



Kent Minerals and Waste Local Plan 2013-30

As amended by the Early Partial
Review

July 2020

Foreword	vi
Abbreviations	vii
Figures	xi
Kent Minerals and Waste Local Plan 2013-2030	
1 Introduction	1
1.1 The Kent Minerals and Waste Local Plan 2013-30	1
1.2 The Status of the Kent Minerals and Waste Local Plan 2013-30	2
1.3 The Links With Legislation, Other Policies and Strategies	3
1.4 The Evidence Base	7
1.5 Planning and Permitting Interface	8
2 Minerals and Waste Development in Kent: A Spatial Portrait	10
2.1 Introduction	10
2.2 Kent's Environmental and Landscape Assets	13
2.3 Kent's Economic Mineral Resources	23
2.4 Kent's Waste Infrastructure	29
3 Spatial Vision for Minerals and Waste in Kent	32
4 Objectives for the Minerals and Waste Local Plan	34

5 Delivery Strategy for Minerals	37
5.1 Policy CSM 1: Sustainable Development	37
5.2 Policy CSM 2: Supply of Land-won Minerals in Kent	38
5.3 Policy CSM 3: Strategic Site for Minerals	49
5.4 Policy CSM 4: Non-identified Land-won Mineral Sites	51
5.5 Policy CSM 5: Land-won Mineral Safeguarding	52
5.6 Policy CSM 6: Safeguarded Wharves and Rail Depots	55
5.7 Policy CSM 7: Safeguarding Other Mineral Plant Infrastructure	57
5.8 Policy CSM 8: Secondary and Recycled Aggregates	58
5.9 Policy CSM 9: Building Stone in Kent	59
5.10 Policy CSM 10: Oil, Gas and Unconventional Hydrocarbons	60
5.11 Policy CSM 11: Prospecting for Carboniferous Limestone	66
5.12 Policy CSM 12: Sustainable Transport of Minerals	66

6 Delivery Strategy for Waste	68
6.1 Policy CSW 1: Sustainable Development	68
6.2 Policy CSW 2: Waste Hierarchy and Policy CSW 3: Waste Reduction	69
6.3 Policy CSW 4: Strategy for Waste Management Capacity	72
6.4 Policy CSW 5: Strategic Site for Waste	73
6.5 Policy CSW 6: Location of Built Waste Management Facilities	77
6.6 Identifying Sites for Household Waste Recycling Centres	80
6.7 Policy CSW 7: Waste Management for Non-hazardous Waste	80
6.8 Policy CSW 8: Recovery Facilities for Non-hazardous Waste	81
6.9 Policy CSW 9: Non Inert Waste Landfill in Kent	82
6.10 Policy CSW 10: Development at Closed Landfill Sites	83
6.11 Policy CSW 11: Permanent Deposit of Inert Waste	84
6.12 Policy CSW 12: Identifying Sites for Hazardous Waste	85
6.13 Policy CSW 13: Remediation of Brownfield Land	86
6.14 Policy CSW 14: Disposal of Dredgings	86
6.15 Policy CSW 15: Wastewater Development	88
6.16 Policy CSW 16: Safeguarding of Existing Waste Management Facilities	88
6.17 Radioactive Waste Management	89
6.18 Policy CSW 17: Nuclear Waste Treatment and Storage at Dungeness	90
6.19 Policy CSW 18: Non-nuclear Radioactive Low Level Waste (LLW) Management Facilities	93

7 Development Management Policies	94
7.1 Policy DM 1: Sustainable Design	94
7.2 Policy DM 2: Environmental and Landscape Sites of International, National and Local Importance and Policy DM 3: Ecological Impact Assessment	95
7.3 Policy DM 4: Green Belt	99
7.4 Policy DM 5: Heritage Assets and Policy DM 6: Historic Environment Assessment	100
7.5 Policy DM 7: Safeguarding Mineral Resources	102
7.6 Policy DM 8: Safeguarding Minerals Management, Transportation, Production & Waste Management Facilities	104
7.7 Policy DM 9: Prior Extraction of Minerals in Advance of Surface Development	107
7.8 Policy DM 10: Water Environment	107
7.9 Policy DM 11: Health and Amenity	110
7.10 Policy DM 12: Cumulative Impact	111
7.11 Policy DM 13: Transportation of Minerals and Waste	112
7.12 Policy DM 14: Public Rights of Way	113
7.13 Policy DM 15: Safeguarding of Transportation Infrastructure	114
7.14 Policy DM 16: Information Required in Support of an Application	115
7.15 Policy DM 17: Planning Obligations	117
7.16 Policy DM 18: Land Stability	119
7.17 Policy DM 19: Restoration, Aftercare and After-use	119
7.18 Policy DM 20: Ancillary Development	123
7.19 Policy DM 21: Incidental Mineral Extraction	124
7.20 Policy DM 22: Enforcement	124
8 Managing and Monitoring the Delivery of the Strategy	125
9 Adopted Policies Maps	150
9.1 Safeguarded Wharves and Rail Transportation Depots	150
9.2 Mineral Safeguarding Areas	159
Appendices	
Appendix A: Glossary	172

Appendix B: List of Replaced, Deleted and Retained Policies 187

Appendix C: List of Mineral Sites that are included in Landbank
Calculations 196

Foreword

Abbreviations

AD	Anaerobic Digestion
AQMA	Air Quality Management Area
AoS	Area of Search
AMR	Annual Monitoring Report
AONB	Area of Outstanding Natural Beauty
AWP	Aggregate Working Party
BAP	Biodiversity Action Plan
BAT	Best Available Techniques (Assessment)
BERR	Department for Business, Enterprise and Regulatory Reform
BGS	British Geological Society
BIS	Department for Business, Innovation and Skills
BOA	Biodiversity Opportunity Area
CD	Construction and Demolition Waste
CDE	Construction, Demolition and Excavation Waste
CSM	Core Strategy Minerals
CSW	Core Strategy Waste
C&I	Commercial and Industrial Waste
DCLG	Department for Communities and Local Government
DECC	Department of Energy and Climate Change
DEFRA	Department for Environment Food and Rural Affairs
DM	Development Management
DOE	Department of the Environment
EA	Environment Agency
EC	European Commission
EfW	Energy from Waste
EIA	Environmental Impact Assessment
ES	Environmental Statement
EU	European Union

Abbreviations

GDF	Geological Disposal Facility
GPDO	Town and Country (General Permitted Development) Order
GVA	Gross Value Added
HDV	Heavy Duty Vehicle
HLW	High Level Waste (Radioactive Waste Classification)
HRA	Habitat Regulations Assessment
HWRC	Household Waste Recycling Centre
ILW	Intermediate Level Waste (Radioactive Waste Classification)
JMWMS	Joint Municipal Waste Management Strategy
KCC	Kent County Council
km	Kilometres
KRP	Kent Resource Partnership
LAA	Local Aggregate Assessment
LCE	Low-Carbon Economy
LDS	Local Development Scheme
LEP	Local Enterprise Partnership
LLW	Low Level Waste (Radioactive Waste Classification)
LLWR	Low Level Waste Repository
LNR	Local Nature Reserve
LWS	Local Wildlife Site
m	Metres
MCA	Mineral Consultation Area
MDA	Marine Dredged Aggregates
MPA	Mineral Planning Authority
MPS	Marine Policy Statement
MSA	Mineral Safeguarding Area
MSW	Municipal Solid Waste
mt	Million tonnes
mtpa	Million tonnes per annum

MWLP	Minerals and Waste Local Plan
NDA	Nuclear Decommissioning Authority
NERC	Natural Environment and Rural Communities
NIA	Nature Improvement Area
NIEA	Northern Ireland Environment Agency
NNR	National Nature Reserve
NPPF	National Planning Policy Framework 2012
NPPW	National Planning Policy for Waste 2014
ODPM	Office of the Deputy Prime Minister
PEDL	Petroleum Exploration and Development Licence
PLA	Port of London Authority
PROW	Public Rights of Way
RSS	Regional Spatial Strategy
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SCI	Site of Community Importance
SEEAWP	South East England Aggregate Working Party
SEP	South East Plan
SEPA	Scottish Environment Protection Agency
SFRA	Strategic Flood Risk Assessment
SPA	Special Protection Area
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest
TCPA	Town and Country Planning Act
tpa	Tonnes per annum
TRW	Topic Report on Waste
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VLLW	Very Low Level Waste (Radioactive Waste Classification)

Abbreviations

Water FD	Water Framework Directive
WCA	Waste Collection Authority
WFD	Waste Framework Directive
WMU	Waste Management Unit
WPA	Waste Planning Authority

Figures

Number	Title	Page
1	Kent Districts	10
2	Transport Links	11
3	SE LEP and the Thames Gateway area	12
4	International Designations	15
5	Nationally Important Designations: Landscape	16
6	Nationally Important Designations: Heritage and Green Belt	17
7	Local Geological Sites and Local Wildlife Sites	18
8	Local Nature Reserves	19
9	Kent Main Rivers and Waterways	20
10	Ancient Woodland	21
11	Biodiversity Improvement Areas	22
12	Geology of Kent	26
13	Minerals Key Diagram	27
14	Minerals Key Diagram Inset Map	28
15	Flood Zones, Source Protection Zones and Petroleum Exploration and Development Licence areas, and Air Quality Management Areas	30
16	Waste Key Diagram: Waste Spatial Strategy	31
17	Minerals Strategic Site: Medway Works, Holborough	50
18	Waste Hierarchy Diagram	69
19	Waste Strategic Site: Norwood Quarry and Landfill	76
20	Dungeness Power Stations & Romney Marsh Nature Designations	94
21	Water Availability Status	109

Figures

1 Introduction

1.0.1 The County Council has a statutory responsibility to plan for future minerals supply and waste management in Kent. This is being fulfilled through the preparation of the *Kent Minerals and Waste Local Plan* (MWLP).

1.1 The Kent Minerals and Waste Local Plan 2013-30

1.1.1 This document, the *Kent Minerals and Waste Local Plan 2013-30*, is the main Local Plan document. It describes:

- the overarching strategy and planning policies for mineral extraction, importation and recycling, and the waste management of all waste streams that are generated or managed in Kent, and
- the spatial implications of economic, social and environmental change in relation to strategic minerals and waste planning.

1.1.2 This Plan identifies and sets out the following subjects for the period up to, and including, the year 2030:

- the long term Spatial Vision and Strategic Objectives for Kent's minerals and waste
- the delivery strategy for minerals and waste planning that identifies how the objectives will be achieved in the plan period
- two areas where strategic mineral and waste development is likely to occur
- the Development Management (DM) policies that will be used when the County Council makes decisions on planning applications
- the framework to enable annual monitoring of the policies within the Plan

1.1.3 The specific sites for mineral developments are set out in the separate Kent Mineral Sites Plan. The site selection process for the final sites included in the Mineral Sites Plan was based on the policies in the Kent MWLP.

1.1.4 Preparing the Plan has involved engagement and collaboration with communities, local organisations and businesses. Public consultation was held for each stage of the plan-making process. It has also been prepared in cooperation with Kent's districts, neighbouring authorities and other minerals and waste planning authorities that may be affected by the strategies and policies in the Plan. This has ensured that effective cooperation has been undertaken where there are cross-boundary impacts.

1.1.5 This Plan is accompanied by the following:

- *Sustainability Appraisal* (SA)
- *Habitat Regulations Assessment* (HRA)

- *Strategic Flood Risk Assessment (SFRA)*
- *Strategic Landscape Assessment*
- *Strategic Transport Assessment*
- *Equalities Impact Assessment (EqIA)⁽¹⁾*

1.2 The Status of the Kent Minerals and Waste Local Plan 2013-30

1.2.1 The Plan is part of the statutory development plan for Kent together with the adopted Local Plans prepared by the twelve Kent district and borough planning authorities and relevant Neighbourhood Plans prepared by local communities. Proposals for waste and mineral developments will be considered against the policies contained in the development plan as whole, not just those included in this Plan.

1.2.2 The policies in this Plan replace the earlier versions of the saved Kent Minerals and Waste Local Plan policies. Appendix B lists the schedules of saved Kent Local Plan policies replaced, deleted or retained.

1.2.3 This Plan will be mainly used by the County Council when determining applications for minerals and waste facilities. The Plan is also relevant to the determination of non-minerals and waste applications which may be determined by the District and Borough Councils and the County Council (in terms of other County matters such as schools). It is envisaged that the main policies that will be implemented when non-minerals and waste applications are being determined are as follows:

- Policy CSM 6: Safeguarded Wharves and Rail Depots
- Policy CSM 7: Safeguarding Other Mineral Plant Infrastructure
- Policy CSM 8: Secondary and Recycled Aggregates
- Policy CSW 3: Waste Reduction
- Policy CSW 16: Safeguarding of Existing Waste Management Facilities
- Policy DM 7: Safeguarding Mineral Resources
- Policy DM 8: Safeguarding Minerals Management, Transportation Production & Waste Management Facilities
- Policy DM 9: Prior Extraction of Minerals in Advance of Surface Development

1 These documents form part of our evidence base and are available online from www.kent.gov.uk/mwlp.

- Policy DM 20: Ancillary Development
- Policy DM 21: Incidental Minerals Extraction

1.2.4 Section 38(6) of the *Planning and Compulsory Purchase Act 2004* and Section 70(2) of the *Town and Country Planning Act (TCPA) 1990* requires that planning applications "must be made in accordance with the [*development*] plan unless material considerations indicate otherwise."

1.2.5 This document was prepared in accordance with national legislation.⁽²⁾ It has also been prepared to be in general conformity with the *National Planning Policy Framework* (NPPF),⁽³⁾ *National Planning Policy for Waste* (NPPW)⁽⁴⁾ and the *Waste Management Plan for England*.⁽⁵⁾

1.2.6 The Kent MWLP only applies to the administrative county of Kent. Medway Council are writing their own local plan. The position regarding saved minerals and waste planning policies in Medway is set out in Appendix B.

1.2.7 Annual monitoring will determine when it is necessary to trigger a review of the adopted plans and their policies. The monitoring schedule in Chapter 8 identifies when, where and by whom, actions will be taken to implement the Plan. The timetable for the preparation and review of Kent's minerals and waste plans is set out in the Kent MWLP Scheme.⁽⁶⁾

1.2.8 A list of the abbreviations used can be found on page v and Appendix A lists a glossary of terms.

1.3 The Links With Legislation, Other Policies and Strategies

1.3.1 When preparing plans, minerals and waste planning authorities must take account of international and national legislation and national planning policy. Until 2013, regional planning policy formed part of the development plan and was required to be taken into account in the preparation of local plans. The *Regional Spatial Strategy* (RSS) for the South East of England was partially revoked.⁽⁷⁾ The remaining part of the RSS relates to a policy about new residential development near the Thames Basin Heaths Special Protection Area (SPA), which is not in Kent. However, the RSS has been tested for soundness through an Examination in Public (EiP), and where relevant, it can still form part of the evidence base for the Kent MWLP.

2 The Town and Country Planning (Local Development) (England) Regulations 2004, The Town and Country Planning (Local Development) (England) (Amendment) Regulations 2008, The Town and Country Planning (Local Planning) (England) Regulations 2012 and the Localism Act (2011), Environmental Assessment of Plans and Programmes Regulations 2004.

3 Department of Communities and Local Government (DCLG) (March 2012) National Planning Policy Framework.

4 DCLG (October 2014) National Planning Policy for Waste

5 DEFRA (December 2013) Waste Management Plan for England.

6 Available online from: www.kent.gov.uk/mwlp.

7 Statutory Instruments 2013 No. 427: The Regional Strategy for the South East (Partial Revocation) Order 2013.

European Legislation

1.3.2 European Union (EU) Directives provide the international legislative context for minerals and waste plan-making. These include:

- **Waste Framework Directive (WFD) (2008/98/EC)** which aims to move the management of waste up the Waste Hierarchy⁽⁸⁾ and to encourage the use of waste as a resource. EU member states are required to achieve recycling and composting rates of 50% by 2020 for household waste streams including paper, metal, plastic, glass, and for other waste streams that are similar to household waste. Also by 2020, the preparation for re-use, recycling and recovery of non-hazardous construction and demolition waste (CDE) (excluding naturally occurring materials) must be increased to a minimum of 70% by weight.
- **Landfill Directive (1999/31/EC)** which requires reductions in the quantity of biodegradable waste that is landfilled, and encourages diversion of non-recyclable and non-usable waste to other methods of treatment.
- **Water Framework Directive (Water FD) (2000/60/EC)** which aims to improve the local water environment for people and wildlife, and promote the sustainable use of water. It applies to all surface water bodies, including lakes, streams and rivers as well as groundwater. The aim of the Water FD is for all water bodies to reach good status by 2027. This means improving their physical state, and preventing deterioration in water quality and ecology. The Water FD introduced the concept of integrated river basin management planning. Kent lies within the Thames River Basin District and South East River Basin District.⁽⁹⁾

8 The Waste Hierarchy is defined in the Glossary in Appendix A and is shown diagrammatically in the text supporting Policy CSW 2.

9 Environment Agency (December 2009) Thames River Basin Management Plan (RBMP) and the South East RBMP.

National Planning Policy and Guidance

1.3.3 The Government published the NPPF in March 2012. The NPPF describes the Government's planning policies for England and how to apply them. It provides a framework for people and their councils to produce distinctive local and neighbourhood plans that reflect local needs and priorities. It includes policies on plan-making and planning for minerals.

1.3.4 Specific policies on waste are described in the *National Waste Management Plan for England* ⁽¹⁰⁾ and the *National Planning Policy for Waste 2014* ⁽¹¹⁾. Local authorities preparing waste plans are also advised to consider relevant NPPF policies.

1.3.5 Since the publication of the NPPF, DCLG have published the following additional guidance notes which are relevant to minerals and waste plan-making:

- *Guidance for Local Planning Authorities on Implementing Planning Requirements of the EU WFD (2008/98/EC)* ⁽¹²⁾
- updated Planning Practice Guidance on Minerals to accompany the NPPF, including updated guidance on the Managed Aggregate Supply System ⁽¹³⁾

1.3.6 The *Marine and Coastal Access Act 2009* introduced measures to enable the sustainable management and use of marine resources, including the requirement for a Marine Policy Statement (MPS). The UK MPS contains minerals policy relating to offshore mineral interests. All public authorities taking authorisation or enforcement decisions that affect, or might affect, the UK marine area must do so in accordance with the UK MPS, unless relevant considerations indicate otherwise. The MPS will also guide the development of Marine Plans across the UK.

Local Plans and Strategies

1.3.7 The Plan also considers other relevant local policies and strategies.

Kent Joint Municipal Waste Strategy

1.3.8 As Waste Disposal Authority, in 2007 the County Council prepared a *Joint Municipal Waste Management Strategy* (JMWMS) with the districts in Kent, which was adopted by the Kent Resource Partnership (KRP). The partnership comprises 12 district/borough councils and KCC. The KRP plans and budgets for Kent's household waste so that new facilities can be built where and when they are needed. The aims of the KRP are to:

- increase recycling rates all over Kent

10 DEFRA (December 2013) Waste Management Plan for England.

11 DCLG (October 2014) National Planning Policy for Waste.

12 DCLG (December 2012) Guidance for local planning authorities on implementing planning requirements of the EU Waste Framework Directive (2008/98/EC).

13 DCLG (Revised March 2014) Planning Practice Guidance: Minerals. Web-based resource available from: <http://planningguidance.planningportal.gov.uk/>.

- reduce the amount of waste produced by each household
- reduce the amount of Kent's waste that is put into landfill

1.3.9 Since 2007 the KRP have achieved the following targets:

- 40% recycling and composting across Kent
- KCC's Household Waste Recycling Centres (HWRCs) to achieve a 60% recycling and composting rate

1.3.10 These targets were achieved in 2011/12. Also the amount of waste sent to landfill has been reduced from around 72% in 2005/06 to 22% in 2011/12.

1.3.11 A review of the Kent JMWMS began in 2011. The KRP prepared new objectives and policies which are being implemented across Kent. These include reducing household waste arisings by at least 10% by 2020/21 (based on 2010/11 levels), recycling and composting rates of at least 50%, and sending no more than 5% of the household waste stream to landfill. The aim is to get as close as possible to 0% for untreated household waste being sent to landfill.

Strategic Transport Plans

1.3.12 The County Council has a statutory duty to prepare and update its Strategic Transport Plan. The *Local Transport Plan for Kent 2011-2016* was adopted in 2011. This Plan explains how the council will work towards its transport vision over a five-year period using the funding that it receives from Government. KCC also prepared a 20-year transport delivery plan, *Growth Without Gridlock*, which focuses on the key strategic transport improvement areas required in Kent, including the Thames Gateway. This aims to relieve the pressure on the Channel Corridor, cut congestion in West Kent along the A21, find a solution in East Kent for Operation Stack⁽¹⁴⁾ and provide a integrated public transport network.

1.3.13 The *Kent Freight Plan* was adopted in 2012. It contains KCC's objectives to tackle key issues and find solutions to the following problems related to lorry movements in Kent:

- overnight lorry parking
- Operation Stack
- managing the routing of Heavy Goods Vehicles to ensure that they remain on the Strategic Road Network for as much of their journey as possible
- impacts of freight traffic on communities and the environment
- encouraging sustainable distribution

14 Operation Stack is the name given to the process used to stack lorries on the M20 when cross channel services from the Port of Dover or through the Channel Tunnel are disrupted.

District Local Plans

1.3.14 The Kent district local plans form part of the development plan. While they do not address minerals and waste matters, their Sustainable Community Strategies have been considered in the preparation of the Kent MWLP.

1.4 The Evidence Base

1.4.1 The evidence base required for plan-making must be: *proportionate*,⁽¹⁵⁾ kept up-to-date and address all of the relevant legislative and policy requirements.

1.4.2 An adequate and relevant evidence base on the economic, social and environmental characteristics and prospects of the area has been available to inform the preparation of the Plan.

1.4.3 The SA identifies and evaluates the impacts that are expected to arise from the Plan's policies regarding social, environmental and economic factors. The SA process is *iterative*⁽¹⁶⁾ and prepared in parallel with the Kent MWLP. The SA influences the production of the Plan and ensures that plan-making is carried out in accordance with the principles of sustainable development. The SA report for the Plan was prepared independently by URS Consultants. Each stage of plan-making has been accompanied by an SA.

1.4.4 Kent contains sites of international importance for wildlife including Special Areas of Conservation (SACs), SPAs and Ramsar sites.⁽¹⁷⁾ The Plan is accompanied by a HRA which considers the impacts of the plan policies on the international sites and assesses whether the policies will have a significant impact. The Plan must comply with the requirements of the Habitat Regulations⁽¹⁸⁾ to minimise the possibility of impacts on internationally designated sites.

1.4.5 The Plan is also accompanied by the following assessments:

- SFRA describing the impacts of the plan policies on flooding and identifying where mitigation measures could be needed
- *Strategic Landscape Assessment* describing the landscape impact of the Strategic Site for Minerals and the Strategic Site for Waste identified in the Plan
- *Strategic Transport Assessment* describing the potential effects on Kent's transport network (see Figure 2) as a result of the Plan's policies

1.4.6 Parts of the Kent MWLP evidence base have been developed in conjunction with other adjoining local authorities, including:

15 Proportionate means being in due proportion, so that there is sufficient evidence (facts and figures) to justify the decisions made in the Plan.

16 Iterative means that there is repetitive on-going discussion and resolution of issues.

17 Ramsar sites are sites designated under The Ramsar Convention as Wetlands of international importance Sites.

18 The Conservation of Habitats & Species Regulations 2010.

- the KCC and Medway Council collaboration on a study of mineral imports into the county⁽¹⁹⁾
- the Kent and Surrey County Council collaboration on an evidence base for their plans for silica sand⁽²⁰⁾

1.4.7 The evidence base topic reports and other documents that have been prepared to inform and support the preparation of this Plan and information on public consultation undertaken are available online.⁽²¹⁾

1.5 Planning and Permitting Interface

When determining planning applications, local planning authorities establish whether a development should go ahead in the particular location proposed. In arriving at its decision, the County Council and its partner planning authorities will:

- seek to establish the development is an appropriate use of the particular land, and in doing so that the development will not result in unacceptable risks from pollution.
- respect the fact that the primary role of controlling pollution falls to the respective pollution regimes.
- pay due cognisance to the fact that certain activities may be subject to non-planning consenting regimes and securing such consents may be critical in delivering the particular development.
- seek advice from other relevant consenting bodies, such as the Environment Agency, around issues that might affect whether a development is acceptable. Where any significant issues are identified, we recommend that other consents needed, such as environmental permits, be sought in parallel to submission of the planning application so that any issues can be resolved as early as possible.

The NPPF states that local planning authorities should focus on whether the development itself is an acceptable use of the land, and the impact of the use, rather than the control of processes or emissions themselves where these are subject to approval under pollution control regimes. Local planning authorities should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.⁽²²⁾

19 KCC and Medway Council (May 2011) MTR7: Kent and Medway Mineral Imports Study.

20 GWP Consultants Ltd (2010) Silica Sand Report for KCC and Surrey County Council.

21 See www.kent.gov.uk/mwlp

22 DCLG (2012) National Planning Policy Framework, para. 122.

The NPPW states that when determining waste planning applications, waste planning authorities should concern themselves with implementing the planning strategy in the Local Plan and not 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.⁽²³⁾

23 DCLG (2014) National Planning Policy for Waste, para. 7.

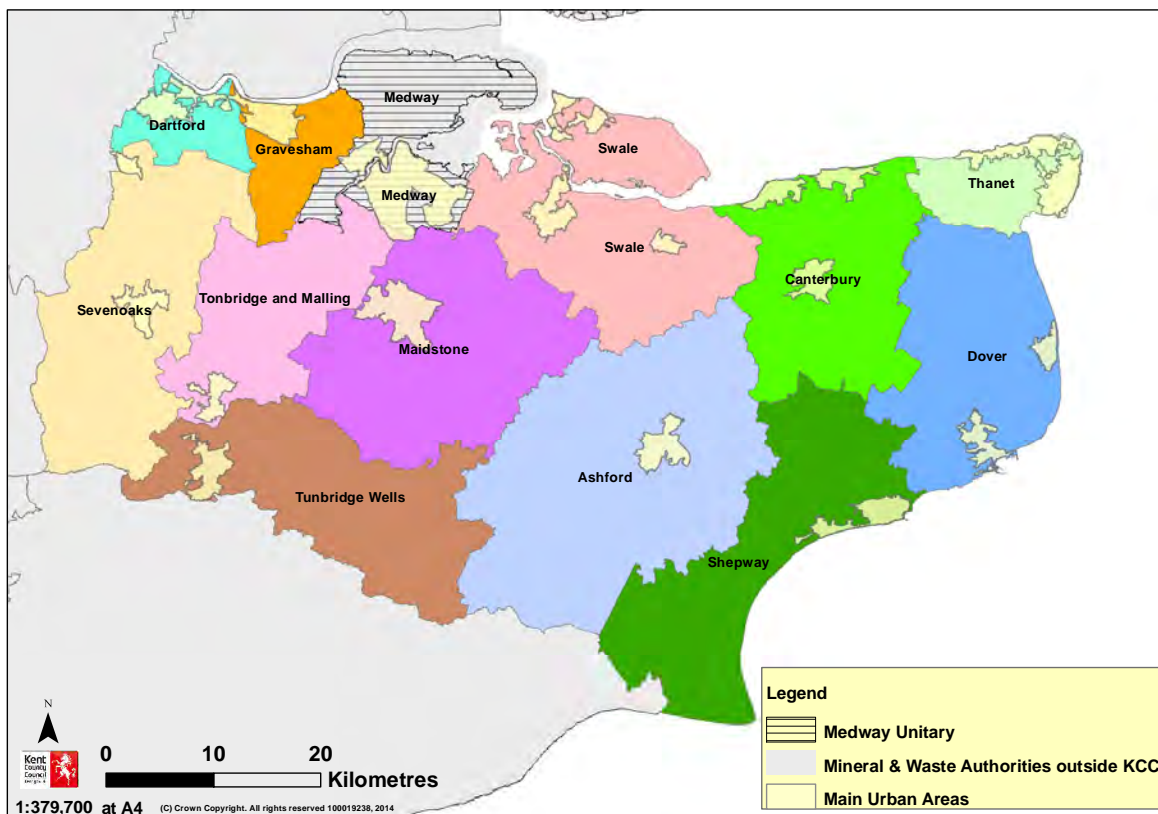
2 Minerals and Waste Development in Kent: A Spatial Portrait

2.1 Introduction

2.1.1 Kent is located in the south east corner of the United Kingdom (UK). The county consists of 12 districts, as shown in Figure 1. It is surrounded on two sides by water: the River Thames to the north and the English Channel to the south-east. It also neighbours London on its north-west perimeter. It has excellent transportation links by road, rail and water with northern France, London, Essex and the South East of England (see Figure 2). 85% of Kent is defined as rural.

2.1.2 With an estimated population of 1,480,200 people,⁽²⁴⁾ Kent is the largest non-metropolitan local authority area in England. Projected population growth for Kent is a 10.5% increase between 2011 and 2021, with the total population of the county expected to be 1.62 million people by 2026.⁽²⁵⁾

Figure 1 Kent Districts

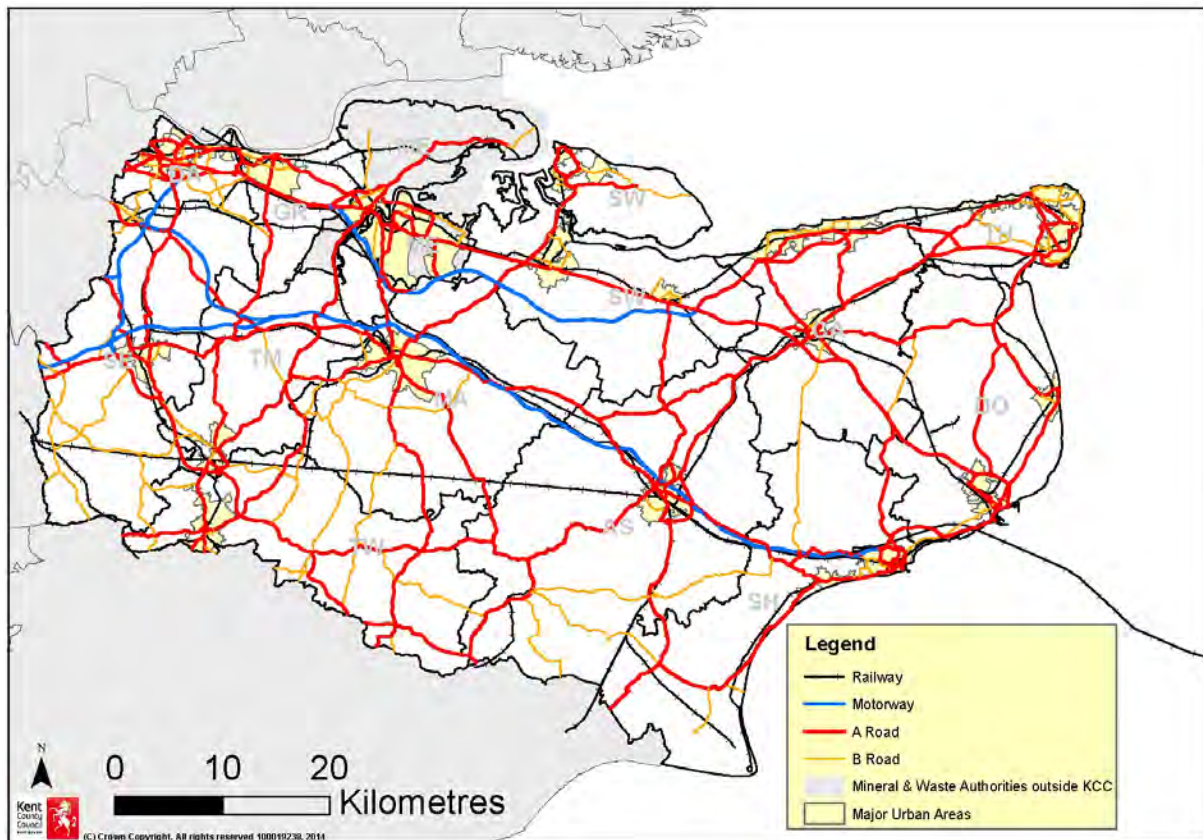


2.1.3 The population of Kent is spread unevenly throughout the county. North-west Kent is the main urban area as part of the Thames Gateway area. The Thames Gateway stretches along the River Thames from Stratford and Lewisham in London out to Sittingbourne, Kent and Southend, Essex. Within Kent, it contains parts of Dartford, Gravesham and Swale Districts and Medway Council.

24 In mid 2012, Office for National Statistics.

25 KCC (2012) Business Intelligence Statistical Bulletin, Interim 2011-Based Sub National Population Projections for Kent.

Figure 2 Transport Links



2.1.4 Kent is a member of The South East Local Enterprise Partnership (SE LEP). This encompasses East Sussex, Essex, Kent, Medway, Southend and Thurrock. LEPs are voluntary partnerships between local authorities and businesses which were formed in 2011 by the Department for Business, Innovation and Skills (BIS) to help determine local economic priorities and lead economic growth and job creation within the local areas. LEPs are responsible for some of the functions previously carried out by the regional development agencies which were abolished in March 2012. There were 39 LEPs in operation in September 2012.

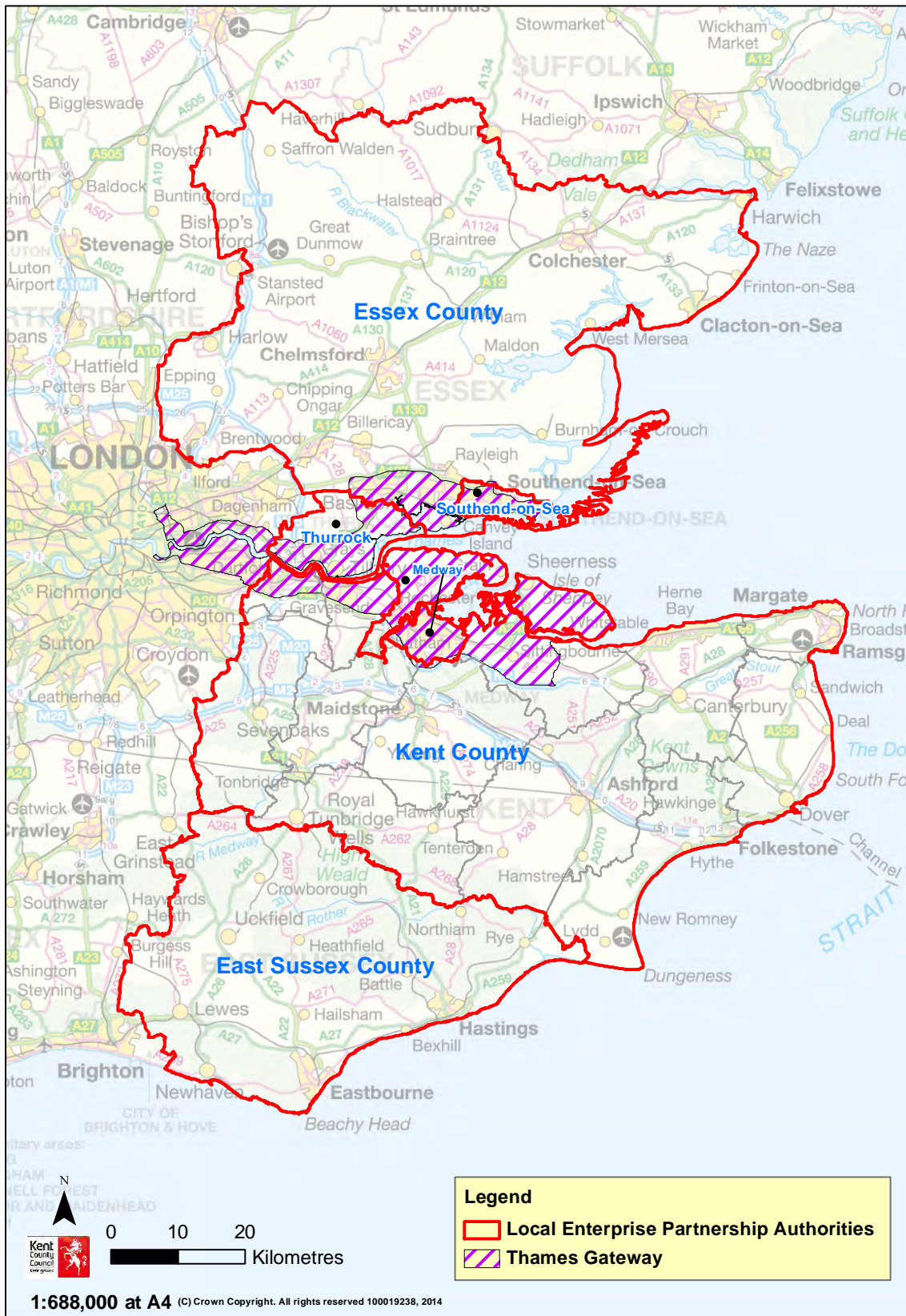
2.1.5 Figure 3 shows the extent of the SE LEP and the Thames Gateway area. The SE LEP area has 156,000 businesses and 3.9 million people. 1,526,000 people work within the LEP area, contributing £63bn Gross Value Added (GVA).⁽²⁶⁾ This represents 5% of the national contribution.⁽²⁷⁾ The SE LEP's vision is to create the most enterprising economy in England. The SE LEP has identified four strategic objectives:

1. secure the growth of the Thames Gateway
2. promote investment in coastal communities
3. strengthen the rural economy
4. strengthen the competitive advantage of strategic growth locations

²⁶ GVA is explained in the Glossary in Appendix A.

²⁷ South East Local Enterprise Partnership Strategic Economic Plan.

Figure 3 SE LEP and the Thames Gateway area



2.2 Kent's Environmental and Landscape Assets

2.2.1 Some of Kent's natural environment and features are formally identified as being of international, national and local importance. Kent also has statutorily protected species, under both European and national legislation. These formal designations include the following:

International Importance (see Figure 4):

- Ramsar sites and/or SPAs
- SACs
- UNESCO World Heritage Sites: Canterbury Cathedral, St Augustine's Abbey and St Martin's Church in Canterbury

National Importance (See Figures 5 & 6):

- almost a third of Kent is protected by two Areas of Outstanding Natural Beauty (AONB): the Kent Downs AONB and High Weald AONB
- Sites of Special Scientific Interest (SSSIs) and National Nature Reserves
- nationally important archaeological sites (most of which are Scheduled Ancient Monuments), Registered Parks and Gardens of Historic Interest and Listed Buildings⁽²⁸⁾
- Kent areas of Heritage Coast including South Foreland and Dover to Folkestone
- Green Belt
- species and habitats listed as being of principal importance for the conservation of biodiversity in the UK (Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006*)⁽²⁹⁾
- Ancient Woodland (Figure 10)

Local Importance:

2.2.2 Kent's wildlife, geological, geomorphological, landscape and historic environmental areas and features that are of particular importance at county level, or that make a contribution to biodiversity and geological conservation, include:

- Local Geological Sites and Local Wildlife Sites (LWSs) (see Figure 7)
- Local Nature Reserves (LNRs) (see Figure 8)

28 Listed Buildings in Kent are shown on The National Heritage List for England on the English Heritage website.

29 DCLG (2000) Countryside and Rights of Way Act 2000.

- Kent Biodiversity Action Plan (BAP) species
- the setting of the World Heritage Site (Canterbury Cathedral, St Augustine's Abbey and St Martin's Church) and Locally Listed buildings, conservation areas and their settings
- landscape features of importance for wildlife that are essential for migration and dispersal, and which enable the protection, conservation and expansion of native flora and fauna
- Kent rivers and waterways and their settings (Figure 9)
- Biodiversity Opportunity Areas (BOA) and The Greater Thames Marshes Nature Improvement Area (NIA) (Figure 11)
- Groundwater in Kent (Flood Zones, Source Protection Zones) (Figure 15)

Biodiversity Opportunity Areas and the Nature Improvement Area

2.2.3 The identification of BOAs and the Greater Thames Marshes NIA present opportunities to contribute to large-scale biodiversity conservation in Kent.

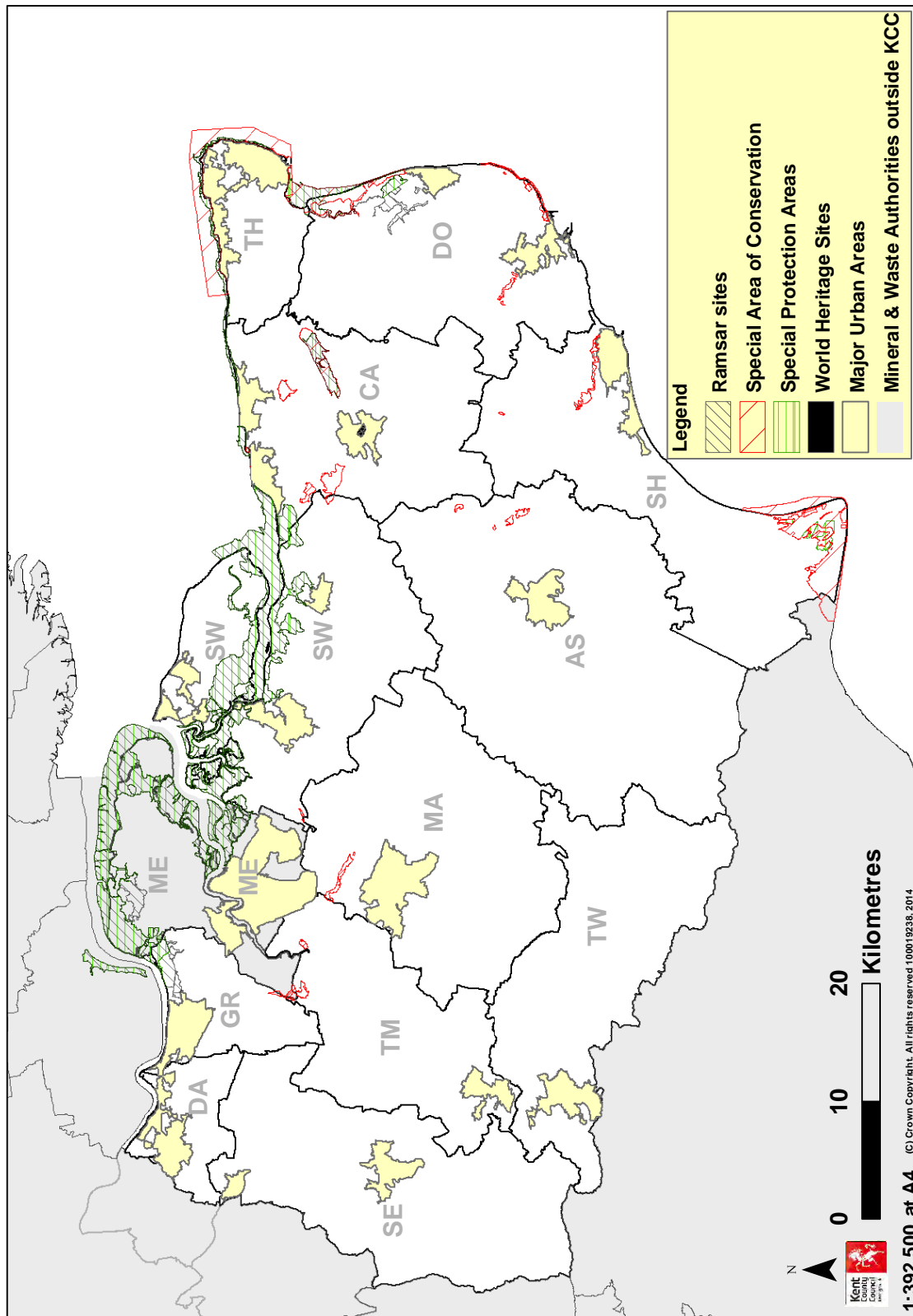
2.2.4 Kent's network of BOAs has been identified to implement the Kent BAP.⁽³⁰⁾ The BOA show where the greatest gains can be made from habitat enhancement, restoration and recreation by establishing or contributing to large habitat areas and/or networks of wildlife habitats. The BOAs include a range of biodiversity. BOA targets reflect the specific landscape, geology and key habitats that are present within each area.

2.2.5 NIAs are areas in which partner organisations are planning and delivering improvements for wildlife and people through sustainable resource use, restoring and creating wildlife habitats, connecting local sites and joining up action on a large-scale. Within Kent there is the Greater Thames Marshes NIA.

2.2.6 The BOAs and the NIA are not constraints to development. They are areas where minerals and waste sites will best be able to support the strategic aims for biodiversity conservation in Kent. Sites that are outside of the BOAs and the NIA can still contribute to the delivery of BAP targets and the enhancement of Kent's biodiversity.

30 Kent Biodiversity Action Plan Steering Group (1997) The Kent Biodiversity Action Plan.

Figure 4 International Designations



2 Minerals and Waste Development in Kent: A Spatial Portrait

Figure 5 Nationally Important Designations: Landscape

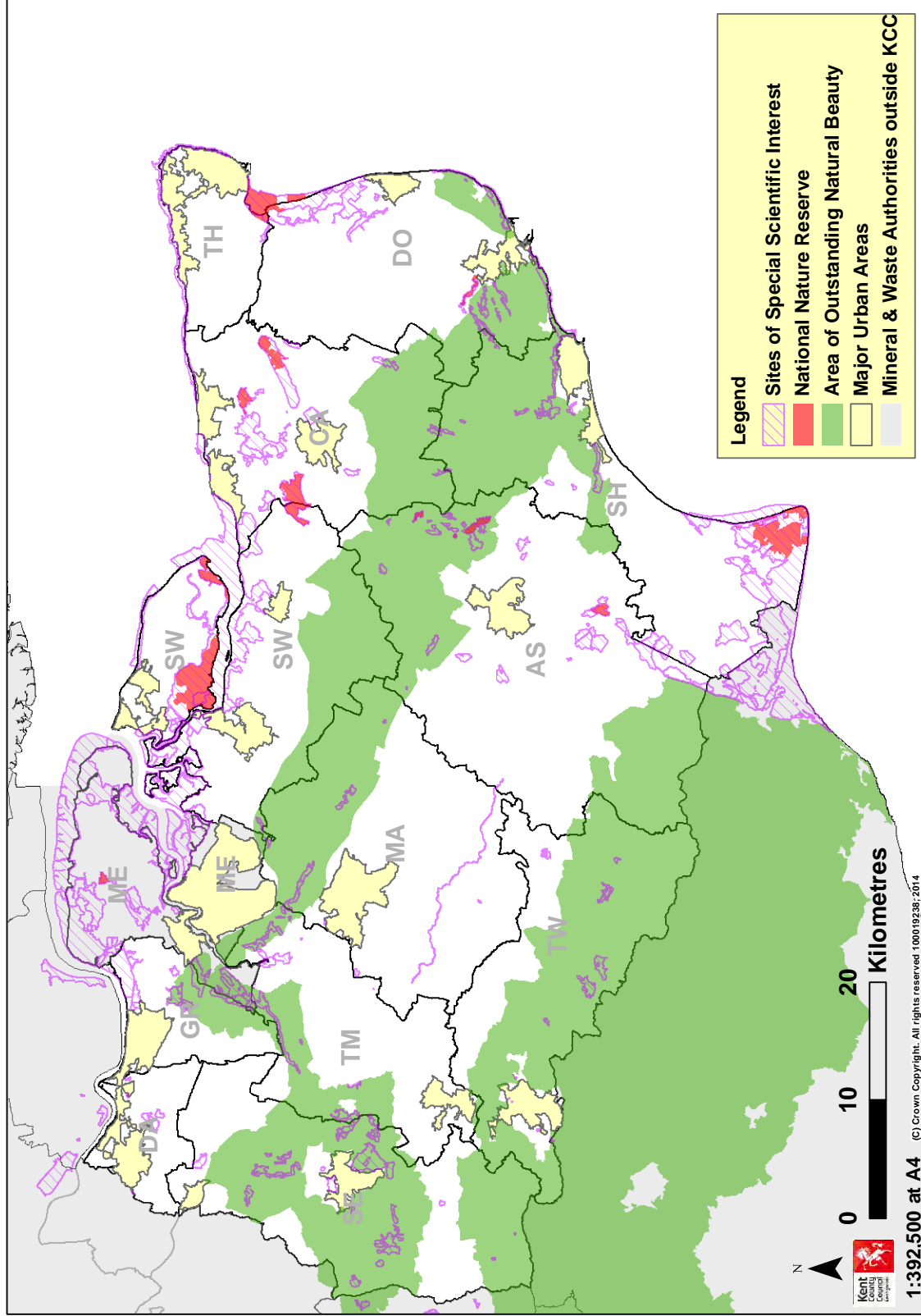
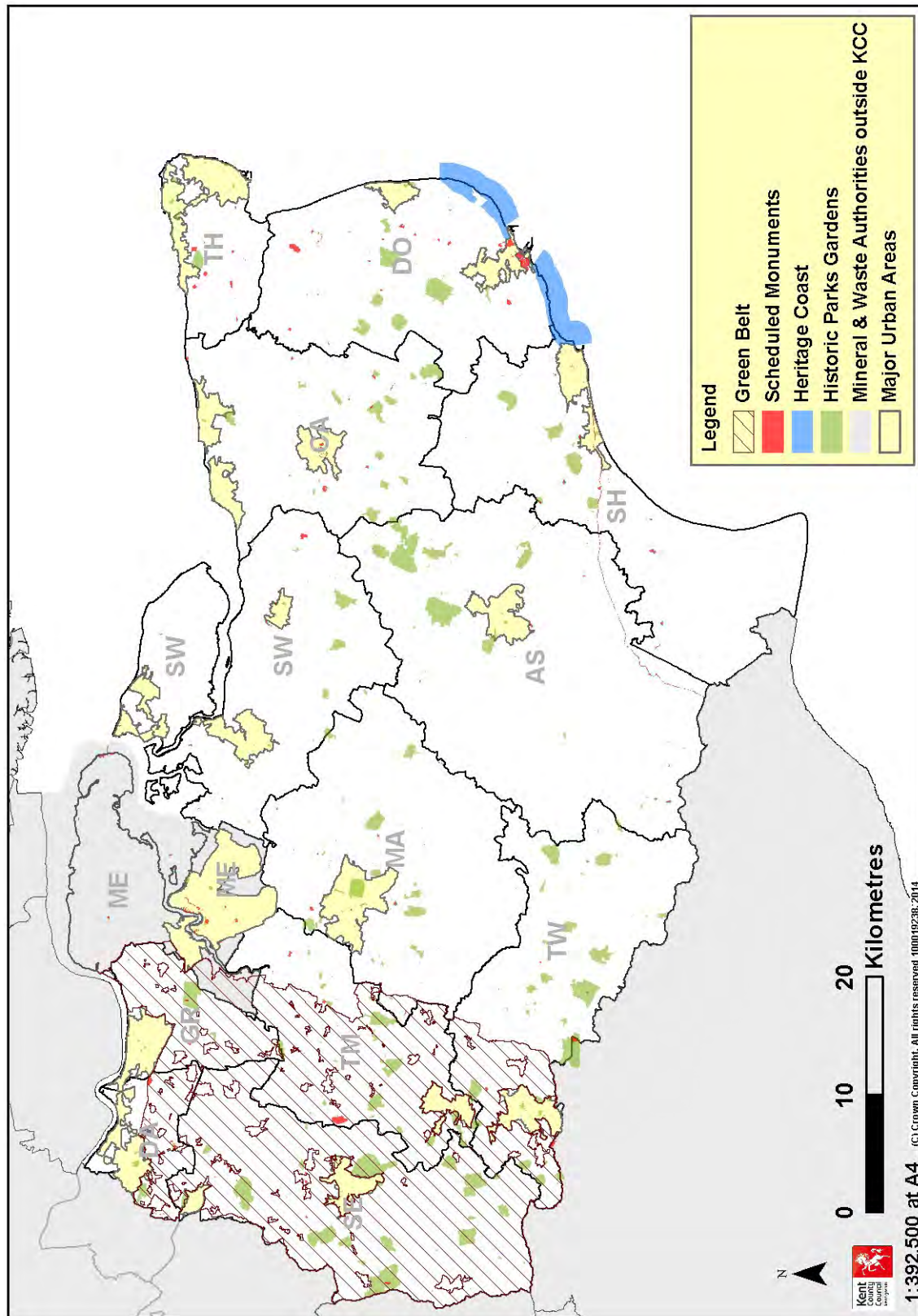


Figure 6 Nationally Important Designations: Heritage & Green Belt



2 Minerals and Waste Development in Kent: A Spatial Portrait

Figure 7 Local Geological Sites and Local Wildlife Sites

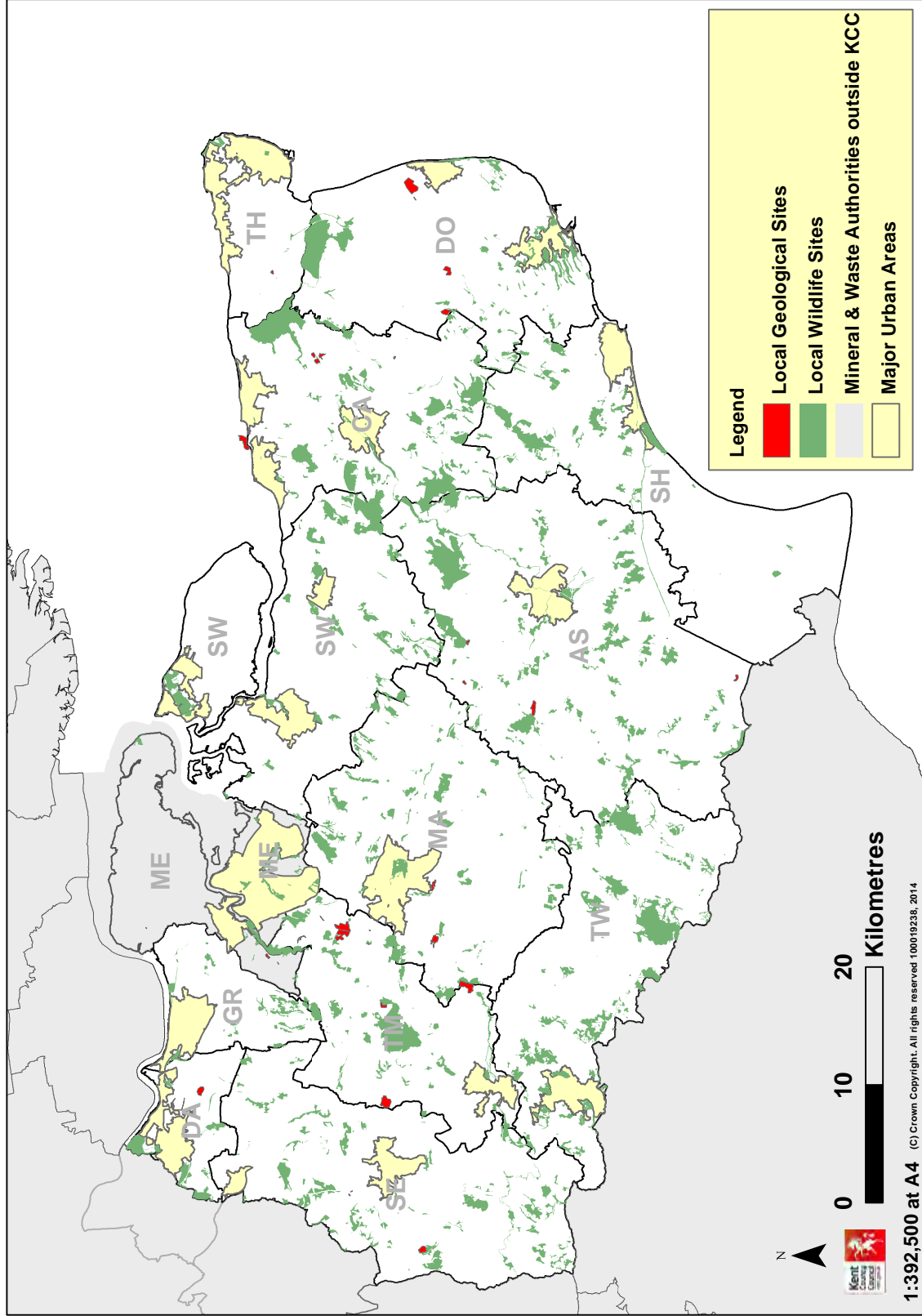
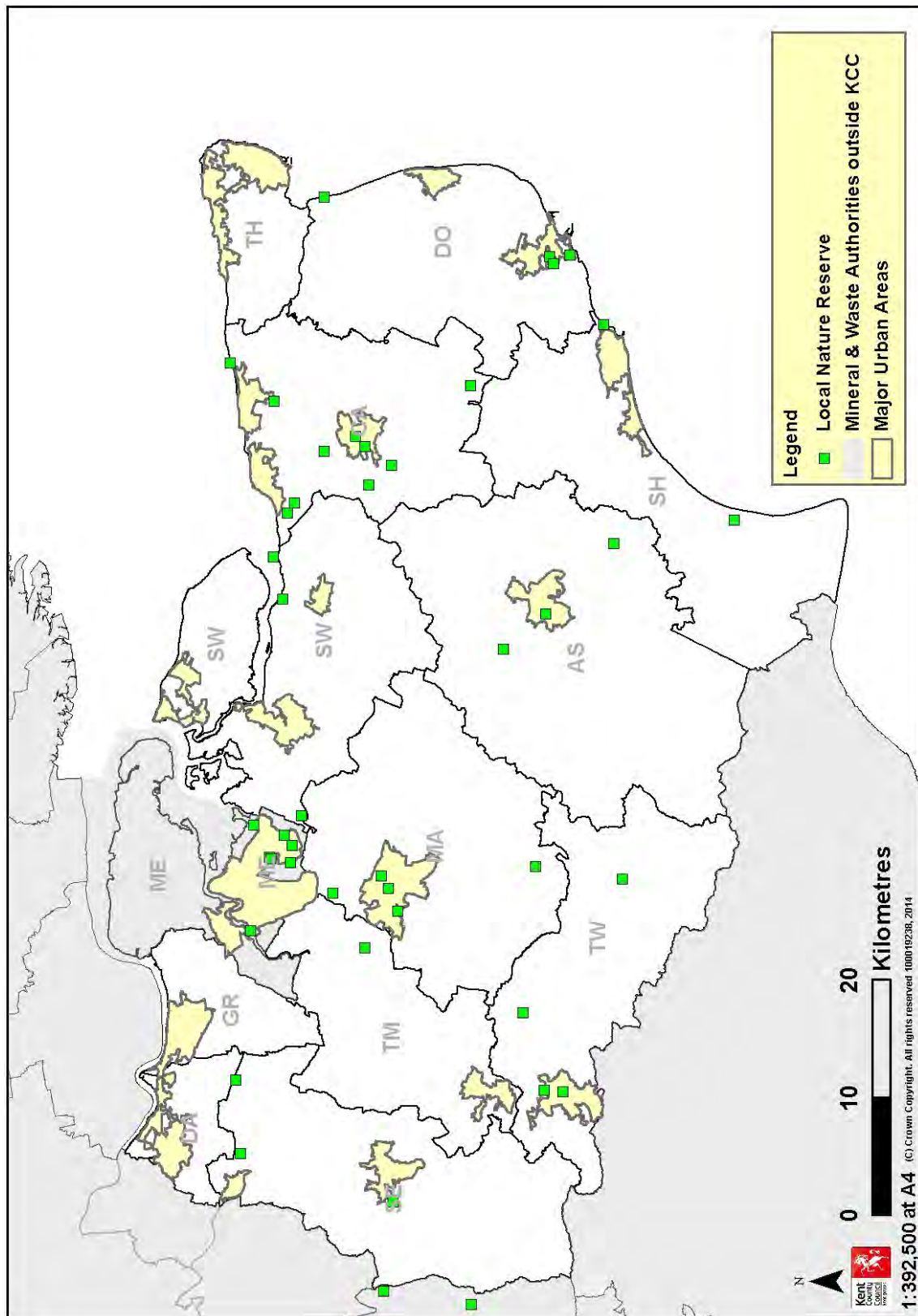
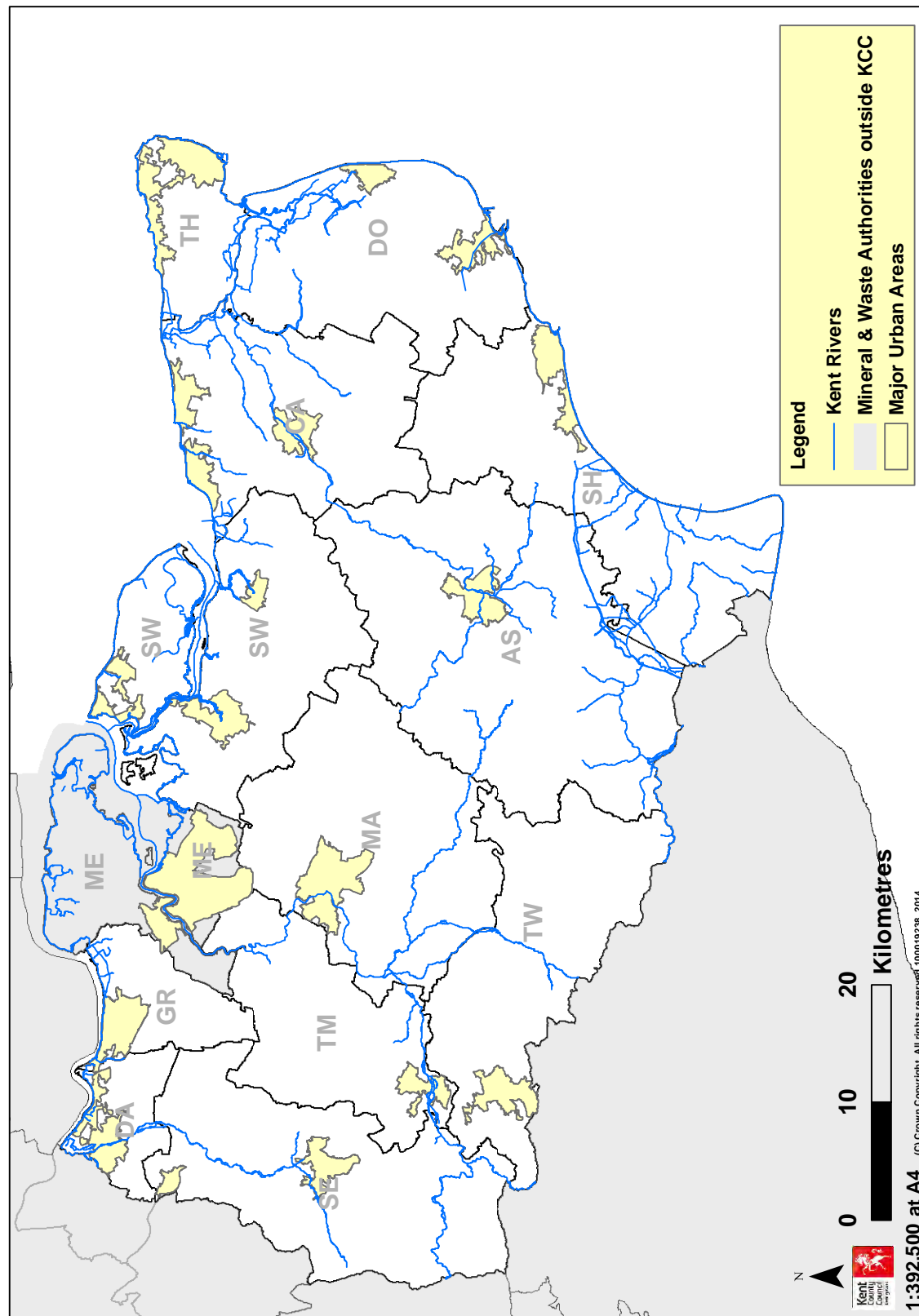


Figure 8 Local Nature Reserves



2 Minerals and Waste Development in Kent: A Spatial Portrait

Figure 9 Kent Main Rivers and Waterways



Legend

- Kent Rivers
- Mineral & Waste Authorities outside KCC
- Major Urban Areas

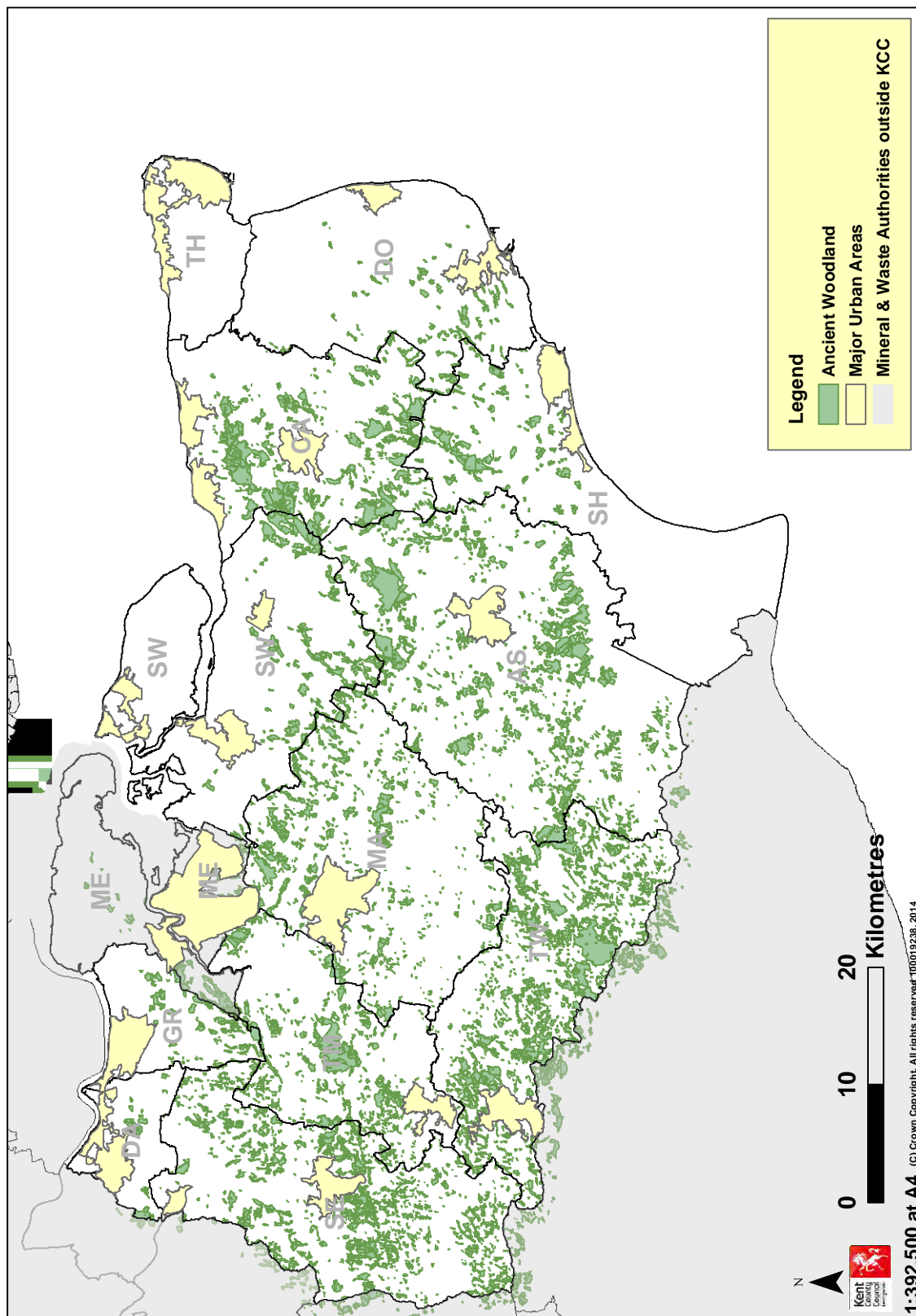
N

Kent County Council

1:392,500 at A4 (C) Crown Copyright. All rights reserved 100019238, 2014

0 10 20 **Kilometres**

Figure 10 Ancient Woodland



2.3 Kent's Economic Mineral Resources

2.3.1 The economic mineral resources⁽³¹⁾ of Kent reflect its complex geological, economic and social history. Historically, the Coal Measures were of major economic importance until the East Kent Coal mines ceased operations by 1989. Until recently, Kent also had a thriving cement industry based on the chalk and clay deposits of the Medway Valley and north-west Kent. There are now no active cement works in Kent. Areas of Kent have also been licensed by the Government for petroleum exploration and development.

2.3.2 Economic minerals that are extracted from Kent quarries include sand and gravel, crushed rock (ragstone), silica sand, brickearth, clay for tile-making, chalk for agricultural and industrial uses, and building stone.

2.3.3 Figure 12 shows the geology of Kent. Figure 13 and 14 shows all existing mineral extraction sites, wharves, rail depots, the areas licensed for petroleum exploration and the Strategic Site for Minerals.⁽³²⁾

2.3.4 Details of operational and inactive quarries, wharves, rail depots and secondary and recycled aggregate sites in Kent are reviewed annually and listed in the Kent Minerals and Waste Annual Monitoring Report (AMR).⁽³³⁾

Construction Aggregates

2.3.5 Construction aggregates consist of sand, gravel and crushed rock. These are the most significant in quantity terms of all of the minerals extracted in Kent.

2.3.6 Historically, sharp sand and gravel deposits have been extracted along Kent's river valleys and in the Dungeness and Romney Marsh area. The permitted reserves are becoming depleted.

2.3.7 Soft sand or building sand, used to produce asphalt and mortar, is extracted from quarries situated on the Folkestone Beds between Charing and Sevenoaks. Most of these sand quarries produce a combination of soft sand (building sand which is a construction aggregate) and silica sand (a specialist sand).

2.3.8 The difference between sharp sand and soft sand is in the particulate shape, and the degree of variation of grain size. Soft sand particles are low in angularity and are more equidimensional, making them suitable for mortar mixes. Sharp sands are more angular and variable in size and they provide the high structural strength in concrete mixes.

2.3.9 The only type of crushed rock that is exploited commercially in Kent is Kentish Ragstone, found in a band crossing Kent from east to west. Currently ragstone extraction is carried out to the west of Maidstone. Crushed rock resources also exist in a Carboniferous Limestone deposit in east Kent.

31 A resource is a concentration or occurrence of workable material of intrinsic economic interest.

32 See Policy CSM 3: Strategic Site for Minerals for details.

33 All Annual Monitoring Reports are available online from: www.kent.gov.uk/mwlp.

2.3.10 The use of secondary and recycled aggregates is more sustainable than extracting primary land-won aggregates. The County Council is therefore keen to increase the amount of secondary and recycled aggregates being re-processed. Recycled aggregates can replace sharp sand and gravel in concrete production. There are sites across Kent that screen and/or crush secondary and recycled aggregates for re-use. Some are located in industrial estates, or at existing quarries, wharves and rail depots.

2.3.11 As well as land-won minerals and mineral recycling, Kent handles minerals (construction aggregates and cement) through its wharves and rail depots and is the largest importer of Marine Dredged Aggregates (MDA) in the South East.

Other Minerals

2.3.12 Chalk and clay resources are very common in Kent. There are four main clay horizons in Kent: London Clay, Gault Clay, Weald Clay and Wadhurst Clay. London Clay has been extensively used as an engineering clay, particularly for sea defence works around the North Kent Marshes. Gault, Weald and Wadhurst Clay have been used in brick making.

2.3.13 Brick and tiles are manufactured from brickearth or clays. These industries have declined in Kent but there remains one operational brick and one operational tile works, although some of the brickearth from north Kent is transported to East Sussex for brick manufacture. The Faversham area is the original source of yellow London stock bricks. Hand-made Kent peg tiles are manufactured at a small Weald Clay site near Maidstone.

2.3.14 The chalk horizon in Kent has formed the North Downs and it forms a major feature across the county from Dover in the east to Westerham in the west. It also forms the main bedrock to the Isle of Thanet. Chalk is used in agriculture, e.g. for neutralising acid soils, in construction and as a filler in industrial processes such as a whitening agent.

2.3.15 Building stone, required for specialist or conservation work, is currently provided only from the ragstone (crushed rock) quarries of mid Kent. Other types of building stone, including Tunbridge Wells Sandstone and Bethersden Paludina Limestone, have been worked for local building materials but there are currently no active quarries.

2.3.16 The Kent silica sand deposits found within the Folkestone Beds, while not as pure as those in Surrey, are used for industrial processes. These include: glass manufacture, production of foundry castings, horticulture and for sports surfaces such as horse menages and golf course bunker sand. There are no sites in Kent that provide only silica sand. All such sites also produce construction aggregate.⁽³⁴⁾

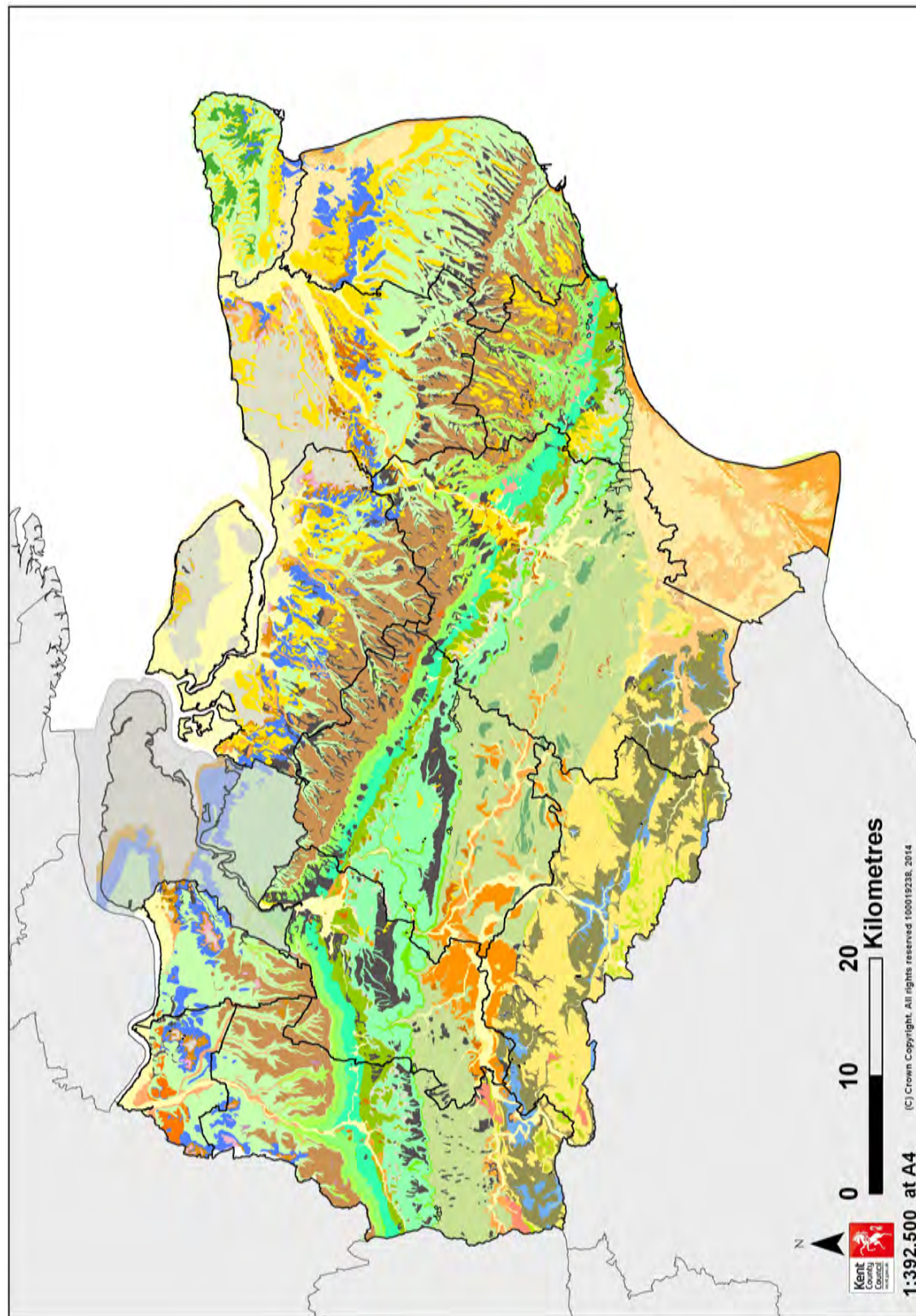
34 GWP Consultants (March 2010). A study of Silica sand Quality and End Uses in Surrey and Kent. Final Report for KCC.

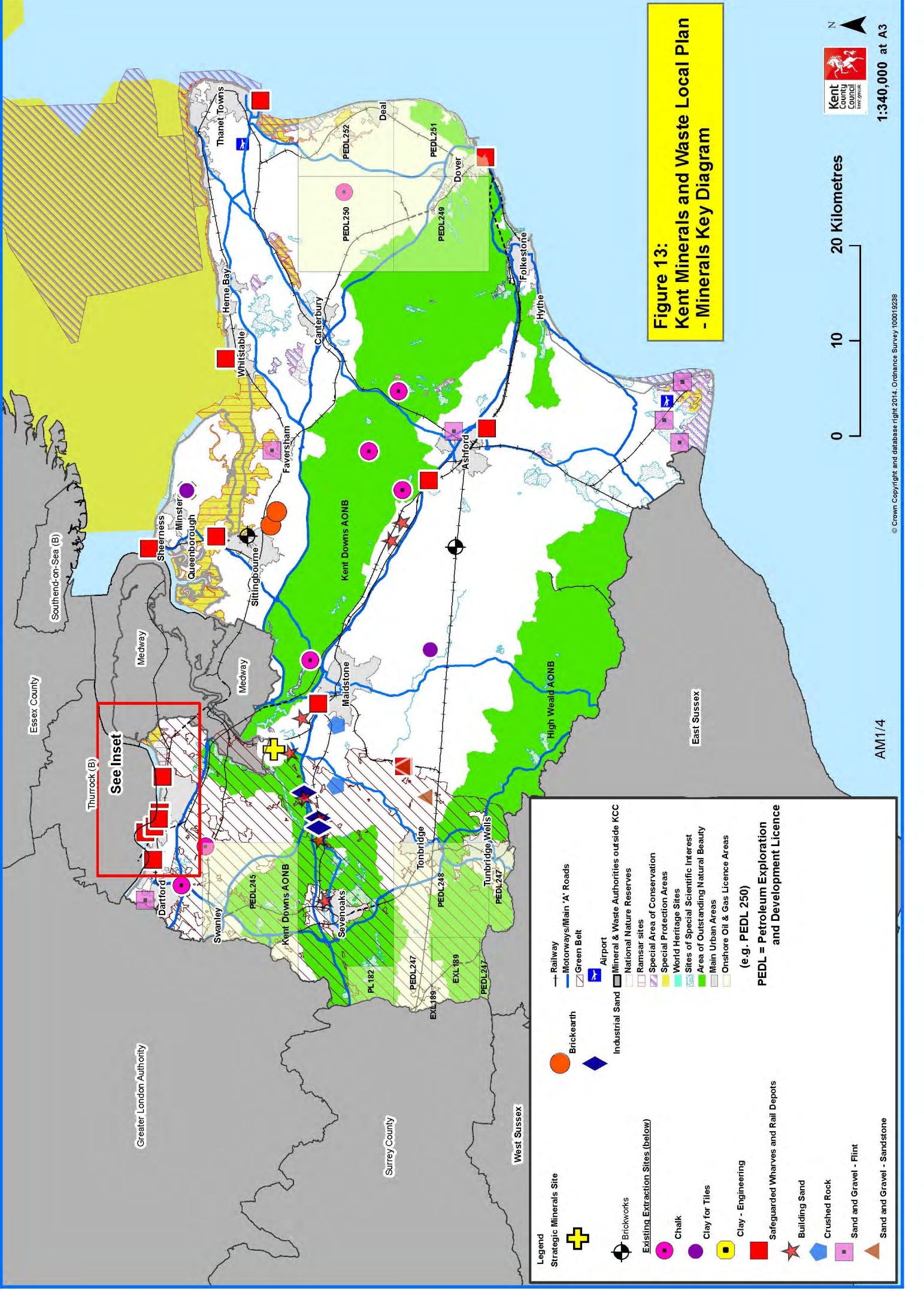
Legend: Geology of Kent

<u>Superficial (Drift) Deposits of Kent</u>		<u>Solid Geology of Kent</u>	
	Landslip		Mineral & Waste Authorities outside KCC
	Blown Sand		Lenham Beds
	Marine Beach / Tidal Flats		Bagshot Beds
	Storm Gravel Beach Deposits		Claygate Beds
	Marine (Estuarine) Alluvium (Clay)		London Clay
	(Sand (Sand & Gravel)		Blackheath / Oldhaven Beds
	Calcareous Tufa		Woolwich Beds
	Alluvium		Thanet Beds
	Dry Valley & Nailbourne Deposits		Bullhead Bed
	Peat		Upper Chalk
	Brickearth		Middle Chalk
	Undivided Flood Plain Gravel		Melbourne Rock
	1st Terrace River Gravel		Lower Chalk (Glauconic Marl)
	2nd Terrace River Gravel		Upper Greensand
	3rd Terrace River Gravel		Gault Clay
	4th Terrace River Gravel		Lower Greensand
	5th Terrace River Gravel		Folkestone Beds
	1st/2nd Terrace River Gravel		Sandgate Beds
	2nd/3rd Terrace River Gravel		Hythe Beds
	4th/5th Terrace River Gravel		Atherfield Clay
	Taplow Gravel		Weald Clay
	Boyn Hill Gravel		Sand in Weald Clay (/Sandstone)
	Head		Large 'Paludina' Limestone
	Coombe Deposits		Small 'Paludina' Limestone
	Head Brickearth		'Cyrene' Limestone
	Head Brickearth (Older)		Clay Ironstone
	Head Brickearth 1st Terrace		Undifferentiated Clay & Limestone
	Head Gravel		Hastings Beds
	Plateau Gravel		Upper Tunbridge Wells Sand
	Clay-with-Flints		Upper
	Sand in Clay-with-Flints		Cuxfield Stone
	Disturbed Blackheath Beds		Lower Grinstead Clay
			Ardingley Sandstone
			Lower Tunbridge Wells Sand
			Tunbridge Wells Sand
			Clay in Tunbridge Wells Sand
			Grinstead Clay
			Wadhurst Clay
			Sand in Wadhurst Clay
			Ironstone in Wadhurst Clay
			Ashdown Beds

2 Minerals and Waste Development in Kent: A Spatial Portrait

Figure 12 Geology of Kent





**Figure 13:
Kent Minerals and Waste Local Plan
- Minerals Key Diagram**

Legend

Strategic Minerals Site	Railway	Motorways/Main 'A' Roads	Airport
Brickworks	Green Belt	Brickearth	Industrial Sand
Existing Extraction Sites (below)	Chalk	Safeguarded Wharves and Rail Depots	Building Sand
Clay for Tiles	Clay - Engineering	Sand and Gravel - Flint	Crushed Rock
Clay - Engineering	Sand and Gravel - Sandstone	Sand and Gravel - Flint	Sand and Gravel - Sandstone

Existing Extraction Sites (below)

- Chalk
- Clay for Tiles
- Clay - Engineering

Other Symbols:

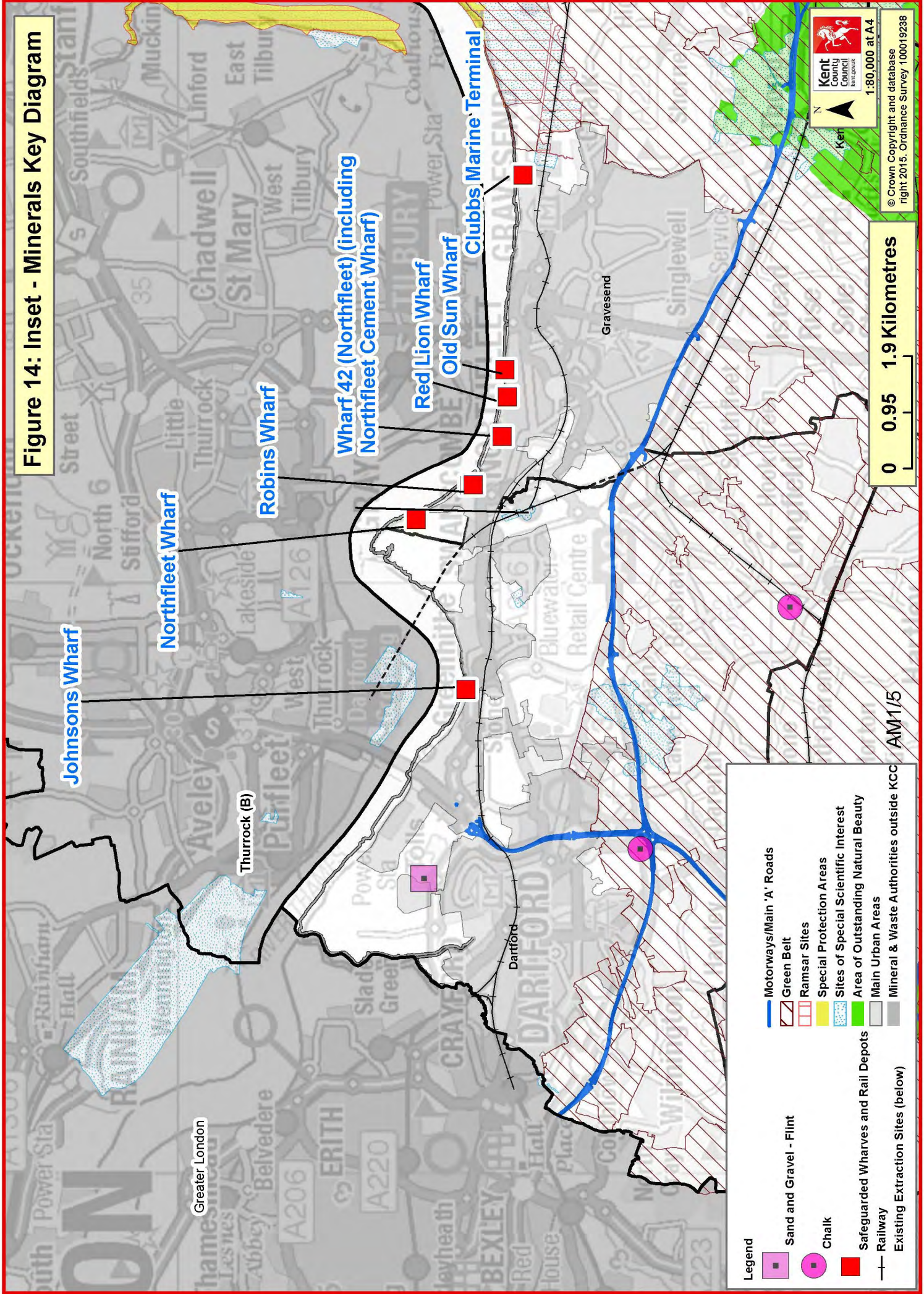
- Brickworks
- Brickearth
- Industrial Sand
- Safeguarded Wharves and Rail Depots
- Building Sand
- Crushed Rock
- Sand and Gravel - Flint
- Sand and Gravel - Sandstone

Other Legend Items:

- Railway
- Motorways/Main 'A' Roads
- Green Belt
- Airport
- Mineral & Waste Authorities outside KCC
- National Nature Reserves
- Ramsar sites
- Special Area of Conservation
- World Heritage Sites
- Sites of Special Scientific Interest
- Area of Outstanding Natural Beauty
- Main Urban Areas
- Onshore Oil & Gas Licence Areas (e.g. PEDL 250)

PEDL = Petroleum Exploration and Development Licence

Figure 14: Inset - Minerals Key Diagram



Kent County Council
1:80,000 at A4
© Crown Copyright and database right 2015. Ordnance Survey 100019238

0 0.95 1.9 Kilometres

AM1/5

- Legend**
- Sand and Gravel - Flint
 - Chalk
 - Safeguarded Wharves and Rail Depots
 - Railway
 - Existing Extraction Sites (below)
 - Motorways/Main 'A' Roads
 - Green Belt
 - Ramsar Sites
 - Special Protection Areas
 - Sites of Special Scientific Interest
 - Area of Outstanding Natural Beauty
 - Main Urban Areas
 - Mineral & Waste Authorities outside KCC

2.4 Kent's Waste Infrastructure

2.4.1 Kent has a population of 1,480,200 people with major urban areas in North Kent, Maidstone, Ashford and Thanet and smaller towns throughout the county. The county is an area of sustained growth for housing, employment and infrastructure, and retains important manufacturing industries in addition to the service employment that is prevalent in the South East. This infrastructure generates large volumes of household, Commercial and Industrial (C&I), and construction waste. In 2014, an additional 140,299 dwellings were forecast within the county for the period 2013 - 2033.

2.4.2 The district councils, as waste collection authorities (WCA), influence the rate of recycling of Municipal Solid Waste (MSW) in their areas. However, the County Council, as the disposal and Waste Planning Authority (WPA), must achieve targets and apply policies for the county as a whole. The JMWMS,⁽³⁵⁾ which provides guidance for the future direction of household waste management in Kent, has informed the Kent MWLP.

2.4.3 The provision of waste management facilities is influenced by international and national planning constraints. Local geology and hydrology also constrain where non-hazardous and hazardous waste landfill might be sited. Areas with clay geology, outside water Source Protection Zones (SPZs) which are not liable to flooding, may be suitable for future landfill. This is subject to suitable engineering solutions and any local environmental impact being acceptable. Figure 15 shows the SPZs and Flood Zones in Kent.

2.4.4 Some of Kent's mineral workings are used for waste disposal. At the time of Plan preparation, there are two non-hazardous landfill sites and two hazardous landfill sites.

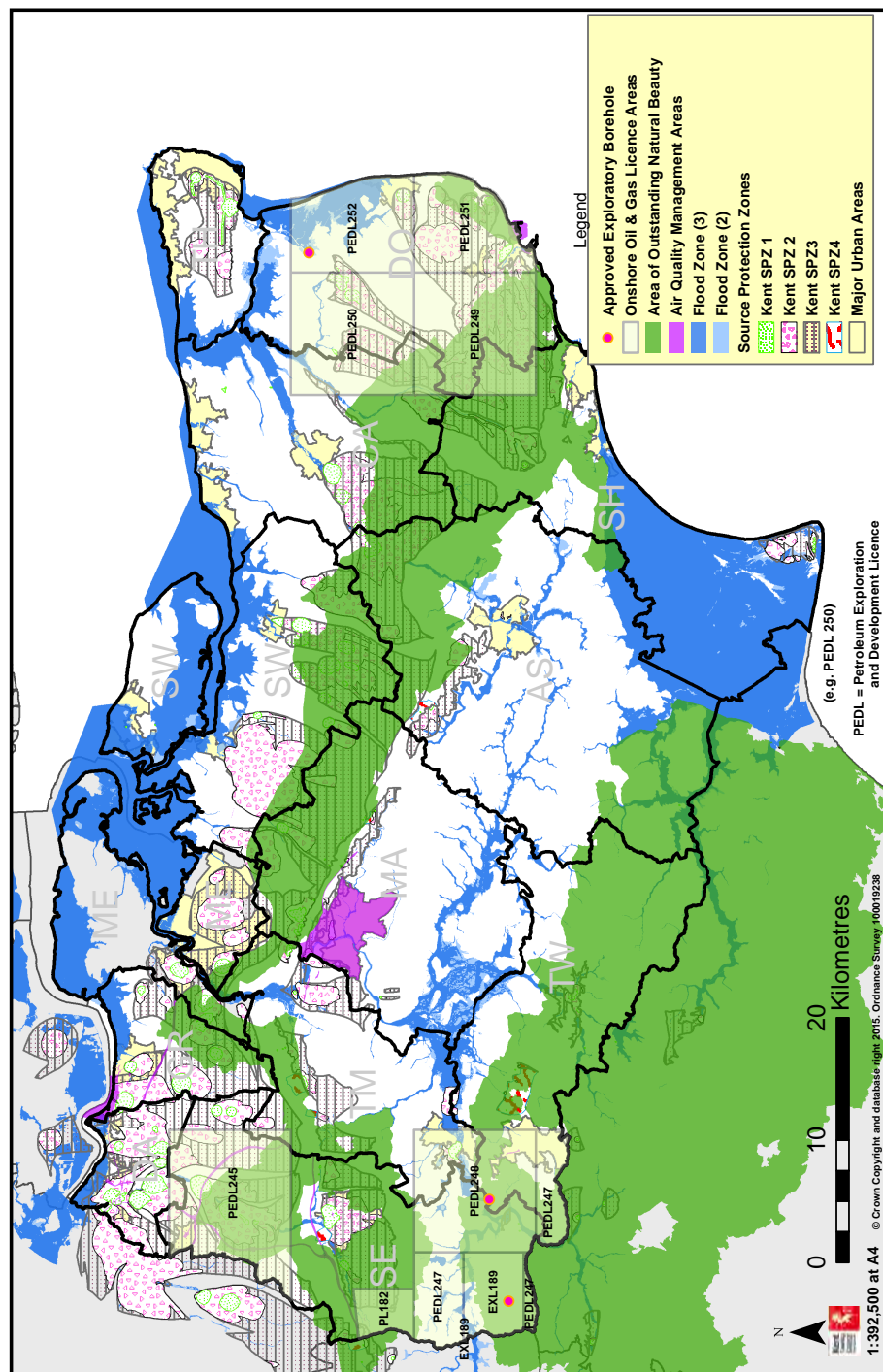
2.4.5 The Allington Energy from Waste (EfW) plant near Maidstone can treat residual household waste. It has additional capacity not contracted to the County Council available for MSW from outside Kent, or C&I waste from inside or outside Kent. It enables Kent to divert waste from landfill and to meet the national planning policy objective to move the treatment of waste up the hierarchy (see Figure 18). Blaise Farm, near West Malling has a large, modern enclosed plant for composting of green and kitchen waste.

2.4.6 Kent neighbours London, Essex, Surrey and East Sussex. Waste crosses the borders into and out of Kent.

2.4.7 Construction waste comes into the county from London for disposal in inert landfill sites. MSW is also transported to Kent to take the spare capacity in Kent's new waste treatment infrastructure at the Allington EfW facility and the materials recycling facility in Sittingbourne.

2.4.8 Figure 16 shows the location of key existing facilities. This Plan aims to provide a balanced and accessible network of modern facilities.

Figure 15 Flood Zones, Sources Protection Zones and Petroleum Exploration and Development Licence areas



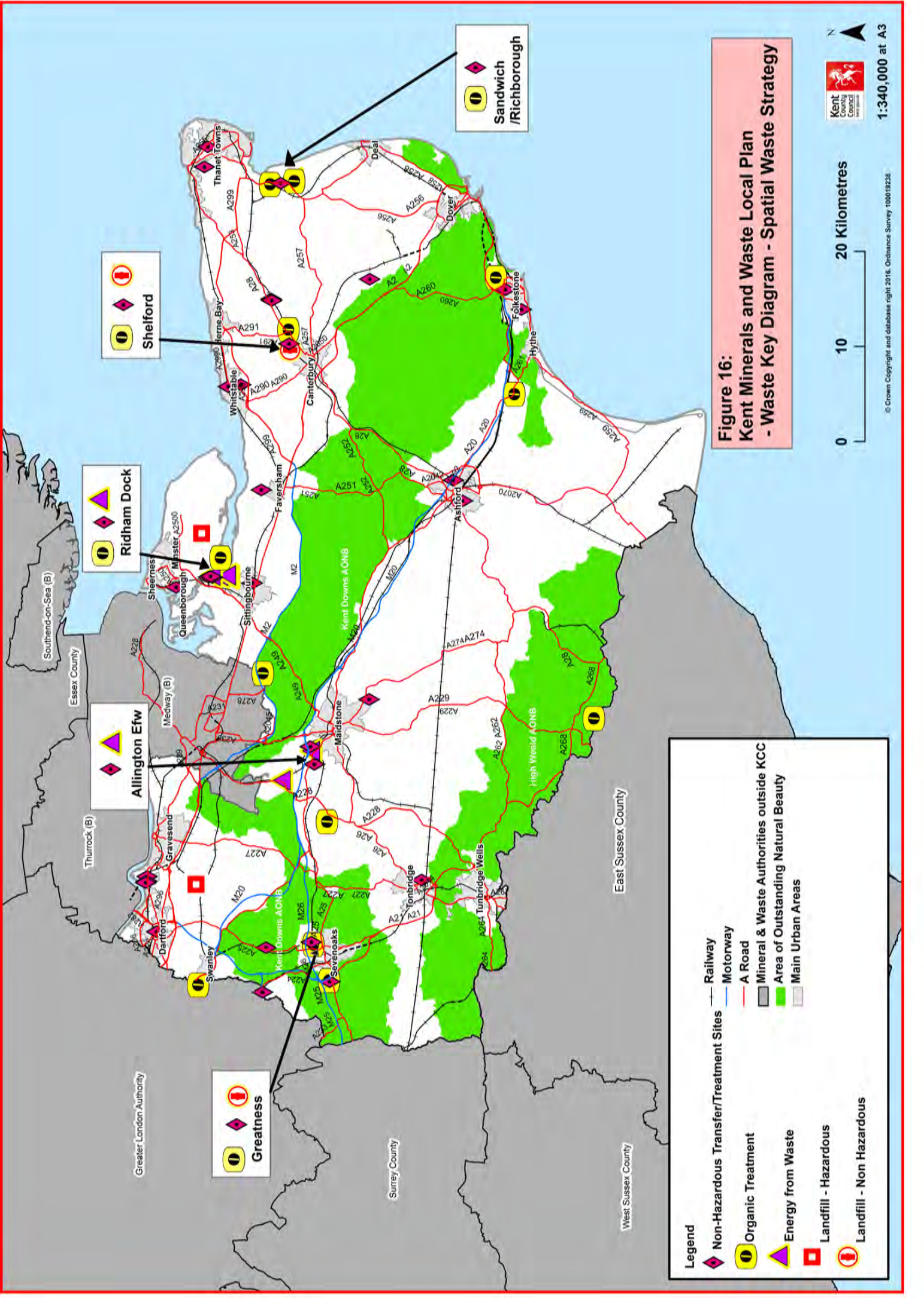


Figure 16:
Kent Minerals and Waste Local Plan
- Waste Key Diagram - Spatial Waste Strategy

3 Spatial Vision for Minerals and Waste in Kent

3.0.1 The Kent MWLP provides an opportunity to take a fresh look at minerals and waste issues and to take some bold steps towards delivering improvements in mineral supply and waste resource management based on the principles of sustainable development. Identifying a vision for minerals and waste in Kent allows us to translate broad sustainability principles and put them into a context that is relevant to our communities and businesses.

3.0.2 The main aims of the Plan are to drive waste up the Waste Hierarchy (see Figure 18) enabling waste to be considered as a valuable resource, while at the same time providing a steady supply of minerals to allow sustainable growth to take place. It will also ensure that requirements such as a Low Carbon Economy (LCE) and climate change issues are incorporated into new developments for minerals and waste development in Kent.

3.0.3 The vision outlines our ambition for sustainable resource management and mineral supply.

3.0.4 As the Kent MWLP will plan for minerals and waste in Kent up to the end of 2030, it is important to recognise that technology will change over the plan period. Therefore, the Plan has to be robust and flexible enough to enable improvements in technology to be incorporated into future mineral supply and waste management developments.

Spatial Vision for Minerals and Waste in Kent

Throughout the plan period 2013-2030, minerals and waste development will:

1. Make a positive and sustainable contribution to the Kent area and assist with progression towards a low carbon economy.
2. Support the needs arising from growth within Kent.
3. Deliver cost effective and sustainable solutions to Kent's minerals and waste needs through collaborative working with communities, landowners, the minerals and waste industries, the environmental and voluntary sector and local planning authorities.
4. Embrace the naturally and historically rich and sensitive environment of the plan area, and ensure that it is conserved and enhanced for future generations to enjoy.

Planning for Minerals in Kent will:

5. Seek to deliver a sustainable, steady and adequate supply of land-won minerals including aggregates, silica sand, crushed rock, brickearth, chalk and clay, building stone and minerals for cement manufacture.
6. Facilitate the processing and use of secondary and recycled aggregates and become less reliant on land-won construction aggregates.
7. Safeguard economic mineral resources for future generations and all existing, planned and potential mineral transportation and processing infrastructure (including wharves and rail depots and production facilities).
8. Restore minerals sites to a high standard that will deliver sustainable benefits to Kent communities.

Planning for Waste in Kent will:

9. Move waste up the Waste Hierarchy, reducing the amount of non-hazardous waste sent to landfill.
10. Encourage waste to be used to produce renewable energy incorporating both heat and power if it cannot be re-used or recycled.
11. Ensure waste is managed close to its source of production.
12. Make provision for a variety of waste management facilities to ensure that Kent remains at the forefront of waste management with solutions for all major waste streams, while retaining flexibility to adapt to changes in technology.
13. Ensure sufficient capacity exists to meet the future needs for waste management.
14. Restore waste management sites to a high standard that will deliver sustainable benefits to Kent communities.

4 Objectives for the Minerals and Waste Local Plan

4.0.1 The Spatial Vision outlines our ambition for sustainable resource management for minerals and waste development in the plan area up to the end of 2030. While this vision describes what will be achieved, the objectives explain how the vision will be achieved.

4.0.2 All of the Kent MWLP objectives that follow are underpinned by an ambition to manage waste and mineral extraction and supply according to the principles of sustainable development, and in support of the *National Infrastructure Plan*⁽³⁶⁾ and the delivery of Kent's community strategies.

4.0.3 Through regular monitoring and review of the progress of the Plan's policies against these objectives, it will be possible to see how much progress is being made towards achieving these requirements. Monitoring will also show whether the policies are having the required effects and will help to identify what may need to be undertaken to implement improvements, or whether a review of the policies is necessary. Chapter 8 sets out a schedule for managing and monitoring the delivery of the strategy.

4.0.4 The Strategic Objectives are listed overleaf and are in no particular order of priority.

Strategic Objectives for the Minerals and Waste Local Plan

General

1. Encourage the use of sustainable modes of transport for moving minerals and waste long distances and minimise road miles.
2. Ensure minerals and waste developments contribute towards the minimisation of, and adaptation to, the effects of climate change. This includes helping to shape places to secure radical reductions in greenhouse gas emissions and supporting the delivery of renewable and low carbon energy and associated infrastructure.
3. Ensure minerals and waste sites are sensitive to both their surrounding environment ⁽³⁷⁾ and communities, and minimise their impact on them.
4. Enable minerals and waste developments to contribute to the social and economic fabric of their communities through employment opportunities.

Minerals

5. Seek to ensure the delivery of adequate and steady supplies of sand and gravel, chalk, brickearth, clay, silica sand, crushed rock, building stone and minerals for cement during the plan period, through identifying sufficient sites and safeguarding mineral bearing land for future generations.
6. Promote and encourage the use of recycled and secondary aggregates in place of land-won minerals.
7. Safeguard existing, planned and potential sites for mineral infrastructure including wharves and rail depots across Kent to enable the on-going transportation of marine dredged aggregates, crushed rock and other minerals as well as other production facilities.
8. Enable the small-scale, low-intensity extraction of building stone minerals for heritage building products.
9. Restore minerals sites to the highest possible standard to sustainable afteruses that benefit the Kent community economically, socially or environmentally. Where possible, afteruses should conserve and improve local landscape character and incorporate opportunities for biodiversity to meet targets outlined in the Kent Biodiversity Action Plan, the Biodiversity Opportunity Areas and the Greater Thames Nature Improvement Area.

37 Surrounding environment: see the Glossary in Appendix A for details.

10. Encourage the sustainable use of the inert non-recyclable fraction of Construction, Demolition and Excavation Waste for quarry restoration.

Waste

11. Increase amounts of Kent's waste being re-used, recycled or recovered. Promote the movement of waste up the Waste Hierarchy by enabling the waste industry to provide facilities that help to deliver a major reduction in the amount of Kent's waste being disposed of in landfill.
12. Promote the management of waste close to the source of production in a sustainable manner using appropriate technology and, where applicable, innovative technology, such that net self sufficiency is maintained throughout the plan period.
13. Use waste as a resource to provide opportunities for the generation of renewable energy for use within Kent through energy from waste and technologies such as gasification and aerobic/anaerobic digestion.
14. Provide suitable opportunities for additional waste management capacity to enable waste to be managed in a more sustainable manner.
15. Restore waste management sites to the highest possible standard to sustainable afteruses that benefit the Kent community economically, socially or environmentally. Where possible, afteruses should conserve and improve local landscape character and incorporate opportunities for biodiversity to meet targets outlined in the Kent Biodiversity Action Plan, the Biodiversity Opportunity Areas and the Greater Thames Nature Improvement Area.

5 Delivery Strategy for Minerals

5.0.1 Minerals are essential to support sustainable economic growth and quality of life. It is important that there is a sufficient supply of minerals to provide the infrastructure and its maintenance, buildings, energy and goods that the country needs. However, since they 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.⁽³⁸⁾

5.1 Policy CSM 1: Sustainable Development

5.1.1 The purpose of the planning system is to contribute to the achievement of sustainable development.⁽³⁹⁾ There are three dimensions to sustainable development: economic, social and environmental. These require the planning system to perform three roles:

- **An economic role:** contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places at the right time to support growth and innovation; and by identifying and co-ordinating development requirements, including the provision of infrastructure.
- **A social role:** supporting strong, vibrant and healthy communities by providing the supply of housing required to meet the needs of present and future generations; and by creating a high-quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well being.
- **An environmental role:** contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a LCE.

5.1.2 At the heart of the NPPF is a presumption in favour of sustainable development. The NPPF requires that policies in local plans should follow the approach of the presumption in favour of sustainable development. The Kent MWLP is therefore based on the principle of sustainable development. This is demonstrated in the Spatial Vision and the Strategic Objectives, and the policies that seek sustainable solutions.

5.1.3 Planning law requires planning decisions to be determined in accordance with the development plan unless material considerations indicate otherwise. The NPPF states that it does not change the statutory status of the development plan as the starting point for decision making.

5.1.4 All references to 'community' or 'communities' in the policies that follow should be taken in the widest sense of including both economic and social roles and potential impacts on both people and business.

5.1.5 Policy CSM 1 is included in the Plan to ensure the presumption in favour of sustainable development is taken into account in KCC's approach to minerals development.

38 DCLG (March 2012) National Planning Policy Framework, paragraph 142.

39 DCLG (March 2012) National Planning Policy Framework Ministerial Foreword.

Policy CSM 1

Sustainable Development

When considering mineral development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework and the associated Planning Practice Guidance.

Mineral development that accords with the development plan will be approved without delay, unless material considerations indicate otherwise.

Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the Council will grant permission unless material considerations indicate otherwise, taking into account where either:

1. any unacceptable adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole, or
2. specific policies in that Framework⁽⁴⁰⁾ indicate that development should be restricted.

5.2 Policy CSM 2: Supply of Land-won Minerals in Kent

5.2.1 Economic minerals that are currently extracted from Kent quarries include aggregate minerals and industrial minerals. Aggregate minerals include: soft sand, sharp sand, gravel and crushed rock (ragstone); industrial minerals include: silica sand, brickearth, clay for tile-making, chalk for agricultural and industrial uses and building stone. In the recent past, shale from the coal measures in East Kent has been used for brick making, clay has been used for brick-making and raw materials have been extracted for cement manufacture within Kent. Up until the late 1980s, coal was extracted from underground coal mines in East Kent.⁽⁴¹⁾

5.2.2 The NPPF requires Mineral Planning Authorities (MPAs) to aim to source minerals supplies indigenously so far as practicable, and take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to supply, before considering extraction of primary materials. For land-won primary materials the NPPF expects MPAs to identify, and include policies for the extraction of, mineral resources of national and local importance in their area.

40 For example, those policies relating to land within an Area of Outstanding Natural Beauty, Green Belt, sites protected under the Birds and Habitats Directives and/or as Sites of Special Scientific Interest, designated heritage assets and locations at risk of flooding.

41 More details of non-aggregate minerals in Kent are given in: KCC (May 2011) TRM3: Other Minerals.

Sharp Sand and Gravel

Flint Gravels

5.2.3 High quality flint gravels in Kent are concentrated in the areas where flints derived from the chalk have been deposited by river and marine action. These are sourced from the three main river valleys of the Darent, Medway and Stour, and the beach deposits along the coast (particularly at Dungeness). As far back as 1970, planning studies⁽⁴²⁾ identified concerns about the depletion of flint gravels in the river valleys and the constraints on availability of the coastal supply in the Dungeness area due to nature conservation and water resource protection. Flint dominant head gravel resources near Herne Bay, previously identified as Areas of Search (AoS),⁽⁴³⁾ have not proved to be sufficiently attractive for development.

Sandstone Gravels

5.2.4 The sandstone dominant gravels in the Medway Valley upstream of Maidstone became the subject of increasing interest from operators as other deposits became worked out, although their use in the production of high-quality concreting aggregates has not normally been possible. Only one Medway Valley sandstone gravel quarry was operational at the time of plan preparation; this site imports crushed rock for blending with the indigenous sandstone gravels to produce aggregates suitable to supply the concrete production market.

Soft Sand

5.2.5 Kent's soft sand reserves extracted from the Folkestone Beds continue to be important for mortar and asphalt production. Soft sand supplies in Kent are relatively abundant, whereas they are scarce in other parts of the South East of England, with supplies from seven sites continuing to be important for mortar and asphalt production.

Crushed Rock

5.2.6 The only resource exploited commercially to supply crushed rock in the county is Kentish Ragstone, which is found in a band crossing Kent from east to west. The ragstone resource to the west of Maidstone has been the focus of crushed rock supply in the recent past. Other resources capable of producing crushed rock are found in the form of a Carboniferous Limestone deposit in east Kent (see section 5.11).

Alternative Sources of Materials to Markets Supplied by Land-won Sharp Sand & Gravels

5.2.7 Secondary and recycled aggregates can, in some circumstances, provide a replacement for sharp sand and gravel in many applications. The suitability of such materials to substitute for land-won supplies has been considered in detail in the preparation of this plan.⁽⁴⁴⁾ Sales of secondary and recycled materials in 2014 were

42 Evidence prepared for the Kent Structure Plan in 1975.

43 KCC (1993) Kent Minerals Local Plan Construction Aggregates Written Statement.

44 See report: KCC (2013) Interchangeability of Construction Aggregates.

0.84mt, although sales have been as high as 1.3mt in the last decade. The importance of maintaining supply from this source is recognised in Policy CSM 8: Secondary and Recycled Aggregates which seeks to maintain and increase production capacity.

5.2.8 With its coastal location, Kent fulfils an important role in the importation of minerals including a range of construction aggregates from mainland Europe, as well as marine dredged aggregates (MDA) and imported recycled and secondary materials. Kent benefits from a number of aggregate wharves, into which significant quantities of MDA and crushed rock are landed. Kent is understood to be the largest importer of MDA in the South East of England, with 1.7 million tonnes (mt) being imported into its wharves in 2013 and of the total of 3.13mt of MDA landed in Kent and Medway in 2009 (1.41mt into Kent), 2.5mt was consumed within Kent and Medway.⁽⁴⁵⁾ Land-won sharp sand and gravel is also imported by rail and road from areas beyond Kent. Assurances regarding the security of these minerals imports during the Plan period have been obtained.⁽⁴⁶⁾

Demand for Land-won Aggregates

5.2.9 The NPPF⁽⁴⁷⁾ requires Minerals Planning Authorities to plan for a steady and adequate supply of aggregates through preparing an annual Local Aggregates Assessment (LAA) from which future planned provision should be derived based on a rolling average of 10-years aggregates sales data⁽⁴⁸⁾ and an assessment of all supply options (including marine dredged, secondary and recycled sources), and other relevant local information. It also seeks for plans to make provision for the maintenance of landbanks of at least seven years for land-won sand and gravel and ten years for crushed rock. Landbanks of aggregate minerals reserves are used as the principal indicator of the future security of aggregate minerals supply, and to indicate the additional provision that needs to be made for new aggregate extraction and alternative supplies in mineral plans.

5.2.10 The NPPF and planning practice guidance⁽⁴⁹⁾ also states that separate landbanks should be calculated and maintained for any aggregate materials of a specific type or quality which have a distinct and separate market. Within Kent the economic sand and gravel resources are:

- the Medway Valley sandstone gravels and flint sands and gravels (collectively referred to as ‘sharp sands and gravels’) that are used primarily for concrete production
- soft sands that are predominantly used in asphalt and mortar production

45 KCCI (January 2015) The 2nd Local Aggregate Assessment for Kent, Table 3.

46 KCC (2014) Duty to Co-operate Report, Table 5.

47 DCLG (2012) National Planning Policy Framework, para. 145.

48 Data collected annually by mineral planning authorities for their AMRs and the regional aggregate working parties. Details of how the rolling 10-year average sales data and how landbanks are calculated are given in KCC (January 2015) Kent's 2nd Local Aggregate Assessment (for 2014) and in the recently updated Minerals Topic Paper 1: Construction Aggregate Assessments and Need, May 2014. Available from www.kent.gov.uk/mwlp.

49 DCLG (Revised March 2014) Planning Practice Guidance: Minerals.

5.2.11 The Kent Local Aggregate Assessment (January 2015) sets out the 10 year average of sales for all aggregates and the contribution of different aggregates to overall supply. Since the sharp sands and gravels and soft sands serve predominantly different markets their supply has been assessed separately.

5.2.12 Between 2004 and 2013 sales of sharp sand and gravel from quarries in Kent dropped from around 908,000 tonnes in 2004 to around 273,000 tonnes in 2013. The average of 10 years' sales of sharp sand and gravel is 0.78 million tonnes per annum (mtpa). If demand were at this level for the rest of the Plan period (the 17 years 2013-30), the requirement would be 13.26mt.

5.2.13 Between 2004 and 2013 sales of soft (building) sand from Kent's quarries have dropped from around 780,000 tonnes in 2004 to around 483,000 tonnes in 2013. The average of 10 years' sales of soft sand is 0.65 mtpa.

5.2.14 The 10-year average sales figure for crushed rock is 0.78mtpa and, as presented in the LAA, is based on assumed sales as the actual sales come from two quarries and hence data is confidential for the purposes of the annual monitoring returns.

5.2.15 Other relevant local information that may affect supply of, or demand for, aggregates was considered in the LAA.⁽⁵⁰⁾ This did not indicate that a figure higher than the 10 year average sales figures would be justified as a basis for future provision.

Future Supplies of Land-won Sharp Sand and Gravel

5.2.16 The starting point for identifying requirements for future land release for sand and gravel is the expected need for materials over the Plan period and beyond, taking into account the material which can be supplied from sites which already exist and have planning permission and the contribution that substitute or secondary and recycled materials would make. The Plan provides separate policies for sharp sand & gravel, soft sand and crushed rock, all of which are won from the land within Kent.

5.2.17 The sites included in the calculations of the supply of land-won sand and gravel are listed in Appendix C.

Sharp Sand and Gravel

5.2.18 Permitted reserves at the end of 2013 were 3.61mt. Initial work through the 'Call for Sites' identified potential suitable sites that might supply a potential further 6.47mt of sharp sand and gravel over the Plan period. This, combined with existing permitted reserves, totals 10.08mt.

5.2.19 As set out above, based on 10 year sales, the requirement for the Plan period (the 17 years 2013-30) is 13.26mt. The 10.08mt potentially available is not sufficient to meet this and, indeed, a seven year landbank does not presently exist, and even if the potential new supply came on stream, it would still not be possible to maintain a seven year landbank for the whole of the Plan period. This is due to insufficient suitable sites for release being identified by the minerals industry. It is possible that other suitable sources of aggregates will be identified, that currently uneconomic deposits become

50 The Local Aggregates Assessment (2015) forecast a substantially lower figure for the seven year period compared with the ten year sales figure recommended by the NPPF.

economic, or that constraints on the release of known aggregates sources (such as land ownership) may be overcome. This could lead to proposals coming forward to be judged against Policy CSM4: Non-identified Land-won Mineral Sites or to further sites being proposed in the Minerals Sites Plan.

5.2.20 Diminishing land-won sharp sand and gravel supplies will increasingly be substituted over the plan period by supplies from production of alternative materials including secondary and recycled aggregates,⁽⁵¹⁾ supplies gained from blending of materials to generate material suitable to supply the construction aggregate market,⁽⁵²⁾ landings of MDA and imports of land-won aggregates from elsewhere. Indeed, there is adequate existing capacity at wharves, railheads and recycling facilities for supplies from these sources to meet the predicted shortfall in supply of land-won sharp sand and gravel aggregate as resources are exhausted. The Plan provides for this flexibility in supply of aggregates as follows: Policy CSM 5 seeks to safeguard sharp sand and gravel resources that may become economic and to maximise the opportunities for the development of 'windfall' reserves which may come forward under Policy CSM 4. In addition, Policies CSM 7 and CSM 8 make provision for maintaining and developing further secondary and recycled aggregates supplies during the plan period and Policies CSM 6, CSM 7 & CSM 12 seek to ensure that the necessary minerals importation and processing infrastructure is in place.

Soft Sand

5.2.21 The current annual need for soft sand based on the 10-year rolling average sales figures is 0.65 million tonnes. If demand were at this level for the rest of the Plan period (the 17 years 2013-30), the requirement would be 11.05mt. In addition, provision of a landbank of seven years' supply to be available at the end of the Plan period (4.55mt) implies a total requirement of 15.60mt. At the end of 2012 there were permitted reserves of soft sand in Kent of 10.64mt and so the Plan needs to make provision for at least an additional 4.96mt of soft sand. The 'Call for Sites' from mineral companies has identified sufficient sites with estimated reserves at these sites sufficient to meet requirements without adversely impacting on the AONB or its setting. Therefore it will be possible to meet the requirement of the NPPF to maintain a landbank of at least seven years of reserves for soft sand throughout the Plan period (4.55mt). Achieving supply in practice is dependent on sufficient satisfactory planning applications being submitted by mineral companies.

5.2.22 It should be noted that there can be a lack of clarity in geology between soft sand and silica sand as they occur in the ground. In light of this, it is necessary, in consultation with the operators, to determine the degree to which sites identified as supplying soft sand and/or silica sand may supply both materials. This review process may have an effect on the overall recorded landbank for soft sand in Kent. The outcome of this review will be reported in the LAA.

51 KCC (January 2015) Kent's 2nd Local Aggregate Assessment

52 This currently occurs at two sites (Hermitage Quarry - rock and hassock & East Peckham - imported rock and extracted sandstone gravels)

Crushed Rock

5.2.23 The stock of planning permissions for crushed rock (ragstone) in Kent at the time of plan preparation are sufficient to maintain a landbank of ten years supply (assumed as 0.78mtpa) throughout and beyond the end of the plan period and so no additional crushed rock (ragstone) sites will be identified in the Minerals Sites Plan.

5.2.24 At the time of plan preparation, consented reserves of crushed rock are contained within two Kentish Ragstone sites. One of which contains the bulk of the permitted reserves that are generally of low quality and so their use is limited, and mineral extraction only takes place from this site intermittently on a campaign basis. In view of this, a policy covering situations where non-identified land-won mineral sites could be acceptable is included as Policy CSM 4.

Overall Provision of Land-won Aggregates

5.2.25 The Plan will provide for land-won aggregates as follows:

- Sharp sand and gravel: at least 10.08mt (including 3.61mt of currently permitted reserves), and a landbank of at least 5.46 mt as long as resources allow.
- Soft sand: 10.64mt reserves at existing permitted sites and new allocations to provide at least 4.96mt making a total provision of 15.60mt, sufficient to provide 11.05mt for the Plan period plus a landbank of 4.55mt in 2030;
- Crushed rock: c.50mt reserves at existing permitted sites, sufficient to provide 13.26mt for the Plan period plus a landbank of 7.28mt in 2030 without the need for any new allocation

5.2.26 The sand and gravel sites identified in the Mineral Sites Plan will include land-won sharp sand and gravel sites, and soft sand (building sand) sites.

5.2.27 Criteria that will be taken into account for selecting and screening the suitability of sites for identification in the Minerals Sites Plan are set out in Policy CSM2.

Industrial Minerals

5.2.28 In seeking to provide a steady and adequate supply of industrial minerals, and following national policy, the County Council will co-operate with other MPAs to co-ordinate the planning of industrial minerals (including silica sand) to ensure adequate provision is made to support their likely use in industrial and manufacturing processes. The County Council will also seek to maintain a stock of permitted reserves to support the level of actual and proposed investment required for new or existing plant and the maintenance and improvement of existing plant and equipment as follows:

- at least 10 years for individual silica sand sites except where significant new capital is required in which case it is 15 years;

- at least 15 years for cement primary (chalk and limestone) and secondary (clay and shale) materials to maintain an existing plant; and
- at least 25 years for brick clay and for cement primary and secondary materials to support a new kiln.

5.2.29 This section deals with how the Plan intends to provide to meet these expectations.

Brickearth and Clay for Brick and Tile Manufacture

5.2.30 At the time of plan preparation, Kent only has one operational brickworks near Sittingbourne, which is supplied by brickearth extracted from sites in the Sittingbourne to Faversham area to make yellow London stock bricks. Brickearth extracted from another site in north Kent provides the raw materials for a brickworks in East Sussex. National planning policy requires the provision of a stock of permitted reserves of at least 25 years for brick clay.⁽⁵³⁾ There is a need to ensure sufficient reserves are available to provide brickearth for these two brickworks to ensure that the locally characteristic yellow London stock bricks can continue to be manufactured.

5.2.31 In the past in Kent, bricks have also been made at various locations from supplies of Weald Clay, Gault Clay, London Clay, Wadhurst Clay and colliery shale. No operational brickworks that use clay and/or colliery shale remain in Kent. The stock of planning permissions for clay and colliery shale for brick and tile making is sufficient for the plan period if any of the dormant or closed brickworks is re-opened or new brickworks are established.⁽⁵⁴⁾ Therefore, there is no need to identify further reserves of brick clay or colliery shale for brickmaking in the Mineral Sites Plan.

5.2.32 A small-scale tile manufacturer that makes traditional 'Kent Peg' tiles is located in the Weald of Kent at Hawkenbury. This site has a consented clay pit with reserves consented through to 2026. Permitted reserves are however sufficient to supply the tile works beyond this date. No further reserves are needed to be identified to sustain this operation during the plan period.

53 MHCLG (February 2019) National Planning Policy Framework, paragraph 208.

54 KCC (May 2011) TRM3: Other Minerals.

Silica Sand

5.2.33 Silica sand is considered to be a mineral of national importance due to its limited distribution. The Folkestone Beds, west of Maidstone, is the traditional extraction area for silica sand in Kent and is made up of distinct horizons of building sand and silica sand. While the quality of these silica sand deposits in Kent is not as pure as those found in the neighbouring county of Surrey, some of this material is used for industrial processes including glass manufacture and the production of foundry castings. Silica sand is also used in horticulture and for sports surfaces including horse maneges and golf course bunker sand. There are no sites in Kent that provide only silica sand. All of Kent's existing silica sand sites produce construction aggregates to some extent.⁽⁵⁵⁾ National policy requires MPAs to plan for a steady and adequate supply of silica sand by providing a stock of permitted reserves to support the level of actual and proposed investment required for new or existing plant, and the maintenance and improvement of existing plant and equipment. This is carried out by providing a stock of permitted reserves of at least 10 years at established existing sites, and at least 15 years for silica sand sites where significant new capital is required, this would include entirely new sites.⁽⁵⁶⁾

5.2.34 Silica sand is used in a range of applications including the manufacture of glass and production of materials used in construction. An example of a potential local use would be in the manufacture of 'Aircrete' blocks (also known as aerated concrete blocks) where it may substitute for the current supply of Pulverised Fuel Ash (PFA). Currently the existing market need for silica sand is being met by extraction from two quarries Wrotham Quarry (Addington Sand Pit) and Nepicar Sand Pit. These have permitted reserves in the region of 2.1 mt. These quarries are identified in Appendix C and shown in Figure 13: Minerals Key Diagram. Wrotham Quarry site has a potential extension area but that lies within the Kent Downs AONB. While the Plan seeks to maintain a stock of permitted reserves, in line with national policy, it is recognised that this may not be possible if it would be inconsistent with policy to conserve the landscape and scenic beauty of the AONB. In light of national policy, the Plan does not seek allocation of sites within the AONB or in locations which would have an adverse impact on the setting of, and implementation of, the statutory purposes of the AONB. Proposals will be considered on their merits against policy CSM 2.

55 GWP Consultants (March 2010) A study of silica sand quality and end uses in Surrey and Kent. Final report for KCC and Surrey County Council.

56 DCLG (2012) National Planning Policy Framework, paragraph 146.

Chalk

5.2.35 Chalk is abundant in Kent. It is used for agricultural and construction purposes (primarily as a bulk fill material) across the county.⁽⁵⁷⁾ Since there are no plants dependant on the supply of chalk there is no policy requirement to make provision. However local sales data for agricultural and engineering use combined indicates that sales vary considerably from year to year. The indicative Kent landbank of chalk for agricultural and engineering use is estimated to be around 17.6 years as of 2018⁽⁵⁸⁾. Reserves of chalk and rates of demand will be monitored and reported in the Annual Monitoring Report and taken into account when any proposals for new sites come forward.

5.2.36 To help facilitate future development of cement manufacture at the Medway Works, Holborough, specific reserves of chalk are safeguarded as set out in Policy CSM 3.

Clay for Engineering Purposes

5.2.37 Clay is also abundant in Kent. Other than uses in brick manufacture, the principal use for extracted clay is for land engineering purposes. Since there are no specific requirements for engineering clay for bulk fill, waterproof capping or flood defences there is no requirement to make specific provision. Local sales data indicates that sales vary significantly from year to year, however an average for the 11 years in which data was available indicates sales of approximately 27,000 tpa with a peak demand of 69,000 tonnes in 2002.⁽⁵⁹⁾ This equates to a need over the plan period of around 459,000mt. The proposed extension areas for Norwood Quarry and Landfill Site on the Isle of Sheppey, identified as the Strategic Site for Waste in Policy CSW 5, will also be identified as an extraction site for engineering clay.

57 KCC (May 2012) TRM3: Other Minerals.

58 KCC (2018) Kent's 12th Annual Kent Minerals and Waste Monitoring Report 2017/18.

59 KCC (2012) TRM3 Other Minerals, Table 4B.

Policy CSM 2

Supply of Land-won Minerals in Kent

Mineral working will be granted planning permission at sites identified in the Minerals Sites Plan⁽⁶⁰⁾ subject to meeting the requirements set out in the relevant site schedule in the Mineral Sites Plan and the development plan.

1. Aggregates

Provision will be made for the supply of land-won aggregates as follows:

- **Sharp sand and gravel:** At least 10.08mt and a landbank of at least seven years supply (5.46mt) will be maintained while resources allow. The rate of supply will decline through the Plan period from a supply of a 10-year average of around 0.78mtpa and resources will be progressively worked out (unless additional sites are brought forward which would be assessed against Policy CSM4). Demand will instead be met from other sources, principally a combination of recycled and secondary aggregates, landings of MDA, blended materials and imports of crushed rock through wharves and railheads. The actual proportions will be decided by the market.
- **Soft sand:** Rolling landbanks for the whole of the plan period and beyond of at least seven years equivalent to at least 15.6mt, comprising 10.6mt from existing permitted sources and 5.0mt from sites allocated in the Minerals Sites Plan.
- **Crushed rock:** Rolling landbanks for the whole of the Plan period and beyond of at least ten years equivalent to at least 20.5mt, all from existing permitted sources.

Sites will be identified in the Mineral Sites Plan to support supplies of land-won aggregates at the stated levels above. A rolling average of ten years' sales data and other relevant information will be used to assess landbank requirements on an on-going basis, and this will be kept under review through the annual production of a Local Aggregates Assessment.

2. Brickearth and Clay for Brick and Tile Manufacture

The stock of existing planning permissions at Paradise Farm, Orchard Farm, Hempstead House and Claxfield Road for brickearth clay for brick and tile making is sufficient for the plan period. Applications for sites supplying brickearth and clay for brick and tile making will be dealt within in accordance with the policies of this Plan. The existence of a stock of permitted reserves of at least 25 years (as reported in the latest Annual Monitoring report) to support the level of actual and proposed investment required for new or existing plant and the maintenance and improvement of existing plant and equipment will be a material consideration.

3. Silica Sand

In response to planning applications, the Mineral Planning Authority will seek to permit sites for silica sand production sufficient to provide a stock of permitted reserves of at least 10 years for individual sites of 10 years and 15 years for sites where significant new capital is required, to support the level of actual and proposed investment required for new or existing plant and the maintenance and improvement of existing plant and equipment.⁽⁶¹⁾ Proposals will be considered on their own merits, having regard to the policies of the Development Plan as a whole subject to them demonstrating:

- a. how the mineral resources meet technical specifications required for silica sand (industrial sand) end uses
- b. how the mineral resources will be used efficiently so that high-grade sand deposits are reserved for industrial end uses

4. Chalk for Agriculture and Engineering Purposes

The stock of existing planning permissions for chalk is sufficient to supply Kent's requirements for agricultural and engineering chalk over the plan period. Applications for sites supplying chalk for agriculture and engineering purposes will be dealt with in accordance with the policies of this Plan. The need for additional supplies of chalk will be assessed based on the latest assessment of supply and demand set out in the Annual Monitoring Report.

5. Clay for Engineering Purposes

A site for the extraction of clay for engineering purposes will be identified at Norwood Quarry and Landfill Site in the Minerals Sites Plan. Other sites will be identified if required in order to enable clay extraction to continue through the Plan period to supply Kent's requirements.

Selection of Sites in the Minerals Sites Plan

The criteria that will be taken into account for selecting and screening the suitability of sites for identification in the Minerals Sites Plan will include:

- the requirements for minerals set out above
- relevant policies set out in Chapter 7: Development Management Policies
- relevant policies in district local plans and neighbourhood plans
- strategic environmental information, including landscape assessment and HRA as appropriate
- their deliverability
- other relevant national planning policy and guidance

60 Sites identified in the Minerals Sites Plan will generally be where viable mineral resources are known to exist, where landowners are supportive of mineral development taking place and where MPAs consider that planning applications are likely to be acceptable in principle in planning terms.

5.3 Policy CSM 3: Strategic Site for Minerals

5.3.1 While Kent was once a major producer of cement, there are no operational cement works remaining within the county. Re-establishing cement manufacture in Kent is sufficiently important to the achievement of the Plan's Spatial Vision and Strategic Objectives to warrant the identification of a proposed cement works and its associated mineral reserves as a Strategic Site. Medway Works, Holborough (shown on Figure 17) has the benefit of an extant planning permission with the permitted mineral resources that are required to supply the works being sufficient for at least 25 years. However, there are likely to be significant changes needed to the approved layout and design to reflect modern requirements that would require a fresh planning application being approved prior to the development of the site. In view of the potential job opportunities and level of investment required to construct a new cement works, this site is considered sufficiently important to designate it as the only Strategic Site for minerals. Policy CSM 3 addresses the planning issues of this Strategic Site's potential for significant investment for long-term cement manufacture while maintaining a sensitive protection of the environment, with particular regard to the Kent Downs AONB landscape designation.

Policy CSM 3

Strategic Site for Minerals

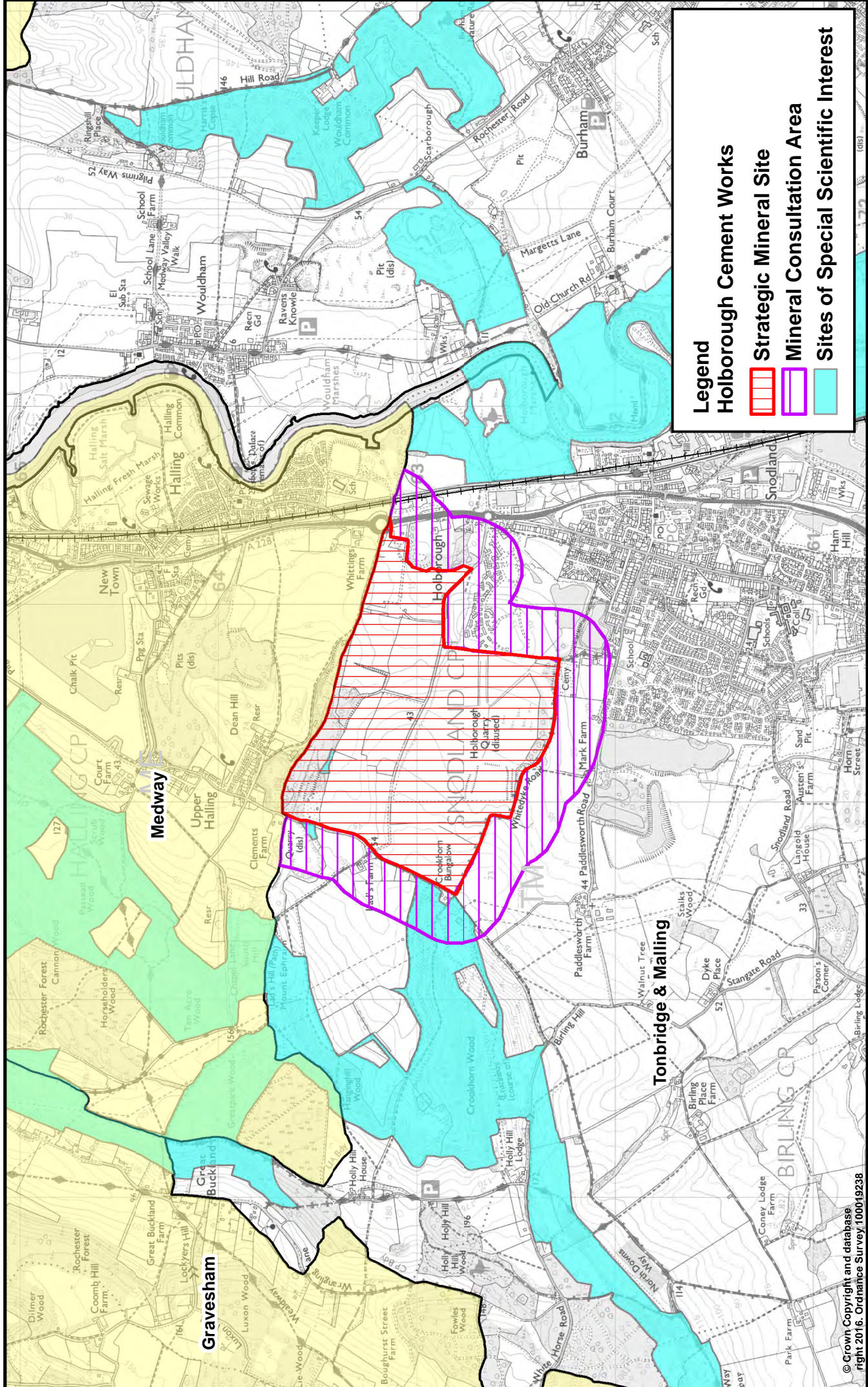
The site of the proposed Medway Cement Works, Holborough and its permitted mineral reserves are together identified as the Strategic Site for Minerals in Kent. The site location is shown on Figure 17.

Planning permission will not be granted for any development other than chalk extraction for cement manufacture, cement manufacture and restoration of the resulting void.

Mineral working and processing at the Strategic Site for Minerals will be permitted subject to meeting the requirements of the development plan and the following criteria:

1. an assessment of the impact of mineral working upon views from the Kent Downs Area of Outstanding Natural Beauty, with suitable sufficient landscaping mitigation measures to minimise the impacts upon views, protect the amenity of nearby residents and enhance and restore the landscape character
2. the development not generating more traffic movements than can be accommodated without any unacceptable adverse impacts upon the local highway network
3. the site and any associated land being restored to a high quality standard and where appropriate after-use that supports and enhances the long-term local landscape character

61 'Plant and equipment' is taken to mean that used in the processing of minerals and its use in industrial and manufacturing processes.



Legend

- Strategic Mineral Site
- Mineral Consultation Area
- Sites of Special Scientific Interest

Figure 17 : Strategic Mineral Site

Kent Minerals & Waste Local Plan

© Crown Copyright and database right 2016. Ordnance Survey 100019238

Scale: 1:25,000 at A4

Scale bar: 0, 830, 1,660 Metres

Kent County Council logo

5.4 Policy CSM 4: Non-identified Land-won Mineral Sites

5.4.1 Policy CSM 3: Strategic Site for Minerals, together with the other Plan policies and the sites identified in the Mineral Sites Plan, will provide the framework that seeks to enable a stock of planning permissions for aggregates, chalk, brickearth, clay, silica sand and minerals for cement manufacture to be maintained at the required levels throughout the plan period.

5.4.2 The sites identified in the Minerals Sites Plan will have been subject to a detailed assessment that will seek to balance demand for the mineral and any other benefits against potential adverse impacts, with a view to securing a steady and adequate supply of aggregates and industrial minerals, having regard to national planning policy and the objectives and policies of this plan, including sustainability objectives. The presumption is that provision will be made by means of the allocated sites coming forward and providing the mineral required at the appropriate time. Planning applications for minerals development on non-allocated sites (other than with respect to silica sand, where no allocations are proposed to be made) will be considered having regard to the relevant objectives and policies of the development plan as a whole, in particular the need to plan for a steady and adequate supply of mineral.

5.4.3 Where a proposal for minerals development on a non-allocated site fails to comply with the development plan or is otherwise shown to cause harm to its objectives, planning permission will be granted only if sustainable benefits are clearly demonstrated that are sufficient to outweigh the harm identified. Examples of criteria that may justify permission being granted include:

- the possibility of prior extraction of an economic mineral ahead of other development taking place within the safeguarded mineral resource⁽⁶²⁾
- the possibility of borrow pit developments that can supply materials in a sustainable manner to major infrastructure developments including road, rail and ports
- locations of consented reserves and any alternative supply options⁽⁶³⁾ being remote from main market areas necessitating unduly long road journeys from the source to the market
- the nature and qualities of the mineral such as suitability for particular use
- known constraints on the availability of consented reserves that might limit output over the plan period
- the extent to which permitted reserves are within inactive sites that are unlikely to ever be worked

62 Safeguarding of mineral resources is dealt with by Policies CSM 5, DM 7 and DM 8 and prior extraction principally by Policy DM 9.

63 Alternative supply options include secondary or recycled materials and imports through wharves and rail depots.

- the assurance that large landbanks bound up in very few sites do not stifle competition
- sites in the Minerals Sites Plan not coming forward as anticipated.

Policy CSM 4

Non-identified Land-won Mineral Sites

With the exception of proposals for the extraction of silica sand provided for under Policy CSM 2, proposals for mineral extraction other than the Strategic Site for Minerals and sites identified in the Minerals Sites Plan will be considered having regard to the policies of the development plan as a whole and in the context of the Vision and Objectives of this Plan, in particular the objective to plan for a steady and adequate supply of aggregates and industrial minerals. Where harm to the strategy of the development plan is shown, permission will be granted only where it has been demonstrated that there are overriding benefits that justify extraction at the exception site.

5.5 Policy CSM 5: Land-won Mineral Safeguarding

5.5.1 Protecting mineral resources from unnecessary sterilisation is a very important part of minerals planning policy, it is central to supporting sustainable development. Minerals are a finite natural resource which need to be used prudently. The purpose of safeguarding minerals is to ensure that sufficient economic minerals are available for future generations to use. The viability of extracting resources may change over time and is likely to increase as resources become more scarce. Mineral transportation infrastructure is also important because, as described in section 5.2, imported minerals make a major contribution to the County's requirements and production facilities convert materials into useable products. Such transportation infrastructure also allows for the export of minerals from Kent to other areas. The British Geological Society (BGS) Mineral Resource maps provide the best available geological data on the extent of mineral resources in Kent and so have been used as the starting point for safeguarding mineral resources in Kent.

5.5.2 Policy CSM 5 describes how land-won minerals will be safeguarded and Policies CSM 6 and CSM 7 describe how mineral infrastructure will be safeguarded. Policy DM 7 describes the circumstances in which non-mineral developments that are incompatible with safeguarding a resource or a safeguarded wharf or rail depot would be acceptable. Policies CSM 4 and DM 9 set out how applications for prior extraction of safeguarded mineral resources, that would otherwise be sterilised by non-minerals development, would be considered. Policy DM 8 describes the circumstances in which non-mineral developments that might be incompatible with safeguarding minerals and/or waste infrastructure would be acceptable.

5.5.3 Land-won mineral safeguarding is carried out through the designation of Mineral Safeguarding Areas (MSAs) and Mineral Consultation Areas (MCAs). Further explanation is provided below.

5.5.4 MSAs cover areas of known mineral resources that are, or may in future be, of sufficient value to warrant protection for future generations. MSAs ensure that such resources are adequately and effectively considered in land-use planning decisions so that they are not needlessly sterilised. The level of information used to indicate the existence of a mineral resource can vary from geological mapping to more in-depth geological investigations. Defining MSAs carries no presumption for extraction and there is no presumption that any areas within MSAs will ultimately be acceptable for mineral extraction.

5.5.5 National policy expects all MPAs, both unitary and two-tier authorities, to include policies and proposals in their local plans to safeguard mineral resources and to set out their extent on maps of MSAs. In two-tier authority areas, such as Kent, MSAs should be included on the Policies Maps of the Development Plan maintained by the District and Borough Councils. This is intended to alert prospective promoters of development and the local planning authority, to the existence of mineral resources and shows where local mineral safeguarding policies may apply.

5.5.6 Geological mapping is indicative of the existence of a mineral resource. It is possible that the mineral has already been extracted and/or that some areas may not contain any of mineral resource being safeguarded. Nevertheless, the onus will be on promoters of non-mineral development to demonstrate satisfactorily⁽⁶⁴⁾ at the time that the development is promoted that the indicated mineral resource does not actually exist in the location being promoted, or extraction would not be viable or practicable under the particular circumstances.

5.5.7 The MCA designation is intended to ensure that consultation takes place between county and district/borough planning authorities when mineral interests might be compromised by non-minerals development, especially in close proximity to a known mineral resource. The designation of MCAs is not obligatory, but consultation on development within an MCA is. The MCAs within Kent cover the same areas as the MSAs, other than that around the safeguarded mineral reserves at Holborough Works as shown in Figure 17.

5.5.8 Where an application is made for non-mineral development within a MSA identified in this Plan, then the determining authority will consult the MPA for its views on the application and take them into account in its determination. For non-minerals development determined by the County Council e.g. schools and waste management, the safeguarding policies will equally apply.

5.5.9 Economic land-won minerals that are identified for safeguarding in Kent are sharp sand and gravel, soft sand, silica sand, crushed rock, building stone and brickearth. As chalk and clay (other than brickearth) are abundant across the county, they are not being safeguarded. The mineral resource areas identified for safeguarding are shown in the MSAs in Chapter 9: Adopted Policies Maps. The MSAs are based on mapping

64 Non-minerals development will mainly be promoted through planning applications or through proposed allocations in Local Plans. Advice will be provided by Kent County Council (as the Minerals Planning Authority).

of the mineral resource prepared by the BGS. Current guidance advises that mineral safeguarding should not be curtailed by any other planning designation, such as environmental designations without sound justification. The mineral resources within the Plan area are extensive and whilst they continue beneath urban areas they are already sterilised by non-mineral development with very little prospect of future working. Therefore in order for the safeguarding to be practical such areas have been excluded from the MSAs.

5.5.10 The surface working area of the proposed East Kent Limestone Mine is not identified for safeguarding. This is because there has been no advancement in the mine's development since the identification of this resource as a possible area of mining in the 1993 Minerals Subject Plan.⁽⁶⁵⁾ There is no certainty where the built footprint for the surface aggregate processing facility is likely to be situated (if it is ever developed) and planning policies should avoid the long-term protection of sites identified for employment use where there is no reasonable prospect of a site being used for that purpose. Any proposals for prospecting the Carboniferous Limestone deposit will be considered under Policy CSM 11.⁽⁶⁶⁾

5.5.11 Coal, oil, and deep pennant sandstone resources are also not being safeguarded, as they are located at considerable depth underground and may potentially form extensive resources. The safeguarding of these deep underground minerals would dilute the focus of safeguarding mineral resources, access to which is more likely to be lost to built development.

5.5.12 Following the adoption of this Plan, the MSAs will be reviewed and updated as necessary. Further reviews of the MSAs will take place at least every five years. Matters to be taken into account in these reviews will be set out in a Supplementary Planning Document on minerals safeguarding to be prepared following adoption of this Plan. Such matters will include the following:

1. Previously worked land (provided the mineral resource is exhausted)
2. Transport infrastructure
3. Land within urban areas
4. Proposed urban extensions and site allocations for non-minerals uses in adopted local plans
5. The importance of minerals resources
6. The accessibility of the minerals resource i.e. whether it can be practicably and viably worked

5.5.13 At the same time, the need to safeguard sites hosting specific infrastructure (transportation and production) will also be reviewed.

65 KCC (1993) Mineral Subject Plan Construction Aggregates.

66 DCLG (March 2012) National Planning Policy Framework, para. 22.

5.5.14 The process of allocating land for non-minerals uses in local plans will take into account the need to safeguard minerals resources and mineral infrastructure. The allocation of land within an MSA will only take place after consideration of the factors that would be considered if a non-minerals development were to be proposed in that location, or in proximity to it, as set out in Policies DM 7, DM 8, CSM 5 and CSM 6. The Minerals Planning Authority will support the District and Borough Councils in this process.

Policy CSM 5

Land-won Mineral Safeguarding

Economic mineral resources are safeguarded from being unnecessarily sterilised by other development by the identification of:

1. Mineral Safeguarding Areas for the areas of brickearth, sharp sand and gravel, soft sand (including silica sand), ragstone and building stone as defined on the Mineral Safeguarding Area Policies Maps in Chapter 9
2. Mineral Consultation Areas which cover the same area as the Minerals Safeguarding Areas and a separate area adjacent to the Strategic Site for Minerals at Medway Works, Holborough as shown in Figure 17
3. Sites for mineral working within the plan period identified in Appendix C and in the Mineral Sites Plan.

5.6 Policy CSM 6: Safeguarded Wharves and Rail Depots

5.6.1 Kent has a range of mineral transportation facilities around its coast as well as inland. The importance of safeguarding these facilities to enable the on-going supply of essential minerals is identified in national planning policy. Development in proximity to a mineral transportation facility could prejudice or constrain current or future operations. It is important therefore, that the Plan ensures that wharves and rail depots are safeguarded and are not put at risk by non-minerals developments. The locations of the safeguarded wharves and rail depots are shown in Figure 13: Minerals Key Diagram and in Chapter 9: Adopted Policies Maps.

5.6.2 Policy DM 8 identifies situations where development at, or in proximity to, safeguarded infrastructure including wharves and rail depots, would be acceptable.

Policy CSM 6

Safeguarded Wharves and Rail Depots

Planning permission will not be granted for non-minerals development that may unacceptably adversely affect the operation of existing,⁽⁶⁷⁾ planned or potential sites, such that their capacity or viability for minerals transportation purposes may be compromised.

The following sites, and the allocated sites included in the Minerals Sites Plan, are safeguarded:

1. Allington Rail Sidings
2. Sevington Rail Depot
3. Hothfield Works
4. East Peckham
5. Ridham Dock (both operational sites)
6. Johnson's Wharf, Greenhithe
7. Robins Wharf, Northfleet (both operational sites)
8. Clubbs Marine Terminal, Gravesend
9. East Quay, Whitstable
10. Red Lion Wharf, Gravesend
11. Ramsgate Port
12. Wharf 42, Northfleet (including Northfleet Cement Wharf)
13. Dunkirk Jetty (Dover Western Docks)
14. Sheerness
15. Northfleet Wharf
16. Old Sun Wharf, Gravesend

67 Existing sites are taken as sites that have permanent planning permission for minerals transportation purposes.

Their locations are shown in Figure 13: Minerals Key Diagram in Chapter 2 and their site boundaries are shown in Chapter 9: Adopted Policies Maps.

The Local Planning Authorities will consult the Minerals Planning Authority and take account of its views before making a planning decision (in terms of both a planning application and an allocation in a local plan) for non-mineral related development (other than that of the type listed in policy DM 8 (clause 1) on all development proposed at, or within 250m of, safeguarded minerals transportation facilities.

5.7 Policy CSM 7: Safeguarding Other Mineral Plant Infrastructure

5.7.1 National policy requires other types of mineral infrastructure to be safeguarded. This includes existing, planned and potential sites for concrete batching, the manufacture of coated materials, other concrete products and the handling, processing and distribution of substitute, recycled and secondary aggregate materials.

5.7.2 As there are many sites within the county, with considerable numbers being located on industrial estates identified in local plans for general industrial and commercial uses, a generic (non-site specific) policy for safeguarding these facilities and their ongoing, overall capacities is necessary. Policy CSM 7 addresses the need to safeguard mineral production infrastructure, while being flexible to the needs of the industry by enabling the loss of capacity (potentially required for the industry to remain competitive and viable) provided there is replacement capacity available elsewhere of a type that is at least equal to that provided by the original facility. Policy DM 8 identifies situations where development at, or in proximity to safeguarded mineral plant infrastructure would be acceptable.

Policy CSM 7

Safeguarding Other Mineral Plant Infrastructure

Facilities for concrete batching, the manufacture of coated materials, other concrete products and the handling, processing and distribution of substitute, recycled and secondary aggregate material in Kent are safeguarded for their on-going use.

Where these facilities are situated within a host quarry, wharf or rail depot facility, they are safeguarded for the life of the host site.

Where other development is proposed at, or within 250m of, safeguarded minerals plant infrastructure, Local Planning Authorities will consult the Minerals Planning Authority and take account of its views before making a planning decision (in terms of both a planning application and an allocation in a local plan).

5.8 Policy CSM 8: Secondary and Recycled Aggregates

5.8.1 The use of secondary and recycled aggregates is generally more sustainable than extracting primary land-won aggregates. It is for this reason that national policy expects MPAs to take account of the contribution that secondary and recycled materials would make, before considering extraction of primary materials so far as practicable. As considered in Section 5.2, the replacement of primary aggregates with secondary and recycled supplies materials is becoming increasingly important as indigenous land-won primary supplies diminish. The County Council is therefore keen to see the quantities of secondary and recycled aggregates being produced within Kent increase.

5.8.2 The consented secondary and recycled aggregates processing capacity within Kent currently exceeds 2.7mtpa, 0.63 mtpa of which is identified as temporary capacity. Inert Construction, Demolition and Excavation (CDE) waste is the main source of recycled aggregate and arisings of this waste in Kent are estimated to be 2.6 mtpa which indicates that some capacity may be utilised for imported materials. In addition, arisings of materials suitable for conversion into secondary aggregates such as furnace bottom ash are expected to increase as more Energy from Waste capacity is developed during the plan period in line with Policy CSW 8: Recovery Facilities for Non-hazardous Waste.

5.8.3 Policy CSM 8 sets out criteria to be used in the consideration of additional secondary and recycled aggregate production capacity. Where permanent consent is being sought, to avoid adverse amenity impacts the presumption will be that processing activities will be contained within a covered building or similar structure. While sites with permanent consent will be safeguarded under Policy CSM 7, to compensate for the loss of capacity located on temporary sites, sites will be identified in the Minerals Sites Plan to ensure processing capacity is maintained to allow the production of at least 2.7 million tonnes per annum of secondary and recycled aggregates, throughout the Plan period.

Policy CSM 8

Secondary and Recycled Aggregates

Sites will be identified in the Minerals Sites Plan to ensure processing capacity is maintained to allow the production of at least 2.7 million tonnes per annum of secondary and recycled aggregates, throughout the Plan period.

Proposals for additional capacity for secondary and recycled aggregate production including those relating to the expansion of capacity at existing facilities that increases the segregation and hence end product range/quality achieved, will be granted planning permission if they are well located in relation to the source of input materials or need for output materials, have good transport infrastructure links and accord with the other relevant policies in the development plan, at the following types of sites:

1. temporary demolition, construction, land reclamation and regeneration projects and highways developments where materials are either generated or to be used in the project or both for the duration of the project (as defined by the planning permission)
2. appropriate mineral operations (including wharves and rail depots) for the duration of the host site permission.
3. appropriate waste management operations for the duration of the host site permission.
4. industrial estates, where the proposals are compatible with other policies set out in the development plan including those relating to employment and regeneration.
5. any other site that meets the requirements cited in the second paragraph of this policy above.

The term 'appropriate' in this policy is defined in terms of the proposal demonstrating that it will not give rise to unacceptable adverse impacts on communities or the environment as a whole over and above the levels that had been considered to be acceptable for the host site when originally permitted without the additional facility.

Planning permission will be granted to re-work old inert landfills and dredging disposal sites to produce replacement aggregate material where it is demonstrated that net gains in landscape, biodiversity or amenity can be achieved by the operation and environmental impacts can be mitigated to an acceptable level.

5.9 Policy CSM 9: Building Stone in Kent

5.9.1 Only two ragstone quarries have consented reserves at the time of the preparation of this Plan: Hermitage Quarry and Blaise Farm in mid Kent. Although building stone has been produced from both quarries, only Hermitage Quarry has the ability to produce high-quality cut stone from the full sequence of ragstone beds in the Hythe Formation, and it continues to provide building stone for building conservation uses. However, in the past, small-scale quarries have provided locally distinctive stone

including Paludina Limestone (found near Bethersden), Tunbridge Wells Sandstone and flint (from chalk strata). Calcareous tufa found in small outcrops near Ditton has also been used in a few buildings, including Leeds Castle in Kent. These have been popular building materials and supplies may be needed in the future to maintain and restore the buildings that use them.

5.9.2 Small quarries for building stone can play an important part in providing historically authentic building materials in the conservation and repair of historic and cultural buildings and structures. Policy CSM 9 addresses the potential need for granting planning permission for small-scale, local restoration building stone quarrying in Kent.

Policy CSM 9

Building Stone in Kent

Planning permission will be granted for small-scale proposals⁽⁶⁸⁾ that are needed to provide a supply of suitable local building stone necessary for restoration work associated with the maintenance of Kent's historic buildings and structures and new build projects within conservation areas, subject to:

1. development taking place in appropriate locations where the proposals do not have unacceptable adverse impacts on the local environment and communities
2. there being no other suitable, sustainable sources of the stone available
3. the site is restored to a high quality standard and appropriate after-use that supports the local landscape character

5.10 Policy CSM 10: Oil, Gas and Unconventional Hydrocarbons

5.10.1 Oil and gas are important mineral resources and primary sources of energy in the United Kingdom. They underpin key aspects of modern society and remain an important part of the UK's energy mix. Maximising economic production of UK oil and gas reserves to provide reliable energy supplies is a key activity the Government are taking forward to minimise international energy supply risks.

5.10.2 All hydrocarbons are owned by the State, in the form of the Oil and Gas Authority, the Coal Authority and the Department of Energy and Climate Change. Companies who wish to exploit these minerals are invited to bid for licences by the Government. A conditional underground licence does not give an operator the power to exploit underground resources and is conditional upon planning permission (and other rights) being granted too.

68 A small-scale building stone extraction site is one that produces predominantly building stone for conservation and restoration of old buildings or for new build purposes in areas where the stone provides historically authentic materials in keeping with the local built environment. Operations are likely to be intermittent and volumes produced are low.

5.10.3 Where possible reserves have been identified there is a need to establish, through exploratory drilling, whether or not there are sufficient recoverable quantities of unconventional hydrocarbons present to facilitate economically viable full scale production. There are three phases of onshore hydrocarbon extraction: exploration, testing (appraisal) and production.

5.10.4 In the case of appraisal wells, decisions will not take account of hypothetical future activities, since the further appraisal and production phases will be the subject of separate planning applications and assessments. When determining applications for subsequent phases, the fact that exploratory drilling has taken place on a particular site is only likely to be material in determining the suitability of continuing to use that site insofar as it establishes the presence of hydrocarbon resources. There is no presumption that because permission is granted for one phase, then permission will be granted for a subsequent one, i.e. permission granted for exploration should not be assumed to lead to permission for appraisal, nor for appraisal to production. Each application will be considered on its merits. Proposals associated with exploration, appraisal and production might reasonably include underground gas storage and associated infrastructure, for which encouragement is sought in the NPPF.

5.10.5 The Mineral Planning Authority is one of four key regulators for hydrocarbon extraction. Its role is to provide clear guidance and criteria for the local assessment of hydrocarbon extraction within Petroleum Licence Areas and to grant planning permission for the location of any wells and wellpads and impose conditions to ensure that the impact on the use of land is acceptable. There are clear roles and responsibilities for each of the regulators and an expectation that the Mineral Planning Authority should assume non-planning regimes will operate effectively and should not ordinarily need to carry out its own assessments where it can rely on the assessments of other regulatory bodies. However, before granting planning permission the MPA will need to be satisfied that these issues can or will be adequately addressed by taking and considering advice from the relevant regulatory body relating to the specific risks/concerns posed by particular proposals. For example in the case of proposals involving hydraulic fracturing mitigation of seismic risks; well design and construction; well integrity during operation; operation of surface equipment on the well pad; mining waste; chemical content of hydraulic fracturing fluid flaring or venting; final off-site disposal of water and well decommissioning/abandonment.

5.10.6 Where it is intended to utilise new or existing infrastructure, the MPA will need to be satisfied that any associated environmental and amenity impacts are mitigated to ensure that there is no unacceptable adverse impact on the local environment or communities.

Resources and Potential

Oil

5.10.7 Kent is part of the Southern Permian Basin Area, an area of potential for oil resource that stretches across northern Europe from Dorset to Yorkshire in the west, across northern France, Belgium, Holland, Denmark, Germany and Poland. On-going exploration has established a series of oil and gas fields across the Basin Area. Notable commercial discoveries in the English sector of this basin, associated with the Weald and south coast, are Wytch Farm (Dorset) which is the largest onshore oil field in western Europe, Alvington (Hampshire), Storrington (West Sussex) and Palmers Wood (Surrey). The Department of Energy and Climate Change (DECC) issues Petroleum Exploration and Development Licenses (PEDLs). In the past, parts of west and east Kent have been included. These licensing areas are subject to periodic revision by DECC.

5.10.8 A planning permission was granted in 2012 for exploratory drilling and subsequent oil and gas field testing at Bidborough in West Kent. In 2015 the planning permission had not been implemented. Exploratory drilling has also taken place in Cowden near Tunbridge Wells from August 1999 (planning permission SE/98/234). Subsequent extensions were granted to complete planned testing operations on the capped well at Cowden to establish the extent of productive capacity of the oil field, the last of which expired in 2012 (SE/11/1396).

Gas

5.10.9 Minor reserves of natural gas have been exploited in the past in East Sussex however only two resources have been detected following exploration undertaken more recently as a result of licences issued.

Unconventional hydrocarbons

5.10.10 Unconventional hydrocarbons refers to oil and gas which comes from sources such as shale or coal seams which act as the reservoirs. Shale gas, shale oil and coal bed methane are often referred to as unconventional hydrocarbons as they are extracted using technologies that enables oil and gas locked into rock formations that were previously considered to be unsuitable or uneconomic to be exploited.

5.10.11 Coal Bed Methane is methane that is trapped within the pore spaces of coal in coal seams, such as the East Kent Field. In coal, methane is held in an almost liquid state within the porous elements so that if pressure is reduced by human intervention such as mining or drilling into a coal seam, the gas is liberated. As the gas is combustible it is a potential resource. The East Kent Coalfield covers an area of 157,900 hectares beneath the Kent landmass. It was exploited for its coal reserves between 1912 and 1989. Underground licence applications to investigate the East Kent Coalfield are being processed by the Coal Authority at the time of writing this Plan. There is currently no information available on the potential of coal bed methane resources in Kent. However interest has been shown in Kent and permission was granted to drill an exploratory borehole to test the in situ coals, Lower Limestone Shales and associated strata in 2011 at Woodnesborough, in East Kent. During the preparation of the Plan, a further three planning applications for test drilling in East Kent were received by KCC but were subsequently withdrawn.

5.10.12 Underground coal gasification is a technique that gasifies coal underground and then brings the resultant gas to the surface for subsequent use in heating or power generation. It requires precision drilling of two boreholes: one to supply oxygen and water/steam and the other to bring the resulting gas back to the surface. Currently there are no commercial scale underground coal gasification processes present in the UK.

5.10.13 Hydraulic fracturing (often called fracking) is a technique used to extract gas or oil from shale rock strata whereby water (and additives) is pumped under pressure into productive shale rocks via a drilled bore to open up pore spaces releasing the gas or oil for pumping to the surface for use.⁽⁶⁹⁾

5.10.14 The BGS completed a resource study for the Weald Basin, which includes part of Kent. The study concluded that with the current level of geological data and information there is no significant shale gas potential within the Weald Basin. There is however potentially a significant volume of unconventional shale oil. The study estimates that the oil in place (OIP) across the whole Weald Basin, which is the resource estimate, ranges from 2.2 to 8.6 billion barrels (billion bbl). There is currently insufficient information and data to estimate how much of that oil resource is economically and technically viable to extract; further exploratory drilling, sampling and socio-economic and environmental studies would be required.

5.10.15 Section 50 of the Infrastructure Act 2015 inserts section 4A of the Petroleum Act 1998, which sets out a number of safeguards for developments involving onshore hydraulic fracturing. This includes no hydraulic fracturing within protected groundwater source areas and within "other protected areas". "Other protected areas" are defined in the secondary legislation, Onshore Hydraulic Fracturing (Protected Areas) Regulations 2016. Section 3 of these Regulations define "other protected areas" in the following manner, as areas of land at a depth of less than 1,200 metres beneath a National Park, the Broads, Areas of Outstanding Natural Beauty or a World Heritage site. Decisions on planning applications will be made in accordance with the Infrastructure Act and the associated secondary legislation.

5.10.16 The Act also places a duty on the Mineral Planning Authority to take account, where relevant, of the cumulative effects of an application for onshore hydraulic fracturing, and any other applications relating to exploitation of onshore oil and gas obtainable by hydraulic fracturing. It is important to examine how differences in context such as geological and environmental characteristics might lead to differing levels of risk, for example this may include consideration of the depth of shale exploration and mitigation measures such as restricting water use to wetter seasons or requiring recirculation. Each application will be considered on its merits.

5.10.17 Provision has also been made in the Infrastructure Act (in section 49) for the Secretary of State to request the Committee on Climate Change to provide advice (in accordance with section 38 of the Climate Change Act 2008) on the impact which combustion of, and fugitive emissions from, petroleum produced through onshore activity, is likely to have. The way in which minerals produced in Kent are subsequently used is not within the control of the Plan. However, the Council will review any such

69 Information on unconventional hydrocarbon extraction is available in the Planning Practice Guidance website at: <http://planningguidance.planningportal.gov.uk/blog/guidance/minerals/planning-for-hydrocarbon-extraction/annex-a-shale-gas-and-coalbed-methane-coal-seam-gas/>

advice to consider whether it raises any consideration that needs to be taken into account in determining an application for planning permission relating to hydraulic fracturing and whether any review of policy CSM 10 is required. Any such reviews will take into account any relevant national planning policy and guidance.

5.10.18 There are several issues associated with the extraction of oil and gas and unconventional hydrocarbons which need careful attention at the planning application stage. The nature and significance of these issues will vary between the technology utilised and the phases of exploration, testing (appraisal) and production. These issues are set out below, together with the development management policies which ensure they are adequately addressed:

- The discharge of artesian groundwater to the surface (Policy DM 10)
- Impact on ground and surface waters (both quantity and quality) (Policy DM 10)
- Visual and amenity (e.g. noise, lighting, PROW) impacts of surface operations (including those resulting from 24 hour operations) (Policies DM 2, DM 11, DM 12, DM 14)
- Impacts of vehicles transporting staff and materials to and from the drill site (Policy DM 13)
- Impacts on biodiversity (Policy DM 3)
- Stability of land (Policy DM 18)
- Restoration of the surface operations following their cessation (Policy DM 19)
- Cumulative effects (Policy DM 12)

5.10.19 Policy CSM 10 sets out the matters that need to be taken into account when considering proposals for the exploration, appraisal and development of oil, gas and unconventional hydrocarbons.

Policy CSM 10

Oil, Gas and Unconventional Hydrocarbons

Planning permission will be granted for proposals associated with the exploration, appraisal and production of oil, gas and unconventional hydrocarbons subject to:

1. well sites and associated facilities being sited, so far as is practicable, to minimise impacts on the environment and communities
2. developments being located outside Protected Groundwater Source Areas⁽⁷⁰⁾
3. there being no unacceptable adverse impacts (in terms of quantity and quality) upon sensitive water receptors including groundwater, water bodies and wetland habitats
4. all other environmental and amenity impacts being mitigated to ensure that there is no unacceptable adverse impact on the local environment or communities
5. exploration and appraisal operations being for an agreed, temporary length of time
6. the drilling site and any associated land being restored to a high quality standard and appropriate after-use that reflects the local landscape character at the earliest practicable opportunity
7. it being demonstrated that greenhouse gases associated with fugitive emissions from the exploration, testing and production activities will not lead to unacceptable adverse environmental impacts

Particular consideration will be given to the location of hydrocarbon development involving hydraulic fracturing having regard to impacts on water resources, seismicity, local air quality, landscape, noise and lighting impacts. Such development will not be supported within protected groundwater source protection zones or where it might adversely affect or be affected by flood risk or within Air Quality Management Areas or protected areas for the purposes of the Infrastructure Act 2015, section 50.

70 Advice will be sought from the Environment Agency

5.11 Policy CSM 11: Prospecting for Carboniferous Limestone

5.11.1 While the East Kent Limestone mine has not been progressed since it was included in the *Kent Minerals Local Plan Construction Aggregates Written Statement (1993)* ⁽⁷¹⁾ as a possible area of mining, it is still considered to be a possible long-term source of construction aggregates in Kent. The location of the underground limestone resource is in the vicinity of calcareous grassland which is an important habitat, being registered with both the national and Kent BAPs and as a Habitat of Principal Importance under the NERC Act 2006. There are also Natura 2000 sites, SSSIs and LWSs throughout the area. If prospecting is proposed in the plan period, it will have to be undertaken sensitively with sufficient controls to avoid any impacts upon sensitive receptors.

Policy CSM 11

Prospecting for Carboniferous Limestone

Planning permission will be granted at suitable locations for the drilling operations associated with the prospecting for underground limestone resources in East Kent subject to:

1. exploration and appraisal operations are for an agreed, temporary length of time

5.12 Policy CSM 12: Sustainable Transport of Minerals

5.12.1 While there have not been any proposals for new wharves and rail depots for consideration in the Mineral Sites Plan, in line with the requirements of sustainable development it is important to encourage the sustainable transportation of minerals by rail and water wherever possible. Policy CSM 12 encourages an increase in sustainable transport modes for minerals and encourages the development of new mineral importation facilities or facilities that have fallen out of use.

71 KCC (1993) Kent Minerals Local Plan Construction Aggregates Written Statement.

Policy CSM 12

Sustainable Transport of Minerals

Planning permission for any new wharf and rail depot importation operations, or for wharves and rail depots that have been operational in the past (having since fallen out of use), that includes the transport of the minerals by sustainable means (i.e. sea, river or rail) as the dominant mode of transport will be granted planning permission, where:

1. they are well located in relation to the Key Arterial Routes⁽⁷²⁾ across Kent and
2. the proposals are compatible with other local employment and regeneration policies set out in the development plan.

72 These are made up of Motorways and Trunk Roads, County Primary Routes and County Principal Routes. County Primary Routes link major urban centres, including the A228/A26 between Medway and Tonbridge, the A229 between Medway and East Sussex, the A299 between Faversham and Thanet, the A28 between Thanet and East Sussex, the A256 between Dover and Thanet, the A26 between Tonbridge and Tunbridge Wells and the A25 between Wrotham and Sevenoaks. County Principal routes are generally A class roads with relatively high traffic flows, including the A225 between Sevenoaks and Dartford and the A251 between Faversham and Ashford. These are shown on Figure 2.

6 Delivery Strategy for Waste

6.0.1 The following policies give the delivery strategy for waste management development in Kent up to the end of 2030.

6.1 Policy CSW 1: Sustainable Development

6.1.1 As stated in paragraph 5.1.1, the purpose of the planning system is to contribute to the achievement of sustainable development.⁽⁷³⁾ At the heart of the NPPF is a presumption in favour of sustainable development. The NPPF requires that policies in local plans should follow the approach of this presumption. The Kent MWLP is therefore based on the principle of sustainable development. This is demonstrated in the Spatial Vision, the Strategic Objectives and the policies that seek sustainable solutions.

6.1.2 Planning law requires planning decisions to be determined in accordance with the development plan unless material considerations indicate otherwise. The NPPF states that it does not change the statutory status of the development plan as the starting point for decision making. Policy CSW 1 ensures the presumption in favour of sustainable development is taken into account in KCC's approach to waste development.

Policy CSW 1

Sustainable Development

When considering waste development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework, National Planning Policy for Waste and the Waste Management Plan for England.

Waste development that accords with the development plan should be approved without delay, unless material considerations indicate otherwise.

Where there are no policies relevant to the application, or relevant policies are out of date at the time of decision making, the Council will grant permission unless material considerations indicate otherwise, taking into account where either:

1. any unacceptable adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole, or
2. specific policies in that Framework⁽⁷⁴⁾ indicate that development should be restricted.

73 DCLG (March 2012) National Planning Policy Framework: Ministerial Foreword.

74 For example, those policies relating to land within an Area of Outstanding Natural Beauty, Green Belt, sites protected under the Birds and Habitats Directives and/or as Sites of Special Scientific Interest, designated heritage assets, and locations at risk of flooding.

6.2 Policy CSW 2: Waste Hierarchy and Policy CSW 3: Waste Reduction

6.2.1 It is Government policy to break the link between economic growth and the environmental impact of waste by moving the management of waste up the Waste Hierarchy, as shown in Figure 18.⁽⁷⁵⁾

Figure 18 Waste Hierarchy



6.2.2 The Kent MWLP mainly implements this policy through influence over waste and minerals developments. However, the Plan also includes a policy (Policy CSW 3) seeking to influence/reduce waste arising from all forms of development. The Kent MWLP forms part of the development plan, along with the district local plans, and is therefore relevant to the determination of planning applications for all forms of development in Kent.

6.2.3 In accordance with the Waste Hierarchy, the Plan gives priority to planning for waste management developments that prepare waste for re-use or recycling. The most recent assessment of waste management capacity requirements⁽⁷⁶⁾ shows that Kent's current recycling and processing facilities have sufficient capacity for the anticipated rate of usage with the exception of facilities for green and kitchen wastes. It should be appreciated that these calculations are based upon a rate of use that should only be regarded as a minimum, as the aspiration is to encourage more of the waste that is produced in Kent to be managed by methods at this tier of the hierarchy.

6.2.4 Encouraging more waste to be managed via re-use or recycling will be achieved by enabling policies for the development of additional waste management capacity for recycling and processing including a policy presumption to grant planning permission

75 The Waste Hierarchy diagram is a copy of the version in Appendix A of DCLG National Planning Policy for Waste.

76 BPP Consulting Waste Needs Assessment 2018.

for redevelopment or extensions to lawful existing waste management facilities to enable more waste to be recycled or processed for re-use providing the proposal is in accordance with the locational and development management policies in the Plan.

6.2.5 The application of the Waste Hierarchy is a legal requirement under the Waste (England and Wales) Regulations 2011. It is anticipated that there will be a transition over time to forms of waste management at the higher end of the Waste Hierarchy. The Kent MWLP addresses this transition by seeking to rapidly provide a more sustainable option for the mixed non-hazardous waste that is going to landfill by applying ambitious but achievable landfill diversion targets presented in Policy CSW 4.

Policy CSW 2

Waste Hierarchy

To deliver sustainable waste management solutions for Kent, proposals for waste management must demonstrate how the proposal will help drive waste to ascend the Waste Hierarchy whenever possible.

Policy CSW 3

Waste Reduction

All new development should minimise the production of construction, demolition and excavation waste and manage any waste in accordance with the objectives of Policy CSW 2.

The following details shall be submitted with the planning application, except for householder applications:

1. the measures to be taken to show compliance with this policy
2. the details of the nature and quantity of any construction, demolition and excavation waste and its subsequent management

New development should include detailed consideration of waste arising from the occupation of the development including consideration of how waste will be stored, collected and managed.

In particular proposals should ensure that:

1. there is adequate temporary storage space for waste generated by that development allowing for the separate storage of recyclable materials; and
2. as necessary, there is adequate communal storage for waste, including separate recyclables, pending its collection; and
3. storage and collection systems (e.g. any dedicated rooms, storage areas and chutes or underground waste collection systems), for waste are of high quality design and are incorporated in a manner which will ensure there is adequate and convenient access for users and waste collection operatives and will contribute to the achievement of waste management targets; and
4. adequate contingency measures are in place to manage any mechanical breakdowns. All relevant proposals should be accompanied by a recycling & waste management strategy which considers the above matters and demonstrates the ability to meet local authority waste management targets.

6.3 Policy CSW 4: Strategy for Waste Management Capacity

Net Self-sufficiency and Waste Movements

6.3.1 Kent currently achieves net self-sufficiency in waste management capacity for all waste streams. I.e. the annual capacity of the waste management facilities (excluding transfer) in Kent is sufficient to manage the equivalent quantity of waste to that predicted to arise in Kent. The continued achievement of net self-sufficiency and the management of waste close to its source are key Strategic Objectives of the Kent MWLP, because it shows that Kent is not placing any unnecessary burden on other WPAs to manage its waste. Net self-sufficiency recognises that existing (and future) waste management capacity within Kent may not necessarily be for the exclusive management of Kent's waste. Moreover, proposals that would result in more waste being managed in Kent than is produced may be acceptable if they resulted in waste moving up the hierarchy. Achievement of net self-sufficiency is the baseline aspiration and can be monitored on an annual basis and will provide an indicator as to whether the policies in the Plan need to be reviewed. The purpose in adopting the principle of net self-sufficiency is not to restrict the movement of waste as such restriction of waste catchment areas could have an adverse effect upon the viability of the development of new waste management facilities needed to provide additional capacity for Kent's waste arisings.

6.3.2 In reality, different types of waste are managed at different types of facilities. To assess the future needs for waste facilities in Kent, net self-sufficiency has been studied for the individual waste streams of inert, non-inert (also called nonhazardous) and hazardous wastes. While Kent currently achieves net self-sufficiency, this position will be monitored to ensure this remains the case throughout the plan period. The purpose in adopting the principle of net self-sufficiency is not to restrict the movement of waste as such restriction of waste catchment areas could have an adverse effect upon the viability of the development of additional waste management capacity.

Provision for Waste From London

6.3.3 Specific provision in the calculations for capacity required for non-hazardous waste going to landfill or EfW has been made for waste from London. The reason for this is that due to land constraints London's residual waste cannot all be managed within London itself and so, as a neighbouring waste planning authority, Kent County Council has some responsibility to make provision for an element of this waste. Historical data indicates the tonnage to be provided for is in the region of 35,000 tonnes per annum. It is also recognised that closure of Rainham Landfill in the London Borough of Havering in 2026 may result in the displacement of waste from Kent currently managed there. Therefore, an additional tonnage of 20,000 tpa has been planned for on a contingency basis.

6.3.4 An assessment has been made of the current profile of management of the principal waste streams. The targets applied reflect ambitious (but realistic) goals for moving waste up the hierarchy and seek to ensure that the maximum quantity of non-hazardous waste is diverted from landfill.

Policy CSW 4

Strategy for Waste Management Capacity

The strategy for waste management capacity in Kent is to provide sufficient waste management capacity to manage at least the equivalent of the waste arising in Kent plus some residual non-hazardous waste from London. As a minimum it is to achieve the targets set out below for recycling and composting and other forms of recovery.

Table 1

	Milestone Year			
	2015/16	2020/21	2025/26	2030/31
Local Authority Collected Waste				
Recycling/Composting ⁽⁷⁷⁾	n/a	50%	55%	60%
Other Recovery	n/a	45%	43%	38%
Remainder to Landfill	n/a	2%	2%	2%
Commercial and Industrial Waste				
Recycling/Composting ⁽⁷⁸⁾	n/a	50%	55%	60%
Other Recovery	n/a	35%	32.5%	30%
Remainder to Landfill	n/a	15%	12.5%	10%
Construction & Demolition Waste (Non-Inert only)				
Recycling	n/a	12%	13%	14%
Composting	n/a	1%	1%	1%
Other Recovery	n/a	5%	5%	5%
Remainder to Landfill	n/a	2%	1%	0.5%

6.4 Policy CSW 5: Strategic Site for Waste

6.4.1 To meet the Kent MWLP objective of reducing the amount of waste being landfilled, the Plan is using policies to drive a major change in the way that waste is managed in Kent. Enabling the change in perception of waste from being something that has to be disposed to something that can be used as a resource will be helped by the development of such additional capacity further up the hierarchy.

77 This is taken to include organic waste (including green and kitchen waste) treatment by Anaerobic Digestion.

78 This is taken to include organic waste (including green and kitchen waste) treatment by Anaerobic Digestion.

6.4.2 The landfill at Norwood Quarry on the Isle of Sheppey accommodates the hazardous flue ash residues from the Allington EfW facility that features heavily in the Waste Management Unit (WMU) contracts for residual MSW, but it has limited consented void space remaining. To make provision for this waste for the duration of the Plan an extension to Norwood Quarry is identified. Enabling the continued management of hazardous flue ash within Kent has the added benefit of contributing to achieving net self-sufficiency in hazardous waste management capacity⁽⁷⁹⁾

6.4.3 While there is a risk that identifying the extension area at Norwood Quarry as a Strategic Site for Waste could hinder the development of alternative treatment solutions for the flue ash, there is a need to make provision for this waste stream.

6.4.4 The proposed extension areas to Norwood Landfill are identified as the Strategic Site for Waste. The location of these extension areas is shown on Figure 19.

Policy CSW 5

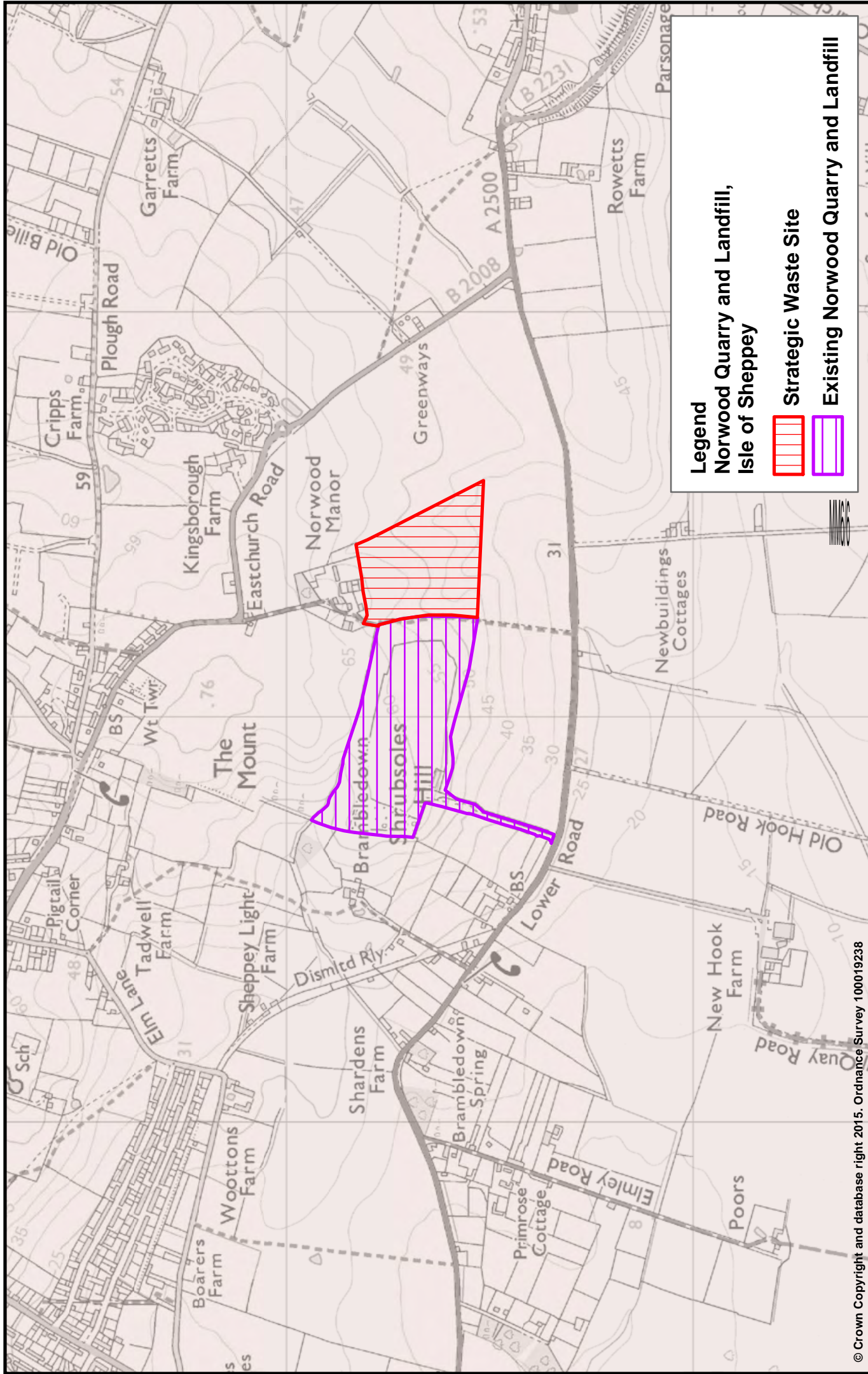
Strategic Site for Waste

The proposed extension areas for Norwood Quarry and Landfill Site, Isle of Sheppey are together identified as the Strategic Site for Waste in Kent. The site location is shown on Figure 19. Unless criterion 1 below is satisfied, planning permission will not be granted for any other development other than mineral working with restoration through the landfilling of hazardous (flue) dust ash residues from Energy from Waste plants.

Mineral working and restoration by hazardous landfill and any ancillary treatment plant at the Strategic Site for Waste will be permitted subject to meeting the requirements of the development plan and the following criteria:

1. Demonstration that the site can be suitably restored in the event that landfilling of hazardous (flue) dust ash residues from Energy from Waste plants were to cease before completion of the final landform due to changes in treatment capacity and/or government policy that may result in the diversion of these wastes from landfill
2. an air quality assessment is made of the impact of the proposed development and its associated traffic movements ⁽⁸⁰⁾ on the Medway Estuary and Marshes Special Protection Area and the Swale Special Protection Area sites and if necessary mitigation measures are required through planning condition and/or planning obligation
3. the site and any associated land being restored to a high-quality standard and appropriate after-use that accords with the local landscape character
4. Any proposal for this site would need to consider the requirements of other relevant policies of this Plan and in particular would need to consider any impacts on the A2500 Lower Road. Depending on the nature of any proposal it may be necessary for the developer to make a contribution to the improvement of this road.

80 Traffic movements consist of the total vehicles entering and leaving the site.



6.5 Policy CSW 6: Location of Built Waste Management Facilities

6.5.1 The preference identified in response to earlier consultations during the formulation of the Plan was for a mix of new small and large sites for waste management. This mix gives flexibility and assists in balancing the benefits of proximity to waste arisings while enabling developers of large facilities to exploit economies of scale. National policy recognises that new facilities will need to serve catchment areas large enough to secure economic viability and this is particularly relevant when considering the possible sizing and location of facilities required to satisfy any emerging need indicated by monitoring e.g. in the relevant AMR.

6.5.2 The location of waste sites in appropriate industrial estates was also the preference identified from the consultation. This has the benefit of using previously developed land and enabling waste uses to be located proximate to waste arisings. Employment land availability is monitored by KCC and the district and borough councils.⁽⁸¹⁾ It should be appreciated that all industrial estate locations may not be suitable for some types of waste uses, because of their limited size or close proximity to sensitive receptors or high land and rent costs.

6.5.3 Certain types of waste or waste management facilities, such as Construction, Demolition and Excavation (CDE) recycling facilities are often co-located on mineral sites for aggregates or landfills, which are usually found in rural areas. Also, in rural areas where either the non-processed waste arisings or the processed product can be of benefit to agricultural land (as is the case with compost and anaerobic digestion), the most proximate location for the waste management facility will likely be within the rural area.

6.5.4 The development of waste management facilities on previously developed land will be given preference over the development of greenfield sites. In particular, the redevelopment of derelict or contaminated land may involve treatment of soil to facilitate the redevelopment. Also, redundant agricultural or forestry buildings may be suitable for waste uses where such uses are to be located within the rural areas of the county. Waste management facilities located in the Green Belt are generally regarded as inappropriate development. Developers proposing a waste management facility within the Green Belt shall demonstrate the proposed use complies with Green Belt policy (See Policy DM4).

6.5.5 The development of built waste management facilities on greenfield sites is not precluded. This is because the goal of achieving sustainable development will lead to new development which may incorporate facilities to recycle or process the waste produced on the site, or to generate energy for use on the site.

6.5.6 Existing mineral and waste management sites may offer good locations for siting certain waste management facilities and for expansion to deliver further capacity to that which exists because of their infrastructure and location. In such cases, the developer will need to demonstrate the benefits of co-location such as connectivity with the existing use of the site while also demonstrating that any cumulative impact is acceptable. For example, the co-location of CDE recycling (i.e. aggregate recycling) at

81 KCC (January 2013) Kent County Council & District Authorities Commercial Information Audit Summary Report for 2011/2012.

an aggregate quarry that can enable the blending of recycled and virgin aggregates to increase the marketability of the product or the addition of a facility that will move waste further up the hierarchy at an existing EfW site.

6.5.7 Policy CSW 6 applies to all proposals for built waste management facilities.

Policy CSW 6

Location of Built Waste Management Facilities

Planning permission will be granted for proposals that:

- a. do not give rise to significant adverse impacts upon national and international designated sites, including Areas of Outstanding Natural Beauty (AONB), Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC), Special Protection Areas (SPAs), Ramsar sites, Ancient Monuments and registered Historic Parks and Gardens. (See Figures 4, 5 & 6).
- b. do not give rise to significant adverse impacts upon Local Wildlife Sites (LWS), Local Nature Reserves (LNR), Ancient Woodland, Air Quality Management Areas (AQMAs) and groundwater resources. (See Figures 7, 8, 10 & 15)
- c. are well located in relation to Kent's Key Arterial Routes, avoiding proposals which would give rise to significant numbers of lorry movements through villages or on unacceptable stretches of road.
- d. do not represent inappropriate development in the Green Belt.
- e. avoid Groundwater Source Protection Zone 1 or Flood Risk Zone 3b
- f. avoid sites on or in proximity to land where alternative development exists/ has planning permission or is identified in an adopted Local Plan for alternate uses that may prove to be incompatible with the proposed waste management uses on the site.
- g. for energy producing facilities - sites are in proximity to potential heat users.
- h. for facilities that may involve prominent structures (including chimney stacks) - the ability of the landscape to accommodate the structure (including any associated emission plume) after mitigation.
- i. for facilities involving operations that may give rise to bioaerosols (e.g. composting) to locate at least 250m away from any potentially sensitive receptors.

Where it is demonstrated that waste will be dealt with further up the hierarchy, or it is replacing capacity lost at existing sites, facilities that satisfy the relevant criteria above on land in the following locations will be granted consent, providing there is no adverse impact on the environment and communities and where such uses are compatible with the development plan:

1. within or adjacent to an existing mineral development or waste management use
2. forming part of a new major development for B8 employment or mixed uses
3. within existing industrial estates
4. other previously developed, contaminated or derelict land not allocated for another use
5. redundant agricultural and forestry buildings and their curtilages

Proposals on greenfield land will only be permitted if it can be demonstrated that there are no suitable locations identifiable from categories 1 to 5 above within the intended catchment area of waste arisings. Particular regard will be given to whether the nature of the proposed waste management activity requires an isolated location.

6.6 Identifying Sites for Household Waste Recycling Centres

6.6.1 The county has an existing well-established network of facilities for MSW for receiving household waste delivered by residents of Kent. These Household Waste Recycling Centres (HWRC) play an important role in meeting waste recovery and landfill diversion targets. The intention for the Plan period is to ensure facilities are provided to meet local population needs accounting for economic and projected housing growth. During the lifetime of the Plan, there is an intention to rationalise facilities. Proposals for Household Waste Recycling Centres will be considered against Policy CSW6: Location of Built Waste Management Facilities and relevant Development Management Policies.

6.7 Policy CSW 7: Waste Management for Non-hazardous Waste

6.7.1 Policy CSW 7 provides a strategy for the provision of new waste management capacity for non-hazardous waste. The policy will allow the provision of new waste management capacity recognising the need to drive waste up the hierarchy.

6.7.2 The term non-hazardous waste is regarded, for purposes of the Plan, as being synonymous with MSW⁽⁸²⁾ and C&I⁽⁸³⁾ waste and the non inert, non-hazardous, component of CDEW.

82 MSW is Municipal Solid Waste.

83 C&I is Commercial and Industrial waste.

6.7.3 There is no intention to restrict the amount of new capacity for waste management for recycling or preparation of waste for reuse or recycling⁽⁸⁴⁾, or for the provision of additional capacity for green and/or kitchen waste treatment since the sooner it is delivered, the greater the impact will be on reducing organic waste going to landfill, the most significant source of methane production.

6.7.4 Implementing Policy CSW 7 will result in reducing the amount of Kent non-hazardous waste going for disposal to landfill and by doing so conserve existing non-hazardous landfill capacity in Kent for any non-hazardous waste that cannot be reused, recycled, composted or recovered.

Policy CSW 7

Waste Management for Non-hazardous Waste

Waste management capacity for non-hazardous waste that assists Kent in continuing to be net self-sufficient while providing for a reducing quantity of London's waste, will be granted planning permission provided that:

1. it moves waste up the hierarchy,
2. recovery of by-products and residues is maximised
3. energy recovery is maximised (utilising both heat and power)
4. any residues produced can be managed or disposed of in accordance with the objectives of Policy CSW 2
5. sites for the management of green waste and/or kitchen waste in excess of 100 tonnes per week are Animal By Product Regulation compliant (such as in vessel composting or anaerobic digestion)
6. sites for small-scale open composting of green waste (facilities of less than 100 tonnes per week) that are located within a farm unit and the compost is used within that unit.

6.8 Policy CSW 8: Recovery Facilities for Non-hazardous Waste

6.8.1 One of the fundamental aims of the Plan is to reduce the amount of MSW and C&I waste being sent to non-hazardous landfill.

6.8.2 Proposals for additional recovery capacity will need to be designed to harness the maximum practicable quantity of energy produced.

84 A definition of recycling is included in the glossary. Recycling includes composting

6.8.3 Such capacity might be developed in conjunction with waste processing facilities on the same site, or as standalone plants where the waste is processed to produce a fuel off-site. In order to avoid the risk of under provision by double counting both fuel preparation capacity and fuel use capacity, only one of the two facility contributions will be counted towards meeting any emerging need identified by annual monitoring in future. Where fuel preparation takes place as a stand-alone activity, e.g. Mechanical Biological Treatment, the recovery contribution will only be counted as the difference between the input quantity and the output quantity unless the output fuel has a proven market. Where that is the case, if the output fuel is to be used in a combustion plant beyond Kent, then this contribution will also be counted⁽⁸⁵⁾.

Policy CSW 8

Recovery Facilities for Non-hazardous Waste

Facilities using waste as a fuel will only be permitted if they qualify as recovery operations as defined by the Revised Waste Framework Directive⁽⁸⁶⁾.

When an application for a combined heat and power facility has no proposals for use of the heat when electricity production is commenced, the development will only be granted planning permission if the applicant and landowner enter into a planning agreement to market the heat and to produce an annual public report on the progress being made toward finding users for the heat.

6.9 Policy CSW 9: Non Inert Waste Landfill in Kent

6.9.1 The lack of response to the call for sites for non-hazardous landfill is indicative of a lack of demand by the waste industry to develop non-hazardous landfill.

Nevertheless, a proposed development might come forward during the plan period and if so it will be granted permission providing it complies with both Policy CSW 9 and the DM policies in this Plan. In addition, proposed additional capacity for hazardous waste landfill will be assessed against this policy.

6.9.2 Following the completion of a non-inert waste landfill site, the site will need to be restored and there will be a considerable period of aftercare during which such sites need to be managed in order to prevent unacceptable adverse impacts to the environment. Aftercare management can require new development in order to either prepare the site for re-use or to manage the landfill gas or leachate production. Policy DM 19 sets out the Plan's provisions with regard to restoration, aftercare and after-use.

85 For example, if 100 tonnes is fed into the plant: 20 tonnes are lost as moisture; 30 tonnes are diverted as recyclate; 50 tonnes of waste is converted into material that may be suited for use as a fuel. Unless that fuel has a proven market then the contribution counted will be 50 tonnes as the remaining material may end up going to landfill. If the 50 tonnes of fuel goes to a plant built within Kent the recovery contribution will be counted at the combustion plant rather than the fuel preparation plant. If the 50 tonnes of fuel is exported beyond the county then the recovery contribution will be counted at the fuel preparation plant.

86 Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

Policy CSW 9

Non Inert Waste Landfill in Kent

Planning permission will only be granted for non inert⁽⁸⁷⁾ waste landfill if:

1. it can be demonstrated that the waste stream that needs to be landfilled cannot be managed in accordance with the objectives of Policy CSW2 and for which no suitable disposal capacity exists; and
2. environmental or other benefits will result from the development
3. the site and any associated land being restored to a high quality standard and appropriate after-use that accords with the local landscape character as required by Policy DM 19.

6.10 Policy CSW 10: Development at Closed Landfill Sites

6.10.1 Following the completion of a landfill there needs to a considerable period of aftercare during which the site needs to be managed in order to prevent unacceptable adverse impacts to the environment and to bring the site into use. A 5-year aftercare programme following site restoration is normally required as part of the planning permission for the development of landfill site. However, potential problems can occur after the 5-year aftercare period, such as differential settlement, which can have an adverse effect upon land drainage. In particular, any landfill sites that contain biodegradable wastes need to be managed in order to prevent unacceptable adverse impacts to the environment from leachate or gas for a period considerably longer than five years. While the management of closed landfill sites is regulated by the Environment Agency (EA), there may be a need for new development at the site to ensure that the protection of the environment is continued. Policy CSW 10: Development at Closed Landfill Sites should be read in conjunction with Policy CSW 11: Permanent Deposit of Inert Waste, and any development at a closed landfill that includes the bringing of additional waste onto the site will need to demonstrate that the amount of waste being used is kept to a minimum.

87 Non inert waste landfill includes non hazardous waste landfill, separate cells within a non hazardous waste landfill provided to accept stable hazardous waste and dedicated hazardous waste landfill.

Policy CSW 10

Development at Closed Landfill Sites

Planning permission will be granted for development for any of the following purposes:

1. development for the improvement of restoration for an identified after use for the site; or
2. development for the reduction of emissions of gases or leachate to the environment; or
3. development making use of gases being emitted and which will reduce the emission of gases to the environment.

6.11 Policy CSW 11: Permanent Deposit of Inert Waste

6.11.1 The most recent capacity assessment shows that there is currently permitted capacity at permanent CD recycling sites of over 2 mtpa. It is considered more sustainable to use recycled aggregates than to extract primary aggregates. The term CD recycling is synonymous with the term aggregate recycling and the criteria for assessing further site proposals for such sites can be read in Policy CSM 8: Secondary and Recycled Aggregates in Chapter 5.

6.11.2 The most recent capacity assessment shows that Kent has existing consented inert waste landfill capacity that is more than sufficient to meet Kent's need for the plan period. It is known that Kent receives a lot of waste originating out of the county, particularly from London, which goes into inert waste landfill in Kent. It has been concluded that continuation of this waste import throughout the plan period at a rate of 300,000 tpa can be accommodated by the existing consented capacity.

6.11.3 Another important issue is that without the import of inert waste the ability to restore existing permitted mineral workings would take a lot longer. Policy CSW 11: Permanent Deposit of Inert Waste seeks to ensure that a high priority is given to using inert waste that cannot be recycled in the restoration of existing permitted mineral workings, in preference to uses where inert waste is deposited on land (e.g. bund formation or raising land to improve drainage etc).

Policy CSW 11

Permanent Deposit of Inert Waste

Planning permission for the disposal of inert waste will be granted where:

1. it can be demonstrated that the waste cannot be managed in accordance with the objectives of Policy CSW2
2. it is for the restoration of landfill sites and mineral workings
3. environmental benefits will result from the development, in particular the creation of priority habitat
4. sufficient material is available to restore the site within agreed timescales.

6.12 Policy CSW 12: Identifying Sites for Hazardous Waste

6.12.1 Hazardous waste arising in Kent is one of the smaller streams of waste. The management of hazardous waste is typically characterised by the following: Hazardous waste is often produced in small quantities and hazardous waste management facilities are often highly specialised with regional or even national catchment areas involving movement of hazardous waste with both waste originating in Kent going outside the county for management and hazardous waste coming into the county for management.

6.12.2 When hazardous waste management in Kent is viewed as a whole, net self-sufficiency in hazardous waste management is achieved. However, Kent could cease to be net self-sufficient in hazardous waste capacity if changes in the production and management profile of hazardous waste occur as follows:

- the continued demand for disposal capacity for flue residues from Allington EfW facility
- the likely increase in hazardous residues from air pollution control from additional EfW capacity requiring management
- if the existing asbestos landfill closes then a significant amount of asbestos based hazardous waste will cease to be imported into the county.

6.12.3 The former issue is partly dealt with through the identification of a Strategic Site for Waste in Policy CSW 5. The need for management capacity of additional EfW APC residues can be addressed through Policy CSW 12 should it be required.

6.12.4 Any proposals for future provision for asbestos landfill capacity will be addressed using Policy CSW9.

Policy CSW 12**Hazardous Waste Management**

To maintain net self-sufficiency in the management of hazardous waste throughout the plan period, development proposals for built hazardous waste management facilities will be granted planning permission in locations consistent with Policy CSW 6, regardless of whether their catchment areas for waste extend beyond Kent

6.13 Policy CSW 13: Remediation of Brownfield Land

6.13.1 Recent changes in the environment permitting regime has enabled soil decontamination and the subsequent reuse in the redevelopment of the decontaminated soil within the site. Policy CSW 13 seeks to ensure that contaminated land is treated in situ or in combination with other contaminated land when those sites are to be redeveloped.

Policy CSW 13**Remediation of Brownfield Land**

Planning permission will be granted for a temporary period for waste related developments on brownfield land that facilitate its redevelopment by reducing or removing contamination from previous development, where:

1. the site is identified in a local plan for redevelopment or has planning permission for redevelopment, or
2. the site is part of a network of brownfield sites that are identified in a local plan or local plans for redevelopment or that have planning permission for redevelopment and is to receive waste for treatment from those sites as well as treating the land within the site.

6.14 Policy CSW 14: Disposal of Dredgings

6.14.1 Retaining the navigable channels within the estuaries within Kent is the statutory duty of the Port of London Authority (PLA) and the Medway Ports Authority. When the dredged materials do not consist of aggregates or cannot be accommodated within projects to enhance the biodiversity of the estuaries, then landfill is the only option currently available.

Policy CSW 14

Disposal of Dredgings

Planning permission will be granted for new sites for the disposal of dredging materials where it can be demonstrated that:

1. the re-use of the material to be disposed of is not practicable
2. there are no opportunities to use the material to enhance the biodiversity of the Kent estuaries

6.15 Policy CSW 15: Wastewater Development

6.15.1 Water treatment undertakers have a range of rights to carry out development without the need to obtain planning permission under the *Town and Country (General Permitted Development) Order 1995* (GPDO). However, new proposals for wastewater treatment works, sludge treatment and disposal facilities as well as extensions and some modifications to existing facilities will invariably require planning permission. In view of the need to locate new wastewater treatment works where they can service other developments and to connect to the existing wastewater network, the locational criteria Policy CSW 6 will not always be appropriate.

Policy CSW 15

Wastewater Development

Wastewater treatment works and sewage sludge treatment and disposal facilities will be granted planning permission, subject to:

1. there being a proven need for the proposed facility.

6.16 Policy CSW 16: Safeguarding of Existing Waste Management Facilities

6.16.1 The current stock of waste management facilities are important to maintaining net self-sufficiency. The loss of annual capacity at an existing permitted waste site could have an adverse effect upon delivering the waste strategy and so the protection of the existing stock of sites with permanent waste permission is as important to achieving the aims of the Plan as identifying new sites. Existing permitted sites with permanent permission for waste facilities can be protected through refusing permission for the redevelopment of these sites to non-waste uses. A list of waste sites is updated and published each year in the Kent MWLP AMR⁽⁸⁸⁾ Policy DM 8 identifies situations where development at, or in proximity to safeguarded waste management facilities would be acceptable.

Policy CSW 16

Safeguarding of Existing Waste Management Facilities

Sites that have permanent planning permission for waste management, or are allocated in the Waste Sites Plan are safeguarded from being developed for non waste management uses.

Where other development is proposed at, or within 250m of, safeguarded waste management facilities Local Planning Authorities will consult the Waste planning Authority and take account of its views before making a planning decision (in terms of both a planning application and an allocation in a local plan).

6.17 Radioactive Waste Management

6.17.1 The subject of radioactive waste is complex as it covers waste arisings from nuclear power stations as well as small quantities of radioactive waste that arise from hospitals and other medical activities and research establishments. Details of national policy on this subject, as well as the details of Kent arisings and current management routes are given in the evidence base topic paper on radioactive wastes.⁽⁸⁹⁾ The following paragraphs define the various types of radioactive waste.

6.17.2 High Level Wastes (HLW) are defined as wastes in which the temperature may rise significantly as a result of their radioactivity, so that this factor has to be taken into account in designing storage or disposal facilities.⁽⁹⁰⁾

6.17.3 Intermediate Level Wastes (ILW) are wastes with radioactivity levels exceeding the upper boundaries for low level wastes, but which do not require heating to be taken into account in the design of storage or disposal facilities.⁽⁹¹⁾ ILW is retrieved and processed to make it passively safe and then stored pending the availability of the Geological Disposal Facility (GDF).

6.17.4 Low Level Wastes (LLW) are radioactive wastes, other than those suitable for disposal with ordinary refuse, but not exceeding 4 gigabecquerels per tonne of alpha activity, or 12 gigabecquerels per tonne of beta or gamma activity.⁽⁹²⁾ LLW does not normally require shielding during handling or transport. LLW consists largely of paper, plastics and scrap metal items that have been used in hospitals, research establishments and the nuclear industry. Across the UK, large volumes of soil, concrete and steel will need to be managed as nuclear power plants are decommissioned. LLW makes up more than 90% by volume of UK radioactive wastes (but contains less than 0.1% of the radioactivity).⁽⁹³⁾ Historically most of LLW from the nuclear industry was transferred to the Low Level Waste Repository (LLWR) in Cumbria. In recent years it has been recognised that the capacity of the LLWR is limited and that most types of LLW do not require the level of protection offered by such a highly engineered facility. Not all LLW needs to be transferred to the LLWR for subsequent disposal there. Some types of solid LLW arisings from nuclear power stations can be disposed of at suitably licensed landfill sites,⁽⁹⁴⁾ or can be incinerated.⁽⁹⁵⁾ The Waste Hierarchy has to be considered in order to deal with LLW in the most effective way, so minimising the use of the capacity at the LLWR in order to extend its life. Some LLW arisings are incinerated and some metals are recycled, so there are a number of routes that these waste streams take.

89 KCC (Updated January 2013) TRW6: Radioactive Waste.

90 Defra, BERR and the Devolved Administrations for Wales and Northern Ireland (June 2008) Managing Radioactive Waste Safely: A framework for Implementing Geological Disposal. HLW is largely a by-product from the reprocessing of spent fuel.

91 Defra, BERR and the Devolved Administrations for Wales and Northern Ireland (June 2008). Managing Radioactive Waste Safely: A framework for Implementing Geological Disposal.

92 A becquerel is the unit of radioactivity, representing one disintegration per second. A gigabecquerel is 1000 million becquerels.

93 DECC, the Welsh Government, DOE and the Scottish Government (12 March 2012). Strategy for the management of solid low level radioactive waste from the non nuclear industry in the UK. Part 1 -Anthropogenic radionuclide.

94 There are no radioactive waste landfills in Kent at the time of plan preparation.

95 Source: Note from the EA (October 2012) attached to KCC (January 2013) Update Note to Dungeness Site Stakeholder Group on the Kent Minerals and Waste Plan.

6.17.5 Very Low Level Waste (VLLW) is a subcategory of LLW that contains limited amounts of solid radioactive waste that can be disposed of conveniently and without causing unacceptable environmental impacts, provided that it is mixed with large quantities of non-radioactive wastes which are themselves being disposed of.⁽⁹⁶⁾

6.17.6 The term higher activity waste embraces ILW and any LLW that requires disposal to a GDF. This waste stream has no disposal routes at the time of writing the Plan. Legacy waste refers to all of the radioactive waste streams that arise from the nuclear power stations across the UK.

6.18 Policy CSW 17: Nuclear Waste Treatment and Storage at Dungeness

6.18.1 Kent has two nuclear power stations sites (Dungeness A and B) located on Dungeness (Figure 20 shows their location). Dungeness A (a twin reactor Magnox power station) operated from 1965 to the end of 2006 and is undergoing decommissioning that will continue until around 2097. Dungeness B (an Advanced Gas Cooled twin reactor) started operation in 1983 and is scheduled to end power generation in 2028, but operations may continue beyond then. The decommissioning of Dungeness B is likely to continue until 2111.⁽⁹⁷⁾

6.18.2 Both stations lie within an environmentally sensitive area adjacent to sites of international and national importance designated for their geology and biodiversity interests. Dungeness is the largest shingle site in Europe comprising approximately 2000 hectares of vegetated shingle, approximately half the English shingle habitat resource. The extent and compositions of shingle habitats found at Dungeness is unique in the UK and rare in northwest Europe. Designated European Sites, protected by the *Habitats* and *Wild Birds Directives*, cover large parts of the Dungeness Peninsula.

6.18.3 If Dungeness C power station is built it will need storage facilities for radioactive wastes until the GDF is available, as well as facilities for the storage and/or management of other radioactive waste streams. Policy CSW 17 for the management of nuclear waste at Dungeness does not preclude Dungeness C being planned and constructed.

6.18.4 Policy CSW 17 does not foreclose possible future solutions for consolidation and waste movements between sites (for treatment and/or storage). At the time of plan preparation, each Magnox site is currently planned to have its own ILW store and be 'self-sufficient' but the best options for consideration in the future may be for movements of waste between sites for storage. The nuclear power companies are looking at options for local, regional or national storage consolidation to compare these with the current plans. Options include co-locating waste from both Dungeness power stations (A and B) on one of those sites. The study looking at these issues was initiated in 2012. The nuclear power operators are required to make best use of processing facilities to minimise the overall impact of radioactive waste processing and disposal subject to due process and Best Available Techniques (BAT) assessment.

96 NIEA, SEPA and EA. (September 2011) The Radioactive Substances Act 1993. The Environmental Permitting (England and Wales) (Amendment) Regulations 2011. VLLW Guidance Version 1.0.

97 Source: KCC (May 2011) TRW6: Nuclear Wastes, quoting information from both Magnox Ltd and EDF Energy.

6.18.5 In 2012, Shepway District Council considered whether to submit an expression of interest to host the GDF in Shepway. As part of this consideration Shepway District Council held a public referendum and on 19th September 2012 decided to recommend not to submit an expression of interest for hosting the GDF. Policy CSW 17 specifically precludes the management of waste from anywhere other than the nuclear power stations at this location and would preclude the development of a GDF at Dungeness.

Policy CSW 17

Nuclear Waste Treatment and Storage at Dungeness

Facilities for the storage and/or management of radioactive waste will be acceptable within the Nuclear Licensed area at Dungeness where:

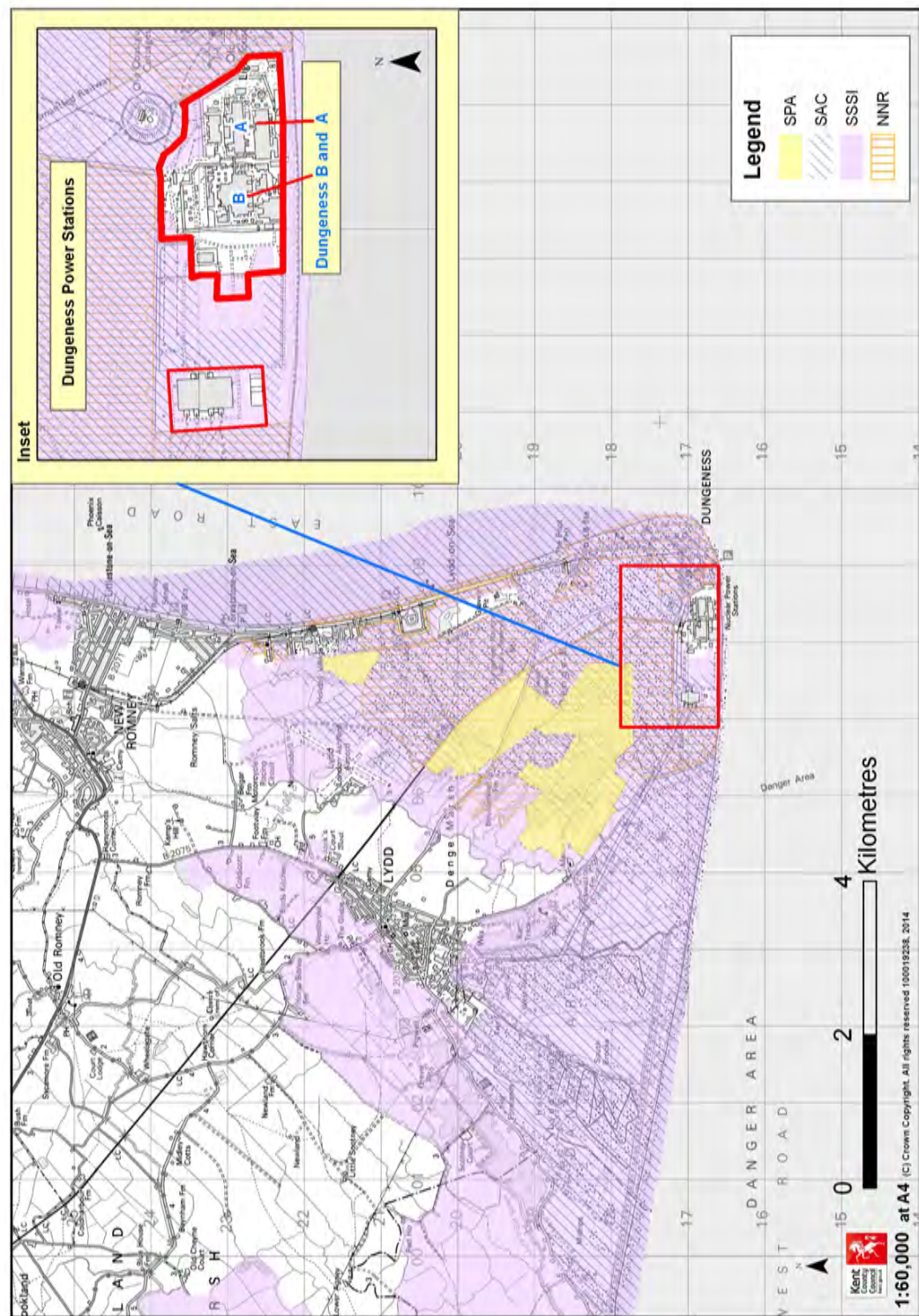
1. this is consistent with the national strategy⁽⁹⁸⁾ for managing radioactive waste and discharges
2. the outcome of environmental assessments justify it being managed on site.

The only waste arisings from Dungeness Nuclear Licensed Site that will be acceptable as fill material for the back-filling of voids within the nuclear licensed site are inert (non-radioactive) wastes generated by the demolition of existing buildings and structures. Landfill or landraise activities that use radioactive wastes within the nuclear licensed site will not be granted planning permission.

98 National strategy for radioactive wastes is the NDA Strategy at the time of this plan preparation.

6 Delivery Strategy for Waste

Figure 20: Dungeness Power Stations & Romney Marsh Nature Designations



6.19 Policy CSW 18: Non-nuclear Radioactive Low Level Waste (LLW) Management Facilities

6.19.1 There may also be a need for new facilities for the storage and/or treatment of non-nuclear sources of LLW (including VLLW) from institutions such as research establishments, universities and hospitals. At the time of plan preparation, there is no data on these waste arisings in Kent. They are likely to be in low volumes. However, to address the requirements of DCLG's, guidance on the EU WFD 2008/98/EC,⁽⁹⁹⁾ an enabling policy for sites that will manage this waste stream is required.

Policy CSW 18

Non-nuclear Industry Radioactive Low Level Waste Management

Planning permission will be granted for facilities that manage non-nuclear industry low level waste and very low level waste arisings where they meet the requirements of all relevant development plan policies, in the following circumstances:

1. where there is a proven need for the facility
2. some of the source material to be managed arises from within Kent.

7 Development Management Policies

7.0.1 The DM policies in this chapter address a range of subjects relevant to minerals and waste developments in Kent. Together with the minerals and waste delivery strategy policies, and the Minerals and Waste Site Plans, the policies form a robust DM framework for the determination of minerals and waste applications. These policies should also be considered in the context of the relevant local plan for the district or borough where the proposal is situated.

7.0.2 The DM policies in the Plan avoid duplication with other regulatory functions, such as the environmental permitting regime carried out by the EA.

7.1 Policy DM 1: Sustainable Design

7.1.1 It is important that all minerals and waste developments are designed to minimise the impact upon the environment and Kent's communities. There is a need to reduce the amount of greenhouse gas emissions and other forms of emissions, minimise energy and water consumption, reduce waste production and reuse or recycle materials.

7.1.2 Sustainable design initiatives can be achieved by a variety of means such as the incorporation of renewable energy, energy management systems, grey water recycling systems, sustainable drainage systems, energy efficient appliances and the use of recycled and recyclable building materials. Policy DM 1 supports some of the key priorities in the County Council's environmental strategy.⁽¹⁰⁰⁾

Policy DM 1

Sustainable Design

Proposals for minerals and waste development will be required to demonstrate that they have been designed to:

1. minimise greenhouse gas emissions and other emissions
2. minimise energy and water consumption and incorporate measures for water recycling and renewable energy technology and design in new facilities where possible
3. maximise the re-use or recycling of materials
4. utilise sustainable drainage systems wherever practicable
5. protect and enhance the character and quality of the site's setting and its biodiversity interests or mitigate and if necessary compensating for any predicted loss
6. minimise the loss of Best and Most Versatile Agricultural Land.

100 KCC (July 2011) Growing the Garden of England: A Strategy for Environment and Economy in Kent.

7.2 Policy DM 2: Environmental and Landscape Sites of International, National and Local Importance and Policy DM 3: Ecological Impact Assessment

7.2.1 Minerals and waste developments can have adverse impacts on sites of international, national and local importance. Kent has a wide range of landscapes and habitats that play an important role in supporting a variety of flora and fauna. The county also has an abundance of important heritage assets. Significant weight in planning terms is given to conserving landscape and scenic beauty of AONBs in which the conservation of wildlife and cultural heritage are important considerations.

7.2.2 Locally important sites are also designated in recognition of their significance at the local level but do not normally carry the same level of protection as international or nationally designated sites. These sites include LWSs, priority habitat identified in BAP, Local Geological Sites, Locally Listed Heritage Assets, LNRs, Country Parks, Ancient Woodland and aged or veteran trees, waterbodies and other green infrastructure features.

7.2.3 Policy DM 2 relates to these sites of international, national, and local environmental and landscape importance. The policy aims to ensure that there are no unacceptable adverse impacts on these important assets and sets out the circumstances where impacts upon them would be acceptable. 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 or improvement to their condition.

7.2.4 In addition to Policy DM 2, Policy DM 3 seeks to ensure that an adequate level of ecological assessment will be undertaken for Kent's biodiversity assets.

7.2.5 In terms of selecting and screening the suitability of sites for identification in the Minerals and Waste Sites Plans, the following criteria will be taken into account:

- the requirements set out in Policy CSM 2: Supply of Land-won Minerals, Policy CSW 6: Location of Built Waste Management Facilities and Policy CSW 7: Waste Management for Non-hazardous Waste
- all policies set out in Chapter 7: Development Management Policies
- relevant policies in district local plans
- strategic environmental information, including landscape assessment and HRA as appropriate

The scope of the above information to be considered will be appropriate for a Strategic Site selection process. More detailed information will be required for consideration at the planning applications stage.

Policy DM 2

Environmental and Landscape Sites of International, National and Local Importance

Proposals for minerals and/or waste development will be required to ensure that there is no unacceptable adverse impact on the integrity, character, appearance and function, biodiversity interests, or geological interests of sites of international, national and local importance.

1. International Sites

Minerals and/or waste proposals located within or considered likely to have any unacceptable adverse impact on international designated sites, including Ramsar, Special Protection Areas and Special Areas of Conservation (European Sites), will need to be evaluated in combination with other projects and plans. Before any such proposal will be granted planning permission or identified in the Minerals and Waste Sites Plans, it will need to be demonstrated that:

- a. there are no alternatives
- b. there is a robust case established as to why there are imperative reasons of overriding public interest
- c. there is sufficient provision for adequate timely compensation

2. National Sites

2.1 Designated Areas of Outstanding Natural Beauty (AONB)⁽¹⁰¹⁾ have the highest status of protection in relation to landscape and scenic beauty. Regard must be had to the purpose of the designation when exercising or performing any functions in relation to, or so as to affect land, in an AONB. For the purposes of this policy, such functions include the determination of planning applications and the allocation of sites in a development plan.

Planning permission for major minerals and waste development in a designated AONB will be refused except in exceptional circumstances and where it can be demonstrated that it is in public interest. In relation to other minerals or waste proposals in an AONB, great weight will be given to conserving its landscape and scenic beauty. Proposals outside, but within the setting of an AONB will be considered having regard to the effect on the purpose of conserving and enhancing the natural beauty of the AONB.

Consideration of such applications will assess;

101 The purpose of an AONB is set out in Section 82(1) of the Countryside and Rights of Way Act 2000 states as follows: the purpose of conserving and enhancing the natural beauty of the area of outstanding natural beauty.

- a. the need for the development, including in terms of any national considerations and the impact of granting, or refusing, the proposal upon the local economy
- b. the cost of, and scope for developing elsewhere outside the designated area, or meeting the need in some other way
- c. any detrimental impact on the environment, the landscape and recreational opportunities, and the extent to which the impact could be moderated taking account of the relevant AONB Management Plan.

Sites put forward for allocation for minerals or waste development in the Minerals Site Plan or the Waste Sites Plan will be considered having regard to the above tests. Those that appear to the Minerals and Waste Planning Authority to be unlikely to meet the relevant test(s) will not be allocated.

2.2 Proposals for minerals and/or waste developments within or outside of designated Sites of Special Scientific Interest, that are considered likely to have any unacceptable adverse impact on a Site of Special Scientific Interest, will not be granted planning permission or identified in the Minerals and Waste Sites Plans except in exceptional circumstances where it can be demonstrated that:

- a. the benefits of the development outweigh any impacts that it is likely to have on the features of the site that make it of special scientific interest
- b. the benefits of the development outweigh any impacts that it is likely to have on the national network of Sites of Special Scientific Interest

2.3 Minerals and/or waste proposals located within or considered likely to have any unacceptable adverse impact on Ancient Woodland will not be granted planning permission, or identified in the Minerals and Sites Plans, unless the need for, and the benefits of the development in that location clearly outweigh any loss.

3. Local Sites

Minerals and/or waste proposals within the Local Sites listed below will not be granted planning permission, or identified in the Minerals and Sites Plans, unless it can be demonstrated that there is an overriding need for the development and any impacts can be mitigated or compensated for, such that there is a net planning benefit:

- a. Local Wildlife Sites
- b. Local Nature Reserves
- c. Priority Habitats and Species
- d. land that is of regional or local importance as a wildlife corridor or for the conservation of biodiversity
- e. Local Geological Sites
- f. irreplaceable habitat including aged and veteran trees
- g. Country Parks, common land and village greens and other important areas of open space or green areas within built-up areas

Policy DM 3

Ecological Impact Assessment

Proposals for minerals and waste developments will be required to ensure that they result in no unacceptable adverse impacts on Kent's important biodiversity assets. These include internationally, nationally and locally designated sites, European and nationally protected species, and habitats and species of principal importance for the conservation of biodiversity / Biodiversity Action Plan habitats and species.

Proposals that are likely to have unacceptable adverse impacts upon important biodiversity assets will need to demonstrate that an adequate level of ecological assessment has been undertaken and will only be granted planning permission following:

1. an ecological assessment of the site, including preliminary ecological appraisal and, where likely presence is identified, specific protected species surveys
2. consideration of the need for, and benefits of, the development and the reasons for locating the development in its proposed location
3. the identification and securing of measures to mitigate any adverse impacts (direct, indirect and cumulative)
4. the identification and securing of compensatory measures where adverse impacts cannot be avoided or mitigated for
5. the identification and securing of opportunities to make a positive contribution to the protection, enhancement, creation and management of biodiversity

7.3 Policy DM 4: Green Belt

7.3.1 The western area of Kent is situated within the Green Belt around London (see Figure 6 in Chapter 2.2). The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence.

7.3.2 Proposals for minerals and waste development within the Green Belt will be considered in light of their potential impacts, national policy and the National Planning Policy Framework.

7.3.3 There is a presumption against inappropriate development within the Green Belt. Inappropriate development is, by definition harmful to the Green Belt and should not be approved except in very special circumstances. When considering any planning application, the planning authority will ensure that substantial weight is given to any harm to the Green Belt. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.

7.3.4 The National Planning Policy Framework provides guidance on the purposes of the Green Belt and what constitutes inappropriate development. It states that minerals extraction, engineering operations and the re-use of buildings provided that the buildings are of permanent and substantial construction are not inappropriate development in the Green Belt provided that they preserve the openness of the Green Belt and proposals do not conflict with the purpose of including land in the Green Belt. Processing plant, although commonly associated with mineral extraction, is unlikely to preserve openness, owing to its size, height and industrial appearance and would therefore be inappropriate development. Elements of many renewable energy projects will also comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.

7.3.5 Within the Green Belt, the planning authority will plan positively to enhance the beneficial use of the Green Belt, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land.

Policy DM 4

Green Belt

Proposals for minerals and waste development within the Green Belt will be considered in light of their potential impacts, and shall comply with national policy and the NPPF.

7.4 Policy DM 5: Heritage Assets and Policy DM 6: Historic Environment Assessment

7.4.1 Kent's historic environment requires protection for the enjoyment and benefit of future generations. The historic environment covers all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged as well as landscaped and planted or managed flora.⁽¹⁰²⁾ The NPPF identifies the conservation of such heritage assets as one of the core land-use planning principles that underpin both plan-making and decision-taking; it states that heritage assets should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life by today's and future generations.⁽¹⁰³⁾

102 As defined by DCLG (March 2012) National Planning Policy Framework, para. 52.

103 DCLG (March 2012) National Planning Policy Framework, para.17.

Policy DM 5

Heritage Assets

Proposals for minerals and waste developments will be required to ensure that Kent's heritage assets and their settings, including locally listed heritage assets, registered historic parks and gardens, Listed Buildings, conservation areas, World Heritage Sites, Scheduled Ancient Monuments, archaeological sites and features and defined heritage coastline,⁽¹⁰⁴⁾ are conserved in a manner appropriate to their significance.

Proposals should result in no unacceptable adverse impact on Kent's historic environment and, wherever possible, opportunities must be sought to maintain or enhance historic assets affected by the proposals. Minerals and/or waste proposals that would have an impact on a heritage asset will not be granted planning permission unless it can be demonstrated that there is an overriding need for development and any impacts can be mitigated or compensated for, such that there is a net planning benefit.

Policy DM 6

Historic Environment Assessment

Proposals for minerals and waste development that are likely to affect important heritage assets will only be granted planning permission following:

1. preliminary historic environment assessment, including field archaeological investigation where appropriate, to determine the nature and significance of the heritage assets
2. appropriate provision has been secured for preservation in situ, and/or archaeological excavation and recording and/or other historic environment recording as appropriate, including post-excavation analysis and reporting, archive deposition and access, and interpretation of the results for the local community, in accordance with the significance of the finds
3. agreement of mitigation of the impacts on the significance of the heritage assets, including their fabric, their setting, their amenity value and arrangements for reinstatement

104 Two sites in Kent: (1.) South Foreland and (2.) Dover - Folkestone.

7.5 Policy DM 7: Safeguarding Mineral Resources

7.5.1 As set out in section 5.5, it is important that certain mineral resources in Kent are safeguarded for potential use by future generations. However, from time to time, proposals to develop areas overlying safeguarded minerals resources for non-minerals purposes will come forward where for genuine planning reasons it would not be practicable to extract the otherwise economic underlying reserves before surface development is carried out.

7.5.2 In such circumstances, when determining proposals, a judgement will be required which weighs up the need for such development against the need to avoid sterilisation of the underlying mineral taking account of the objectives and policies of the development plans as a whole will need to be considered when determining proposals.

7.5.3 Policy DM 7 sets out the circumstances when non-minerals development may be acceptable at a location within a Minerals Safeguarding Area. This policy recognises that the aim of safeguarding is to avoid unnecessary sterilisation of resources and encourage prior extraction of the mineral where practicable and viable before non-mineral development occurs.

7.5.4 The process of Local Plan formulation, including consultation, independent examination and subsequent adoption provides the opportunity to take account of, and address, the need for the safeguarding of mineral resources. In doing so, it can make a clear judgement that where land is allocated in a Local Plan for surface development, such as housing, the presence of a mineral resource, and the need for its safeguarding, has been factored into the consideration of whether the allocation is appropriate. For sites allocated for non-mineral development it will therefore usually be the case that an assessment of the relevant considerations (criteria 1 to 6 in Policy DM7) has already taken place. In some cases, the assessment will conclude that an allocated site should be exempt from mineral safeguarding. The approach to be taken to mineral assessment during the plan-making stage will be set out in the Safeguarding SPD.

7.5.5 However, applications for non-mineral development located in MSAs, which are promoted as a 'windfall site' (sites not allocated in a development plan) or which are being promoted on allocated sites that have not been the subject of a 'Minerals Assessment, will usually need to be accompanied by such an assessment. This assessment will be prepared by the promoter and will include information concerning the availability of the mineral, its scarcity, the timescale for the development, the practicability and the viability of the prior extraction of the mineral. Guidance on undertaking Minerals Assessments is included in the BGS Good Practice Advice on Safeguarding. ⁽¹⁰⁵⁾

7.5.6 In certain cases it is possible that the need for a particular type of development in a particular location is so important that it overrides the need to avoid sterilisation of the safeguarded mineral resource. Such cases will be exceptional and it will be necessary to demonstrate, amongst other things, why the identified need cannot practically be met elsewhere.

105 The Supplementary Planning Document will be maintained by the County Council and updated as required.

7.5.7 Criterion 7 of Policy DM7 recognises that the allocation of land in adopted Local Plans for non-mineral development, such as housing, should have considered the presence of an economic mineral resource and the need for its safeguarding at this time, and, where that is shown to be the case to the satisfaction of the Mineral Planning Authority, there is no need to revisit mineral safeguarding considerations at the planning application stage. The Mineral Planning Authority and the district/borough planning authority will consider mineral safeguarding during the preparation of Local Plans including during preparation of Strategic Housing Land Availability Assessments.

7.5.8 Where proposals are determined by a district/borough planning authority, the Mineral Planning Authority will work with the relevant authority and/or the promoter to assess the viability and practicability of prior extraction of the minerals resource. As necessary the Minerals Planning Authority will provide information that helps determine the economic viability of the resource.

7.5.9 In the case of the Sandstone-Sandgate Formation and the Limestone Hythe Formation (Kentish Ragstone) the low probability of utility of the Sandgate Beds and the significant available reserves (in 2019) of the Kentish Ragstone, it is anticipated that any future allocations in local plans for non-mineral development that are coincident with these safeguarded minerals will be unlikely to be found to be in conflict with the presumption to safeguard these minerals. This will need to be evidenced by a Minerals Assessment prepared to a proportionate level of detail. Further guidance will be provided in a revised SPD.

Policy DM 7

Safeguarding Mineral Resources

Planning permission will only be granted for non-mineral development that is incompatible with minerals safeguarding,⁽¹⁰⁶⁾ where it is demonstrated that either:

1. the mineral is not of economic value or does not exist; or
2. that extraction of the mineral would not be viable or practicable; or
3. the mineral can be extracted satisfactorily, having regard to Policy DM9, prior to the non-minerals development taking place without adversely affecting the viability or deliverability of the non-minerals development; or
4. the incompatible development is of a temporary nature that can be completed and the site returned to a condition that does not prevent mineral extraction within the timescale that the mineral is likely to be needed; or
5. material considerations indicate that the need for the development overrides the presumption for mineral safeguarding such that sterilisation of the mineral can be permitted following the exploration of opportunities for prior extraction; or
6. it constitutes development that is exempt from mineral safeguarding policy, namely householder applications, infill development of a minor nature in existing built up areas, advertisement applications, reserved matters applications, minor extensions and changes of use of buildings, minor works, non-material amendments to current planning permissions; or
7. it constitutes development on a site allocated in the adopted development plan where consideration of the above factors (1-6) concluded that mineral resources will not be needlessly sterilised.

Further guidance on the application of this policy is included in a Supplementary Planning Document.

7.6 Policy DM 8: Safeguarding Minerals Management, Transportation, Production & Waste Management Facilities

7.6.1 It is essential to the delivery of this Plan's minerals and waste strategy that existing facilities⁽¹⁰⁷⁾ used for the management of minerals (including wharves and rail depots) and waste are safeguarded for the future, in order to enable them to continue to be used to produce and transport the minerals needed by society and manage its waste.

106 In this context 'mineral safeguarding' should be taken to mean safeguarding certain minerals identified within a Mineral Safeguarding Area shown in the policies maps in Chapter 9 and allocations in the Minerals Sites Plan.

107 'Existing facilities' are taken as those have permanent planning permission for minerals and waste uses.

7.6.2 Policy DM 8 sets out the circumstances when safeguarded minerals and waste development may be replaced by non-waste and minerals uses. This includes ensuring that any replacement facility is at least equivalent to that which it is replacing and it specifies how this should be assessed.

7.6.3 In the case of mineral wharves the factors to be considered include the depths of water at the berth, accessibility of the wharf at various states of the tide, length of the berth, the size and suitability of adjacent land for processing plant, weighbridges and stockpiles, and existing, planned or proposed development that may constrain operations at the replacement site at the required capacity.

7.6.4 There also are circumstances when development proposals in the vicinity of safeguarded facilities will come forward. The need for such development will be weighed against the need to retain the facility and the objectives and policies of the development plan as a whole will need to be considered when determining proposals. Policy DM 8 sets out the circumstances when development may be acceptable in a location proximate to such facilities. The policy recognises that the aim of safeguarding is to avoid development which may impair the effectiveness and acceptability of the infrastructure.

7.6.5 Certain types of development which require a high quality amenity environment (e.g. residential) may not always be compatible with minerals production or waste management activities which are industrial in nature. Policy DM 8 therefore expects the presence of waste and minerals infrastructure to be taken into account in decisions on proposals for non-waste and minerals development (known as ‘agents of change’) made in the vicinity of such infrastructure.

7.6.6 Criterion 2 of Policy DM8 recognises that the allocation of land in adopted Local Plans for development, such as housing, should have considered the presence of waste management and minerals supply infrastructure and the need for its safeguarding at that time, and, where this has been shown to be the case to the satisfaction of the Mineral Planning Authority, there is no need to revisit the safeguarding considerations at planning application stage.

7.6.7 Further guidance on the implementation of this policy is included in a Supplementary Planning Document.

Policy DM 8

Safeguarding Minerals Management, Transportation Production & Waste Management Facilities

Planning permission will only be granted for development that is incompatible with safeguarded minerals management, transportation or waste management facilities, where it is demonstrated that either:

1. it constitutes development of the following nature: advertisement applications; reserved matters applications; minor extensions and changes of use and buildings; minor works; and non-material amendments to current planning permissions; or
2. it constitutes development on the site that has been allocated in the adopted development plan where consideration of the other criteria (1, 3-7) can be demonstrated to have taken place in formulation of the plan and allocation of the site which concluded that the safeguarding of minerals management, transportation production and waste management facilities has been fully considered and it was concluded that certain types non-mineral and waste development in those locations would be acceptable; or
3. replacement capacity, of the similar type, is available at a suitable alternative site, which is at least equivalent or better than to that offered by the facility that it is replacing; or
4. it is for a temporary period and will not compromise its potential in the future for minerals transportation; or
5. the facility is not viable or capable of being made viable; or
6. material considerations indicate that the need for development overrides the presumption for safeguarding; or
7. It has been demonstrated that the capacity of the facility to be lost is not required.

Replacement capacity must be at least equivalent in terms of tonnage, accessibility, location in relation to the market, suitability, availability of land for processing and stockpiling of waste (and materials/residues resulting from waste management processes) and minerals, and:

- in the case of wharves, the size of the berth for dredgers, barges or ships
- in the case of waste facilities, replacement capacity must be at least at an equivalent level of the waste hierarchy and capacity may be less if the development is at a higher level of the hierarchy

There must also be no existing, planned or proposed developments that could constrain the operation of the replacement site at the required capacity.

Planning applications for development within 250m of safeguarded facilities need to demonstrate that impacts, e.g. noise, dust, light and air emissions, that may legitimately arise from the activities taking place at the safeguarded sites would not be experienced to an unacceptable level by occupants of the proposed development and that vehicle access to and from the facility would not be constrained by the development proposed.

Further guidance on the application of this policy will be included in a Supplementary Planning Document.

7.7 Policy DM 9: Prior Extraction of Minerals in Advance of Surface Development

7.7.1 When development is proposed within an MSA, promoters will be encouraged to extract the mineral in advance of the main development. Policy DM 9 aims to manage situations where built development located on a safeguarded mineral resource is to be permitted, so as to avoid the needless sterilisation of economic mineral resources (in accordance with Policy DM 7).

Policy DM 9

Prior Extraction of Minerals in Advance of Surface Development

Planning permission for, or incorporating, mineral extraction in advance of development will be granted where the resources would otherwise be permanently sterilised provided that:

1. the mineral extraction operations are only for a temporary period; and,
2. the proposal will not cause unacceptable adverse impacts to the environment or communities

Where planning permission is granted for the prior extraction of minerals, conditions will be imposed to ensure that the site can be adequately restored to a satisfactory after-use should the main development be delayed or not implemented.

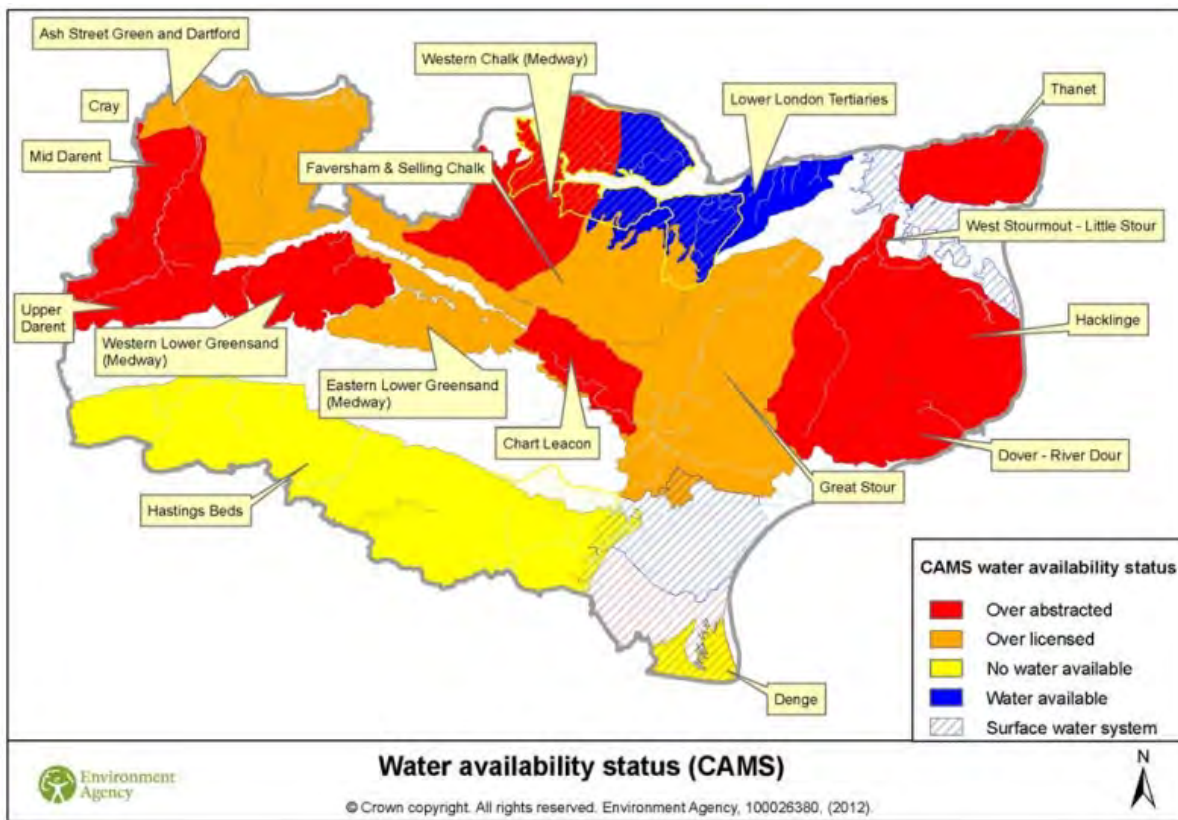
7.8 Policy DM 10: Water Environment

7.8.1 Minerals and waste development can have significant impacts on flooding and water quantity and water quality. In Kent there are many catchments where there is little or no water available for abstraction during dry periods. Pressures are particularly notable in Kent as it is one of the driest parts of England and Wales, coupled with high population density and household water use (see Figure 21). Areas of mineral excavation

can often provide opportunities for water storage at times of flood and therefore mitigate against the effects of flooding. There are five sources of flooding that are considered in the SFRA:⁽¹⁰⁸⁾

- flooding from rivers
- flooding from the sea
- flooding from rainfall
- flooding from groundwater
- flooding from sewers

Figure 21 Water Availability Status (Source: Environment Agency, State of Water in Kent, 2012)



7.8.2 Flood zones are used to determine the probability of land experiencing flooding from a river or the sea. The aims of national flood policy is to steer development towards areas with the lowest probability of flooding. The EA has identified four flood zones:

- **Flood Zone 1:** Land within this zone has been assessed as having a low probability of experiencing flooding from the rivers and sea (less than a 1 in 1000 annual probability of river or sea flooding (<0.1%). Any land-use is appropriate in this zone. Flood Zone 1 is normally shown as unshaded on flood maps.

108 Barton Willmore (June 2013) Mineral and Waste Plan 2013-2030 Strategic Flood Risk Assessment (on Behalf of KCC).

- **Flood Zone 2:** Land within this flood zone has been assessed as having a medium probability of experiencing flooding from rivers and the sea (i.e. having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1%-0.1%), or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding (0.5%-0.1%) in any year). Sand and gravel workings, wharves, mineral workings and processing, waste treatment and landfill sites are appropriate developments for land within this flood zone.
- **Flood Zone 3:** Land within this zone has been assessed as having a high probability of experiencing flooding from rivers and the sea (between a 1 in 100 or greater annual probability of river flooding (>1%), or between a 1 in 200 or greater annual probability of sea flooding (>0.5%) in any year). Development within this flood zone should seek opportunities to reduce the overall level of flood risk through layout and form and appropriate use of sustainable drainage systems, relocating existing development to land in zones with lower risks of flooding and creating space for flooding to occur by restoring functional floodplain and flood flow pathways and by identifying and safeguarding open space for flood storage. Sand and gravel workings, wharves, mineral workings and the processing and treatment of waste (except landfill and hazardous waste facilities) are considered suitable for land-use in this zone.
- **Flood Zone 3b (The Functional Floodplain):** Land within this zone has been assessed as land where water has to flow or be stored in times of flood. Development within this zone should seek opportunities to reduce the overall level of flood risk in the area through the layout and form of the development and the appropriate application of sustainable drainage systems, or to relocate existing development to land with a lower probability of flooding. Sand and gravel workings and wharves are considered appropriate land-uses within this zone.

7.8.3 Both flood water and groundwater may become contaminated if it comes into contact with certain types of wastes. It is therefore necessary for waste sites to be managed to ensure that the risk of water contamination from waste is minimised. Planning applications for sites located in areas prone to flooding must be accompanied by a suitable Flood Risk Assessment.

7.8.4 Groundwater Source Protection Zones (SPZ) for Kent are set out in Figure 15. Groundwater accounts for over 70% of public water supply in Kent. This reliance on groundwater resources makes it important that mineral and waste developments do not adversely affect groundwater supplies in any way.

- **SPZ 1** is the inner zone which is within the 50-day travel time from any point below the water table to the source. This zone around the groundwater supply abstraction point has a minimum radius of 50 metres.
- **SPZ 2** is the outer protection zone and refers to the 400-day travel time from a point below the water table.

- **SPZ 3** is the Source Protection Catchment Zone and refers to the area around a source within which all groundwater recharge is presumed to be discharged at the source.
- **SPZ4** is a surface water catchment which drains into the aquifer feeding groundwater supply.

7.8.5 To ensure compliance with the Water FD,⁽¹⁰⁹⁾ minerals and waste developments must not cause any unacceptable adverse impact on local water bodies. Applications for minerals and waste proposals within SPZs should be accompanied by a hydrogeological assessment. Waste operations are not usually considered compatible within SPZ1.

7.8.6 Policy DM 10 embraces issues of flood, groundwater, SPZs and the protection of waterbodies.

Policy DM 10

Water Environment

Planning permission will be granted for minerals or waste development where it does not:

1. result in the deterioration of physical state, water quality or ecological status of any water resource and waterbody, including rivers, streams, lakes and ponds
2. have an unacceptable impact on groundwater Source Protection Zones (as shown in Figure 15)
3. exacerbate flood risk in areas prone to flooding (as shown in Figure 15) and elsewhere, both now and in the future

All minerals and waste proposals must include measures to ensure the achievement of both no deterioration and improved ecological status of all waterbodies within the site and/or hydrologically connected to the site. A hydrogeological assessment may be required to demonstrate the effects of the proposed development on the water environment and how these may be mitigated to an acceptable level.

7.9 Policy DM 11: Health and Amenity

7.9.1 Minerals and waste development can have unacceptable adverse impacts on the environment and local communities. The use of machinery and lighting can result in noise, light and air pollution and also affect the amenity of nearby communities and businesses and other land uses such as sport, recreation or tourism. It is important that

109 EU Water Framework Directive 2000/60/EC.

the minerals and waste industry in Kent does not adversely impact upon the health and amenity of surrounding environment and communities, and appropriate suitable mitigation measures are used to reduce the risk of unacceptable adverse impacts occurring.

Policy DM 11

Health and Amenity

Minerals and waste development will be permitted if it can be demonstrated that they are unlikely to generate unacceptable adverse impacts from noise, dust, vibration, odour, emissions, bioaerosols, illumination, visual intrusion, traffic or exposure to health risks and associated damage to the qualities of life and wellbeing to communities and the environment. This may include production of an air quality assessment of the impact of the proposed development and its associated traffic movements and necessary mitigation measures required through planning condition and/or planning obligation. This will be a particular requirement where a proposal might adversely affect the air quality in an AQMA. (See Figure 15)

Proposals for minerals and waste development will also be required to ensure that there is no unacceptable adverse impact on the use of other land for other purposes.

7.10 Policy DM 12: Cumulative Impact

7.10.1 Impacts from one development in any particular area may give rise to impacts that, when controlled by mitigation are acceptable and do not give rise to any unacceptable adverse impacts. However, two or more developments of a similar nature within close proximity to each other may act together to cause impacts that are not acceptable, even with mitigation incorporated into the design for each development.

7.10.2 Proposals likely to have a significant effect on internationally important interest features of internationally important wildlife sites, will need to be assessed through consideration of the possible effects of any other plans and projects, as well as the minerals and/or waste development proposed.

7.10.3 The following policy requires cumulative impacts to be considered when two or more developments are potentially capable of causing significant effects on the environment (including climate change), biodiversity interests or on the amenity of the local community. It is also relevant where a new development may affect communities or the environment cumulatively with existing developments.

Policy DM 12

Cumulative Impact

Planning permission will be granted for minerals and waste development where it does not result in an unacceptable adverse, cumulative impact on the environment or communities. This is in relation to the collective effect of different impacts of an individual proposal, or in relation to the effects of a number of developments occurring concurrently and/or successively.

7.11 Policy DM 13: Transportation of Minerals and Waste

7.11.1 One of the roles of the Kent MWLP is to encourage the use of sustainable transportation methods including rail and water. However, in view of the limited opportunities that are available within the county to increase the use of sustainable transportation methods, it is acknowledged that most minerals and waste movements across Kent will continue to be made by road.

7.11.2 Any minerals or waste developments that are likely to result in an increase of more than 200 Heavy Duty Vehicles (HDVs)/day⁽¹¹⁰⁾ on any road that lies within 200m of a designated European Site will need to be subject to HRA screening to evaluate air quality impacts. It will be necessary for the applicant to demonstrate that either:

- the increased traffic will not lead to an increase in nitrogen deposition within all European Sites that lie within 200m that constitutes more than 1% of the critical load for the most sensitive habitat within the site, or
- If the increase in deposition will be greater than 1% of the critical load it will nonetheless be sufficiently small that no adverse effect on the interest features and integrity of the European Site will result.

7.11.3 The aim of the Policy DM 13 is to minimise road miles in relation to the transportation of minerals and waste across Kent.

110 Department for Transport (May 2007) The design manual for Roads and Bridges, Volume 11, Section 3, Part 1; regarding air quality Environmental Impact Assessment from roads indicates that if the increase in traffic will amount to less than 200 HDVs per day the development can be scoped out of further assessment. A Heavy Goods Vehicles is a vehicle with over 3.5 tonnes maximum permissible gross weight (mgw).

Policy DM 13

Transportation of Minerals and Waste

Minerals and waste development will be required to demonstrate that emissions associated with road transport movements are minimised as far as practicable and by preference being given to non-road modes of transport. Where development requires road transport, proposals will be required to demonstrate that:

1. the proposed access arrangements are safe and appropriate to the scale and nature of movements associated with the proposed development such that the impact of traffic generated is not detrimental to road safety
2. the highway network is able to accommodate the traffic flows that would be generated, as demonstrated through a transport assessment, and the impact of traffic generated does not have an unacceptable adverse impact on the environment or local community.
3. emission control and reduction measures, such as deployment of low emission vehicles and vehicle scheduling to avoid movements in peak hours. Particular emphasis will be given to such measures where development is proposed within an AQMA. (Figure 15)

7.12 Policy DM 14: Public Rights of Way

7.12.1 Public Rights of Way (PROW) play an important role in enabling access to the countryside. Minerals and waste sites can often be located close to a PROW or a PROW may cross an area of mineral bearing land. It is important that PROWs remain accessible to users throughout the lifetime of the minerals and waste operations and that users' safety is not compromised by any activity on site. New sites or extended sites should not have an adverse impact on the network of PROWs. In some circumstances it will be necessary for a PROW to be diverted during operations. Temporary diversions will only be acceptable if the restoration scheme provides routes to the same standard of surface level as the original PROW. If this is not possible, it may be preferable to divert the route permanently.

Policy DM 14

Public Rights of Way

Planning permission will only be granted for minerals and waste development that adversely affect a Public Right of Way, if:

1. satisfactory prior provisions for its diversion are made which are both convenient and safe for users of the Public Rights of Way
2. provision is created for an acceptable alternative route both during operations and following restoration of the site
3. opportunities are taken wherever possible to secure appropriate, improved access into the countryside

7.13 Policy DM 15: Safeguarding of Transportation Infrastructure

7.13.1 Non-hazardous landfill and water-filled mineral operations attract birds which may give rise to the possibility of increased hazard to air traffic due to bird strike. EfW plants can cause air turbulence in the vicinity of the site which together with the physical structures necessary for these operations can cause obstruction to air safety, in particular to light aircraft. Local planning authorities are required to consult local aerodromes before granting planning permission for development that might endanger the safety of aircraft. Such developments include buildings and structures that exceed certain heights and development that is likely to attract birds within the relevant radius of aerodromes as identified on safeguarding maps provided by the Civil Aviation Authority or Ministry of Defence.

7.13.2 The Port of London Authority has a network of navigational equipment that needs to be maintained to ensure the continued safety of vessels navigating on the River Thames, in addition to the existing, varied operations that currently take place. It is important that this network of equipment is not compromised by other developments.

7.13.3 If, following consultation with relevant organisations, the nature of the mineral extraction or waste management development is considered to give rise to new or increased risks to aerodromes and their associated uses, or increased hazards to rail, river, sea, waterways or road transport then planning permission will not be granted.

Policy DM 15

Safeguarding of Transport Infrastructure

Minerals and waste proposals will be granted planning permission where development would not give rise to unacceptable impacts on aviation, rail, river, sea, other waterways or road transport or where these impacts are mitigated.

7.14 Policy DM 16: Information Required in Support of an Application

7.14.1 The minerals and waste planning authority is entitled to request appropriate information from applicants when the required information is a material consideration in the determination of the planning application. If the additional information is not supplied, the application may be refused planning permission on the grounds of insufficient information.

7.14.2 The planning authority carefully considers all aspects of a planning application to establish whether planning permission should be granted. It involves using the available information to consider the merits of proposals against any potential impacts; a judgement is made regarding the need for the development weighed against any residual impacts after mitigation is taken into consideration. A system of planning controls can be established through the imposition of conditions or planning obligations to further ensure that the development proposals do not have an unacceptable adverse impact on local communities or the environment.

7.14.3 The details of the information required within a planning application can be determined through pre-application discussions and meetings with the Minerals and Waste Planning Authority, which applicants are strongly encouraged to undertake. Applications that are not supported by suitable, sufficient material information will invariably take longer to determine and are at risk of being refused.

7.14.4 Certain types of minerals and waste developments may require an Environmental Statement (ES) to accompany the planning application.⁽¹¹¹⁾ The information contained within the ES will be taken into account in determining the application. If applicants consider that their proposals are likely to require an ES, they should seek guidance at an early stage on the need for and scope of the ES. All submitted applications will be screened and applicants advised if an ES is required, if one has not already been submitted.

7.14.5 European Sites (including SPAs, Ramsar sites and SACs) are protected by European legislation. HRAs are required to be carried out where proposals may have a significant impact upon the European Site. To assess whether a proposal will have likely significant effects upon a designated site, the criteria in the following paragraphs 7.14.6 - 7.14.8 are used to determine when a HRA will be required for a development project.

7.14.6 Any proposal for an EfW facility should undertake HRA screening with regard to all European Sites within 10 km. It will be necessary for the applicant to demonstrate that either:

- increases in nitrogen deposition within all European Sites that lie within 10 km constitute less than 1% of the critical load for the most sensitive habitat within the site or
- if the increase in nitrogen deposition will be greater than 1% of the critical load, it will nonetheless be sufficiently small that no adverse effect on the interest features and integrity of the European Site will result.

111 Required under the *Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011 (as amended)*.

7.14.7 Any minerals or waste development that is likely to result in an increase of HDVs on any road that lies within 200 m of a European Site should also be subject to HRA screening in order to evaluate air quality impacts within the context of the critical load, or critical level, and the 1% criterion cited above.

Table 2 Indicative screening distances for considering whether a Habitat Regulations Assessment is required for a development.

Pathway	Screening Distance from a European Site⁽¹⁾
Air Quality - Energy from Waste	10 km
Air Quality - Landfill Gas Flares	1 km
Air Quality - Biopathogens	1 km
Air Quality - Dust	500 m
Air Quality - Vehicle Exhaust Emissions	200 m
Water Quality and Flow	No standard distance (use source/pathway/receptor approach)
Disturbance (noise/visual)	1 km from a European Site supporting disturbance sensitive species/populations
Gull/Corvid (rooks and crows) predation	5 km from a European site supporting sensitive ground nesting breeding species
Coastal Squeeze	No standard distance - evaluate on a case-by-case basis

1. International Designated Sites, Special Areas of Conservation, Special Protection Areas and Ramsar sites.

7.14.8 Table 1 identifies the screening distances from European Sites associated with particular impact pathways. Development projects that will lead to the pathways and fall within these zones will require HRA. The table does not preclude HRA being required in other circumstances.

Policy DM 16

Information Required In Support of an Application

Planning applications for minerals or waste management development must be supported by sufficient, relevant drawings, plans and information, including the information specified in the County Council's guidance notes for minerals and waste applications.⁽¹¹²⁾

7.15 Policy DM 17: Planning Obligations

7.15.1 Where the use of planning conditions is not possible, in some circumstances, development proposals could be considered to be acceptable if planning obligations are used. These can either take the form of legal agreements entered into by planning authorities or a unilateral undertaking made by the developer and any person with an interest in the development and the relevant land. The types of matters that may need to be covered in planning obligations are listed in Policy DM 17, which is neither exhaustive nor are the listed matters relevant to every development.

Policy DM 17

Planning Obligations

Planning obligations will be sought where appropriate, to achieve suitable control over, and to mitigate and/or compensate for, the effects of minerals and waste development where such objectives cannot be achieved by planning conditions. Matters to be covered by such planning obligations may include those listed below as appropriate to the proposed development:

1. revocation and consolidation of planning permissions
2. highways and access improvements

112 Applicants should refer to the following website for the most recent guidance on local information requirements and validation of applications: <http://www.kent.gov.uk/planningapplications>. Guidance will be reviewed and updated periodically.

3. traffic management measures including the regulation of lorry traffic
4. provision and management of off-site or advance tree planting and screening
5. extraction in advance of future development
6. environmental enhancement and the delivery of Local Biodiversity Action Plan Targets
7. protection and enhancement of internationally, nationally and locally important sites
8. landscape enhancement
9. protection of internationally, nationally and locally notable and protected species
10. long term management and monitoring of mitigation or compensation sites and their protection from further development
11. provision and long term maintenance of an alternative water supply should existing supplies be affected
12. archaeological investigation, analysis, reporting, publication and archive deposition
13. establishment of a liaison committee
14. long-term site management provision to establish and/or maintain beneficial after-use
15. improvement to the public rights of way network
16. financial guarantees to ensure restoration and long term maintenance is undertaken
17. measures for environmental, recreational, economic and community gain in mitigation or compensation for the effects of minerals and waste development
18. codes of construction practice for large⁽¹¹³⁾ waste developments that incorporate the requirement for the majority of the construction workforce to be recruited locally. Opportunities for modern apprenticeships to be made available for a proportion of the construction workforce
19. the majority of the operational staff at large waste developments to be sourced from the local area and opportunities for modern apprenticeships and other nationally recognised training schemes to be available for a proportion of the workforce

113 A large waste development is one that has a capacity of over 100,000 tpa.

7.16 Policy DM 18: Land Stability

7.16.1 Minerals and waste development can give rise to land instability if proposals are not properly planned and implemented. The issue needs to be considered and satisfactorily addressed when planning applications are determined. Where there is the possibility of land instability, applications for minerals and waste development should be accompanied by a stability report. Such a report should assesses the physical capability of the land, possible adverse impacts of any instability, possible adverse impacts on adjacent land, possible impacts on local amenity and conservation interests and any proposed remedial or precautionary measures.

7.16.2 The aim of Policy DM 18 is to ensure that land stability is properly addressed during the operational phase(s) of minerals and waste development. Policy DM 19 addresses the issue in so far as it relates to restoration, aftercare and after-use.

Policy DM 18

Land Stability

Planning permission will be granted for minerals or waste development where it is demonstrated that it will not result in land instability.

All minerals and waste proposals that could give rise to land instability must include a stability report and measures to ensure land stability.

7.17 Policy DM 19: Restoration, Aftercare and After-use

7.17.1 The nature of restoration activity depends on the choice of after-use, which is influenced by a variety of factors including the aspirations of the landowner(s) and the local community, the present characteristics of the site and its environs, any strategies for the area (e.g. biodiversity priorities), the nature, scale and duration of the proposed development and the availability and quality of soil resources. Where the proposal is to restore the site to agricultural use at existing ground levels, ensuring the availability of clean inert fill material is important to the deliverability of the scheme as is the availability of suitable topsoil (Policy CSW 10: Development at Closed Landfill Sites seeks to address this). Quarries have been restored through importation of non-hazardous and/or hazardous waste and the acceptability of this in principle would be considered against Policy CSW 9: Non Inert Landfill in Kent. It may be appropriate to retain some industrial archaeological features, geological exposures or landscapes within a quarry.

7.17.2 Restoration, aftercare and after-use will usually seek to assure that the land is restored back to a quality that is at a level at least equivalent to that which it was prior to development commencing and wherever possible provide for the enhancement of the quality of the landscape, local environment or the setting of historic assets to the benefit of the local or wider community. Wherever possible, restoration schemes should include measures to improve biodiversity interests whatever the proposed after-use of the site. Restoration, aftercare and after-use may be secured through Planning Obligations as set out in Policy DM 17.

7.17.3 To achieve high-quality restoration to an agricultural use or certain leisure uses (e.g. to parkland), a supply of suitable soils is normally required. In such cases all soil resources should be retained and managed on site for use in restoration. The way that soils are handled is also a key element for successful restoration to these uses. Details of the management and storage of soils, including timing and means of soil movements and types of machinery to be used will be required.

7.17.4 In cases where insufficient soils exist on site the applicant will need to make provision for the supply of soils or soil making materials within an agreed timescale to ensure the timely restoration of the site. Planning consent will only be granted for the importation and processing of such materials (where soil making materials require prior processing) if proven necessary to ensure timely restoration. Stockpiles will need to be controlled such that soil quality is not adversely affected and there are no unintended adverse impacts resulting from, for example, visual appearance and drainage. No subsequent export of material will be allowed.

7.17.5 For the initial years following restoration (usually a 5-year period but this may be extended e.g. when restoration is to a particular wildlife habitat) site aftercare measures are required to ensure that the reinstatement of soils and the planting or seeding carried out to meet restoration requirements is being managed so that the site will return to its intended after-use in a timely manner. These measures involve improving the structure, stability and nutrient value of soils, ensuring adequate drainage is available and securing the establishment and management of the grass sward, crop or planting areas, together with any other maintenance as may be required. The aftercare scheme normally requires two levels of details to be provided, these are:

- the outline strategy for the whole of the aftercare period
- a detailed strategy for the forthcoming year

7.17.6 Restoration and aftercare plans should take into consideration community needs and aspirations. Local interest groups and community representatives should be consulted and their viewpoints incorporated into the proposals wherever possible and appropriate. Restoration and aftercare plans for mineral development need to be reviewed and updated periodically, in accordance with legislation.⁽¹¹⁴⁾ Policy DM 19 identifies the issues that need to be addressed in relation to the restoration, aftercare and after-use of minerals extraction and temporary waste management development.

Policy DM 19

Restoration, Aftercare and After-use

Planning permission for minerals extraction and temporary waste management development will be granted where satisfactory provision has been made for high standards of restoration and aftercare such that the intended after-use of the site is achieved in a timely manner, including where necessary for its long-term management.

Restoration plans should be submitted with the planning application which reflect the proposed after-use and, where appropriate, include the details set out below:

1. a site-based landscape strategy for the restoration scheme
2. the key landscape and biodiversity opportunities and constraints ensuring connectivity with surrounding landscape and habitats
3. the geological, archaeological and historic heritage and landscape features and their settings
4. the site boundaries and areas identified for soil and overburden storage
5. an assessment of soil resources and their removal, handling and storage
6. an assessment of the overburden to be removed and stored
7. the type and depth of workings and information relating to the water table

114 The Environment Act (1995) introduced a requirement for an initial review and updating of all old mineral planning permissions (known as the 'Review of Mineral Permissions' or 'ROMP' process). There is no fixed period when periodic reviews should take place so long as the first review is no earlier than 15 years after planning permission is granted or, in the case of an old permission, 15 years of the date of the initial review. Any further reviews should be at least 15 years after the date of the last review.

8. storage locations and quantities of waste/fill materials and quantities and types of waste/fill involved
9. proposed infilling operations, sources and types of fill material
10. the arrangements for monitoring and the control and management of landfill gas
11. consideration of land stability after restoration
12. directions and phasing of working and restoration and how they are integrated into the working scheme
13. the need for and provision of additional screening taking account of degrees of visual exposure
14. details of the proposed final landform including pre and post settlement levels
15. types, quantities and source of soils or soil making materials to be used
16. a methodology for management of soils to ensure that the pre-development soil quality is maintained
17. proposals for meeting targets or biodiversity gain in relation to the Kent Priority Habitats (or its replacement), the Kent Biodiversity Opportunity Areas and the Greater Thames Marshes Nature Improvement area
18. removal of all buildings, plant, structures, accesses and hardstanding not required for long term management of the site
19. planting of new native woodlands
20. installation of drainage to enable high quality restoration and after-use
21. measures to incorporate flood risk mitigation opportunities
22. details of the seeding of grass or other crops and planting of trees, shrubs and hedges
23. a programme of aftercare to include details of vegetation establishment, vegetation management, biodiversity habitat management, field drainage, irrigation and watering facilities
24. the restoration of the majority of the site back to agriculture, if the site consists of the best and most versatile agricultural land

Aftercare schemes should incorporate an aftercare period of at least five years. Where appropriate, voluntary longer periods for certain uses will be sought through agreement between the applicant and minerals planning authority.

7.18 Policy DM 20: Ancillary Development

7.18.1 Policy DM 20 seeks to provide certainty that proposals for ancillary development within or close to minerals and waste development will be permitted, even when there may be an adverse environmental impact, so long as it is possible to demonstrate that there are environmental benefits in providing the close link with the existing site that outweighs the likely environmental impacts.

Policy DM 20

Ancillary Development

Proposals for ancillary development⁽¹¹⁵⁾ within or in close proximity to mineral and waste development will be granted planning permission provided that:

1. the proposal is necessary to enable the main development to proceed
2. it has been demonstrated that there are environmental benefits in providing a close link with the existing site that outweigh the environmental impacts.

Where permission is granted, the operation and retention of the associated development will be limited to the life of the linked mineral or waste facility.

115 "Ancillary Development" is defined in the Town and Country Planning Act S90. In relation to minerals and waste developments "ancillary development" only includes development that is directly related to the minerals or waste development proposed.

7.19 Policy DM 21: Incidental Mineral Extraction

7.19.1 Policy DM 21 seeks to provide certainty that proposals for incidental mineral extraction will be permitted provided that operations do not cause unacceptable adverse impacts to the environment or communities.

Policy DM 21

Incidental Mineral Extraction

Planning permission for mineral extraction that forms a subordinate and ancillary element of other development will be granted provided that operations are only for a temporary period. Where planning permission is granted, conditions will be imposed to ensure that the site can be restored to an alternative after-use in accordance with Policy DM 19 should the main development be delayed or not implemented.

7.20 Policy DM 22: Enforcement

7.20.1 The Plan seeks to promote sustainable development within Kent. Positive and balanced policies have been designed to help support and encourage this principle. Hand-in-hand with this objective is the need to ensure a general upholding of planning law. Within this context, informal and negotiated solutions to planning control problems are sought, acting with discretion and in a proportionate way. However, there will be occasions when determined planning breaches cause significant environmental and amenity issues and may threaten the integrity of the planning system. To fully meet such challenges requires the actions of a local control and management regime and the support of a recognised policy base.

Policy DM 22

Enforcement

The County Council will carry out its planning enforcement functions within the terms of its own Enforcement Plan/Protocols (and any subsequent variations) and specifically for waste-related matters, in light of the European Union Waste Framework Directive 2008/98/EC.

8 Managing and Monitoring the Delivery of the Strategy

8.0.1 Monitoring is an important part of evidence-based policy making. The NPPF states that local planning authorities should ensure that the local plan is based on adequate, up-to-date and relevant evidence.⁽¹¹⁶⁾ The Kent MWLP therefore requires a monitoring schedule to ensure it remains based on up-to-date evidence and to measure the effectiveness of its vision and objectives.

8.0.2 The monitoring and implementation framework set out in this section shows how the Strategic Objectives of the Kent MWLP will be achieved by monitoring data indicators relevant to each of the Plan's policies. The framework includes targets against which the performance of the policies can be monitored, plus associated 'trigger points' to indicate when corrective action may be required. The monitoring of each indicator will be carried out as part of the production of the Kent Annual Monitoring Report. Policies may be subject to review if annual monitoring indicates that significant, adverse trends are likely to continue.

8.0.3 Following the enactment of the *Localism Act 2011* it is now the responsibility of each local authority to decide what to include in its monitoring reports, while satisfying the information requirements of relevant UK and EU legislation. KCC still attaches importance to the former core national output indicators, used as the basis for monitoring in previous years, and will continue to report on these indicators. These are:

- production of primary land-won aggregates
- production of secondary and recycled aggregates
- capacity of waste management facilities by type
- amount of municipal waste arising and managed, by management type and the percentage each management type represents of the total waste managed

116 DCLG (2012) National Planning Policy Framework, para. 158.

8.0.4 In addition, KCC also monitors local output indicators as follows:

- new mineral reserves granted permission
- construction aggregate landbanks
- other minerals landbanks
- safeguarding of wharves and rail depots
- sales of construction aggregates at wharves and rail depots
- waste growth rate
- exports and imports of waste.
- capacity for managing waste in Kent

8.0.5 Data for many of the mineral related indicators is supplied by the South East England Aggregate Working Party (SEEAWP). KCC intends to include these local output indicators in the AMR and/or the Local Aggregate Assessment (LAA) for as long as the data remains available. In accordance with the agreements with industry and their trade associations, this information is only available in a collated form, so individual site information cannot be easily identified. This can cause problems for planning for minerals, especially where there is a limited number of suppliers of particular types of mineral such as brickearth or crushed rock. The SEEAWP reports also provide a limited amount of information on secondary and recycled aggregates. The potential problem with this source of material is that some operators are reluctant to provide survey returns and so the values obtained are considered likely to be an under-representation of the actual amount of secondary and recycled aggregates produced in Kent in any one year.

8.0.6 The National Planning Policy for Waste⁽¹¹⁷⁾ also refers to specific parameters being monitored to inform the determination of planning applications. In particular:

- take-up in allocated sites and areas;
- existing stock and changes in the stock of waste management facilities, and their capacity (including changes to capacity); and
- the amounts of waste recycled, recovered or going for disposal.

8.0.7 The supporting Planning Practice Guidance⁽¹¹⁸⁾ also refers to the need to monitor annual arisings to allow for review of the forecasts that underpin the strategy.

8.0.8 Data on Local Authority Collected Waste is readily available and reported to central Government on an annual basis. Data on C&I waste arisings is less readily available. Similarly, until now there has not been any regular reporting of hazardous waste arisings in Kent or the amount of hazardous waste managed in the county. This information was collated as part of the evidence base for the Plan.⁽¹¹⁹⁾ It is proposed to include the following additional new local output indicators to monitor the effectiveness of the Kent MWLP policies regarding these waste streams in future AMRs:

- C&I waste generated in Kent that is landfilled within Kent and outside Kent
- hazardous waste arising in Kent that is managed within Kent and outside Kent

8.0.9 The following monitoring schedule includes considers how each of the Plan's Strategic Objectives will be implemented through the Plan's policies and how their achievement will be monitored.

117 DCLG (October 2014) National Planning Policy for Waste, para.9

118 DCLG (updated October 2014) National Planning Policy Framework Planning Practice Guidance on Waste, para. 054

119 KCC (May 2011) TRW5: Hazardous Waste Management

Monitoring Schedule: Sustainable Development Policies

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
CSM 1 & CSW 1: Sustainable Development	1. Mineral and waste applications granted contrary to national policy and guidance.	KCC	DM decisions	On-going (annual monitoring)	No application granted planning permission contrary to national policy and guidance	One application permitted contrary to national policy and guidance	SO1; SO2
	2. Minerals and waste applications determined within 13 / 16 weeks.	KCC	DM decisions	On-going (annual monitoring)	100% within the target/ agreed timescale	One application determined beyond the agreed timescale	SO1; SO2
DM 1: Sustainable Design	1. Minerals and waste applications granted that accord with the Kent Design Guide and/or KCC's environmental strategy.	KCC District authorities	District authority local plan adoption	On-going (annual monitoring)	100% of major applications granted planning permission	One application permitted contrary to the cited guidance	SO1; SO2; SO3; SO5; SO11; SO12
	2. Adoption of the Kent Design Guide by district authorities	KCC District authorities	District authority local plan adoption	On-going (annual monitoring)	100% adoption as supplementary planning guidance	One authority without the adopted supplementary guidance	

120 For applications without an extension of time agreed with the applicant. 16 weeks for applications accompanied by an Environmental Statement

Monitoring Schedule: Delivery Strategy for Minerals

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
CSM 2: Supply of Land-won Minerals in Kent	1. Reserve data for sharp sand and gravel	KCC Minerals operators	Aggregates Monitoring Survey	Annual data collection from the previous calendar year	Maintain at least 10.08mt and at least a 7 year landbank (5.46mt) while resources allow	Permitted reserves equivalent to 10% above supply target	SO5;
	2. Reserve data for soft sand	KCC Minerals operators	Aggregates Monitoring Survey	Annual data collection from the previous calendar year	Maintain a rolling landbank of at least 7 years supply equivalent to 11.05mt	Permitted reserves equivalent to 10% above landbank target	SO5;
	3. Reserve data for crushed rock (confidential) ⁽¹²¹⁾	KCC Minerals operators	Aggregates Monitoring Survey	Annual data collection from the previous calendar year	Maintain a rolling landbank of at least 10 years supply equivalent to at least 20.5mt)	Permitted reserves equivalent to 10% above landbank target	SO5;
	4. Reserve data for brickearth and clay for brick and tile manufacture	KCC Minerals operators	KCC Survey	Annual data collection from the previous calendar year	Stock of permitted reserves of at least 25 years for brickearth Maintenance of sufficient reserves of clay based on past sales and market demand	Permitted reserves equivalent to less than three years above the minimum stock of permitted reserves target	SO5;

121 The sales and reserves of land-won crushed rock are not published as there are only two sites currently producing crushed rock in Kent; the total sales data from three or more sites are required in order to protect commercial confidentiality.

8 Managing and Monitoring the Delivery of the Strategy

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
	5. Reserve data for silica sand	KCC Minerals operators	KCC Survey	Annual data collection from the previous calendar year	Stock of permitted reserves for individual sites of at least 10 years and 15 years for sites where significant new capital is required	Permitted reserves equivalent to less than three years above the minimum stock of permitted reserves target	SO5;
	6. Reserve data for chalk for agricultural and engineering purposes	KCC Minerals operators	KCC Survey	Annual data collection from the previous calendar year	Maintenance of sufficient reserves to meet supply requirements for the plan period	Permitted reserves equivalent to less than three years of reserves at current (annual) rates	SO5;
	7. Reserve data for clay engineering purposes	KCC Minerals operators	KCC Survey	Annual data collection from the previous calendar year	Maintenance of sufficient reserves to meet supply requirements for the plan period	Permitted reserves equivalent to less than three years of reserves at current (annual) rates	SO5;
CSM 3: Strategic Site for Minerals	1. Planning applications granted for alternative development within the Strategic Site for Minerals at Medway Cement	KCC Tonbridge & Malling Borough Council	DM decisions	On-going (annual monitoring)	100% refusal for proposals with an objection from the County Council	One application permitted with an objection from the County Council	SO5;

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
	Works and the Minerals Consultation Area.						
CSM 4: Non-identified Land-won Mineral Sites	1. Planning applications granted for mineral extraction at alternative sites outside allocated sites	KCC	DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	SO5;
CSM 8: Secondary and Recycled Aggregates	1. Identification of secondary and recycled aggregate capacity in the Minerals Sites Plan.	KCC Secondary and recycled aggregate operators	Mineral Sites Plan	Adoption of the Mineral Sites Plan On-going (annual monitoring)	To maintain at least 2.7mtpa of processing capacity throughout the plan period	Processing capacity falls by the equivalent to 10% below the target capacity	SO2; SO6; SO10
	2. Planning applications granted for secondary and recycled aggregate production.	KCC	DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	

8 Managing and Monitoring the Delivery of the Strategy

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
CSM 9: Building Stone in Kent	1. Planning applications granted for building stone extraction.	KCC	DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	SO5; SO8;
CSM 10 : Oil, Gas and Unconventional Hydrocarbons	1. Planning applications granted associated with the exploration, appraisal and development of oil, gas and unconventional hydrocarbons.	KCC	DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	SO1; SO2; SO3; SO9
CSM 11: Prospecting for Carboniferous Limestone	1. Planning applications granted for underground limestone prospecting.	KCC	DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	SO5;

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
CSM 12: Sustainable Transport of Minerals	1. Planning applications granted for the sustainable transport of minerals (e.g. water or rail).	KCC	DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	SO1; SO2; SO3; SO5; SO7; SO12; SO14;

Monitoring Schedule: Delivery Strategy for Waste

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
CSW 2: Waste Hierarchy	1. Existing waste capacity by facility type and Waste Hierarchy category.	KCC EA	EA waste management facility data DM information	On-going (annual monitoring, when data is made public)	Increasing the proportions of waste management capacity further up the waste hierarchy	Relative and total fall in the proportion of waste capacity provided further up the waste hierarchy	SO2; SO3; SO11; SO12; SO13
	2. Planning applications for waste management to include information on how the proposal will help drive waste to ascend the Waste Hierarchy wherever possible and practicable	KCC Waste operators	DM decisions and information	On-going (annual monitoring)	100% of proposals granted planning permission providing the required information where relevant	One application permitted without the required information	

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
CSW 3: Waste Reduction	1. All development applications (122) submitted with details of the compliance to policy CSW 3 as applicable	KCC District authorities	DM decisions	On-going (annual monitoring)	100% of applications granted planning permission providing the required information where relevant	One application permitted without the required information	SO2; SO3; SO6; SO10; SO11; SO13
CSW 4: Strategy for Waste Management Capacity	1. Annual capacity of waste management facilities.	KCC EA	Planning permission data Data on flows to and from permitted waste management facilities of waste arising from Kent	On-going (annual monitoring)	LACW: Recycling/composting rates at least 50% by 2020/21, 55% by 2025/26 and 60% by 2030/31; Landfilling no more than 2% by 2020/21, 2% in 2025/26 and 2% in 2030/31 C&I Waste: Recycling/composting rates at least 50% by	Capacity fallen to 10% above the target capacity beyond the years stated	SO1; SO6; SO10; SO11; SO13

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
					<p>2020/21, 55% by 2025/26 and 60% by 2030/31</p> <p>Landfilling no more than 15% by 2020/21, 12.5% in 2025/26 and 10% in 2030/31</p> <p>C%D Waste (Non-inert):</p> <p>Recycling rates at least 12% by 2020/21, 13% by 2025/26 and 14% by 2030/31</p> <p>Composting rates at least 1% by 2020/21, 1% in 2025/26 and 1% in 2030/31</p> <p>Landfilling no more than 2% by 2020/21, 1% in 2025/26 and 0.5% in 2030/31</p>		

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
	2. Net self-sufficiency plus proportion of London's waste.	KCC EA	Data on flows to and from permitted waste management facilities in Kent	On-going (annual monitoring)	Tonnages of waste arising from Kent equivalent to the tonnages of waste managed within Kent Capacity for residual waste from London	More than -10% difference in the annual levels of imports and exports Spare consented capacity falls below forecast need for Kent by 10%	
CSW 5: Strategic Site for Waste	1. Planning decisions resulting in development (other than mineral working with restoration through the landfilling of hazardous flue dust from Energy from Waste plants in Kent ⁽¹²³⁾) on or near the Strategic Site for Waste that could adversely affect development of required capacity to serve Allington EfW.	Swale Borough Council	DM decisions	On-going (annual monitoring)	100% refusal for applications with an objection from the County Council	One application permitted with an objection from the County Council	SO13; SO14;

123 Note that in the event that government policy changes such that hazardous flue dust from Energy from Waste plants can no longer be landfilled, restoration by other means may be possible

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
	2. An appropriate planning application granted on the Strategic Site for Waste	KCC	DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	
CSW 7: Waste Management for Non-Hazardous Waste	1. Planning applications granted for non-hazardous waste developments	KCC	DM decisions and conditions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	SO2; SO3; SO11; SO13; SO14;
CSW 8: Recovery Facilities for Non-hazardous Waste	1. Percentage of waste managed in Kent diverted from landfill.	KCC WMU KCC EA	EA waste management facility data National survey data	On-going (annual monitoring- when national data is made public)	Landfilling of no more than 5% of household waste by 2020/21	Within 10% of the target maximum for the household waste landfill diversion target at or beyond the dates stated	SO2; SO3; SO11 SO12; SO13; SO14;
	2. Remaining capacity of non-hazardous landfill.	KCC WMU	EA waste management facility data	On-going (annual monitoring)	Maintain sufficient voidspace for residual waste to the end of the plan period	Sufficient capacity for net self sufficiency (import and export levels) for non-inert management capacity plus 10%	
	3. Planning applications granted for EfW Facilities and their capacity.	KCC EA	DM information and decisions	On-going (annual monitoring)	Planning permission granted for a maximum of 437,500 tonnes of	Insufficient capacity for non hazardous landfill to manage predicted level of non hazardous waste	

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
					non hazardous waste recovery facility 100% of applications meeting all policy criteria granted planning permission	requiring final disposal plus 10% at end of the plan period One application permitted that does not meet all policy criteria	
CSW 9: Non-Inert Waste Landfill in Kent	1. Planning decisions resulting in non-inert waste landfilling	KCC District authorities	KCC & District authority DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	SO3; SO11; SO14; SO15
CSW 10: Development at Closed Landfill Sites	1. Planning applications granted on closed Biodegradable Landfill Sites for the developments listed in Policy CSW 10	KCC	DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	SO2; SO3; SO10; SO11; SO15

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
CSW 11: Permanent Deposit of Inert Waste	1. Annual volume of CDE waste arisings.	KCC	National survey data DM decisions and information	On-going (annual monitoring-when national data available)	Timely restoration of landfills and mineral working where their restoration requires fill material	Delay in restoration timetable of landfills and mineral workings due to lack of available suitable fill material Delay in development of mineral extraction sites where phasing requires progressive restoration.	SO3; SO10; SO11; SO14; SO15
	2. Annual CDE waste recycling capacity.	KCC	National survey data DM decisions and information	On-going (annual monitoring-when national data available)	Suitable sites allocated in the Waste Sites Plan to maintain the minimum capacities stated in CSW 8 throughout the Plan period	More than 10% deficit in the actual capacity provided at or beyond the dates stated in CSW 8	
	3. Planning applications granted for permanent deposit of inert waste.	KCC	DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	

8 Managing and Monitoring the Delivery of the Strategy

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
CSW 12: Identifying Sites for Hazardous Waste	1. Capacity of hazardous waste management facilities.	KCC EA	DM information EA data on hazardous waste movements	On-going (annual monitoring)	Annual net self-sufficiency in hazardous waste	Capacity fallen to 90% of capacity for net self sufficiency	SO10; SO3; SO14;
	2. Planning decisions resulting in permitted built hazardous waste management facilities	KCC District authorities	KCC & District authority DM decisions	On-going (annual monitoring)	100% of applications meeting all relevant policy criteria in CSW 6 granted planning permission	One application permitted that does not meet all policy criteria	
CSW 13: Remediation of Brownfield Land	1. Temporary waste related planning applications granted on brownfield land that facilitate its redevelopment	KCC District authorities	DM decisions Sites identified in an adopted district local plan	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	SO2; SO3; SO4; SO14; SO15
CSW 14: Disposal of Dredgings	1. Planning applications granted for the disposal of dredgings.	KCC	DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria	One application permitted that does not meet all policy criteria	SO3; SO14

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
					granted planning permission		
CSW 15: Wastewater Development	1. Wastewater treatment works, sewage sludge treatment and disposal facilities granted planning permission.	KCC	Sites identified in the Waste Sites Plan	Adoption of the Waste Sites Plan	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	SO1; SO3; SO12; SO14;
CSW 17: Nuclear Waste Treatment and Storage at Dungeness	1. Planning applications granted for storage and/or management of radioactive waste in the licensed area at Dungeness.	KCC	DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	SO2; SO3; SO12; SO14
CSW 18: Non-nuclear Industry Radioactive Low Level (LLW) Waste Management	1. Planning applications granted for facilities managing non-nuclear LLW and VLLW waste.	KCC	DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria	SO3; SO12; SO14
	2. Monitoring of waste material source.	KCC	Planning application information	On-going (annual monitoring)	100% of applications granted planning permission providing the required information	One application permitted without the required information	

Monitoring Schedule: Minerals and Waste Safeguarding Strategy

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Relevant Strategic Objective
CSM 5: Land-won Mineral Safeguarding	1. Decisions resulting in non-mineral development permitted within Kent MSAs.	KCC District authorities	District/ Borough Council DM decisions	On-going (annual monitoring)	100% refusal for applications with an objection from the County Council	One application permitted with an objection from the County Council	SO3; SO5
	2. Decisions resulting in non-mineral development permitted within the separate MCA adjacent to the Strategic Site for Minerals at Medway Works, Holborough.	KCC District authorities	District/ Borough Council DM decisions	On-going (annual monitoring)	100% refusal for applications with an objection from the County Council	One application permitted with an objection from the County Council	
	3. Decisions resulting in non-mineral development permitted on sites for mineral working within the plan period identified in Appendix C and in the Minerals Sites Plan.	KCC District authorities	District/ Borough Council DM decisions Mineral Sites Plan	On-going (annual monitoring) Adoption of the Mineral Sites Plan	100% refusal for applications with an objection from the County Council	One application permitted with an objection from the County Council	

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Relevant Strategic Objective
	4. Review of Minerals Safeguarding Areas (MSAs)	KCC	KCC	On-going (annual monitoring)	The need to revise the boundaries of the MSAs has been reviewed at least once each year	MSAs not reviewed in any one year	
CSM 6: Safeguarded Wharves and Rail Depots	1. Decisions resulting in non-mineral development permitted within 250m of safeguarded minerals transportation facilities listed in Policy CSM 6 ⁽¹²⁴⁾ and allocated sites in the Mineral Sites Plan (other than the developments listed in Policy DM8 criteria 1)	KCC District authorities	District authority DM decisions	On-going (annual monitoring) Adoption of the Minerals Sites Plan	100% refusal for applications with an objection from the County Council	One application permitted with an objection from the County Council	SO1; SO2; SO7
CSM 7: Safeguarding Other Mineral Plant Infrastructure	1. Decisions resulting in other development permitted on, or within 250m of, sites safeguarding for other mineral plant infrastructure	KCC District authorities	KCC & District authority DM decisions	On-going (annual monitoring)	100% refusal for proposals with an objection from the County Council	One application permitted with an objection from the County Council	SO1; SO2; SO6; SO7

124 Boundaries of the safeguarding facilities are shown in Chapter 9.1 Adopted Policies Maps - Safeguarded Wharves and Rail Importation Depot

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Relevant Strategic Objective
CSW 16: Safeguarding of Existing Waste Facilities	1. Decisions resulting in non-waste management uses permitted on, or within 250m of, sites with permanent planning permission for waste management uses and sites allocated in the Waste Sites Plan	KCC District authorities	District DM decisions	On-going (annual monitoring) Adoption of the Waste Sites Plan	100% refusal for applications with an objection from the County Council	One application permitted with an objection from the County Council	SO1; SO4; SO12
	DM 7: Safeguarding Mineral Resources	District authorities KCC	District authority DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria with an objection from the County Council	SO3; SO5
	2. Adoption of a Supplementary Planning Document (SPD) setting out further information about the approach to Minerals Safeguarding	KCC	KCC	2015 - 2017	SPD adopted by of end of 2016	Failure to adopt SPD by of end 2016	SO3; SO5

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Relevant Strategic Objective
	3. Allocations in adopted Local Plans for development incompatible with the presumption to safeguard minerals within mineral safeguarded areas (as defined by CSM 5).	District Authorities and KCC	District authority planning policy decisions	No Change	100% of local plan allocations meeting all policy criteria (except criterion 7)	An allocation in a local Plan that does not meet all policy criteria (except criterion 7) with an objection from the County Council	SO3
DM 8: Safeguarding Minerals Management, Transportation & Waste Management Facilities	1. Decisions resulting in incompatible non-minerals or waste development permitted within, or in the vicinity of, existing safeguarded minerals management, transportation or waste management facilities.	District authorities KCC	District authority DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria with an objection from the County Council	SO1; SO2; SO4; SO7; SO12;
	2. Allocations in adopted Local Plans considered incompatible with the presumption to safeguard minerals and waste facilities from direct loss and/or within 250m of a safeguarded facility where there will be the high probability of incompatibility that may lead to the lawful operation of the safeguarded	District Authorities and KCC	District Authority planning policy decisions	On-going (annual monitoring)	100% of local plan allocations meeting all policy criteria (except criterion 2)	An allocation in a local Plan that does not meet all policy criteria (except criterion 2) with an objection from the County Council	SO1; SO2; SO4; SO7; SO12;

8 Managing and Monitoring the Delivery of the Strategy

Policy	Indicator(s)	Who?	How?	When?	Target	Trigger	Relevant Strategic Objective
	facility to cease or be compromised such that will affect its lawful operational viability						
DM 9: Prior Extraction of Minerals in Advance of Surface Development	1. Planning applications granted / decisions resulting in, or incorporating, mineral extraction in advance of built development where the resources would otherwise be permanently sterilised.	KCC District authorities	KCC and/or District authority DM decisions	On-going (annual monitoring)	100% of applications meeting all policy criteria granted planning permission	One application permitted that does not meet all policy criteria (with an objection from the County Council in the case of District decisions)	SO3; SO5

Approach to the Monitoring of Development Management Policies

8.0.10 The Plan's Development Management policies will be monitored using the relevant planning applications data as an indicator. The performance of each policy will be monitored on an annual basis and recorded in the AMR in accordance with the following strategy:

- **Target:** 100% of applications meeting all applicable policy criteria granted planning permission. To include the submission of the required information where relevant.
- **Trigger:** One application permitted that does not meet all relevant policy criteria and requirements, unless clearly justified.

8.0.11 Policy DM 2 applies to both proposals for minerals and waste development and the identification of sites in the Kent Minerals and Waste Sites Plans:

- **Target:** 100% of applications/ proposed site allocations meeting all applicable policy criteria granted planning permission / allocated in the Minerals or Waste Sites Plan. To include the submission of the required policy information where relevant.
- **Trigger:** One application permitted / adopted site allocation that does not meet all policy criteria, unless clearly justified.

Policy	Who?	How?	Link to Strategic Objective
DM 2: Environmental and Landscape Sites of International, National and Local Importance	KCC	DM decisions Adoption of Mineral and Waste Sites Plans	SO2; SO3; SO9; SO15
DM 3: Ecological Impact Assessment	KCC	DM decisions	SO2; SO3; SO9; SO15
DM 4: Green Belt	KCC	DM decisions	SO1; SO2; SO3; SO9; SO15
DM 5: Heritage Assets	KCC	DM decisions	SO3;

Policy	Who?	How?	Link to Strategic Objective
DM 6: Historic Environment Assessment	KCC	DM decisions	SO3;
DM 10: Water Environment	KCC	DM decisions	SO2; SO3;
DM 11: Health and Amenity	KCC	DM decisions	SO1; SO2; SO3; SO4; SO9; SO15
DM 12: Cumulative Impact	KCC	DM decisions	SO1; SO2; SO3; SO12; SO14
DM 13: Transportation of Minerals and Waste	KCC	DM decisions	SO1; SO2; SO3; SO6; SO7; SO10; SO12; SO14
DM 14: Public Rights of Way	KCC Minerals/ waste operators	DM decisions	SO3; SO9; SO15
DM 15: Safeguarding of Transport Infrastructure	KCC	DM decisions	SO1; SO2; SO3; SO7;
DM 16: Information Required In Support of an Application	KCC Minerals/ waste operators	DM decisions	SO2; SO3; SO4; SO9; SO11; SO13; SO15
DM 18: Land Stability	KCC Minerals/ waste operators	DM decisions	SO3;
DM 19: Restoration, Aftercare and After-use	KCC Minerals/ waste operators	DM decisions	SO2; SO3; SO4; SO9; SO15

Policy	Who?	Who?	How?	Link to Strategic Objective
DM 20: Ancillary Development	KCC		DM decisions	SO1; SO2; SO3; SO6; SO9 SO10; SO11; SO12; SO15
DM 21: Incidental Mineral Extraction	KCC District authorities	KCC District authorities	KCC and district authority DM decisions	SO3; SO4; SO5; SO9

8.0.12 The performance of Development Management policies DM 17 and DM 22 will be monitored as follows:

Policy	Who?	How?	When?	Target	Trigger	Link to Strategic Objective
DM 17: Planning Obligations	KCC	DM decisions	On-going (annual Monitoring)	100% of Planning Obligations agreed and implemented on a case by case basis	One unimplemented legal agreement within 3 years of consent being implemented	SO2; SO3; SO4
DM 22: Enforcement	KCC	DM decisions	On-going (annual monitoring)	100% of cases reported to the Regulation Committee on a quarterly basis	Any alleged breaches being resolved within 6 months of detection	SO2; SO3; SO4

9 Adopted Policies Maps

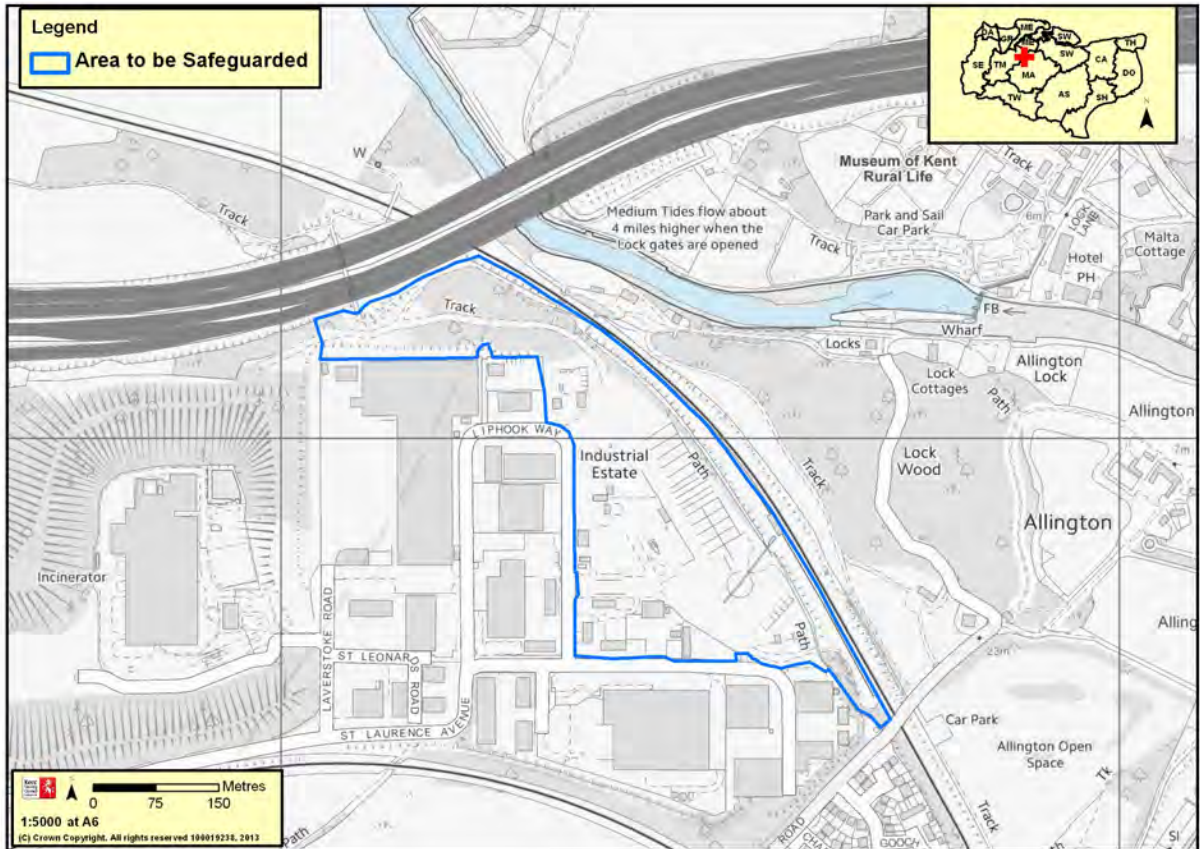
9.1 Safeguarded Wharves and Rail Transportation Depots

Safeguarded Wharves and Rail Transportation Adopted Policies Maps⁽¹⁾

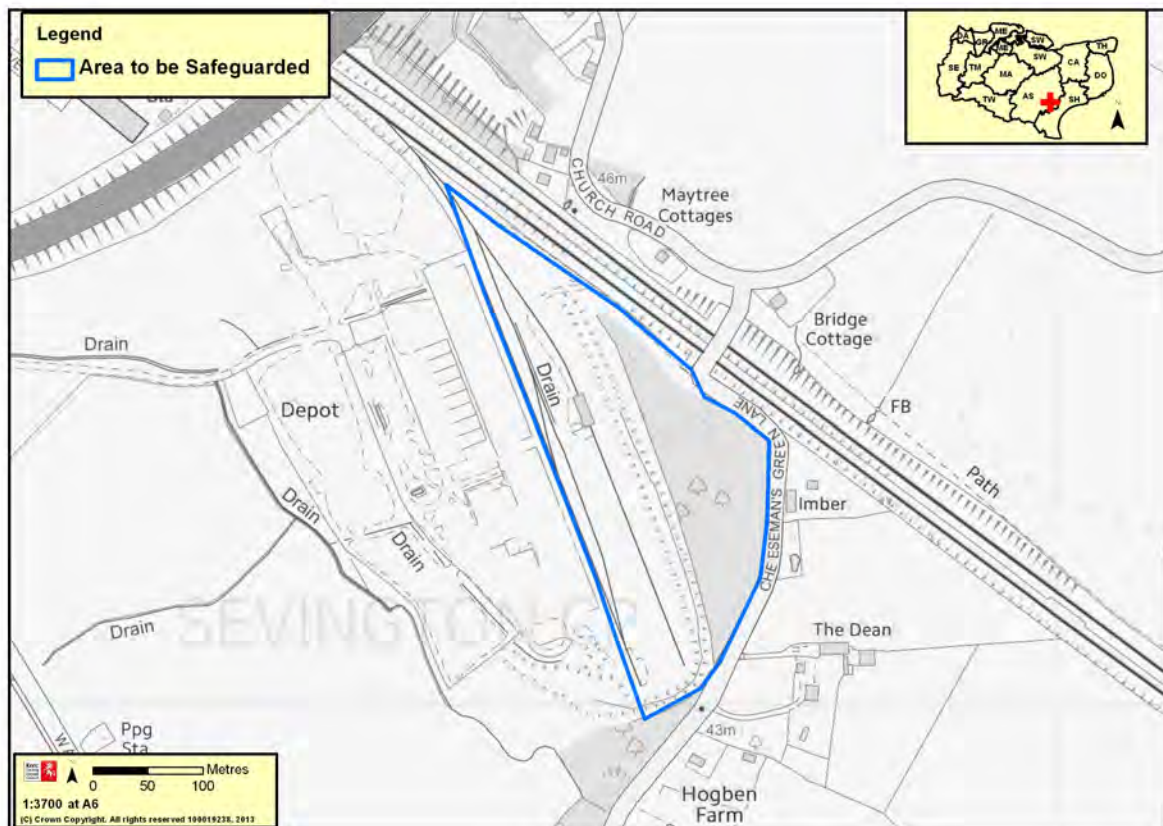
Site Name	Operator	Site Code
Allington Rail Depot	Hanson	A
Sevington Rail Depot	Brett	B
Hothfield Works Rail Depot	Tarmac	C
East Peckham Rail Depot	Clubb	D
Ridham Dock	Brett & Tarmac	E
Johnsons Wharf	Lafarge	F
Robin's Wharf, Northfleet	Aggregate Industries & Brett	G
Clubbs Marine Terminal	Clubb	H
East Quay, Whitstable	Brett	J
Red Lion Wharf	Stema Shipping Ltd	K
Ramsgate Port	Brett	L
Dunkirk Jetty, Dover Western Docks	Brett	M
Wharf 42, Northfleet (including Northfleet Cement Wharf)	Lafarge	N
Sheerness	Aggregate Industries	O
Northfleet Wharf	Cemex	P
Old Sun Wharf	Fleetmix Ltd	Q

1. Excludes Medway Wharves and Rail Depots.

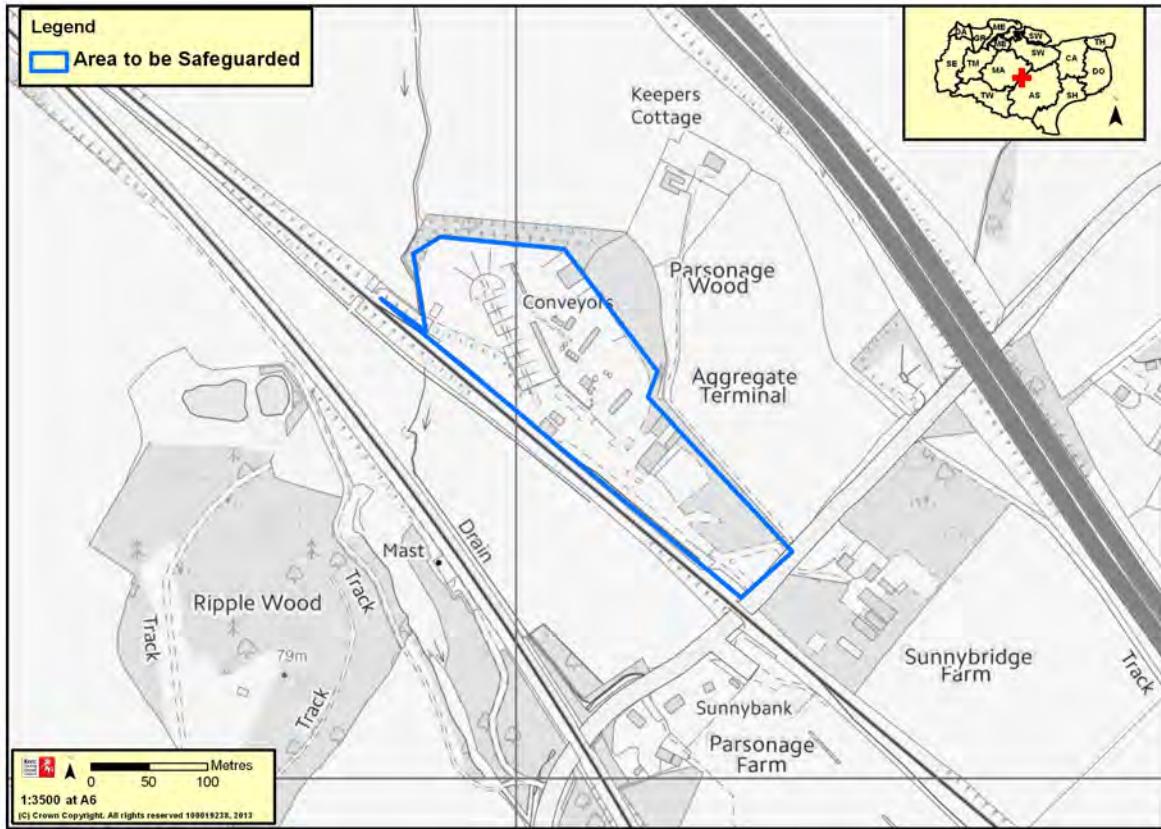
Site A: Allington Rail Depot



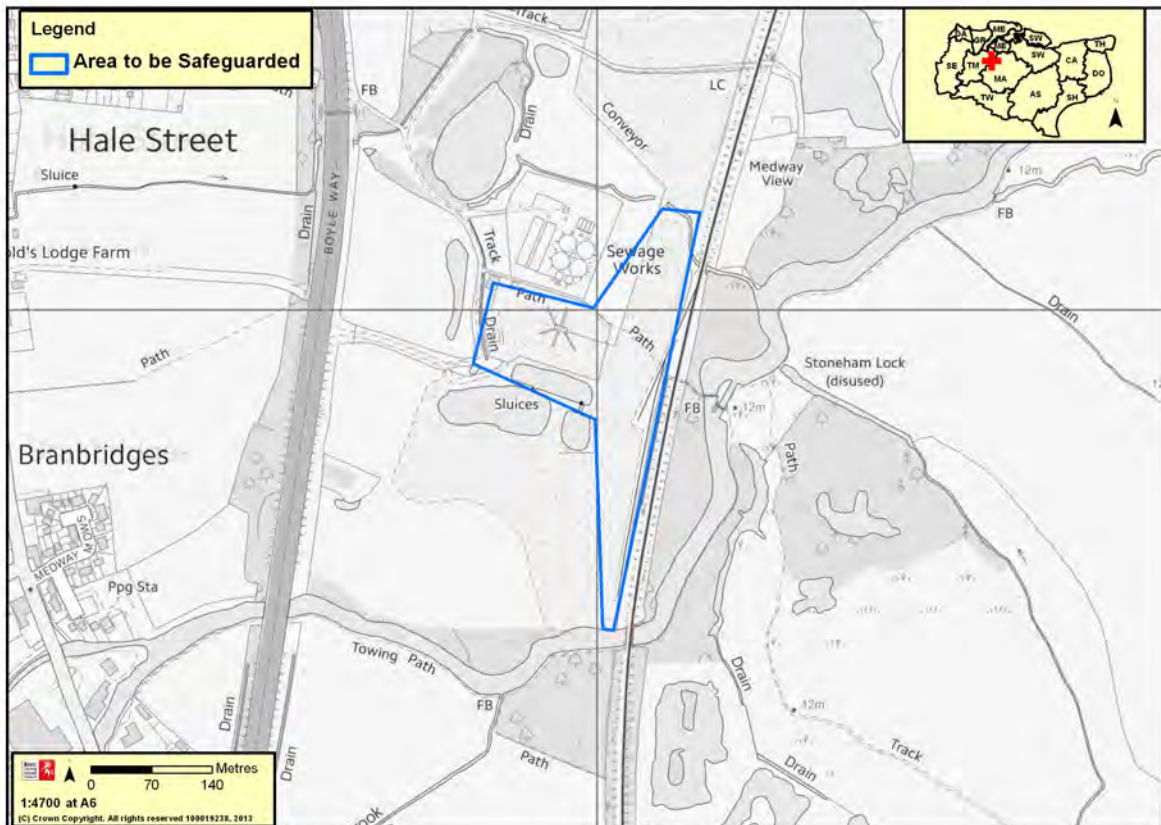
Site B: Sevington Rail Depot



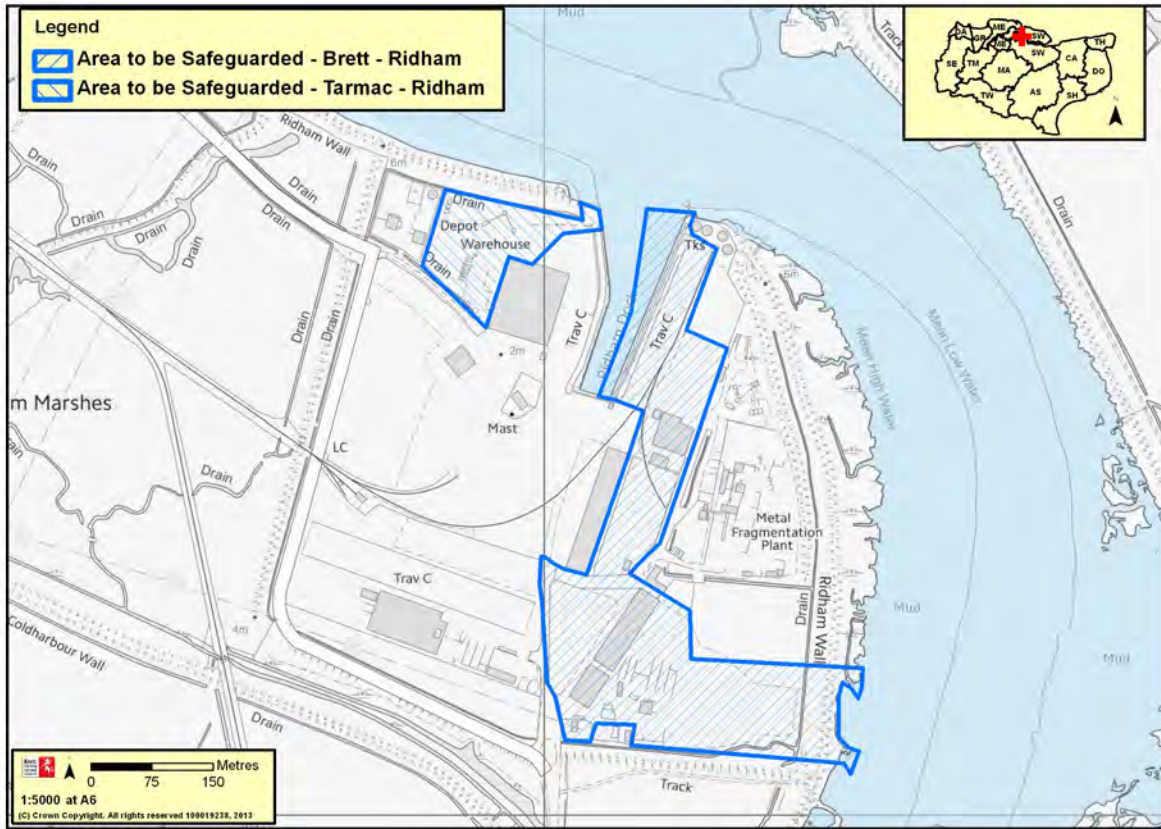
Site C: Hothfield Works



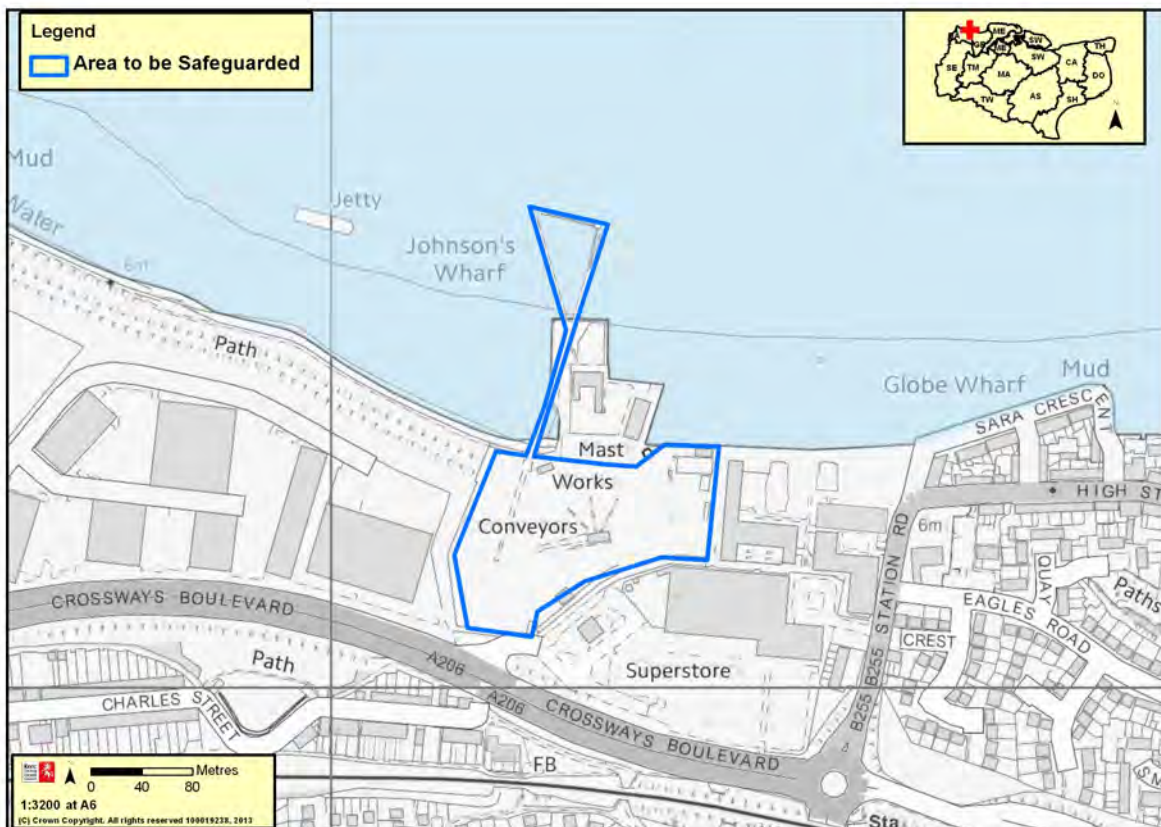
Site D: East Peckham



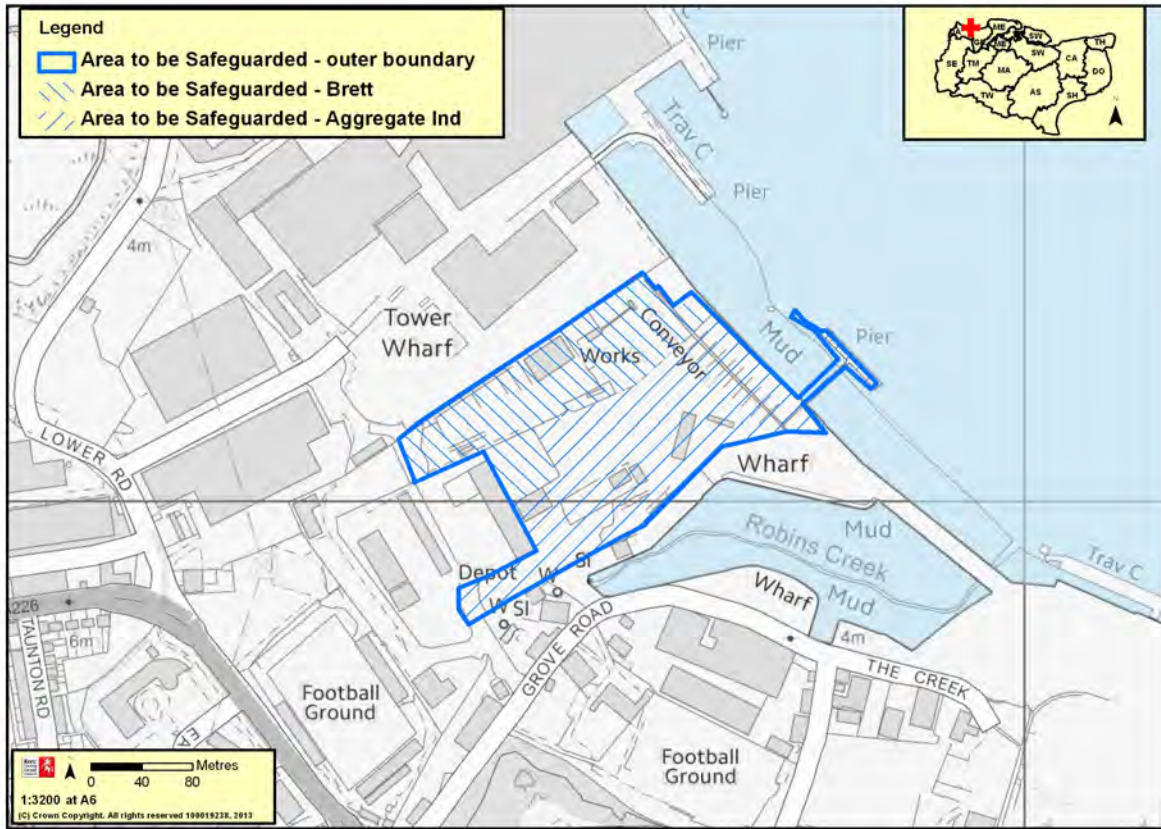
Site E: Ridham Dock



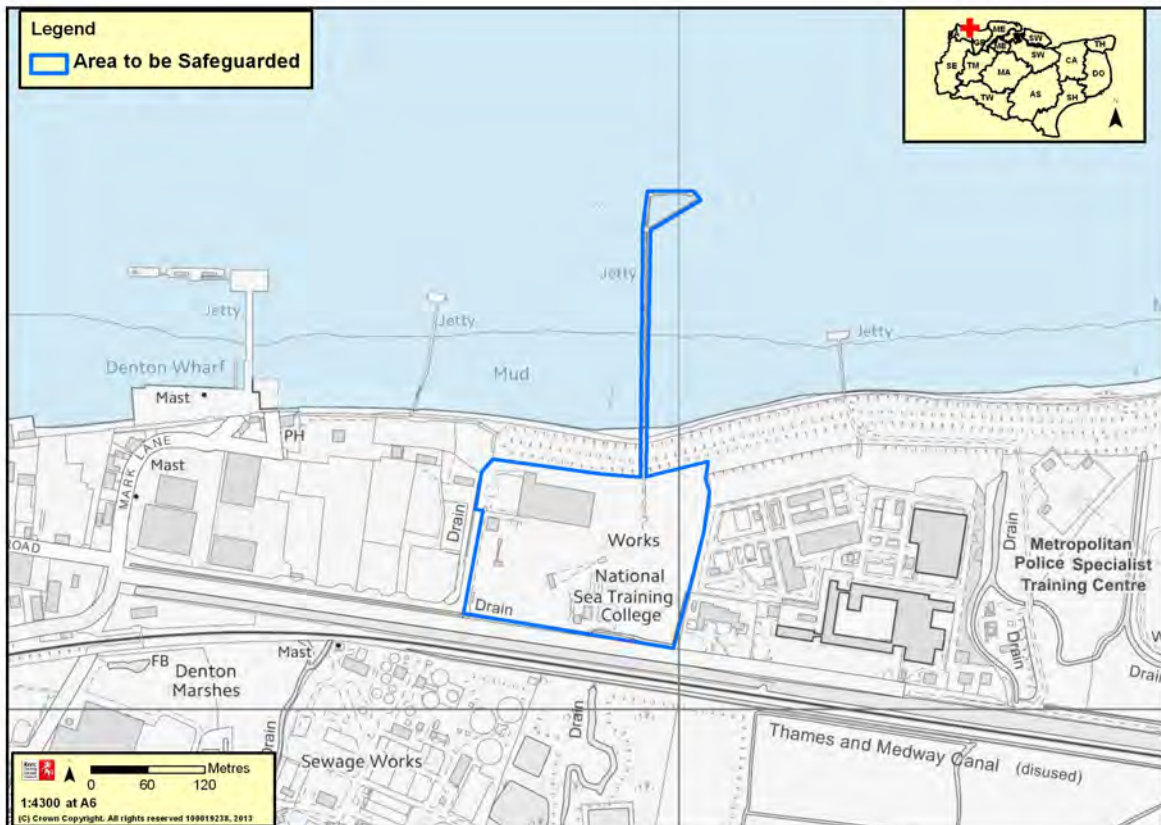
Site F: Johnsons Wharf



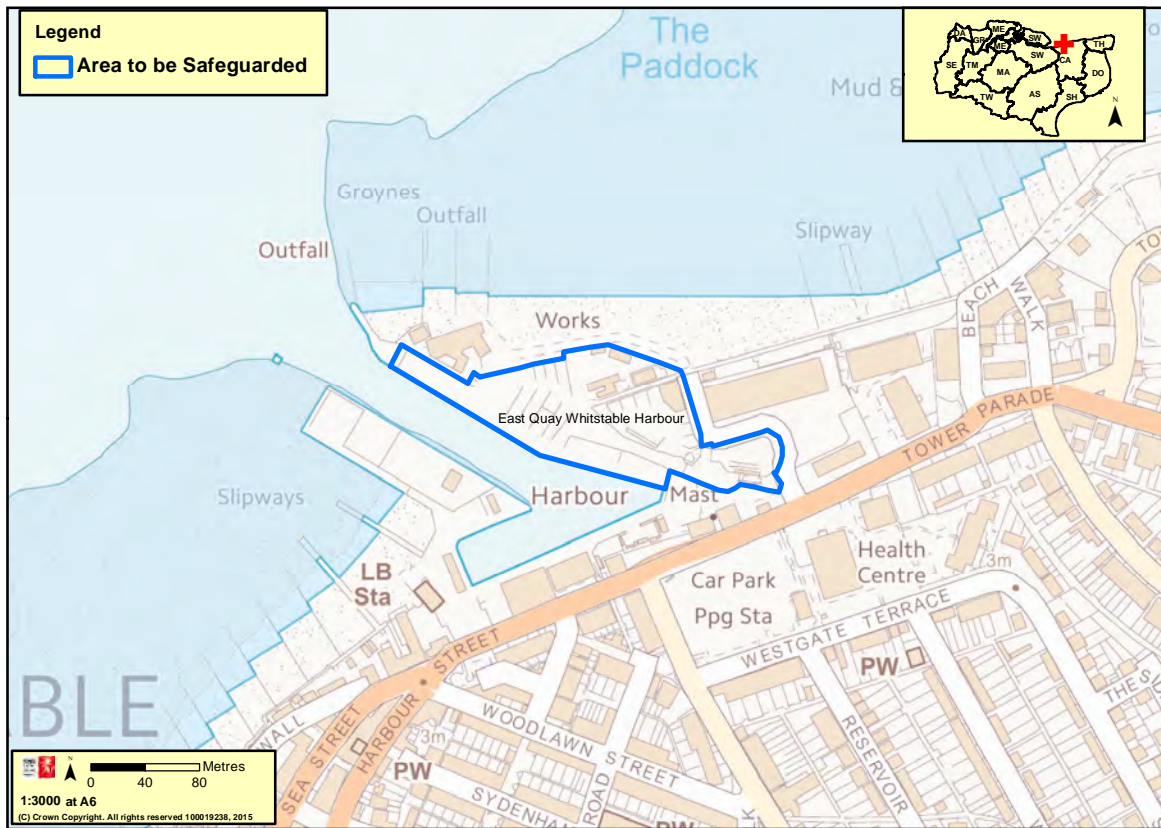
Site G: Robins Wharf, Northfleet



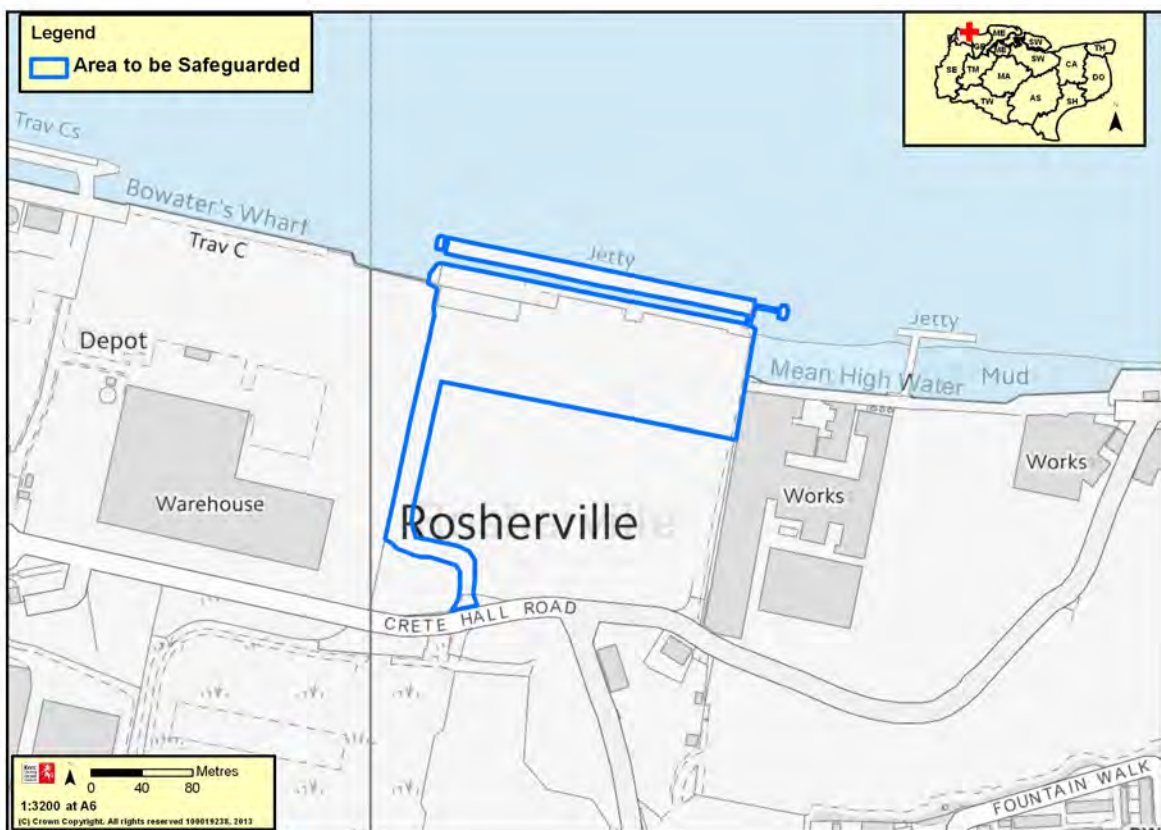
Site H: Clubbs Marine Terminal



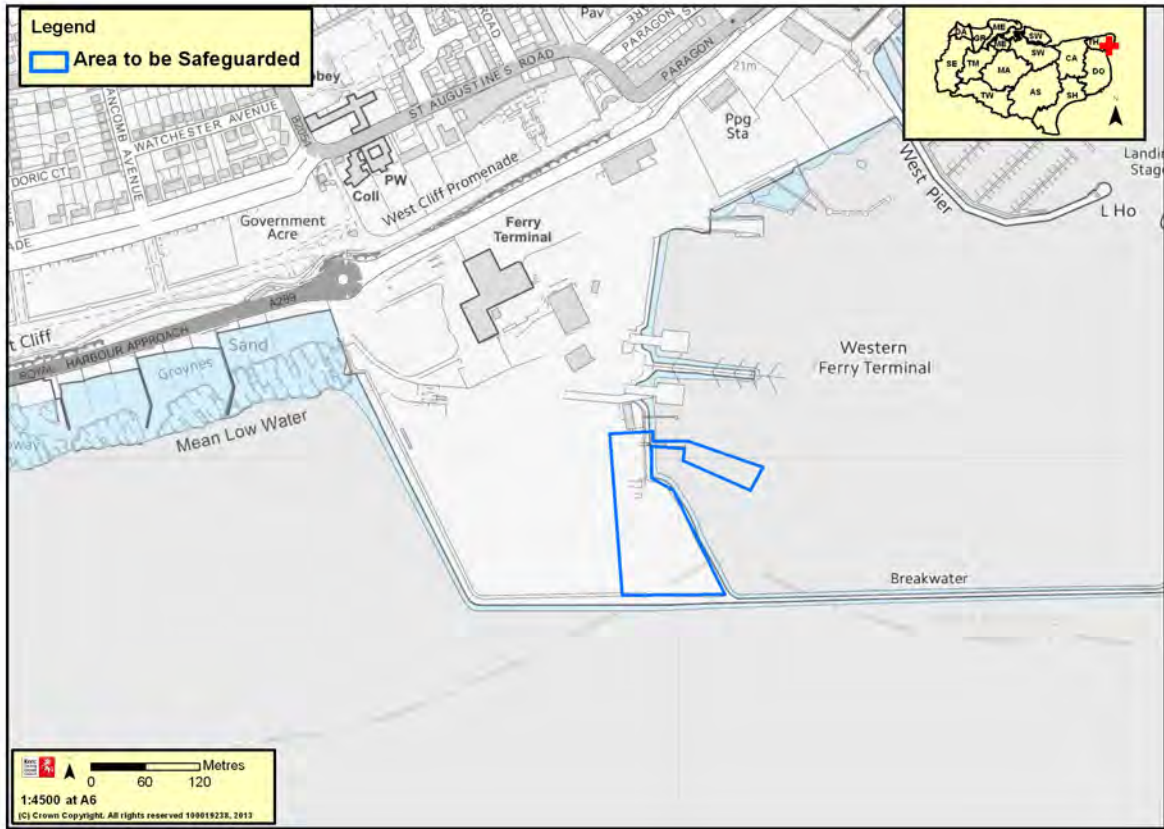
Site J: East Quay, Whitstable



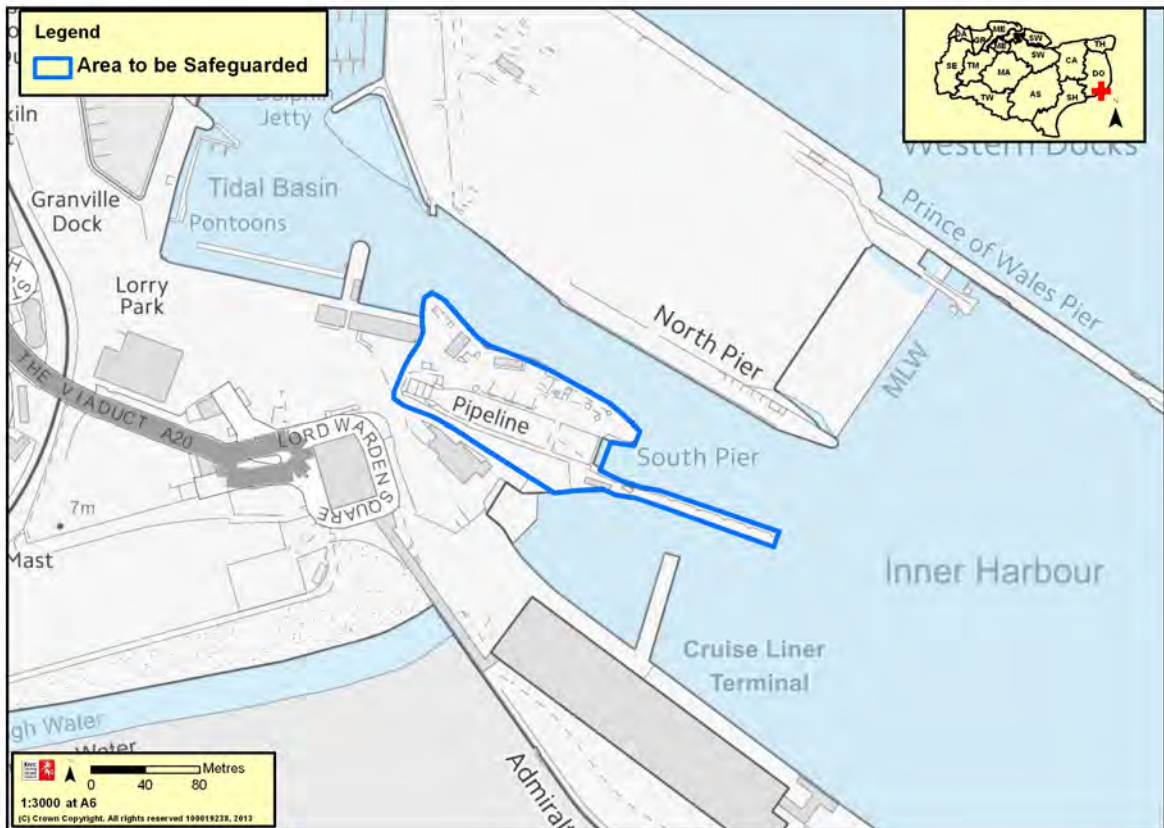
Site K: Red Lion Wharf



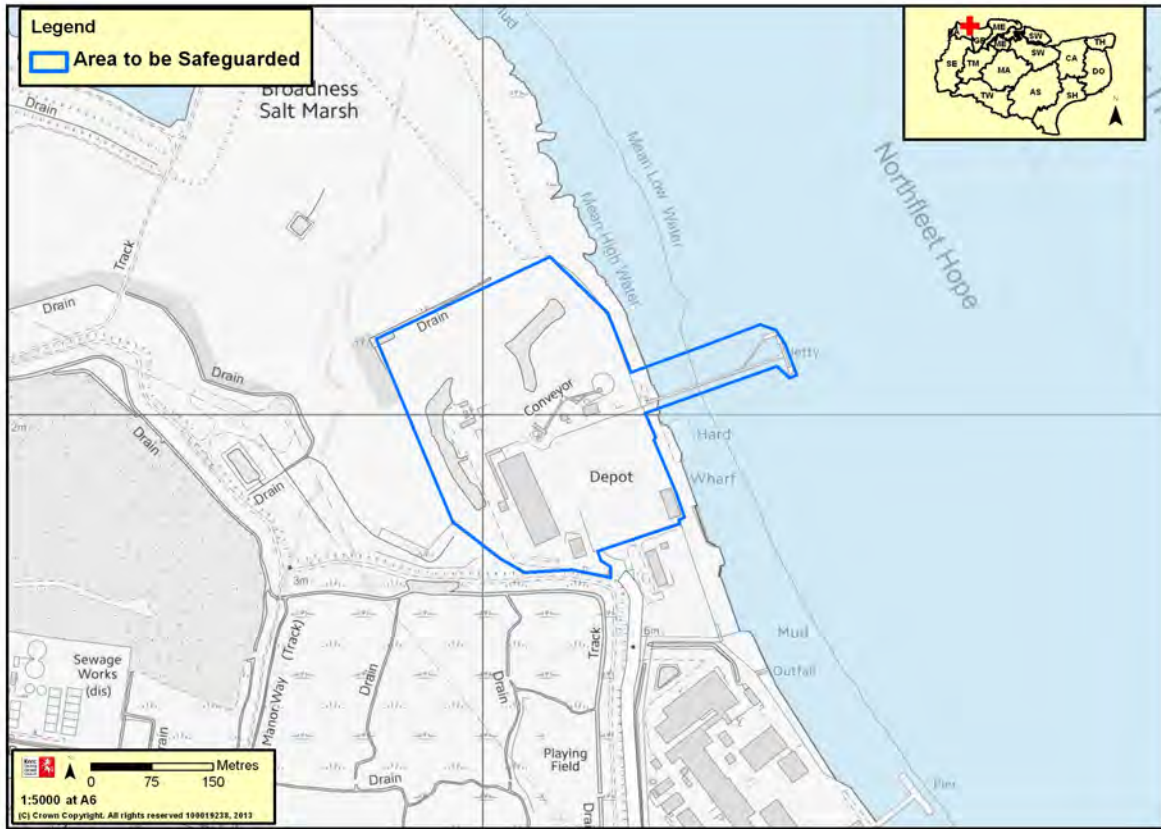
Site L: Ramsgate Port



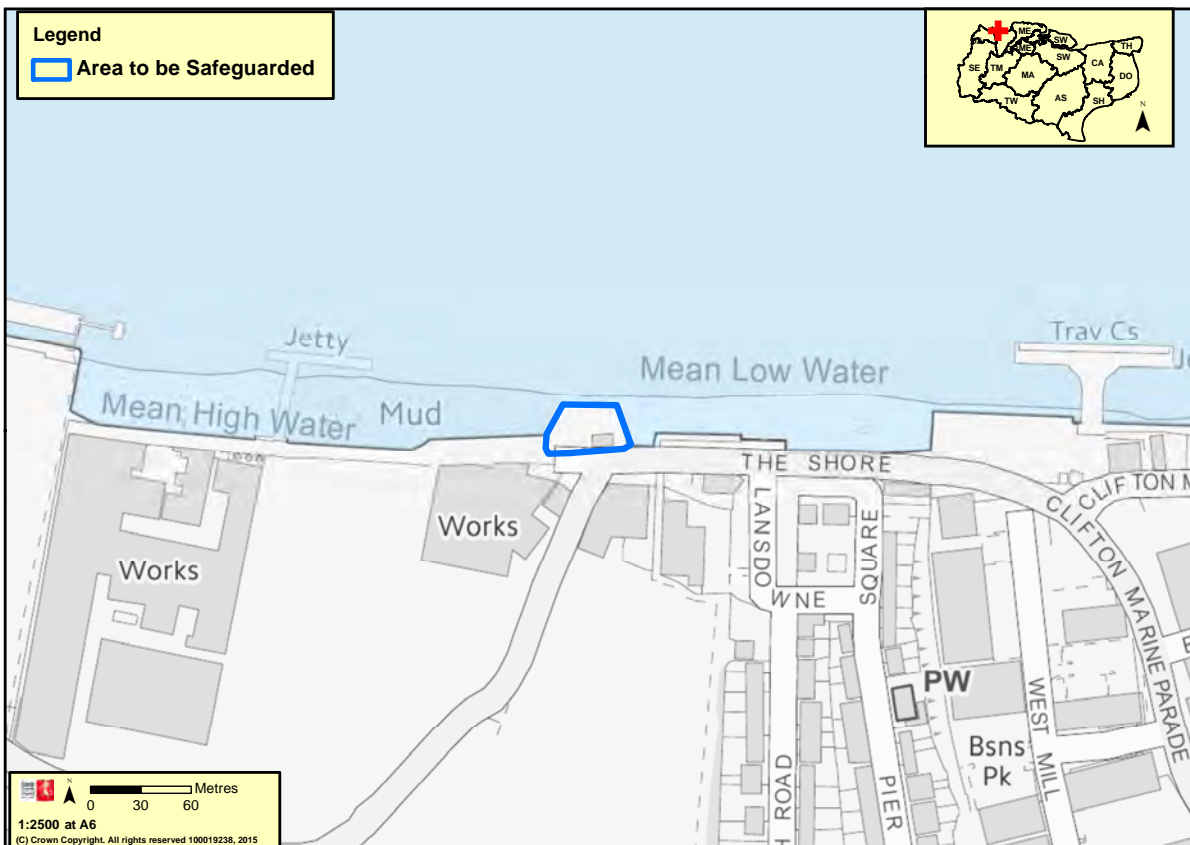
Site M: Dunkirk Jetty, Dover Western Docks



Site P: Northfleet Wharf



Site Q: Old Sun Wharf

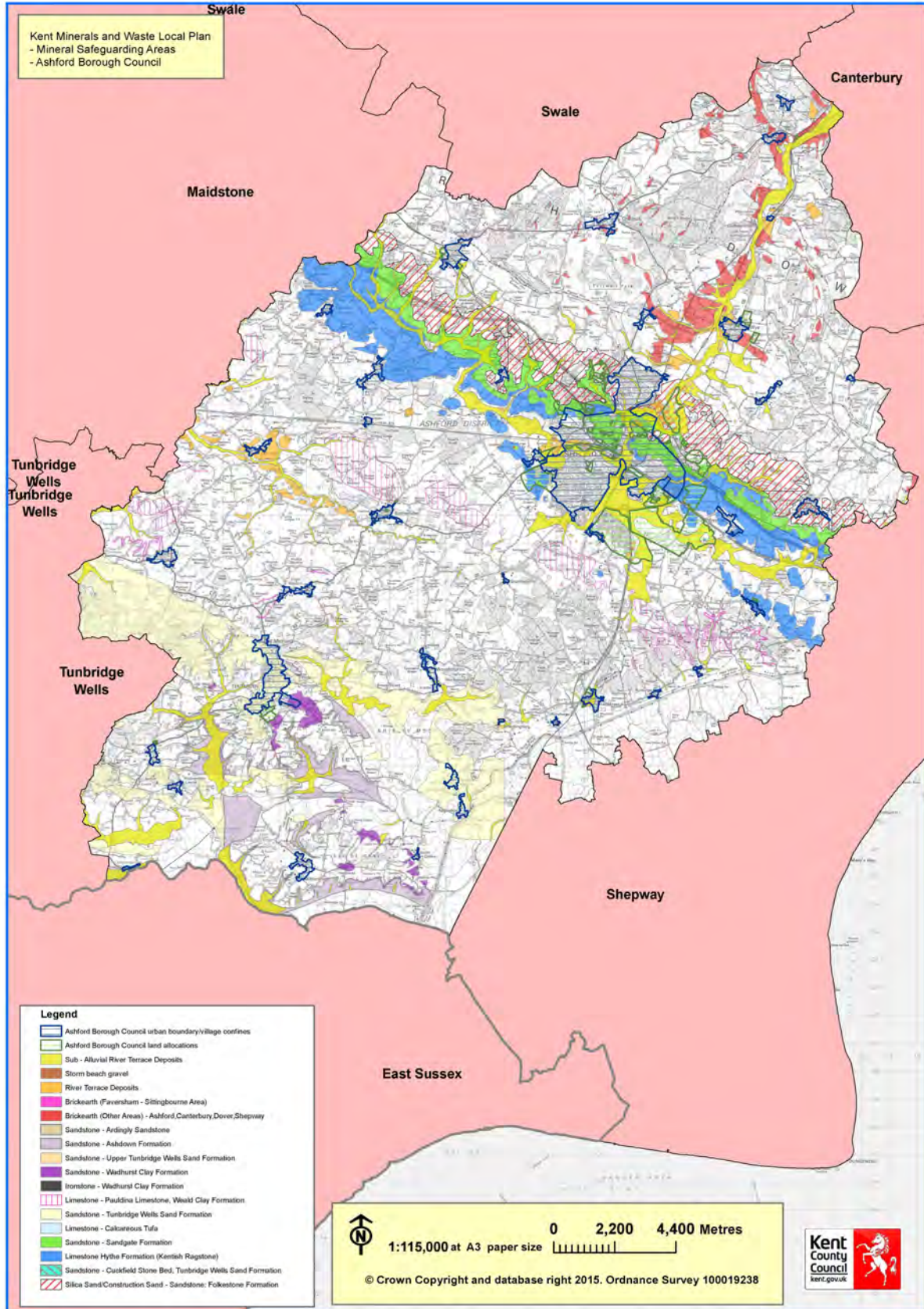


9.2 Mineral Safeguarding Areas

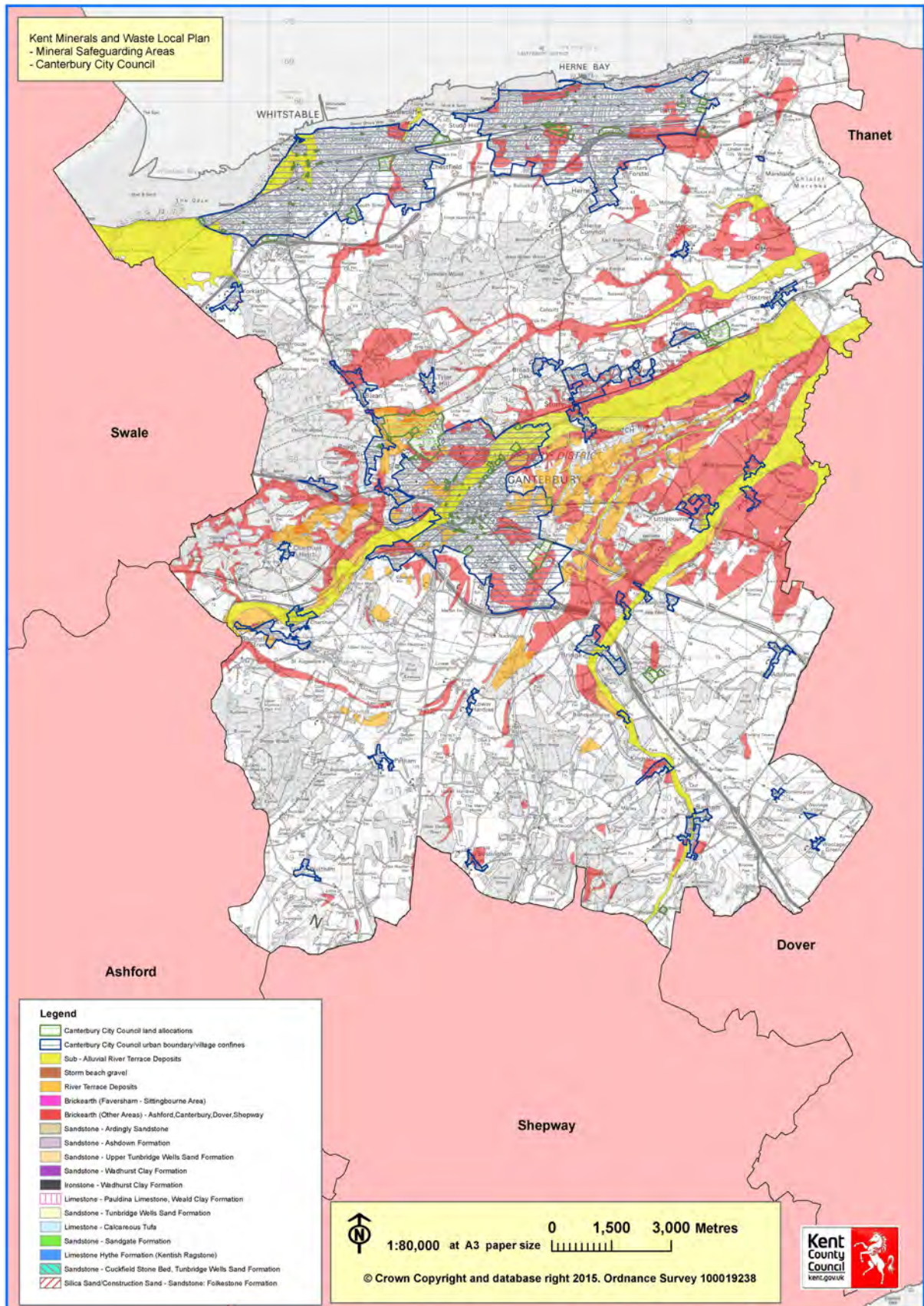
9.2.1 The following Policies Maps display the Mineral Safeguarding Areas (MSAs) in Kent. The maps cover the following authority's areas in Kent:

- Ashford Borough Council
- Canterbury City Council
- Dartford Borough Council
- Dover District Council
- Gravesham Borough Council
- Maidstone Borough Council
- Sevenoaks District Council
- Shepway District Council
- Swale Borough Council
- Thanet District Council
- Tonbridge & Malling Borough Council
- Tunbridge Wells Borough Council

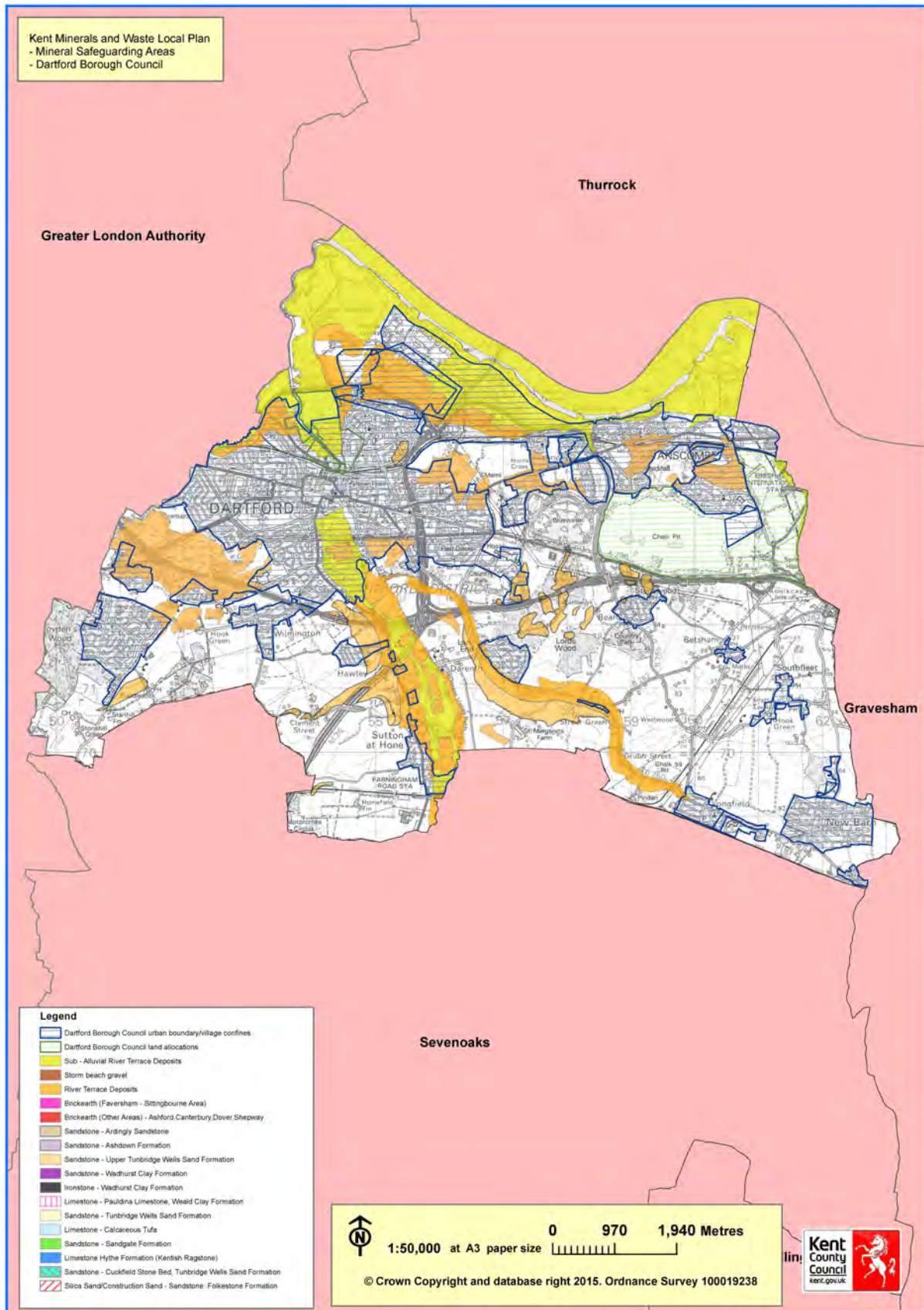
Ashford Mineral Safeguarding Areas



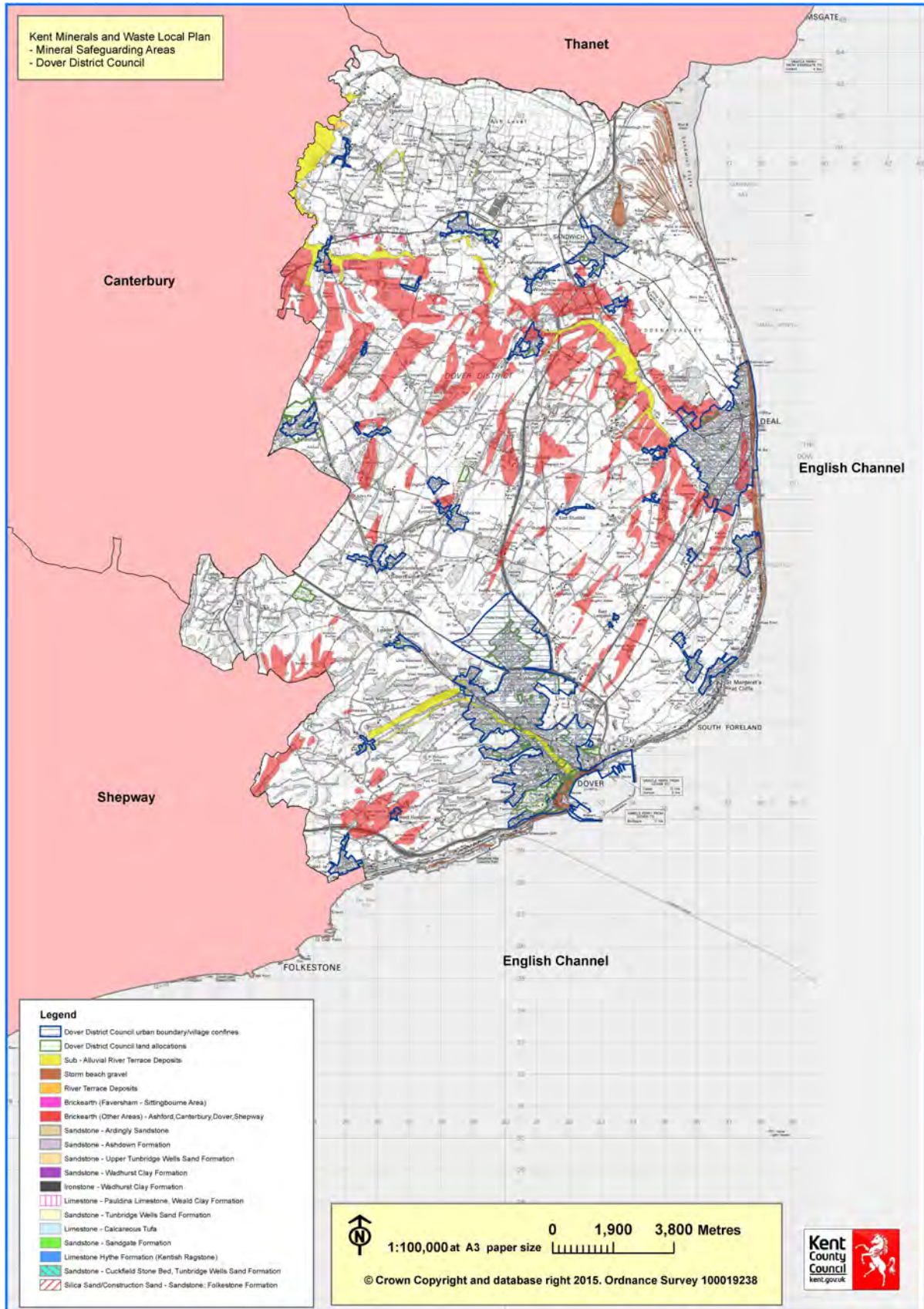
Canterbury Mineral Safeguarding Areas



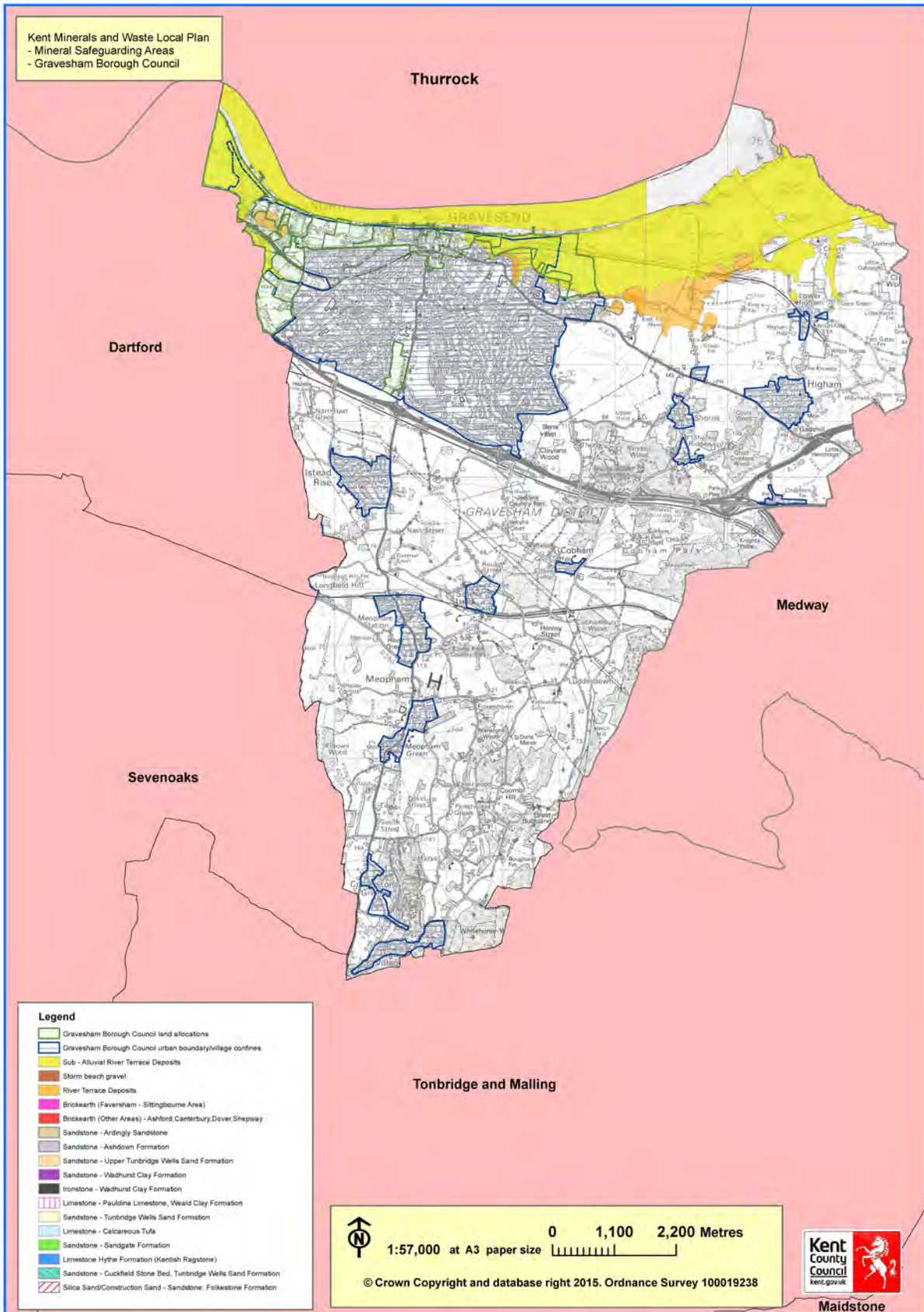
Dartford Mineral Safeguarding Areas



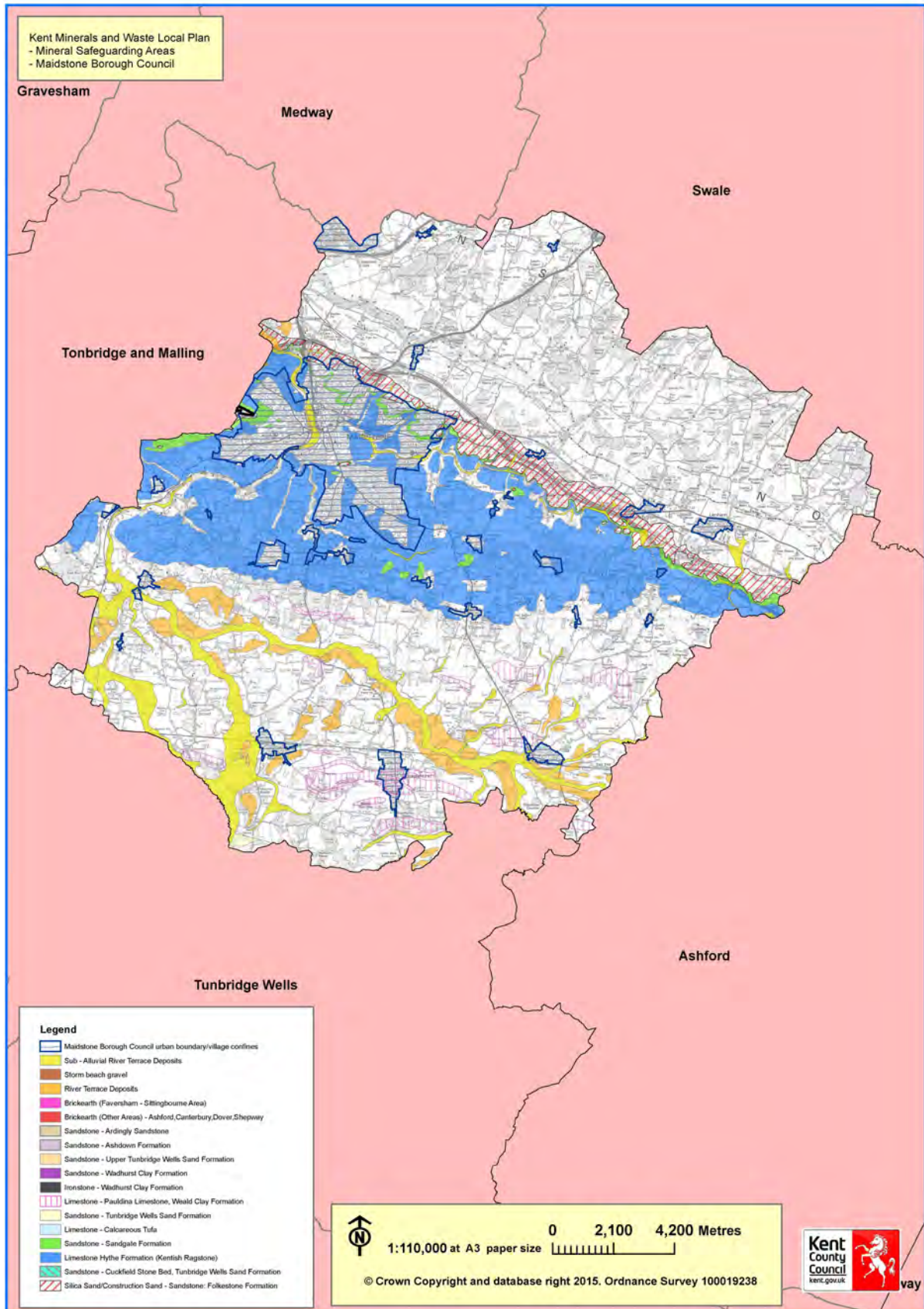
Dover Mineral Safeguarding Areas



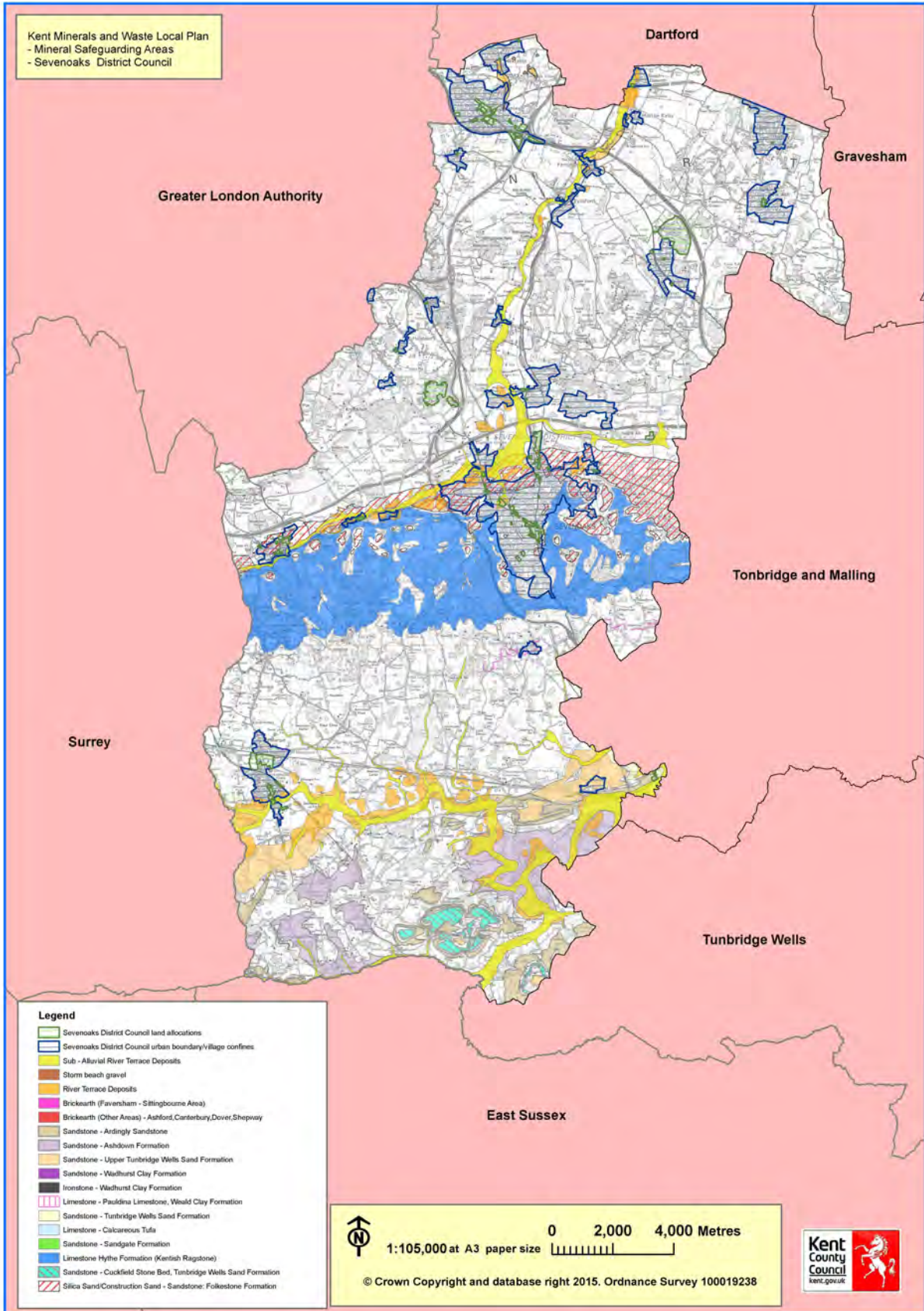
Gravesham Mineral Safeguarding Areas



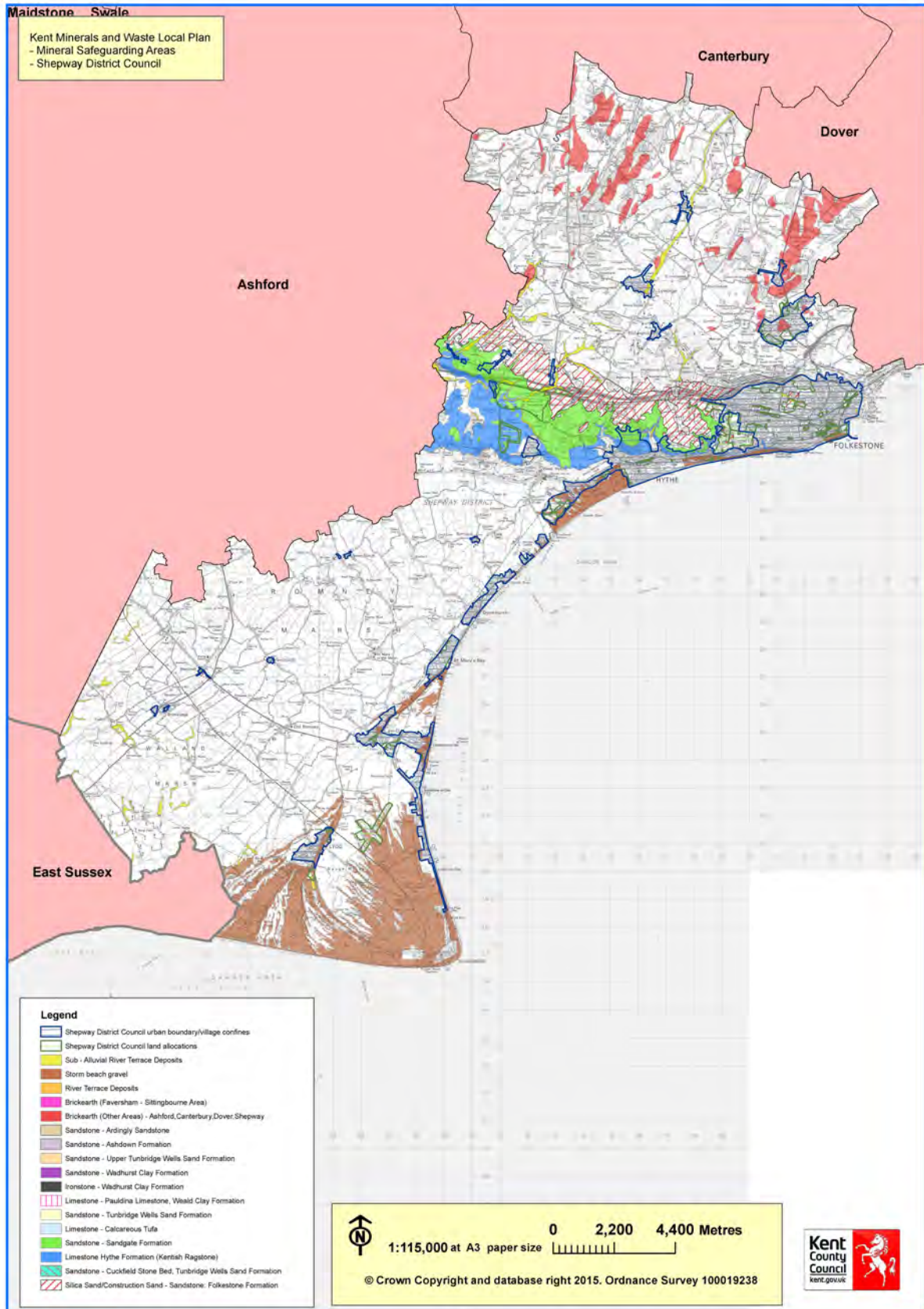
Maidstone Mineral Safeguarding Areas



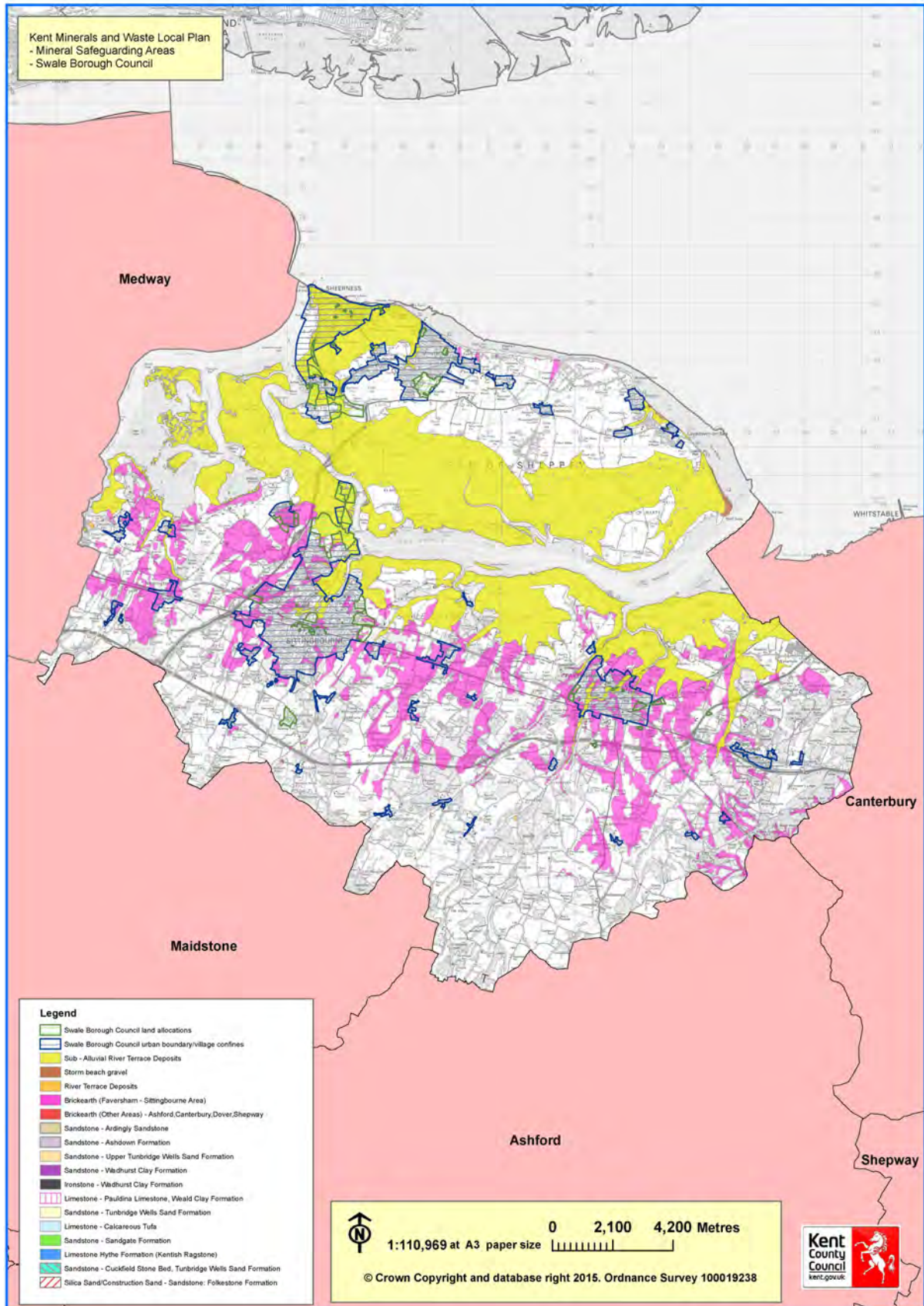
Sevenoaks Mineral Safeguarding Areas



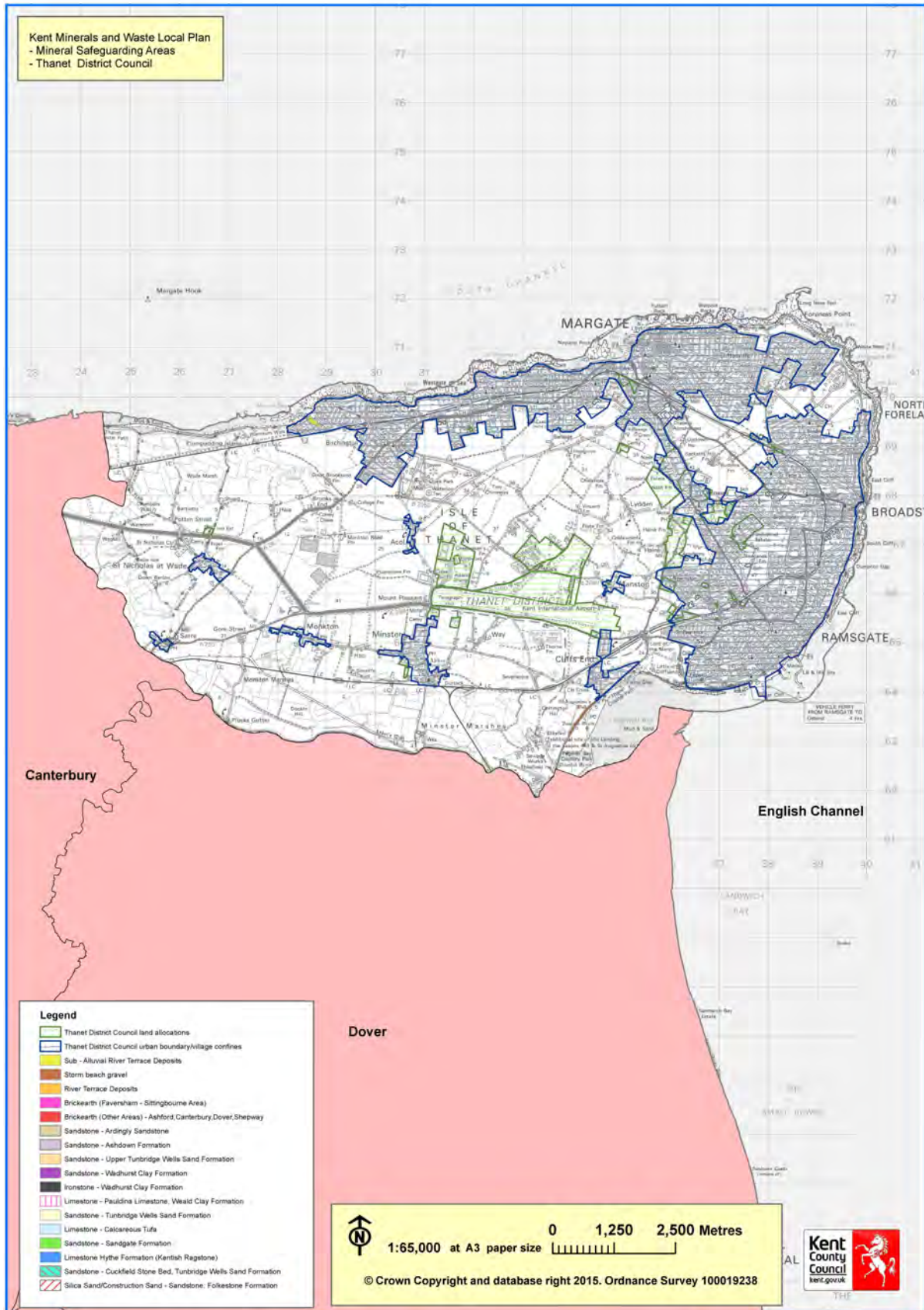
Shepway Mineral Safeguarding Areas



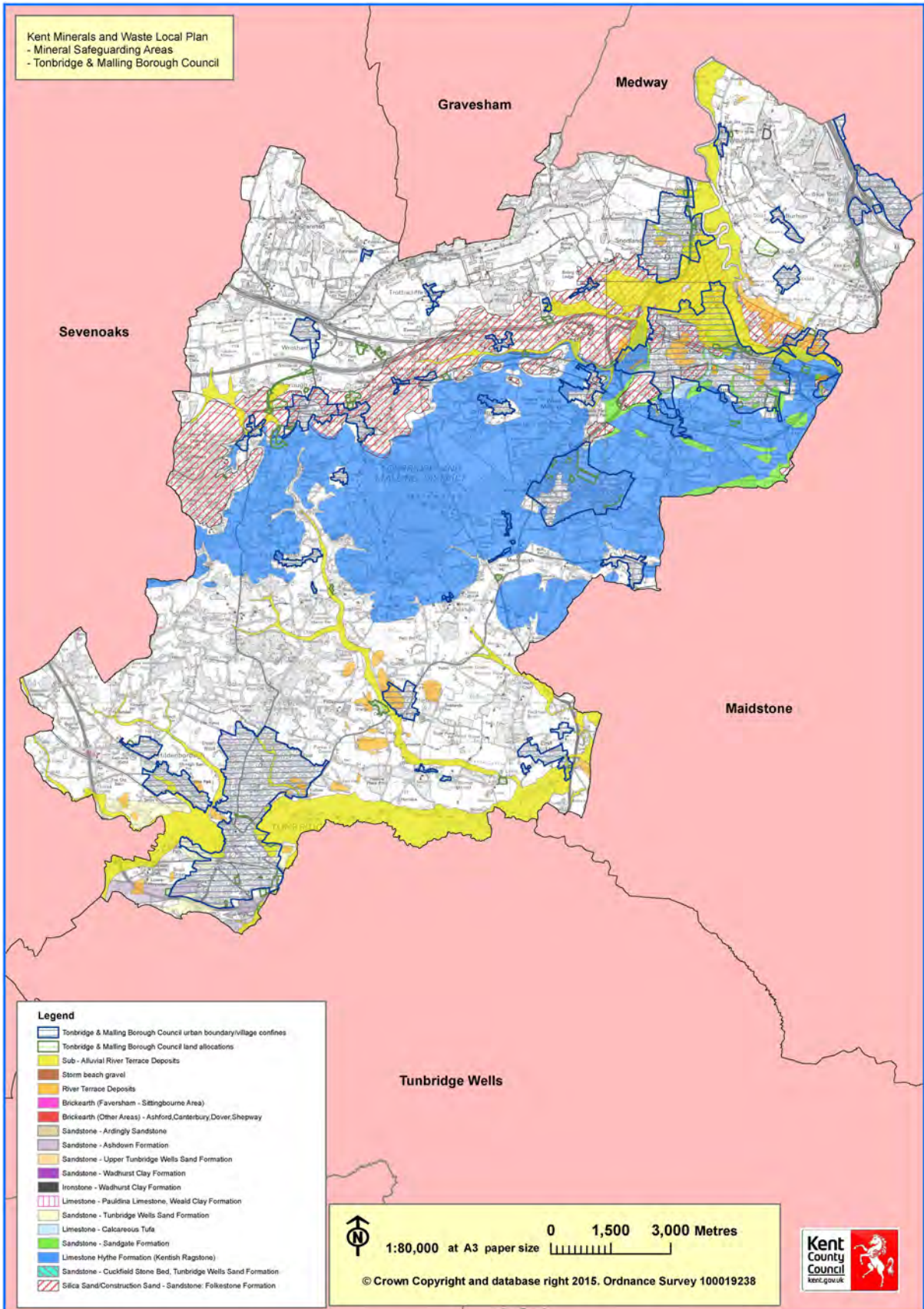
Swale Mineral Safeguarding Areas



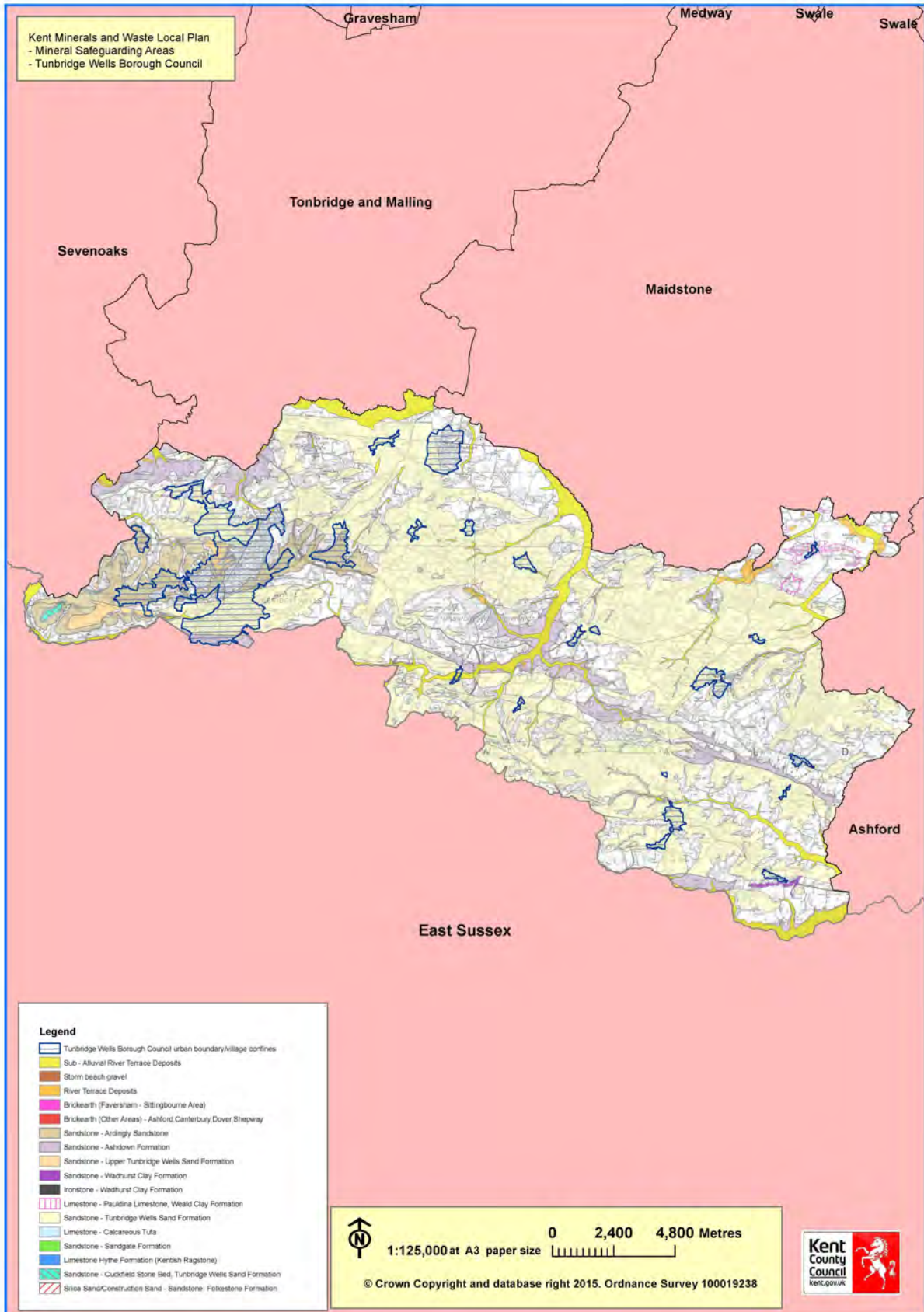
Thanet Mineral Safeguarding Areas



Tonbridge & Malling Mineral Safeguarding Areas



Tunbridge Wells Mineral Safeguarding Areas



Appendix A: Glossary

A	
Aftercare	Measures to bring land up to the required standard following restoration which enables it to be used for the intended after-use. The aftercare period normally extends for 5 years following compliance with restoration conditions but may be extended where agreed between the applicant and the minerals planning authority.
After-use	The use to which a quarry or landfill site is put following its restoration, such as forestry, agriculture, recreation or biodiversity.
Aggregate	Inert particulate matter that is suitable for use (on its own or with the addition of cement or bituminous material) in construction as concrete, mortar, finishes, road stone, asphalt, or drainage course, or for use as constructional fill or railway ballast.
Aggregate Monitoring Survey	An annual survey undertaken by the MPAs in England to gather data on aggregate sales and reserves on behalf of the regional aggregate working parties. Each regional aggregate working party prepares an annual report which includes the results of the aggregate monitoring survey and which is submitted to the Government. The data from the aggregate monitoring survey is also used by the MPAs in their AMRs and their LAAs.
Aggregates and soils recycling	Rubble, hardcore and soil from construction and demolition projects can often be re-used on-site. Alternatively it can be taken to purpose-built facilities for crushing, screening and re-sale. There are also temporary facilities at some quarries and landfill sites where material can be recovered for re-sale or use on-site.
Agricultural waste	This mostly covers animal slurry/by products and organic waste, but also scrap metals, plastics, batteries, oils, tyres, etc. The regulations for this waste stream have been altered meaning farmers can no longer manage all of their own waste within the farm. The agricultural waste regulations affect whether or not waste can be burnt, buried, stored, used on the farm or sent elsewhere.
Amenity	Amenity is a broad concept and is not specifically defined in Planning legislation. It is a matter of interpretation by the local planning authority and is usually understood to be the pleasant or normally satisfactory aspects of a location which contribute to its overall character and the enjoyment of residents, business users and visitors. A land-use that is not productive agriculture, forestry or industrial development. This can include formal and informal recreation and nature conservation.

Anaerobic Digestion (AD)	A natural process comprising the breakdown of organic material in the absence of air. It is carried out in an enclosed vessel and produces methane that powers an engine used to produce electricity. The useful outcomes of AD are electricity, heat, and the solid material left over called the digestate. Both the heat and the electricity can be sold if there is a market and the digestate can either be sold or used for agricultural purposes (landspread). Its use is currently small-scale and it can only be used for part of the waste stream e.g. sewage sludge, agricultural waste and some organic municipal and industrial waste.
Annual Monitoring Report (AMR)	The AMR documents progress in meeting the milestones of the adopted Minerals and Waste Development Scheme and will monitor the impact of policies when the plans are adopted.
Apportionment	Related to Kent's share of the regional South East Plan's waste management capacity to be provided and Kent's share of the regional SEP's aggregate provision. The regional planning function has been repealed by the <i>Localism Act 2011</i> and the Regional Plan has been substantially revoked (certain habitat conservation elements still being in force) to date.
Appraisal of hydrocarbon extraction	This phase follows exploration when the existence of oil or gas has been proven, and the operator needs further information about the extent of the deposit or its production characteristics to establish whether it can be economically exploited.
Area of Search (AoS)	Broad areas where certainty of knowledge of mineral resources may be less than in other types of site allocations. Within these areas, planning permissions could be granted to meet any shortfall in mineral supply, if suitable applications are made. AoS are no longer being used in strategic planning in Kent.
B	
Becquerel	A Becquerel is a unit of radioactivity, representing one disintegration per second.
Biodegradable waste	Any waste that is capable of undergoing natural decomposition, such as food and garden waste, paper and cardboard.
Biodiversity	The variety of all life on earth (mammals, birds, fish, invertebrates, plants, etc).
Biodiversity Action Plan (BAP)	A plan that sets objectives and actions for the conservation of biodiversity, with measurable targets.
Brownfield site	Site previously used for or affected by development. It may be abandoned or in a derelict condition.

Buffer zone	A zone or area that separates minerals and/or waste management facilities from other land-uses to safeguard local amenity.
Building sand or soft sand	A naturally formed deposit where the sand grains are rounded in shape. The individual grains tend towards being equidimensional and the particle size variation is low. When soft sands are mixed with cement the mixture (called mortar) can be easily smoothed by hand to facilitate brick and block laying in construction.
C	
Call for sites	The call for sites is an early opportunity for individuals and organisations to suggest sites within the administrative area of a local planning authority which could be identified for development in a local plan. The call for sites exercise does not in itself determine whether a site should be allocated for development. This is determined by the local planning authority and the sites promoted in the call for sites exercise have no status until they are identified in an adopted local plan.
Certificate of Lawful Use	This is also known as a Lawful Development Certificate. These certificates exist in two forms: <ol style="list-style-type: none"> 1. a determination by a local planning authority as to whether an unauthorised development or use has become lawful through the passage of time, and can be continued without the need for planning permission 2. a determination by a local planning authority as to whether a proposed use or building can occur or be built without the need for planning permission
Combined Heat and Power	A technology producing power (electricity) while capturing the usable heat produced in the process.
Commercial waste	Waste from premises used mainly for trade, business, sport, recreation or entertainment, as defined under Section 5.75(7) of the <i>Environmental Protection Act 1990</i> . For example, it is likely to include timber, metal, paints, textiles, chemicals, oils and food waste, as well as paper, card, plastic and glass.
Composting	The breakdown of plant matter by the action of micro-organisms and other organisms into usable end-products. It is an important method of processing organic waste because it reduces the amount of potentially polluting waste going to landfill or incineration.
Conformity	In conformity means being in compliance.

Construction waste (also see demolition waste)	Unwanted material arising from construction projects. It includes vegetation and soils from land clearance, discarded materials and off-cuts from building sites, road schemes and landscaping projects. It is mostly made up of stone, concrete, rubble and soils but may include timber, metal and glass.
Critical load or Level	Critical load or level as the threshold below which emissions from a facility or changes in road emissions can be considered to be sufficiently small as to be essentially trivial whether alone or in combination with other projects and plans.
D	
Degradable or putrescible waste	This is also called non-hazardous waste. This is a waste that will biodegrade or decompose, releasing environmental pollutants. For example this includes wood and wood products, paper, plasterboard, cardboard, vegetable matter, food processing wastes and vegetation.
Demolition waste	This is also called construction waste. This is a waste arising from any development, redevelopment, or demolition of existing schemes. It includes vegetation and soils from land clearance, discarded materials and off-cuts from building sites, road schemes and landscaping projects. It is mostly made up of stone, concrete, rubble and soils but may include timber, metal and glass.
Development Plan	The Kent MWLP forms part of the statutory Development Plan for Kent together with the adopted local plans prepared by the Kent district planning authorities. The development plan has statutory status as the starting point for decision making. Section 38(6) of the <i>Planning and Compulsory Purchase Act 2004</i> and Section 70(2) of the TCPA 1990 require that planning applications should be determined in accordance with the development plan unless material considerations indicate otherwise.
E	
Energy from Waste (EfW)	The use of waste to generate energy (power and/or heat) or produce a gas that can be used as a fuel including the processing of waste to produce a fuel suitable for use in such plants.
Environmental Impact Assessment (EIA)	The process by which the impact on the environment of a proposed development can be assessed. Certain types and scale of waste proposals will require an Environmental Statement (ES) to be prepared. <i>The Town and Country Planning (Environmental Impact Assessment) Regulations 2011</i> (as amended) and the <i>Planning Practice Guidance</i> on Environmental Impact Assessment set out the circumstances when planning applications will be required to be accompanied by an EIA. The information contained in the EIA will be taken into account when local planning authorities determine such proposals.

Appendix A: Glossary

<p>European Sites</p>	<p>These are defined by Regulation 8 of the <i>Habitat Regulations 2010</i> and originate from a list of designated areas produced by the European Community which can be amended. These include fully designated Special Areas of Conservation (SAC) and Sites of Community Importance (SCIs). Also included in the list of such sites are: sites hosting a priority habitat or species during the period in which the EC is consulting the UK Government as to its inclusion in the list of SCIs and pending a decision of the Council of the EU as to its inclusion, classified Special Protection Areas (SPAs), sites submitted by the UK government or the EC as eligible for identification as an SCI until such time as it is placed on the list of SCIs (usually referred to as candidate SACs).</p> <p>In England, as a matter of Government policy, the following sites should be given the same protection as statutory European Sites: a potential SPA, a possible or proposed SAC, a listed or a proposed Ramsar site, and sites identified or required as compensatory measures for adverse effects on (statutory) European Sites, SPAs, SAC and listed or proposed Ramsar sites.</p>
<p>Examination in Public</p>	<p>The process in which all local plans are subject to an independent examination by a planning inspector before they can be adopted.</p>
<p>Exempt sites</p>	<p>Sites of small-scale waste management activities that do not require a licence or permit from the Environment Agency. They still require planning permission before they can operate and are subject to general rules (e.g. types and quantities of waste).</p>
<p>Exploratory phase of hydrocarbon extraction</p>	<p>The exploratory phase seeks to acquire geological data to establish whether hydrocarbons are present. It may involve seismic surveys, exploratory drilling and in the case of shale gas, (possibly) hydraulic fracturing.</p>
<p>G</p>	
<p>Gasification</p>	<p>A technology that converts carbon containing material into gas (mostly methane). The gas can either be used as a substitute for natural gas or used to power electricity generation.</p>
<p>Geodiversity</p>	<p>The variety of rocks, minerals, fossils, soils and landforms, together with the natural processes that shape the landscape.</p>
<p>Geological Disposal Facility (GDF)</p>	<p>This is a secure facility which the Government is working towards finding a location for and which will be used for either the long-term storage or disposal of higher-activity radioactive wastes. Site selection is a process to determine sites where the geological conditions are suitable to contain the wastes and to find a site where the local community are in agreement with the development of a GDF.</p>

Geomorphological	The scientific study of landforms and the processes that shape them.
Gigabecquerel	A becquerel is a unit of radioactivity, representing one disintegration per second. A gigabecquerel is 1,000 becquerels.
Greenhouse gas	Gases such as carbon dioxide and methane which when their atmospheric concentrations exceed certain levels can contribute to climate change by forming a barrier in the earth's atmosphere that traps the sun's heat.
Gross Value Added (GVA)	A measure of output i.e. the value of the goods and services produced in the economy. It is primarily used to monitor the performance of the national economy and is now the measure preferred by the Office for National Statistics to measure the overall economic wellbeing of an area. While the Gross Domestic Product and the GVA are both measures of value, the GVA excludes taxes and subsidies.
Groundwater	Water contained within underground strata (aquifers) of various types across the country. Groundwater is usually of high quality and often requires little treatment prior to use. It is however vulnerable to contamination from pollutants. Aquifer remediation is difficult, prolonged and expensive and therefore the prevention of pollution is important.
H	
Hazardous waste	Controlled waste that is dangerous or difficult to treat, keep, store or dispose of, so that special provision is required for dealing with it. Hazardous wastes are the more dangerous wastes and include toxic wastes, acids, alkaline solutions, asbestos, fluorescent tubes, batteries, oil, fly ash (flue ash), industrial solvents, oily sludges, pesticides, pharmaceutical compounds, photographic chemicals, waste oils, wood preservatives. If improperly handled, treated or disposed of, a waste that, by virtue of its composition, carries the risk of death, injury or impairment of health, to humans or animals, the pollution of waters, or could have an unacceptable environmental impact. It should be used only to describe wastes that contain sufficient of these materials to render the waste as a whole hazardous within the definition given above.
Heritage assets	A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing).
Heritage Coast	Areas of undeveloped coastline that are managed to conserve their natural beauty and, where appropriate, to improve accessibility for visitors.

High Level Wastes (HLW)	One of four broad categories of radioactive waste, HLW are wastes in which the temperature may rise significantly as a result of their radioactivity, so that this factor has to be considered in designing storage and disposal facilities.
Household waste	This is also known as Municipal Solid Waste (MSW). This is a waste from a domestic property, caravan, residential home or from premises forming part of a university or school or other educational establishment and premises forming part of a hospital or nursing home.
I	
Impact pathways	In carrying out a Habitat Regulations Assessment it is important to determine the various ways in which land-use plans can impact on European Sites by following the pathways along which development can be connected with European Sites. Impact pathways are routes by which a change in activity associated with a development can lead to an effect upon a European Site.
Imported minerals	Minerals imported through wharves and rail depots. In Kent this includes Marine Dredged Aggregates, crushed rock, sand and gravel, secondary aggregates and cement.
Industrial waste	Waste from any of the following premises: factory, provision of transport services (land, water and air), purpose of connection of the supply of gas, water, electricity, provision of sewerage services, provision of postal or telecommunication services.
Inert waste	Waste that will not biodegrade or decompose (or will only do so at a very slow rate). Types of materials include uncontaminated topsoil, subsoil, clay, sand, brickwork, stone, silica and glass.
Intermediate Level Wastes (ILW)	One of four broad categories of radioactive waste, ILW are wastes with radioactivity levels exceeding the upper boundaries of LLW that are retrieved and processed to make them passively safe and then stored pending the availability of the GDF.
L	
Landbank	A stock of mineral reserves with planning permission for their winning and working.
Landfill	The deposition of waste onto hollow or void space in the land, usually below the level of the surrounding land or original ground level in such a way that pollution or harm to the environment is prevented. Former mineral workings have historically been used for this purpose.

Landfill gas	A by-product from the digestion by anaerobic bacteria (rotting) of biodegradable matter present in waste deposited on landfilled sites. The gas is predominantly methane together with carbon dioxide and trace concentrations of a range of other vapours and gases.
Land-won minerals	Mineral extracted from a quarry situated on the mainland, as opposed to off-shore mineral supplies such as MDAs.
Local Aggregate Assessment (LAA)	A public report prepared annually by MPAs to gather together up-to-date information on aggregate sales and reserves from land-won sources together with data on secondary and recycled aggregates and mineral imports.
Local Development Scheme	The timetable for the preparation of the local plans.
Local Geological Sites	Any geological or geomorphological sites, excluding SSSIs, that are considered worthy of protection for their educational, research, historical or aesthetic importance. They are broadly analogous to non-statutory wildlife sites and are often referred to locally by the same name. They can include important teaching sites, wildlife trust reserves, LNRs and a wide range of other sites. They are not regarded as inferior to SSSIs but as sites of regional importance in their own right.
Local Plan	A Local Plan is a Development Plan Document that includes planning policies for a local area. A Local Plan forms part of the Development Plan for an Area.
Low-carbon Economy (LCE) or low-fossil-fuel economy	An economy that has a minimal output of greenhouse gas emissions into the biosphere, but specifically refers to the greenhouse gas carbon dioxide.
Low Level Radioactive Waste (LLW)	One of four broad categories of radioactive waste that reflect the degree of radioactivity and hazard. LLW does not normally require shielding during handling or transport. It consists largely of paper, plastics and scrap metal items that have been used in hospitals, research establishments and the nuclear industry.
M	
Marine Dredged Aggregates (MDA)	Aggregates excavated from the seabed, as opposed to aggregate minerals extracted from the earth on the mainland.
Materials Recovery Facility	A facility where waste can be taken in bulk for separation, recycling or recovery of waste materials. This is usually Municipal Solid Waste, but some sites take Commercial & Industrial waste. Some may also take Construction and Demolition waste to be crushed and screened.

Appendix A: Glossary

Methane	A colourless, odourless, flammable gas, formed during the decomposition of biodegradable waste.
Mineral Consultation Area (MCA)	An area identified in order to ensure consultation between the relevant local planning authority and the MPA before certain non-mineral planning applications made within the area are determined.
Mineral resources	Natural concentrations of minerals or bodies of rock that are, or may become, of potential economic interest due to their inherent properties.
Mineral Safeguarded Area (MSA)	Known areas of mineral resources that are of sufficient economic value to warrant protection for generations to come. There is no presumption that any areas within an MSA will ultimately be environmentally acceptable for mineral extraction. The purpose of MSAs is not to automatically preclude other forms of development, but to make sure that mineral reserves are considered in land-use planning decisions.
Municipal Solid Waste (MSW)	Waste collected and disposed of by or on behalf of a local authority. It will generally consist of household waste, some commercial waste, and waste taken to Household Waste Recycling Centres (HWRCs) by the general public. In addition, it may include road and pavement sweepings, gully emptying wastes, and some construction and demolition waste arising from local authority activities. It is typically made up of card, paper, plastic, glass, kitchen and garden waste.
N	
Natura 2000 Sites	All EU member states are required to create a network of protected wildlife areas, known as Natura 2000 Sites, consisting of SACs and SPAs, established to protect wild birds under the European Birds Directive. These sites are part of a range of measures aimed at conserving important or threatened habitats and species. In the UK they are also known as European Sites.
Natural Improvement Areas (NIAs)	Areas designated for creating more and better-connected habitats, recreational opportunities, flood protection, cleaner water and carbon storage as well as uniting local stakeholders.
Non-hazardous Waste (Non-inert Waste)	This is also called non-inert waste. This is a waste that will biodegrade or decompose, releasing environmental pollutants. Examples include wood and wood products, paper and cardboard, vegetation and vegetable matter, leather, rubber and food precessing wastes.

O	
Operation Stack	The process used to park lorries on a part of the M20 when cross channel services from the Port of Dover or through the Channel Tunnel are disrupted.
P	
Permitted reserves	Saleable minerals in the ground with planning permission for winning and working. Usually expressed in million tonnes.
Planning conditions	Conditions attached to a planning permission for the purpose of regulating and controlling the development.
Primary aggregates	Naturally occurring sand, gravel and crushed rock used for construction purposes, which have either been extracted from the sea bed or the earth's crust.
Production phase of Hydrocarbon Extraction	This normally involves the drilling of a number of wells. This may be wells used at the sites at the exploratory and/or appraisal phases of hydrocarbon development, or from a new site. Associated equipment such as pipelines, processing facilities and temporary storage tanks are also likely to be required.
Prospecting	Prospecting is the first stage of the geological analysis of a territory or area. It includes the physical search for minerals, fossils, precious metals or mineral specimens. Prospecting can be a small-scale form of mineral exploration that can extend to an organised, large scale effort undertaken by commercial mineral companies to find economically viable materials such as ores, gas, oil, coal and aggregates.
Putrescible waste	Waste readily able to be decomposed by bacterial action. Landfill gas and leachate can occur as by-products of decomposition.
Pyrolysis and Gasification	Both systems involve heating the waste in varying amounts of oxygen to produce a gas. The gas could either be used as a substitute for natural gas or used to power electricity generation.
R	
Ramsar sites	Sites of international importance to birds that inhabit wetlands. Ramsar is the name of the place where the Wetlands Convention was signed.
Reclamation of mineral workings	The combined processes of restoration and aftercare following completion of mineral working.
Recovery	The collection, reclamation and separation of materials from the waste stream.

Appendix A: Glossary

Recovery facilities	A facility that recovers value, such as resources and energy, from waste prior to disposal, includes recycling, thermal treatment, biological treatment and composting facilities.
Recycled aggregates	Aggregates produced from recycled CD waste such as crushed concrete and planings from road surfacing.
Recycling	The collection and separation of materials from waste and subsequent processing to produce new marketable products.
Reduction	The use of technology requiring less waste generation from production, or the production of longer lasting products with lower pollution potential, or the removal of material from the waste stream, e.g. paper being taken straight from a waste producer to a paper re-processing facility, avoiding it being handled at any waste management operation.
Reserve	The remaining concentration or occurrence of workable material of intrinsic economic interest. Generally used for those economic mineral deposits that have the benefit of planning permission.
Resource	A concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such a form, quality and quantity that they are reasonable prospects for eventual economic extraction.
Residual waste	The elements of the waste streams that remain following recovery, recycling or composting operations.
Resource recovery	The extraction of useful materials or energy from solid waste.
Restoration	Operations designed to return an area to an acceptable environmental state, whether for the resumption of the former land-use or for a new use following mineral working. Involves the reinstatement of land by contouring, the spreading of soils or soil making materials, etc.
Reuse	Reuse of waste is encouraged by the Government's national waste policy requirements. Typically it involves re-using materials so that they can be used again without further processing.
S	
Safeguarding	The process of protecting sites and areas that have potential for relevant development (minerals and waste) from other forms of development.
Saved policies	Retaining a local plan (or policies from it) until replacement by a new local plan. Normally lasts for three years only, but extended saving can occur if policies need to stay in place for a longer period.

Scheduled Ancient Monument	Nationally important monuments and archaeological areas that are protected under the <i>Ancient Monuments and Archaeological Areas Act 1979</i> .
Secondary aggregates	Construction materials that are produced as by-products of other processes and used instead of primary aggregates. Secondary aggregates include boiler ashes, colliery shale, burned clay, pulverised fuel ash, chalk and shale.
Self-sufficiency	A key aim of sustainable waste management is self-sufficiency in waste disposal, i.e. the waste generated within the region can be disposed or managed within the same region.
Sensitive receptors	Habitable residential accommodation including, but not limited to, hospitals, schools, childcare facilities, elderly housing, churches and convalescent facilities.
Shale gas	Mostly methane (CH ₄) and is found in the pore spaces of shale, a fine grained sedimentary rock, that contains hydrocarbon materials. Methane, often referred to as natural gas has an occurrence that is geologically variable in that it can be found in a reservoir as well as held within the source rock such as shale. It is combustible and is used to generate electricity and for domestic heating and cooking. Shale gas is often referred to as an unconventional hydrocarbon as it is extracted using technologies developed since the 1940s that has enabled gas to be recovered from shale (a fine grained sedimentary rock mainly of marine origin) that were previously considered to be unsuitable or uneconomic for the extraction of natural gas. One process, hydraulic fracturing (often called fracking) is a technique where water (and additives) is pumped under pressure into productive shale rocks via a drilled bore to open up pore spaces and allow the shale gas to be pumped to the surface for collection. ⁽¹²⁵⁾
Sharp sand and gravel	A naturally occurring mineral deposit found in Kent and elsewhere. When extracted it is mainly used in the production of concrete products.
Silica sand or industrial sand	A naturally occurring mineral deposit that is extracted and used in industrial processes including glass manufacture and the production of foundry castings. It is also used in horticulture and for sports surfaces including horse menages and golf course bunker sand. It is also known as industrial sand. It is a mineral of national importance.
Sites of Special Scientific Interest (SSSIs)	These sites are notified under Section 28 of the <i>Wildlife and Countryside Act 1981</i> by English Nature (now Natural England) whose responsibility is to protect these areas. These are

125 Information on unconventional hydrocarbon extraction is on the following DECC website at: <https://www.gov.uk/government/publications/about-shale-gas-and-hydraulic-fracturing-fracking>

Appendix A: Glossary

	important areas for nature conservation i.e. valuable flora, fauna or geological strata. Natural England needs to be notified of planning proposals in or adjacent to the designated areas. National Nature Reserves, terrestrial Ramsar sites, SPAs and SACs are also SSSIs under national legislation.
Soft sand	See Building sand.
Statement of Community Involvement	A document setting out how a local authority is to ensure that suitable sufficient consultation occurs for different elements of the planning process. This is a requirement as amended under the <i>Planning and Compulsory Purchase Act 2004</i> .
Sterilisation	When a change of use or the development of land on or near a minerals or waste facility prevents possible mineral extraction or continued use of a wharf, rail depot or other facility in the foreseeable future.
Strategic Environmental Assessment	An evaluation process for assessing the environmental impacts of plans and programmes. This is a statutory requirement of the Kent MWLP system.
Submission	A stage of the plan preparation process where the document is submitted to the Secretary of State for independent examination by a planning inspector. The document is published for public consultation prior to submission.
Surrounding environment	Aspects of the surrounding environment include such features as water resources including surface water, groundwater and rivers and their settings, heritage interests including listed buildings, conservation areas and their settings, and World Heritage Sites, nature reserves, local sites designated for biodiversity and geodiversity, species and habitats of importance for conservation and biodiversity, nationally designated areas including SSSIs and AONBs and their setting, internationally designated sites including SPAs, SACs, Ramsar sites, Heritage Coast and NIAs. The surrounding environment also includes those areas that are non designated but contribute to the whole environment.
Sustainability Appraisal (SA)	An evaluation process for assessing the environmental, social, economic and other sustainability effects of plans and programmes from the outset of the preparation process. This is a statutory requirement.
Sustainable development	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The definition also encompasses the efficient use of natural resources.

T	
Transfer stations	Facilities that receive waste (normally from a local area), where the waste is bulked up and transported further afield in larger lorries for disposal or recovery. Some transfer stations sort out the recoverable wastes, such as CD waste and scrap metal prior to onward transportation for disposal or processing.
V	
Very Low Level Radioactive Waste (VLLW)	One of four broad categories of radioactive waste that reflect the degree of radioactivity and hazard. The radioactive concentration of VLLW is similar to the natural activity of soils and is well within the normal range of natural radioactivity in the Earth's crust.
Void space	A hole created by mineral working or nature that may have potential for landfilling with waste.
W	
Waste	<p>The TCPA 1990 has been amended so there is no dispute over whether waste, in terms of the planning regime, is defined in accordance with European law. It states that: Waste includes anything that is waste for the purposes of Directive 2006/12/EC of the European Parliament and of the Council on waste, and that is not excluded from the scope of that Directive by Article 2(1) of that Directive.</p> <p>Waste is therefore defined as any substance or object that the holder or the possessor either discards or intends or is required to discard. ⁽¹²⁶⁾</p>
Waste arisings	The amount of waste generated in a given locality over a given period of time.
Waste Collection Authority (WCA)	A local authority with a statutory responsibility to provide a waste collection service to each household in its area, and on request, to local businesses.
Waste Disposal Authority	A local authority that is legally responsible for the safe disposal of household waste collected by the WCAs. Long-term contracts are let to private sector companies who provide the facilities to handle this waste. These contracts are awarded on the basis of detailed cost and environmental criteria as well specific targets for recycling and reducing landfill.

126 This definition is inserted into s.336(1) of the TCPA 1990, as part of the consequential amendments made by the Environmental Permitting (England and Wales) Regulations 2007 SI 2007/3528 (the EPR 2007), as from 6 April 2008. See Schedule 21, para 19 of the EPR 2007 (and its commencement - see reg.1).

Appendix A: Glossary

Waste electrical and electronic equipment	Discarded electrical or electronic equipment, including all components, sub-assemblies and consumables that are part of the product at the time of discarding.
Waste hierarchy	A concept devised by EUWFD (2008/98/EC) conveying waste management options in order of preference; waste prevention (most preferred) followed by reduction, recycling, recovery and disposal (least preferred). Figure 18 shows the Waste Hierarchy in Chapter 6.
Waste management permit	A permit granted by the Environment Agency (EA) authorising treatment, keeping or disposal of any specified description of controlled waste in or on specified land by means of specified plant.
Waste Management Unit (WMU)	A KCC department that manages all aspects of MSW (household waste) arisings in Kent.
Waste minimisation	The reduction of unwanted outputs from the manufacturing and construction processes that are likely to result in less waste being produced.
Waste Planning Authority (WPA)	A local authority with responsibility for waste planning, including the determination of waste related planning applications. In areas with two tiers of local government (counties and districts), the county councils are the WPAs. National Parks are also WPAs. Unitary authorities, such as Medway Council, deal with waste planning and all other planning issues within their areas.
Waste reduction	To make waste production and waste management practices more sustainable. Key national objectives are to reduce the amount of waste that is produced, make the best use of waste produced and choose practices which minimise the risks of pollution and harm to human health. Waste reduction is concerned with reducing the quantity of solid waste that is produced and reducing the degree of hazard represented by such waste.
Wastewater	Water discharged to the sewers and includes MSW, C&I waste in addition to surface water run off. This raw wastewater is collected in sewers and transferred to wastewater treatment works where it is treated in such a way that it produces largely reusable sewage sludge and effluent that is discharged to watercourses.

Appendix B: List of Replaced, Deleted and Retained Policies

B.1 All the previously adopted minerals and waste policies are replaced by the Kent MWLP 2013-30 and the Mineral Sites Plans. The Kent Minerals and Waste Plans previously in force are listed below:

- Kent Minerals Local Plan: Brickearth (1986)
- Kent Minerals Local Plan Construction Aggregates (1993)
- Kent Minerals Local Plan Chalk and Clay (1997)
- Kent Minerals Local Plan Oil and Gas (1997)
- Kent Waste Local Plan (1998)

B.2 All of these plans were prepared before Medway Council was formed and these plans therefore covered areas which are now within Medway.

B.3 The Secretary of State for the Government Office for the South East wrote separately to both KCC and Medway Council on 21 September 2007 providing a direction on the policies in the previously adopted minerals and waste plans. Any policies not listed by the Secretary of State expired and those listed in the Direction are known as the 'saved policies'. It is the saved policies that are deleted by the Minerals and Waste Plan, and the Mineral Sites Plan once adopted. KCC and Medway Council have separate letters of direction from the Secretary of State and therefore the deletion of saved policies by KCC has no effect on Medway Council's saved policies.

Appendix B: List of Replaced, Deleted and Retained Policies

List of Saved Policies in Previously Adopted Plans to be Deleted

This list identifies the saved policies within the previously adopted minerals and waste plans for Kent alongside the new policies in the Kent MWLP 2013-2030 that will replace them. These policies will be deleted upon the adoption of the Kent MWLP 2013-2030.

Saved Policies being Deleted

Kent Minerals Local Plan Construction Aggregates (1993) Saved Policies		Equivalent Policies in the Kent MWLP 2013-2030	
CA1	Access Considerations (for aggregate wharves and rail depots)	CSM 12	Sustainable Transport of Minerals
CA2C	Primary Planning Constraints (for aggregate wharves and rail depots)	-	No new sites came forward in the call for sites but Policy CSM 11 identifies safeguarded sites for wharves and rail depots for the plan period
CA3	Local Considerations (for aggregate wharves and depots)	CSM 12	Sustainable Transport of Minerals
CA4	Proposed Locations (for aggregate wharves and depots)	-	No new sites came forward in the call for sites but Policy CSM 11 identifies safeguarded sites for wharves and rail depots for the plan period
CA7	Provision of Geological Information in Support of an Application	DM 16	Information Required in Support of an Application
CA8D	Exceptions to Areas of Search	CSM 4	Non-identified Land-won Mineral Sites
CA9	Borrow Pits	-	Policy will be deleted. However borrow pits can be considered as part of Policy CSM 4

CA10	Mineral Consultation Areas (safeguarding mineral resources and potential supply points)	CSM 5, CSM 11 DM 7	Land-won Mineral Safeguarding, Safeguarded Wharves and Rail Depots, and Safeguarding Mineral Resources and Importation Infrastructure
CA12	The Structure Plan (regarding silica sand)	CSM 2	Supply of Land-won Minerals in Kent
CA13	Location for Mining and Processing Carboniferous Limestone	CSM 11	Prospecting for Carboniferous Limestone
CA16	Traffic Considerations	DM 13	Transportation of Minerals and Waste
CA18	Noise, Vibration and Dust	DM 11	Health and Amenity
CA19	Plant and Building	DM 1	Sustainable Design
CA20	Plant and Building	DM 11	Health and Amenity
CA20A	Ancillary Operations	DM 20	Ancillary Development
CA21	Public Rights of Way	DM 13	Public Rights of Way
CA22	Landscaping	DM 19	Restoration, Aftercare and After-use
CA23	Working and Reclamation	DM 19	Restoration, Aftercare and After-use

Kent Minerals Local Plan Chalk and Clay(1997) Saved Policies		Equivalent Policies in the Kent MWLP 2013-2030	
CC1	Provision for Development	CSM 2	Supply of Land-won Minerals in Kent
CC1A	Provision for Development (secondary or waste material re-use)	-	Policy is deleted. There is no need for a policy supporting the preparation of suitable secondary or waste chalk or clay materials for re-use. It is considered that this is related to potential supply of recycled or secondary materials for cement workings
CC5	Safeguarding existing working areas in the south-eastern and western parts of Eastern Quarry	-	All potential reserves are now exhausted. Policy will be deleted
CC9	Cement Wharves (safeguarding)	CSM 6 DM 7 DM 8	Safeguarded Wharves and Rail Depots and Safeguarding Mineral Resources Safeguarding Minerals Management, Transportation & Waste Management Facilities
CC10A	Minerals Consultation Areas (safeguarding)	CSM 5	Land-won Mineral Safeguarding
CC12	Noise, Vibration and Dust	DM 11	Health and Amenity
CC14	Land Drainage, Flood Control and Land Stability	DM 10	Water Environment
CC15	Nature Conservation	DM 19	Restoration, Aftercare and After-use
CC16	Plant and Buildings	DM 1	Sustainable Design
CC18	Ancillary Operations	DM 20	Ancillary Development

CC20	Public Rights of Way	DM 14	Public Rights of Way
CC24	Road, Traffic and Access	DM 13	Transportation of Minerals and Waste
CC26	Landscaping	DM 19	Restoration, Aftercare and After-use
CC27	Aftercare	DM 19	Restoration, Aftercare and After-use
Kent Minerals Local Plan Oil and Gas(1997) Saved Policies			
Equivalent Policies in the Kent MWLP 2013-2030			
OG1AA	Coastal Planning		Policy will be deleted
OG2	Exploration	CSM 10	Oil, Gas and Coal-bed Methane
OG3	Appraisal	CSM 10	Oil, Gas and Coal-bed Methane
OG4	Development	CSM 10	Oil, Gas and Coal-bed Methane
OG5	Noise, Vibration, Dust and Gas	DM 11	Health and Amenity
OG7	Land Drainage, Flood Control and Unstable Land	DM 10	Water Environment
OG8	Nature Conservation	CSM 10 DM 19	Oil, Gas and Coal-bed Methane Restoration, Aftercare and After-use
OG9	Plant and Buildings	DM 1	Sustainable Design

OG10	Hours of Working	DM 16 DM 11	Information required in Support of an Application and Health and Amenity
OG11	Public Rights of Way	DM 14	Public Rights of Way
OG15	Road, Traffic and Access	DM 13	Transportation of Minerals and Waste
OG16	Road, Traffic and Access	DM 11	Health and Amenity
OG17	Landscaping	DM 19	Restoration, Aftercare and After-use
OG18	Working and Restoration/Aftercare	DM 19	Restoration, Aftercare and After-use
Kent Minerals Local Plan: Brickearth (1986) Saved Policies			
Equivalent Policies in the Kent MWLP 2013-2030			
B2	Safeguarded Land	CSM 5 DM 7	Land-won Mineral Safeguarding Safeguarding Mineral Resources
B3	Development Land	DM 9	Extraction of Minerals in Advance of Surface Development
B4	Economically Workable Reserves	DM 16	Information Required in Support of an Application
B5	Material Required for Restoration (soil depths)	DM 16	Information Required in Support of an Application
B6	Working and Restoration Scheme Requirements	DM 19	Restoration, Aftercare and After-use
B7	Agricultural Aftercare	DM 19	Restoration, Aftercare and After-use
B9	Access	DM 12	Transportation of Minerals and Waste
B10	Mud and Stones on the Public Highway	DM 16	Information Required in Support of an Application
B11	General Policy on Environmental Impact	DM 11	Health and Amenity

B12	Noise, Dust and Traffic	DM 11 DM 13	Health and Amenity and Transportation of Minerals and Waste
B13	Landscaping	DM 16 DM 19	Information required in Support of an Application, Restoration, Aftercare and After-use
B14	Public Rights of Way	DM 14	Public Rights of Way
Kent Waste Local Plan (1998) Saved Policies			
W3	Locational Criteria	CSW 6	Location of Built Waste Management Sites Facilities
W5	Land Raising	CSW 9 CSW 11	Non Inert Waste Landfill in Kent Permanent Deposit Inert Waste
W6	Need (for waste facilities outside identified locations)	CSW 6	Location of Built Waste Management Sites Facilities
W7	Locations Suitable in Principle for Inert Waste to be Prepared for Recycling or Reuse	N/A	Policy Deleted
W8A	River Dredgings	CSW 14	Disposal of Dredgings
W9	Locations Suitable in Principle for Waste Separation and Transfer Proposals	N/A	Policy Deleted
W10	Composting and Digestion	CSW 7	Waste Management for Non-hazardous Waste
W11	Locations with Potential for Efw Proposals	N/A	Policy Deleted
W12	Landfill of Mineral Voids	CSW 9 CSW 10	Non Inert Waste Landfill in Kent Development at Closed Landfill Sites
W13	PFA	DM 1	Sustainable Design

Appendix B: List of Replaced, Deleted and Retained Policies

W17	Incineration		DM 11	Health and Amenity
W18	Noise, Dust, Odours etc		DM 11	Health and Amenity
W19	Water Resources/ Leachate/ Groundwater		DM 10	Water Environment
W20	Landfill: Surcharging/Unstable Land/Land Water, Drainage and Flood Control		DM 10 DM 19	Water Environment Restoration, Aftercare and After-use
W21	Nature Conservation Policy		DM 19	Restoration, Aftercare and After-use
W22	Road Traffic and Access		DM 12	Transportation of Minerals and Waste
W25	Plant and Buildings		DM 1	Sustainable Design
W25A	Plant and Buildings		CSW 6	Location of Built Waste Management Sites Facilities
W27	Public Rights of Way		DM 14	Public Rights of Way
W31	Landscaping		DM 19	Restoration, Aftercare and After-use
W32	Restoration/Aftercare		DM 19	Restoration, Aftercare and After-use

Saved Policy CA6 – ‘Areas of Search within which the Extraction of minerals is Acceptable in Principle’ is deleted and replaced by the Kent Mineral Sites Plan

Saved Policy B1 – ‘Locations Suitable in Principle for the Extraction of Brickearth’ is deleted.

Note that the proposed deletion of saved policies CA6 and B1 is a result of the preparation of the Mineral Sites Plan that will provide updated policy on the allocation of land for minerals extraction

Appendix B: List of Replaced, Deleted and Retained Policies

Appendix C: List of Mineral Sites that are included in Landbank Calculations

C.1 The table below lists the permitted land-won mineral working sites in Kent included in landbank calculations at the time of plan preparation. Sites that have been inactive for more than 10 years are not included in the landbank calculations. Sites that were inactive in 2013 are shown in *italics*.

Table 3 Land-Won Mineral Sites in Kent included in calculations of permitted reserves

Sites	Predominant Aggregate Type	Operator Details
1. Aggregate Sites		
Hermitage Quarry, Maidstone	Crushed Rock	Gallagher Aggregates Ltd
Blaise Farm, West Malling	Crushed Rock	Hanson Aggregates Ltd
<i>Stone Castle Farm, Whetsted</i>	<i>Sandstone Sand and Gravel</i>	<i>Lafarge Aggregates Ltd</i>
Faversham Quarries, Faversham	Sharp Sand and Gravel	Brett Aggregates Ltd
Lydd Quarry (Scotney Court Farm), Lydd	Sharp Sand and Gravel	Brett Aggregates Ltd
<i>Allens Bank, Lydd</i>	<i>Sharp Sand and Gravel</i>	<i>Brett Aggregates Ltd</i>
<i>Conningbrook Quarry</i>	<i>Sharp Sand and Gravel</i>	<i>Brett Aggregates Ltd</i>
<i>Highstead Quarry, Chislet</i>	<i>Sharp Sand and Gravel</i>	<i>Brett Aggregates Ltd</i>
Denge Quarry, Lydd	Sharp Sand and Gravel	CEMEX UK
Darenth & Joyce Green Quarry, Dartford	Sharp Sand and Gravel	J Clubb Ltd

Sites	Predominant Aggregate Type	Operator Details
East Peckham Quarry, East Peckham	Sandstone Sand and Gravel	J Clubb Ltd
<i>Joyce Green Quarry, Dartford</i>	<i>Sharp Sand and Gravel</i>	<i>Hanson (Joyce Green Aggregates) Ltd</i>
<i>Aylesford Quarry, Aylesford</i>	<i>Soft Sand</i>	<i>Aylesford Heritage Ltd</i>
Borough Green Sand Pit, Sevenoaks	Soft Sand	Borough Green Sandpits Ltd
Charing Quarry, Charing	Soft Sand	Brett Aggregates Ltd
Lenham Quarry, Maidstone	Soft Sand	Brett Aggregates Ltd
Ightham Sand Pit, Sevenoaks	Soft Sand	H&H Ltd
Wrotham Quarry (Addington Sand Pit), Wrotham	Soft Sand	Hanson Aggregates
Nepicar Sand Quarry, Sevenoaks	Soft Sand	J Clubb Ltd
Greatness Farm, Sevenoaks	Soft Sand	Tarmac Ltd
2. Silica Sand		
Nepicar Sand Pit, Wrotham	Silica sand	J Clubb Ltd
Addington Sand Pit (Wrotham Quarry), Addington	Silica sand	Hanson Aggregates Ltd
3. Brickearth and Brickclays		
Claxfield Farm, Sittingbourne	Brickearth	Wienerberger Ltd
Hempstead House, Sittingbourne	Brickearth	Ibstock Brick Ltd
Babylon Tileworks, Tonbridge	Tiles (Weald Clay)	Mr M Gash
4. Clay		
Norwood Quarry, Isle of Sheppey	Engineering (London Clay)	FCC Environment (UK) Ltd

Sites	Predominant Aggregate Type	Operator Details
5. Chalk		
<i>Medway Works, Holborough</i>	<i>Cement</i>	<i>Lafarge Cement Ltd</i>
Darenth Rd Quarry, Dartford	Agricultural uses	J Clubb Ltd
Pinden Quarry, Dartford	Agricultural uses	SBS Ltd
Detling Quarry, Maidstone	Agricultural uses	John Bourne & Co Ltd
Beacon Hill Quarry, Ashford	Agricultural uses	John Bourne & Co Ltd
Crundale Quarry, Ashford	Agricultural uses	C Peach
Hegdale Quarry, Ashford	Agricultural uses	R H Ovenden Ltd
Rowling Quarry, Dover	Agricultural uses	R H Ovenden Ltd

C.2 Table 3 gives the sand and gravel and agricultural chalk permitted reserve calculations based on the data for the 2013 calendar year. The total permitted reserve figure per mineral type is given where data is available. Reserve details for the individual sites cannot be published due to operator confidentiality requirements. Table 4 shows hard rock, clay and brickearth quarries where there is commercial sensitivity due to there being less than three operational sites (or simply limited data). These reserves are expressed as an estimated supply in years rather than an available tonnage.⁽¹²⁷⁾

C.3 Permitted reserve figures for all the economic minerals in Kent are reviewed annually in the Kent AMR. Further details of these calculations are given in the Kent LAA (updated annually) and in topic report TRM3: Other Minerals.⁽¹²⁸⁾

127 The years of supply are estimates based on the data from ten year sales averages, operator surveys or planning application information.

128 Available from: www.kent.gov.uk/mwlp.

Table 4 Mineral Reserves in Kent without Tonnage Confidentiality Restriction (2013)

Mineral Reserves in Kent without Confidentially Restrictions	Millions of tonnes (mt) ⁽¹⁾
Soft Sand	10.6 mt
Soft Sand (non-aggregate uses including silica or industrial sand)	2.2 mt
Sharp Sand and Gravel	3.61 mt
Sharp Sand and Gravel (non-aggregate uses)	0.50 mt
Chalk (for agricultural uses)	1.9 mt

1. Figures rounded to nearest decimal place

Table 5 Kent Mineral Landbank Subject to Tonnage Confidentiality Restriction (2013)

Mineral Reserves in Kent with Confidentially Restrictions	Landbank expressed as supply in years
Hard Rock (that can be crushed to form aggregate)	Over 20 years supply
Hard Rock (that is only suitable for construction fill and/or industrial uses)	Over 46 years supply
Chalk (for cement manufacture)	Over 25 years supply
Brick Clay (peg tile manufacture)	Over 25 years supply
Brickearth (brick manufacture)	Less than 15 years supply
Clay for engineering uses	Approximately 12 years supply