

# **Kent Minerals and Waste Development Framework**

*Planning for the future of minerals and waste in Kent*

## **Evidence Base for the Minerals and Waste Core Strategy Strategy & Policy Directions consultation**

### **Minerals Topic Report 7: Kent and Medway Imports Study**



**May 2011**



i List of Abbreviations	1
ii Executive Summary	2
1 Introduction and Context	1
2 Sources of Mineral Imports into Kent and Medway	8
3 Marine Planning System in Relation to Licensing of Marine Dredged Aggregates	10
4 National, Regional and County Trends	15
5 Current Situation - Existing Railheads and Wharves in Kent	23
6 Consideration of Supply and Demand	27
7 Implications of Planned Level of Development and Major Infrastructure	29
8 Potential New Importation Sites	31
9 Safeguarding Issues	34
10 Conclusions	36
<b>Appendices</b>	
Appendix A: Dredging Licence Areas From Which Aggregate is Imported into Kent and Medway Wharves	38
Appendix B: Kent and Medway Active Importation Sites - Plans and Summary details	41

Contents

## i List of Abbreviations

The following table lists the abbreviations used in this document:-

<b>Abbreviation</b>	<b>Details - What it Stands for or Represents</b>
ABP	Association of British Ports
BMAPA	British Marine Aggregate Producers Association
CLG	Communities and Local Government
CS	Core Strategy
DPD	Development Plan Document
KCC	Kent County Council
LDF	Local Development Framework
LPA	Local Planning Authority (ie a unitary such as Medway Council or a district)
MC	Medway Council
MDA	Marine Dredged Aggregates
MMO	Marine Management Organisation
MPA	Mineral Planning Authority
mpa	Mineral Products Association (trade association)
MPS1	Mineral Policy Statement 1 -Planning and Minerals
MWDF	Minerals and Waste Development Framework
PFA	Pulverised Fuel Ash - a secondary aggregate
RSS	Regional Spatial Strategy (South East Plan)
SEERA	South East England Regional Assembly
Type 1	Crushed rock which meets the technical specifications for use as a road base material

## ii Executive Summary

This report updates the 2006 Kent Aggregate Imports Study by Land and Mineral Management Ltd on behalf of Kent County Council <sup>(1)</sup> It also widens the types of mineral imports that are reviewed to include all minerals imported into Kent by water and rail. It does not include any consideration of importation into Kent of minerals by road.

Prior to the writing of this report, all of the existing wharves and railheads that are operational in Kent and Medway were visited and details of site boundaries were obtained from the operators.

It establishes the policy context for considering mineral importation facilities in both the Kent Minerals and Waste Development Framework (M&WDF) and the Medway Local Development Framework (LDF) and confirms the importance of safeguarding all of the existing Kent and Medway mineral importation facilities in order to comply with national minerals policy.

It identifies the importance of Kent and Medway wharves and railheads for the importation of Marine Dredged Aggregates (MDA), crushed rock, other land-won aggregates, recycled and secondary aggregates, as well as other minerals including cement and salt. There are currently 16 active mineral importation wharves in Kent (one additional one which has recently been granted planning permission) and four active rail-heads. These facilities combine to give Kent and Medway a very important role in the supply of minerals both for the local markets and in the wider strategic context contributing to supply of the Greater South East, London and parts of East of England. The strategic importance of these facilities is particularly recognised when considering sustainable trans-shipment capabilities from some of the the wharves by rail and water.

Landings of MDA into Kent and Medway wharves now account for 55% of all MDA landed in the South East Region (not including London). Also the total landings of crushed rock at Kent and Medway wharves increased to 90% of the region's total in 2008 (2.7mt in 2007 and 2.1mt in 2008). Figures for 2009 were not available at the time of writing.

Kent and Medway importation facilities range in size and capability and some have benefitted from considerable operator investment over the past few years. They are all currently operating below their capacity levels which means that when the economy picks up they will be able to increase production to supply essential construction aggregates and other minerals in a sustainable manner.

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1 Land and Mineral Management Ltd Feb 2006 Kent Aggregate Imports Study. A Study of Aggregate Imports into Kent and Medway (Excluding Road Imports) on Behalf of Kent County Council .

# 1 Introduction and Context

## Introduction and Context

**1.0.1** Kent County Council (KCC) is responsible for the preparation of the Kent Minerals and Waste Development Framework (MWDF). Medway Council (MC) is responsible for the preparation of the Medway Local Development Framework (LDF) which must include consideration of mineral supply and safeguarding.

**1.0.2** Formative work on preparing Kent and Medway's Development Plan Documents (DPDs) included commissioning a report on importation of aggregates in Kent and Medway in 2006.<sup>(2)</sup> That report now needs to be updated in light of changes that have taken place in legislation, guidance and site operations since its publication. It also now needs to include a consideration of all mineral imports into Kent and Medway, not just construction aggregates.

**1.0.3** KCC has undertaken a comprehensive review of its Minerals and Waste Development Scheme (the project timetable). It is now proposed that the Minerals and Waste Development Framework will initially contain three documents:

- a Minerals and Waste Core Strategy (CS);
- a Minerals Sites DPD; and
- a Waste Management Sites DPD.

**1.0.4** The initial emphasis and priority will be on the Minerals and Waste CS. The first stage of the plan making process – the Kent MWDF CS 'Issues' consultation ran between Sept 24<sup>th</sup> and Nov 17<sup>th</sup> 2010. This evidence base topic paper on Mineral Imports into Kent and Medway will inform both the Kent Minerals and Waste Development Framework Core Strategy at 'Strategy and Policy Directions' consultation stage as well as the Medway Local Development Framework Core Strategy.

**1.0.5** The Medway Local Development Framework (LDF) includes consideration of minerals issues. Medway Council consulted on their Draft CS in November -December 2010. Both authorities are proposing to consult on the next stages of their CSs in early summer 2011.

**1.0.6** One of the principal elements of both the Kent Minerals and Waste CS and the Medway CS will be a strategy for the working, processing and importation of minerals. The CS will also set a framework for the identification of sites for both non-aggregate, as well as aggregate, mineral working, processing and importation in the later Sites Development Plan Documents.

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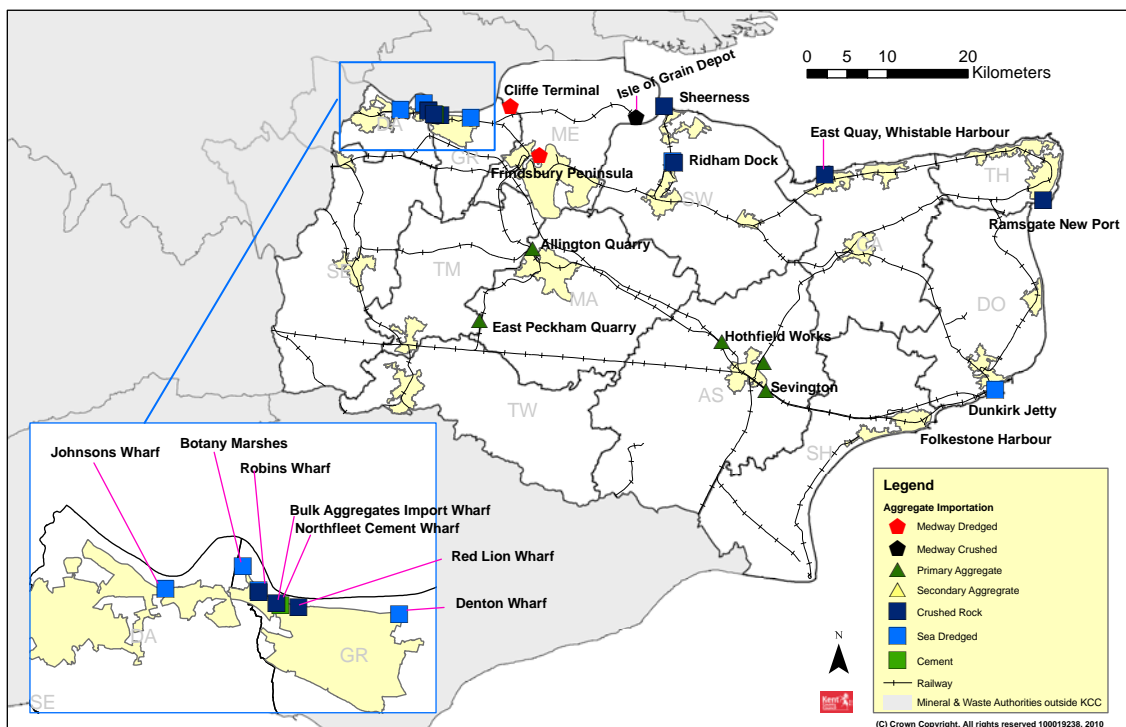
2 Land and Mineral Management Ltd (February 2006). Kent Aggregate Imports Study. A Study of Aggregate Imports into Kent & Medway (excluding road imports) on behalf of Kent County Council.

**1.0.7** Imports of both marine dredged aggregates and crushed rock into Kent and Medway's wharves make a significant contribution towards meeting a strategic local, regional and wider need for construction aggregates, supplying Kent and Medway, the South East, London and parts of East Anglia. Landings of marine dredged sand and gravel in Kent have consistently accounted for approximately 30% of all landings in the South East of England region (which excludes London) over the period 1998-2008. In addition, landings of marine dredged aggregates into the Medway wharves have consistently accounted for circa 25% of all landings in the South East Region over the period 1998-2008. In 2007 & 2008 the percentage of total imports of crushed rock into the South East region landed at wharves in Kent and Medway increased to 90% of the region's total (2.7mt in 2007 and 2.1mt in 2008).

**1.0.8** Construction aggregates are also imported into Kent by rail. These originate generally from Western England. Three railheads in Kent (at Allington -Maidstone, Sevington - Ashford and Hothfield (near Ashford)) imported around half a million tonnes per annum of aggregates in 2007 and 2008. These imports are important for meeting the local demand for construction aggregates, especially as the importation points are near Maidstone and Ashford, areas which cannot be served easily from the crushed rock imports from any of the wharves in Kent and Medway.

**1.0.9** The existing wharves and railheads in Kent and Medway are shown on Figure 1 attached.

**Figure 1: Existing Wharves and Rail Aggregate Depots**



Existing Wharves and Rail Aggregate Depots



## Policy Context for Mineral Importation & Safeguarding

### National policy in Minerals Policy Statement 1: Planning and Minerals

**1.0.10** MPS1<sup>(3)</sup> states that the Government's objectives for mineral planning reflect the requirement to contribute to the achievement of sustainable development, as required by Section 39 of the Planning and Compulsory Purchase Act 2004. These are:

- to ensure, so far as is practicable, the prudent, efficient and sustainable use of minerals and recycling of suitable materials, thereby minimising the requirement for new primary extraction;
- to conserve mineral resources through appropriate domestic provision and timing of supply;
- to safeguard mineral resources as far as possible;
- to prevent or minimise production of mineral waste;
- to secure working practices which prevent or reduce as far as possible, impacts on the environment and human health arising from the extraction, processing, managing or transporting of minerals;
- to maximise the benefits and minimise the impacts of mineral operations over their full life cycle;
- to promote and seek to enhance the overall quality of the environment once extraction has ceased, through high standards of restoration, and to safeguard the long term potential of land for a wide range of after-uses;
- to secure closer integration of minerals planning policy with national policy on sustainable construction and waste management and other applicable environmental protection legislation;
- and to encourage the use of high quality materials for the purposes for which they are most suitable.'

**1.0.11** MPS1 establishes national minerals planning policy in relation to safeguarding, noting that Minerals Planning Authorities (MPAs) and Local Planning Authorities (LPAs) should:-

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3 Minerals Policy Statement 1: Planning and Minerals, Communities and Local Government (November 2006)

- safeguard existing, planned and potential railheads, wharfage and associated storage, handling and processing facilities for the bulk transport by rail, sea or inland waterways of minerals, particularly coal and aggregates, including recycled, secondary and marine-dredged materials;
- identify future sites to accommodate the above facilities and reflect any such allocations in the LDDs of district councils in two-tier planning areas. District councils in these areas should not normally permit other development proposals near such safeguarded sites where they might constrain future use for these purposes;
- safeguard existing, planned and potential sites including rail and water-served, for concrete batching, the manufacture of coated materials, other concrete products and the handling, processing and distribution of substitute, recycled and secondary aggregate material. Where appropriate, identify future sites for these uses and reflect any such allocations in the LDDs of district councils in two tier planning areas.'

**1.0.12** MPS1 states, in relation to 'bulk transportation', that MPAs and LPAs should:

- 'seek to promote and enable the bulk movement of minerals by rail, sea or inland waterways to reduce the environmental impact of their transportation;
- Promote facilities at ports and rail links that have good communications inland, so that bulk minerals can be landed by sea and distributed from ports, as far as is practicable, by rail or water;
- Safeguard and promote rail links to quarries where there is potential to move minerals by rail'.

### **Guidance and Good Practice Guide on Safeguarding**

**1.0.13** The Communities and Local Government (CLG) Practice Guide to accompany MPS1<sup>(4)</sup> offers principles and examples of good practice and background information to assist mineral planning authorities (MPAs) in the preparation of LDDs for minerals.

**1.0.14** It recognises that minerals make an essential contribution to the nation's prosperity and to quality of life, not least in helping to create and develop sustainable communities.

**1.0.15** Construction raw materials constitute about 82%, by tonnage, of all land-won minerals extracted in Britain. The document clarifies and expands upon the national policy requirements for mineral safeguarding in MPS1.

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4 Planning and Minerals, Practice Guide (Nov 2006). Communities and Local Government

**1.0.16** The Practice Guide also gives further details regarding the safeguarding of existing facilities and future sites, including wharves, ports and depots, and establishing suitable transport links for bulk materials. Such facilities can be important to promote movement of material by rail, inland waterway and by sea, and therefore contribute to sustainable development. This is particularly important in London and other metropolitan areas that rely on the importation of significant quantities of aggregates. As Kent aggregate wharves supply depots and wharves in London and the wider South East of England, as well as supplying local markets, this is an important aspect of safeguarding for Kent.

**1.0.17** MPAs should be alert to the possibilities of combining such sites with those for processing and distribution of recycled and alternative materials. MPAs also need to take into account the possibility that future use of such sites may be constrained if sensitive developments, such as housing, are permitted nearby. The safeguarding of such facilities needs to be considered within the wider framework of spatial planning for the surroundings.

## Regional Policy

**1.0.18** 2.4 Government abolished Regional Spatial Strategies (RSS) in the summer of 2010, however, following a legal challenge by Cala Homes, the RSS system has been re-instated into the planning policy regime. The RSS for the South East - the South East Plan (2009)<sup>(5)</sup> contains strategic policy relevant to the safeguarding of mineral resources and facilities. Policy M5 : Safeguarding of Mineral Reserves, Wharves and Rail Depots states:-

*'Mineral Planning Authorities should assess the need for wharf and rail facilities for the handling and distribution of imported minerals and processed materials, and identify strategic sites for safeguarding in their mineral development frameworks. These strategic facilities should be safeguarded from other inappropriate development in local development documents. Existing mineral sites, and proposed sites and 'areas of search' should be identified in mineral development documents for the extraction and processing of aggregates, clay, chalk, silica sand and gypsum. These should then be safeguarded in local development plan documents'*

**1.0.19** The South East Plan requires MPAs to assess the need for wharves and depots using the following strategic criteria to assist the identification of those sites to be safeguarded:

- capacity to supply imported material to the region;
- proximity to markets;
- value of specialist infrastructure;
- adequacy of existing or potential environmental safeguards.

5 Regional Spatial Strategy for the South East of England (RSS) (May 2009). South East Plan

**1.0.20** It also requires MPAs to protect from other development existing mineral workings and processing plants and give further consideration to extending safeguarding arrangements to larger known resources which are not specifically allocated in mineral development documents (MDDs). All partners must work towards a modal shift in the transport of minerals. MDDs should include a requirement that any applicants for the development of alternative uses on wharf or depot sites must demonstrate that there is no real prospect of a transport use continuing or being reintroduced on the site.

## The Kent Aggregate Imports Study (2006)

**1.0.21** The Kent Aggregate Imports Study, published in 2006, was originally prepared in order to inform the preparation of the Medway LDF and the Kent Core Minerals Strategy and Construction Aggregates DPDs.<sup>(6)</sup>

**1.0.22** The study identified the location, existing import levels, existing capacity and potential for expansion of all aggregates-importing wharves and rail depots in Kent and Medway. Much of the data and information presented in the 2006 report is in a combined form due to commercial confidentiality restrictions. The study also identified trends in the importation of construction aggregates in the South East region and in Kent and Medway. The study concluded that capacity headroom existed at all of Kent's existing wharves and rail depots and KCC were advised to safeguard all existing wharves and adjoining land. However, as a result of operators' perceived constraints to expansion and pressures of alternative development at a number of the sites, KCC were also advised to look to safeguard other sites. This stance is reinforced in the outcome of the 2008 Association of British Ports (ABP) legal challenge of the Hampshire Core Strategy.<sup>(7)</sup>

**1.0.23** Since the publication of the 2006 Kent Aggregate Imports Study, some matters relevant to minerals policy, have emerged, which should now be taken into consideration whilst preparing the evidence for the MWDF & LDF DPDs. These include:-

- Publication of 'Minerals Policy Statement 1: Planning and Minerals' & its 'Practice Guide' in Nov 2006;
- The 2008 ABP legal challenge to the Hampshire Core Strategy over the issues of wharf safeguarding and identification;
- Publication of the MDS Transmodal Limited 2009 Final Report entitled, 'Aggregate Wharves and Rail Depots in South East England' commissioned by SEERA.

6 Land and Mineral Management Ltd February 2006 A Study of Aggregate Imports into Kent and Medway (Excluding Road Imports) on Behalf of Kent County Council.

7 Approved Judgement In the High Court of Justice Queen's Bench Division & Administrative Court Case No CO/1116/2007 Between Association of British Posts (ABP) and Hampshire County Council, New Forest National Park Authority, Portsmouth City Council, Southampton City Council and Hampshire Minerals and Waste Authority.

## 2 Sources of Mineral Imports into Kent and Medway

**2.0.1** The following list gives details of land-won minerals that are imported into Kent and Medway (by ship, dredger or rail) at the time of the 2010 survey:

- Primary aggregates including land-won crushed rock, land-won sand and marine dredged aggregates;
- Secondary and recycled aggregates including slag and Pulverised Fuel Ash;
- Cement; &
- Salt (a recent addition to list of imports).

**2.0.2** Cement is imported into one of the large wharves on the north Kent coast, with the material generally being derived from France.

**2.0.3** Pulverised Fuel Ash (PFA) is imported into one of the north Kent wharves from Spain and Denmark. PFA is a by product of pulverised fuel (typically coal) fired power stations. The fuel is pulverised into a fine powder, mixed with heated air and burned. Approximately 18% of the fuel forms fine glass spheres, the lighter of which (c. 75 %) are borne aloft by the combustion process. They are extracted from the flue gases by cyclones and electrostatic precipitation. The resultant material is used as engineering fill and as a component for concrete. It has been widely used, particularly in the UK, for concrete block production. The blocks are lightweight and have excellent thermal insulation properties.

**2.0.4** Slag is also imported into three of the north Kent wharves from locations in France as well as Flushing (the Netherlands). Blast furnace and steel furnace slag forms one of the largest volumes of recycled material used as construction aggregate. Blast furnace slag is either air-cooled (slow cooling in the open) or granulated (formed by quenching molten slag in water to form sand-sized glass-like particles). If the granulated blast furnace slag accesses free lime during hydration, it develops strong hydraulic cementitious properties and can partly substitute for cement in concrete. Air-cooled blast furnace slag is used in road bases and surfaces, asphaltic concrete, ready-mixed concrete, and the balance for other uses. Granulated blast furnace slag is used mainly as cementitious materials. Steel furnace slag sales is used in road bases and surfaces, asphaltic concrete and for fill.

**2.0.5** Recycled aggregates are also imported into one of the North Kent wharves from Rotterdam (Holland).

**2.0.6** Land won aggregates from the UK are brought into Kent and Medway wharves and railheads from Glensanda (Scotland), Belfast (Ireland), Devon, Leicestershire and Wales.

**2.0.7** Land won sand is also imported into one of the wharves on the North Kent coast from Denmark. Much of the crushed rock imported into the North Kent wharves is derived from Norway. Granite is also imported from Calais and northern Ireland. In the past limestone has been imported into one of the north Kent wharves from Morocco.

**2.0.8** Salt was imported into one of the wharves on the north Kent coast during 2010 and another operator reported that they may import salt from Egypt in the future.

**2.0.9** Marine dredged aggregates imported into the Kent and Medway wharves are generally derived from dredging grounds in the Eastern English Channel, Thames Estuary, off the Isle of Wight and Eastern England. The plans in Appendix 1 show the locations of these dredging grounds.

**2.0.10** There are currently four active rail served importation sites in Kent, at East Peckham, Allington, Hothfield and Sevington. Their locations are shown on Figure 1. Washed scalpings from Somerset are imported into two of these sites. Scalpings are the off-cuts or shards created by dressing stone for building work. The term more often refers to crushed rock quarry waste. Type 1 (Crushed rock) from the Mendips (Somerset) is also imported into two of these rail depots. Gritstone from Wales and crushed rock from Leicestershire are also imported by train. Marine Dredged Aggregate is also imported by rail into one of these rail served distribution depots.

### 3 Marine Planning System in Relation to Licensing of Marine Dredged Aggregates

**3.0.1** The following information summarises a part of the British Geological Survey's 2007 document entitled, 'The Strategic Importance of the Marine Aggregate Industry to the UK'.<sup>(8)</sup>

**3.0.2** Two key factors determine where marine dredged aggregates can be worked:

- The presence of a viable aggregate resource; &
- Permission to access the resource.

**3.0.3** There are large resources of sand and gravel on the UK Continental Shelf<sup>(9)</sup> that could be commercially viable to extract. However, the presence of an economically viable aggregate deposit is not, in itself, sufficient to ensure that mineral extraction will take place. In common with mineral extraction onshore, a legal permission is required for marine aggregate extraction (a dredging licence).

**3.0.4** The rights to dredge for marine sand and gravel are principally vested in the Crown, which owns most of the sea-bed out to the 12 mile territorial limit and the right to explore for, and extract, non-energy minerals on the remainder of the UK Continental Shelf. The rights to dredge are managed by the Crown Estate with dredging operators paying royalties to the Crown Estate for every tonne dredged from the licensed areas.

**3.0.5** In the past the Crown Estate has also been the regulator, that is the organisation which issues licenses to dredge. The system for issuing dredging licenses has changed in the last 5 years or so, with the regulator currently being the Government.

**3.0.6** However, the [Marine and Coastal Access Act 2009](#) provides a framework for a new marine licensing system for activities in the marine environment, including, aggregate dredging, offshore wind farms and construction works.

**3.0.7** The Act modernises the marine licensing system. Provisions in the Act plus secondary legislation will enable the UK to deliver a more streamlined, transparent, and effective marine licensing system.

8 British Geological Survey Research Report OR/07/019, The Strategic Importance of the Marine Aggregate Industry to the UK, Keyworth, Nottingham, 2007. Authors DE Highley, L E Etherington, T J Brown, D J Harrison and G O Jenkins.

9 The continental shelf is the extended perimeter of each continent and associated coastal plain, and was part of the continent during the glacial periods, but is undersea during interglacial periods such as the current epoch by relatively shallow seas (known as shelf seas) and gulfs.



**3.0.8** A joint Defra and Welsh Assembly Government booklet [Managing our marine resources – licensing under the Marine and Coastal Access Bill](#)<sup>(10)</sup> explains the changes made to the marine licensing and enforcement systems through the Act.

**3.0.9** The Marine Management Organisation (MMO) is the UK Government's strategic delivery body in the marine area and its centre of marine management expertise. Its role includes contributing to the sustainable development of the marine environment through the preparation of marine plans, furthering the objectives of marine conservation zones as well as the responsible body for regulating most activities and enforcing sea fisheries, nature conservation and licensing regulation. Aggregate dredging will generally be carried out under a Marine Licence when appropriate, except where dredging is authorised by a local Harbour Act or a Harbour Order made under the Harbour Act 1964.

**3.0.10** The new licensing system will start in spring 2011. Until then, existing consenting systems for dredging will continue to operate and existing dredging licenses will continue to be valid until such a time that they need to be renewed.

**3.0.11** In March 1999, the Crown Estate and the British Marine Aggregate Producers Association (BMAPA) issued a statement of intent committing to reviewing all dredging licenses over a rolling 5 year period. Included in this was a commitment to surrender areas no longer containing useful resources of sand and gravel and to publish an annual report detailing the extent of dredging within the licensed areas. The Crown Estate and BMAPA have recently published their 12th Annual report on marine aggregate dredging for 2009, entitled, The Area Involved - 12th Annual Report.<sup>(11)</sup>

**3.0.12** This states that, 'extraction of marine aggregates involves a very small proportion of the UK's continental shelf – typically an area totalling some 140km<sup>2</sup> every year. Yet it provides around a fifth of all the sand and gravel used in Britain and, significantly, over half the amount required in London. The marine aggregate industry is an essential supplier to the construction industry and, through it, helps support the life of the nation.

**3.0.13** Despite the industry's small footprint, BMAPA members recognise that the environment in which they operate is sensitive. They accept the responsibility to manage their operations in ways that minimise any effects on the marine environment and its other users. Furthermore, the industry is extracting a finite natural mineral resource that will not be replenished. There is, therefore, a responsibility upon operators to carefully manage their licence areas to ensure that these valuable resources are able to be used in the most efficient and effective manner possible'.

**3.0.14** **Marine aggregate summary statistics 1998-2009.** The information in the following table is from the bmapa website.<sup>(12)</sup>

10 Managing our Marine Resources - Licensing under the Marine Bill, Department for Environment Food and Rural Affairs and Welsh Assembly Government, November 2008.

11 The Crown Estate and BMAPA, 2010, The Area Involved -12th Annual Report.

12 [www.bmapa.org/issues01\\_.php](http://www.bmapa.org/issues01_.php)

**Table 1 Marine Aggregate Summary Statistics (1998-2009)**

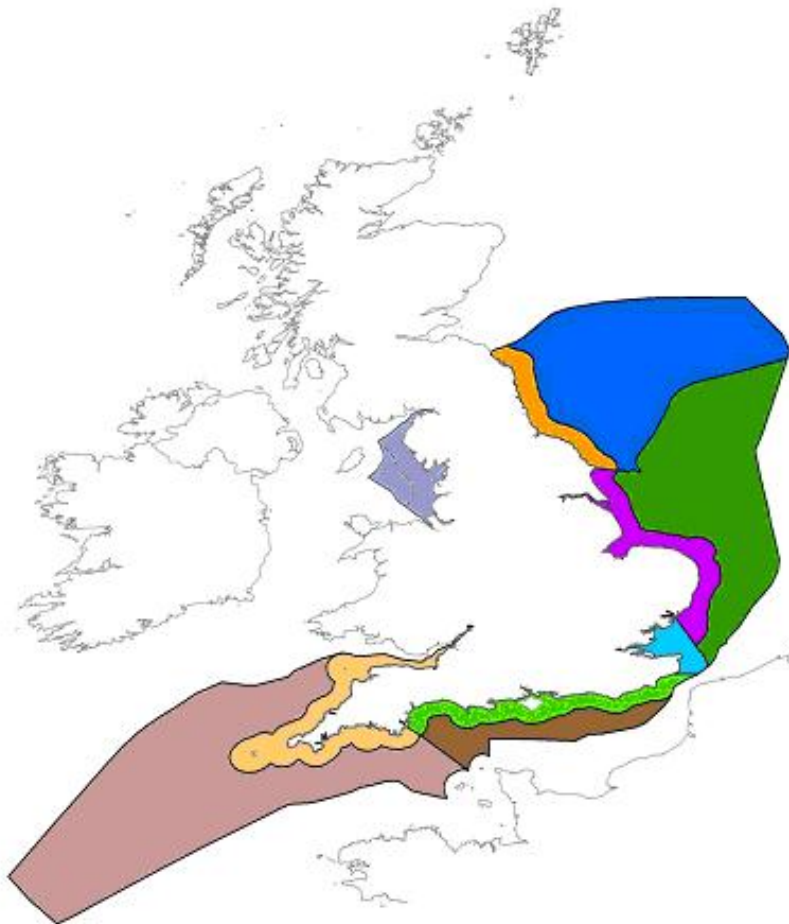
	Area of seabed licensed for dredging (km <sup>2</sup> )	Area available to be worked (km <sup>2</sup> )	Area dredged (km <sup>2</sup> )	Quantity dredged (m tonnes)
1998	1,458		222.6	20.47
1999	1,455		220.3	23.68
2000	1,464		155.4	20.68
2001	1,408	972	150.6	22.76
2002	1,359	896	149.8	21.93
2003	1,264	890	143.8	22.23
2004	1,257	780	134.5	21.45
2005	1,179	596	137.6	21.09
2006	1,316	576	140.6	24.18
2007	1,344	556	135	23.09
2008	1278	570	138	21.24
2009	1,286	536	124	20.10

**3.0.15** The area of seabed off the coast of Britain that has been dredged has been steadily reducing since 1998. The area dredged in 2009 was only 55% of the area dredged in 1998. However, the quantity of marine aggregates which is dredged annually has remained fairly constant at between 20-24 million tonnes per annum (mtpa). This reflects the efforts made by the dredging industry to reduce their environmental impacts on the marine environment.

**3.0.16** Plan 2 attached, which was included in the Defra July 2010 publication entitled, 'Recommended Marine Plan areas for the English Inshore and English Offshore Marine Regions', shows the proposed marine planning areas for the English Inshore and English Offshore Marine Regions.<sup>(13)</sup>

13 Defra July 1010, Recommended Marine Plan Areas for the English Inshore and Offshore Marine Regions.

### Plan 2: Recommended marine plan areas for the English Inshore and English Offshore Marine Regions (Defra, July 2010)



The map shows the following areas: East Offshore, South Offshore, South West Offshore, North East Offshore, North West\*, North East Inshore, East Inshore, South East, South Inshore, and South West Inshore.

\*The North West area is shown as a single area to reflect the recommendation that the inshore and offshore plans are prepared through a single process.

**3.0.17** Marine dredged aggregates from four regions around the eastern and southern coast of Britain are regularly landed at wharves in Kent and Medway. The four regions of major interest to Kent and Medway are the South Coast, the East English Channel, the Thames Estuary and the East Coast. These licence areas are shown in Appendix 1.

**Constraints on Seaborne/MDA supplies**

**3.0.18** The Median Deep dredging ground in the East English Channel region has some licence constraints due to the environmental considerations on the seabed. The area cannot be dredged between November and March due to fish spawning in the area. The licence requires tests to be passed every year for 5 years before an extended licence of 15 years is granted.

**3.0.19** New dredging licenses have environmental conditions attached to them requiring ongoing monitoring and management of the sea bed. There are no other known constraints upon the licensing of marine dredged aggregates within the licensed areas.

## 4 National, Regional and County Trends

**4.0.1** The Communities and Local Government document entitled, 'National and Regional Guidelines for aggregates provision in England 2005-2020' (the Guidelines)<sup>(14)</sup> sets out the revised national and regional guidelines for aggregates provision for the period 2005-2020 inclusive. It also indicates how the guidelines should be taken into account in the planning process, and is a material planning consideration from its date of issue. This 2009 document recommends generally lower levels of provision than the previous set issued in 2003. The drop in guideline figures reflects an overall fall in demand for aggregate and an increase in use of alternatives to primary aggregates, notably construction and demolition wastes. It sets a slightly higher assumption for alternative materials (recycled and secondary aggregates) at 65 million tonnes per annum by 2015.

**4.0.2** The table below gives the National and Regional Guidelines for Aggregates Provision in England, 2005-2020 (million tonnes) (i.e. over a 16 year period).

**Table 2 National and Regional Guidelines for Aggregates Provision in England, 2005-2020**

	Guidelines	Guidelines	Assumptions	Assumptions	Assumptions
Regions	Land-won Sand and Gravel	Land won crushed rock	Marine Sand and Gravel	Alternative Materials	Net Imports to England
South East	195	25	121	130	31
London	18	0	72	95	12
East of England	236	8	14	117	7
East Midlands	174	500	0	110	0
West Midlands	165	82	0	100	23
South West	85	412	12	142	5
North West	52	154	15	117	55

14 CLG, June 2009, National and Regional Guidelines for Aggregates Provision in England 2005-2020.

	Guidelines	Guidelines	Assumptions	Assumptions	Assumptions
Yorkshire and Humber	78	212	5	133	3
North East	24	99	20	50	0
<b>England</b>	<b>1028</b>	<b>1492</b>	<b>259</b>	<b>993</b>	<b>136</b>

**4.0.3** This shows that the South East is expected to be the biggest importer of marine sand and gravel for the duration of the Guidelines (ie up to 2020). London is easily the next biggest region for the importation of marine sand and gravel. The South East of England is also notable for being the second biggest importer of aggregates into England, after the North west at 31mt over the 16 years covered by the Guidelines.

**4.0.4** The trade association, Mineral Products Association (mpa) reported that land-won aggregate sales have dropped across GB between 2008 and 2009, from 187mt in 2008 to 141mt in 2009 (a 24.6% drop).<sup>(15)</sup> At the same time the sale of secondary and recycled materials dropped from 68.5mt in 2008 and 56.5mt in 2009 (a 17.5% drop). In comparison, a total of 20.10 mt of sand and gravel was dredged from Crown Estate licences in England and Wales during 2009 (21.24mt in 2008).<sup>(16)</sup> The drop in sales for marine sand and gravel between 2008-2009 was 5.4% - considerably less dramatic than the fall in sales of land-won and secondary and recycled aggregates over the same timescale.

**4.0.5** The following table shows the landings of marine dredged sand and gravel in the South East Region. This information is taken from Table 7 of the South East England Partnership Board Aggregates Monitoring Report 2008.<sup>(17)</sup>

**Table 3 Landings of Marine-Dredged Sand and Gravel in the South East Region 1999-2008 (thousand tonnes)**

County	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
East Sussex	268	346	430	350	323	302	176	202	217	205
Hampshire	1638	1620	1698	1715	1763	1615	1441	1535	1692	1437
Isle of Wight	188	179	151	130	208	91	118	148	137	100

15 Mineral Products Association 2010 Building on Progress Facing the future Summary Sustainable Development Report 2010.

16 The Crown Estate and Mineral Products Association 2010. The Area Involved - 12th Annual Report Marine Aggregate Dredging 2009.

17 South East England Partnership Board, Dec 2009. Aggregate Monitoring Report 2008.

County	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Kent	1731	1823	1716	1856	1804	1498	1669	1818	2062	1813
Medway	1469	1693	1706	1751	1672	1440	1268	1409	1582	1488
West Sussex	843	743	801	774	747	720	815	768	817	785
<b>Totals</b>	<b>6137</b>	<b>6404</b>	<b>6502</b>	<b>6575</b>	<b>6517</b>	<b>5666</b>	<b>5487</b>	<b>5880</b>	<b>6507</b>	<b>5828</b>

**4.0.6** This shows that Kent has historically been the biggest importer of marine dredged sand and gravel in the South East Region (in 9 out of 10 years). In addition, Medway is now the second biggest importer of marine dredged sand and gravel in the South East Region. Combined, Kent and Medway were responsible for 57% of all of the marine dredged aggregates imported into the South East region in 2008.

**4.0.7** The table below shows Marine Dredged Aggregate imports (by sea) into Kent and Medway in 2009. This data is primarily taken from the Crown Estate Licences Summary of Statistics 2009. <sup>(18)</sup>

**Table 4 Imports of Marine Dredged Aggregates into Kent and Medway (by Sea)**

Site	Operator	Site Code	Crown Estate Region	Tonnes
Ridham Dock	Tarmac	E	Thames Estuary	148778
Johnson's Wharf	Lafarge	F	Thames Estuary	231478
Robin's Wharf	Al	G	*3	
Denton Wharf	Clubb	H	Thames Estuary	256371
Cliffe	Brett	I	Thames Estuary	1115606
East Quay, Whitstable	Brett	J	*3	
Eurowharf (Frindsbury)	Hanson	K	Thames Estuary	286886
Red Lion Wharf	Stema	L	*3	
Isle of Grain	Al	M	*3	
Ramsgate New Port	Brett	N	*2	*2
Robins Wharf	Brett	O	Thames Estuary	*1

18 Crown Estate Marine Aggregates The Crown Estate Licences Summary of Statistics 2009'.

Site	Operator	Site Code	Crown Estate Region	Tonnes
Bevan's Wharf	Lafarge	P	*4	*5
Dunkirk Jetty, Dover	Brett	Q	East English Channel	110,931
Ridham Dock	Brett	R	*3	
Northfleet Wharf	Lafarge	S	*3	
Sheerness	Al	T	Thames Estuary	13464
Botany Marshes	Cemex	U	Thames Estuary	661646 <sup>*1</sup>

#### 4.0.8 Footnotes:

- \*1 Botany Marshes and Robins Wharf (Brett) marine dredged aggregate landings are reported as one figure for 'Northfleet' in the Crown Estates 2009 data charts.
- \*2 Brett started to import processed marine dredged aggregates from another wharf in another region into Ramsgate in 2009. Therefore the Ramsgate landings are counted in a different region and do not appear in the Crown Estate data.
- \*3 The other wharves listed in this chart, but not showing any marine dredged aggregate tonnage, are importing crushed rock from a variety of locations, secondary and recycled aggregates including slag and PFA, as well as some land-won sand from sites in Europe. Some of the wharves also import other minerals including salt and cement in bulk.
- \*4 and \*5 Bevan's wharf has recently been granted Planning Permission subject to resolution of legal agreements. It does not at present import marine dredged aggregates.

**4.0.9** The South East England Partnership Board Aggregate Monitoring Report 2008 <sup>(19)</sup> also gives data on imports of crushed rock by sea in the South East region. That information is tabulated below.

**Table 5 Imports of Crushed Rock By Sea 1999-2008**

County	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
East Sussex	67	164	37	176	176	176	93	93	181	145



County	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Hampshire	193	306	328	436	385	360	360	313	c	c
Isle of Wight	c	c	c	c	c	c	c	N/a	c	c
Kent and Medway	2071	4326	3159	3142	2973	2561	1980	2098	2780	2067
West Sussex	285	365	236	264	223	43	47	N/a	c	c
<b>Totals</b>	<b>2620</b>	<b>5170</b>	<b>3790</b>	<b>4050</b>	<b>3800</b>	<b>3170</b>	<b>2500</b>	<b>2500</b>	<b>3000</b>	<b>2300</b>

#### 4.0.10 Footnotes to Table 5.

- c=confidential, or if identified will release another confidential figure
- Medway is included with Kent, otherwise all data would have to be shown as confidential
- The total figures are rounded to avoid revealing a confidential figure
- Marine dredged sand and gravel is not included in this table.

**4.0.11** Since 1999, wharves in Kent and Medway have consistently been the most important destinations (by quantity) for crushed rock imported into the South East by sea. The proportion of crushed rock imported into the South East region through Kent and Medway wharves has been rising from 79% in 1999 to 89.9% in 2008. However, imports of crushed rock by sea into the region have seen a considerable drop since year 2000 when over 5 million tonnes was imported into the region (83.6% of which was into Kent and Medway) to 2.3mt in 2008 (89.9% of which was into Kent and Medway).

**4.0.12** This data shows the importance of Kent and Medway wharves in providing suitable locations for the landing of crushed rock into the region from abroad. It also shows how the importance of West Sussex wharves have diminished in importance for the importation of crushed rock since 2003. It is thought that this is because access for large vessels with deep water requirements is limited off the West Sussex coast and as the vessels that import crushed rock from Norway get larger and larger, so the usefulness of shallow water or restrictive access wharves diminishes. In comparison with that situation, the deep water wharves of North Kent and Medway provide suitable offloading facilities close to the demand for the aggregates.

**Table 6 Sales of Aggregate at Rail Depots 2003-2008, thousand tonnes**

County	2003	2004	2005	2006	2007	2008	2009
Berks. and Hants.	2095	2299	1762	1737	1935	1369	
Bucks, Milton Keynes and Oxfordshire	996	689	790	791	887	733	
Surrey and West Sussex	594	587	557	557	669	657	
Kent	359	582	575	572	594	581	
<b>Totals</b>	<b>4044</b>	<b>4157</b>	<b>3685</b>	<b>3657</b>	<b>4085</b>	<b>3340</b>	

**4.0.13** Footnotes for Table 6:

- Mineral Planning Authorities were grouped in the table to overcome confidentiality
- 90% of the aggregate received at the rail depots is crushed rock
- The 10% sand and gravel includes small amounts from within the South East

**4.0.14** Whilst the sales of aggregates at rail-depots in Kent has been at a fairly steady level of just over half a million tonnes per annum since 2004, the proportion of rail depot sales from Kent has increased from 8.9% in 2003 to 17.3% in 2008. The rail depots in Kent are situated near Ashford and Maidstone, i.e. away from sources of imported marine dredged aggregates or crushed rock imported by sea. It is considered that this proportional increase in sales from rail depots in Kent is due to alternative supplies of sharp sand and gravel from land won supplies in central and mid Kent running out together with increased transport costs for aggregates from alternative sources e.g. Dungeness or the North Kent wharves, meaning that rail imports are more competitive due to their economies of scale.

**4.0.15** The 2006 import study classified sites as Small (up to 0.1mtpa), Medium (0.1-0.35mtpa), Large (0.35-0.75mtpa) and Major (over 0.75mtpa). The classification was based on capacity of site as developed, not on average throughput. Table 7 below gives the site classification (using the same criteria) for both 2006 and 2010.

**Table 7 Comparison of Kent and Medway Aggregate Import Facilities 2006 & 2010**

Site	Operator	Site Code	Site Size 2006 Survey	Site Size 2010 Survey	Change between 2006 and 2010
Allington Rail Sidings	Hanson	A	Large	Major	Increase
Sevington Rail Depot	Brett	B	Small	Medium	Increase
Hothfield Works	Tarmac	C	Medium	Medium	
East Peckham	Clubb	D	Not recorded	Medium	Additional Site (operational)
Ridham Dock	Tarmac	E	Medium	Large	Increase
Johnson's Wharf	Lafarge	F	Medium	Large	Increase
Robins Wharf Northfleet	Al	G	Medium	Medium	
Denton Wharf	Clubb	H	Large	Major	Increase
Cliffe	Brett	I	Major	Major	
East Quay Whitstable	Brett	J	Medium	Medium	
Eurowharf Frindsbury	Hanson	K	Large	Major	Increase
Red Lion Wharf	Stema	L	Large	Major	Increase
Isle of Grain	Al	M	Major	Major	
Ramsgate New Port	Brett	N	Small	Small	
Robins Wharf Northfleet	Brett	O	Medium	Large	Increase
Bevans Wharf	Lafarge	P		Large	New site (not operational)
Dunkirk Jetty Dover	Brett	Q	Medium	Medium	

Site	Operator	Site Code	Site Size 2006 Survey	Site Size 2010 Survey	Change between 2006 and 2010
Ridham Dock	Brett	R	Medium	Medium	
Northfleet Wharf	Lafarge	S		Major (?)	Used for import of cement at time of survey
Sheerness	Al	T		Small	
Botany Marshes	Cemex	U	Large	Major	Increase

**4.0.16** Several of the site operators reported major expenditure in relation to their site infrastructure since the 2006 survey, including major investment in new processing plant, weighbridges, site offices, conveyor systems and 'value added' facilities at the wharves and railheads including concrete and bagging plants. In addition some of the site operators reported the possibility of increasing capacity at their sites when the economic climate improves by running double shift systems or the possibility of increasing the capacity of their storage areas.

**4.0.17** Between the 2006 survey and the current set of site visits in 2010, it is apparent that at nine of the sites, operators have reported an increase in productive capacity at their facilities. In addition the railhead at East Peckham was not reported upon in 2006, but is now operational. The Lafarge sites at Northfleet Wharf (used for cement importation) and the newly consented (but not yet operational) facility at Bevan's Wharf are included in the table for 2010.

**4.0.18** The wharves which have the greatest capacity are those reported in the table as 'Major', situated on the deep water part of the north Kent and Medway coast, i.e. Isle of Grain, Cliffe, Eurowharf, Lafarge's cement terminal at Northfleet and Red Lion Wharf.

**4.0.19** It would be both difficult and contravene site operator confidentiality requirements to give an accurate estimate of annual capacity at each site. It is however realistic to state that the existing handling capacity at the Kent and Medway wharves and railheads is far greater than the operational throughputs in recent years during the recession.

## 5 Current Situation - Existing Railheads and Wharves in Kent

5.0.1 The table below shows the current importation sites in Kent and Medway classified according to whether they import marine dredged aggregates, crushed rock or secondary/recycled aggregates and/or other minerals (imports by road are not included).

**Table 8 Current Importation Sites in Kent and Medway**

Site Name	Operator	Site Code	Marine Dredged Aggregates	Crushed Rock	Other Land-won Aggregates	Secondary/ Recycled	Other Minerals
Allington	Hanson	A		◆			
Sevington Rail Depot	Brett	B		◆			
Hothfield Works	Tarmac	C		◆		◆	
East Peckham	Clubb	D		◆			
Ridham Dock	Tarmac	E	◆	◆			
Johnsons Wharf	Lafarge	F	◆				
Robins Wharf Northfleet	AI	G		◆			
Denton Wharf	Clubb	H	◆			◆	
Cliffe	Brett	I	◆				
East Quay Whitstable	Brett	J		◆		◆	
Eurowharf Frindsbury	Hanson	K	◆	◆			◆
Red Lion Wharf	Stema	L		◆	◆	◆	
Isle of Grain	AI	M		◆			
Ramsgate New Port	Brett	N	◆	◆		◆	
Robins Wharf Northfleet	Brett	O	◆				
Bevans Wharf	Lafarge	P					

Site Name	Operator	Site Code	Marine Dredged Aggregates	Crushed Rock	Other Land-won Aggregates	Secondary/ Recycled	Other Minerals
Dunkirk Jetty Dover	Brett	Q	◆				
Ridham Dock	Brett	R		◆		◆	
Northfleet Wharf	Lafarge	S					◆
Sheerness	Al	T	◆	◆			◆
Botany Marshes	Cemex	U	◆				

**5.0.2** Only one of the active wharves is connected to an operational railhead. That is Cliffe. However, Lafarge have recently been granted planning permission for a rail connected aggregate importation facility at Bevan's Wharf, Northfleet, subject to Section 106 legal agreements. Ridham Dock has existing rail facilities which have potential for future use by one of the operators with facilities based there.

**5.0.3** At least two of the wharves have the infrastructure and capability to process marine dredged aggregates and then to re-load the processed aggregates into smaller barges or boats for trans-shipment by water along the Thames into London and south Essex/Thurrock. This type of sustainable trans-shipment also takes place for crushed rock from at least one of the north Kent wharves.

**5.0.4** The table below shows Marine Dredged Aggregate landings at Kent and Medway wharves in 2009. The Crown Estate releases this data on its website and so its inclusion here is not contravening operator confidentiality requirements.

**Table 9 Marine Dredged Aggregates landed at Kent and Medway Wharves 2009**

Site	Operator	Site Code	CE Region	Tonnes
Ridham Dock, Tarmac	Tarmac	E	Thames E	148,778
Johnson's Wharf	Lafarge	F	Thames E	231,478
Denton Wharf	Clubb	H	Thames E	256,372
Cliffe	Brett	I	Thames E	1,115,606
Eurowharf	Hanson	K	Thames E	286,886
Ramsgate New Port	Brett	N		Confidential

Site	Operator	Site Code	CE Region	Tonnes
Robin's Wharf, Brett	Brett	O	Thames E	Included in Botany Marshes figure below
Dunkirk Jetty, Dover	Brett	Q	East English C	110,931
Sheerness, AI	Aggregate Industries	T	Thames E	13,464
Botany Marshes	Cemex	U	Thames E	*661,646
			<b>Total (approx)</b>	<b>2.9 million tonnes</b>

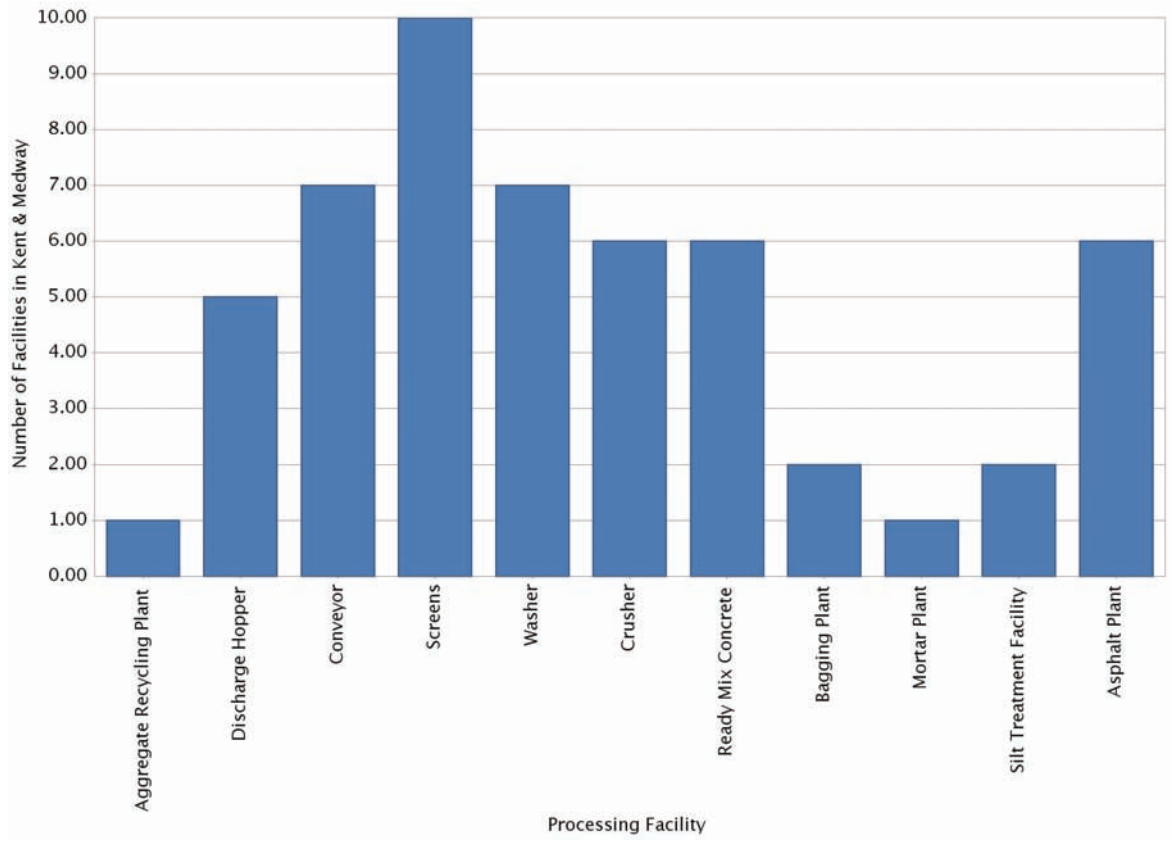
Source: *Marine Aggregates The Crown Estate Licences Summary of Statistics (2009)*.

\* The 661,646 tonnes reported for 'Northfleet' is for both the Cemex site at Botany Wharf, Swanscombe, Northfleet, and the Brett site at Robins Wharf, Northfleet. The Brett site at Ramsgate is a new facility and due to the nature of the marine dredged material imported (ie landed and processed elsewhere prior to trans-shipment to Ramsgate), it does not show in the Crown Estate data.

**5.0.5** One of the important facts to consider when reviewing this range of sites is how different each site is. Each operator has developed their sites to meet the demands that are placed upon them by its customers - each site is unique. This is also evident when one considers the range of processing plant and 'value added' processes at these sites. This is evident from the graph below.

5 Current Situation - Existing Railheads and Wharves in Kent

Processing Facilities at Kent & Medway's Import Sites





## 6 Consideration of Supply and Demand

**6.0.1** In view of the economic situation that has been experienced since 2008, not surprisingly all of the operators reported operational capacity at their sites which exceeds current levels of throughput. This surplus capacity means that the operators will be able to meet increased demands for their mineral products when economic situations improve.

**6.0.2** Several of the operators reported a need for heavier reliance upon railheads and wharves in the future, due to the decline in available land-won construction aggregates resources in Kent and Medway and in the south-east region as a whole.

**6.0.3** Some of the sites have recently invested heavily in new plant and 'value added' facilities such as bagging plants and concrete plants. Also some of the operators reported a heavy financial investment in securing long term dredging grounds and tying up commercial deals with dredger and cargo ship/barge operators, so that they have flexibility in their ability to respond to improving market conditions in the future.

**6.0.4** Whilst the current recession is continuing to affect the operators of these importation facilities, they are not as badly affected by the drop in demand as land-won mineral operations which appear to be bearing the biggest drop in production levels compared to the demand for marine dredged aggregates and imported minerals.

**6.0.5** It must however be borne in mind that the Kent M&WDF and the Medway LDF have timelines of around 20 years, and the Development Framework Documents (DPDs) must ensure compliance with national minerals policy in MPS1 on the subjects of mineral supply and safeguarding of importation facilities. It is essential that there is an adequate and steady supply of material to provide the infrastructure, buildings and goods that society, industry and the economy needs, but this provision has to be made with the principles of sustainable development. It also requires Mineral Planning Authorities (MPAs) to 'promote the sustainable transport of minerals by rail, sea or inland waterways'.

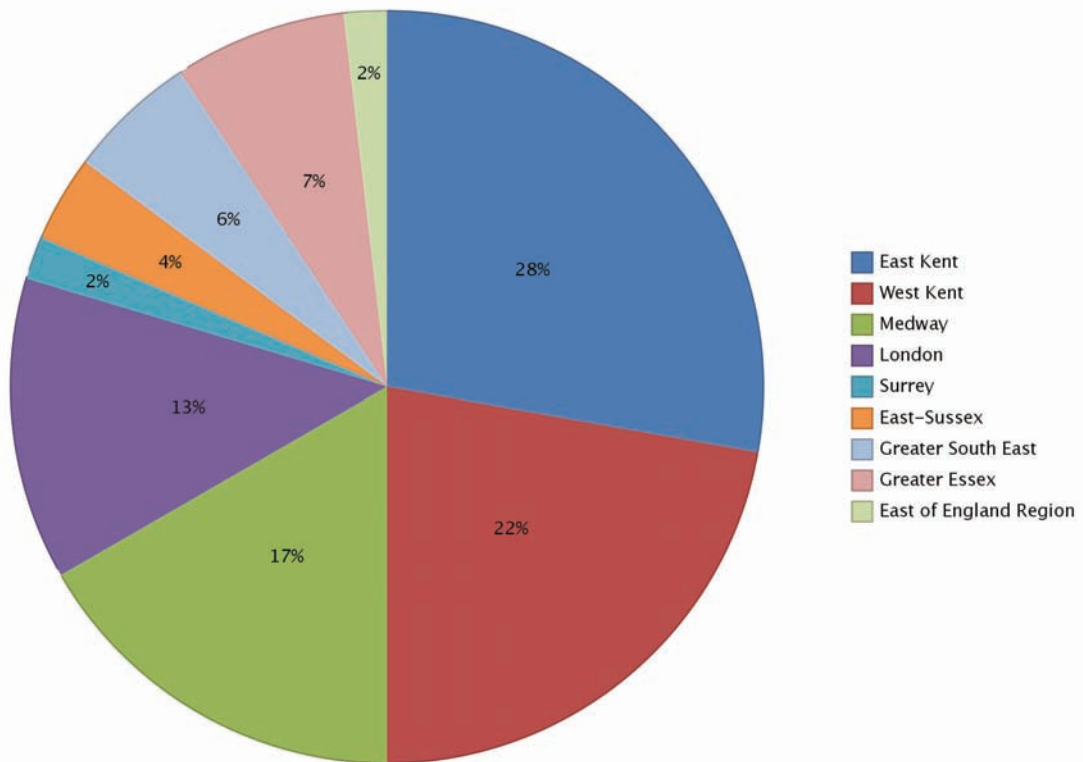
**6.0.6** The safeguarding of these mineral importation facilities will be discussed in Section 11.

**6.0.7** In any 20 year period the economy will fluctuate and historically demand for land won aggregates has been cyclical, with peaks and troughs in demand correlating to times of peak economic growth and recessions.

**6.0.8** Minerals and construction aggregates in particular are normally only dredged or excavated from land-won sites as and when demands arise. Stockpiles of materials on wharves and at railheads are generally a very small proportion of the annual site production levels.

**6.0.9** Whilst the destinations of the minerals imported into Kent and Medway wharves and railheads cannot be reported on a site by site basis for confidentiality reasons, the following pie chart shows the destinations of the minerals imported into Kent and Medway wharves and railheads based upon the number of sites exporting to each region.

**Destination of Minerals Imported by Dredger, Ship & Rail into Kent and Medway**



**6.0.10** In view of the relatively high cost of onward transportation of bulk minerals, not surprisingly, the destinations with the largest percentage shares are East Kent, West Kent and Medway. However, London is the destination of only 13% of all of the minerals imported into Kent and Medway. Surrey, East Sussex, the East of England and the Greater South East are all relatively less important in terms of the percentage of materials which is transported to final destinations from Kent and Medway wharves.

## 7 Implications of Planned Level of Development and Major Infrastructure

**7.0.1** The main clusters of import facilities in Kent and Medway serve the two Growth Areas: Ashford and The Thames Gateway. The location of the North Kent facilities within close proximity to London and the M25 means that material from these facilities can be moved economically to destinations outside Kent.

### Thames Gateway

**7.0.2** The Kent Thames Gateway consists of three areas; Kent Thameside, Medway and Swale. All three areas are heavily served by mineral import wharves.

**7.0.3** In total there are 49,000 new homes, 85,000 new jobs and over 6 million sq ft of commercial space planned for the area over the next twenty years. The Kent districts of Dartford, Gravesham and Swale are within the Thames gateway and are required to build 36,440 new additional dwellings by 2026. This large level of development and regeneration will be supported by improvements to existing and new transport infrastructure including a new Northern Relief Road in Swale and expansion of the Fastrack Scheme.

**7.0.4** The overall regeneration and development of the Kent Thames Gateway area will see a lot of new build and restorative build of residential, commercial and transport developments. All of this will require building materials such as aggregates and cement for building, plus asphalt for new roads and road improvements. These materials are in great supply through the import facilities within the Thames Gateway and will be a huge resource to the area during this development.

### Ashford

**7.0.5** Ashford is served by many of the active and proposed rail depot import facilities. Also designated a Growth Area, Ashford is intended to provide 22,700 new homes by 2026. In addition there are many transport improvements, particularly to the road network to support the additional developments including improvements to Junction 9 of the M20.

**7.0.6** The area will require high levels of building materials and asphalt for road improvements. These vital materials can and will be provided by the existing rail depot import facilities in the Ashford area.

### London and South East

**7.0.7** Connections to London and the South East via rail, river and road have built Kent and Medway as a valuable resource for the use of imported mineral in London and the South East.

**7.0.8** Some wharves located in Kent and Medway have been used during the Olympic builds and will continue until the completion of the project. Large scale regeneration projects exist across London, including the Thames Gateway London areas. Other major schemes include the Crossrail project which will be served by rail connected wharves in Kent and Medway.

#### Transport

**7.0.9** Large scale plans for transport infrastructure over the next twenty years are set out in Kent County Council's "Growth without Gridlock" transport delivery plan. Projects such as the Lower Thames Crossing, improvements to the M2/A2 and M20/A20 connections from Dover and improvements to the A21 will all require building and road materials. Support through the imports industry will be a great advantage to the infrastructure plan.

## 8 Potential New Importation Sites

**8.0.1** Consideration of potential new sites must consider both the following types of sites:-

- sites that have fallen out of use in the recent past: &
- any new importation facilities that have been identified by operators or others.

**8.0.2** First, the sites that were considered in either the 1993 Minerals Local Plan (MLP) for Construction Aggregates <sup>(20)</sup> or the 2006 Kent Aggregate import report, that are no longer in use (or have not been brought into use) include the two wharves, Port Richborough and Folkestone Harbour. Port Richborough was used for the importation of marine dredged aggregates by Brett until around the mid 1980s. Due to various factors as follows, the site was not economic to operate:-

- Its location some distance inland along the tidal river Great Stour, meant that it could only be used by small dredgers;
- It could only be accessed at high tide;
- The limited size of the site restricting the storage capacities available; &
- At that time the poor road access into and out of the site for lorries.

**8.0.3** There have been no operator interests to re-open it in response to the Kent Minerals and Waste Development Framework 'Call for Sites'.

**8.0.4** Similarly Folkestone Harbour has been operated as an aggregate depot at times in the past. However it has never been a major contributor to mineral imports in Kent, having been replaced by a better facility at Dover (Dunkirk Jetty). It is understood that it is likely to become totally unavailable for use as an aggregate import facility due to the redevelopment of Folkestone Harbour.

**8.0.5** Halling Wharf is currently operating as a block making and onward transportation facility. There is planning permission for the reprocessing of mineral/inert waste and the development of a recycled aggregate and top soil production facility. This would also incorporate a primary aggregate, recycled aggregate and top soil depot. However it does not at present import minerals in any significant quantity.

**8.0.6** Railheads that were mentioned in either the 1993 Minerals Local Plan Construction Aggregates <sup>(21)</sup> or the 2006 Aggregate Imports report were as follows:-

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20 Kent County Council, Kent Minerals Local Plan Construction Aggregates Written Statement Adopted December 1993.

21 Kent Minerals Local Plan Construction Aggregates Written Statement Adopted December 1993

- Conningbrook (Ashford);
- Shelford (Canterbury);
- Hersden (East side of Canterbury); &
- North Farm, Tunbridge Wells.

**8.0.7** Both Conningbrook (Ashford) and Shelford (Canterbury) were the subject of planning permissions to develop railheads in the 1980s, but neither facility was built. Conningbrook Quarry, where the railhead was proposed, is now the location of the Julie Rose sports stadium and is identified in the Ashford Core Strategy and Sites DPD as a location for water sports. The operator has confirmed that it is happy to give up the planning permission for the railhead at Conningbrook, allowing the development of the entire site for water based leisure uses and associated enabling development, subject to implementation of the relevant permanent planning permissions at Sevington railhead for both an increase in importation of minerals and waste uses.

**8.0.8** Hersden and North Farm, Tunbridge Wells have not been the subject of planning applications since the publication of the 1993 Kent MLP. None of the railhead sites have been the subject of submissions to Kent County Council in response to the 'call for sites'.

**8.0.9** A report entitled, 'Aggregate Wharves and Rail Depots in South East England - Final Report' prepared for the South East England Regional Assembly (SEERA) by MDS Transmodal Limited, dated February 2009 <sup>(22)</sup> identified a potential railhead site at Hoo Junction Up and Down Sidings. However this site has not been the subject of any operator interest in respect of the 'Call for Sites' and one operator has confirmed verbally that it is unlikely to be of interest because of its location, where it would be served by the same markets as the established wharves on the North Kent and Medway coast.

**8.0.10** In summary, there have not been any sites identified by landowners or operators as new potential wharves or railheads in Kent and Medway. The sites identified in the 1993 MLP and 2006 Aggregate Import Study, i.e Port Richborough, Folkestone, Hersden, Conningbrook, Shelford and North Farm, Tunbridge Wells have either been taken out of use for economic reasons or were not ever developed. Similarly the operators at Halling have indicated that they have no intention to bring this wharf back into operation.

**8.0.11** It is therefore very unlikely that any new mineral importation wharves or railheads will be identified in the Kent M&WDF or in the Medway LDF.

22 'Aggregate Wharves and Rail Depots in South East England - Final Report' prepared for South East England Regional Assembly (SEERA), MDS Transmodal Limited, dated February 2009

**8.0.12** These details reinforce the importance of safeguarding the existing importation sites for the long term supply of essential minerals into Kent and Medway.

## 9 Safeguarding Issues

**9.0.1** In view of the lack of new importation sites being identified by landowners and operators, as well as the extremely high capital cost of developing a new railhead or wharf combined with the potential threats to some of these facilities from redevelopment or regeneration projects, it is essential that as MPAs, Kent and Medway identify and safeguard the existing mineral importation infrastructure.

**9.0.2** Minerals Policy Statement 1 Planning and Minerals, Nov 2006 <sup>2</sup> requires the safeguarding of existing, planned and potential railheads, wharfage and associated storage, handling and processing facilities for the bulk transport by rail, sea or inland waterways of minerals particularly coal or aggregates, including recycled, secondary and marine dredged aggregates. It also requires the identification of future sites to accommodate the above facilities and these allocations must be reflected in the Local Development Documents (LDDs) of district councils in two -tier planning authorities. District councils should not normally permit other development proposals near such safeguarded sites where they may constrain future use for these purposes.

**9.0.3** Planning and Minerals Practice Guide<sup>3</sup> states that, 'The transport of minerals, particularly aggregates, cement materials and coal often requires storage and handling facilities. Safeguarding existing facilities, identifying future sites, including wharves, ports and depots, and establishing suitable transport links for bulk materials can be important to promote movement of material by rail, inland waterway and by sea, and thereby contribute to sustainable development. This will be particularly so in London and other metropolitan areas that rely heavily on the importation of significant quantities of aggregate materials. ...MPAs will also need to take into account the possibility that future uses of such sites may be constrained if sensitive developments such as housing are permitted nearby. Therefore the safeguarding of such areas needs to be considered within the wider framework of spatial planning for the surroundings.'

**9.0.4** It is therefore clear that national minerals policy requires both Kent and Medway as MPAs, to identify and safeguard existing and potential future wharves and railheads. This is not negotiable. Once lost to alternative development these facilities are unlikely to ever be brought back into productive uses again. Housing and other types of development can be situated in a variety of locations whereas mineral wharves and railheads can only be situated in locations which are suitable for the dredgers/cargo vessels involved. In view of the trend towards deeper dredging grounds further away from the wharves in which the aggregates are landed, utilising bigger dredgers and vessels for the trans-shipment of crushed rock, it is some of the deep water wharves of north Kent and Medway, closest to the markets of Thames Gateway which are numerically the most important wharves and also the most threatened at the time of writing.

**9.0.5** However, it must be borne in mind that safeguarding does not rely on hierarchies of importance - all existing facilities are equally important as far as their identification and safeguarding for mineral use. The smaller wharves and railheads



serve local markets in a very sustainable way, reducing the need to rely on long distance transport of minerals by road. All existing mineral importation facilities therefore need to be safeguarded to comply with national policy.

**9.0.6** Therefore it is essential that the Kent M&WDF and the Medway LDF identify and safeguard the existing wharves and railheads, taking into account the need to safeguard these facilities in a way which establishes buffer zones around them wherever practicable. Such buffer zones minimise the risk of sensitive development such as housing being built in close proximity to these facilities.

## 10 Conclusions

**10.0.1** Kent and Medway are unique in terms of the range and variety of mineral importation wharves and railheads that are established around the coast and inland. These wharves and railheads are essential for ensuring an adequate and steady supply of material to provide the infrastructure, buildings and goods that society, industry and the economy needs. Provision of minerals via Kent and Medway's wharves and railheads is totally in accordance with the principles of sustainable development.

**10.0.2** Imports of marine dredged aggregates and crushed rock into Kent and Medway's wharves make a significant contribution towards meeting a strategic local, regional and wider need for construction aggregates, supplying Kent and Medway, London and parts of East Anglia and the South east of England. Landings of marine dredged sand and gravel into Kent and Medway wharves now account for 55% of all marine dredged sand and gravel landed in the South East of England (which excludes London).

**10.0.3** In 2007 and 2008 the percentage of total imports of crushed rock brought into the South East region, which was landed at Kent and Medway wharves increased to 90% of the region's total (2.7mt in 2007 and 2.1mt in 2008).

**10.0.4** Wharves in Kent and Medway also import secondary and recycled aggregates, other land won construction aggregates from Europe as well as other minerals including cement and salt.

**10.0.5** The four railheads in the middle of the County at Allington (near Maidstone), East Peckham (west of Maidstone), Sevington (Ashford) and Hothfield (near Ashford) imported around half a million tonnes of construction aggregates by rail in 2007 and 2008, mainly from the west of England. These sites are likely to continue to supply the central parts of Kent in the future.

**10.0.6** The wharf operators have recognised the strategic importance of Kent and Medway's mineral wharves and have undergone considerable amount of investment in aggregate processing infrastructure and 'value added' facilities including bagging and concrete plants.

**10.0.7** It is acknowledged that as land-won resources of construction aggregates are depleted, so the importance of the steady supply of both marine dredged aggregates from the dredging grounds around the coast and crushed rock from Europe will get more important in the future.

**10.0.8** Whilst all wharves and railheads are currently operating at production levels well below their existing capacities, their operational companies acknowledge the importance of these sites to be able to meet increased demands when the economy picks up in the future.

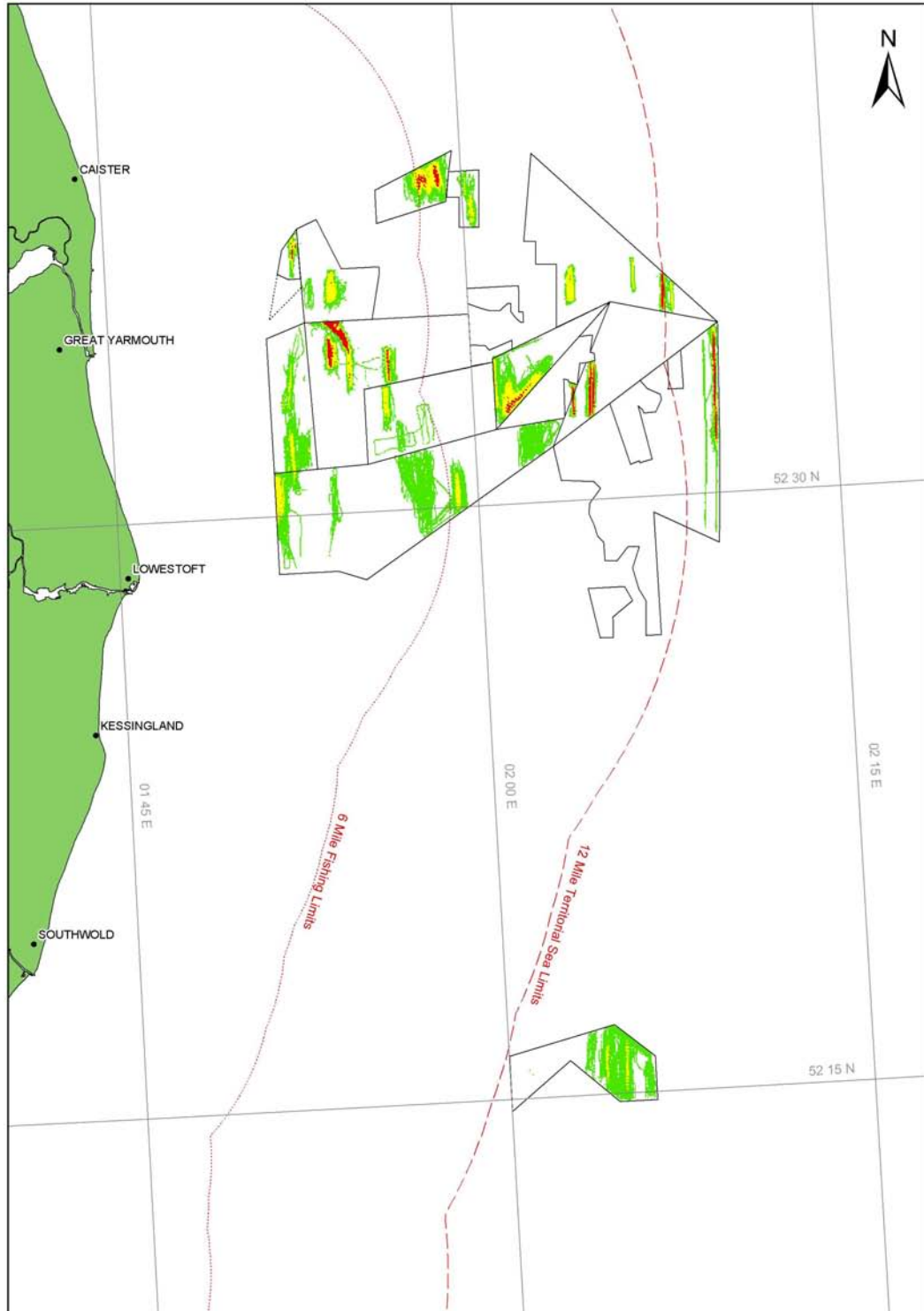
**10.0.9** No new wharves or railheads have been brought forward for consideration in either Kent's M&WDF or Medway's LDF 'Call for Sites'. Therefore, in accordance with national minerals policy in MPS1 it is essential that both MPAs identify and safeguard the existing facilities. This report is the first stage in identifying and establishing the boundaries of these sites.

**10.0.10** In establishing the safeguarding criteria of the existing importation facilities, it is important to give consideration to 'buffer zones' to minimise the risk of any incompatible developments such as housing being built within close proximity of the safeguarded facility.

Appendix A: Dredging Licence Areas From Which Aggregate is Imported into Kent and Medway Wharves

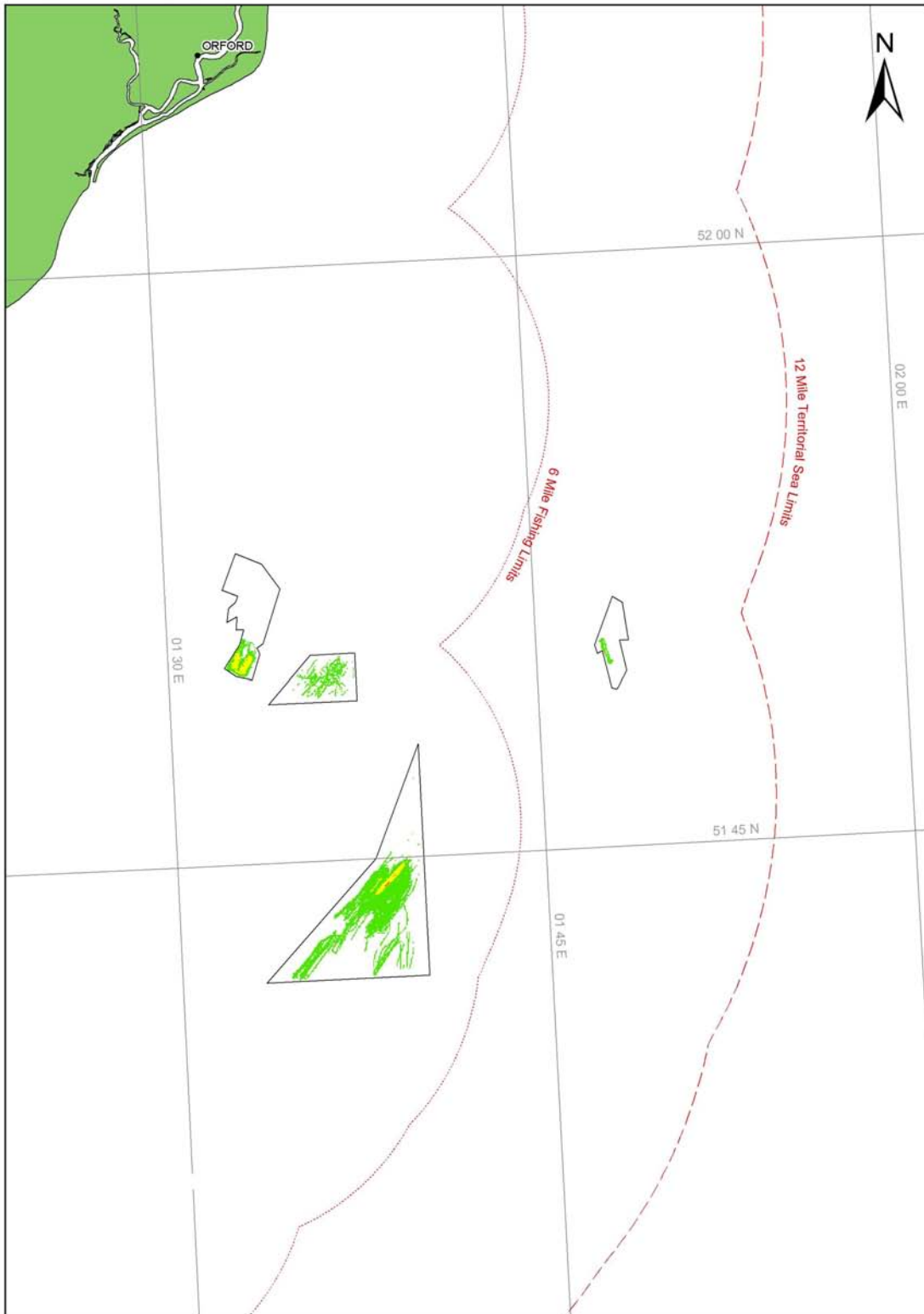
# Appendix A: Dredging Licence Areas From Which Aggregate is Imported into Kent and Medway Wharves

## East Coast Region



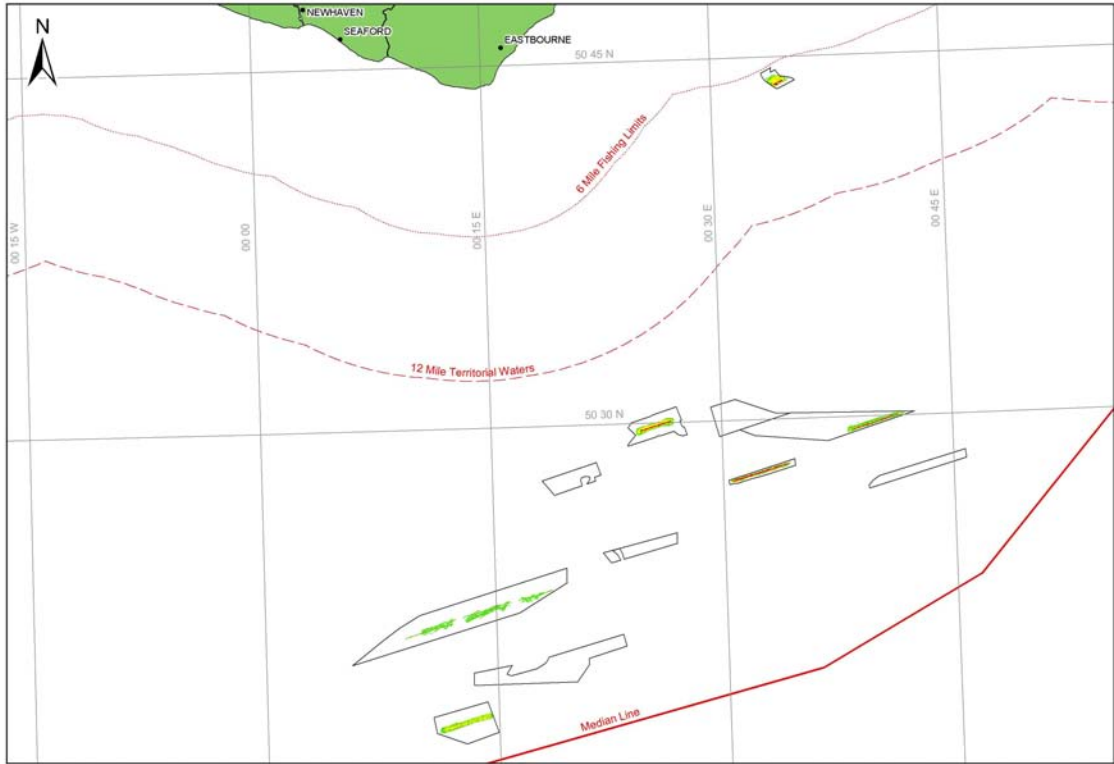
**Appendix A: Dredging Licence Areas From Which Aggregate is Imported into Kent and Medway Wharves**

**Thames Estuary Region**

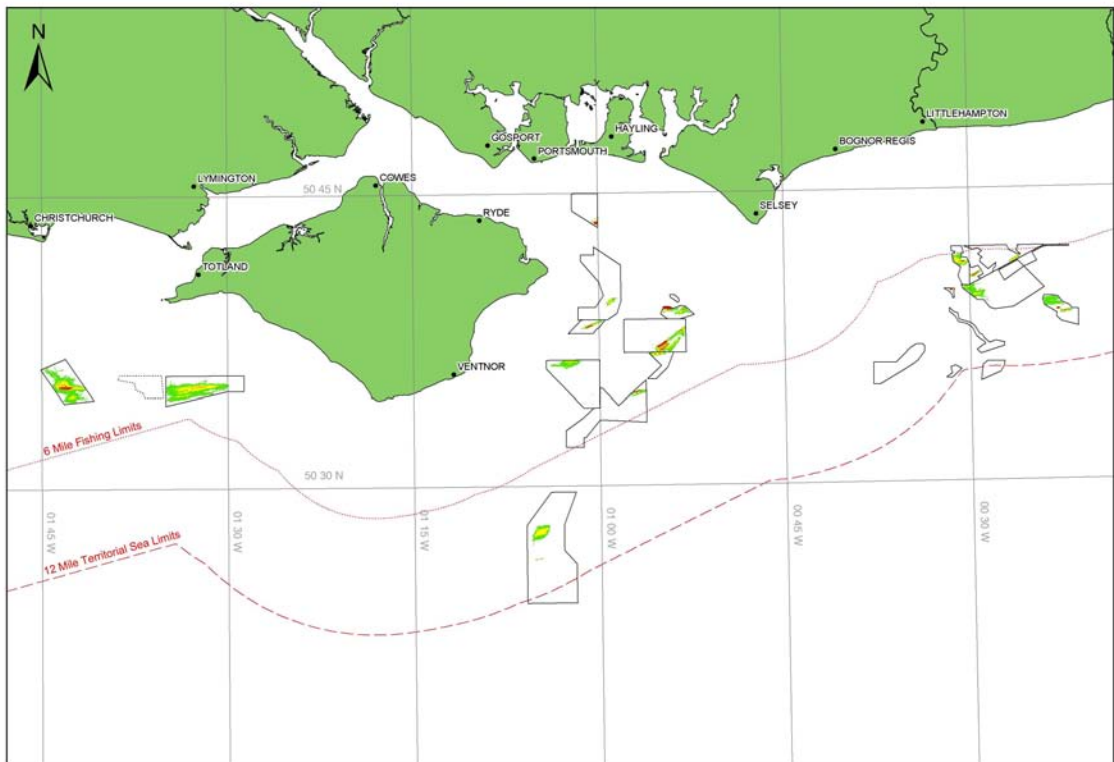


Appendix A: Dredging Licence Areas From Which Aggregate is Imported into Kent and Medway Wharves

East English Channel Region



South Coast Region

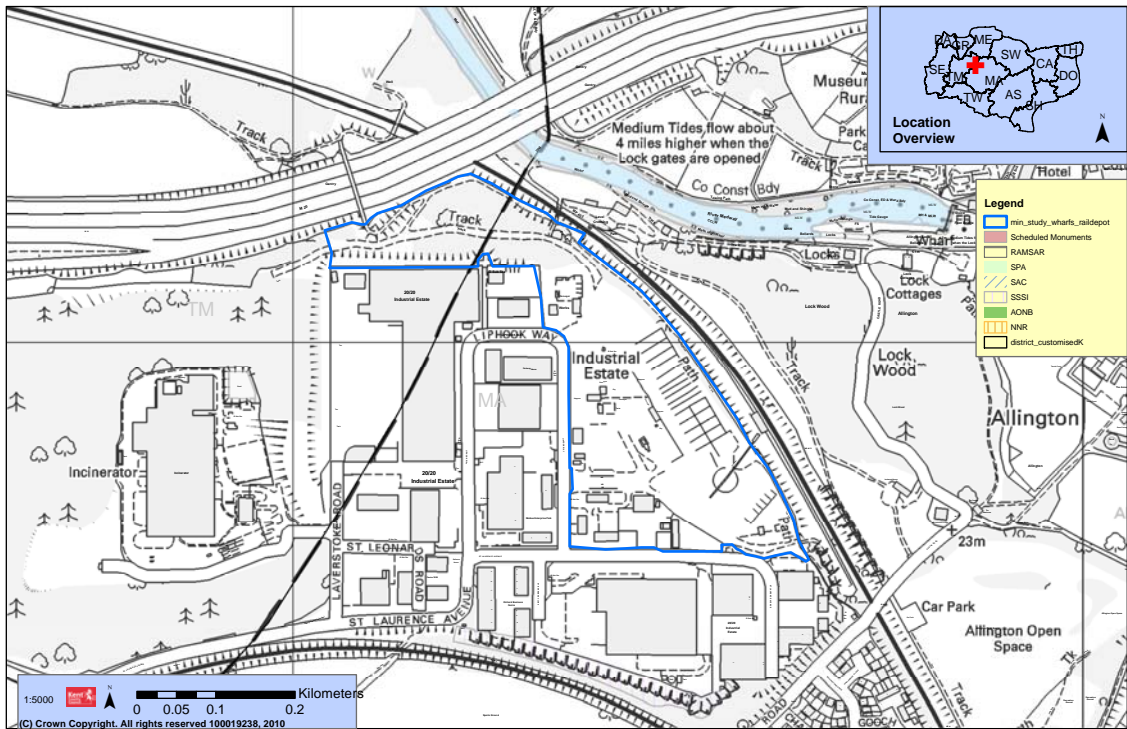


## Appendix B: Kent and Medway Active Importation Sites - Plans and Summary details

- **Sites in Kent and Medway 2010**

**Table 10**

Site Name	Operator	Site Code
Allington	Hanson	A
Sevington Rail Depot	Brett	B
Hothfield Works	Tarmac	C
East Peckham	Clubb	D
Ridham Dock	Tarmac	E
Johnsons Wharf	Lafarge	F
Robins Wharf Northfleet	Al	G
Denton Wharf	Clubb	H
Cliffe	Brett	I
East Quay Whitstable	Brett	J
Eurowharf Frindsbury	Hanson	K
Red Lion Wharf	Stema	L
Isle of Grain	Al	M
Ramsgate New Port	Brett	N
Robins Wharf Northfleet	Brett	O
Bevans Wharf	Lafarge	P
Dunkirk Jetty Dover	Brett	Q
Ridham Dock	Brett	R
Northfleet Wharf	Lafarge	S
Sheerness	Al	T
Botany Marshes	Cemex	U
Halling	Cemex	

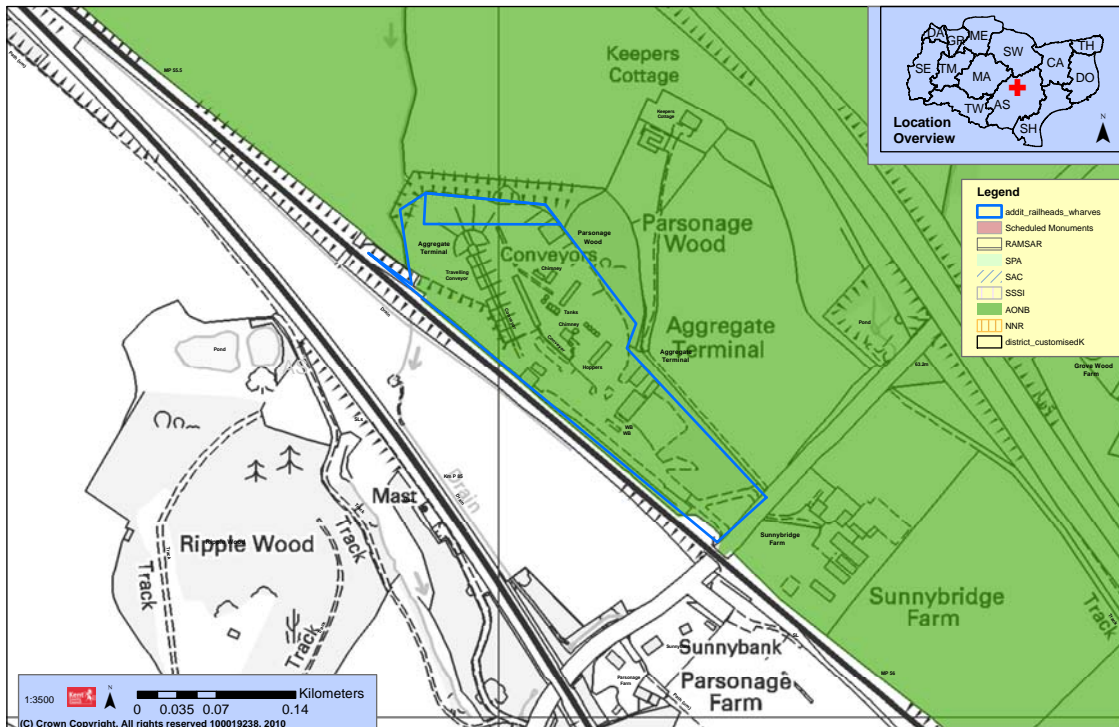


Allington

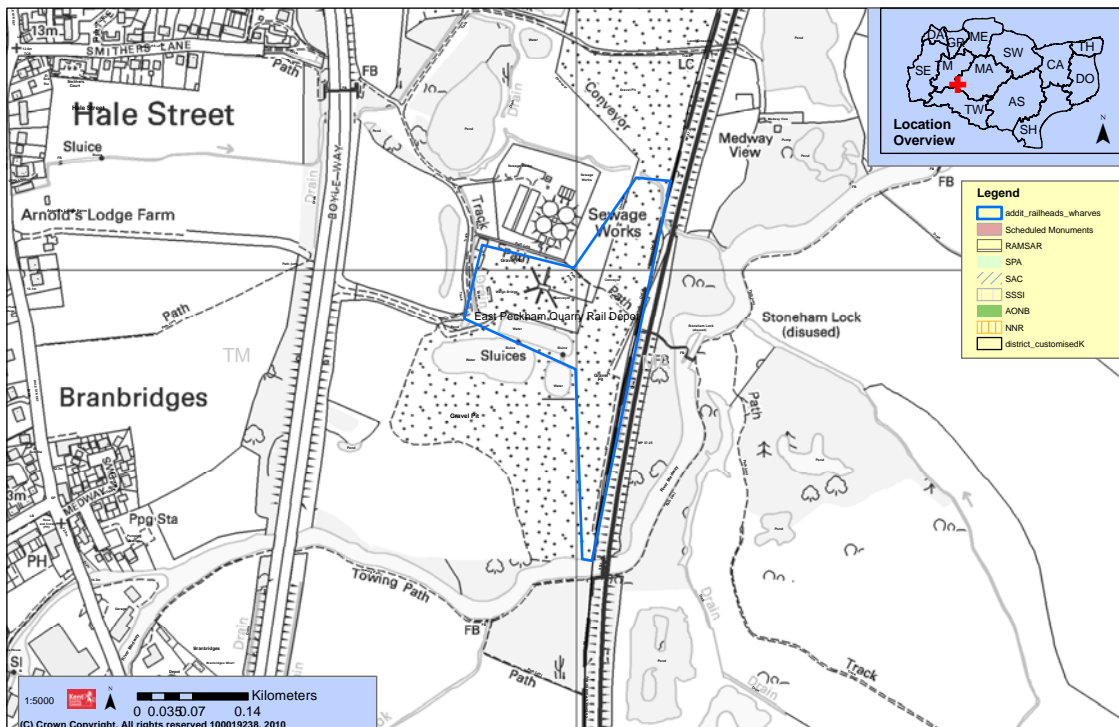


Sevington

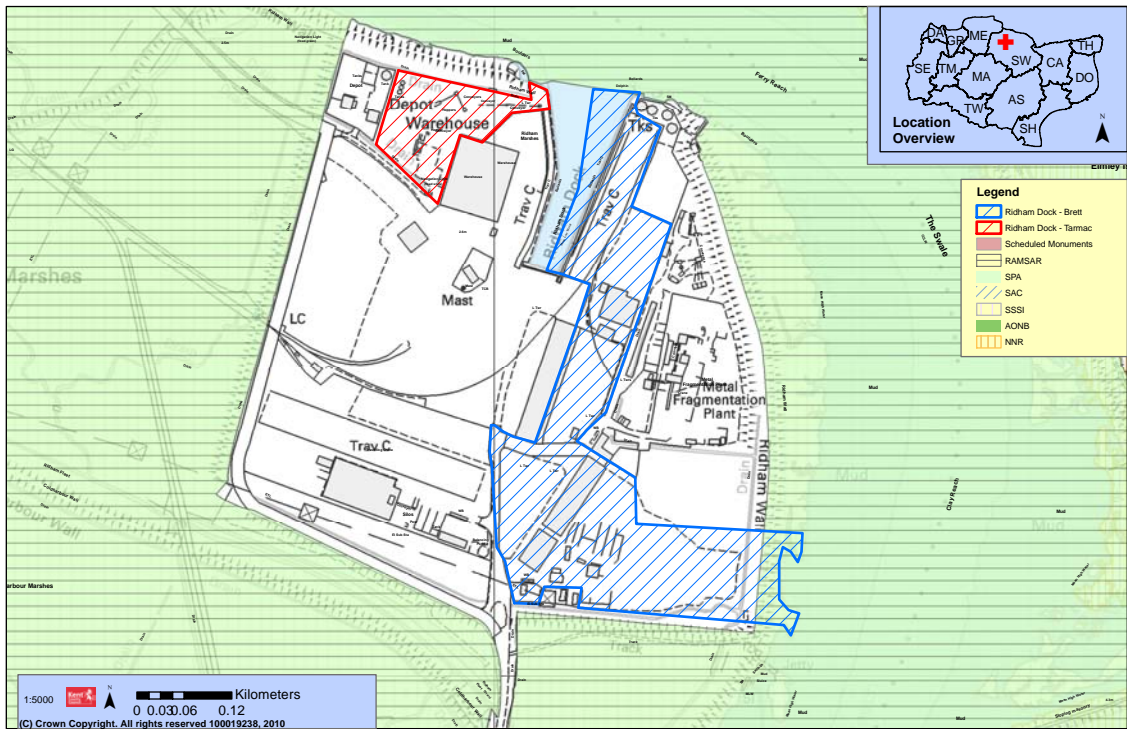




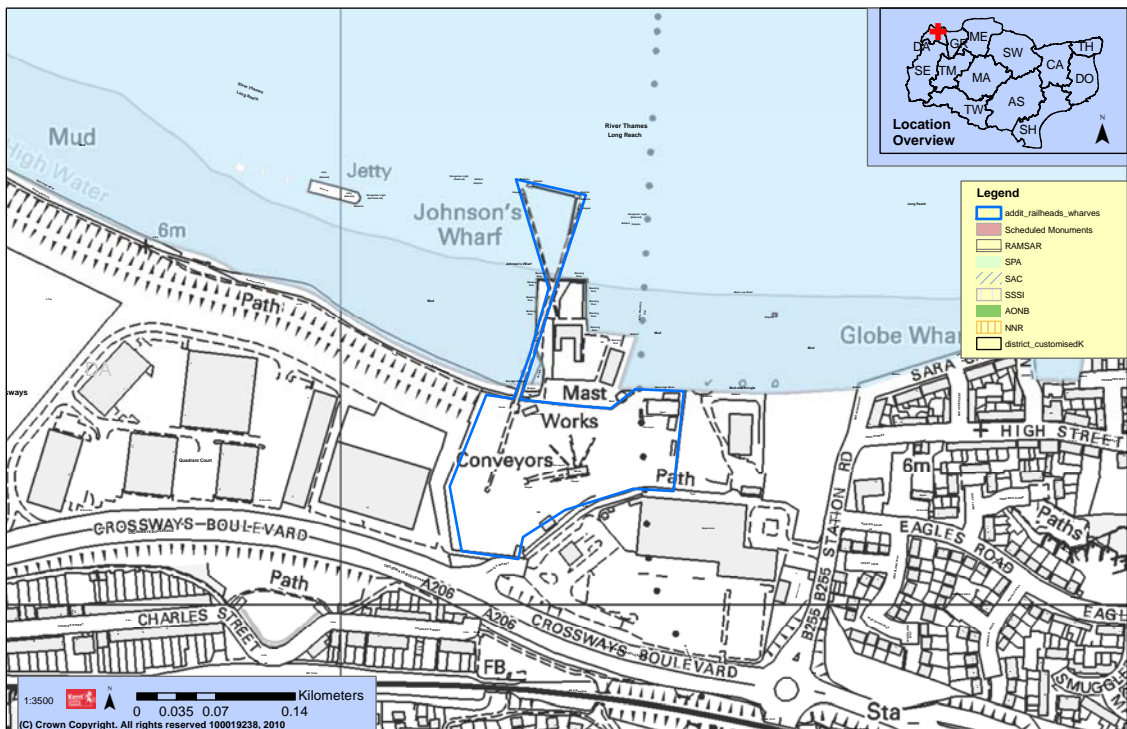
Hothfield Railhead



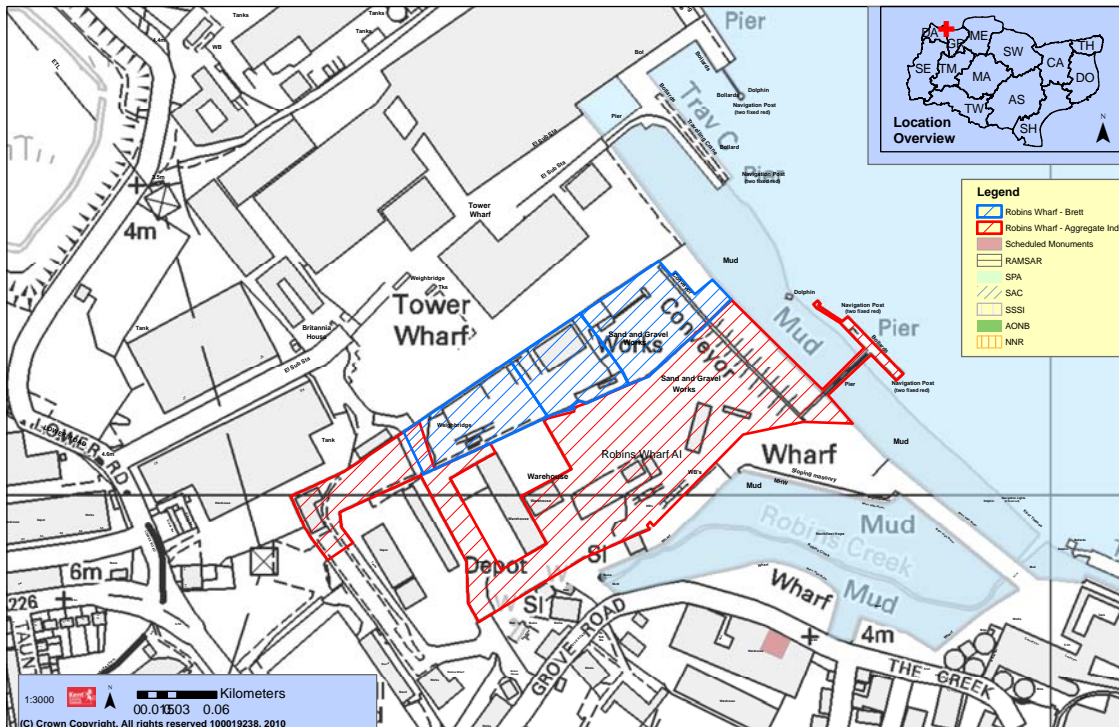
East Peckham Quarry Rail Depot



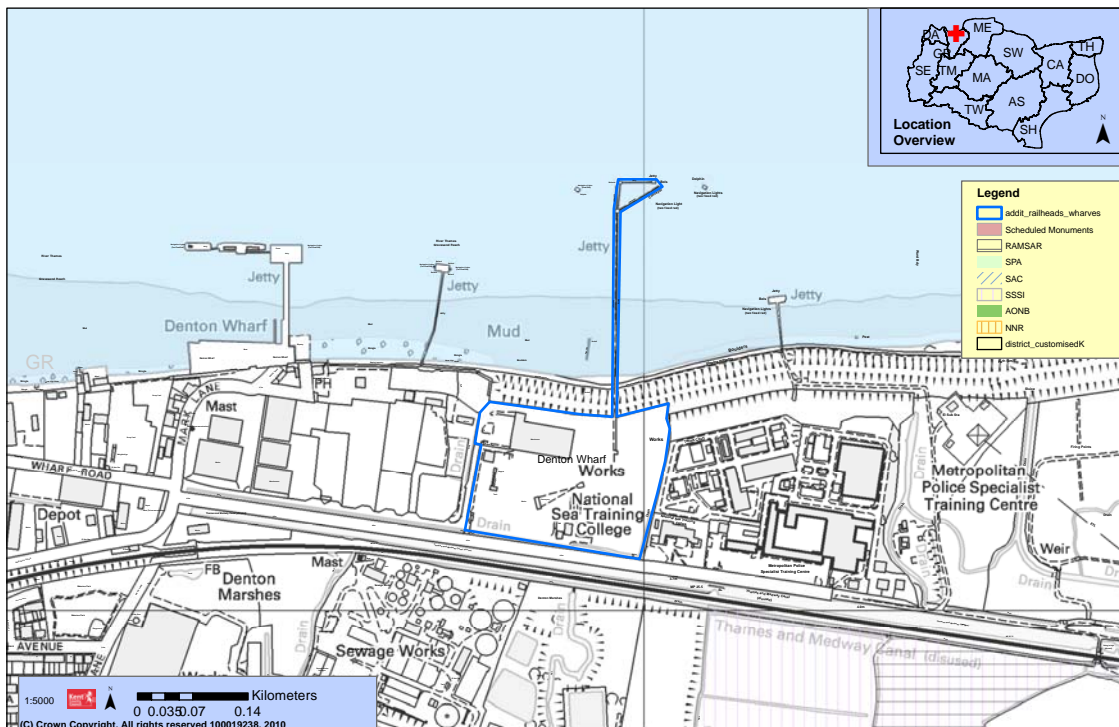
Ridham Dock



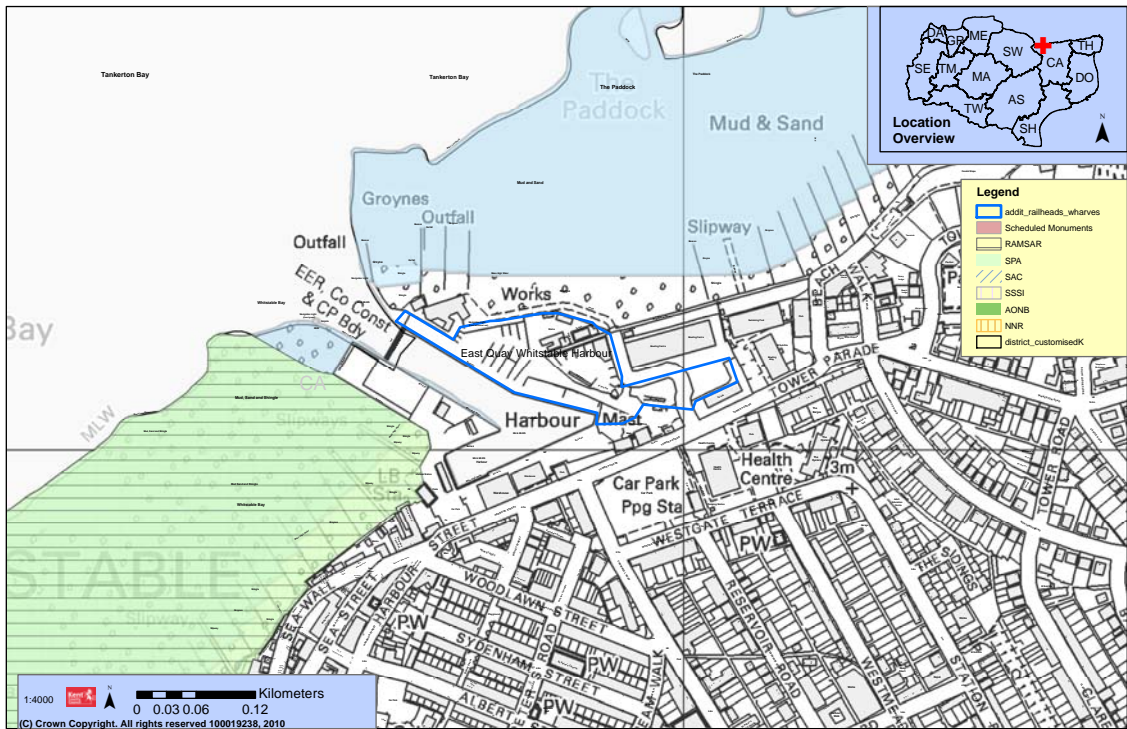
Johnsons Wharf, Greenhithe



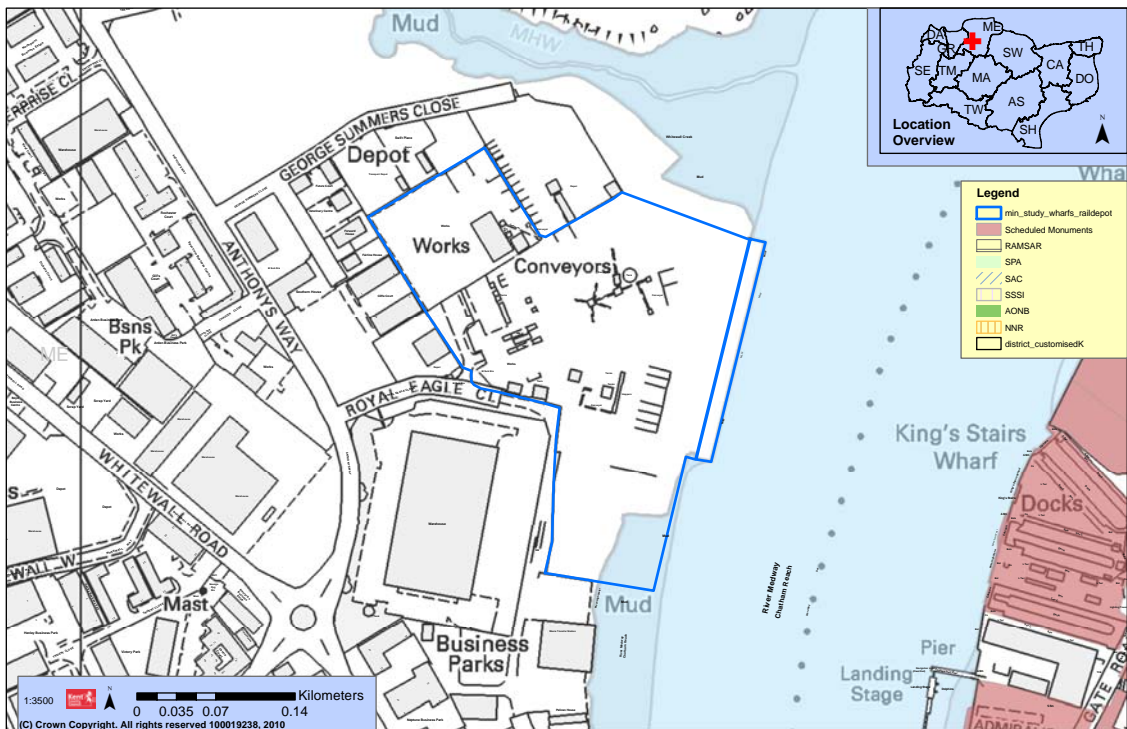
Robins Wharf



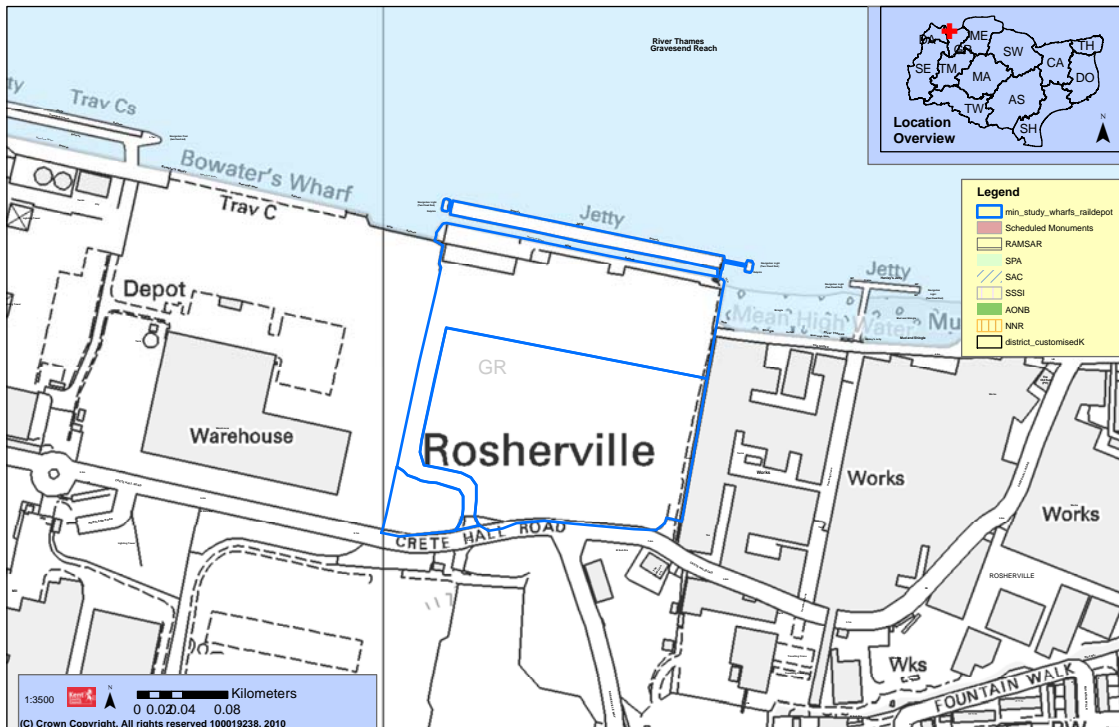
Denton Wharf



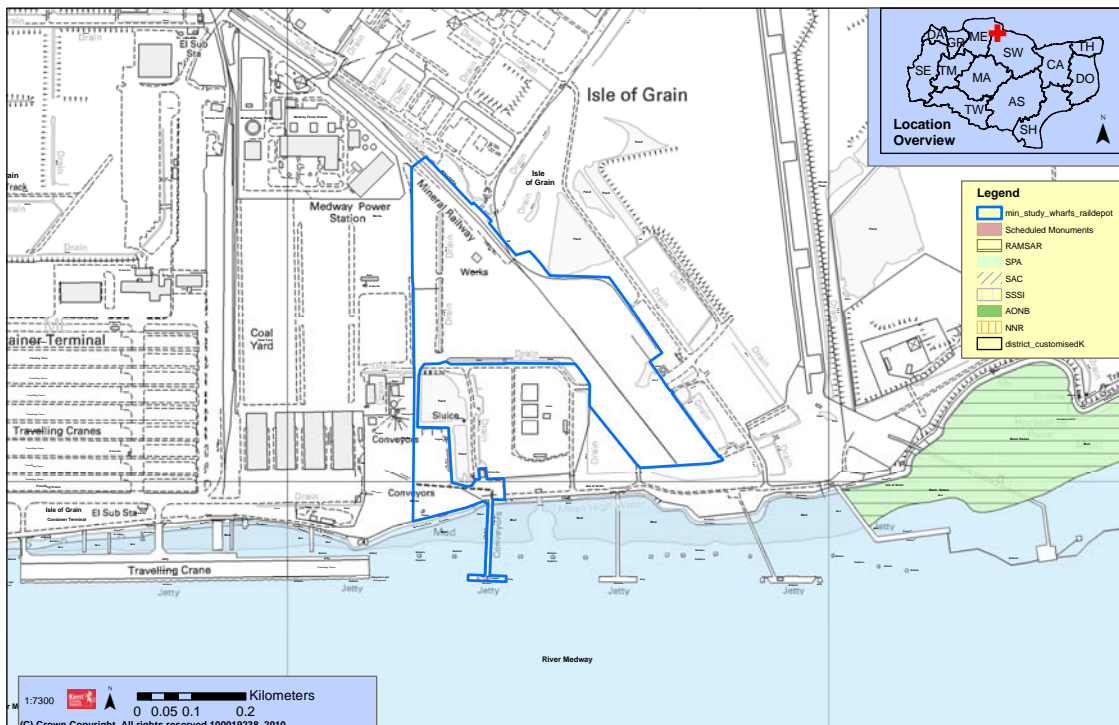
East Quay, Whistable Harbour



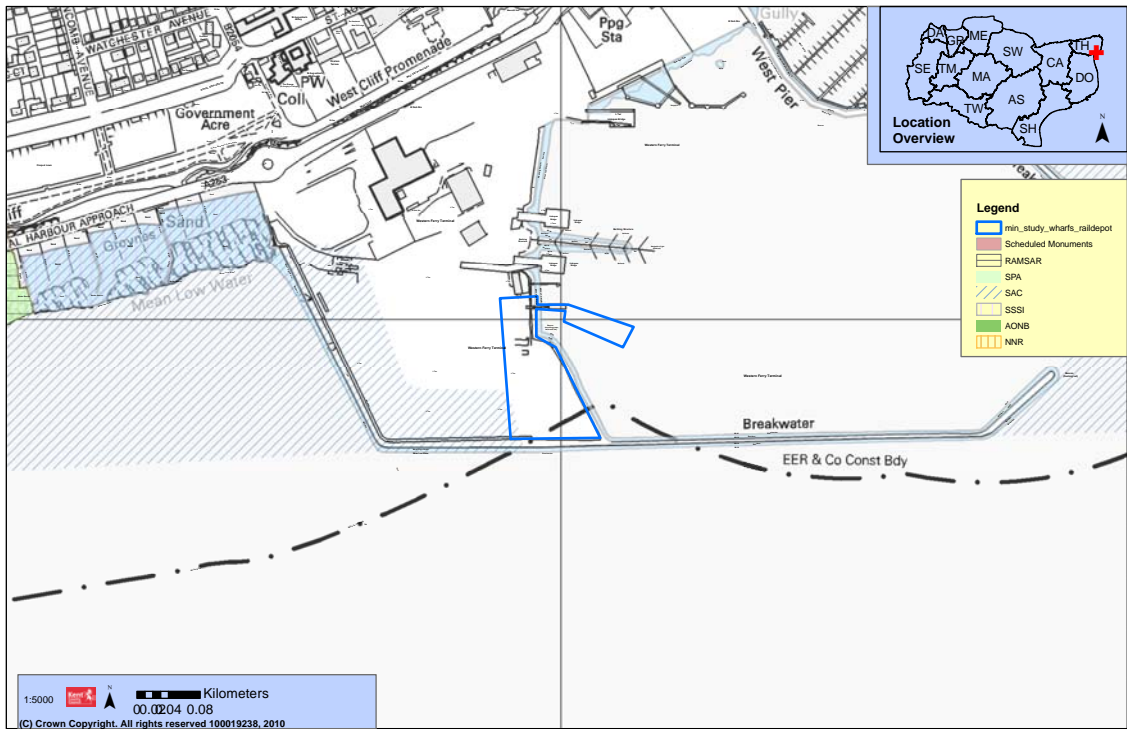
Frindsbury



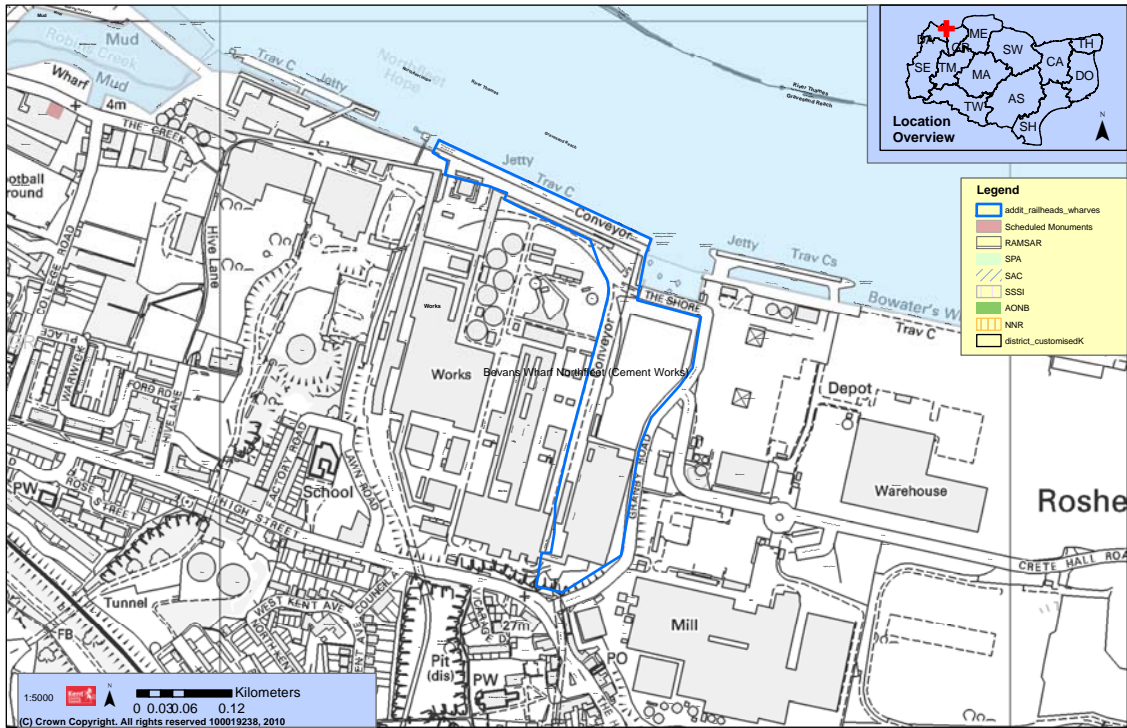
Red Lion Wharf



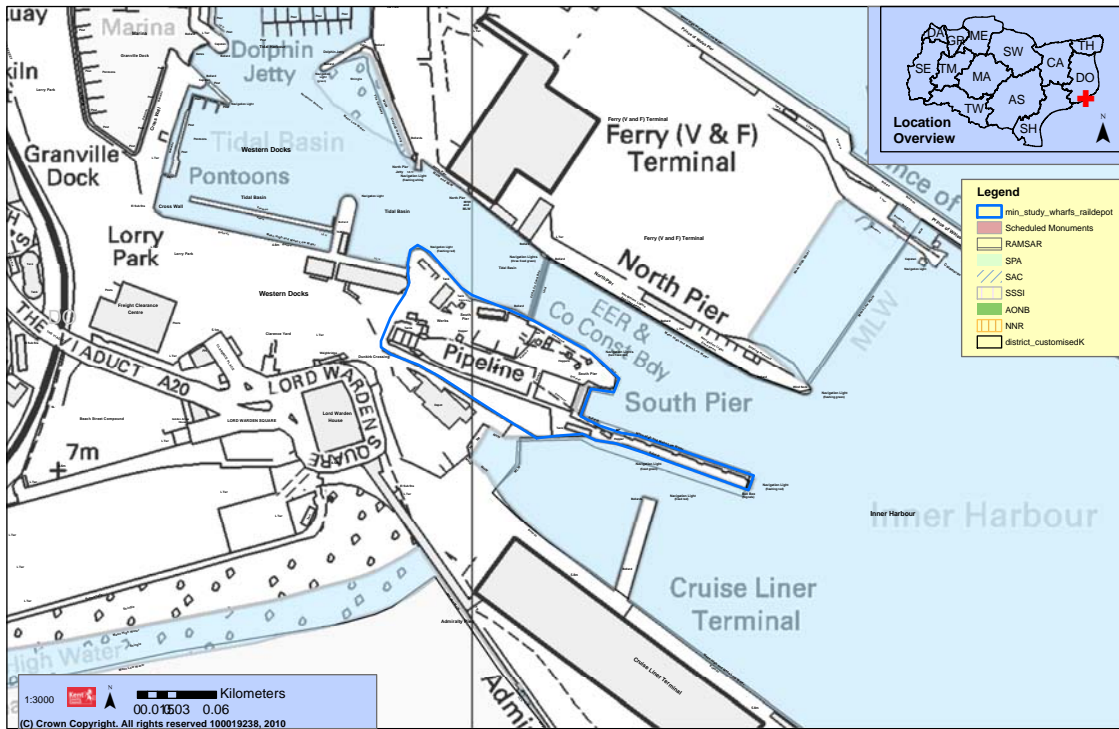
Isle of Grain



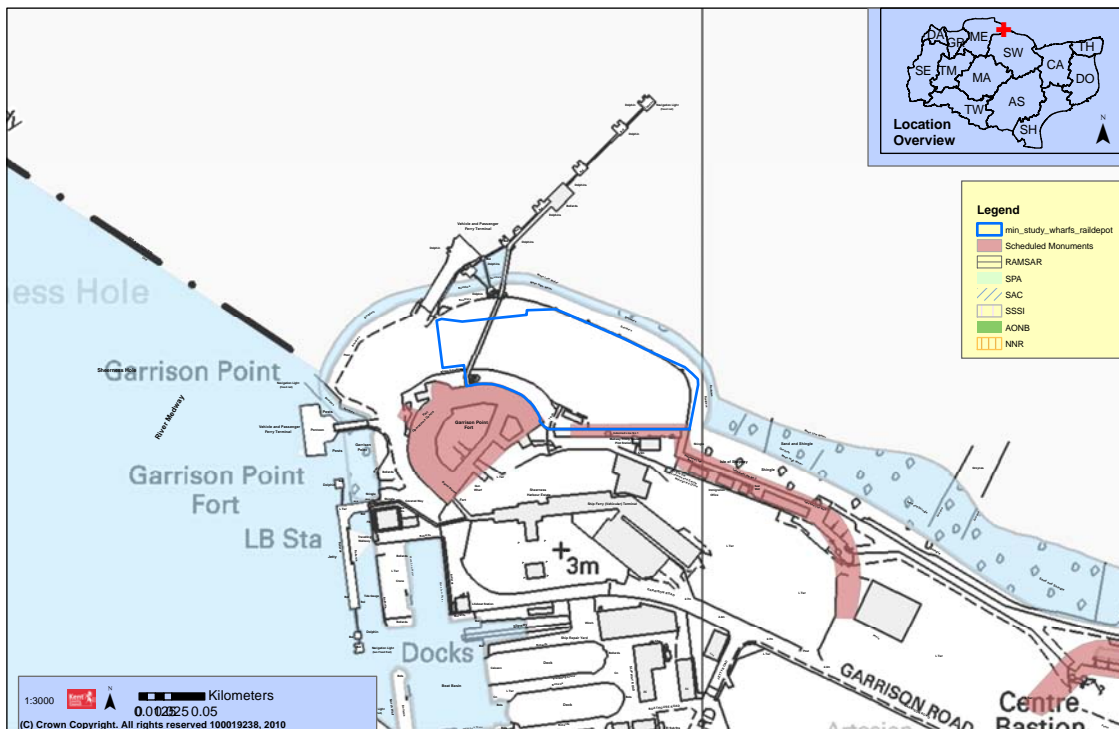
Ramsgate Harbour



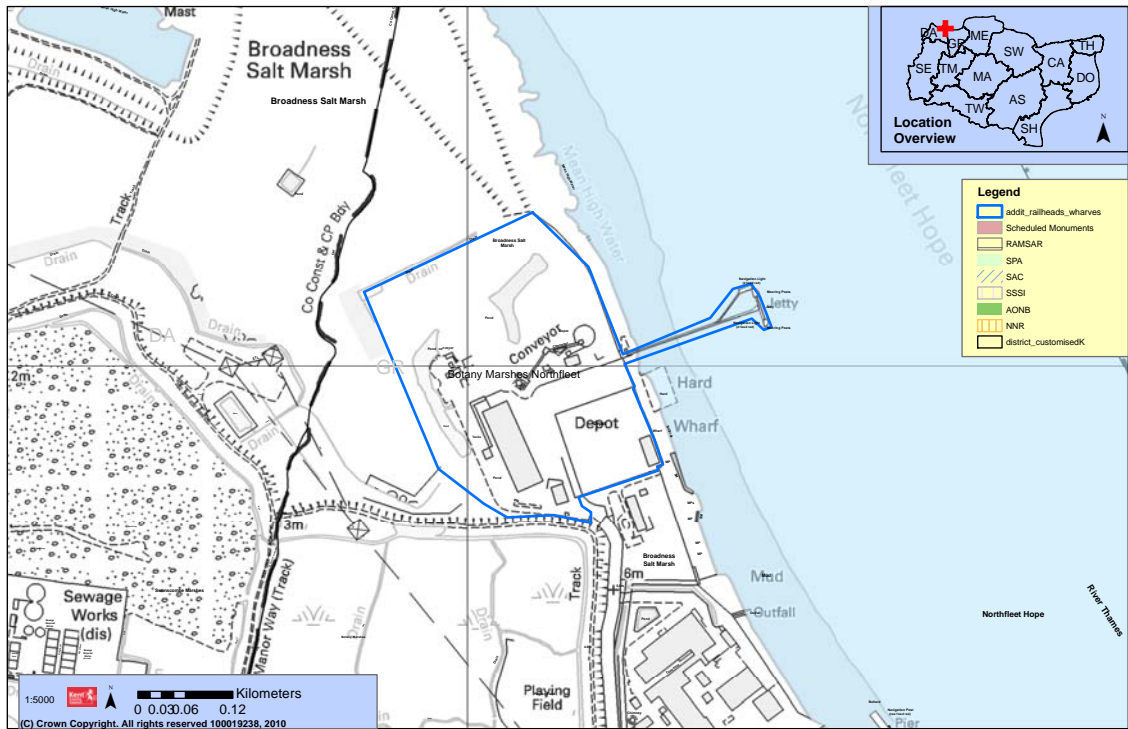
Bevens Wharf, Northfleet



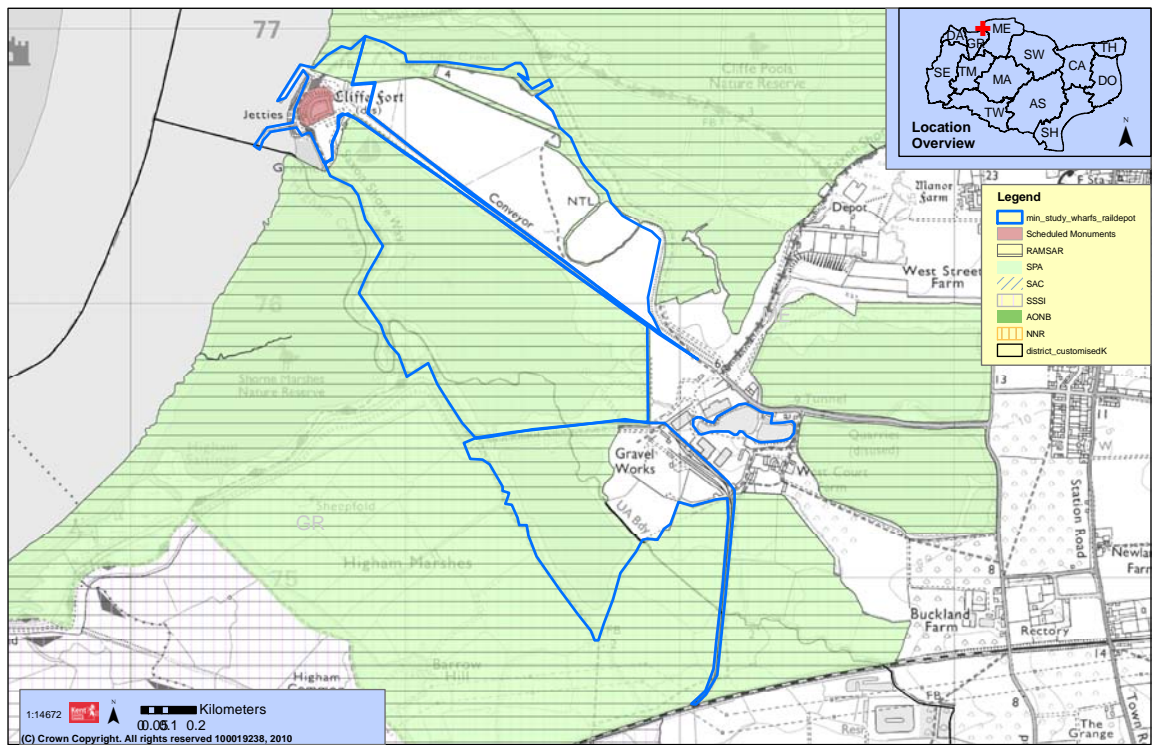
Western Docks, Dover



Sheerness

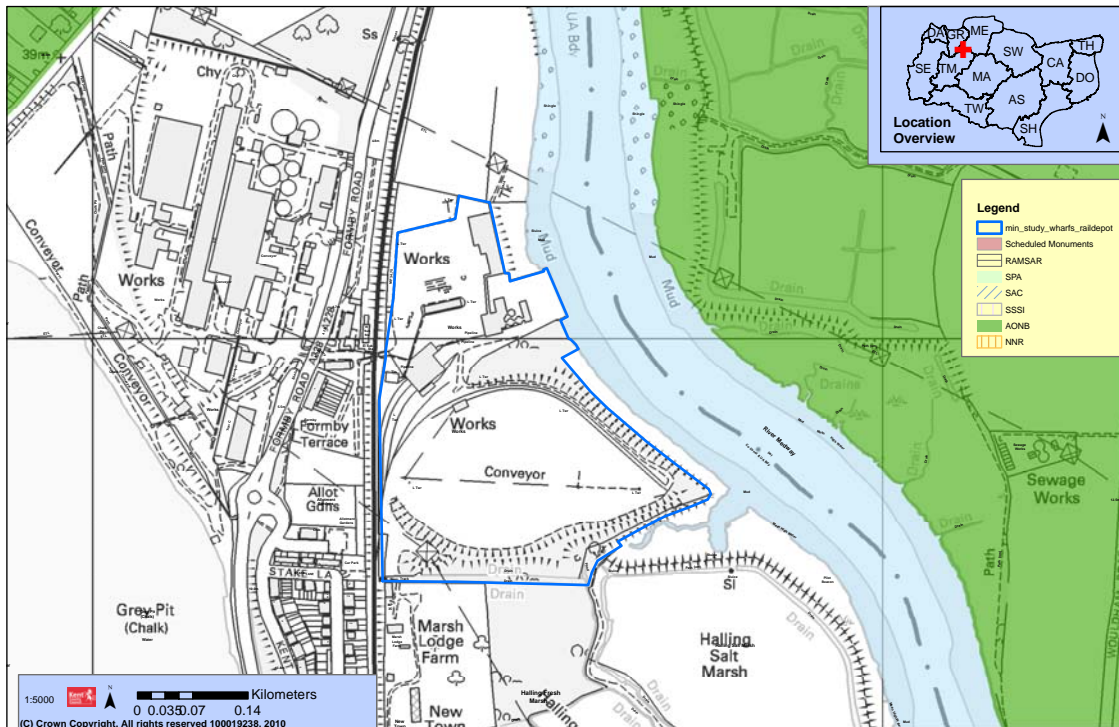


Botany Marshes, Northfleet



Cliffe





Halling Wharf