# planning transport design environment infrastructure

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Appendix 9.1: WKN Desk Study Ground Conditions Preliminary Risk Assessment

Wheelabrator Kemsley (K3 Generating Station) and Wheelabrator Kemsley North (WKN) Waste to Energy Facility DCO

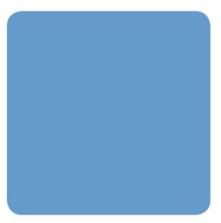
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Desk Study and Preliminary Risk Assessment
Wheelabrator Kemsley North (WKN), Kemsley Paper Mill
On Behalf Of Wheelabrator Technologies Incorporated (WTI)













**Date:** November 2018 **Our Ref:** JER1519

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# **Quality Management**

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# **Amendment Record**

Revision No.	Date	Reason for Change	Authors Initials
0	26/10/2018	-	-
1	01/11/18	Inclusion of DHA comments	GM
2	22/11/18	Inclusion of WTI and additional DHA comments	GM

# **Contents**

Qua	ality	y Management	i
Am	end	dment Record	ii
Cor	ntei	nts	iii
Tab	les	s, Drawings & Appendices	iv
1		Introduction	5
1	.1	Background	5
1	.2	Proposed Development	5
1	.3	Objectives	6
1	.4	Previous Reports	6
1	.5	Limitations of the Desktop Study	7
2		Site Location and Description	8
2	2.1	Overview	8
2	2.2	Site Location	8
2	2.3	Current Site Land Use	8
2	2.4	Site Reconnaissance	8
3		Land Use	10
4		Environmental Setting	17
5		Previous Reports and Baseline Ground Conditions	22
5	5.1	Previous Ground Investigation Reports	22
5	5.2	Baseline Ground Conditions	27
6		Conceptual Site Model and Preliminary Risk Assessment	30
7		Conclusions	33
Ref	ere	nces	35
Dra	wir	ngs	36
App	oen	dices	37
App	oen	dix 1	38
App	oen	dix 2	41
App	oen	dix 3	42

# **Tables, Drawings & Appendices**

# Table

Table 2.1 Site Location Summary	8
Table 3.1 Land Use	11
Table 4.1 Environmental Sensitivity	18
Table 6.1 Summary of Pollutant (Source-Pathway-Receptor) Linkages	31
Table 6.2 Summary of Pollutant (Source-Pathway-Receptor) Linkages - Continued	32

# **Drawings**

1371 SK138 - Maximum Parameters

Figure 9.1 – Historic Ground Investigation Locations

Figure 2.3 – DRAFT Works Plan

# **Appendices**

Appendix 5

Appendix 1 Desk Study Methodology

Appendix 2 Landmark Envirocheck Report

Appendix 3 Site Walkover Photographs

Appendix 4 Baseline Soil Quality

**Baseline Groundwater Quality** 

# 1 Introduction

# 1.1 Background

1.1.1 RPS Planning and Environment ('RPS') was commissioned by Wheelabrator Technologies Inc. (herein shortened to WTI and referred to as 'the Applicant') to undertake a Phase 1 Desktop Study (DTS) and Preliminary Risk Assessment (PRA) report to support a Development Consent Order (DCO) for the construction of a new single-line waste-to-energy plant ( WKN Proposed Development) at the Kemsley Paper Mill, Sittingbourne, Kent, ME10 2TD (referred to as the 'WKN Site').

# 1.2 Proposed Development

- 1.2.1 The WKN Proposed Development is set adjacent to the existing paper mill ('The Kemsley Paper Mill Site') operated by DS Smith and lies to the north of the adjoining K3 facility that, at the time of writing, is under construction.
- 1.2.2 As outlined in the Request for Scoping Opinion for the WKN Proposed Development (Ref. 1), RPS understands the following:
  - The WKN Proposed Development comprises the construction and operation of a new waste-to-energy plant. The facility would comprise a single line facility capable of processing 390,000 tonnes of waste per annum, with a generating capacity of 42MW,
  - The facility will comprise a series of interlinked buildings, with the key buildings identified as being:
  - Fuel reception and storage facilities;
  - Combustion system housed within a turbine hall;
  - Bottom ash handling system, including storage hall and ash collection bay;
  - A flue gas treatment system, including residues and reagent storage silos and tanks;
  - A stack and associated emissions monitoring systems;
  - A cooling system comprising air cooled condenser (ACC) units;
  - Other associated supporting facilities.
  - All waste will be delivered in HGVs or collection vehicles and via a weighbridge, the waste will be tipped in the tipping hall prior to combustion.
- 1.2.3 The WKN Proposed Development includes a total of Î Works Areas, as shown in *Figure 2.3,* and includes:
  - The WKN Site (Works Area 2);
  - Access / Haulage Roads (Works Areas 4 and 5);
  - Construction Laydown Area (Works Area 6); and
  - Surface Water Outfall (Works Area 7).

- 1.2.4 The purpose of undertaking this assessment is to:
  - Assess the potential for the presence of ground contamination and associated ground gas risks at the WKN Site and adjacent areas as a result of former and current land uses at and in the local vicinity of the WKN Site;
  - To provide an overview of the environmental setting of the WKN Site and adjacent areas;
     and
  - To identify potential contamination sources to enable a Preliminary Risk Assessment (PRA) to be undertaken.
- 1.2.5 The assessment also considers a preliminary appraisal of ground stability to provide an indication of potential geotechnical considerations for the proposed development.
- 1.2.6 The assessment has been undertaken to a standard that is considered suitable to meet the initial requirements of planning as outlined within the National Policy Statements (NPS) and National Planning Policy Framework (NPPF) (Ref. 2).
- 1.2.7 The WKN Proposed Development layout is presented in Drawing 1371 SK138.

# 1.3 Objectives

- 1.3.1 The objectives of this assessment are to:
  - Assess likely existing ground conditions, including geological, hydrogeological and hydrological conditions to establish baseline conditions and allow an assessment of environmental sensitivity;
  - Identify potential contamination sources, both from historical and current activities, that may
    have led to contamination of the WKN Site and areas associated with Works Areas 3,4,5,6
     & 7; and
  - Develop a PRA including a Conceptual Site Model (CSM) to support an assessment of the likely risks associated with potential contamination at the WKN Site.
- 1.3.2 The methodology followed to produce this DTS and PRA is detailed in Appendix 1.

# 1.4 Previous Reports

- 1.4.1 RPS understands that there has been several phases of ground investigation previously undertaken in the vicinity of the WKN Site, and these have included a number of exploratory holes within the current WKN Site boundary. The following reports have been reviewed as part of the information review undertaken for this report:
  - RPS Group, 'Phase 1 Environmental Site Assessment, Kemsley Paper Mill, Sittingbourne, Kent', on behalf of E.ON, March 2009, reference: 'JER3773 R 090318 LW Kemsley Paper Mill P1' (Ref. 3);

- RPS Group, 'Phase 2 Intrusive Site Investigation, Kemsley Paper Mill, Sittingbourne, Kent', on behalf of E.ON, September 2009, Reference: 'JER4418 R 090909 AP EON Kemsley Mill Phase II' (Ref. 4);
- RPS Group, 'Development of a Sustainable Energy Plant, Kemsley Paper Mill, Environmental Statement, Chapter 11: Hydrogeology and Ground Conditions', prepared for St. Regis Paper Company Ltd, January 2010, Reference: 'DLE1726' (Ref. 5);
- URS Group, 'Geotechnical and Environmental Site Investigation', on behalf of John Sisk & Sons Ltd, January 2013, reference: '47064660' (Ref. 6).
- RPS Group, 'Interpretative Ground Investigation Report, Pre-Commencement Works for the Sustainable Energy Plant, Kemsley Paper Mill, Sittingbourne, Kent', on behalf of EEW Energy from Waste UK Limited, June 2013, reference: 'JER5481 R 130613 DH Interpretative Report' (Ref. 7); and
- RPS Group, 'Site Investigation Report, Kemsley Paper Mill' on behalf of Wheelabrator Technologies Inc. December 2015, reference: '151202 R JER6773 RH GI Report PT Review' (Ref. 8).
- 1.4.2 A summary of information gained from this review is presented in Section 5.

# 1.5 Limitations of the Desktop Study

1.5.1 This assessment is limited to the information available at the time of production including a Landmark Envirocheck Report (Appendix 2) published environmental / geological data, observations made during a site reconnaissance visit undertaken by a consultant from RPS on 25th October 2018 and a review of the available ground investigation reports.

# 2 Site Location and Description

#### 2.1 Overview

2.1.1 This section sets out details of the location and general layout of the WKN Site, as well as detailing findings of the site reconnaissance.

## 2.2 Site Location

2.2.1 A summary of the site location details is presented in Table 2-1.

Table 2.1 Site Location Summary

ITEM	DESCRIPTION/DETAIL		
Site Address	DS Smith, Kemsley Paper Mill, Sittingbourne, Kent, ME10 2TD		
OS Grid Reference Centre	(NGR) 592160, 166730		
Approximate Area	2.44ha		
Site Location	The WKN Site is located on the eastern boundary of the wider Kemsley Paper Mill Site, to the north of the K3 area that is currently under construction.  The Kemsley Paper Mill site is situated approximately 3.2km northeast of Sittingbourne train station, and approximately 1.6km east of the A249. The WKN Site is bound by The Swale to the east, unused land to the north, the K3 development to the south and the Kemsley Paper Mill to the west.		
Topography	The WKN Site is located at approximately 6.3mAOD (metres above Ordnance Datum) and is generally level with some areas uneven. There is a slight downward slope from the east to the west of the site.		

## 2.3 Current Site Land Use

2.3.1 The WKN Site is currently in use as a car park, office and construction lay down area for K3 being constructed at the time to the south.

## 2.4 Site Reconnaissance

- 2.4.1 A site reconnaissance survey was undertaken on 25th September 2018 by an RPS Consultant. The main findings of the site reconnaissance survey are detailed below.
- 2.4.2 Photographs of the WKN Site taken during the site walkover are provided in Appendix 3.
- 2.4.3 The WKN Site is adjacent to the Kemsley Paper Mill site which lies to the west. The Applicant-operated adjacent K3 site directly to the south of the WKN Site is currently under construction. The WKN Site is currently used as a car park, office and construction lay down area for K3.

- 2.4.4 The WKN Site is generally level, although it is uneven in places and there is a slight downward slope from the east to the west.
- 2.4.5 The majority of the WKN Site comprises a car park with a fairly level surface primarily covered by hardstanding but with some areas covered by gravel. Along the western and southern borders of the WKN Site are temporary construction offices and containers associated with the construction of K3.
- 2.4.6 A ditch runs along the northern boundary of the WKN Site and in the south western corner is a fenced off area containing a remote mixing station for mortar.
- 2.4.7 The smaller, eastern area of the WKN Site is separated from the car park by fencing and comprises a construction lay down area. This area appears to comprise of made ground and gravel/rubble although it is largely covered by construction materials and plant. No hardstanding is present in this area. The southern area of this eastern part of the WKN Site, where there is currently an access track for plant to the K3 construction site, was waterlogged.
- 2.4.8 An IBC filled with an unknown liquid was noted to be present along the northern boundary of the laydown area. The IBC appeared to be in good condition and there was no evidence of leaks or spills around the IBC.
- 2.4.9 No evidence of contamination was noted to be present at the WKN Site and all temporary structures and equipment appear to be in good condition and well maintained.

# 3 Land Use

3.1.1 This section sets out details of the current and historical land use of the WKN Site and the surrounding area (Table 3.1). The data presented does not represent full details of all land uses, but those that are considered to have the potential to have led to contamination of the WKN Site. For full details of the land use, reference should be made to the Envirocheck Report included within Appendix 2.

Table 3.1 Land Use

Section	Description/Information			Comments / Potential Contamination Sources
Site Size	The Site	is approxin	nately 2.44 hectares in size.	N/A
Current Site Description / Layout*			te is currently in use as a car park, office and construction lay down area for the istructed at the time to the south.	Storage of an unknown liquid was observed in an IBC, although the IBC was in good conditions and there was no evidence of leaks and spills.
Current Neighbouring Land Uses* (500m)	South ea	Sittingbour ast Infilled land The Swale Kemsley M Sewage Tr Recycling	eatment with filter beds and water reservoirs (360m) ne and Kemsley Light Railway (420m) d, to be developed for K3 CHP (0m)  (20m) larshes (0m) eatment Beds (240m) facility (500m)  aper Mill Site (0-500m)	Potential organic and inorganic sources from the infilled land, adjacent paper mill and sewage treatment beds.  No other potentially significant off-site sources of contamination were noted.
	Date			
	From	То	On-site Land Uses	
Site History** (Labelled features from the	istory**	1896	Area called <i>Kemsley Marshes</i> . Streams were present, as were embankments. The north-eastern embankment separated off an area of osiers (similar to a coppice) close to the river edge. The river bank was in a slightly different orientation to present day. A <i>Sheepfold</i> or <i>Sheepwash</i> is shown.	The following have been identified as potential historical on-site sources of contamination:  The historical presence of a landfill;
maps are given here in italics)	1896	1908	Osiers area in the far north now labelled as <i>Saltings</i> . The river bank is as per the present day orientation.	and  The historical presence of railway
	1908	1939	Area in the far north no longer labelled as Saltings.	into the WKN Site (inorganic and organic contamination).
	1939	1964	An area of shingle is shown in the southwest of site and beyond.	3
	1964	1966	A <i>Conveyor</i> is shown from the central area of the Site, heading northeast to a jetty on the Swale. A railway track (end of the line) and a number of small	

Section	Description/Information			Comments / Potential Contamination Sources
			buildings are shown in the central area. The railway is oriented to the northwest where it connects to tracks going into the present day paper mill site. The streams and embankments are no longer shown.	
	1966 1978 The area of shingle is no longer shown in the southwest of site and beyond.		The area of shingle is no longer shown in the southwest of site and beyond.	
	1978	1999	A Refuse Tip is shown in the eastern extent.	]
	1999	2018	The Refuse Tip is no longer shown.	]
	2018	Presen t day	All buildings and infrastructure are no longer shown and the site shows no features.	
	Date		Surrounding Land Uses	A number of potential sources of
	From	То		contamination associated with the
	1869  1898	<ul> <li>Wash Mill and Brick Field (500m southwest)</li> <li>A Tramway runs SW-NE (&gt;1000m-250m southwest)</li> <li>Areas to the southeast, east, north, and west are largely undeveloped pastures, marshes, and estuarine areas.</li> </ul>	historical development of the surrounding land have been identified, including:  Areas of landfill to the south and south-east of the WKN Site;  Infilled lakes and old clay pits (ground gas);	
		<ul> <li>Sub-stations and tanks as part of the Paper Mill and further west (inorganic and organic contamination, asbestos, PCBs);</li> <li>Railway lines (organic, inorganic contamination);</li> <li>Whilst there are a number of other offsite potential historical contaminative uses (tanks, railway cuttings, works), given</li> </ul>		
	1909	1938	<ul> <li>Grovehurst Dock is now present (250m north)</li> <li>Brickworks now labelled as Disused (450m southwest)</li> <li>Old Clay Pit no longer shown (500m southwest)</li> </ul>	their distance and history the majority are considered unlikely to have led to contamination of the Site. The presence of a historical landfill below and
	1938	1950	<ul> <li>Paper Mill shown (150m southwest)</li> <li>The area of the former clay pit and adjoining buildings is still denoted, albeit not labelled (500m southwest)</li> </ul>	extending offsite to the south and southeast of the WKN Site has the potential to impact the WKN Site.

Section	Description/Information			Comments / Potential Contamination Sources
			<ul> <li>A building is shown on the river bank, unlabelled, with a Tramway extending to it (100m east)</li> </ul>	
	1950	1966	<ul> <li>An area of shingle is present adjoining the southern boundary</li> <li>Tanks are shown across the Paper Mill</li> <li>Three Reservoirs are shown (350m southwest)</li> <li>A Tramway extends from the southwest in a north-eastern direction past the Site.</li> <li>Filter Beds, Filter Tanks and Sludge Beds (250 south)</li> <li>Grovehurst Dock is now marked as Disused</li> <li>Aerial Cables, a Conveyor and a Tramway are shown (from 200m west)</li> </ul>	
	1966	1973	<ul> <li>A Pipe line is present extending from north of the site towards the disused dock</li> <li>6 no. Ponds (later Lagoons) labelled as Works are present (150m southeast)</li> <li>A Pond is shown (100m north)</li> <li>The building shown on the river bank, is labelled with Slipway and Navigation Lights, with a Tramway extending to it (100m east)</li> </ul>	
	1979	1999	<ul> <li>The Aerial Cables, a Conveyor and a Tramway are no longer shown (from 200m west)</li> <li>An area of Refuse Tip is shown to the south and east of the Site.</li> <li>A Spoil Heap is shown (100m south)</li> <li>The disused dock to the north is now demarcated as two lakes surrounded by a track.</li> <li>A large Electrical Grid Station is present (1000m west)</li> <li>As part of the expansion of the paper mill site, several sub-stations and 'tanks' are now present</li> <li>The railway extending from the southwestern site boundary in a southwestward direction is now labelled as the Sittingbourne and Kemsley Light Railway</li> </ul>	
	1999	2006	<ul> <li>The area of Refuse Tip is no longer shown</li> <li>Only 2 no. Ponds (later Lagoons) are now present (150m southeast). The area of the former ponds is demarcated as a refuse or slag heap</li> <li>Works (1000m north)</li> </ul>	
	2018	Presen t day	<ul> <li>Pipe line no longer shown</li> <li>The building shown on the river bank, labelled with Slipway and Navigation</li> </ul>	

Section	Description/Intermation		Comments / Potential Contamination Sources
	Distance &	<ul> <li>Lights, with a Tramway extending to it, is no longer shown (100m east)</li> <li>The Spoil Heap is no longer shown (100m south)</li> <li>The remaining 2 no. Ponds (later Lagoons) are no longer shown</li> </ul> Details	
Landfills (500 m)***	120m & 292m South-east  283m South-east  286m South-east  On-site	There are 3 no. recorded active landfill / waste management sites within 500m of the WKN Site.  License Holder: D S Smith Paper Ltd Site Location: Kemsley Mill Landfill, Kemsley, Sittingbourne, Kent Max input rate: Not supplied Date started: 18/04/1994 Site category: Industrial Waste Landfills  License Holder; Grovehurst Energy Ltd Site Location: Kemsley Mill extension, Kemsley, Sittingbourne, Kent Max input rate: 'Large' (75,000-250,000 tonnes per year) Date started: 18/04/1994 Authorised waste includes: bio sludge; dewatered effluent sludge cake; flood sweepings not contaminated; primary sludge cake; pulverised fuel ash; and uncontaminated used fuel containers.  License Holder: New Thames Paper Co Ltd. Site Location: Kemsley Mill, Kemsley, Sittingbourne, ME10 3ET Max input rate: 'Medium' (25,000-75,000 tonnes per year) Date started: 14/10/1977 Authorised waste includes: Construction and demolition wastes. Inert/Nonhazardous/non-toxic; paper-making wastes; wet fly ash.  There are 2 no. records of historical landfill sites within 500m of the WKN Site: License held by Kemsley Paper Mill. Dates of operation unknown.	Historical landfilled waste may represent a source of ground gas and leachate; the distance (below the central and eastern part of the WKN Site) mean this is likely to pose a risk to the WKN Site.

Section	Description/Inform	nation	Comments / Potential Contamination Sources	
	117m South-east	The type of landfill was recorded as 'inert waste'.  License held by: Bowaters UK  Dates of operation: 31st December 1977 to 31st December 1993.  The type of landfill was recorded as 'inert, industrial, commercial, and household waste and liquid sludge'.		
Waste Treatment, Transfer and Disposal Sites (500 m)***	Transfer and Disposal 308m South-west Site Location: Kemsley Mill Landfill, Kemsley Sittinghourne, Kent		None identified.	
Current Potentially	On-site	None recorded	None identified.	
Contaminative land Uses*** (250 m)	Off-site	None recorded within 250m.	None identified.	
Petrol and Fuel Sites*** (500 m)  On Site  None recorded  None recorded.			None identified.	
Authorisations / Licences (250m)***	On-Site / Off-Site	None recorded	None identified.	
Substantiated Pollution incident register (250m)***	Off site	1 no Category 2 – significant incident to water recorded in 2005	Considering the scale and the dates of these incidents, these incidents are not considered to provide a contamination risk at the WKN Site.	
•	On site	None recorded	-	
	On-Site	None recorded		
Recorded Pollution Incidents (Controlled Waters) (250m)***	Off-Site	Category 2 – Significant There has been 1 no. pollution incident categorised at Category 2 – Significant, recorded 84m east. The incident comprised included discharges of organic wastes due to a fault at a	Considering the scale and the dates of these incidents, these incidents are not considered to provide a contamination risk at the WKN Site.	

Section	Description/Inform	nation	Comments / Potential Contamination Sources
		Waste Water Treatment Plant in 1997.  Category 3 - Minor There has been 1 no. pollution incident categorised as Category 3 - Minor. The incidents included discharges of 'chemicals - detergents/surfactant' in 1998.	
	On-Site	None recorded	None recorded
Pollution Prevention and Controls*** (500 m)	Off-Site	There are 6 no. effective/valid Integrated Pollution Prevention and Control permits in place within 500m of the Assessment Site. These are classified as follows:  1 no. relate to 'paper and pulp manufacturing processes within Miscellaneous Industries'.  3 no. relate to the incineration of non-hazardous waste (at K3 facility).  1 no. related to an 'associated process' at the Kemsley IBA Recycling Facility.  1 no. related to the handling of paper, pulp and board, producing paper/board greater than 20T/d. Several historical IPCC controls have been superseded within the adjacent area	These records are all located off-site, and are not considered to pose a risk to the WKN Site.
There are 4 no. active discharge consents listed within 500 m of the Assessmen Site. These consents are: 1 no. consents for Trade Discharges – Cooling/Process Water; 1 no. for Trade Effluent discharge; 1 no. for sewage discharges – final/treated effluent; and 1 no. public sewage – storm sewage overflow.  Discharge Consents (500 m)***  These consents related to the discharge to a number of bodies, including: Freshwater stream/river (1 no.); discharge into a tributary of The Swale (1 no.); and discharges into a Saline estuary (2 no.).  Multiple discharge consents were previously active within the area, but have been revoked / expired.		These sites were licenced to discharge effluent. They are considered to pose a low risk.	
	On Site	No active discharge consents recorded	Not Applicable.

<sup>\*</sup> based on site reconnaissance and review of Envirocheck Report (Appendix 2)

\*\* based on review of Historical Maps (Appendix 2) obtained from Landmark

\*\*\* based on review of Landmark Envirocheck Report (Appendix 2)

# 4 Environmental Setting

4.1.1 This section sets out details of the environmental setting of the WKN Site and the surrounding areas (Table 4.1).

Table 4.1 Environmental Sensitivity

Section	Description / Inform	nation			Issues / Comments
	Strata	Description	Aquifer Status	Anticipated Approx. thickness (m)	
	Made Ground	Made Ground present on the WKN Site	N/A	Up to 4.2 m	Previous investigations at the Assessment Site have found Made Ground up to 4.2 m thick (refer to Section 5). Asbestos has been encountered in the Made Ground at 3 locations. Perched water has been found within the Made Ground
	Superficial Deposits	Alluvium – Soft to firm consolidated, compressible silty clay. Can contain layers of silt, sand, peat, and basal gravel.	Secondary (Undifferentiated)	Maximum depth of 8.6 m bgl	Organic-rich soils such as Alluvium can be a source of ground gas.
Geology & Hydrogeology**	Bedrock	London Clay Formation	Unproductive Strata	Approx. 5m	
,gg,		The Woolwich Formation (a subdivision of the Lambeth Group) and Thanet Formation are shown to outcrop approx. 300m to the south of the WKN Site, and are likely to underlie the WKN Site.	Secondary A Aquifer	Approx. 30 – 40m	Sandy and silty lenses are likely to be present and may contain pockets of perched groundwater.  Fine sand that can be clayey and glauconitic with rare calcareous or siliceous sandstones.
		The Seaford Chalk Formation is anticipated to underlie the Thanet Formation and the WKN Site.	Principal Aquifer	Unknown	
	The superficial deposits vulnerability. The super Secondary (undifferent	s do not have classified groundwater ficial deposits are classified as a lated) Aquifer.			The groundwater of the superficial deposits is considered to be at low to medium risk from contamination which may be present at the Assessment Site.
Groundwater Vulnerability		London Clay Formation) is classed as dithe groundwater vulnerability is not	Low leaching potential.		Any groundwater bodies below the London Clay are considered to be at low risk. This is due to the likely cohesiveness of the superficial deposits across the site, and the presence of thick cohesive deposits

Section	Description / Informat	ion	Issues / Comments		
			(London Clay). Perched pockets of groundwater may be present within sandy or silty lenses within the bedrock however these are expected to be limited in extent.		
	Distance & Direction	Details			
SPZs* (500m)	On site	None Identified	None identified		
	Off site	None identified within 500 m of the WKN Site.	None identified		
Surface Water (1km)*		No surface water bodies have been identified on identified on-site, with The Swale being the closest lying approx. 15m West.  The majority of the WKN Site lies within an area which is at risk from extreme flooding from rivers or sea without defences (Zone 2).	The majority of the WKNSite (Zone 2) is at a medium risk (between 0.1% and 1%) from flooding from rivers.		
	On-site	The eastern end of the WKN Site (nearest The Swale) lies within an area which is at risk from flooding from rivers or sea without defences (Zone 3). Flood defences are present for the WKN Site.  There are 22 OS network water lines within 250m of the WKN Site, and these are predominately short (less than 200m) long	The definition of the Flood Zone 3 is: Land and property in this flood zone would have a high probability of flooding without the local flood defences. These protect the area against a river flood with a 1% chance of happening each year, or a flood from the sea with a 0.5% chance of happening each year.		
	Off site	The Envirocheck Report identifies that there are a number of surface water features ('inland rivers', 'tidal rivers' and 'lakes') in the vicinity of the WKN Site. These are most likely associated with the marsh area that the WKN Site sits within/surrounds it.  An underground river is listed in the Envirocheck report (16 m west). This is presumably within a culvert.  There are three artificial reservoirs located on the southern boundary of the wider Kemsley site.	None identified.		
	On site	None recorded	None identified.		
Licensed Water Abstractions (1km/500m)*	Off site	There are 3 no. Permits for surface water abstractions within 500m of the WKN Site:  1 no. permit 140m east for non-evaporative cooling; 1 no. permit 140m east for direct spray irrigation 1 no. permit 184m east for industrial cooling (miscellaneous)  There are no permits for groundwater abstraction listed within 1km of the	Contamination arising from the WKN Site, if present, is unlikely to impact the surface water, due to the dilution effect, and the distance of the abstractions from the WKN Site.		

Section	Description / Informat	ion	Issues / Comments	
		WKN Site.		
	On site	The WKN Site does not lie within a Nitrate Vulnerable Zone.	None identified	
Conservation Areas & Sensitive Land Use (1 km)*	Off Site	The Swale located to the east of the WKN Site, is classified as a Marine Nature Reserve, SSSI and a Ramsar Site.  The Elmley Nature Reserve, located 392m northeast of the Assessment Site	The ecological status of The Swale means that it would be sensitive to any contamination migrating from the WKN Site.	
	Is the site potentially affected?	(at its nearest point) is classified as a National Nature Reserve.  Details		
Radon*	No	The WKN Site is within a lower probability radon area where less than 1% of homes are estimated to be at or above the Action Level. No radon protection measures are required in the construction of new dwellings.	N/A	
Coal Mining*	No	The WKN Site is not in an area that is recorded as impacted by coal mining.	N/A	
	On site	None identified	None identified	
BGS Recorded Mineral Sites (1 km)*	Off site	The Envirocheck Report has identified 2 no. BGS Recorded Mineral Sites within 1 km of the WKN Site: Kemsley Down Brickworks, and Elmley Hills Cement Works. Both of these were opencast works for clay and shale, and all have since ceased operations.  Kemsley Down brickworks was recorded to be 552m south of the WKN Site, however, as identified through a review of the historical maps, this was ceased operation, was backfilled, and the area is covered by the Kemsley Paper Mill Site.  Elmley Hills Cement Works was recorded to be 837m northeast, however historical mapping records have also identified this to have been infilled, and the area is now vacant, adjoined by industrial buildings.	These sites are all currently closed and either redeveloped or infilled and left. Where they have been infilled, they are unlikely to pose a risk to the gas and leachate due to the distance and cohesive nature of the superficial deposits and underlying London Clay.	
Historical Surface Ground Working Features	On site	None identified	None recorded	
	Off site	As previously mentioned above, opencast quarries were present in the area. These have been infilled or backfilled and redeveloped.	These sites are all currently closed and redeveloped. Where they have been infilled, they are unlikely to pose a risk to the WKN Site from ground gas and leachate due to the distance and geology (London Clay).	
Foundered Strata / Landslide*	On site	The Envirocheck Report suggests that there is:  • A moderate hazard potential for shrink-swell clay	According to the Landmark Envirocheck report, natural ground stability hazards at the WKN Site are considered to be negligible to moderate.	

Section	Description / Information	Issues / Comments
	<ul> <li>A very low hazard potential for landslides</li> <li>A moderate hazard potential for compressible ground</li> <li>A moderate hazard potential of collapsible ground</li> <li>A very low hazard potential for running sand</li> <li>A negligible hazard potential for dissolution</li> </ul>	The moderate rating of compressible ground hazards indicates the potential for differential settlement of the ground under loading.  Geotechnical testing and calculation of bearing capacities should be considered during design of proposed structures and infrastructure.  Where vegetation is to be removed, the shrink-swell implications of this should be considered when designing foundations.

<sup>\*</sup> based on review of Envirocheck Report (Appendix 2)

<sup>\*\*</sup> based on review of geological and hydrogeological maps and the Envirocheck Report (Appendix 2)

# 5 Previous Reports and Baseline Ground Conditions

# 5.1 Previous Ground Investigation Reports

- 5.1.1 As previously mentioned in Section 1.4, several phases of ground investigation works have previously been undertaken on and in the vicinity of the WKN Site. The following reports were reviewed as part of this Desk Study:
  - RPS Group, 'Phase 1 Environmental Site Assessment, Kemsley Paper Mill, Sittingbourne, Kent', on behalf of E.ON, March 2009;
  - RPS Group, 'Phase 2 Intrusive Site Investigation, Kemsley Paper Mill, Sittingbourne, Kent', on behalf of E.ON, September 2009;
  - RPS Group, 'Development of a Sustainable Energy Plant, Kemsley Paper Mill, Environmental Statement, Chapter 11: Hydrogeology and Ground Conditions', prepared for St. Regis Paper Company Ltd, January 2010;
  - URS Group, 'Geotechnical and Environmental Site Investigation', on behalf of John Sisk & Sons Ltd, January 2013;
  - RPS Group, 'Interpretative Ground Investigation Report, Pre-Commencement Works for the Sustainable Energy Plant, Kemsley Paper Mill, Sittingbourne, Kent', on behalf of EEW Energy from Waste UK Limited, June 2013; and
  - RPS Group, 'Site Investigation Report, Kemsley Paper Mill' on behalf of Wheelabrator Technologies Inc. December 2015.
  - 5.1.2 The following sections provide a summary of the findings of these reports and the exploratory hole locations are shown on Figure 1.

# RPS Group, 'Phase 1 Environmental Site Assessment, Kemsley Paper Mill, Sittingbourne, Kent', on behalf of E.ON, March 2009

- 5.1.3 This report was undertaken by RPS in order to support the preparation of the Environmental Impact Assessment (EIA) for the WKN Proposed Development
- 5.1.4 The WKN Site was identified as being marsh land during a walkover in March 2009. The area to the south could be split into three: an area of marsh land, a stockpile area and a contractor laydown area.
- 5.1.5 A review of historical reports within this Phase 1 report identified that the WKN Site had previously been used for the temporary storage of effluent treatment sludge. A review of historical investigation works identified Made Ground to a maximum depth of 2.9mBGL in this area.
- 5.1.6 The report recommended the undertaking of an intrusive ground investigation to support the EIA for the K3 site development, and to characterise the geo-environmental and geotechnical risks to the K3 site development.

# RPS Group, 'Phase 2 Intrusive Site Investigation, Kemsley Paper Mill, Sittingbourne, Kent', on behalf of E.ON, September 2009

- 5.1.7 Following the outcome of the earlier Phase I report (see above), an intrusive ground investigation was undertaken by RPS within land adjoining the south-eastern boundary of the WKN Site, at the K3 Site. 2 no. trial pits (TP11 and TP12) and 1 no. borehole (WS5) were located within or on the boundary of the WKN Site.
- 5.1.8 The ground investigation was undertaken in July 2009, and subsequent post-investigation groundwater and ground gas monitoring was undertaken over a period of several weeks.
- 5.1.9 The ground investigation works were undertaken in order to provide a baseline assessment of the ground conditions and determine the extent of any contamination risks in the soils and groundwater associated with the development of waste-to-energy facility at the K3 Site.
- 5.1.10 The intrusive ground investigation identified the following:

#### **Ground Conditions**

- 5.1.11 Topsoil was present across most of the site, however the south of the K3 site was covered by concrete hardstand.
- 5.1.12 Made Ground was encountered across the site at depths of between 0.9 mbgl to 4.6 mbgl. The Made Ground typically comprised brown and grey gravelly sands and clays with frequent infill materials including: ash, clinker, bricks, concrete, plastics, and wood.
- 5.1.13 Peat was occasionally present within Made Ground in the north and east of the K3 site and was encountered as a peaty silt / clay layer (1.6 to 1.8 mbgl) or as occasional pockets.
- 5.1.14 The superficial deposits typically comprised grey brown orange mottled firm to stiff clays of Alluvium. The maximum proven depth of this stratum was 7.4 mbgl.
- 5.1.15 London Clay was encountered below Made Ground and Superficial Deposits at proven depths of between 7.4 and 14 mbgl. It comprised a stiff grey clay with occasional sands, and sand bands present at depth.
- 5.1.16 Presumed Woolwich Formation and Thanet Beds were encountered at depths of between 7 mbgl and 20 mbgl beneath Superficial Deposits and London Clay in the deep boreholes. The Woolwich Formation and Thanet Beds comprised dense grey slightly silty sand. Groundwater was present within these deposits, confined by the overlying London Clay.

#### Land Contamination Risks

- 5.1.17 Laboratory analysis of soil samples did not identify any organic or inorganic contaminants in exceedance of the applied assessment criteria.
- 5.1.18 Laboratory analysis identified the presence of asbestos at one location at the site, at a depth of between 0.8-1.2mbgl within Made Ground. The location of the sample containing asbestos is outside the boundary of the WKN Site. The asbestos was identified as amosite (brown

- asbestos) and the likely source was attributed to anthropogenic material within the Made Ground.
- 5.1.19 Laboratory analysis of groundwater samples identified concentrations of nickel, sulphate, chromium, copper, PAH and TPH in exceedance of the applied assessment criteria (EQS or DWS). The identified exceedances within the deeper aquifer comprised elevated nickel and sulphate.
  - Groundwater and Ground Gas Monitoring
- 5.1.20 Groundwater monitoring indicated groundwater flow within the shallow aquifer towards the Swale Estuary to the east of the site, but highly influenced by local conditions. A groundwater flow direction within the deep boreholes was not determined.
- 5.1.21 A tidal influence within both the shallow and deep boreholes was noted.
- 5.1.22 Ground gas monitoring identified broadly-low concentrations of ground gas across the site; however one concentrations of Carbon Dioxide was recorded as 5.5% in one location, outside of the WKN Site.
  - RPS Group, 'Development of a Sustainable Energy Plant, Kemsley Paper Mill, Environmental Statement, Chapter 11: Hydrogeology and Ground Conditions', prepared for St. Regis Paper Company Ltd, January 2010
- 5.1.23 An Environmental Chapter was prepared to support a planning Assessment at the Kemsley Paper Mill in January 2010. The chapter provided a description of ground conditions in terms of geology, hydrogeology and land contamination for then K3.
- 5.1.24 Furthermore, the chapter included a hydrological and human health risks assessment based on the proposed development of the K3.
- 5.1.25 The document was based largely on the findings of the previous Phase 1 and 2 investigations (as summarised above).
- 5.1.26 The document summarised the localised hydrological regime as follows:
  - 'A laterally discontinuous perched water body has been identified at shallow depth, with continuous saturated conditions identified in the underlying granular deposits. The London Clay is thought to effectively separate shallow perched groundwater form water in the granular deposits at depth. Groundwater flow in both water bodies is therefore orientated to the east towards The Swale.'
- 5.1.27 It determined that operational impacts to the groundwater and surface water bodies would be negligible.

# URS Group, 'Geotechnical and Environmental Site Investigation', on behalf of John Sisk & Sons Ltd, January 2013

- 5.1.28 URS undertook an intrusive ground investigation at the K3 Site to the south and southeast of the WKN Site. The investigation did not include any locations within the WKN Site boundary.
- 5.1.29 The ground investigation was undertaken in October 2012 and comprised intrusive ground investigation holes across the K3 Site. Subsequent post-investigation groundwater and ground gas monitoring was undertaken over a period of several weeks.
- 5.1.30 This was undertaken in order to provide detailed information of the ground conditions in this area, and to provide indicative information of possible landfill classification of the material to be excavated as part of the development of the K3 Site.
- 5.1.31 The intrusive ground investigation identified the following:
  - Made Ground was identified to a maximum depth of 4.5mbgl. The material included: heterogeneous silt, sand, and gravel with ash, and clinker;
  - The Made Ground was found to be underlain by soft to firm orange and grey mottled alluvial clay to approximately 6.0-8.5mbgl;
  - The alluvial deposits were noted to be underlain by stiff, grey-blue London Clay to a depth of 12.0-15.5mbgl, which overlay dense sands of the Woolwich Formation.
  - Groundwater was encountered in trial pits between 2.0 and 3.5 mbgl and was thought to be discontinuous when present in the Made Ground.
  - Concentrations of contaminants of concern including Polycyclic Aromatic Hydrocarbons (PAHs) and Total Petroleum Hydrocarbons (TPHs) were not considered to pose an unacceptable risk to human health or controlled waters.
  - Asbestos fibres were identified at one location which was considered to represent a potential risk to human health.
  - Material sampled was categorised as non-hazardous waste in accordance with waste management guidelines published by the Environment Agency (EA).

RPS Group, 'Interpretative Ground Investigation Report, Pre-Commencement Works for the Sustainable Energy Plant, Kemsley Paper Mill, Sittingbourne, Kent', on behalf of EEW Energy from Waste UK Limited, June 2013

- 5.1.32 RPS were engaged by EEW Energy from Waste UK Limited to produce a ground conditions report in order to support the Assessment for the K3 Site's development.
- 5.1.33 The investigation by RPS was focused on the K3 site, but also included 2 no. trial pits (TP18 and TP20) and 2 no. boreholes (WS9 and WS10) within the WKN Site boundary. The report also included a review of information obtained from a ground investigation undertaken by CMW in 1995. A total of 11 no. trial pits and 1 no. borehole were progressed within the boundaries of the WKN Site during this investigation.

- 5.1.34 The intrusive ground investigation by RPS was undertaken between May and June 2011, and comprised 7 no. cable percussion boreholes (to characterise the deep groundwater aquifer within the Woolwich / Thanet Formation); and 8 no. window sample boreholes to characterise shallow ground characteristics.
- 5.1.35 The investigation identified the thickness of Made Ground to range between 1.9 to 4.6mbgl. It was noted to be thinnest in the south-western area of the investigation area. Alluvium was identified to be present to a maximum depth of between 6.0-8.6mbgl; and London Clay was noted to be present to a maximum depth of between 12.2 15.7mbgl.
- 5.1.36 The Woolwich Sand Formation was encountered at the base of each of the exploratory cable percussion holes.
- 5.1.37 The investigation identified various visual and olfactory indicators of contamination, including notable staining and hydrocarbon odours within investigation holes. The majority of these observations were noted within the Made Ground. Within the WKN Site, these indicators comprised clinker within Made Ground in each locations, and an oily sheen on a groundwater seepage within trial pit TP18.
- 5.1.38 The human health risk assessment undertaken as part of this ground investigation established that inorganic parameters, petroleum hydrocarbons, and other organic parameters did not represent an unacceptable risk to human health.
- 5.1.39 The Controlled Waters risk assessment identified the following:
  - Perched groundwater was in steady state with Made Ground and patterns of contamination do not suggest significant potential to pollute wider Controlled Waters;
  - The generally limited occurrence of groundwater contamination by organic parameters;
  - The absence of significant sources of soil contamination that were resulting in ongoing contamination of groundwater the site; and
  - The concentration of aliphatic and aromatic hydrocarbons identified in groundwater did not represent an unacceptable risk to groundwater quality at the site boundary;
- 5.1.40 The ground gas risk assessment undertaken as part of the ground investigation classified the site as 'Characteristic Situation 2 'Low Risk" as per CIRIA C665 guidance.
- 5.1.41 This classification was due to elevated concentrations of methane and carbon dioxide (>5%w/w) identified during the course of the post-works monitoring. One of the locations (WS9) of elevated concentrations of methane and carbon dioxide was within the WKN Site boundary.

# RPS Group, 'Site Investigation Report, Kemsley Paper Mill' on behalf of Wheelabrator Technologies Inc. December 2015

5.1.42 RPS was engaged by Wheelabrator Technologies Inc to undertake an intrusive site investigation and ground assessment in order to support the development of the K3 site.

- 5.1.43 The investigation was undertaken to provide baseline ground quality information prior to the lease of the K3 Site by Wheelabrator Technologies Inc. from Kemsley Paper Mill.
- 5.1.44 The investigation was focused on land that forms the WKN Site and all exploratory locations were within the WKN Site boundary.
- 5.1.45 The ground investigation comprised 6 no. trial pits to characterise shallow ground conditions.
- 5.1.46 Made Ground was identified at all of the intrusive investigation locations, and had a maximum proven thickness of 4.2 m. This stratum was noted to contain concrete fragments, brick fragments, glass, metal, ash and clinker.
- 5.1.47 Groundwater was observed as a slight seepage between 0.9 and 1.4 mbgl in trial pit TP01. A rapid influx of groundwater occurred in trial pit TP03 at 4.2 mbgl.
- 5.1.48 Limited olfactory evidence of contamination was identified during the investigation works.
- 5.1.49 An oily sheen was observed on the groundwater encountered at one investigation location.
- 5.1.50 A human health risk assessment was undertaken and concluded that the identified contaminant concentrations were unlikely to present an unacceptable to human health.
- 5.1.51 Asbestos was identified at 3 no. ground investigation locations and was considered to present a potentially unacceptable risk to human health. The report recommended that removal of asbestos containing soils or use of a clean capping layer or hardstanding would significantly reduce this risk.

# 5.2 Baseline Ground Conditions

### **Baseline Soil Quality**

- 5.2.1 Based upon the findings of the ground investigation reports detailed above, the baseline soil quality across expected across the WKN Site (and adjacent areas including the construction laydown area) has been determined from the dataset summarised in Appendix 4.
- 5.2.2 In general terms available soil quality dataset is characterised by low levels of organic and inorganic contamination in soils, although asbestos has been identified within soils at a number of locations. Soil quality is largely characterised by the absence of VOCs and SVOCs, with the exception of PAHs. No hot spots indicative of gross soil contamination were identified in any investigation and no requirement for site remediation in advance on the construction was identified on the basis of observed soil quality.
- 5.2.3 The chemical analyses identified the highest concentration of most contaminants of concern (most notably metals, TPH and PAHs) within the shallow Made Ground, although the dataset for the underlying alluvium is small. The only exception to this was certain inorganic parameters associated with the estuarine setting of the facility (e.g. elevated sulphate in the alluvium).
- 5.2.4 The presence of asbestos suggests that the re-use of Made Ground is likely to be unacceptable unless appropriate capping measures are adopted, where its geotechnical properties allow. This

suggests that soils within landscaped areas on the WKN Site will use imported or re-used with an unproven quality. A "baseline soil quality" cannot be determined for the landscaped areas of the WKN Site until after the construction of the facility and in advance of operations commencing thereon.

5.2.5 The analytical dataset presented in Appendix 4 does define the general baseline soil quality that can be expected in shallow soils (principally Made Ground) across the WKN Site.

## **Baseline Groundwater Quality**

- 5.2.6 Based upon the findings of the ground investigation reports detailed above, the baseline groundwater quality across expected across the WKN Site (and adjacent areas including the construction laydown area) has been determined from the dataset summarised in Appendix 5.
- 5.2.7 In general terms, a low level of organic and inorganic contamination have been identified in shallow perched waters and/or deep groundwater. Where present, the highest concentrations of contaminants of concern have been observed in Made Ground, which is characterised by the presence of metals, petroleum hydrocarbons and polycyclic aromatic hydrocarbons. Groundwater is typically characterised by the absence of VOCs and SVOCs.
- 5.2.8 The water quality dataset for shallow and deep groundwater provides no indication of the impact of leachate associated with the landfill to the south of the WKN Site (Kemsley Mill Landfill).

### Shallow Perched Water

- 5.2.9 The baseline quality of shallow perched water in the Made Ground has been shown to be characterised by the presence or absence of the following contaminants of concern:
  - · Presence of certain heavy metals;
  - · Elevated chloride and sulphate;
  - Elevated ammonia;
  - Presence of PAHs (concentration of up to 0.35 μg/l) and long chain fraction of Petroleum Hydrocarbons (concentration of up to c. 220 μg/l);
  - General absence of short chain Petroleum Hydrocarbons or BTEX compound;
  - General absence of VOCs and SVOCs, with the exception of the occasional presence of phenols and phenolic compounds.
- 5.2.10 Despite the presence of the above contaminants of concern in shallow perched waters, the concentrations are generally low and the associated risk to controlled water and human health are not likely to warrant remediation in advance of construction.
- 5.2.11 In the absence of any hotspots of gross contamination of shallow perched waters across the WKN Site, the dataset presented in Appendix 5 defines a baseline water quality variability that

may be expected in the discontinuous shallow perched waterbody, principally Made Ground, across the WKN Site.

## Deep Groundwater

- 5.2.12 Deep groundwater is afforded protection from surface activities by the presence of the low permeability London Clay Formation across the WKN Site. Groundwater quality in the deep granular Secondary A is typically good with the highest concentration of most contaminants of concern being observed in the shallow perched waters. As result the general the water quality in the deep aquifer is characterised by the presence of fewer contaminants of concern and in particular organic contaminants.
- 5.2.13 Significantly, there is no evidence of any impact on water quality within the deep Secondary A aquifer from surrounding landfill activities, most notably the now closed Kemsley Waste Disposal Site that is situated to the south of the WKN Site.
- 5.2.14 However the occasional presence of certain organic compounds and heavy metals in deep water has been observed albeit at low concentrations. The water quality dataset summarised in Appendix 5 therefore define sthe baseline water quality expected in deep groundwater in the Woolwich / Thanet Sands across the WKN Site.

#### **Baseline Ground Gas**

5.2.15 The ground gas risk assessment presented in the Interpretative Ground Investigation Report (Ref. 7) indicates a Characteristic Situation 2 (CS2) (CIRIA, 2007) 'Low Risk' for the WKN Site. Furthermore no evidence has been found of an observable gas impact on the WKN Site from the Kemsley Landfill Site to the south or other sources of ground gas. It is understood that landfill gas production at the Kemsley Waste Disposal Site is managed to the satisfaction of the regulatory authorities (Ref. 7).

# 6 Conceptual Site Model and Preliminary Risk Assessment

6.1.1 In line with CLR-11 guidance (Ref. 9) a conceptual site model and preliminary risk assessment have been developed to qualitatively assess potential contaminant sources, receptors and potential pollutant linkages identified at the WKN Site. The risk level relevant to each linkage is stated in the context of potential risk to future site users based on the WKN Proposed Development, as well as controlled water receptors.

#### **Potential Contamination Sources**

- 6.1.2 Based on the historical site information, the following potential contamination sources at the WKN Site have been identified:
  - Chemical contamination associated with the historical use of the Site, including as a landfill and railway lines (organic, inorganic and asbestos contamination);
  - Chemical contamination associated with the adjoining Kemsley Paper Mill site (inorganic, organic contamination, and ground gas generation potential);
  - Ground gas and leachate risks associated with offsite landfills (including Kemsley Mill landfill approx. 300m to the south of the WKN site); and
  - Ground gas risk associated with the superficial Alluvium deposits at the WKN Site, and the
    potential for the presence of peat within the deposits.
- 6.1.3 The risk assessment is based on a proposed future industrial use of the WKN Site and presented in Tables 6-1 and 6-2.

Table 6.1 Summary of Pollutant (Source-Pathway-Receptor) Linkages

Source	Pathway	Recep	tor Ri	sk	Notes	
HUMAN HEALTH RECEPTORS						
Chemical contamination from historical use of the Site	Ingestion and dermal contact of soil / dust	Future Site Users /	Low	Grou conta The f	Historical information has indicated contaminant sources to have been located at the WKN Site. Ground investigations at and adjacent to the WKN Site generally indicate low levels of chemical contaminants within the shallow soils.  The final development is anticipated to be largely covered by hardstanding with localised areas o landscaping thereby largely minimising human exposure to soils.	
	Inhalation of organic vapours	Construction Workers	Low	Grou conta The f	prical information has indicated contaminant sources to have been located at the WKN Site. and investigations at and adjacent to the WKN Site generally indicate low levels of chemical aminants within the shallow soils.  If the shallow soils are as of scaping thereby largely minimising human exposure to soils.	
	Inhalation of asbestos fibres	Future Site Users / Construction Workers	Low to moderate	withir locali (albe	Based upon the industrial history of the WKN Site, there is the potential for asbestos to be present within the shallow soils. Ground investigations within the boundaries of the WKN Site have found localised asbestos fibres within the Made Ground. Humans could be exposed to asbestos fibres (albeit in localised areas) during construction activities in an area of landscaping where no clean cover system is implanted.	
Chemical contamination associated with the adjoining Kemsley Paper Mill site, landfill sites and sewage treatment works	Ingestion and dermal contact of soil / dust	Future Site Users /	Low	conta mana	and investigations in areas adjacent to the WKN Site generally indicate low levels of aminants within the shallow soils. The presence of hardstanding and a surface water agement system over much of the Kemsley Paper Mill site will limit to migration of any aminants, via groundwater, on the WKN Site.	
	Inhalation of organic vapours	Construction Workers	Low	conta mana	and investigations in areas adjacent to the WKN Site generally indicate low levels of aminants within the shallow soils. The presence of hardstanding and a surface water agement system over much of the Kemsley Paper Mill site will limit to migration of any aminants, via groundwater, on the WKN Site.	
Ground gas from the historical landfill within WKN Site boundary, landfills to the south of the WKN Site and from within natural organic-rich soils (Alluvium).	Migration of ground gas and accumulation in structures	Future Site Users	Low to moderate	partice poter that i Kems Previous adjace mana and r	The presence of a landfill within the boundaries of the WKN Site and landfill to the south, in particular the Kemsley Mill landfill represent a source of ground gas generation that presents a potential risk to human health. Ground investigations have identified material within the WKN site that is consistent with the inert classification of the landfill. Furthermore, it is understood that the Kemsley Mill landfill site is currently manage to the satisfaction of the Regulatory bodies. Previous ground investigations have identified a ground gas Characteristic Situation 2 on and adjacent to the WKN Site and thus gas protection measures will likely be required in buildings to manage ground gas risks. It is recommended that additional ground investigation, gas monitoring and risk assessment is undertaken to define the ground gas protection measures required. The presence of organic material within the Alluvium has the potential to be a source of ground gas.	

Table 6.2 Summary of Pollutant (Source-Pathway-Receptor) Linkages - Continued

Source	Pathway	Receptor	Risk	Notes
CONTROLLED WATER RECEPTORS				
	Leaching of contaminants within the unsaturated zone and vertical migration	Perched groundwater within the Made Ground / upper superficial Alluvium Deposits (Secondary Undifferentiated)	Low	Generally low levels of contaminants have been identified within soil and groundwater at the WKN Site. The presence of hardstanding over much of the Proposed WKN Development area is likely to minimise the potential for leaching of any soil contaminants into shallow groundwater. In addition, the Alluvium is a Secondary Undifferentiated aquifer and is of low sensitivity.
Chemical contamination		Groundwater within the Woolwich (Lambeth) / Thanet Formation (Secondary A Aquifer)	Low	The WKN Site is believed to be underlain by a significant thickness (~5m) of low permeability clay of the London Clay Formation. The presence of this stratum will likely minimise the potential for downward migration of contamination in shallow perched groundwater into the Secondary A aquifer.
in Made Ground and natural soils relating to historical development ad current use of the Site		Groundwater within the underlying Seaford Chalk Formation (Principal Aquifer)	Low	The depth to chalk is anticipated to be significant (~50m) and is overlain by another groundwater bearing unit (Secondary A aquifer) which will afford the chalk protection from any contamination that may have migrated through the London Clay Formation.
	Migration of contaminated groundwater	Surface water bodies (The Swale)		Previous ground investigations in the vicinity of the Site have indicated that shallow groundwater and deep groundwater (within Secondary A aquifer) are in continuity with The Swale. Generally low levels of contaminants have however been identified within soil and groundwater at the WKN Site.
			Low	In addition, migration of shallow water from the WKN Site towards The Swale is likely to be limited due to the anticipated discontinuous nature of the waterbody. Furthermore, the presence of the London Clay Formation is considered to minimise the potential for any contamination within the shallow water to enter deep groundwater and migrate towards The Swale.

# 7 Conclusions

- 7.1.1 RPS Planning and Environment ('RPS') was commissioned by Wheelabrator Technologies Inc. (herein shortened to WTI and referred to as 'the Applicant') to undertake a Phase 1 Desktop Study (DTS) and Preliminary Risk Assessment (PRA) report to support a Development Consent Order (DCO) for the construction of a new single-line waste-to-energy plant ( WKN Proposed Development) at the Kemsley Paper Mill, Sittingbourne, Kent, ME10 2TD (referred to as the 'WKN Site').
- 7.1.2 The purpose of undertaking this assessment was to assess the potential for the presence of ground contamination and associated ground gas risks at the WKN Site as a result of former and current land uses at and in the local vicinity of the WKN Site.
- 7.1.3 The assessment provides a Conceptual Site Model (CSM) and Preliminary Risk Assessment (PRA) for ground contamination at the WKN Site.
- 7.1.4 The DTS comprised an reconnaissance survey, a review of available records, including existing ground investigation information, to determine the potential for contamination to be present at the WKN Site and the environmental sensitivity of the WKN Site and its surrounding areas.
- 7.1.5 The assessment identified several potential sources of contamination at the WKN Site as a result of historical and current industrial activities:
  - Chemical contamination associated with the historical use of the Site, including as a landfill and railway lines (organic, inorganic and asbestos contamination);
  - Chemical contamination associated with the adjoining Kemsley Paper Mill site (inorganic, organic contamination, and ground gas generation potential);
  - Ground gas and leachate risks associated with offsite landfills (including Kemsley Mill landfill approx. 300m to the south of the WKN site); and
  - Ground gas risk associated with the superficial Alluvium deposits at the WKN Site, and the
    potential for the presence of peat within the deposits.
- 7.1.6 The preliminary CSM has identified that risks to human health (future site users and construction workers) and controlled waters are generally low. A low to moderate risk to human health was identified from the localised presence of asbestos fibres within the Made Ground and from the generation of ground gas within landfills situated within and in close proximity to the WKN Site and from organic soils within the underlying Alluvium.
- 7.1.7 Risks to human health from asbestos can be managed by the use of suitable measures to minimise disturbance of fibres during construction works and the implementation of a suitable cover system in areas of proposed landscaping. Risks to human health from ground gas can be managed by the implementation of ground gas protection measures within new structures.
- 7.1.8 It is recommended that additional ground investigation, gas monitoring and risk assessment is undertaken to define the ground gas protection measures required for new structures.

- 7.1.9 Natural ground stability hazards at the WKN Site are considered to be negligible to moderate.

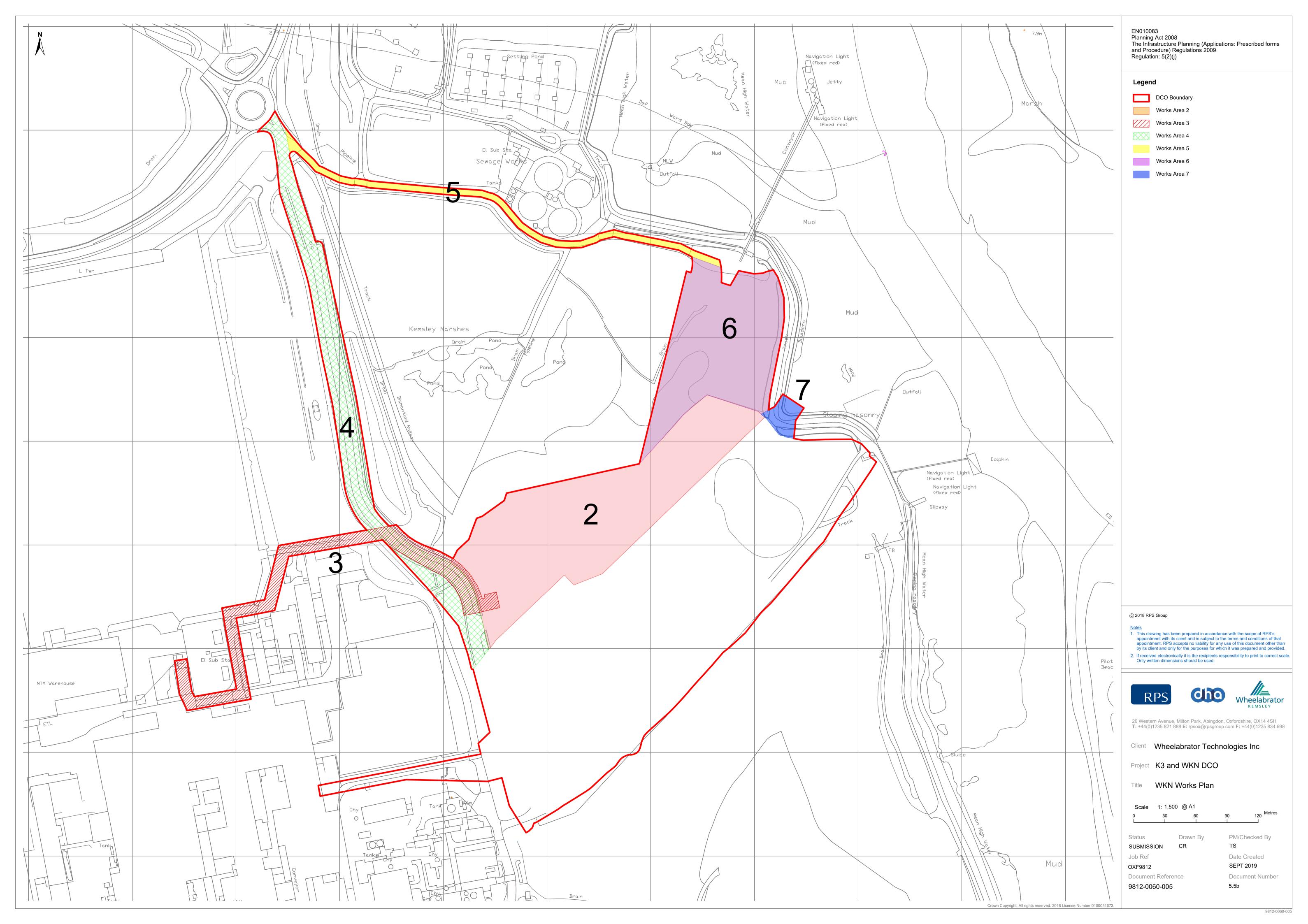
  The moderate rating of compressible ground hazards indicates the potential for differential settlement of the ground under loading.
- 7.1.10 Geotechnical testing and calculation of bearing capacities should be considered during design of proposed structures and infrastructure. Where vegetation is to be removed, the shrink-swell implications of this should be considered when designing foundations.

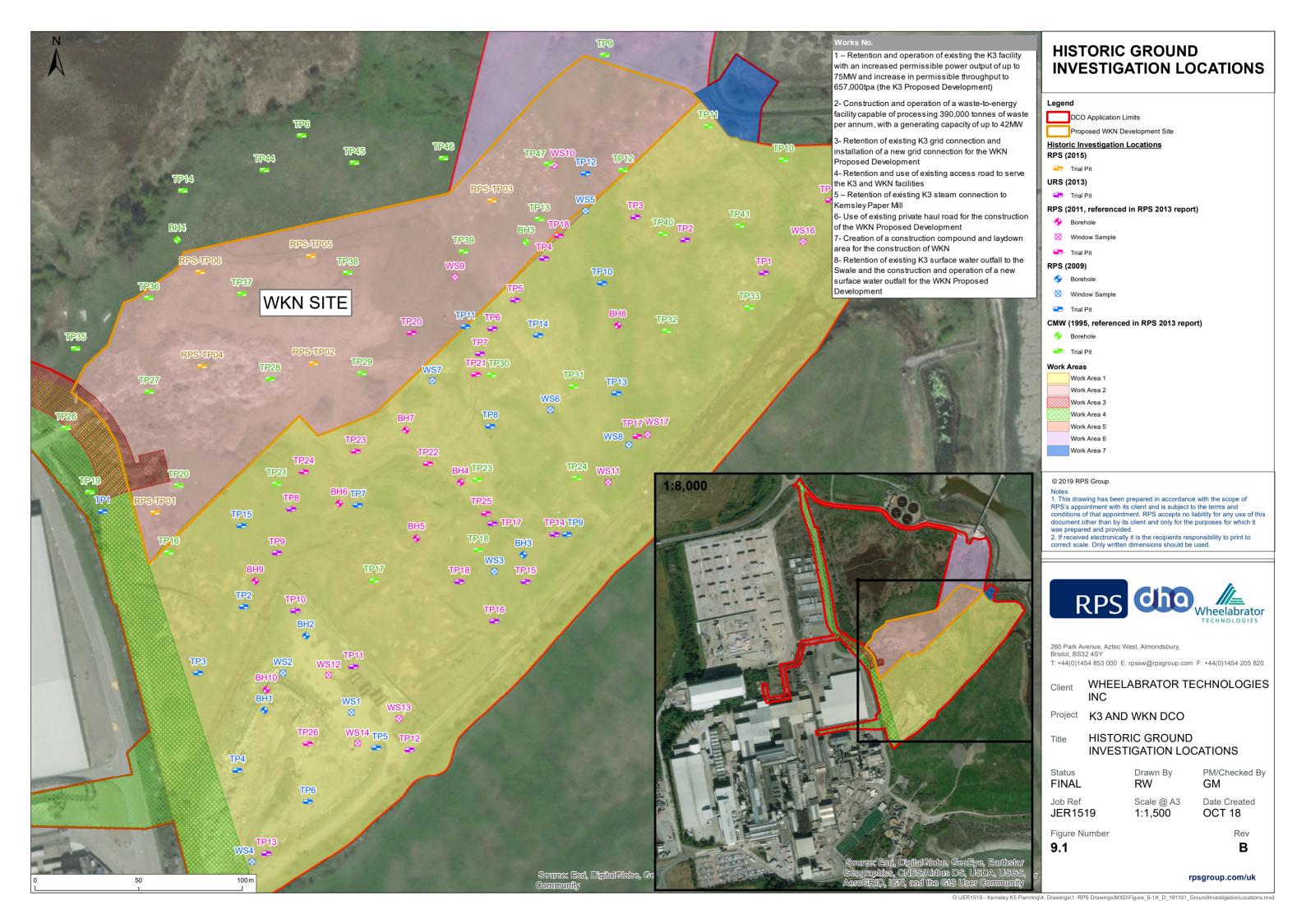
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- 6. URS Group, 'Geotechnical and Environmental Site Investigation', on behalf of John Sisk & Sons Ltd, January 2013, reference: '47064660';
- 7. RPS Group, 'Interpretative Ground Investigation Report, Pre-Commencement Works for the Sustainable Energy Plant, Kemsley Paper Mill, Sittingbourne, Kent', on behalf of EEW Energy from Waste UK Limited, June 2013, reference: 'JER5481 R 130613 DH Interpretative Report';
- 8. RPS Group, 'Site Investigation Report, Kemsley Paper Mill' on behalf of Wheelabrator Technologies Inc. December 2015, reference: '151202 R JER6773 RH GI Report PT Review';
- 9. Environment Agency (2004). *CLR-11 Model Procedures for the Management of Land Contamination*. September 2004.

### **Drawings**







# **Appendices**

### **APPENDIX 1**

**Desk Study Methodology** 

#### Introduction

This report provides available factual data for the site obtained only from the sources described below and related to the site on the basis of the location provided by the Applicant. The desk study information is not necessarily exhaustive and further information relevant to the site may be available from other sources. No responsibility can be accepted by RPS for inaccuracies in the data supplied by any other party.

This report is written in the context of an agreed scope of work and should not be used in a different context. Furthermore, new information and changes in legislation may necessitate a re-interpretation of the report in whole or in part after its original submission. The report is provided for sole use by the Applicant and is confidential to them and their professional advisors. No reliance whatsoever is provided to any party other than the Applicant unless otherwise agreed.

#### **Information Sources**

#### **Land Use**

This section establishes the former and current uses of the site, which could have caused contamination. Details of the site location, the current and proposed site uses have been provided by the Applicant.

Where specified, a site inspection has been carried out by RPS to identify any significant issues associated with current and past activities, neighbouring land uses and other key environmental issues.

Information about the history of the site has been obtained through an inspection of historical maps at 1:10,000, 1:2,500 and 1:1,250 scales (where available). The accuracy of maps cannot be guaranteed and it should be recognised that different conditions on site may have existed between, and subsequent to, the map survey dates.

Regulatory records including landfills, pollution incidents ('major' and 'significant' only), industry authorisations and licensed water abstractions are derived from information purchased from Landmark Ltd (unless otherwise specified).

#### **Environmental Setting**

It is important to establish the environmental setting because, irrespective of the level of contamination at a site, if its location is not 'sensitive' to this contamination, there is a reduced risk of an environmental liability.

The geological sequence underlying the site and the approximate depths of strata are provided by maps published by the British Geological Survey (BGS) 1:50,000 scale. The hydrogeological classification is obtained from Groundwater Vulnerability mapping on the Environment Agency (EA) website. The vulnerability of groundwater is determined from this mapping and geological information.

The location of surface watercourses is obtained from an inspection of current OS maps. Surface water quality information is taken from the most up-to-date Chemical River Quality General Quality Assessment (GQA) details published by the EA. Flood risk details and information on groundwater Source Protection Zones are obtained from readily available EA information published on-line.

Details of sensitive ecosystems/habitats and coal mining areas are supplied by English Nature and the Coal Authority respectively via Landmark Ltd.

Radon is a radioactive gas produced naturally by certain types of geology. This report uses the Indicative Atlas of Radon in England and Wales (2007) produced by the Health Protection Agency (HPA) and the British Geological Survey (BGS) to determine whether the site is located in an area at risk from radon gas. Where potential issues are identified, a site-specific radon report is obtained from the HPA and BGS to provide a more accurate estimate of the probability of the site being affected by radon gas ingress.

#### **Risk Assessment**

The Risk Assessment consists of an appraisal of the source-pathway-receptor 'pollutant linkages' which is central to the approach used to determine the existence of 'contaminated land' according to the definition set out under Part 2A of the Environmental Protection Act 1990. For a risk to exist (under Part 2A), all three of the following components must be present to facilitate a potential 'pollutant linkage'.

- Source of contamination (Hazard);
- Pathway for the contaminant to move from the source(s) to receptor(s); and
- Receptor (Target) that could be affected by the contaminant(s).

Receptors include human beings, other living organisms, crops, controlled waters and buildings / structures. The mere presence of a contaminant source / hazard at a site does not mean that there will necessarily be attendant risks or that the site will be designated as 'contaminated land'.

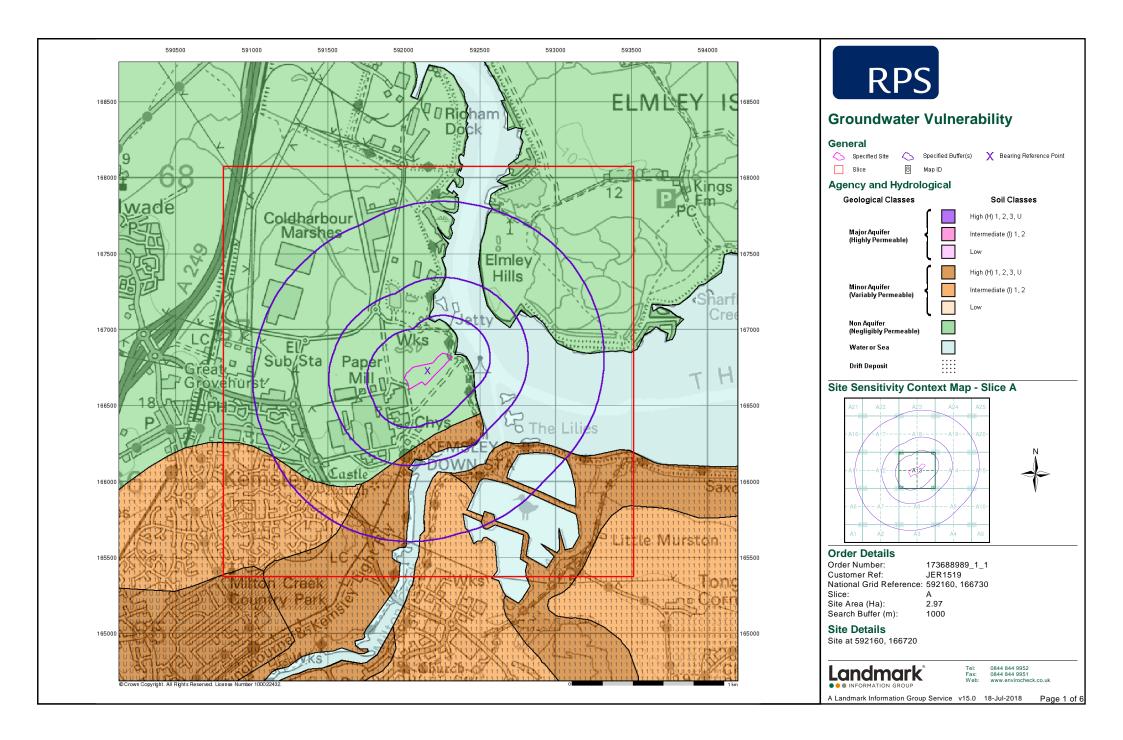
The Risk Assessment sections comprise a summary of the land use and environmental sensitivity information demonstrated as the contaminant Source, Pathway and Receptor components. It also incorporates its likelihood of occurrence and commercial impact. It has been classified under three broad categories:

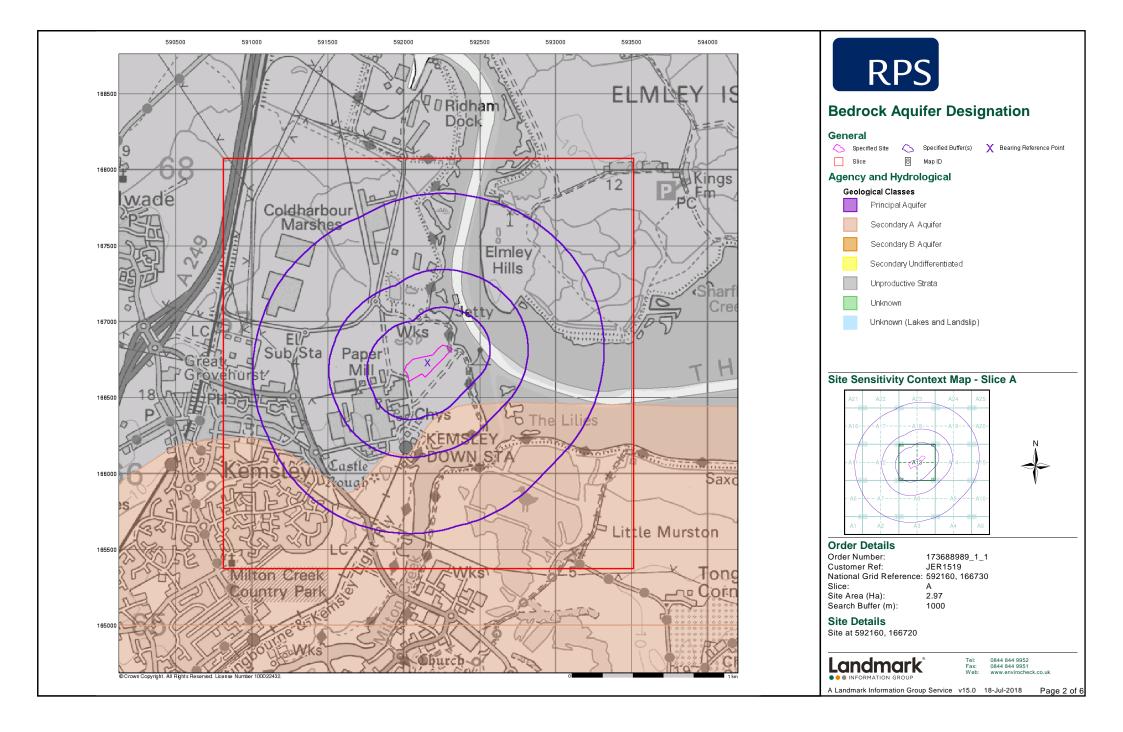
- Low risk it is considered unlikely that issues assigned this designation will give rise to significant harm;
- Moderate risk it is possible, but not certain that issues assigned this designation may give rise to significant harm or a liability/cost for the owner of the site; and
- High risk there is a high potential that issues assigned this designation may give rise to significant harm or a liability/cost for the owner of the site.

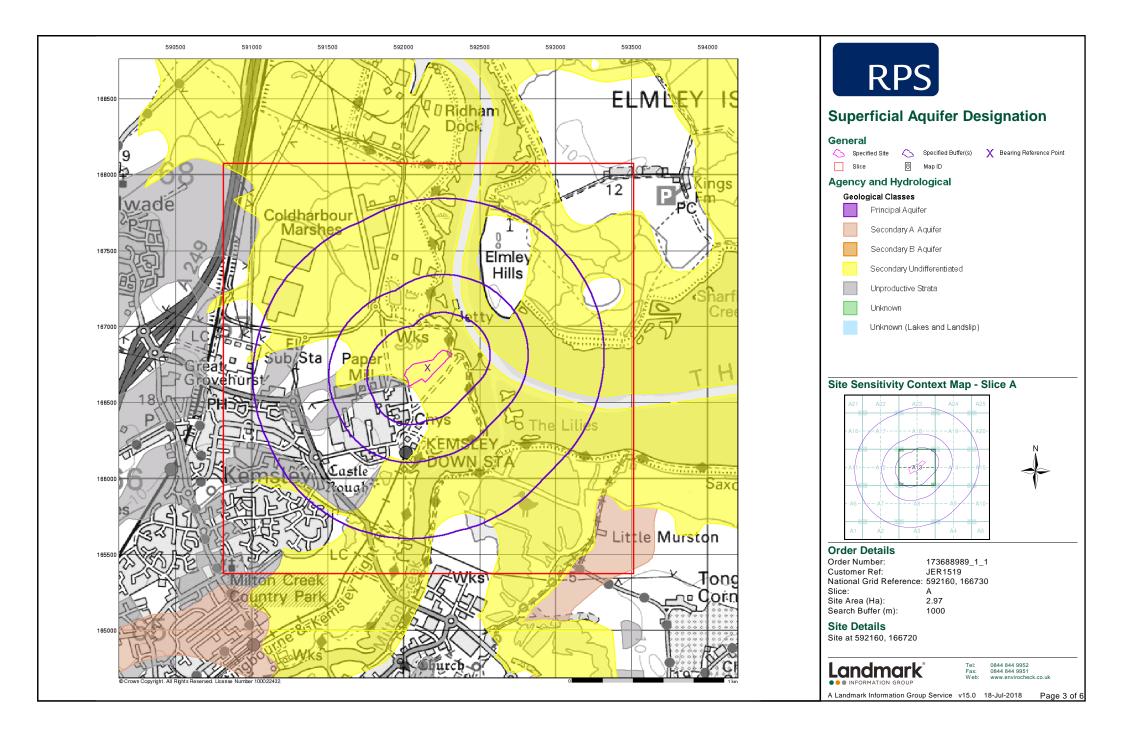
In addition the assessment includes consideration of redevelopment constraints i.e. potential for extraordinary environment-related development costs, the site's 'suitability for use' and the perception by any future purchasers regarding the potential impact on investment value/saleability. The assessment of redevelopment constraints should be considered preliminary and does not represent an exhaustive assessment of potential constraints.

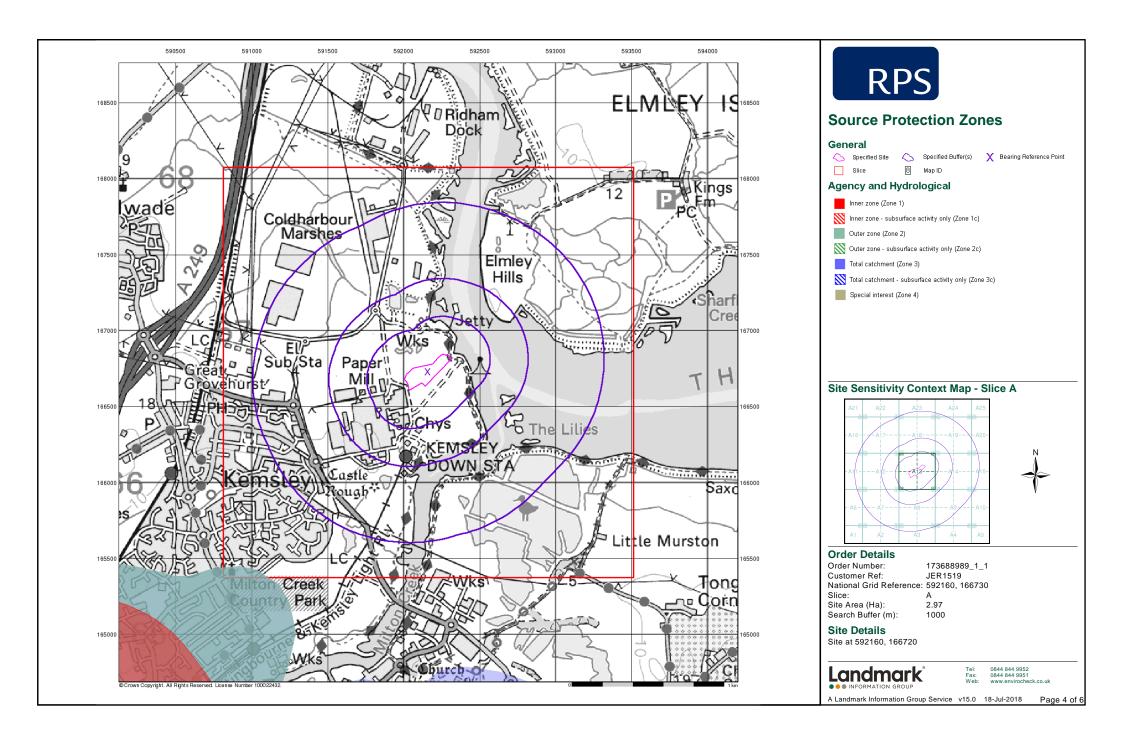
### **APPENDIX 2**

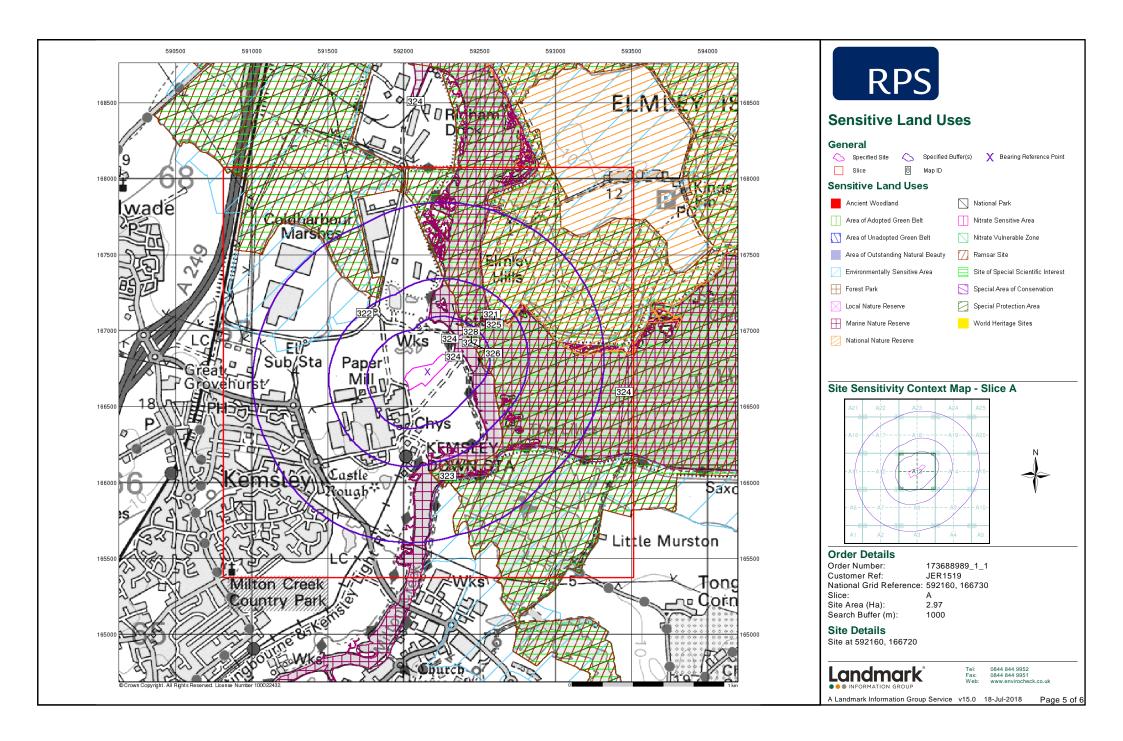
**Landmark Envirocheck Report** 

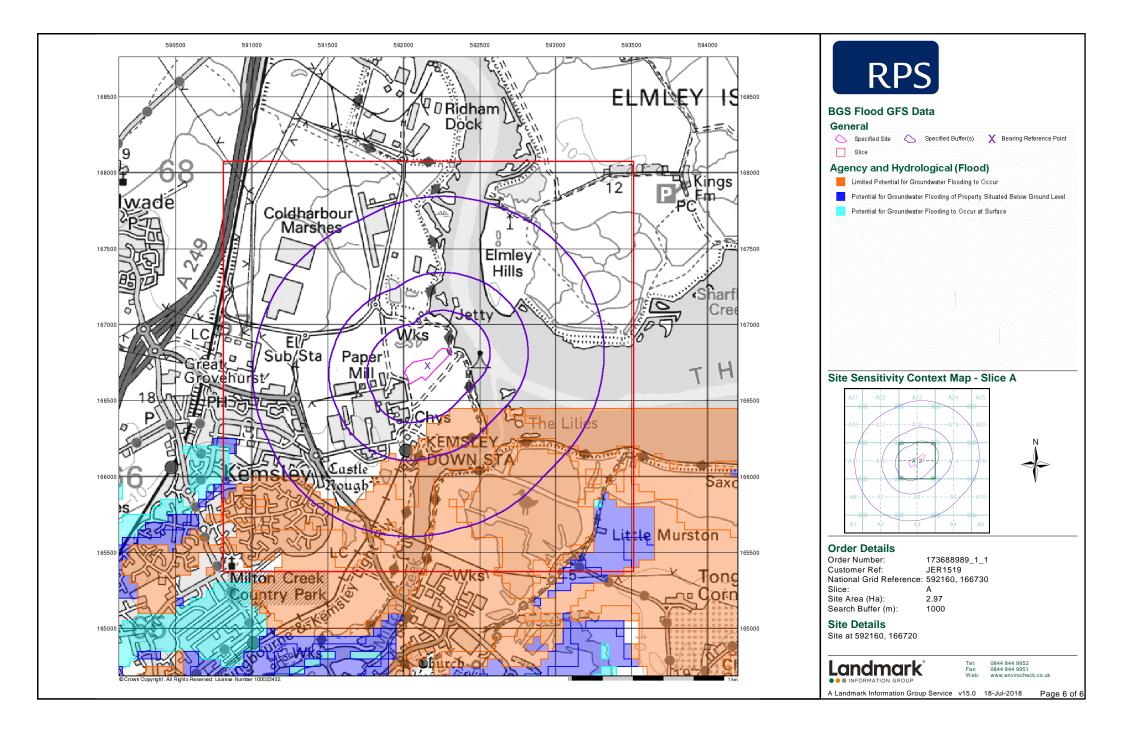














# **Envirocheck® Report:**

### **Datasheet**

#### **Order Details:**

**Order Number:** 

173688989\_1\_1

**Customer Reference:** 

JER1519

**National Grid Reference:** 

592160, 166730

Slice:

Α

Site Area (Ha):

2.97

Search Buffer (m):

1000

**Site Details:** 

Site at 592160, 166720

### **Client Details:**

Ms A Thomas RPS Consultants 260 Park Avenue Aztec West Almondsbury Bristol BS32 4SY







Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	60
Hazardous Substances	-
Geological	64
Industrial Land Use	66
Sensitive Land Use	68
Data Currency	69
Data Suppliers	73
Useful Contacts	74

#### Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.

For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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#### Report Version v53.0



### **Summary**

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1		Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1		3	13	9
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls	pg 7			3	12
Integrated Pollution Prevention And Control	pg 9		5	11	42
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls					
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 22		Yes		
Pollution Incidents to Controlled Waters	pg 23		2	14	8
Prosecutions Relating to Authorised Processes	pg 27				1
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 27		1		2
Water Abstractions	pg 27		3		(*13)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 31	Yes	n/a	n/a	n/a
Drift Deposits			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 31	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 31	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences	pg 31	Yes	Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 32	Yes		n/a	n/a
Areas Benefiting from Flood Defences	pg 32	Yes	Yes	n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences	pg 32		Yes	n/a	n/a
OS Water Network Lines	pg 32		22	23	198



### **Summary**

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 60	1	1		3
Integrated Pollution Control Registered Waste Sites	pg 61				2
Licensed Waste Management Facilities (Landfill Boundaries)	pg 61		1		
Licensed Waste Management Facilities (Locations)	pg 61			2	1
Local Authority Landfill Coverage	pg 62	2	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Registered Landfill Sites	pg 62			2	
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS 1:625,000 Solid Geology	pg 64	Yes	n/a	n/a	n/a
BGS Recorded Mineral Sites	pg 64				2
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 64	Yes		n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 64	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 64	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 64	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 65	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 65	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a



# **Summary**

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Industrial Land Use					
Contemporary Trade Directory Entries	pg 66			2	20
Fuel Station Entries					
Gas Pipelines					
Underground Electrical Cables					
Sensitive Land Use					
Ancient Woodland					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas	pg 68			2	1
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves	pg 68		1		
National Nature Reserves	pg 68			1	
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites	pg 68		1		
Sites of Special Scientific Interest	pg 68		1		
Special Areas of Conservation					
Special Protection Areas	pg 68		1		
World Heritage Sites					



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	243	1	592300 166450
	BGS Groundwater	Flooding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A14SW (SE)	386	1	592500 166450
	Discharge Consent					
1		Clugston Group Ltd CONSTRUCTION OF BUILDINGS Kemsley Kemsley Efw, Kemsley Papermill, Sittingbourne, Kent, Me10 2td Environment Agency, Southern Region Not Supplied Epreb3792ny 1 23rd August 2016 23rd August 2016 Not Supplied Trade Effluent Discharge-Site Drainage Freshwater Stream/River The Swale New issued under EPR 2010 Located by supplier to within 10m	A13NE (NE)	22	2	592332 166832
2	Discharge Consent		4.400\4/	28	2	500000
2	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Grovehurst Energy Ltd MAKING OF PAPER+PAPER PRODUCTS Kemsley Paper Mill, Sittingbourne Kent Environment Agency, Southern Region Not Supplied K00025 1 2nd December 1971 2nd December 1971 Not Supplied Trade Discharges - Cooling Water Saline Estuary Saline Estuary Pre National Rivers Authority Legislation where issue date < 01/09/1989 Located by supplier to within 10m	A13SW (SW)	20	2	592000 166640
	Discharge Consent					
3	-	Grovehurst Energy Ltd. (Hmip) Undefined Or Other Uk Paper House, Kemsley, Sittingbourne, Kent, Me10 2sg Environment Agency, Southern Region Old-River Swale (cut-off) Aa3808 1 1st April 1993 22nd June 1992 31st March 1997 Trade Discharge - Process Water Saline Estuary Authorisation revoked Located by supplier to within 100m	A13SW (SW)	210	2	592000 166400
4	Discharge Consent		A18SW	257	2	592150
4	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Grovehurst Energy Ltd Undefined Or Other Kemsley Paper Mill, Sittingbourne Kent Environment Agency, Southern Region Old-unknown river P05604 1 1st January 1995 15th December 1994 22nd May 2002 Trade Discharge - Process Water Freshwater Stream/River  The Swale Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m	(N)	231	2	167080



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	St. Regis Paper Co. MAKING OF PAPER+PAPER PRODUCTS Wood Pulping Plant, Employing Neutral Sulphite Proce Environment Agency, Southern Region Not Supplied K02095 1 1st October 1969 1st October 1969 25th November 1994 Trade Effluent Freshwater Stream/River  Freshwater River Pre National Rivers Authority Legislation where issue date < 01/09/1989 Located by supplier to within 10m	A18SE (NE)	266	2	592330 167100
6	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Grovehurst Energy Ltd Undefined Or Other Kemsley Paper Mill, Sittingbourne Kent Environment Agency, Southern Region Old-River Swale (cut-off) K00024 1 14th January 1985 14th January 1985 13tst December 1994 Trade Discharge - Process Water Saline Estuary Pre National Rivers Authority Legislation where issue date < 01/09/1989 Located by supplier to within 100m	A18SE (N)	359	2	592200 167200
7	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Grovehurst Energy Ltd MAKING OF MACHINERY/ENGINE/PUMP/FURNACE/TRACTOR Kemsley Mill, Sittingbourne, Kent, Me10 25g Environment Agency, Southern Region Swale Bj8558 1 25th April 2002 25th April 2002 25th April 2002 Trade Effluent Saline Estuary Saline Estuary Pre National Rivers Authority Legislation where issue date < 01/09/1989 Located by supplier to within 10m	A8NW (S)	444	2	592160 166180
7	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Grovehurst Energy Ltd MAKING OF MACHINERY/ENGINE/PUMP/FURNACE/TRACTOR Kemsley Mill, Sittingbourne, Kent, Me10 25g Environment Agency, Southern Region Swale Bj8558 1 25th April 2002 25th April 2002 25th April 2002 Trade Discharge - Process Water Saline Estuary Saline Estuary Pre National Rivers Authority Legislation where issue date < 01/09/1989 Located by supplier to within 10m	A8NW (S)	444	2	592160 166180



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Grovehurst Energy Ltd MAKING OF MACHINERY/ENGINE/PUMP/FURNACE/TRACTOR Kemsley Mill, Sittingbourne, Kent, Me10 2sg Environment Agency, Southern Region Swale Bj8588 1 25th April 2002 25th April 2002 25th April 2002 Sewage Discharges - Final/Treated Effluent - Not Water Company Saline Estuary  Saline Estuary  Revoked and replaced by IPC Authorisation Located by supplier to within 10m	A8NW (S)	444	2	592160 166180
7	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Grovehurst Energy Ltd MAKING OF MACHINERY/ENGINE/PUMP/FURNACE/TRACTOR Kemsley Mill, Sittingbourne, Kent, Me10 2sg Environment Agency, Southern Region Swale Bj8588 1 25th April 2002 25th April 2002 25th April 2002 Trade Effluent Saline Estuary Saline Estuary Revoked and replaced by IPC Authorisation Located by supplier to within 10m	A8NW (S)	444	2	592160 166180
7	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Grovehurst Energy Ltd MAKING OF MACHINERY/ENGINE/PUMP/FURNACE/TRACTOR Kemsley Mill, Sittingbourne, Kent, Me10 2sg Environment Agency, Southern Region Swale Bj8588 1 25th April 2002 25th April 2002 25th April 2002 Trade Discharge - Process Water Saline Estuary Saline Estuary Revoked and replaced by IPC Authorisation Located by supplier to within 10m	A8NW (S)	444	2	592160 166180
7	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Type: Status: Positional Accuracy:	S Southern Water Services Ltd (K) PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Ridham Avenue Kemsley Ceo Ridham Avenue, Kemsley, ., Kent, Me10 2sg Environment Agency, Southern Region Not Supplied A06000 2 5th December 2017 5th December 2017 Not Supplied Public Sewage: Storm Sewage Overflow Saline Estuary  Tributary Of The River Swale Varied under EPR 2010 Located by supplier to within 10m	A8NE (S)	485	2	592200 166150



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent		,			
7		Southern Water Services Ltd (K) PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Ridham Avenue Kemsley Ceo Ridham Avenue, Kemsley, ., Kent, Me10 2sg Environment Agency, Southern Region Not Supplied A06000 2 5th December 2017 5th December 2017 Not Supplied Sewage Discharges - Pumping Station - Water Company Saline Estuary  Tributary Of The River Swale Varied under EPR 2010 Located by supplier to within 10m	A8NE (S)	485	2	592200 166150
7	•	Southern Water Services Ltd (K) PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Ridham Avenue Kemsley Ceo Ridham Avenue, Kemsley, ., Kent, Me10 2sg Environment Agency, Southern Region Not Given A06000 1 5th November 1992 5th November 1992 4th December 2017 Public Sewage: Storm Sewage Overflow Saline Estuary Saline Estuary Post National Rivers Authority Legislation where issue date > 31/08/1989 Located by supplier to within 100m	A8NE (S)	485	2	592200 166150
7	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Southern Water Services Ltd (K) WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Kemsley S.T.W., Kemsley Kent Environment Agency, Southern Region Not Given A00530 1 9th November 1989 9th November 1989 5th November 1992 Sewage Discharges - Unspecified - Water Company Saline Estuary Saline Estuary Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	A8NE (S)	485	2	592200 166150
8	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Grovehurst Energy Ltd DOMESTIC PROPERTY (SINGLE) (INCL FARM HOUSE) Uk Paper Ltd, New Thames Mill, Kemsley, Sittingbourne, Kent Environment Agency, Southern Region Not Supplied P09543 1 19th December 2000 19th December 2000 27th May 2013 Trade Effluent Discharge-Site Drainage Saline Estuary Saline Estuary Surrendered under EPR 2010 Located by supplier to within 10m	A12SE (W)	444	2	591570 166600



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent	s				
9	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Grovehurst Energy Ltd MAKING OF PAPER+PAPER PRODUCTS Kemsley Paper Mills, IWADE, Kent Environment Agency, Southern Region Old-Swale K02134 1 17th September 1965 17th September 1965 22nd May 2002 Trade Discharge - Process Water Freshwater Stream/River  Milton Creek Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m	A8SW (S)	557	2	592020 166050
10	,	Grovehurst Energy Ltd MAKING OF MACHINERY/ENGINE/PUMP/FURNACE/TRACTOR Kemsley Mill, Sittingbourne, Kent, Me10 25g Environment Agency, Southern Region Swale Bj8558 1 25th April 2002 25th April 2002 25th April 2002 25th April 2002 Sewage Discharges - Final/Treated Effluent - Not Water Company Saline Estuary Pre National Rivers Authority Legislation where issue date < 01/09/1989 Located by supplier to within 10m	A8SW (S)	588	2	592150 166030
11	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Grovehurst Energy Ltd MAKING OF PAPER+PAPER PRODUCTS Kemsley Paper Mill, Sittingbourne, Kent Environment Agency, Southern Region Not Supplied K02135 1 17th December 1971 17th December 1971 17th December 1971 1st January 1995 Trade Discharge - Process Water Saline Estuary  Saline Estuary  Pre National Rivers Authority Legislation where issue date < 01/09/1989 Located by supplier to within 10m	A7NE (SW)	590	2	591630 166180
	Discharge Consent	s				
12	Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:	Niall Cormac-Walsh WASTE COLLECTION/TREATMENT/DISPOSAL/MATERIALS RECOVERY Countrystyle Recycling Ltd Ridham Dock Road, Iwade, Nr Sittingbourne, Kent, Me9 8sr Environment Agency, Southern Region Swale P21638 1 30th January 2008 30th January 2008 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River  The Swale Estuary New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	A18NW (N)	591	2	592120 167420



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent	s				
13	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Knauf Drywall Undefined Or Other Premises At Knauf Drywall, Ridham Dock, Sittingbourne, Kent, Me9 8sr Environment Agency, Southern Region Swale P20365 1 2nd February 2005 2nd February 2005 26th May 2009 Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River  A Tributary Of The River Swale Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m	A18NW (N)	745	2	591900 167500
13	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Trevor Ellis Undefined Or Other Premises At Knauf Drywall, Ridham Dock, Sittingbourne, Kent, Me9 8sr Environment Agency, Southern Region Swale P20068 1 14th January 2004 14th January 2004 19th October 2006 Trade Effluent Discharge-Site Drainage Freshwater Stream/River  A Trib Of River Swale Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m	A18NW (N)	745	2	591900 167500
14		National Grid Electricity SUB-STATION/ELECTRICITY/GAS/AIR CONDITIONING SUPPLY Outfall 2 - Kemsley Substation Outfall 2 At Kemsley Substation, Ypres Drive, Sittingbourne, Kent, Me10 2tr Environment Agency, Southern Region Swale P21177 1 22nd December 2006 22nd December 2006 22nd March 2013 Trade Effluent Discharge-Site Drainage Freshwater Stream/River  Coldharbour Fleet Surrendered under EPR 2010 Located by supplier to within 10m	A12NW (W)	866	2	591160 166860
15	Discharge Consent Operator: Property Type: Location:  Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	National Grid Electricity SUB-STATION/ELECTRICITY/GAS/AIR CONDITIONING SUPPLY Outfall 1 - Kemsley Substation Outfall 1 At Kemsley Substation, Ypres Drive, Sittingbourne, Kent, Me10 2tr Environment Agency, Southern Region Swale P21176 1 22nd December 2006 22nd December 2006 22nd December 2006 22nd March 2013 Trade Effluent Discharge-Site Drainage Freshwater Stream/River  Coldharbour Fleet Surrendered under EPR 2010 Located by supplier to within 10m	A11NE (W)	909	2	591140 166950



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consents	S				
16	Operator: Property Type: Location:	Knauf (Uk) Gmbh OFFICES ADMIN + SUPPORT Knauf (Uk) Gmbh Kemsley Fields Business Park, Sittingbourne, ., Kent, Me9 8sr	A23SW (N)	995	2	591948 167791
	Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type:	Environment Agency, Southern Region Not Supplied Eprjb3290nc 1 21st October 2013 21st October 2013 19th August 2015 Sewage Discharges - Final/Treated Effluent - Not Water Company				
	Discharge Environment: Receiving Water: Status: Positional Accuracy:	Freshwater Stream/River  The Swale  Authorisation revoked  Located by supplier to within 10m				
	Integrated Pollution	Controls				
17	Name: Location:	M-Real New Thames Ltd Graphic And Business Papers Division, New Thames Mill, SITTINGBOURNE, Kent, ME10 2SG Environment Agency, Southern Region	A7NE (SW)	464	2	591805 166205
	Permit Řeference: Dated: Process Type: Description:	BD4449 24th November 1998 IPC minor (non-substantial) variation to previous variation 6.1 A (B) Paper and Pulp manufacturing processes within Miscellaneous Industries				
	Status: Positional Accuracy:	Authorisation superseded by a substantial or non substantial variation Manually positioned to the address or location				
	Integrated Pollution					
17	Name: Location: Authority: Permit Reference: Dated: Process Type: Description:	M-Real New Thames Ltd Uk Paper House, Kemsley, SITTINGBOURNE, Kent, ME10 2SG Environment Agency, Southern Region AU7184 3rd June 1996 IPC new application 6.1 A (B) Paper and Pulp manufacturing processes within Miscellaneous	A7NE (SW)	476	2	591800 166195
	Status: Positional Accuracy:	Industries <b>Authorisation superseded by a substantial or non substantial variation</b> Manually positioned to the address or location				
	Integrated Pollution	Controls				
17	Name: Location: Authority: Permit Reference: Dated: Process Type: Description:	Uk Paper Plc Uk Paper, Recycled Fibre Plant, Kemsley, SITTINGBOURNE, Kent, ME10 2SG Environment Agency, Southern Region BC3161 21st October 1998 IPC minor (non-substantial) variation to previous variation 6.1 A (B) Paper and Pulp manufacturing processes within Miscellaneous	A7NE (SW)			591795 166190
	Status: Positional Accuracy:	Industries Application has met the requirements for authorisation (but not yet authorised)				
	-					
17	Integrated Pollution Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	M-Real New Thames Ltd Uk Paper House, Kemsley, Sittingbourne, Kent, ME10 2SG Environment Agency, Southern Region Bl3323 21st June 2001 IPC minor (non-substantial) variation to previous variation 6.1 A (B) Paper and Pulp manufacturing processes within Miscellaneous Industries Revoked - Now IPPC Automatically positioned to the address	A7NE (SW)	521	2	591779 166155
17	Integrated Pollution Name: Location: Authority: Permit Reference: Dated:	E.On Uk Chp Ltd Kemsley Paper Mill, Ridham Avenue, KEMSLEY, SITTINGBOURNE, KENT, ME10 2SG Environment Agency, Southern Region BD8827 24th November 1998	A7NE (SW)	521	2	591779 166155
	Process Type: Description: Status: Positional Accuracy:	IPC minor (non-substantial) variation to previous variation 1.3 A (A) Combustion processes within the Fuel & Power Industry Revoked - Now IPPC Manually positioned to the address or location				



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Integrated Pollution	Controls				
17	Name: Location:	E.On Uk Chp Ltd Kemsley Paper Mill, Ridham Avenue, KEMSLEY, SITTINGBOURNE, KENT, ME10 2SG	A7NE (SW)	521	2	591779 166155
	Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Environment Agency, Southern Region AY1587 30th June 1997 IPC minor (non-substantial) variation to previous variation 1.3 A (A) Combustion processes within the Fuel & Power Industry Authorisation superseded by a substantial or non substantial variation Manually positioned to the address or location				
	Integrated Pollution	Controls				
17	Name: Location:	E.On Uk Chp Ltd UK Paper House, Ridham Avenue, Kemsley, SITTINGBOURNE, Kent, ME10 2SG	A7NE (SW)	521	2	591779 166155
	Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Environment Agency, Southern Region AP2090 13th March 1995 IPC new application 1.3 A (A) Combustion processes within the Fuel & Power Industry Authorisation superseded by a substantial or non substantial variation Manually positioned to the address or location				
17	Integrated Pollution Name: Location: Authority: Permit Reference:	Controls Grovehurst Energy Ltd Uk Paper House, Kemsley, Sittingbourne, Kent, ME10 2SG Environment Agency, Southern Region AA3808	A7NE (SW)	521	2	591779 166155
	Dated: Process Type: Description:	22nd June 1992 IPC application for process that was regulated by HMIP for air releases under previous legislation 1.3 A (A) Combustion processes within the Fuel & Power Industry <b>Authorisation revoked</b>				
	Status: Positional Accuracy:	Automatically positioned to the address				
	Integrated Pollution					
18	Name: Location: Authority: Permit Reference: Dated: Process Type: Description:	St Regis Paper Co Ltd Kemsley Paper Mill, SITTINGBOURNE, Kent, ME10 2TD Environment Agency, Southern Region BE4703 24th November 1998 IPC minor (non-substantial) variation to previous variation 6.1 A (B) Paper and Pulp manufacturing processes within Miscellaneous Industries Revoked - Now IPPC	A7NE (SW)	599	2	591637 166162
	Positional Accuracy:	Automatically positioned to the address				
18	Integrated Pollution Name: Location: Authority: Permit Reference: Dated: Process Type: Description:  Status: Positional Accuracy:	Controls  St Regis Paper Co Ltd Kemsley Mill, Kemsley, SITTINGBOURNE, Kent, ME10 2TD Environment Agency, Southern Region AU6269 3rd June 1996 IPC new application 6.1 A (B) Paper and Pulp manufacturing processes within Miscellaneous Industries Authorisation superseded by a substantial or non substantial variation Automatically positioned to the address	A7NE (SW)	602	2	591632 166162
	,	, , , , , , , , , , , , , , , , , , ,				
18	Integrated Pollution Name: Location: Authority: Permit Reference: Dated: Process Type: Description:	St Regis Paper Co Ltd Kemsley Mill, Kemsley, SITTINGBOURNE, Kent, ME10 2TD Environment Agency, Southern Region BB2712 13th May 1998 IPC minor (non-substantial) variation to previous variation 6.1 A (B) Paper and Pulp manufacturing processes within Miscellaneous Industries	A7NE (SW)	606	2	591632 166157
	,	Authorisation superseded by a substantial or non substantial variation Automatically positioned to the address				
18	Integrated Pollution Name: Location: Authority: Permit Reference: Dated: Process Type: Description:	M-Real New Thames Ltd Uk Paper,Ridham Avenue, Kemsley, SITTINGBOURNE, Kent, ME10 2GT Environment Agency, Southern Region BI1355 21st June 2001 IPC minor (non-substantial) variation to previous variation 6.1 A (B) Paper and Pulp manufacturing processes within Miscellaneous	A7NE (SW)	635	2	591589 166158
	Status: Positional Accuracy:	Industries  Revoked - Now IPPC  Manually positioned to the road within the address or location				



Map ID		Details			Contact	NGR
	Integrated Pollution	Controls				
18	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:	M-Real New Thames Ltd Uk Paper,Ridham Avenue, Kemsley, SITTINGBOURNE, Kent, ME10 2GT Environment Agency, Southern Region BG9757 28th October 1999 IPC minor (non-substantial) variation to previous variation 6.1 A (B) Paper and Pulp manufacturing processes within Miscellaneous Industries Authorisation superseded by a substantial or non substantial variation	A7NE (SW)	635	2	591589 166158
		Manually positioned to the road within the address or location				
	Integrated Pollution	Controls				
18	Name: Location: Authority: Permit Reference: Dated: Process Type: Description:  Status: Positional Accuracy:	M-Real New Thames Ltd Uk Paper,Ridham Avenue, Kemsley, SITTINGBOURNE, Kent, ME10 2GT Environment Agency, Southern Region BD3051 24th November 1998 IPC minor (non-substantial) variation to previous variation 6.1 A (B) Paper and Pulp manufacturing processes within Miscellaneous Industries Authorisation superseded by a substantial or non substantial variation Manually positioned to the road within the address or location	A7NE (SW)	635	2	591589 166158
	Integrated Pollution	**				
18	Name: Location: Authority: Permit Reference: Dated: Process Type:	M-Real New Thames Ltd Uk Paper,Ridham Avenue, Kemsley, SITTINGBOURNE, Kent, ME10 2GT Environment Agency, Southern Region AT6417 22nd January 1996 IPC new application	A7NE (SW)	635	2	591589 166158
	Description:	6.1 A (B) Paper and Pulp manufacturing processes within Miscellaneous				
	Status: Positional Accuracy:	Industries  Authorisation superseded by a substantial or non substantial variation  Manually positioned to the road within the address or location				
		Prevention And Control				
19	Activity Code:	K3 Chp Operations Limited Kemsley Sustainable Energy Plant Epr/Jp3135dk, Kemsley Sustainable Energy Plant, Kemsley, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area EP3336YX Jp3135dk 8th March 2018 Effective Variation Minor Located by supplier to within 10m 5.1 A(1) (B) THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR.	A13SW (S)	93	2	592090 166530
	Primary Activity:	Υ				
	Activity Code: Activity Description: Primary Activity:	0.0 Associated Process Associated Process N				
	Integrated Pollution	Prevention And Control				
19	Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	K3 Chp Operations Limited Kemsley Sustainable Energy Facility, Kemsley Sustainable Energy Facility, Kemsley,, Sittingbourne, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area UP3534YJ Jp3135dk 7th March 2018 Effective Variation Standard Located by supplier to within 10m 5.1 A(1) (B)	A13SW (S)	93	2	592090 166530
	Activity Description: Primary Activity: Activity Code:	THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR. Y 0.0 Associated Process Associated Process N				



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Integrated Pollution	Prevention And Control				
19	Name: Location: Authority: Permit Reference: Original Permit Ref:		A13SW (S)	93	2	592090 166530
	Activity Code:	5th August 2016  Superseded By Variation  Transfer  Whole limited change in management Located by supplier to within 10m  5.1 A(1) (B)  THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3  TONNES PER HOUR.				
	Primary Activity: Activity Code: Activity Description: Primary Activity:	Y 0.0 Associated Process Associated Process N				
	_	Prevention And Control				_,
19	Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: <b>Status:</b> Application Type:	Wti Uk Ltd Kemsley Sustainable Energy Plant Epr/Xp3637vx, Kemsley Sustainable Energy Plant, Kemsley, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area XP3637VX Xp3637vx 12th August 2014 Superseded By Variation Transfer	A13SW (S)	93	2	592090 166530
	App. Sub Type: Positional Accuracy: Activity Code: Activity Description: Primary Activity:	Whole limited change in management Located by supplier to within 10m 0.0 Associated Process Associated Process N				
	Activity Code: Activity Description: Primary Activity:	5.1 A(1) (B) THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR. Y				
19	Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type:	Not Supplied Valid Surrender Part	A13SW (S)	93	2	592090 166530
	Activity Code:	Located by supplier to within 10m 5.1 A(1) (B) THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR. Y				
	Activity Code: Activity Description: Primary Activity:	0.0 Associated Process Associated Process N				
20	Integrated Pollution Name: Location:	Prevention And Control  Wti Uk Ltd  Kemsley Iba Recycling Facility, Kemsley Iba Recycling Facility, Ridham  Avenue, Kemsley,, Sittingbourne, Kent, ME10 2TD	A7NE (SW)	329	2	591810 166370
	Activity Code:	Environment Agency - South East Region, Kent & South London Area QP3236DR				
	Permit Řeference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Environment Agency - South East Region, Kent & South London Area QP3236DR Qp3236dr 8th March 2018 Effective Application New Located by supplier to within 10m 0.0 Associated Process				



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Integrated Pollution	Prevention And Control				
21	Name: Location:	M-Real Uk Services Ltd New Thames Mill, Uk Paper, Ridham Avenue, Kemsley,, SITTINGBOURNE, Kent, ME10 2GT	A12SE (SW)	339	2	591752 166424
	Activity Code:	Environment Agency - South East Region, Kent & South London Area ZP3337XM				
	,					
22	Name: Location:	Prevention And Control St Regis Paper Company Ltd New Thames Paper Mill, Uk Paper, Ridham Avenue, Kemsley,, SITTINGBOURNE, Kent, ME10 2GT	A7NE (SW)	385	2	591756 166344
	Authority: Permit Reference: Original Permit Ref: Effective Date: Status:	Environment Agency - South East Region, Kent & South London Area JP3535GR				
	Activity Code:	Transfer Whole with Fit and Proper Person Manually positioned to the address or location 6.1 A(1) (B) Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y				
22	Name: Location:	Prevention And Control  Ds Smith Paper Limited  New Thames Paper Mill, Uk Paper, Ridham Avenue, Kemsley,,  SITTINGBOURNE, Kent, ME10 2GT	A7NE (SW)	399	2	591748 166332
	Activity Code:	Environment Agency - South East Region, Kent & South London Area HP3731FC				
	Integrated Pollution	Prevention And Control				
22	Name: Location: Authority: Permit Reference:	M-Real Uk Services Ltd Kemsley & Sittingbourne Paper Mills, New Thames Mill, Ridham Avenue,,Kemsley, Sittingbourne, Kent, ME10 2SG Environment Agency, Southern Region QP3638XL	A7NE (SW)	409	2	591725 166344
	Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:					
	Primary Activity:	Υ , , , , , , , , , , , , , , , , , , ,				
	Integrated Pollution	Prevention And Control				
22	Activity Code:	28th May 2002 Superseded By Variation Application New Manually positioned to the address or location 6.1 A(1) (B)	A7NE (SW)	414	2	591752 166308
	Activity Description: Primary Activity:	Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y				



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Integrated Pollution	Prevention And Control				
22	Activity Code:	M-Real New Thames Limited New Thames Paper Mill, Uk Paper, Ridham Avenue,Kemsley,, SITTINGBOURNE, Kent, ME10 2GT Environment Agency - South East Region, Kent & South London Area BX1080IC Bj7387ih 1st February 2004 Superseded By Variation Variation Standard Manually positioned to the address or location 6.1 A(1) (B) Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y	A7NE (SW)	427	2	591736 166305
		Provention And Control				
23	Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	St Regis Paper Company Ltd New Thames Paper Mill, Uk Paper, Ridham Avenue, Kemsley,, SITTINGBOURNE, Kent, ME10 2GT Environment Agency, Southern Region JP3535GR Jp3535gr 30th January 2009 Effective Transfer Whole with Fit and Proper Person Manually positioned within the geographical locality 6.1 A(1) (B) Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y	A12SE (W)	404	2	591616 166574
	Integrated Pollution	Prevention And Control				
23	Activity Code:	M-Real Uk Services Ltd New Thames Mill, Uk Paper, Ridham Avenue, Kemsley,, SITTINGBOURNE, Kent, ME10 2GT Environment Agency, Southern Region ZP3337XM Bj7387ih 1st December 2008 Superseded By Variation Variation Substantial Manually positioned within the geographical locality 6.1 A(1) (B) Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y	A12SE (W)	404	2	591616 166573
	Integrated Pollution	Prevention And Control				
24	Activity Code: Activity Description: Primary Activity:	1st February 2004 Superseded By Variation Variation Standard Manually positioned to the address or location 6.1 A(1) (B) Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y	A8NW (SW)	466	2	591864 166174
		Prevention And Control		16-	-	
24	Activity Code:	M-Real New Thames Limited Kemsley And Sittingbourne Paper Mills, Uk Paper, Ridham Avenue, Kemsley, Sittingbourne, Kent, ME10 2GT Environment Agency, Southern Region Bj7387ih Bj7387ih Bj7387ih Bg8th May 2002 Superseded By Variation Application New Manually positioned to the address or location 6.1 A(1) (B) Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y	A8NW (SW)	466	2	591864 166174



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Integrated Pollution	Prevention And Control				
25	Name: Location:	Ds Smith Paper Limited Kemsley Paper Mill Epr/Bj7468ic, Kemsley Paper Mill, SITTINGBOURNE, Kent, ME10 2TD	A7NE (SW)	514	2	591643 166278
	Authority: Permit Reference: Original Permit Ref:	Environment Agency - South East Region, Kent & South London Area CP3538WH				
	Effective Date: Status: Application Type:	5th December 2014 Superseded By Variation Variation				
	App. Sub Type:	Standard Automatically positioned to the address 6.1 A(1) (B)				
		Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y 6.1 A(1) (A)				
		Paper, Pulp And Board; Producing Pulp From Timber Etc N 0.0 Associated Process				
	Activity Code: Activity Description: Primary Activity: Activity Code:					
	Activity Description:	DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT N				
	Primary Activity:		-			
25	Name: Location:	Prevention And Control  Ds Smith Paper Limited  Kemsley Paper Mill Epr/Bj7468ic, Kemsley Paper Mill, SITTINGBOURNE,	A7NE (SW)	514	2	591643 166278
	Authority: Permit Reference:	Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area JP332EG				
	Original Permit Ref: Effective Date: Status:	6th January 2014  Superseded By Variation  Variation				
	Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Minor Automatically positioned to the address 6.1 A(1) (A)				
		Paper, Pulp And Board; Producing Pulp From Timber Etc N 0.0 Associated Process				
	Activity Code: Activity Description: Primary Activity: Activity Code:					
		Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y 5.4 A(1) a) (i)				
	Activity Description:	DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT N				
		Prevention And Control				
25	Name: Location:	Ds Smith Paper Limited Kemsley Paper Mill Epr/Bj7468ic, Kemsley Paper Mill, SITTINGBOURNE,	A7NE (SW)	514	2	591643 166278
	Authority: Permit Reference:	Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area HP3231FS				
	Original Permit Ref: Effective Date: Status:	5th November 2012 Superseded By Variation				
	Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Variation Standard Automatically positioned to the address 0.0 Associated Process				
		Associated Process Associated Process N 6.1 A(1) (B)				
	Activity Description: Primary Activity: Activity Code:					
	Activity Description: Primary Activity:					



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Integrated Pollution	n Prevention And Control				
26	Name: Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Ds Smith Paper Limited Kemsley Paper Mill Effluent Treatment Plant, Uk Paper House, Kemsley Mill,Kemsley,, SITTINGBOURNE, Kent, ME10 2SG Environment Agency - South East Region, Kent & South London Area FP3931FN	A7NE (SW)	520	2	591779 166155
	Integrated Pollution	Prevention And Control				
26	Activity Code:	St Regis Paper Company Ltd Kemsley Paper Mill Effluent Treatment Plant, Uk Paper House, Kemsley Mill,Kemsley,, SITTINGBOURNE, Kent, ME10 2SG Environment Agency - South East Region, Kent & South London Area YP3635GC Yp3635gc 26th January 2009 Superseded By Variation Transfer Whole without Fit and Proper Person Automatically positioned to the address 0.0 Associated Process Associated Process Y	A7NE (SW)	520	2	591779 166155
	Integrated Pollution	Prevention And Control				
26	Activity Code:	St Regis Paper Company Ltd Kemsley Paper Mill Effluent Treatment Plant, Uk Paper House, Kemsley Mill,Kemsley,, SITTINGBOURNE, Kent, ME10 2SG Environment Agency, Southern Region YP3635GC Yp3635gc 19th January 2009 Effective Transfer Whole without Fit and Proper Person Automatically positioned to the address 0.0 Associated Process Associated Process Y	A7NE (SW)	520	2	591779 166155
	Integrated Pollution	Prevention And Control				
26	Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Grovehurst Energy Limited Kemsley Paper Mill Effluent Treatment Plant, Uk Paper House, Kemsley Mill,Kemsley,, SITTINGBOURNE, Kent, ME10 2SG Environment Agency - South East Region, Kent & South London Area KP3833LL Bj8588iw 6th July 2006 Superseded By Variation Variation Standard Automatically positioned to the address 0.0 Associated Process Associated Process Y	A7NE (SW)	520	2	591779 166155
	Integrated Pollution	Prevention And Control				
26	Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: Activity Description: Primary Activity:	28th May 2002 Superseded By Variation PPC APPLICATION Not Supplied Automatically positioned to the address 6.1 A(1) (B)	A7NE (SW)	520	2	591779 166155



Map ID		Details			Contact	NGR
	Integrated Pollution	Prevention And Control				
26	Name: Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: Activity Description: Primary Activity:	25th April 2002 Superseded By Variation Application New Automatically positioned to the address 0.0 Associated Process	A7NE (SW)	520	2	591779 166155
	Integrated Pollution	Prevention And Control				
26	Activity Code:	St Regis Paper Company Ltd Kemsley Paper Mill Effluent Treatment Plant, Uk Paper House, Kemsley Mill,Kemsley,, SITTINGBOURNE, Kent, ME10 2SG Environment Agency - South East Region, Kent & South London Area DP3035FS Yp3635gc Not Supplied Valid Surrender Part Automatically positioned to the address 0.0 Associated Process Associated Process Y	A7NE (SW)	520	2	591779 166155
	Integrated Pollution	Prevention And Control				
26	Activity Code:	Grovehurst Energy Limited Kemsley And Sittingbourne Paper Mills, Uk Paper House, Kemsley Mill, Kemsley, Sittingbourne, Kent, ME10 2SG Environment Agency, Southern Region Kp3833II Bj8588iw 6th July 2006 Superseded By Variation Variation Variation Standard Automatically positioned to the address 0.0 Associated Process Associated Process Y	A7NE (SW)	521	2	591779 166155
	-	Prevention And Control				
26	Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: Activity Description: Primary Activity:	25th April 2002 Superseded By Variation Application New Automatically positioned to the address 0.0 Associated Process	A7NE (SW)	521	2	591779 166155
26	Name:	M-Real Uk Services Ltd	A7NE	530	2	591770
23	Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Kemsley & Sittingbourne Paper Mills, New Thames Mill, Ridham Avenue,,Kemsley, Sittingbourne, Kent, ME10 2SG Environment Agency - South East Region, Kent & South London Area QP3638XL	(SW)		_	166150



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Integrated Pollution	Prevention And Control				
27	Name: Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Wti Uk Ltd Kemsley Sustainable Energy Plant Epr/Xp3637vx, Kemsley Sustainable Energy Plant, Kemsley, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area HP3434WU	A7NE (SW)	602	2	591632 166162
	Primary Activity:	0.0 Associated Process Associated Process N				
27	Name: Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: Activity Description: Primary Activity: Activity Code: Activity Description:	6th December 2013  Superseded By Variation Variation Minor Automatically positioned to the address 0.0 Associated Process Associated Process N 5.1 A(1) (B) THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR.	A7NE (SW)	602	2	591632 166162
	Primary Activity:	Y				
27	Name: Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: Activity Description: Primary Activity: Activity Description: Primary Activity:	5th January 2012  Superseded By Variation  Variation  Minor  Automatically positioned to the address 5.1 A(1) (A)  Incineration Of Hazardous Waste  N  1.1 A(1) (A)  Combustion; Any Fuel Greater Or Equal To 50Mw  Y	A7NE (SW)	602	2	591632 166162
27	Name: Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Prevention And Control  E.On Energy From Waste Uk Ltd Kemsley Sustainable Energy Plant Epr/Sp3431kj, Kemsley Sustainable Energy Plant, Kemsley, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area SP3431kJ Sp3431kj 27th July 2011 Superseded By Variation Application New Automatically positioned to the address 5.1 A(1) (C) Incineration Of Non Hazardous Waste Greater Than 1 T/Hr Y	A7NE (SW)	602	2	591632 166162



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Integrated Pollution	Prevention And Control				
27	Activity Code:	E.On Energy From Waste Uk Ltd Kemsley Sustainable Energy Plant, Kemsley Sustainable Energy Plant, Kemsley, SITTINGBOURNE, Kent, ME10 2TD Environment Agency, Southern Region SP3431KJ Sp3431Kj 27th July 2011 Effective Application New Automatically positioned to the address 5.1 A(1) (C) Incineration Of Non Hazardous Waste Greater Than 1 T/Hr Y	A7NE (SW)	602	2	591632 166162
	Integrated Pollution	Prevention And Control				
27	Activity Code: Activity Description: Primary Activity: Activity Code:	E.On Uk Chp Limited Kemsley Paper Mill Chp Plant Epr/Bj7395ig, Kemsley Mill, Kemsley,,, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area CP3036MH Bj7395ig 25th January 2008 Superseded By Variation Variation Standard Automatically positioned to the address 5.1 A(1) (A) Incineration Of Hazardous Waste N 1.1 A(1) (A) Combustion; Any Fuel Greater Or Equal To 50Mw Y	A7NE (SW)	602	2	591632 166162
	Integrated Pollution	Prevention And Control				
27	Activity Code: Activity Description: Primary Activity: Activity Code: Activity Description: Primary Activity:	25th January 2008 Effective Variation Standard Automatically positioned to the address 5.1 A(1) (A) Incineration Of Hazardous Waste N 1.1 A(1) (A) Combustion; Any Fuel Greater Or Equal To 50Mw Y	A7NE (SW)	602	2	591632 166162
	Integrated Pollution	Prevention And Control				
27	Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: Activity Description: Primary Activity: Activity Code: Activity Description: Primary Activity: Activity Code: Activity Code:	5th November 2007 Superseded By Variation Variation Standard Automatically positioned to the address 0.0 Associated Process Associated Process N 6.1 A(1) (B) Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y 6.1 A(1) (A)	A7NE (SW)	602	2	591632 166162



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
27	Integrated Pollution Name: Location:	Prevention And Control  E.On Uk Chp Limited  Kemsley Paper Mill Chp Plant Epr/Bj7395ig, Kemsley Mill, Kemsley,,,	A7NE (SW)	602	2	591632 166162
	Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: Activity Description: Primary Activity: Activity Description: Primary Activity:	SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area GP3836LU Bj7395ig 9th December 2006 Superseded By Variation Variation Simple Standard Variation Automatically positioned to the address 5.1 A(1) (A) Incineration Of Hazardous Waste N 1.1 A(1) (A) Combustion; Any Fuel Greater Or Equal To 50Mw Y	(GW)			100102
	_	Prevention And Control				
27	Activity Code: Activity Description: Primary Activity: Activity Code: Activity Description: Primary Activity:	9th December 2006 Superseded By Variation Variation Simple Standard Variation Automatically positioned to the address 1.1 A(1) (A) Combustion; Any Fuel Greater Or Equal To 50Mw Y 5.1 A(1) (A) Incineration Of Hazardous Waste N	A7NE (SW)	602	2	591632 166162
07	_	Prevention And Control	A 7 N I F	000	0	F04000
27	Activity Code:	E.On Uk Chp Limited Kemsley Paper Mill Chp Plant Epr/Bj7395ig, Kemsley Mill, Kemsley,,, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area QP3032SJ Bj7395ig 20th December 2005 Superseded By Variation Variation Variation Standard Automatically positioned to the address 1.1 A(1) (A) Combustion; Any Fuel Greater Or Equal To 50Mw Y	A7NE (SW)	602	2	591632 166162
	Integrated Pollution	Prevention And Control				
27	Activity Code:	E.On Uk Chp Limited Kemsley And Sittingbourne Paper Mills, Kemsley Mill, Kemsley, Sittingbourne, Kent, ME10 2TD Environment Agency, Southern Region Qp3032sj Bj7395ig 20th December 2005 Superseded By Variation Variation Standard Automatically positioned to the address 1.1 A(1) (A) Combustion; Any Fuel Greater Or Equal To 50Mw Y	A7NE (SW)	602	2	591632 166162



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Integrated Pollution	Prevention And Control				
27	Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	St. Regis Paper Company Limited Kemsley And Sittingbourne Paper Mills, Kemsley Paper Mill, Kemsley, Sittingbourne, Kent, ME10 2TD Environment Agency, Southern Region Bx1039ib	A7NE (SW)	602	2	591632 166162
	Integrated Pollution	Prevention And Control				
27	Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	E.On Uk Chp Limited Kemsley Paper Mill Chp Plant Epr/Bj7395ig, Kemsley Mill, Kemsley,,, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area DP3139SB	A7NE (SW)	602	2	591632 166162
	Integrated Pollution	Prevention And Control				
27	Activity Code:	E.On Uk Chp Limited Kemsley And Sittingbourne Paper Mills, Kemsley Mill, Kemsley, Sittingbourne, Kent, ME10 2TD Environment Agency, Southern Region Dp3139sb Bj7395ig 27th November 2004 Superseded By Variation Variation Minor Automatically positioned to the address 1.1 A(1) (A) Combustion; Any Fuel Greater Or Equal To 50Mw Y	A7NE (SW)	602	2	591632 166162
	Integrated Pollution	Prevention And Control				
27	Activity Code: Activity Description: Primary Activity:	29th February 2004  Superseded By Variation  Variation  Standard  Automatically positioned to the address  1.1 A(1) (A)  Combustion; Any Fuel Greater Or Equal To 50Mw  Y	A7NE (SW)	602	2	591632 166162
		Prevention And Control				
27	Activity Code:	E.On Uk Chp Limited Kemsley And Sittingbourne Paper Mills, Kemsley Mill, Kemsley, Sittingbourne, Kent, ME10 2TD Environment Agency, Southern Region Bx0407ib Bj7395ig 29th February 2004 Superseded By Variation Variation Standard Automatically positioned to the address 1.1 A(1) (A) Combustion; Any Fuel Greater Or Equal To 50Mw Y	A7NE (SW)	602	2	591632 166162



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Integrated Pollution	Prevention And Control				
27	Activity Code:	E.On Uk Chp Limited Kemsley Paper Mill Chp Plant Epr/Bj7395ig, Kemsley Mill, Kemsley,,, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area BJ7395iG Bj7395ig 24th April 2002 Superseded By Variation Application New Automatically positioned to the address 1.1 A(1) (A) Combustion; Any Fuel Greater Or Equal To 50Mw Y	A7NE (SW)	602	2	591632 166162
27	Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Prevention And Control  E.On Uk Chp Ltd Kemsley Mill,Kemsley, Sittingbourne, Kent, Me10 2td Environment Agency, Southern Region Bj7395 Bj7395 24th April 2002 Superseded By Variation PPC APPLICATION Not Supplied Manually positioned to the address or location 1.1 A(1) (A) Combustion; Any Fuel Greater Or Equal To 50Mw Not Supplied	A7NE (SW)	602	2	591632 166162
27	Name: Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Prevention And Control  E.On Uk Chp Limited Kemsley And Sittingbourne Paper Mills, Kemsley Mill, Kemsley, Sittingbourne, Kent, ME10 2TD Environment Agency, Southern Region Bj7395ig Bj7395ig 24th April 2002 Superseded By Variation Application New Automatically positioned to the address 1.1 A(1) (A) Combustion; Any Fuel Greater Or Equal To 50Mw Y	A7NE (SW)	602	2	591632 166162
27	Name: Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Prevention And Control  St. Regis Paper Company Limited Kemsley Paper Mill Epr/Bj7468ic, Kemsley Paper Mill, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area BJ7468IC Bj7468ic 22nd March 2002 Superseded By Variation Application New Automatically positioned to the address 6.1 A(1) (B) Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y	A7NE (SW)	602	2	591632 166162
27	Name: Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Prevention And Control  St. Regis Paper Company Limited Kemsley And Sittingbourne Paper Mills, Kemsley Paper Mill, Kemsley, Sittingbourne, Kent, ME10 2TD Environment Agency, Southern Region Bj7468ic Bj7468ic 22nd March 2002 Superseded By Variation Application New Automatically positioned to the address 6.1 A(1) (B) Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y	A7NE (SW)	602	2	591632 166162



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
27	Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	5th November 2007  Effective Variation Standard Manually positioned to the address or location 6.1 A(1) (A) Paper, Pulp And Board; Producing Pulp From Timber Etc N 6.1 A(1) (B) Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y 0.0 Associated Process	A7NE (SW)	603	2	591631 166162
		Prevention And Control				
27	Name: Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: Activity Description: Primary Activity: Activity Code: Activity Code: Activity Code:	Ds Smith Paper Limited Kemsley Paper Mill Epr/Bj7468ic, Kemsley Paper Mill, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area WP3936DE Bj7468ic 5th December 2016 Effective Variation Simple Standard Variation Located by supplier to within 10m 0.0 Associated Process	A7NE (SW)	605	2	591630 166160
27	Name: Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: Activity Description: Primary Activity: Activity Description: Primary Activity: Activity Code: Activity Description: Primary Activity: Activity Code: Activity Description: Primary Activity: Activity Code: Activity Code: Activity Code: Activity Code:	10th August 2016 Superseded By Variation Variation Standard Located by supplier to within 10m 0.0 Associated Process Associated Process N 5.4 A(1) a) (i) DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT N 6.1 A(1) (A)	A7NE (SW)	605	2	591630 166160



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Integrated Pollution	Prevention And Control				
27	Activity Code: Activity Description: Primary Activity: Activity Code:	E.On Uk Chp Limited Kemsley Paper Mill Chp Plant Epr/Bj7395ig, Kemsley Mill, Kemsley,,, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area AP3934AH Bj7395ig 1st January 2016 Effective Variation Standard Located by supplier to within 10m 1.1 A(1) (A) Combustion; Any Fuel Greater Or Equal To 50Mw Y 5.1 A(1) (B) THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR. N	A7NE (SW)	605	2	591630 166160
	Integrated Pollution	Prevention And Control				
27	Name: Location:  Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: Activity Description:  Primary Activity: Activity Code:	E.On Uk Chp Limited Kemsley Paper Mill Chp Plant Epr/Bj7395ig, Kemsley Mill, Kemsley,,, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area MP3231NE	A7NE (SW)	605	2	591630 166160
	Integrated Pollution	Prevention And Control				
27	Activity Code:	St. Regis Paper Company Limited Kemsley Paper Mill Epr/Bj7468ic, Kemsley Paper Mill, SITTINGBOURNE, Kent, ME10 2TD Environment Agency - South East Region, Kent & South London Area BX1039IB Bj7468ic 14th July 2005 Superseded By Variation Variation Standard Located by supplier to within 10m 6.1 A(1) (B) Paper, Pulp And Board; Producing Paper/Board Greater Than 20T/D Y	A7NE (SW)	605	2	591630 166160
	Integrated Pollution	Prevention And Control				
28	Activity Code:	4evergreen Technologies Limited Kemsley Park Efw Epr/Yp3137vy, Kemsley Park, Sittingbourne, Kent, ME10 2fe Environment Agency - South East Region, Kent & South London Area YP3137VY Yp3137vy 27th October 2015 Effective Application New Located by supplier to within 10m 5.1 A(1) (B) THE INCINERATION OF NON-HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 3 TONNES PER HOUR. Y	A12NW (W)	750	2	591270 166820
	Nearest Surface Wa	ter Feature				
			A13NW (W)	15	-	592002 166727



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
29	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	Paper Industry Kemsley Mill, Kemsley, SITTINGBOURNE Environment Agency, Southern Region Organic Wastes: Other Waste Water Treatment Plant Fault 27th October 1997 197020 Not Given Not Given Not Given Category 2 - Significant Incident Located by supplier to within 100m	A13NE (E)	84	2	592400 166800
30	Pollution Incidents Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Paference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Not Given Not Given Industrial Chemicals Category 3 - Minor Incident	A13SW (SW)	193	2	591960 166430
31	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	Manufacturing Kemsley Paper Mill, KEMSLEY Environment Agency, Southern Region General Biodegradable : Other Biological / Non Sewage Not Supplied 12th December 1999 3972 Not Given Not Given Structural Failure : Retaining Structure Collapse Category 3 - Minor Incident Located by supplier to within 10m	A18SE (N)	255	2	592250 167100
32	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	Manufacturing Kemsley Mill, SITTINGBOURNE, Kent Environment Agency, Southern Region Other Pollutant Not Supplied 21st March 1999 2167 Medway Estuary Estuary Unauthorised Activity: Breach Of Discharge Consent Category 2 - Significant Incident Located by supplier to within 10m	A18SE (N)	256	2	592200 167095
32	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters  Manufacturing Kemsleymill, SITTINGBOURNE, Kent Environment Agency, Southern Region Other Pollutant Not Supplied 21st March 1999 2166 Medway Estuary Estuary Other Cause Category 2 - Significant Incident Located by supplier to within 10m	A18SE (N)	261	2	592200 167100
32	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters  Ships/Boats Location Description Not Available Environment Agency, Southern Region Organic Wastes: Other Biological Bulking Problem With Effluent Plant 30th August 1998 197304 Not Given Not Given Poor/Inadequate Maintenance Category 3 - Minor Incident Located by supplier to within 100m	A18SE (N)	264	2	592170 167095



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
32	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters  Ships/Boats Location Description Not Available Environment Agency, Southern Region Organic Wastes: Other Solid Bulking On Treatment Plant 31st August 1998 197305 Not Given Not Given Poor/Inadequate Maintenance Category 3 - Minor Incident Located by supplier to within 100m	A18SE (N)	269	2	592170 167100
33	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters  Paper Industry Fly Ash Sluice, Discharge To Swale Environment Agency, Southern Region Oils - Waste Oil Oil - Fly Ash Sluice 16th March 1993 CD/047/93 Not Given Not Given Oils/Related Products Category 3 - Minor Incident Located by supplier to within 100m	A14SW (E)	282	2	592500 166600
34	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters  Paper Industry Grovehurst Energy, Kemsley Mill Environment Agency, Southern Region Unknown Sewage Power Failure At Effluent Plant 3rd December 1997 197053 Not Given Not Given Not Given Category 3 - Minor Incident Located by supplier to within 100m	A18SE (NE)	286	2	592400 167100
35	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters  Manufacturing Kemsley Mill, SITTINGBOURNE Environment Agency, Southern Region Contaminated Water: Fire Fighting Run Off Not Supplied 10th May 1999 2414 Medway Estuary Estuary Other Cause Category 2 - Significant Incident Located by supplier to within 10m	A12SE (W)	308	2	591700 166700
36	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters  Ships/Boats Location Description Not Available Environment Agency, Southern Region Organic Wastes: Other Activated Sludge Carry Over 30th December 1998 198970 Not Given Not Given Not Given Poor/Inadequate Maintenance Category 2 - Significant Incident Located by supplier to within 100m	A18SE (N)	354	2	592200 167195
36	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	Paper Industry Kemsley Final Effluent Environment Agency, Southern Region Chemicals - Paints / Dyes 200 Gallons Of Blue Paper Dye Into Swale (Non Toxic) 21st July 1992 CD/140/92 Not Given Not Given Industrial Chemicals Category 3 - Minor Incident Located by supplier to within 100m	A18SE (N)	359	2	592200 167200



Page 25 of 74

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
37	Authority: Environme Pollutant: General Bi Note: Not Supplie Incident Date: 29th May 1 Incident Reference: 1560 Catchment Area: Not Given Receiving Water: Cause of Incident: Drainage F	ring aper Mill, SITTINGBOURNE nt Agency, Southern Region odegradable : Other Sewage & Sewerage Material ed 999 ailures : Foul Sewer Failure - Minor Incident	A18SW (N)	437	2	592000 167200
38	Authority: Environme Pollutant: General Bi Note: Not Supplic Incident Date: 17th Decer Incident Reference: 3855 Catchment Area: Swale Receiving Water: Potential R Cause of Incident: Unauthoris	ing UENT DISCHARGE PIPE ADJACENT TO SLUDGE ION.  It Agency, Southern Region odegradable: Biological / Non Sewage Microbiological Effluen ad inber 1999  iver ed Activity: Unconsented Discharge - Significant Incident	A8NE (S)	438	2	592200 166200
38	Authority: Environme Pollutant: Organic W Note: Suspected Incident Date: 29th Septe Incident Reference: Lachment Area: Not Given Receiving Water: Cause of Incident: Poor/Inade	s Energy, Kemsley Mill nt Agency, Southern Region astes: Other Paper Sludge Leachate Entering Swale mber 1998  quate Maintenance - Significant Incident	A8NW (S)	444	2	592160 166180
38	Authority: Environme Pollutant: Organic W Note: Effluent Tr Incident Date: 3rd Novem Incident Reference: 198362 Catchment Area: Not Given Receiving Water: Cause of Incident: Poor/Inade	s Energy, Kemsley Mill nt Agency, Southern Region astes: Other eatment Plant Producing Bulking In Final Settlement Tank ber 1998  quate Maintenance - Significant Incident	A8NW (S)	449	2	592160 166175
39	Pollution Incidents to Controlle Property Type: Paper Indiu Location: Kemsley M Authority: Environme Pollutant: Chemicals Note: Fracture O Incident Date: 21st Augus Incident Reference: CD/172/92 Catchment Area: Not Given Receiving Water: Cause of Incident: Industrial Controlled  Paper Indius Controlled  Remain Controlled  Not Given Industrial Controlled	chemicals - Mwaters - Minor Incident	A17SE (NW)	520	2	591800 167200
40	Pollutant: Miscellane Note: High Solids Incident Date: 5th Februa Incident Reference: 298021 Catchment Area: Not Given Receiving Water: Organic Inc	stry apermill nt Agency, Southern Region ous - Inert Suspended Solids 5 Discharge ry 1998 dustrial Waste - Minor Incident	A8NW (S)	522	2	592110 166090



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
40	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters Ships/Boats Grovehurst Energy, SITTINGBOURNE Environment Agency, Southern Region Organic Wastes: Other Solids Carryover 7th November 1998 198373 Not Given Not Given Deliberate Disposal To Drain Category 3 - Minor Incident Located by supplier to within 100m	A8NW (S)	527	2	592110 166085
40	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	Paper Industry Kemsley Grovehurst Effluent Plant Environment Agency, Southern Region Sewage - Treated Effluent Exceeding Discharge Consent 6th December 1997 197052 Not Given Not Given Not Given Category 3 - Minor Incident Located by supplier to within 100m	A8NW (S)	527	2	592115 166085
41	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	Ships/Boats Milton Creek, KEMSLEY Environment Agency, Southern Region Organic Wastes: Other Discharge Of Untreated Paper Mill Effluent 31st August 1998 197300 Not Given Not Given Poor/Inadequate Maintenance Category 3 - Minor Incident Located by supplier to within 100m	A8SW (S)	562	2	592020 166045
42	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	Landfill/Waste Disposal Site Kemsley Mill Landfill Environment Agency, Southern Region Miscellaneous - Fire water / Foam Paper & Plastics Waste On Fire 17th August 1998 197284 Not Given Not Given Deliberate Disposal To Drain Category 3 - Minor Incident Located by supplier to within 100m	A8SE (S)	654	2	592300 166000
43	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters  Other Farming Kemsley, SITTINGBOURNE Environment Agency, Southern Region Miscellaneous - Fire water / Foam 7 Pump Fire 1st June 1997 297210 Not Given Not Given Miscellaneous/Other Pollution Type Category 3 - Minor Incident Located by supplier to within 100m	A17SE (NW)	784	2	591500 167300
44	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	Not Given SITTINGBOURNE Environment Agency, Southern Region Miscellaneous - Unknown Dyke At Back Of His House Is Blue And Smelly 26th July 1992 CD/159/92 Not Given Not Given Miscellaneous/Other Pollution Type Category 3 - Minor Incident Located by supplier to within 100m	A7SW (SW)	944	2	591360 165950



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Prosecutions Relat	ing to Authorised Processes				
45	Location: Prosecution Text: Prosecution Act: Hearing Date: Verdict: Fine: Costs: Positional Accuracy:	At their premises, Kemsley, SITTINGBOURNE, Kent, ME Environment Times 1997, Illegally disposing of foul-smelling paper waste. EPA90 21st July 1997 Guilty 94000 4240 Manually positioned within the geographical locality	A7NE (SW)	558	2	591688 166172
	Substantiated Pollu	ution Incident Register				
46	Authority: Incident Date: Incident Reference: Water Impact: Air Impact: Land Impact:	Environment Agency - South East Region, Kent & South London Area 29th August 2005	A18SE (N)	227	2	592198 167065
	Substantiated Pollu	ution Incident Register				
47	Authority: Incident Date: Incident Reference: Water Impact: Air Impact: Land Impact: Positional Accuracy: Pollutant:	Environment Agency - South East Region, Kent & South London Area 25th August 2015 1371229 Category 3 - Minor Incident Category 4 - No Impact Category 2 - Significant Incident Located by supplier to within 10m Contaminated Water: Other Contaminated Water Specific Waste Materials: Other Composites	A18NE (N)	658	2	592228 167502
	Substantiated Pollu	ution Incident Register				
48	Authority: Incident Date: Incident Reference: Water Impact: Air Impact: Land Impact: Positional Accuracy: Pollutant:	Environment Agency - South East Region, Kent & South London Area 6th May 2016 1432677 Category 4 - No Impact Category 2 - Significant Incident Category 4 - No Impact Located by supplier to within 10m Atmospheric Pollutants and EffectsOther Odour	A12SW (W)	660	2	591392 166437
	Water Abstractions					
49	Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Ds Smith Paper Limited 9/40/02/0114/A/Sr 101 Point 7, River Swale, Sittingbourne. Environment Agency, Southern Region Production Of Energy: Non-Evaporative Cooling Water may be abstracted from a single point Surface Not Supplied Not Supplied As Shown Coloured Blue On Licence Map. 01 October 30 September 15th July 2014 Not Supplied Located by supplier to within 10m	A13SE (E)	140	2	592380 166680
	Water Abstractions					
49	Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Grovehurst Energy Limited 9/40/02/0114/A/Sr 100 Point 7, River Swale, Sittingbourne. Environment Agency, Southern Region Amenity: Spray Irrigation - Direct Water may be abstracted from a single point Surface Not Supplied Not Supplied As Shown Coloured Blue On Licence Map. 01 October 30 September 24th November 1966 Not Supplied Located by supplier to within 10m	A13SE (E)	140	2	592380 166680



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
50	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Grovehurst Energy Ltd 2/0114/A/SR Not Supplied SITTINGBOURNE Environment Agency, Southern Region Industrial Cooling (Miscellaneous) Not Supplied Unknown 265123 79555000 River Swale (Saline) Not Supplied Located by supplier to within 100m	A14NW (E)	184	2	592500 166795
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Wienerberger Limited 08/114 103 Point A, Borehole At Milton Brickworks, Sittingbourne Environment Agency, Southern Region Construction: Process Water Water may be abstracted from a single point Groundwater Not Supplied Not Supplied As Boldly Outlined On The Map 01 January 31 December 1st April 2008 Not Supplied Located by supplier to within 10m	A3SE (S)	1301	2	592230 165320
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Wienerberger Limited 08/114 103 Point A, Borehole At Milton Brickworks, Sittingbourne Environment Agency, Southern Region Extractive: Non-Evaporative Cooling Water may be abstracted from a single point Groundwater Not Supplied Not Supplied As Boldly Outlined On Map 01 January 31 December 1st April 2008 Not Supplied Located by supplier to within 10m	A3SE (S)	1301	2	592230 165320
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Thebrickbusiness Ltd 08/114 102 Point A, Borehole At Milton Brickworks, Sittingbourne Environment Agency, Southern Region Extractive: Non-Evaporative Cooling Water may be abstracted from a single point Groundwater Not Supplied Not Supplied As Boldly Outlined On Map 01 January 31 December 22nd July 2003 Not Supplied Located by supplier to within 10m	A3SE (S)	1301	2	592230 165320



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date:	Thebrickbusiness Ltd 08/114 102 Point A, Borehole At Milton Brickworks, Sittingbourne Environment Agency, Southern Region Construction: Process Water Water may be abstracted from a single point Groundwater Not Supplied Not Supplied As Boldly Outlined On The Map 01 January 31 December 22nd July 2003	A3SE (S)	1301	2	592230 165320
	Permit End Date: Positional Accuracy: Water Abstractions	Not Supplied Located by supplier to within 10m				
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	The Brick Business 08/114 101 Point A, Borehole At Milton Brickworks, Sittingbourne Environment Agency, Southern Region Construction: Process Water Water may be abstracted from a single point Groundwater Not Supplied Not Supplied As Boldly Outlined On The Map 01 January 31 December 28th March 2002 Not Supplied Located by supplier to within 10m	A3SE (S)	1301	2	592230 165320
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	The Brick Business 08/114 101 Point A, Borehole At Milton Brickworks, Sittingbourne Environment Agency, Southern Region Extractive: Non-Evaporative Cooling Water may be abstracted from a single point Groundwater Not Supplied Not Supplied As Boldly Outlined On Map 01 January 31 December 28th March 2002 Not Supplied Located by supplier to within 10m	A3SE (S)	1301	2	592230 165320
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Chelwood Brick Ltd 08/114 100 Point A, Borehole At Milton Brickworks, Sittingbourne Environment Agency, Southern Region Extractive: Non-Evaporative Cooling Water may be abstracted from a single point Groundwater Not Supplied Not Supplied As Boldly Outlined On Map 01 January 31 December 18th May 1998 Not Supplied Located by supplier to within 10m	A3SE (S)	1301	2	592230 165320



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Chelwood Brick Ltd 08/114 100 Point A, Borehole At Milton Brickworks, Sittingbourne Environment Agency, Southern Region Construction: Process Water Water may be abstracted from a single point Groundwater Not Supplied Not Supplied As Boldly Outlined On The Map 01 January 31 December 18th May 1998 Not Supplied Located by supplier to within 10m	A3SE (S)	1301	2	592230 165320
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	Blue Circle Industries Ltd 2/0225//G Not Supplied SITTINGBOURNE/HIGHSTED Environment Agency, Southern Region Industrial Cooling (Miscellaneous) Not Supplied Groundwater 68 22727 I1 & H5 Chalk; Licence Status: Revoked; Lapsed Or Cancelled Not Supplied Located by supplier to within 100m	A3SE (S)	1301	2	592230 165320
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Mr J John Russell T/A Ridham Sea Terminals Limited 07/037  1 Point A, Ridham Dock, Iwade, Sittingbourne Environment Agency, Southern Region Refuse and Recycling: General use relating to Secondary Category (High Loss)  Water may be abstracted from a single point Tidal  Not Supplied Not Supplied Not Supplied 01 January 31 December 20th September 2006 Not Supplied Located by supplier to within 10m	(N)	1692	2	592100 168530
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Mr L F Harding 9/40/02/0253/S 100 Point A, Tributary Of The Coldharbour Fleet At Sittingbourne Environment Agency, Southern Region General Agriculture: Spray Irrigation - Storage Water may be abstracted from a single point Surface Not Supplied Not Supplied To Fill Off-Stream Reservoir For Subsequent Abstraction 01 January 31 December 27th February 2017 Not Supplied Located by supplier to within 10m	(W)	1803	2	590223 166939



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Tarmac Trading Limited 07/032 101 Point A At Ngr Tq 918 687 Environment Agency, Southern Region Extractive: Mineral Washing Water may be abstracted from a single point Groundwater Not Supplied Not Supplied As Boldly Outlined On Map 01 October 30 September 17th June 2016 Not Supplied Located by supplier to within 10m	(N)	1919	2	591880 168727
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	United Marine Aggregates Ltd 07/032 100 Point A At Ngr Tq 918 687 Environment Agency, Southern Region Extractive: Mineral Washing Water may be abstracted from a single point Groundwater Not Supplied Not Supplied As Boldly Outlined On Map 01 October 30 September 10th October 1994 Not Supplied Located by supplier to within 10m	(N)	1942	2	591880 168750
	Groundwater Vulne Soil Classification: Map Sheet: Scale:	rability  Not classified  Sheet 40 Thames Estuary 1:100,000	A13NW (W)	0	2	592157 166730
	Drift Deposits					
	None					
	Bedrock Aquifer De Aquifer Designation:		A13NW (W)	0	1	592157 166730
	Superficial Aquifer Aquifer Designation:	Designations Secondary Aquifer - Undifferentiated	A13NW (W)	0	1	592157 166730
	Superficial Aquifer Aquifer Designation:	-	A13SW (SW)	0	1	592050 166607
	Extreme Flooding for Type: Flood Plain Type: Boundary Accuracy:	rom Rivers or Sea without Defences  Extent of Extreme Flooding from Rivers or Sea without Defences Tidal Events As Supplied	A13NW (W)	0	2	592157 166730
	Extreme Flooding for Type: Flood Plain Type: Boundary Accuracy:	rom Rivers or Sea without Defences  Extent of Extreme Flooding from Rivers or Sea without Defences Tidal Models and Tidal Events As Supplied	A13NW (N)	0	2	592139 166807
		rom Rivers or Sea without Defences  Extent of Extreme Flooding from Rivers or Sea without Defences Tidal Models	A13SW (W)	1	2	592009 166723
	-	rom Rivers or Sea without Defences  Extent of Extreme Flooding from Rivers or Sea without Defences Tidal Models	A13NE (NE)	30	2	592334 166842
		rom Rivers or Sea without Defences  Extent of Extreme Flooding from Rivers or Sea without Defences Tidal Models	A13SE (S)	96	2	592219 166567



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Extreme Flooding from Rivers or Sea without Defences				
	Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Events Boundary Accuracy: As Supplied	A13SE (S)	107	2	592219 166561
	Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Events Boundary Accuracy: As Supplied	A13SE (SE)	111	2	592269 166607
	Extreme Flooding from Rivers or Sea without Defences  Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Events Boundary Accuracy: As Supplied	A13NW (N)	247	2	592129 167057
	Flooding from Rivers or Sea without Defences  Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied	A13NW (NW)	0	2	592119 166807
	Areas Benefiting from Flood Defences  Type: Area Benefiting from Flood Defences Boundary Accuracy: As Supplied	A13NW (NW)	0	2	592119 166807
	Areas Benefiting from Flood Defences  Type: Area Benefiting from Flood Defences Boundary Accuracy: As Supplied	A13NW (N)	237	2	592149 167057
	Flood Water Storage Areas None				
	Flood Defences				
	Type: Flood Defences Reference: Not Supplied	A13NE (NE)	16	2	592328 166829
51	Water Network Lines  Watercourse Form: Inland river Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13SW (W)	16	3	591989 166694
52	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 10.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13SW (W)	17	3	591992 166670
53	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 198.5  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13SW (W)	21	3	591999 166725
54	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 163.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A13NE (N)	44	3	592199 166858
55	OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 119.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	101	3	592061 166854



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
56	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 42.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	104	3	592064 166859
57	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 52.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A13NW (N)	122	3	592154 166919
58	OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 6.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	138	3	592072 166895
59	OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 54.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	143	3	592068 166900
60	OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 5.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A13NW (NW)	143	3	592073 166901
61	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 335.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A13NW (NW)	144	3	592073 166901
62	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 13.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A13SE (E)	144	3	592415 166711
63	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 11.5  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	148	3	592017 166892
64	OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 21.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	151	3	592006 166892



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
65	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 34.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	155	3	591985 166886
	OS Water Network Lines				
66	Watercourse Form: Inland river Watercourse Length: 217.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A13SE (E)	159	3	592422 166696
67	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 24.0  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	164	3	591953 166875
68	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 164.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	176	3	591932 166871
69	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 41.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A13SW (S)	196	3	592071 166414
70	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Length: 556.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: The Swale Catchment Name: Not Supplied Primacy: 1	A13NE (NE)	206	3	592489 166930
71	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 7.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8NW (S)	237	3	592081 166374
72	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 118.6  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8NW (S)	237	3	592081 166374
73	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 247.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A14SW (E)	278	3	592549 166662

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 34 of 74



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
74	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 30.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A13SE (SE)	323	3	592445 166484
	OS Water Network Lines				
75	Watercourse Form: Inland river Watercourse Length: 38.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A13SE (SE)	323	3	592445 166484
76	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 16.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	329	3	591884 167028
77	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Length: 1180.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Milton Creek Catchment Name: Not Supplied Primacy: 1	A14SW (E)	332	3	592612 166659
78	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Level: On ground surface Permanent: True Watercourse Name: Clay Reach Catchment Name: Not Supplied Primacy: 1	A18SE (NE)	333	3	592413 167145
79	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 4.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	340	3	591888 167043
80	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 7.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	344	3	591887 167047
81	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 13.3  Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A13NW (NW)	352	3	591884 167055
82	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 134.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A18SW (NW)	363	3	591884 167068



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
83	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Length: 204.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A18SE (N)	375	3	592214 167218
	OS Water Network Lines				
84	Watercourse Form: Foreshore Watercourse Length: 11.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A18SE (N)	382	3	592198 167222
85	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A18SE (N)	387	3	592186 167226
86	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Length: 924.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Elmley Reach Catchment Name: Not Supplied Primacy: 1	A14SW (E)	395	3	592684 166668
87	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 29.7  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A18SW (N)	401	3	592157 167234
88	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 417.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A18SW (N)	420	3	592130 167246
89	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 12.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18SW (N)	420	3	592122 167246
90	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 336.5  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12SE (W)	434	3	591579 166604
91	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Length: 241.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Clay Reach Catchment Name: Not Supplied Primacy: 1	A18SE (NE)	442	3	592387 167267



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
92	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 215.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	454	3	591734 167074
	OS Water Network Lines				
93	Watercourse Form: Inland river Watercourse Length: 363.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12SE (W)	478	3	591529 166686
94	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NE (NW)	488	3	591634 167011
95	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 32.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18SW (NW)	490	3	591866 167200
96	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 11.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	511	3	591755 167160
97	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 20.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	514	3	591762 167169
98	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 9.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18SW (NW)	514	3	591836 167213
99	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 137.7  Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A18SW (NW)	522	3	591833 167221
100	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 34.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A18SW (NW)	523	3	591830 167219



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
101	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 25.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	531	3	591758 167187
	OS Water Network Lines				
102	Watercourse Form: Inland river Watercourse Length: 225.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	531	3	591758 167187
103	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NE (W)	539	3	591549 166977
104	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 20.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NE (NW)	540	3	591562 166998
105	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 26.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	543	3	591770 167210
106	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 4.6 Watercourse Level: Underground Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A17SE (NW)	545	3	591796 167226
107	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 6.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A17SE (NW)	546	3	591791 167226
108	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 9.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NE (W)	551	3	591514 166932
109	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 209.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A17SE (NW)	552	3	591787 167230



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
110	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 1.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NE (W)	553	3	591531 166973
	OS Water Network Lines				
111	Watercourse Form: Inland river Watercourse Length: 21.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NE (W)	553	3	591531 166973
112	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NE (W)	554	3	591530 166972
113	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 110.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NE (W)	555	3	591530 166972
114	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 14.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NE (NW)	555	3	591542 166995
115	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 29.0  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NE (W)	557	3	591511 166941
116	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 299.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NE (NW)	567	3	591527 166994
117	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 120.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NW (W)	581	3	591483 166936
118	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 50.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SW (NE)	596	3	592762 167213



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
119	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 190.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SW (NE)	618	3	592807 167192
	OS Water Network Lines				
120	Watercourse Form: Inland river Watercourse Length: 8.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SW (NE)	618	3	592807 167192
121	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SW (NE)	625	3	592812 167199
122	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 19.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18SW (NW)	632	3	591864 167351
123	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 143.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A18SW (NW)	632	3	591864 167351
124	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 42.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18SW (NW)	637	3	591845 167350
125	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 182.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (SW)	637	3	591828 166005
126	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 487.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SE (S)	643	3	592286 166008
127	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: Underground Permanent: True Watercourse Name: North Kent Primacy: 2	A12NW (W)	645	3	591421 166953



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
128	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 208.1  Watercourse Level: On ground surface Permanent: True  Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	650	3	591803 167347
	OS Water Network Lines				
129	Watercourse Form: Inland river Watercourse Length: 65.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	650	3	591939 165965
130	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NW (W)	655	3	591410 166952
131	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Length: 48.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Ridham Fleet Catchment Name: Not Supplied Primacy: 1	A18NE (N)	664	3	592353 167502
132	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 186.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SE (S)	668	3	592339 165997
133	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Length: 184.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Clay Reach Catchment Name: Not Supplied Primacy: 1	A18NE (N)	674	3	592374 167508
134	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 46.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	681	3	591880 165944
135	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Length: 326.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Ridham Fleet Catchment Name: Not Supplied Primacy: 1	A18NE (N)	681	3	592336 167521
136	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Length: 444.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Milton Creek Catchment Name: Not Supplied Primacy: 1	A8SW (S)	684	3	592121 165928



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
137	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 60.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	684	3	592121 165928
	OS Water Network Lines			_	
138	Watercourse Form: Inland river Watercourse Length: 25.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	687	3	592061 165920
	OS Water Network Lines				
139	Watercourse Form: Inland river Watercourse Length: 255.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	690	3	592956 167077
	OS Water Network Lines				
140	Watercourse Form: Inland river Watercourse Length: 46.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	690	3	592956 167077
	OS Water Network Lines				
141	Watercourse Form: Inland river Watercourse Length: 187.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	697	3	592039 165909
	OS Water Network Lines				
142	Watercourse Form: Inland river Watercourse Length: 12.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A14NE (E)	706	3	592986 167042
	OS Water Network Lines				
143	Watercourse Form: Inland river Watercourse Length: 98.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A14NE (E)	707	3	592991 167030
	OS Water Network Lines				
144	Watercourse Form: Inland river Watercourse Length: 54.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18NW (N)	713	3	591867 167443
	OS Water Network Lines				
145	Watercourse Form: Inland river Watercourse Length: 61.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	715	3	591843 165919



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
146	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 49.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	715	3	591843 165919
	OS Water Network Lines				
147	Watercourse Form: Inland river Watercourse Length: 292.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A9SW (SE)	726	3	592551 166035
148	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 45.6 Watercourse Level: On ground surface True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	728	3	591562 167280
149	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 121.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A9SW (SE)	734	3	592564 166034
150	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 25.5  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A9SW (SE)	734	3	592564 166034
151	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 16.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	735	3	591895 165885
152	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 20.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A18NW (N)	740	3	591894 167491
153	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	741	3	591580 167314
154	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 21.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	741	3	591580 167314



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
155	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 60.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A17SE (NW)	743	3	591627 167354
156	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 15.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	743	3	591627 167354
157	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 169.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	744	3	591595 167330
158	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 17.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	747	3	591884 165876
159	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 8.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	749	3	591796 165898
160	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 5.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	749	3	591796 165898
161	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 762.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A9NW (SE)	751	3	592774 166208
162	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 27.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	752	3	591803 165893
163	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 23.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18NW (N)	753	3	591877 167497



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
164	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 68.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	753	3	591790 165896
	OS Water Network Lines				
165	Watercourse Form: Inland river Watercourse Length: 10.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	754	3	591867 165873
166	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 3.3  Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A18NW (N)	756	3	591898 167511
167	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 49.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SE (NW)	757	3	591625 167369
168	OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 23.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A9SW (SE)	758	3	592570 166009
169	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 13.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18NW (N)	759	3	591898 167514
170	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 74.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A18NW (N)	759	3	591898 167514
171	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 365.1  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A14NE (E)	759	3	593060 166969
172	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 255.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A14NE (E)	759	3	593060 166969



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
173	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 60.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	761	3	591872 165864
	OS Water Network Lines				
174	Watercourse Form: Inland river Watercourse Length: 15.5 Watercourse Level: Underground True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18NW (N)	768	3	591886 167519
	OS Water Network Lines				
175	Watercourse Form: Inland river Watercourse Length: 28.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	775	3	591781 165876
	OS Water Network Lines				
176	Watercourse Form: Inland river Watercourse Length: 43.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18NW (N)	779	3	591871 167523
	OS Water Network Lines				
177	Watercourse Form: Inland river Watercourse Length: 446.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17SW (W)	789	3	591318 167075
	OS Water Network Lines				
178	Watercourse Form: Inland river Watercourse Length: 115.2 Watercourse Level: On ground surface True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NW (W)	791	3	591309 167060
	OS Water Network Lines				
179	Watercourse Form: Inland river Watercourse Length: 15.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	793	3	591733 165874
	OS Water Network Lines				
180	Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	793	3	591733 165874
	OS Water Network Lines				
181	Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	795	3	591746 165867



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
182	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 77.1  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	795	3	592873 167385
183	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 12.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	795	3	592873 167385
184	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Primacy: 2	A7SE (SW)	799	3	591759 165857
185	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 2.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	799	3	591759 165857
186	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 148.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	800	3	591757 165858
187	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 57.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	802	3	591900 165817
188	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 89.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A17NE (NW)	803	3	591590 167402
189	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 7.7 Watercourse Level: On ground surface True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17NE (NW)	803	3	591590 167402
190	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Primacy: 2	A8SW (S)	803	3	591875 165821



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
191	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 41.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	803	3	591847 165826
192	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 25.0 Watercourse Level: On ground surface	A8SW (S)	805	3	591826 165830
	Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2				
193	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 109.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17NE (NW)	806	3	591595 167408
194	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 26.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	806	3	592884 167388
195	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 106.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NW (W)	811	3	591249 166967
196	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	814	3	591862 165811
197	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 25.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18NW (N)	817	3	591914 167587
198	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 149.0  Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A18NW (N)	817	3	591914 167587
199	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 7.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	817	3	592908 167380



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
200	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 93.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	822	3	592916 167380
201	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 49.9  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (S)	823	3	591813 165815
202	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 42.0  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18NW (N)	826	3	591889 167586
203	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 13.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A9SW (SE)	829	3	592685 166010
204	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 3.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A9SW (SE)	835	3	592680 165997
205	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 440.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A9SW (SE)	836	3	592678 165993
206	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 95.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18NW (N)	838	3	591848 167577
207	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 24.4  Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	843	3	591853 165784
208	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 68.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A12NW (W)	845	3	591191 166897



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
209	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 7.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A12NW (W)	846	3	591191 166901
	OS Water Network Lines				
210	Watercourse Form: Tidal river Watercourse Length: 283.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A18NE (N)	846	3	592422 167675
211	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Length: 143.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Clay Reach Catchment Name: Not Supplied Primacy: 1	A18NE (N)	846	3	592422 167675
212	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 7.0  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A12NW (W)	847	3	591174 166834
213	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 10.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A12NW (W)	847	3	591181 166865
214	OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 51.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A12NW (W)	848	3	591191 166908
215	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 185.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A12NW (W)	848	3	591172 166827
216	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 25.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17NE (NW)	851	3	591757 167546
217	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 153.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17NE (NW)	851	3	591757 167546



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
218	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 29.8  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	855	3	592962 167378
	OS Water Network Lines				
219	Watercourse Form: Inland river Watercourse Length: 201.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17NE (NW)	862	3	591730 167547
220	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	862	3	593000 167343
221	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 39.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	862	3	592977 167372
222	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 10.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	862	3	592977 167372
223	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 1.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17NE (NW)	862	3	591732 167547
224	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 33.4  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (S)	863	3	591802 165776
225	OS Water Network Lines  Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (S)	863	3	591802 165776
226	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 8.2 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19NE (NE)	863	3	592912 167442



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
227	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 95.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A12NW (W)	864	3	591163 166862
	OS Water Network Lines				
228	Watercourse Form: Inland river Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	864	3	592961 167392
	OS Water Network Lines				
229	Watercourse Form: Inland river Watercourse Length: 85.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A8SW (S)	867	3	591845 165761
	OS Water Network Lines				
230	Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	868	3	591718 165800
	OS Water Network Lines				
231	Watercourse Form: Inland river Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	868	3	593017 167331
	OS Water Network Lines				
232	Watercourse Form: Inland river Watercourse Length: 105.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	870	3	592962 167400
	OS Water Network Lines				
233	Watercourse Form: Inland river Watercourse Length: 48.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	871	3	592980 167382
	OS Water Network Lines				
234	Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A11SE (W)	872	3	591148 166528
	OS Water Network Lines				
235	Watercourse Form: Inland river Watercourse Length: 102.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19NE (NE)	872	3	592917 167449

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
236	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 8.3 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	876	3	591686 165804
237	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 33.5  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	878	3	593026 167336
238	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 6.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A12NW (W)	887	3	591161 166945
239	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 146.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	890	3	593053 167317
240	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 89.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	890	3	593056 167313
241	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 13.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19NE (NE)	891	3	592859 167525
242	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 100.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A17NE (NW)	893	3	591540 167475
243	OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 113.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Not Supplied Primacy: 2	A8SE (S)	897	3	592428 165785
244	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 96.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19NE (NE)	897	3	592872 167522

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service F



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
245	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 6.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	899	3	593107 167246
	OS Water Network Lines				
246	Watercourse Form: Inland river Watercourse Length: 9.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17NE (NW)	900	3	591569 167504
247	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 23.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	904	3	593110 167252
248	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 108.1  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17NE (NW)	906	3	591559 167505
249	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 45.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	926	3	593126 167269
250	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 57.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	930	3	591650 165762
251	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 21.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A2NE (S)	934	3	591808 165701
252	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 211.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A20SW (NE)	934	3	593184 167166
253	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 108.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	939	3	591652 165751

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service F



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
254	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 28.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	939	3	591652 165751
255	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 9.8  Watercourse Level: Underground Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A18NW (N)	940	3	591946 167733
256	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 51.9 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Ridham Fleet Catchment Name: North Kent Primacy: 1	A23SW (N)	941	3	592145 167780
257	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 141.0  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A3NW (S)	942	3	591971 165667
258	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 192.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17NW (NW)	943	3	591460 167478
259	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 16.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17NW (NW)	943	3	591460 167478
260	OS Water Network Lines  Watercourse Form: Lake Watercourse Length: 55.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A7SE (SW)	944	3	591675 165735
261	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 260.5  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A7SE (SW)	944	3	591604 165768
262	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 29.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A7SE (SW)	945	3	591606 165766

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 55 of 74



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
263	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 14.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A23SW (N)	948	3	591948 167742
	OS Water Network Lines				
264	Watercourse Form: Inland river Watercourse Length: 30.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19NE (NE)	949	3	592970 167506
265	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 25.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent	A19NE (NE)	950	3	592980 167497
	Primacy: 2				
266	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 384.0  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A7SW (SW)	953	3	591391 165908
	OS Water Network Lines				
267	Watercourse Form: Inland river Watercourse Length: 50.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A23SW (N)	961	3	591951 167756
	OS Water Network Lines				
268	Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A23SW (N)	961	3	591951 167756
269	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 11.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19SE (NE)	962	3	593169 167263
	OS Water Network Lines				
270	Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19NE (NE)	964	3	593045 167448
	OS Water Network Lines				
271	Watercourse Form: Inland river Watercourse Length: 106.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A23SW (N)	965	3	591985 167772

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
272	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 69.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19NE (NE)	968	3	593057 167440
	OS Water Network Lines				
273	Watercourse Form: Inland river Watercourse Length: 56.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A20SW (NE)	972	3	593181 167264
274	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 9.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19NE (NE)	973	3	593034 167475
275	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 184.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19NE (NE)	976	3	593030 167484
276	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 17.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A2NE (SW)	977	3	591700 165690
277	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 55.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19NE (NE)	977	3	592892 167609
278	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 84.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A19NE (NE)	977	3	592892 167609
279	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 45.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A23SE (N)	978	3	592184 167820
280	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 56.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A2NE (S)	982	3	591789 165657

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
281	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 5.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Ridham Fleet Catchment Name: North Kent Primacy: 1	A23SW (N)	986	3	592114 167821
282	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 291.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17NE (NW)	989	3	591671 167661
283	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 191.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Coldharbour Fleet Catchment Name: North Kent Primacy: 2	A17NE (NW)	990	3	591502 167568
284	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 176.7  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A17NE (NW)	990	3	591502 167568
285	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Length: 191.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 1	A23SE (N)	990	3	592455 167814
286	OS Water Network Lines  Watercourse Form: Tidal river Watercourse Length: 612.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: The Swale Catchment Name: Not Supplied Primacy: 1	A23SE (N)	990	3	592455 167814
287	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 141.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Ridham Fleet Catchment Name: North Kent Primacy: 1	A23SW (N)	991	3	592115 167826
288	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 24.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A23SW (N)	991	3	592115 167826
289	OS Water Network Lines  Watercourse Form: Inland river Watercourse Length: 3.8  Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A2NE (SW)	994	3	591687 165677

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	OS Water Network Lines				
290	Watercourse Form: Inland river Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A15NW (E)	994	3	593281 167060
	OS Water Network Lines				
291	Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A2NE (SW)	997	3	591685 165674
	OS Water Network Lines				
292	Watercourse Form: Inland river Watercourse Length: 15.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A15NW (E)	999	3	593285 167063
	OS Water Network Lines				
293	Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: North Kent Primacy: 2	A23SW (N)	1000	3	592142 167839

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 59 of 74





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
294	Historical Landfill S Licence Holder: Location: Name: Operator Location: Boundary Accuracy: Provider Reference: First Input Date: Last Input Date: Last Input Date: Specified Waste Type: EA Waste Ref: Regis Ref: WRC Ref: BGS Ref: Other Ref:	Kemsley Paper Mill Swale, Kent North Kemsley Not Supplied As Supplied	A13SE (SE)	0	2	592167 166725
295	Historical Landfill S Licence Holder: Location: Name: Operator Location: Boundary Accuracy: Provider Reference: First Input Date: Last Input Date: Specified Waste Type: EA Waste Ref: Regis Ref: WRC Ref: BGS Ref: Other Ref:	Bowaters UK Swale, Kent Kemsley Mill Not Supplied As Supplied	A13SE (SE)	117	2	592290 166617
296	Historical Landfill S Licence Holder: Location: Name: Operator Location: Boundary Accuracy: Provider Reference: First Input Date: Last Input Date: Last Input Date: Specified Waste Type: EA Waste Ref: Regis Ref: WRC Ref: BGS Ref: Other Ref:	Paper Mill Swale, Kent Kemsley Marshes Not Supplied As Supplied	A18SW (N)	527	2	592026 167322
297	Historical Landfill S Licence Holder: Location: Name: Operator Location: Boundary Accuracy: Provider Reference: First Input Date: Last Input Date: Specified Waste Type: EA Waste Ref: Regis Ref: WRC Ref: BGS Ref: Other Ref:	Milton Creek Works Swale, Kent Milton Creek Works Not Supplied As Supplied EAHLD19421 Not Supplied Not Supplied Not Supplied O Not Supplied O Not Supplied 2200/7182 Not Supplied SW45	A8SE (S)	683	2	592284 165965
298	Historical Landfill S Licence Holder: Location: Name: Operator Location: Boundary Accuracy: Provider Reference: First Input Date: Last Input Date: Specified Waste Type: EA Waste Ref: Regis Ref: WRC Ref: BGS Ref: Other Ref:	Paper Mill Swale, Kent Kemsley Marshes Not Supplied As Supplied	A18NW (N)	724	2	591925 167489





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
299	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:	E.On Uk Chp Ltd Kemsley Mill, SITTINGBOURNE, Kent, ME10 2TD Environment Agency, Southern Region BA7174 27th July 1998 IPC new application 5.1 A (C) Incineration within the Waste Disposal Industry Authorisation superseded by a substantial or non substantial variation Automatically positioned to the address	A7NE (SW)	602	2	591632 166162
299	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:	E.On Uk Chp Ltd Kemsley Mill, SITTINGBOURNE, Kent, ME10 2TD Environment Agency, Southern Region BE3367 24th November 1998 IPC minor (non-substantial) variation to previous variation 5.1 A (C) Incineration within the Waste Disposal Industry Revoked - Now IPPC Automatically positioned to the address	A7NE (SW)	603	2	591637 166157
300	Name: Licence Number: Location: Licence Holder: Authority: Site Category: Max Input Rate: Licence Status: Issued:	Nagement Facilities (Landfill Boundaries)  Kemsley Mill Landfill 19432  Kemsley Mill Landfill, Kemsley, Sittingbourne, Kent, ME10 2SG D S Smith Paper Limited Environment Agency - South East Region, Kent & South London Area Industrial Waste Landfills Not Supplied  Modified 18th April 1994 Positioned by the supplier As Supplied	A13SE (SE)	120	2	592289 166611
301	Licence Number: Location: Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference:	nagement Facilities (Locations)  19432 Kemsley Mill Landfill, Kemsley, Sittingbourne, Kent, ME10 2SG D S Smith Paper Limited Not Supplied Environment Agency - South East Region, Kent & South London Area Industrial Waste Landfills Modified  18th April 1994 7th February 2018 Not Supplied Located by supplier to within 10m	A13SE (SE)	292	2	592300 166389
302	Licence Number: Location: Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference:	nagement Facilities (Locations)  401851 Kemsley Paper Mill, Kemsley, Sittingbourne, Kent, ME10 2TD D S Smith Paper Limited Not Supplied Environment Agency - South East Region, Kent & South London Area Physical Treatment Facilities Modified 5th December 2014 5th December 2016 Not Supplied Located by supplier to within 10m	A8NW (SW)	308	2	591893 166335

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 61 of 74





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Licensed Waste Ma	nagement Facilities (Locations)				
303	Licensed waste Ma Licence Number: Location:  Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference:	402925 Kemsley Park Business Park, Ridham Dock Road, Iwade, Sittingbourne, Kent, ME9 8SR Countrystyle Recycling Limited Not Supplied Environment Agency - South East Region, Kent & South London Area Physical Treatment Facilities Issued 21st December 2016 Not Supplied	A18NW (N)	680	2	591957 167456
		Located by supplier to within 10m				
	Local Authority Lan Name:			0	4	592157 166730
	Local Authority Lan	dfill Coverage				
	Name:	Kent County Council - Had landfill data but passed it to the relevant environment agency		0	5	592157 166730
	Local Authority Lan	dfill Coverage				
	Name:	Kent County Council - Had landfill data but passed it to the relevant environment agency		312	5	592490 167080
	Registered Landfill	Sites				
304	Licence Holder: Licence Reference: Site Location: Licence Easting: Licence Northing: Operator Location: Authority: Site Category: Max Input Rate: Waste Source Restrictions: Status: Dated: Preceded By Licence: Superseded By Licence:	Grovehurst Energy Ltd P/05/63 Kemsley Mill Extension, Kemsley, Sittingbourne, Kent 592300 166400 U.K Paper House, Kemsley, SITTINGBOURNE, Kent, ME10 2SG Environment Agency - Southern Region, Kent Area Landfill Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year) Waste produced/controlled by licence holder  Operational as far as is knownOperational 18th April 1994 P/05/14  Not Given  Manually positioned to the address or location	A13SE (SE)	283	2	592300 166400



## Waste

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Registered Landfill	Sites				
304	Licence Holder: Licence Reference: Site Location: Licence Easting: Licence Northing: Operator Location: Authority: Site Category: Max Input Rate: Waste Source Restrictions: Status: Dated: Preceded By Licence: Superseded By Licence: Positional Accuracy: Boundary Accuracy: Authorised Waste	New Thames Paper Co Ltd P/05/14 Kemsley Mill, Kemsley, SITTINGBOURNE, Kent, ME10 3ET 592305 166400 As Site Address Environment Agency - Southern Region, Kent Area Landfill Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) Waste produced/controlled by licence holder  Record supersededSuperseded 14th October 1977 Not Given P/05/63  Manually positioned to the address or location Not Applicable Constr'N/Demol. Inert/Non-Haz/Non-Tox Paper Making Wastes Wet Fly Ash	A13SE (SE)	286	2	592305 166400

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 63 of 74



## Geological

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid	d Geology				
	Description:	Thames Group	A13NW (W)	0	1	592157 166730
	BGS Recorded Mine	eral Sites	(**)			100700
305	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Kemsley Down Brick Works Not Supplied British Geological Survey, National Geoscience Information Service 130863 Opencast Ceased Not Supplied Not Supplied Palaeocene Lambeth Group Common Clay and Shale Located by supplier to within 10m	A8NW (S)	552	1	591896 166073
	BGS Recorded Mine	eral Sites				
306	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Elmley Hills Cement Works Not Supplied British Geological Survey, National Geoscience Information Service 130780 Opencast Ceased Not Supplied Not Supplied Palaeogene London Clay Formation Common Clay and Shale Located by supplier to within 10m	A19NW (NE)	837	1	592615 167607
	Coal Mining Affecte In an area that might	d Areas not be affected by coal mining				
	Non Coal Mining Ar	eas of Great Britain				
	Risk: Source:	Unlikely British Geological Survey, National Geoscience Information Service	A13SW (SW)	0	1	592050 166607
	Potential for Collap	sible Ground Stability Hazards	(- /			
	Hazard Potential: Source:	Moderate British Geological Survey, National Geoscience Information Service	A13SW (SW)	0	1	592050 166607
	Potential for Collaps Hazard Potential: Source:	sible Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	592157 166730
	Potential for Collaps Hazard Potential: Source:	sible Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	A13SW (SW)	6	1	592058 166599
	Potential for Collaps Hazard Potential: Source:	sible Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	A13NE (NE)	222	1	592483 166965
	Potential for Compr Hazard Potential: Source:	ressible Ground Stability Hazards  Moderate  British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	592157 166730
	Potential for Compr Hazard Potential: Source:	ressible Ground Stability Hazards  No Hazard  British Geological Survey, National Geoscience Information Service	A13SW (SW)	0	1	592050 166607
	Potential for Compr Hazard Potential: Source:	ressible Ground Stability Hazards  Moderate  British Geological Survey, National Geoscience Information Service	A13NE (NE)	222	1	592483 166965
	Potential for Ground Hazard Potential: Source:	d Dissolution Stability Hazards  No Hazard  British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	592157 166730
	Potential for Ground Hazard Potential: Source:	d Dissolution Stability Hazards  No Hazard  British Geological Survey, National Geoscience Information Service	A13NE (NE)	222	1	592483 166965
	Potential for Landsl Hazard Potential: Source:	ide Ground Stability Hazards  Very Low  British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	592157 166730
	Potential for Landsl Hazard Potential: Source:	ide Ground Stability Hazards Low British Geological Survey, National Geoscience Information Service	A13SE (SE)	112	1	592281 166616

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 64 of 74



## Geological

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Lands	lide Ground Stability Hazards				
	Hazard Potential: Source:	Moderate British Geological Survey, National Geoscience Information Service	A13SE (SE)	134	1	592288 166580
	Potential for Lands	lide Ground Stability Hazards				
	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13SE (SE)	166	1	592357 166618
	Potential for Lands	lide Ground Stability Hazards				
	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13SE (SE)	204	1	592308 166513
	Potential for Lands	lide Ground Stability Hazards				
	Hazard Potential: Source:	Moderate British Geological Survey, National Geoscience Information Service	A13SE (SE)	219	1	592390 166576
	Potential for Lands	lide Ground Stability Hazards				
	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13NE (NE)	222	1	592483 166965
	Potential for Runni	ng Sand Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	A13SW (SW)	0	1	592050 166607
	Potential for Runni	ng Sand Ground Stability Hazards				
	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	592157 166730
	Potential for Runni	ng Sand Ground Stability Hazards				
	Hazard Potential: Source:	Moderate British Geological Survey, National Geoscience Information Service	A13NE (NE)	27	1	592331 166840
	Potential for Runni	ng Sand Ground Stability Hazards				
	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13NE (NE)	74	1	592369 166869
	Potential for Runni	ng Sand Ground Stability Hazards				
	Hazard Potential: Source:	Moderate British Geological Survey, National Geoscience Information Service	A13NE (NE)	222	1	592483 166965
	Potential for Shrink	ring or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Source:	Moderate British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	592157 166730
	Potential for Shrink	ring or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Source:	Low British Geological Survey, National Geoscience Information Service	A13SE (SE)	143	1	592281 166573
	Potential for Shrink	ring or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Source:	Moderate British Geological Survey, National Geoscience Information Service	A13NE (NE)	222	1	592483 166965
	Radon Potential - R	adon Affected Areas				
	Affected Area:	The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level).  British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	592157 166730
	Source:					
		No radon protective measures are necessary in the construction of new	A13NW	0	1	592157
	Source:	dwellings or extensions British Geological Survey, National Geoscience Information Service	(W)			166730

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 65 of 74



## **Industrial Land Use**

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
307	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries  D S Smith Kemsley Mill, Kemsley, Sittingbourne, ME10 2TD Paper & Cardboard Products & Packaging - Manufacturers Active Automatically positioned to the address	A7NE (SW)	320	-	591818 166375
308	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries  A A G Distribution Kemsley Paper Mill, Kemsley, Sittingbourne, Kent, ME10 2SG Road Haulage Services Inactive Manually positioned within the geographical locality	A7NE (SW)	371	-	591768 166352
309	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	D S Smith Recycling Kemsley Mill, Kemsley, Sittingbourne, Kent, ME10 2TD Recycling Services Active Automatically positioned to the address	A7NE (SW)	514	-	591643 166278
310	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries  Powergen Chp Ltd  UK Paper House, Kemsley, Sittingbourne, Kent, ME10 2SG Electricity Companies Inactive Automatically positioned to the address	A7NE (SW)	520	-	591779 166155
310	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries  M-Real New Thames Ltd  UK Paper House, Kemsley, Sittingbourne, Kent, ME10 2SG  Paper & Pulp Mills  Inactive  Automatically positioned to the address	A7NE (SW)	520	-	591779 166155
310	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Glosrose Mechanical Handling Ltd UK Paper House, Kemsley, Sittingbourne, ME10 2SG Fork Lift Trucks Active Automatically positioned to the address	A7NE (SW)	530	-	591782 166143
310	Contemporary Trad Name: Location: Classification: Status:	• • • • • • • • • • • • • • • • • • • •	A7NE (SW)	555	-	591750 166132
311	Contemporary Trad Name: Location: Classification: Status:		A7NE (SW)	581	-	591692 166140
312	Contemporary Trad Name: Location: Classification: Status:		A7NE (SW)	602	-	591632 166162
312	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	le Directory Entries St Regis Paper Co Ltd Kemsley Mill, Kemsley, Sittingbourne, Kent, ME10 2TD Paper & Cardboard Products & Packaging - Manufacturers Inactive Manually positioned within the geographical locality	A7NE (SW)	602	-	591632 166162
313	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	le Directory Entries Firmin Unit 10, Kemsley Fields Business Park, Barge Way, Sittingbourne, ME10 2FE Road Haulage Services Active Automatically positioned to the address	A12SW (W)	828	-	591179 166697
314	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	le Directory Entries  Allwick Patterns Ltd  Unit B, O Y O Business Units, Barge Way, Kemsley, Sittingbourne, ME10 2FB Pattern Makers - Industrial  Active  Automatically positioned to the address	A12SW (W)	829	-	591190 166532

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 66 of 74



## **Industrial Land Use**

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
315	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries  C W C Automotive Unit P, O Y O Business Units, Barge Way, Kemsley, Sittingbourne, Kent, ME10 2FB Mot Testing Centres Active Automatically positioned to the address	A12SW (W)	857	-	591155 166583
315	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries  Carbon Motive Ltd  Unit P, O Y O Business Units, Barge Way, Kemsley, Sittingbourne, ME10 2FB Garage Services  Active  Automatically positioned to the address	A12SW (W)	857	-	591155 166583
316	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries  Vibration Monitoring Services Ltd 86, Recreation Way, Kemsley, Sittingbourne, Kent, ME10 2TG Engineering Services Inactive Automatically positioned to the address	A7NW (SW)	884	-	591321 166089
317	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries  Pillars Property Cleaning & Maintanence 2, George Walk, Kemsley, Sittingbourne, Kent, ME10 2GW Commercial Cleaning Services Inactive Automatically positioned to the address	A11SE (W)	903	-	591144 166408
318	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Carpet Cleaning Kent 10, Samuel Drive, Kemsley, Sittingbourne, ME10 2GB Carpet, Curtain & Upholstery Cleaners Active Automatically positioned to the address	A11SE (W)	911	-	591123 166458
319	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Michelsons Uk Ltd Unit J, O Y O Business Units, Barge Way, Kemsley, Sittingbourne, Kent, ME10 2FB Clothing & Fabrics - Manufacturers Inactive Automatically positioned to the address	A11SE (W)	936	-	591079 166553
320	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries L S Cleaning Services 34, Lloyd Drive, Kemsley, Sittingbourne, Kent, ME10 2GA Oven cleaning Inactive Automatically positioned to the address	A11SE (W)	987	-	591036 166499
320	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries  J S Cleaning Services 34, Lloyd Drive, Kemsley, Sittingbourne, Kent, ME10 2GA Cleaning Services - Domestic Inactive Automatically positioned to the address	A11SE (W)	987	-	591036 166499
320	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries  Bedazzled Cleaning Services 34, Lloyd Drive, Kemsley, Sittingbourne, Kent, ME10 2GA Commercial Cleaning Services Active  Automatically positioned to the address	A11SE (W)	987	-	591036 166499
320	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries  Bedazzled Cleaning Services 34, Lloyd Drive, Kemsley, SITTINGBOURNE, Kent, ME10 2GA Carpet, Curtain & Upholstery Cleaners Inactive Automatically positioned to the address	A11SE (W)	987	-	591036 166499

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 67 of 74



## **Sensitive Land Use**

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Environmentally Se	ensitive Areas				
321	Name: Multiple Areas: Total Area (m2): Source:	North Kent Marshes (decommissioned) Y 58689973.1 Natural England	A19SW (NE)	390	6	592578 167109
	Environmentally Se	ensitive Areas				
322	Name: Multiple Areas: Total Area (m2): Source:	North Kent Marshes (decommissioned) Y 8430039.17 Natural England	A17SE (NW)	481	6	591746 167114
	Environmentally Se	ensitive Areas				
323	Name: Multiple Areas: Total Area (m2): Source:	North Kent Marshes (decommissioned) Y 4433494.21 Natural England	A8SE (S)	608	6	592292 166045
	Marine Nature Rese	erves				
324	Name: Multiple Area: Area (m2): Source:	The Swale Estuary Y 51312966.83 Natural England	A13NE (NE)	19	6	592330 166830
	National Nature Res	serves				
325	Name: Multiple Areas: Total Area (m2): Source: Reference: Designation Date:	Elmley Y 12124250.12 Natural England 1007024 Not Supplied	A19SW (NE)	392	6	592596 167092
	Ramsar Sites					
326	Name: Multiple Areas: Total Area (m2): Source: Reference: Designation Date:	The Swale N 65098829 Natural England UK11071 Not Supplied	A13NE (NE)	163	6	592443 166922
	Sites of Special Sci	entific Interest				
327	Name: Multiple Areas: Total Area (m2): Source: Reference: Designation Details: Designation Date: Date Type: Designation Details:	The Swale N 65093505.77 Natural England 1003678 Environmentally Sensitive Area 20th February 1990 Notified Local Nature Reserve 20th February 1990 Notified Nature Conservation Review 20th February 1990 Notified Nature Conservation Review 20th February 1990 Notified National Nature Reserve 20th February 1990 Notified Ramsar Site 20th February 1990 Notified	A13NE (NE)	163	6	592443 166922
328	Special Protection of Name: Multiple Areas: Total Area (m2): Source: Reference: Designation Date:	Areas The Swale N 65099545.42 Natural England UK9012011 Not Supplied	A13NE (NE)	165	6	592445 166922

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 68 of 74



Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Swale Borough Council - Environmental Health Department	January 2015	Annually
Discharge Consents		
Environment Agency - Southern Region	April 2018	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - Southern Region	March 2013	As notified
Integrated Pollution Controls		
Environment Agency - Southern Region	October 2008	Variable
Integrated Pollution Prevention And Control		
Environment Agency - South East Region - Kent & South London Area	April 2018	Quarterly
Environment Agency - Southern Region	April 2018	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Swale Borough Council - Environmental Health Department	April 2013	Variable
London Port Health Authority - Environmental Services	October 2014	Variable
Local Authority Pollution Prevention and Controls		
Swale Borough Council - Environmental Health Department	April 2013	Annual Rolling Update
London Port Health Authority - Environmental Services	October 2014	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Swale Borough Council - Environmental Health Department	April 2013	Variable
London Port Health Authority - Environmental Services	October 2014	Variable
Nearest Surface Water Feature		
Ordnance Survey	September 2017	
Pollution Incidents to Controlled Waters	Coptomiser 2017	
Environment Agency - Southern Region	December 1999	Not Applicable
	December 1999	Not Applicable
Prosecutions Relating to Authorised Processes	March 2013	As notified
Environment Agency - Southern Region	Walch 2013	AS HOUREU
Prosecutions Relating to Controlled Waters	March 0040	A = == ('C' = a)
Environment Agency - Southern Region	March 2013	As notified
Registered Radioactive Substances		
Environment Agency - Southern Region	January 2015	
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points		
Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points		
Environment Agency - Head Office	July 2012	Annually
Substantiated Pollution Incident Register		
Environment Agency - South East Region - Kent & South London Area	April 2018	Quarterly
Environment Agency - Southern Region - Kent Area	April 2018	Quarterly
Environment Agency - Southern Region - Kent and East Sussex	April 2018	Quarterly
Water Abstractions		
Environment Agency - Southern Region	April 2018	Quarterly
Water Industry Act Referrals		
Environment Agency - Southern Region	October 2017	Quarterly
Groundwater Vulnerability		<u> </u>
•	April 2015	Not Applicable
Environment Agency - Head Office	,	11
Environment Agency - Head Office  Prift Deposits  Environment Agency - Head Office	lanuary 1999	Not Applicable
	January 1999	Not Applicable

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 69 of 74



Agency & Hydrological	Version	Update Cycle
Superficial Aquifer Designations		
British Geological Survey - National Geoscience Information Service	August 2015	As notified
Source Protection Zones		
Environment Agency - Head Office	January 2018	Quarterly
Extreme Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	May 2018	Quarterly
Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	May 2018	Quarterly
Areas Benefiting from Flood Defences		
Environment Agency - Head Office	May 2018	Quarterly
Flood Water Storage Areas		
Environment Agency - Head Office	May 2018	Quarterly
Flood Defences		
Environment Agency - Head Office	May 2018	Quarterly
OS Water Network Lines		
Ordnance Survey	May 2018	Quarterly
BGS Groundwater Flooding Susceptibility		
British Geological Survey - National Geoscience Information Service	May 2013	As notified
Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites		
Environment Agency - Head Office	April 2018	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - Southern Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - South East Region - Kent & South London Area	April 2018	Quarterly
Environment Agency - Southern Region - Kent Area	April 2018	Quarterly
Environment Agency - Southern Region - Kent and East Sussex	April 2018	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - South East Region - Kent & South London Area	April 2018	Quarterly
Environment Agency - Southern Region - Kent Area	April 2018	Quarterly
Environment Agency - Southern Region - Kent and East Sussex	April 2018	Quarterly
Local Authority Landfill Coverage		
Kent County Council - Waste Management Group	May 2000	Not Applicable
Swale Borough Council - Environmental Health Department	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
Kent County Council - Waste Management Group	May 2000	Not Applicable
Swale Borough Council - Environmental Health Department	May 2000	Not Applicable
Registered Landfill Sites		
Environment Agency - Southern Region - Kent Area	March 2003	Not Applicable
Environment Agency - Southern Region - Kent and East Sussex	March 2003	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - Southern Region - Kent Area	March 2003	Not Applicable
Environment Agency - Southern Region - Kent and East Sussex	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites		
Environment Agency - Southern Region - Kent Area	March 2003	Not Applicable
Environment Agency - Southern Region - Kent and East Sussex	March 2003	Not Applicable

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 70 of 74



Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	September 2017	Bi-Annually
Explosive Sites	March 2017	Variable
Health and Safety Executive	March 2017	Variable
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		тист фриссии
London Port Health Authority - Environmental Services	January 2008	Annual Rolling Update
Kent County Council	January 2016	Variable
Swale Borough Council	October 2015	Variable
Planning Hazardous Substance Consents		
London Port Health Authority - Environmental Services	January 2008	Annual Rolling Update
Kent County Council Swale Borough Council	January 2016 October 2015	Variable Variable
Swale Bolough Council	October 2013	Valiable
Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology	January 2000	Not Applicable
British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Recorded Mineral Sites  British Geological Survey - National Geoscience Information Service	May 2018	Bi-Annually
CBSCB Compensation District	May 2010	DI Allidally
Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas		
The Coal Authority - Property Searches	March 2014	As notified
Mining Instability		
Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain		
British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	June 2015	As notified
Potential for Compressible Ground Stability Hazards	lun - 0045	A = (*C = -1
British Geological Survey - National Geoscience Information Service	June 2015	As notified
Potential for Ground Dissolution Stability Hazards  British Geological Survey - National Geoscience Information Service	luno 2015	As notified
	June 2015	As notined
Potential for Landslide Ground Stability Hazards  British Geological Survey - National Geoscience Information Service	June 2015	As notified
Potential for Running Sand Ground Stability Hazards	Cano 2010	7.6 116.11164
British Geological Survey - National Geoscience Information Service	June 2015	As notified
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	June 2015	As notified
Radon Potential - Radon Affected Areas		
British Geological Survey - National Geoscience Information Service	July 2011	As notified
Radon Potential - Radon Protection Measures		
British Geological Survey - National Geoscience Information Service	July 2011	As notified

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 71 of 74



Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries		
Thomson Directories	May 2018	Quarterly
Fuel Station Entries		
Catalist Ltd - Experian	April 2018	Quarterly
Gas Pipelines		
National Grid	July 2014	Quarterly
Underground Electrical Cables		
National Grid	December 2015	Bi-Annually
Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	October 2017	Bi-Annually
Areas of Outstanding Natural Beauty		
Natural England	February 2018	Bi-Annually
Environmentally Sensitive Areas		
Natural England	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves	<b>5</b>	5.4
Natural England	February 2018	Bi-Annually
Marine Nature Reserves		D: A
Natural England	January 2018	Bi-Annually
National Nature Reserves	Fabruary 2019	Di Annually
Natural England	February 2018	Bi-Annually
National Parks Natural England	April 2017	Bi-Annually
	April 2017	Di-Allitually
Nitrate Vulnerable Zones Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	October 2015	
Ramsar Sites	33(050) 2010	
Natural England	February 2018	Bi-Annually
Sites of Special Scientific Interest		,
Natural England	February 2018	Bi-Annually
Special Areas of Conservation	,	,
Natural England	January 2018	Bi-Annually
Special Protection Areas		
Natural England	February 2018	Bi-Annually
		1

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 72 of 74



## **Data Suppliers**

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
Environment Agency	Environment Agency
Scottish Environment Protection Agency	SEP Septish Environment Protection Agency
The Coal Authority	The Coal Authority
British Geological Survey	British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
Centre for Ecology and Hydrology	Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	Cyfoeth Naturiol Cymru Natural Resources Wales
Scottish Natural Heritage	SCOTTISH NATURAL HERITAGE 迎念新
Natural England	NATURAL ENGLAND
Public Health England	Public Health England
Ove Arup	ARUP
Peter Brett Associates	peterbrett

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 73 of 74



## **Useful Contacts**

Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service  British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
4	Swale Borough Council - Environmental Health Department Swale House, East Street, Sittingbourne, Kent, ME10 3HT	Telephone: 01795 424341 Fax: 01795 417217 Website: www.swale.gov.uk
5	Kent County Council - Waste Management Group Block H, The Forstal, Beddow Way, Aylesford, Kent, ME20 7BT	Telephone: 01622 605976 Website: www.kent.gov.uk
6	Natural England County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.

Order Number: 173688989\_1\_1 Date: 18-Jul-2018 rpr\_ec\_datasheet v53.0 A Landmark Information Group Service Page 74 of 74

# **Historical Mapping Legends**

#### Gravel Pit Other Orchard Mixed Wood Deciduous Brushwood Furze Rough Pasture Arrow denotes Trigonometrical flow of water Station Site of Antiquities Bench Mark Pump, Guide Post, Well, Spring, Signal Post **Boundary Post** Surface Level Sketched Instrumental Contour Contour Fenced Main Roads Minor Roads Un-Fenced Raised Road Sunken Road Railway over Road over Railway Ri∨er Railway over Level Crossing Road over Road over Road over County Boundary (Geographical) County & Civil Parish Boundary Administrative County & Civil Parish Boundary County Borough Boundary (England) Co. Boro. Bdy. County Burgh Boundary (Scotland) Rural District Boundary R.D. Bdy.

····· Civil Parish Boundary

**Ordnance Survey County Series 1:10,560** 

#### Ordnance Survey Plan 1:10,000

ولاستن	Chalk Pit, Clay Pit or Quarry	000000000000000000000000000000000000000	Gravel Pit
	Sand Pit	( \	Disused Pit or Quarry
	Refuse or Slag Heap	<b></b>	Lake, Loch or Pond
	. Dunes		Boulders
<b>弁 弁</b> :	Coniferous Trees	A A A	Non-Coniferous Trees
ቀ ቀ	Orchard no.	Scrub	∖Y <sub>n</sub> , Coppice
ជា ជា	Bracken	Heath '	、 , , , , Rough Grassland
<u> </u>	- Marsh wY///	Reeds	스 <u>노</u> Saltings
		tion of Flow of	Water
**************************************	Building	16	Shingle
	>_	ANT	Sand
<b>※※</b>	Glasshouse		
		Pylon	Electricity
WWW	Sloping Masonry		- Transmission
	Cloping Wason's	Pole	Line
			_
Cutting	g Embankme	ent	
.,	****************		
	//		Standard Gauge
Road ' Under	''∏''' Road / Leve Over Cross		Single Track
			Siding, Tramway
			or Mineral Line
+	<del></del>		→ Narrow Gauge
	Geographical Cou	unty	
	— — Administrative Co		Borough
	Municipal Boroug Burgh or District	jh, Urban or R	ural District,
	Borough, Burgh of Shown only when no		
	Civil Parish		of boundaries occurs
BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
СН	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH ep	Public House
FB Fn	Foot Bridge Fountain	SB Spr	Signal Box Spring
GP	Guide Post	TCB	Telephone Call Box
MD	Mile Post	TCD	Telephone Call Post

Mile Post

TCP

Telephone Call Post

#### 1:10,000 Raster Mapping

	Gravel Pit		Refuse tip or slag heap
	Rock	3 3	Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle	Mud	Mud
Sand	Sand		Sand Pit
*********	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only) District, Unitary,	• • • • • •	Ci∨il, parish or community boundary
	Metropolitan, London Borough boundary		Constituency boundary
۵ <sup>۵</sup>	Area of wooded vegetation	۵ <sup>۵</sup>	Non-coniferous trees
۵ ۵	Non-coniferous trees (scattered)	**	Coniferous trees
<b>*</b>	Coniferous trees (scattered)	Ö	Positioned tree
Ф Ф Ф	Orchard	* *	Coppice or Osiers
alli,	Rough Grassland	www.	Heath
On_ On_	Scrub	7/√\r 7/√\r	Marsh, Salt Marsh or Reeds
6	Water feature	<b>← ←</b>	Flow arrows
MHW(S)	Mean high water (springs)	MLW(S)	Mean low water (springs)
-••-	Telephone line (where shown)	<b></b>	Electricity transmission line (with poles)
← BM 123.45 m	Bench mark (where shown)	Δ	Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)		Pylon, flare stac or lighting tower
+	Site of (antiquity)		Glasshouse
	General Building		Important

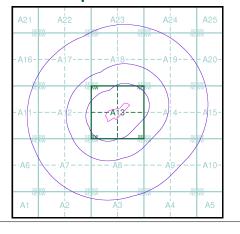
Building



#### **Historical Mapping & Photography included:**

Mapping Type	Scale	Date	Pg
Kent	1:10,560	1869	2
Kent	1:10,560	1898	3
Kent	1:10,560	1909	4
Kent	1:10,560	1938	5
Kent	1:10,560	1940 - 1950	6
Ordnance Survey Plan	1:10,000	1961	7
Ordnance Survey Plan	1:10,000	1966	8
Ordnance Survey Plan	1:10,000	1979	9
Ordnance Survey Plan	1:10,000	1991	10
10K Raster Mapping	1:10,000	1999	11
Street View	Variable		12

#### **Historical Map - Slice A**



#### **Order Details**

Order Number: 173688989\_1\_1
Customer Ref: JER1519
National Grid Reference: 592160, 166730

Slice:

Site Area (Ha): 2.97 Search Buffer (m): 1000

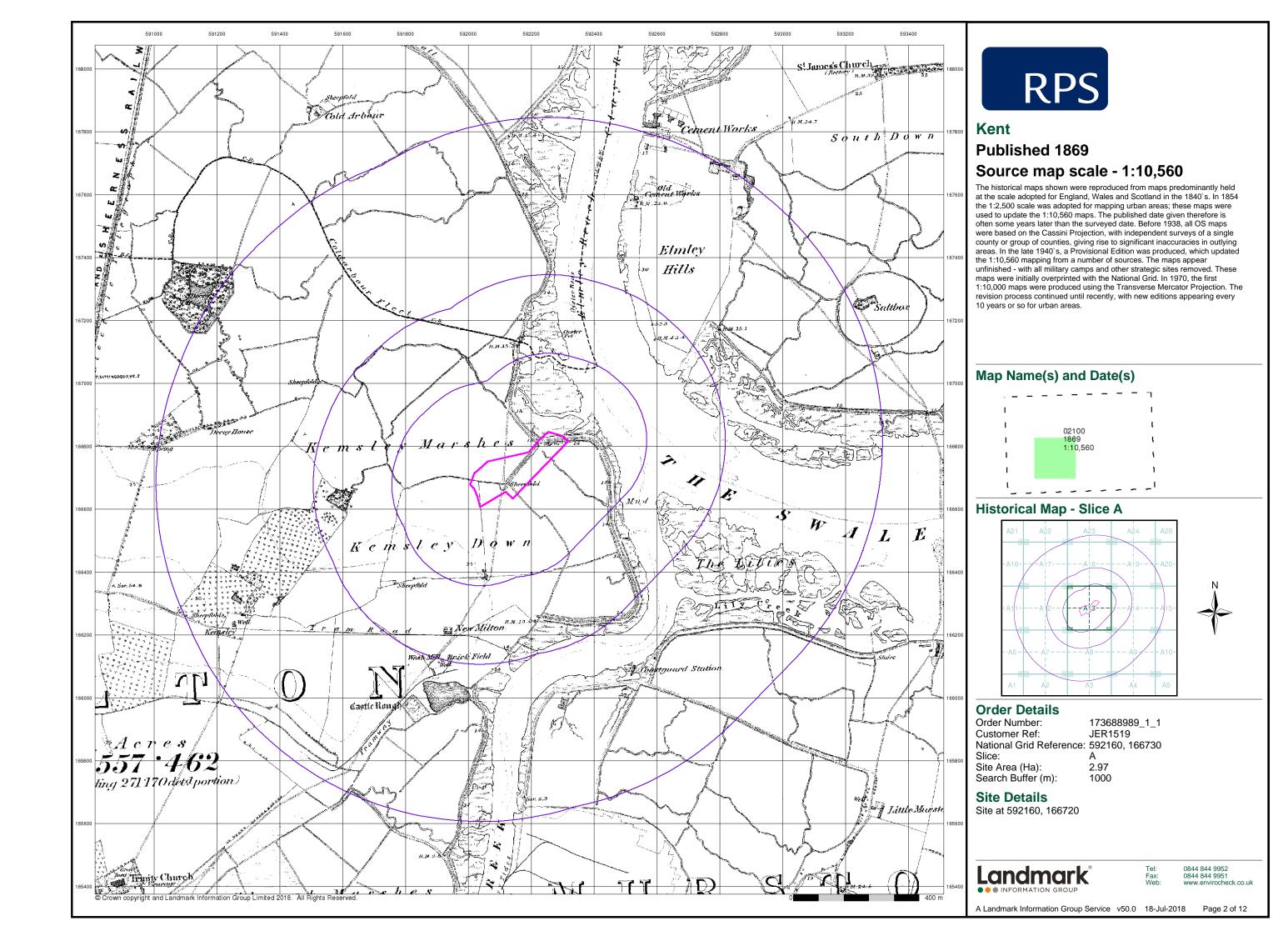
**Site Details** 

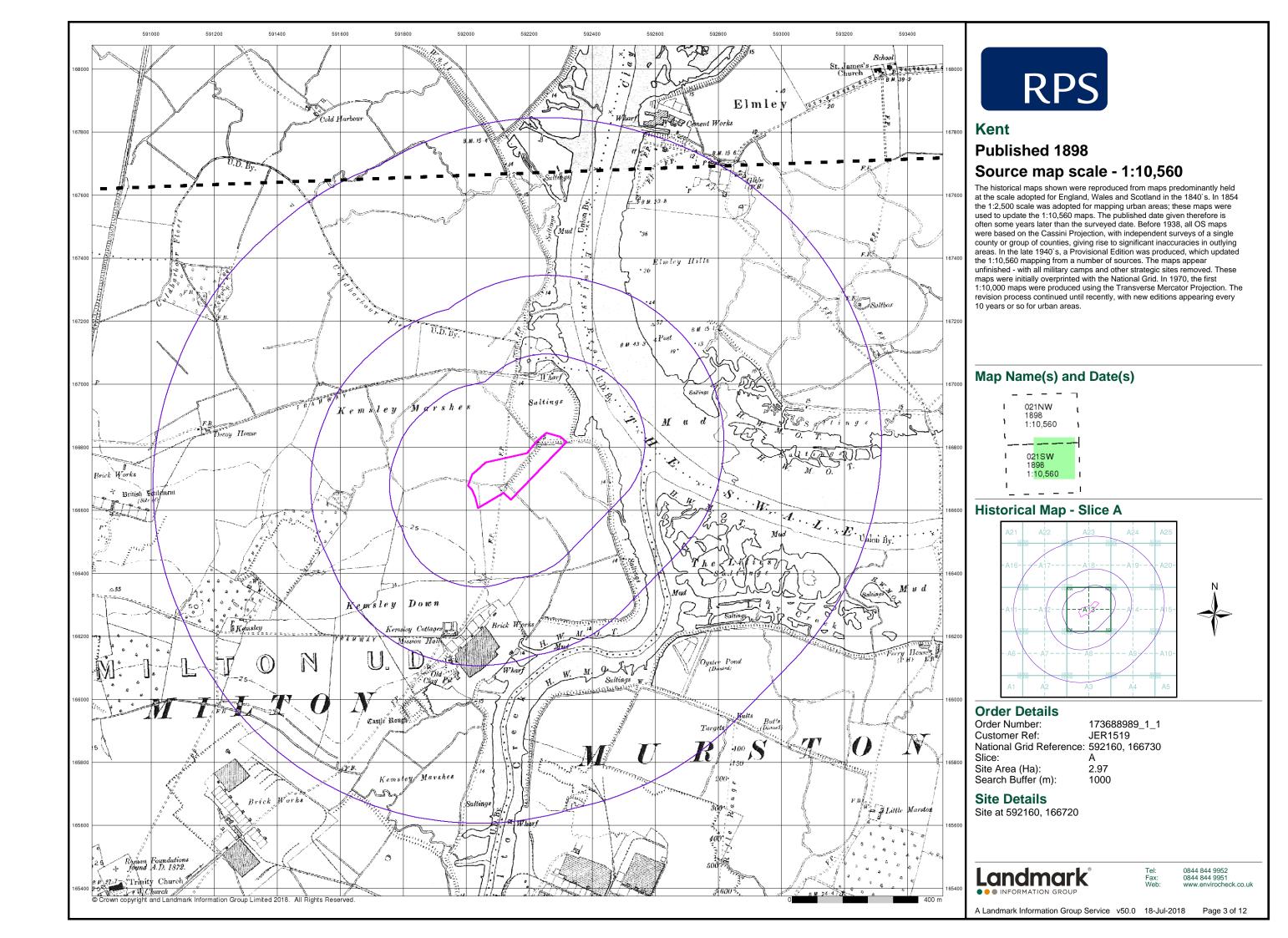
Site at 592160, 166720

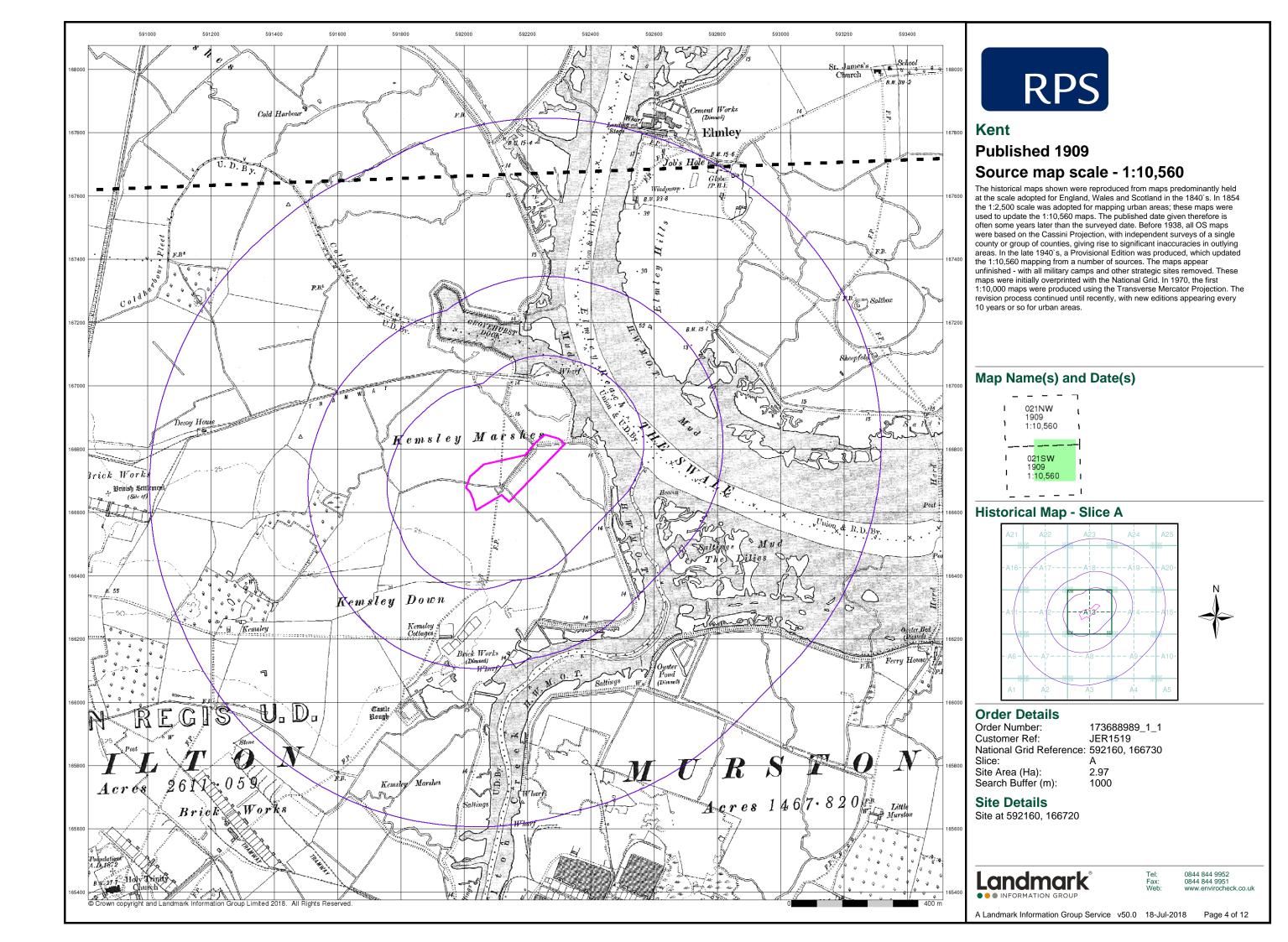


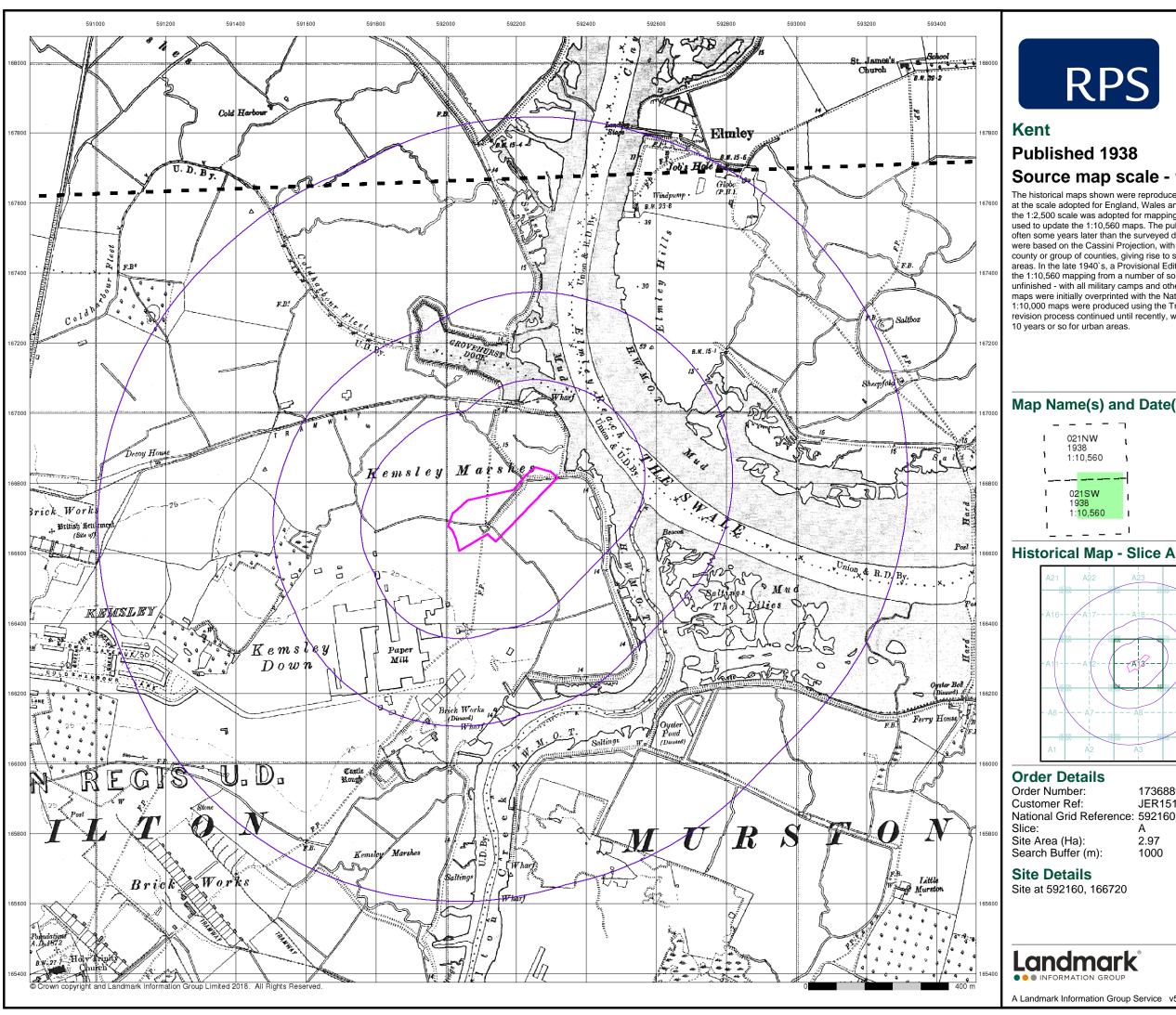
el: 0844 844 9952 tx: 0844 844 9951 eb: www.envirocheck.co.uk

A Landmark Information Group Service v50.0 18-Jul-2018 Page 1 of 12





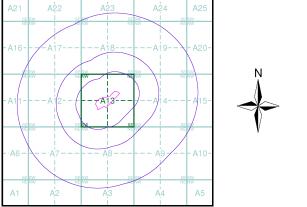




# Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every

#### Map Name(s) and Date(s)

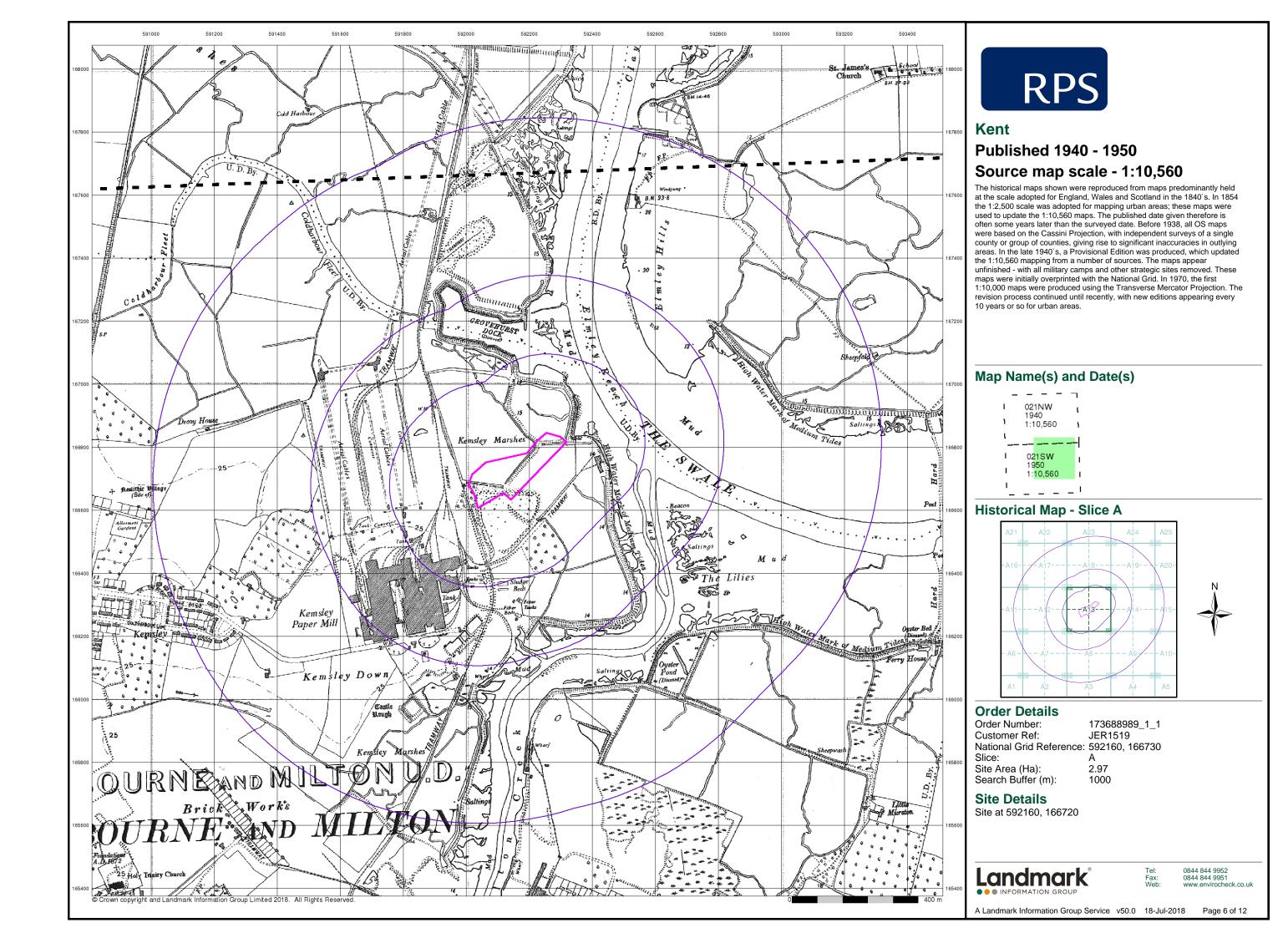


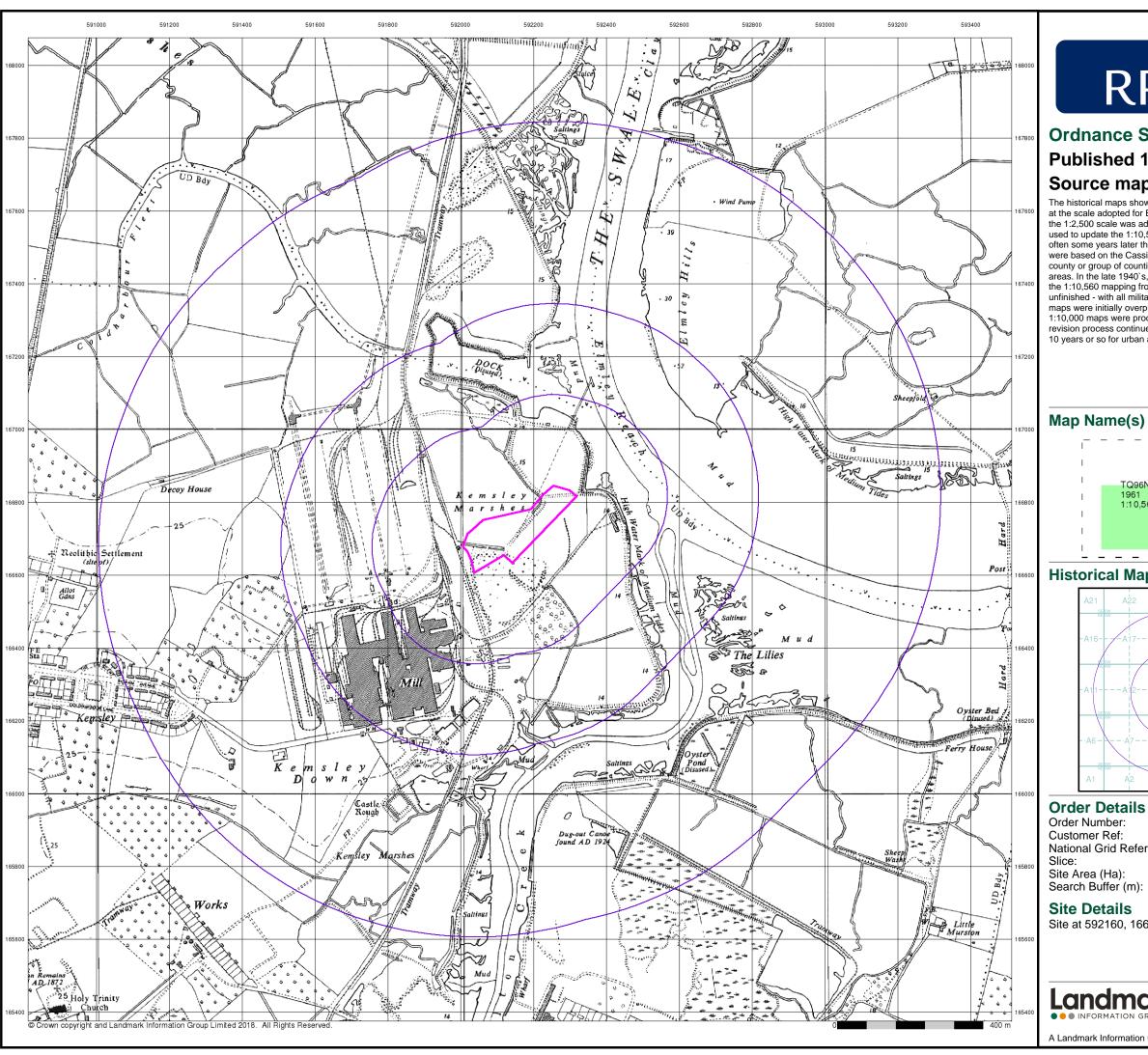
173688989\_1\_1 JER1519 National Grid Reference: 592160, 166730

> 2.97 1000

> > 0844 844 9951 www.envirocheck.co.uk

A Landmark Information Group Service v50.0 18-Jul-2018 Page 5 of 12







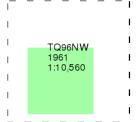
## **Ordnance Survey Plan**

## **Published 1961**

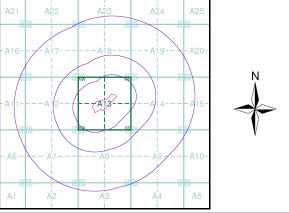
#### Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

#### Map Name(s) and Date(s)



#### **Historical Map - Slice A**



173688989\_1\_1 JER1519 National Grid Reference: 592160, 166730

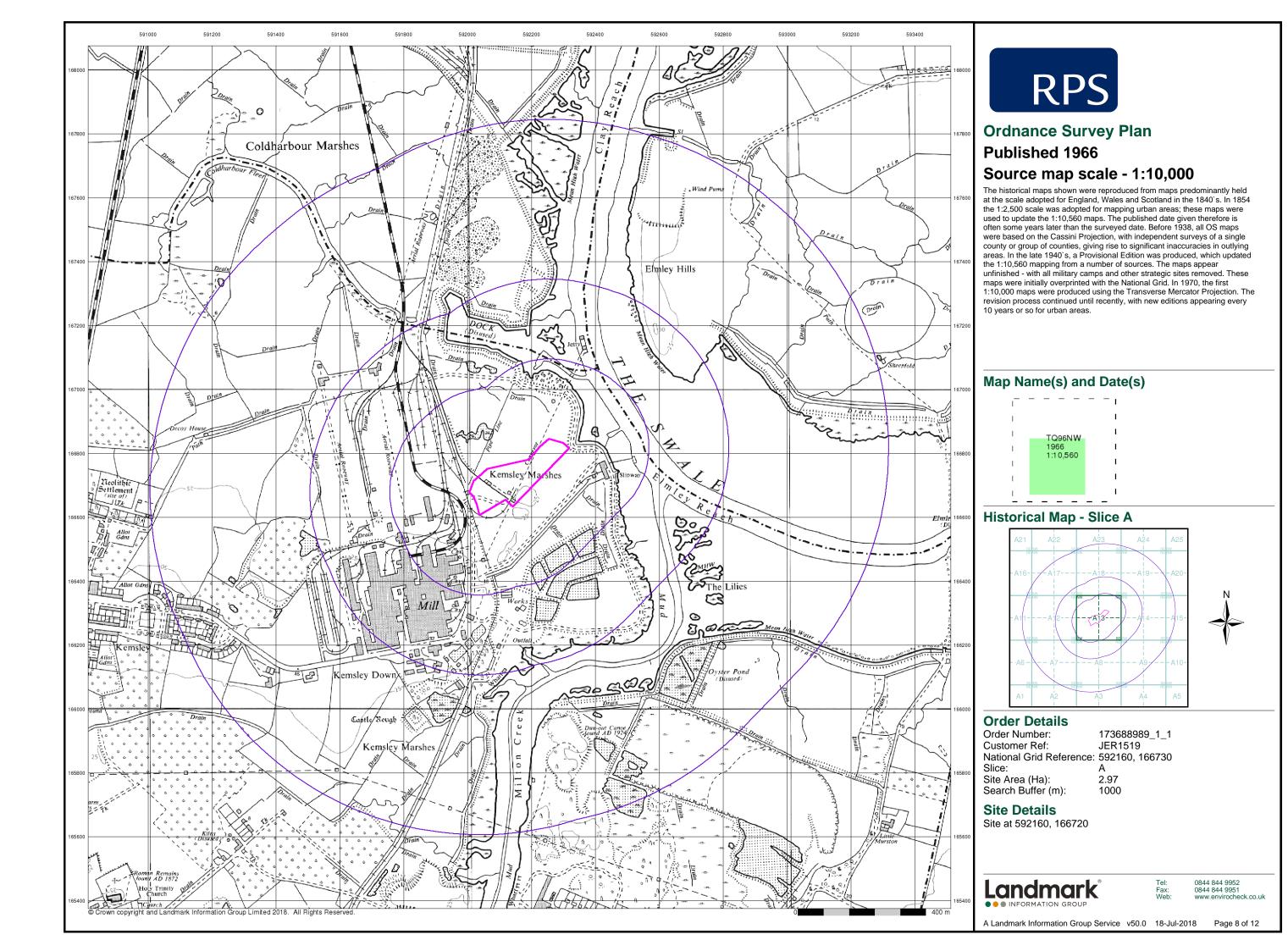
> 2.97 1000

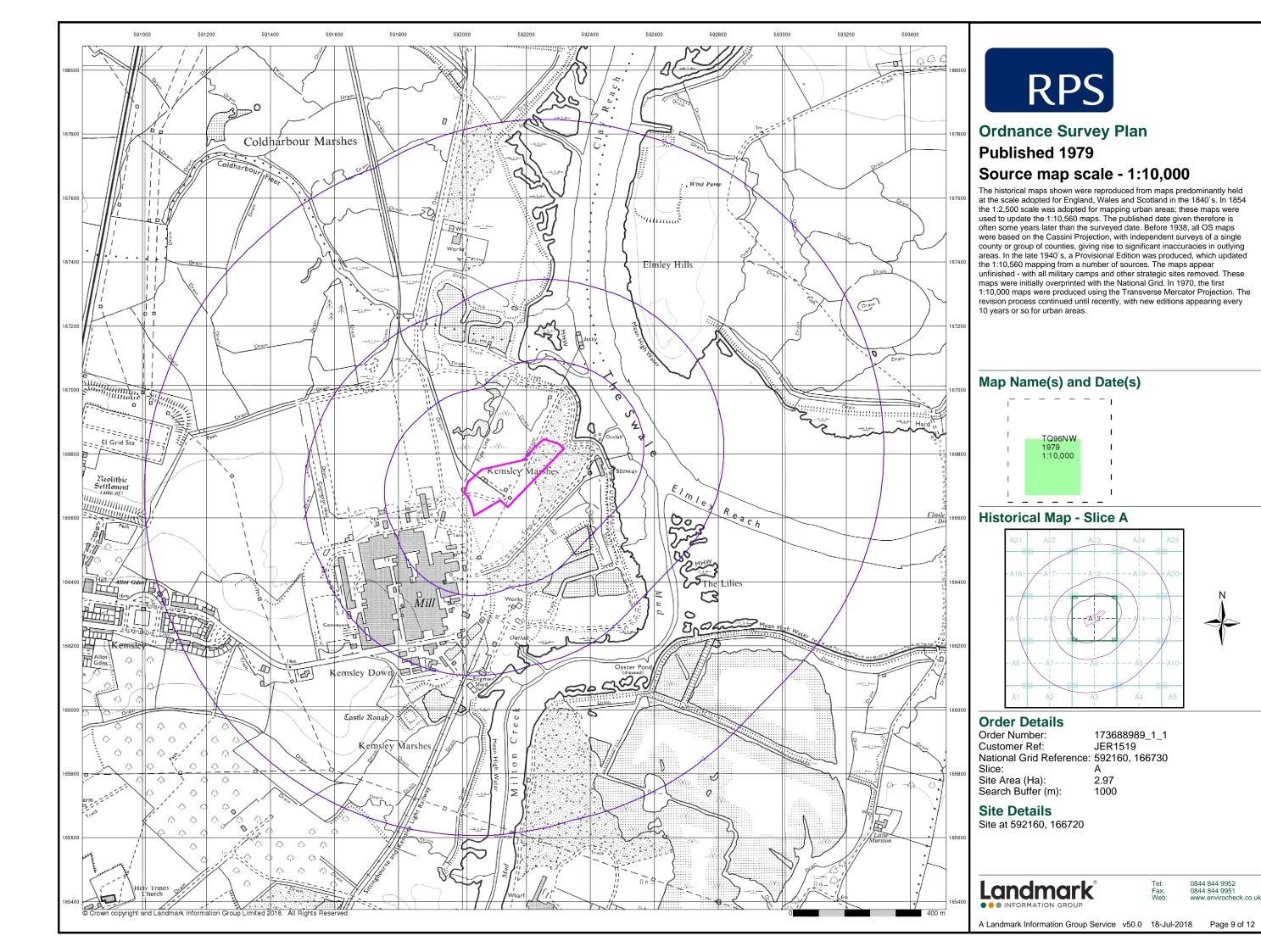
Site at 592160, 166720

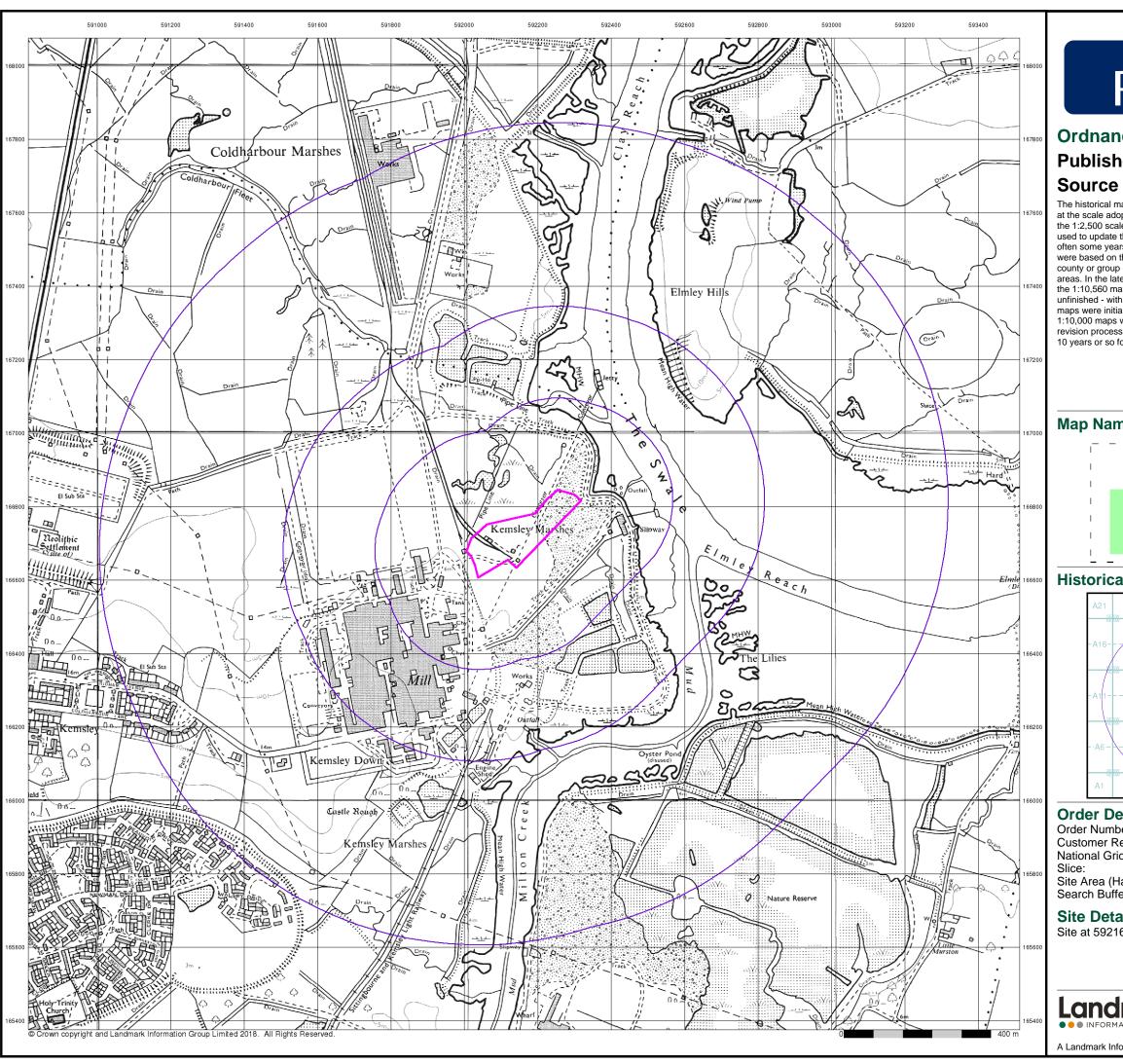
Landmark

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A Landmark Information Group Service v50.0 18-Jul-2018 Page 7 of 12









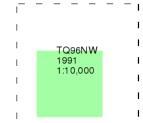
## **Ordnance Survey Plan**

## **Published 1991**

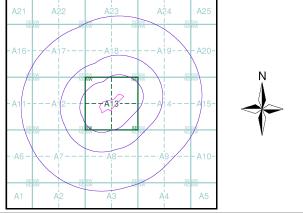
#### Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

#### Map Name(s) and Date(s)



#### **Historical Map - Slice A**



#### **Order Details**

Order Number: 173688989\_1\_1 Customer Ref: JER1519 National Grid Reference: 592160, 166730

Site Area (Ha): Search Buffer (m): 2.97 1000

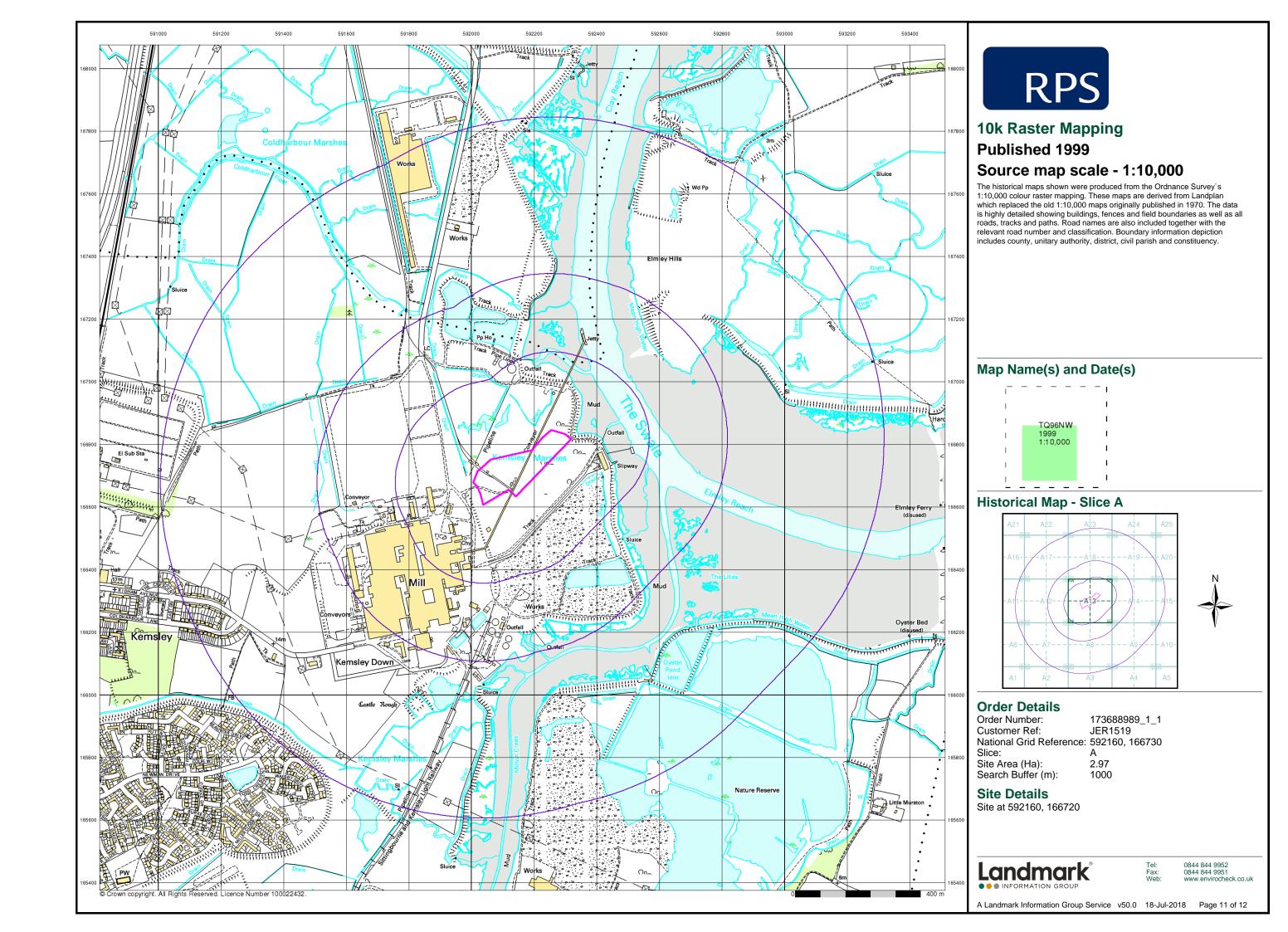
#### **Site Details**

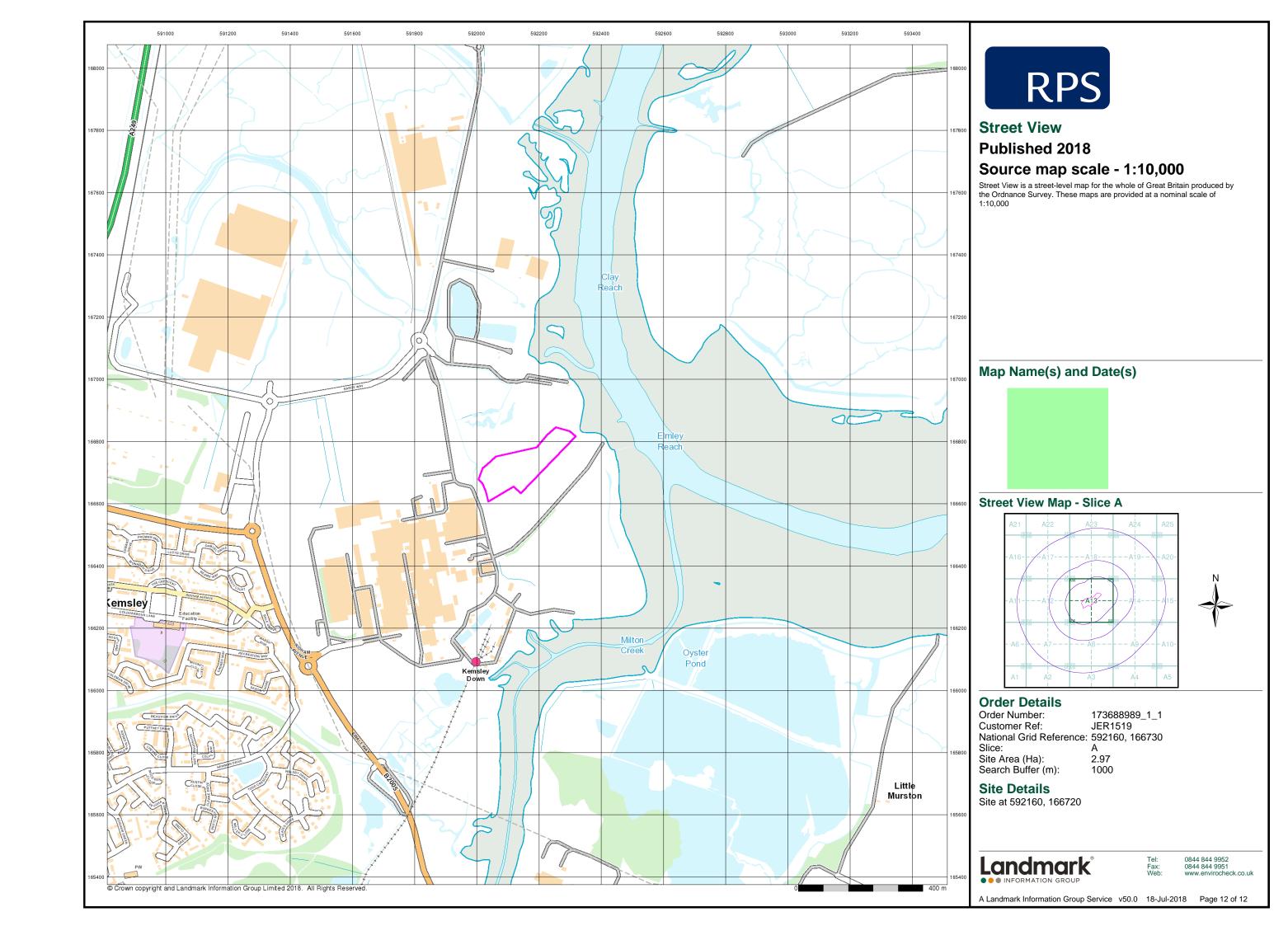
Site at 592160, 166720

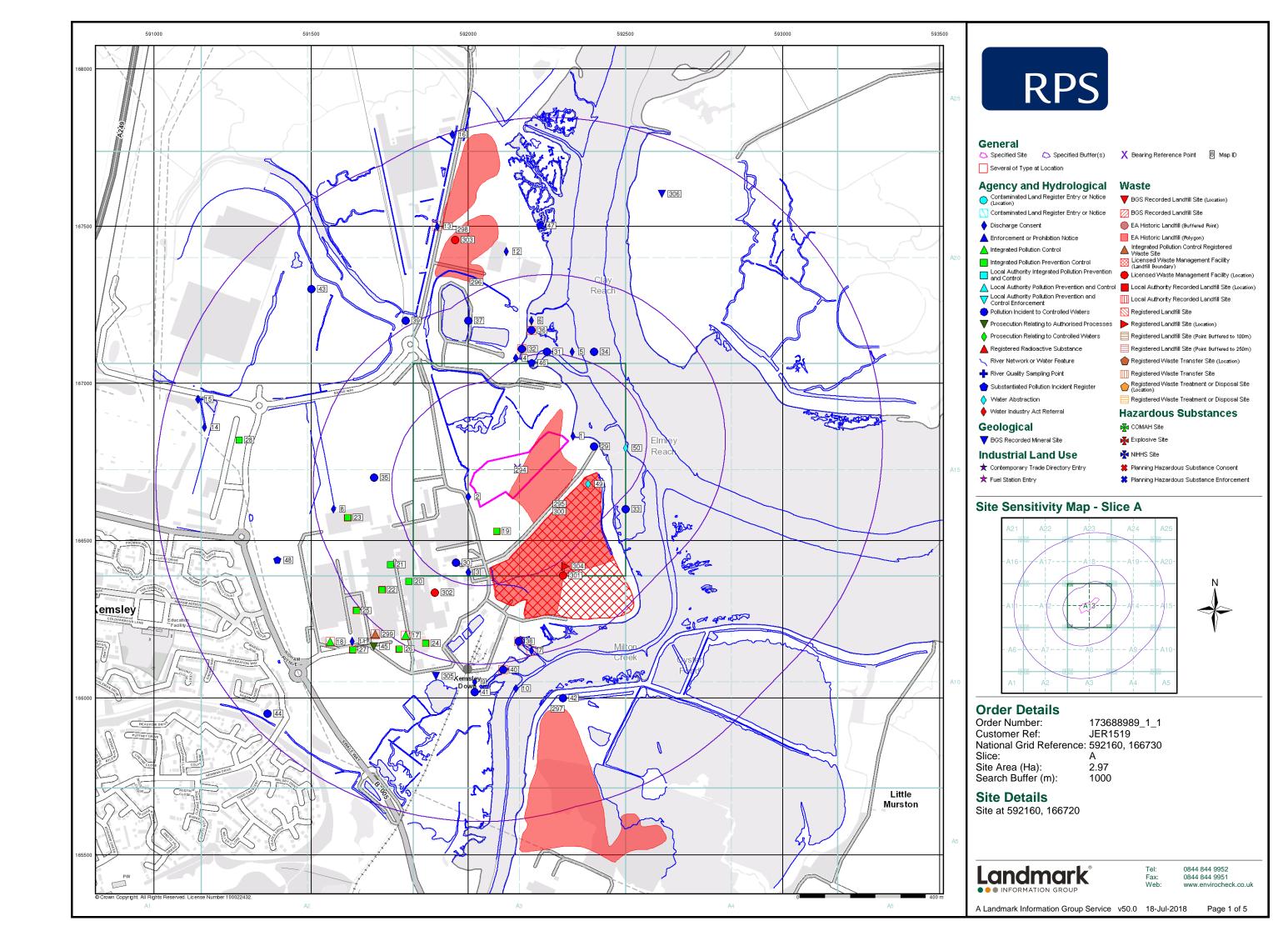
Landmark

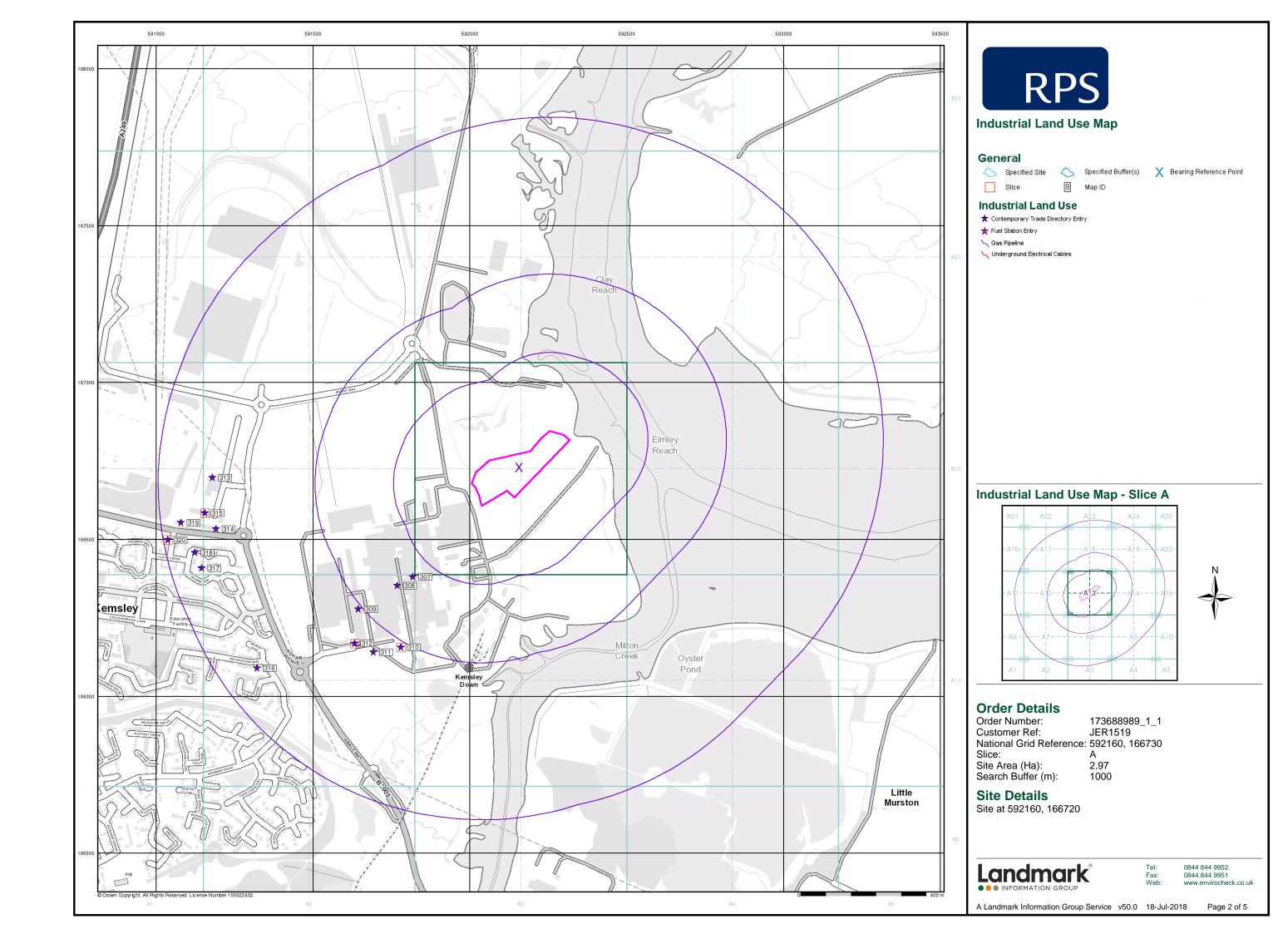
0844 844 9951 www.envirocheck.co.uk

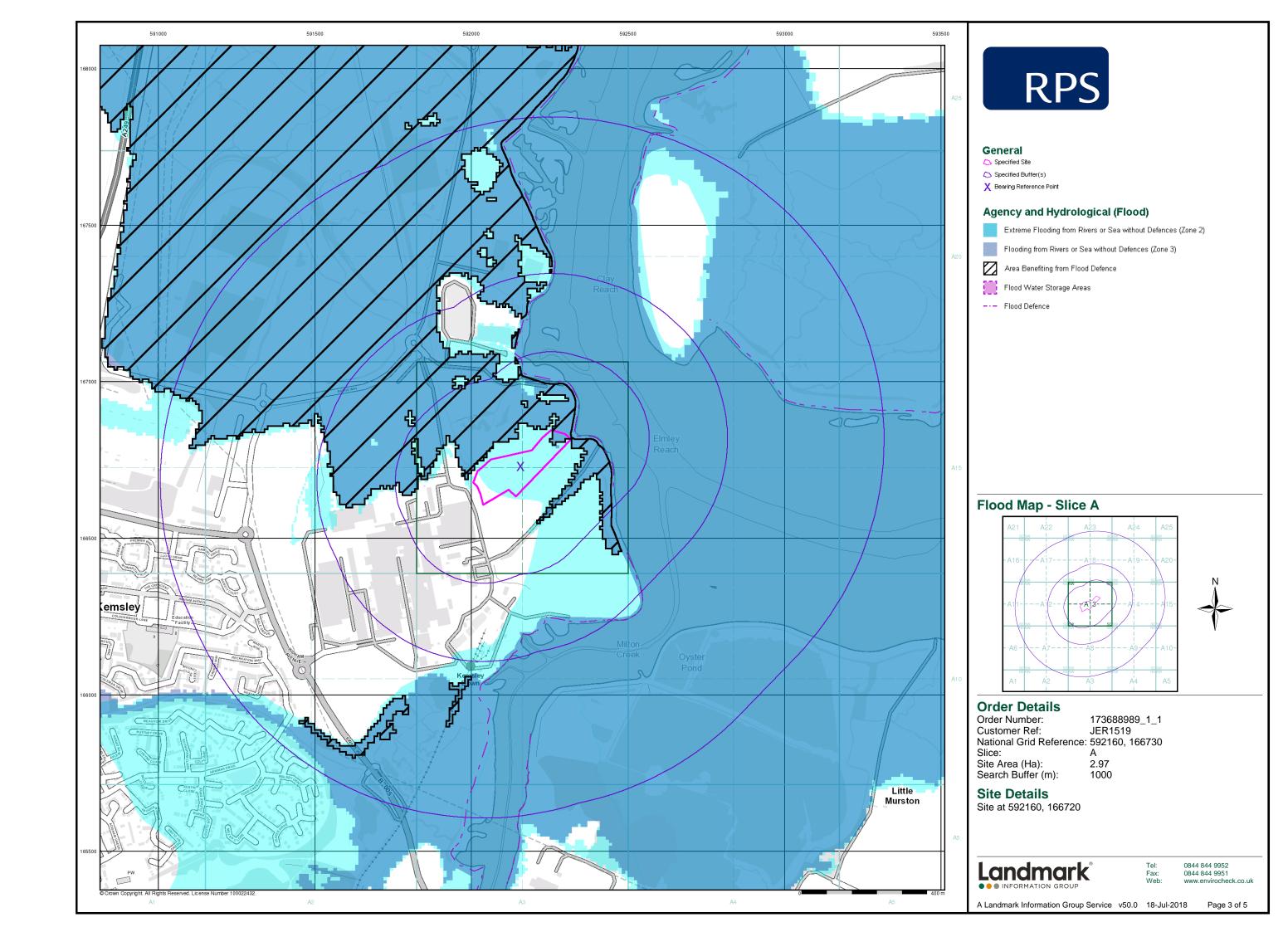
A Landmark Information Group Service v50.0 18-Jul-2018 Page 10 of 12

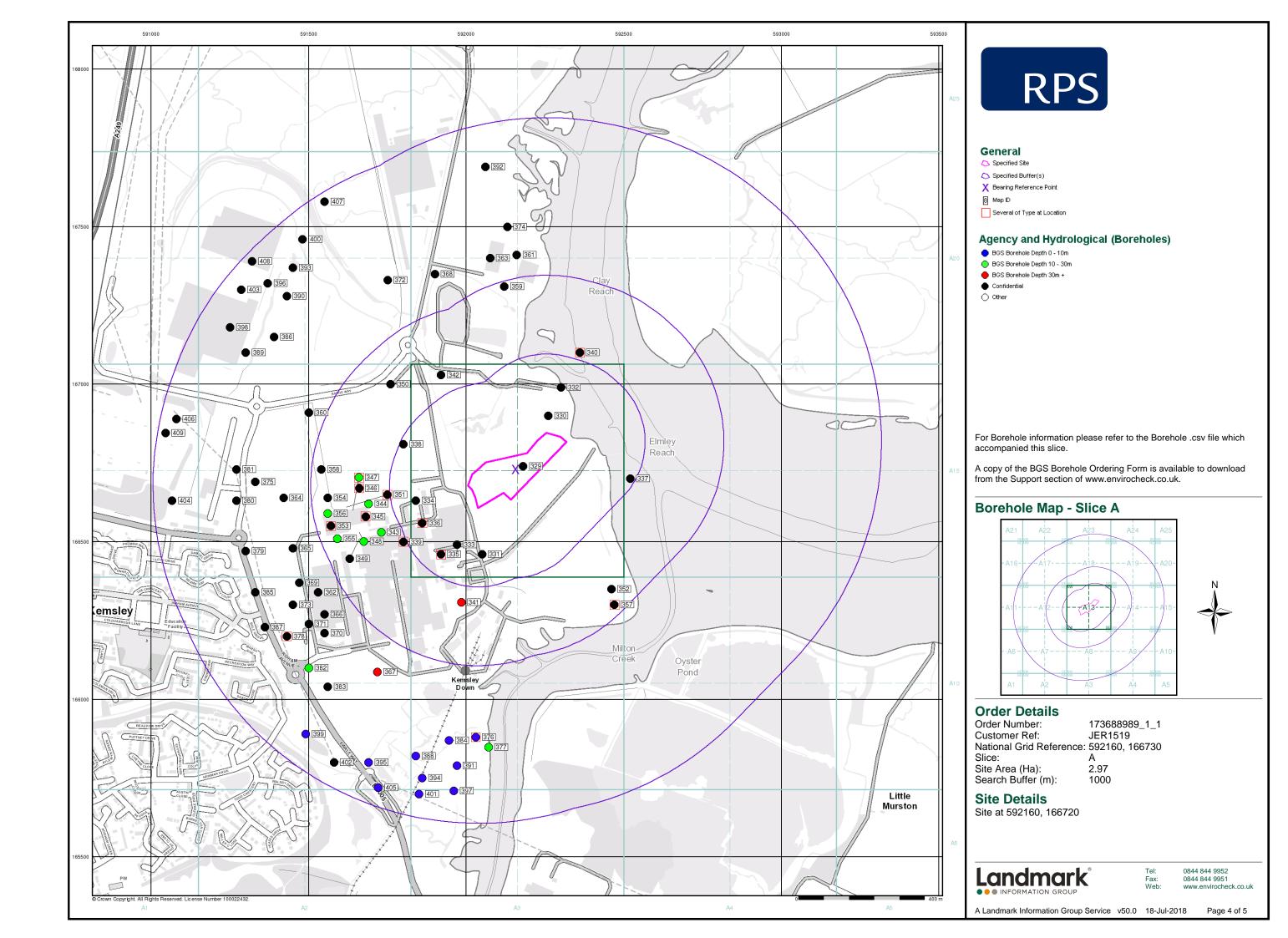


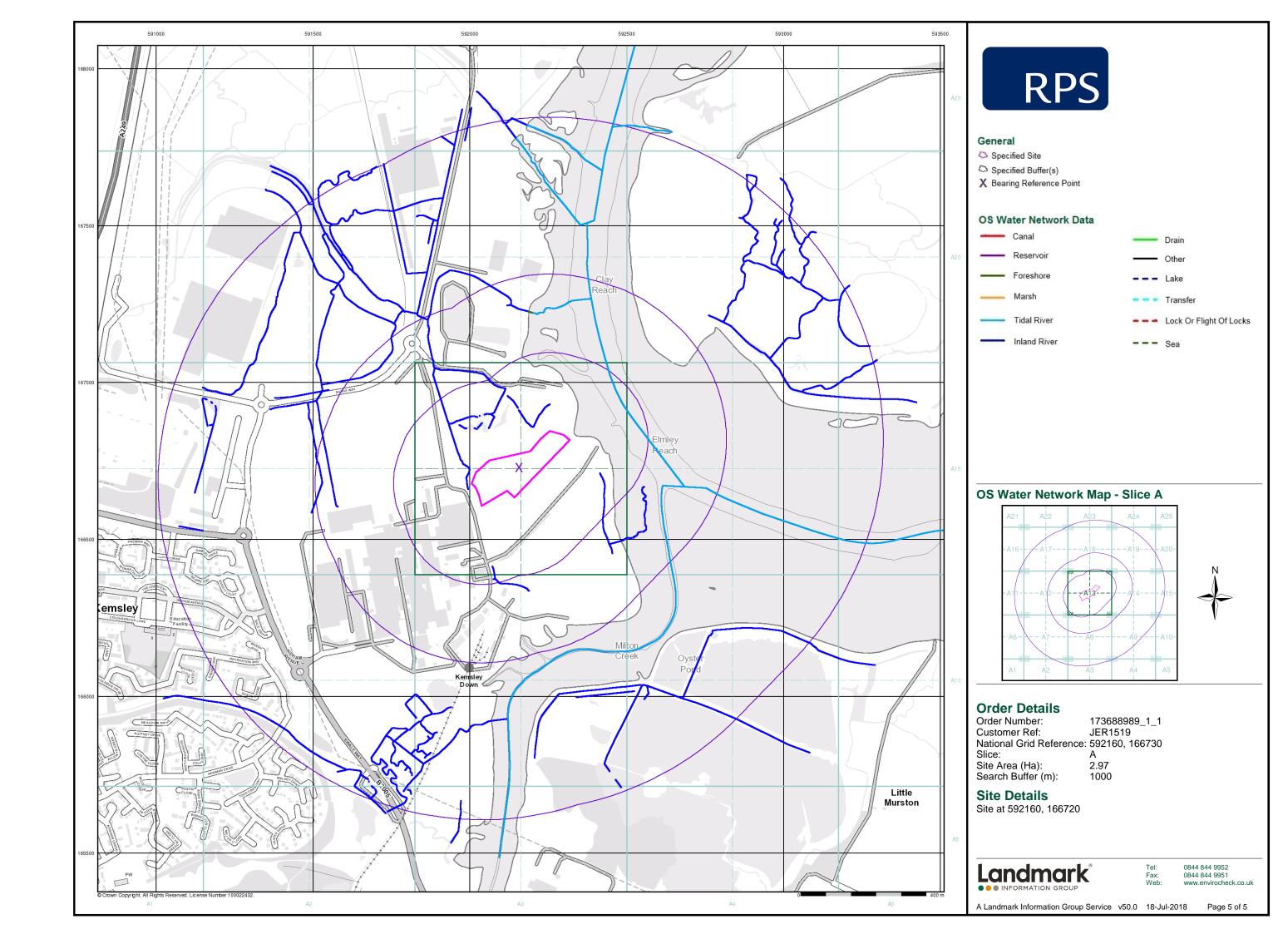






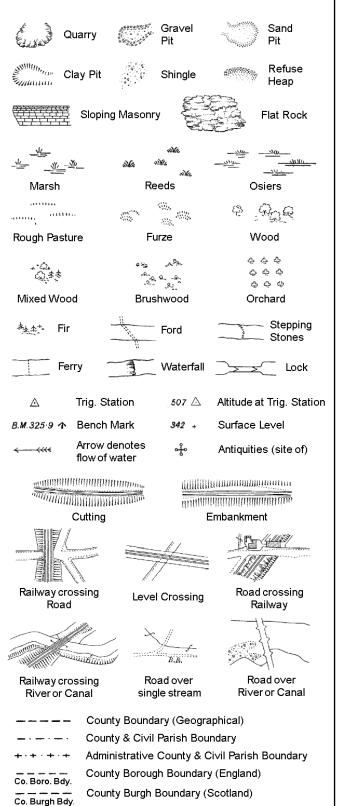






# **Historical Mapping Legends**

## **Ordnance Survey County Series and** Ordnance Survey Plan 1:2,500



B.R.

EP

F.B.

M.S

Bridle Road

Foot Bridge

Mile Stone

M.P.M.R. Mooring Post or Ring

Electricity Pylor

Police Call Box

Telephone Call Box

Signal Post

Pump

Sluice

Spring

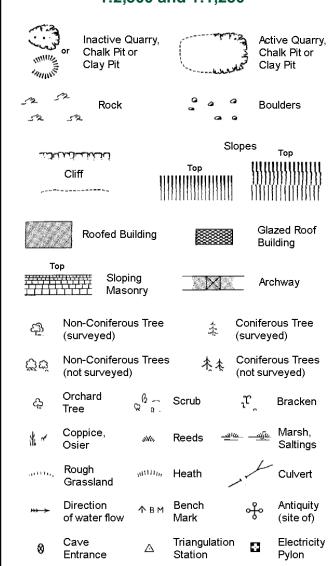
Trough Well

S.P

Sl.

Tr:

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



**Electricity Transmission Line** 

County Boundary (Geographical) County & Civil Parish Boundary Civil Parish Boundary Admin. County or County Bor. Boundary L B Bdy London Borough Boundary Symbol marking point where boundary mereing changes

вн	Beer House	Р	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
EIP	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
Н	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	WrPt,WrT	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

1:1,250

				Slop	oes	Tan
بمامات	لكناب		Тор		11111	Top
(	Cliff	1111	HIMMIN	1111	1)))	1}111111111111
~ <del></del>					-11111	
200	Rock		52	ı F	Rock (	scattered)
$\Box_{\Delta}$	Boulders		۵	. Е	3oulde	ers (scattered)
	Positioned	Boulder	A	\$ 5	Scree	
	Non-Conifo (surveyed)		#	-	Conife surve	rous Tree yed)
Öö	Non-Conife (not surve	erous Trees /ed)	杰	-A:		erous Trees urveyed)
45	Orchard Tree	Q a.	Scrub		r,	Bracken
	Coppice, Osier	siNu,	Reeds	<u></u>	<u>- —w</u>	Marsh, Saltings
arrin,	Rough Grassland	num,	Heath	/	1	Culvert
<del>&gt;&gt;&gt; ≻</del>	Direction of water flo	Δ	Triangula Station	ation	्रे	Antiquity (site of)
_ETL_	_ Electric	ity Transmis	sion Line	)	$\boxtimes$	Electricity Pylon
/ <del>/</del> / вм	291.6ûm E	ench Mark		7		ngs with ng Seed
	Roofe	ed Building			1	Glazed Roof Building
		Ci∨il parish	/commun	itv ho	undar	·v
		District box		,	, an laan	,
			-			
_ •		County bou	indary			
٥		Boundary p	ost/stone	€		
مر		Boundary r always app of three)				
Bks	Barracks		Р		Pillar, F	Pole or Post
Bty	Battery		PO		Post 0	
Cemy	Cemetery		PC		Public	Convenience
Chy	Chimney		Pp		Pump	
Cis	Cistern		Ppg S	Sta	Pumpi	ng Station
Dismtd R	ly Disman	tled Railway	PW		Place	ofWorship
El Gen St	a Electric Station	ity Generating	Sewa	age Pp		Sewage Pumping Station
EIP	Electricity	Pole, Pillar	SB, S	Br		Box or Bridge
	a Electricity		SP, S		_	Post or Light
FB	Filter Bed		Spr Spr	-	Spring	_
	Dou		Opi		Spring	•

Fn / D Fn Fountain / Drinking Ftn.

Gas Governer

**Guide Post** 

Manhole

GVC

Gas Valve Compound

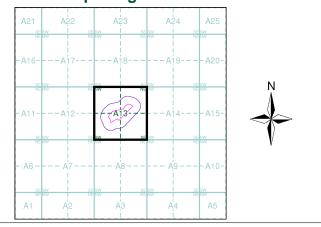
Mile Post or Mile Stone



### **Historical Mapping & Photography included:**

Mapping Type	Scale	Date	Pg
Kent	1:2,500	1885	2
Kent	1:2,500	1896	3
Kent	1:2,500	1908	4
Kent	1:2,500	1939	5
Ordnance Survey Plan	1:2,500	1963 - 1964	6
Additional SIMs	1:2,500	1964 - 1978	7
Ordnance Survey Plan	1:2,500	1977 - 1979	8
Additional SIMs	1:2,500	1978 - 1990	9
Additional SIMs	1:2,500	1981	10
Large-Scale National Grid Data	1:2,500	1993	11
Large-Scale National Grid Data	1:2,500	1994	12

# **Historical Map - Segment A13**



#### **Order Details**

Order Number: 173688989\_1\_1 JER1519 Customer Ref: National Grid Reference: 592160, 166730 Slice:

Tank or Track

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

Tr

Wd Pp

Wks

2.97 Site Area (Ha): Search Buffer (m): 100

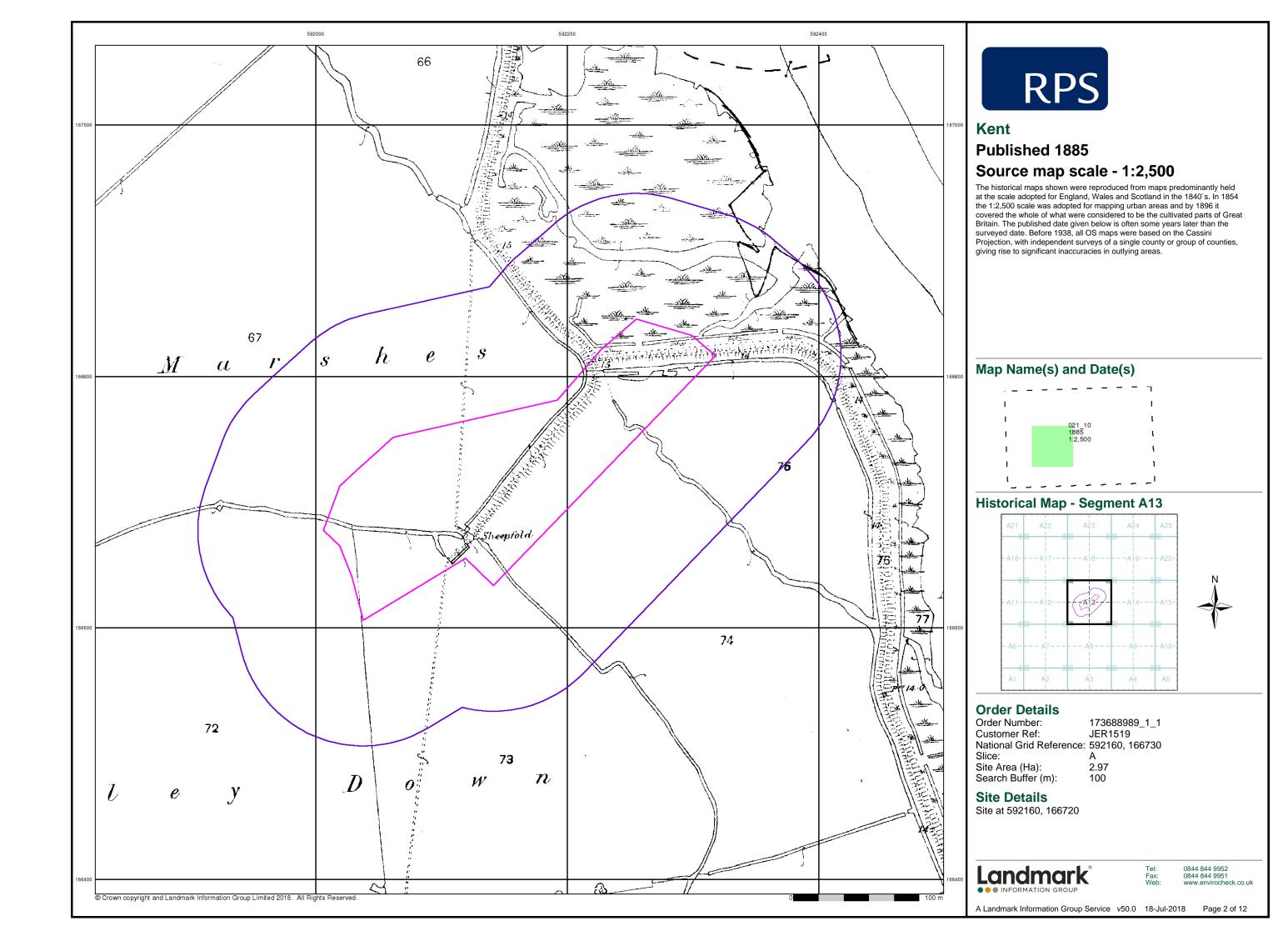
**Site Details** 

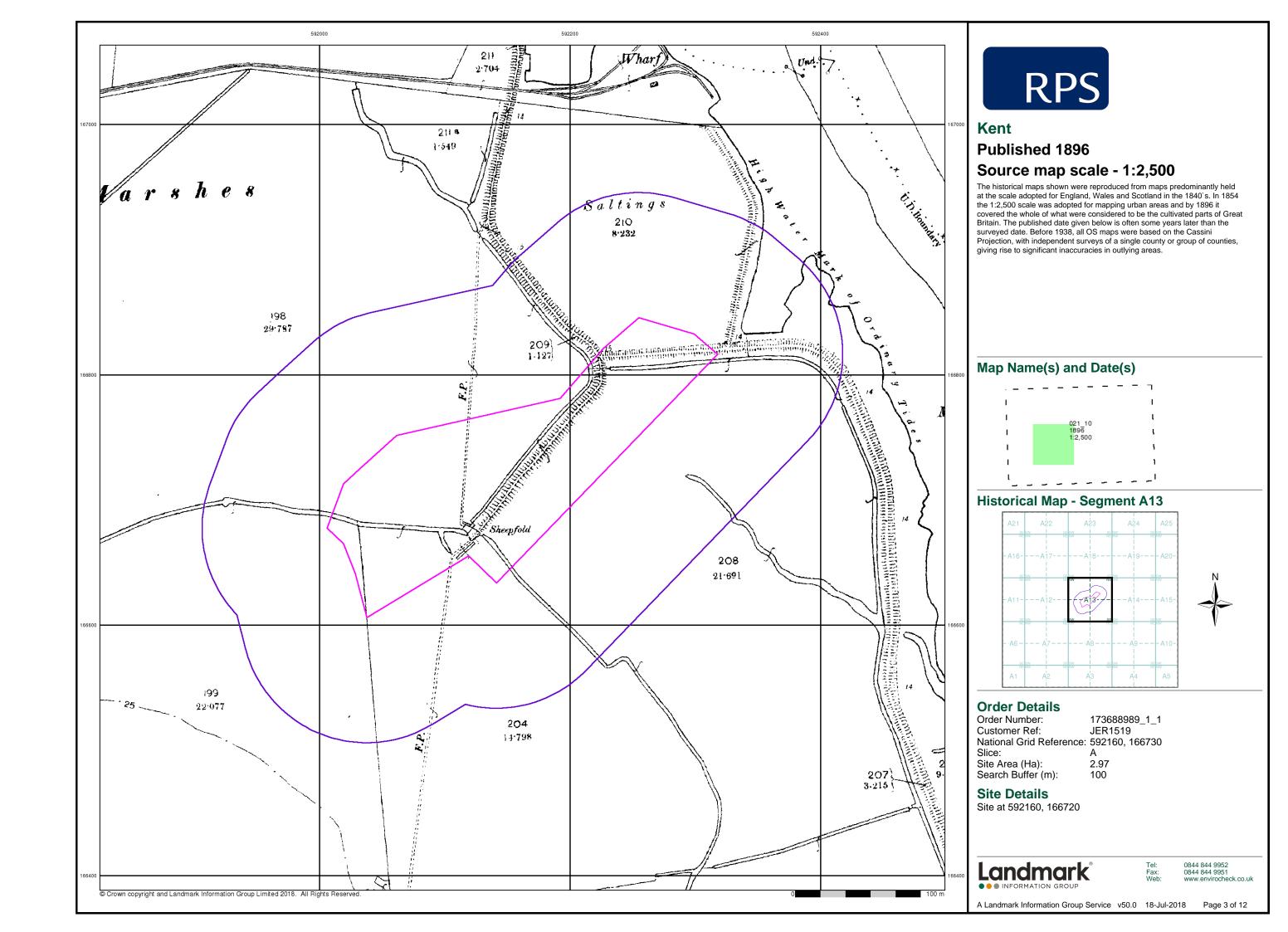
Site at 592160, 166720

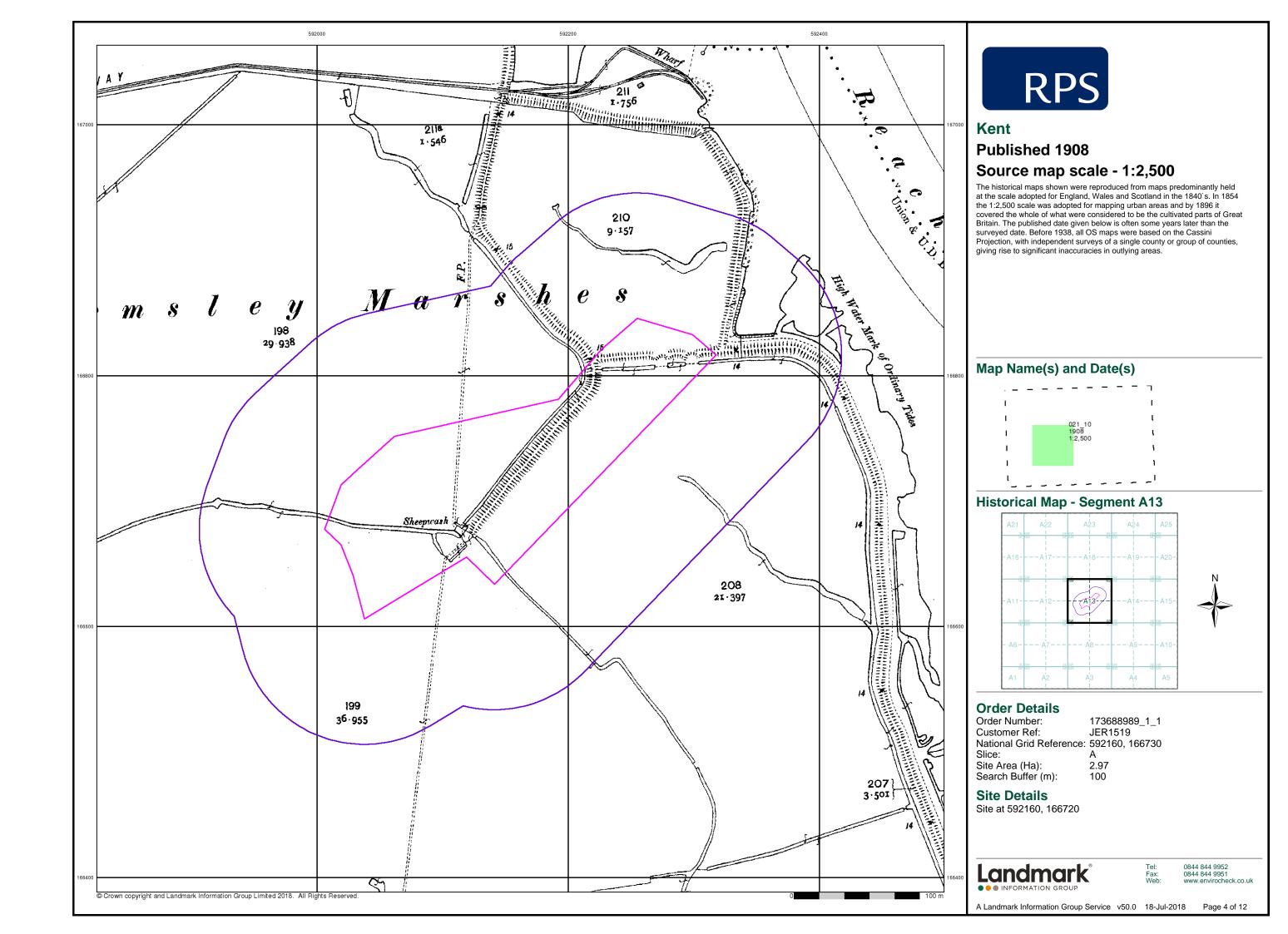


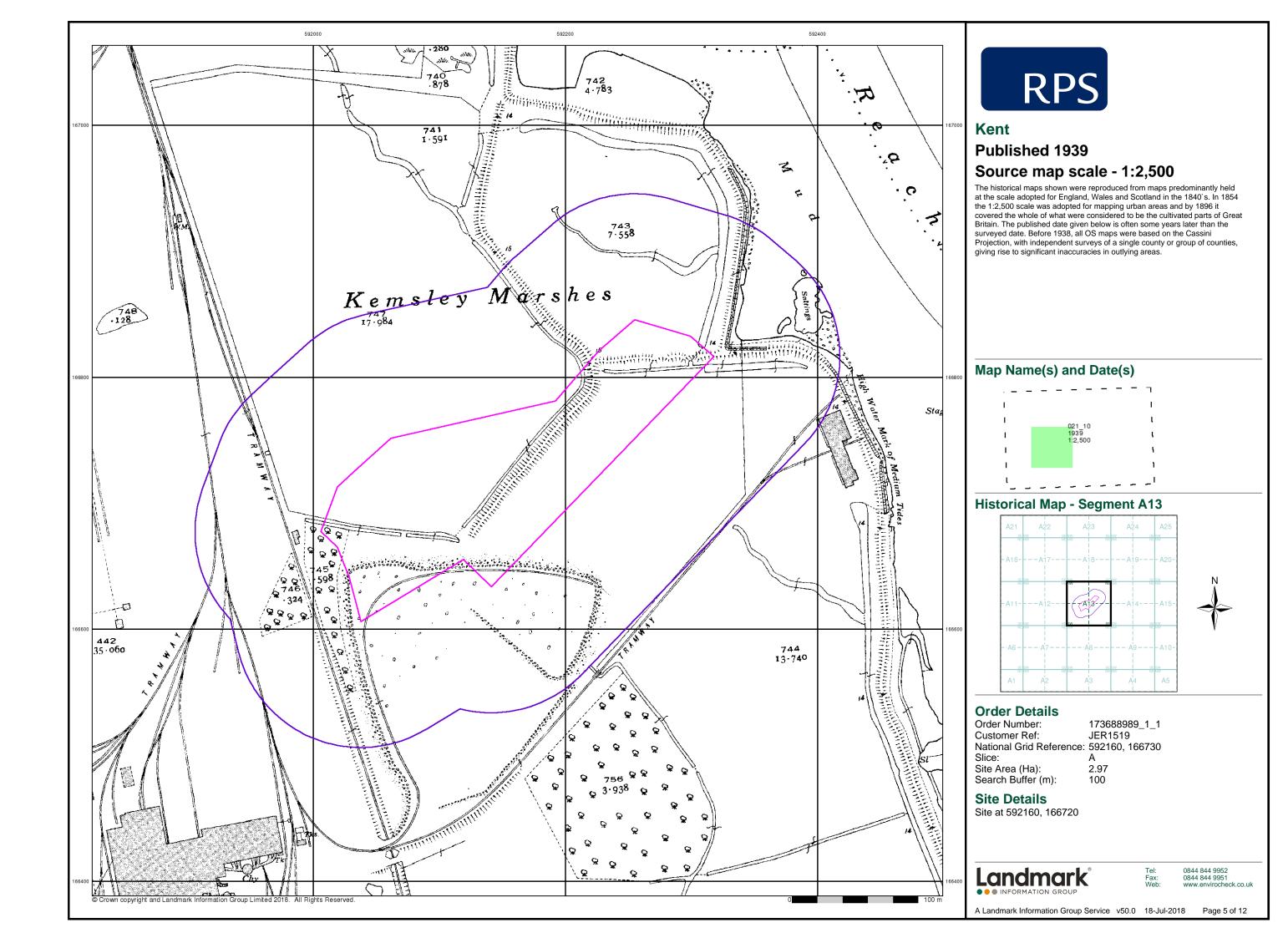
0844 844 9952 0844 844 9951

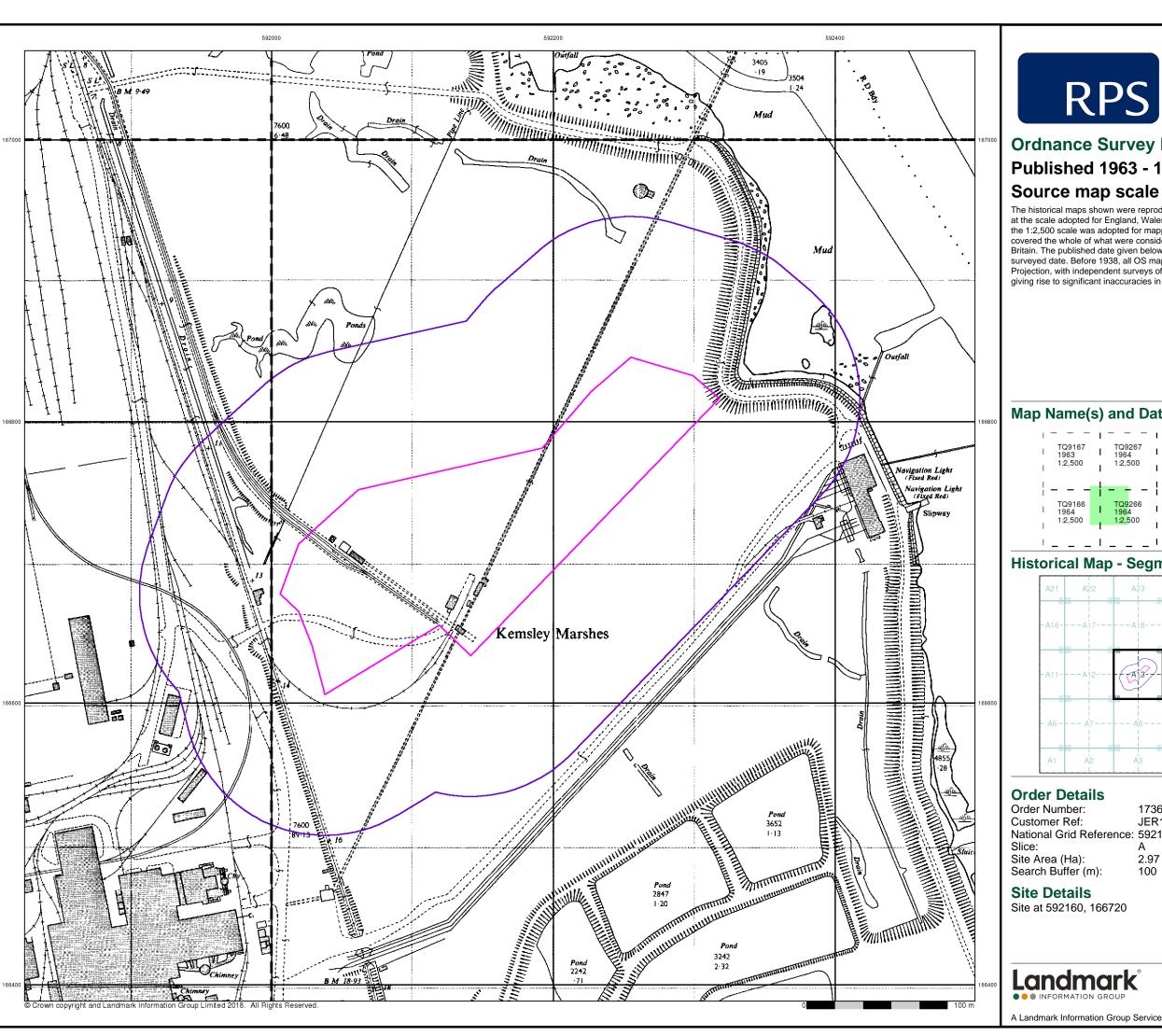
A Landmark Information Group Service v50.0 18-Jul-2018 Page 1 of 12











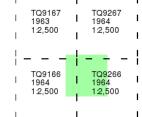


# **Ordnance Survey Plan**

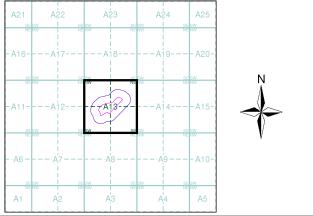
# Published 1963 - 1964 Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

#### Map Name(s) and Date(s)



# **Historical Map - Segment A13**

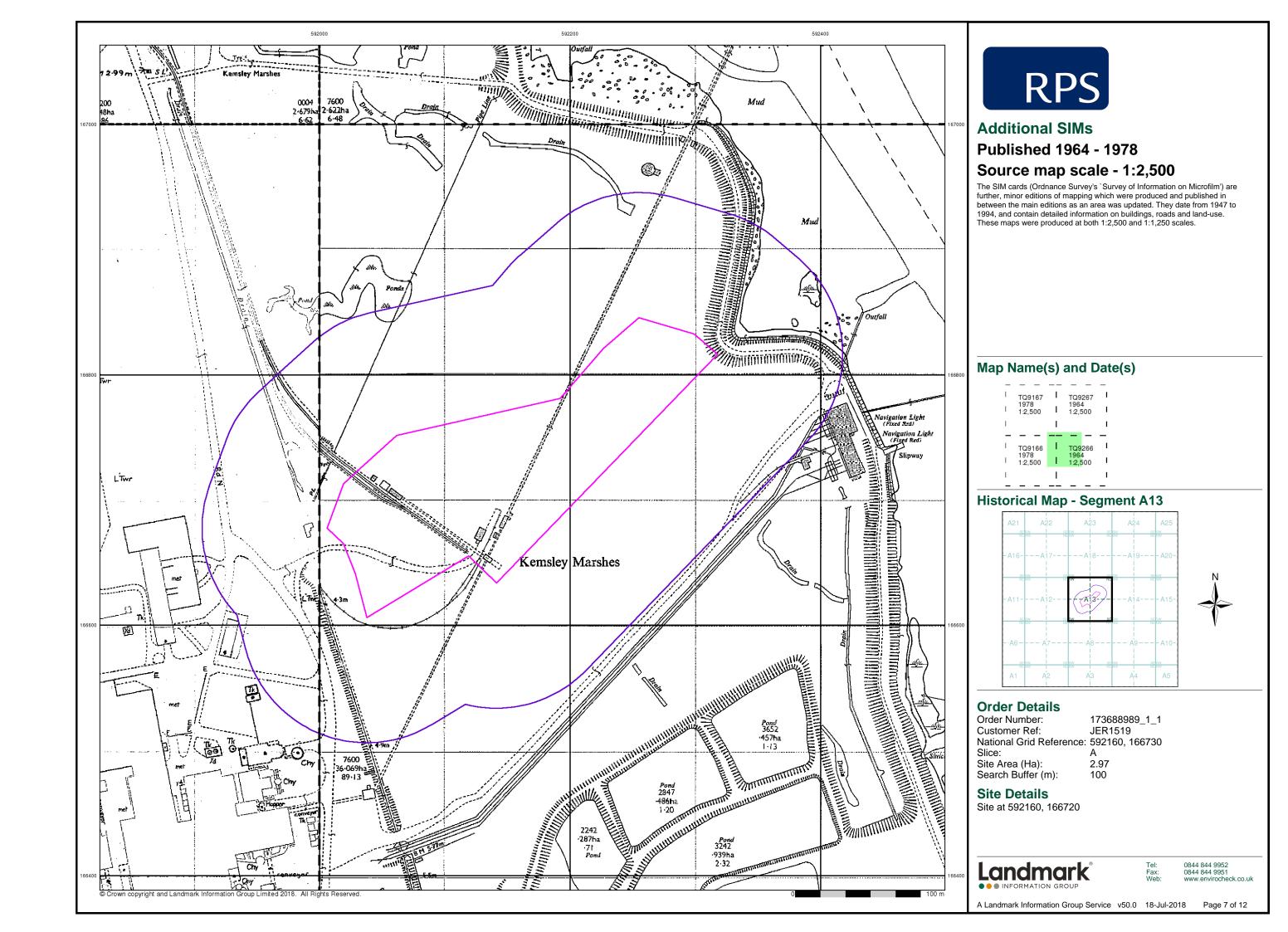


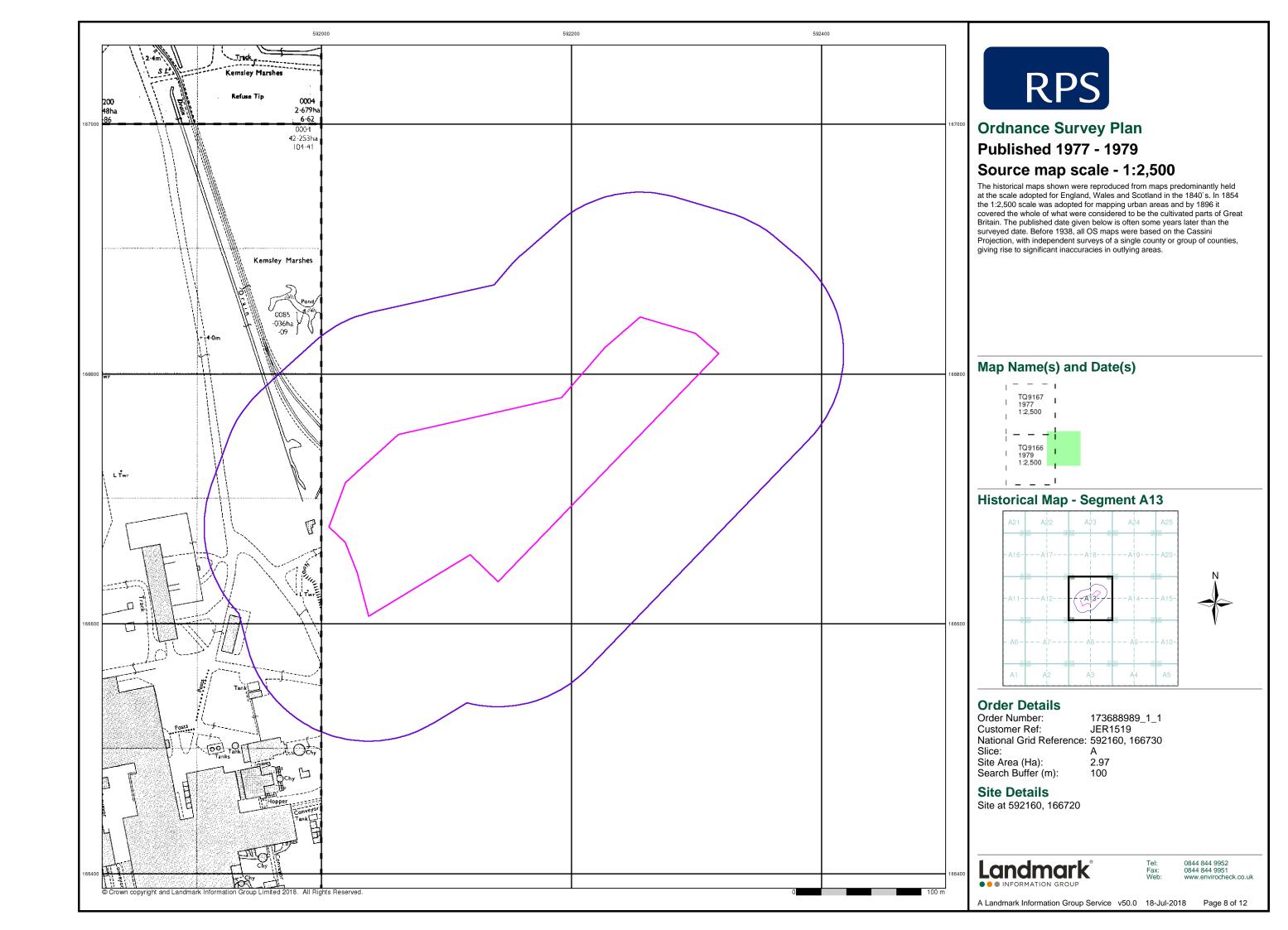
173688989\_1\_1 JER1519 National Grid Reference: 592160, 166730

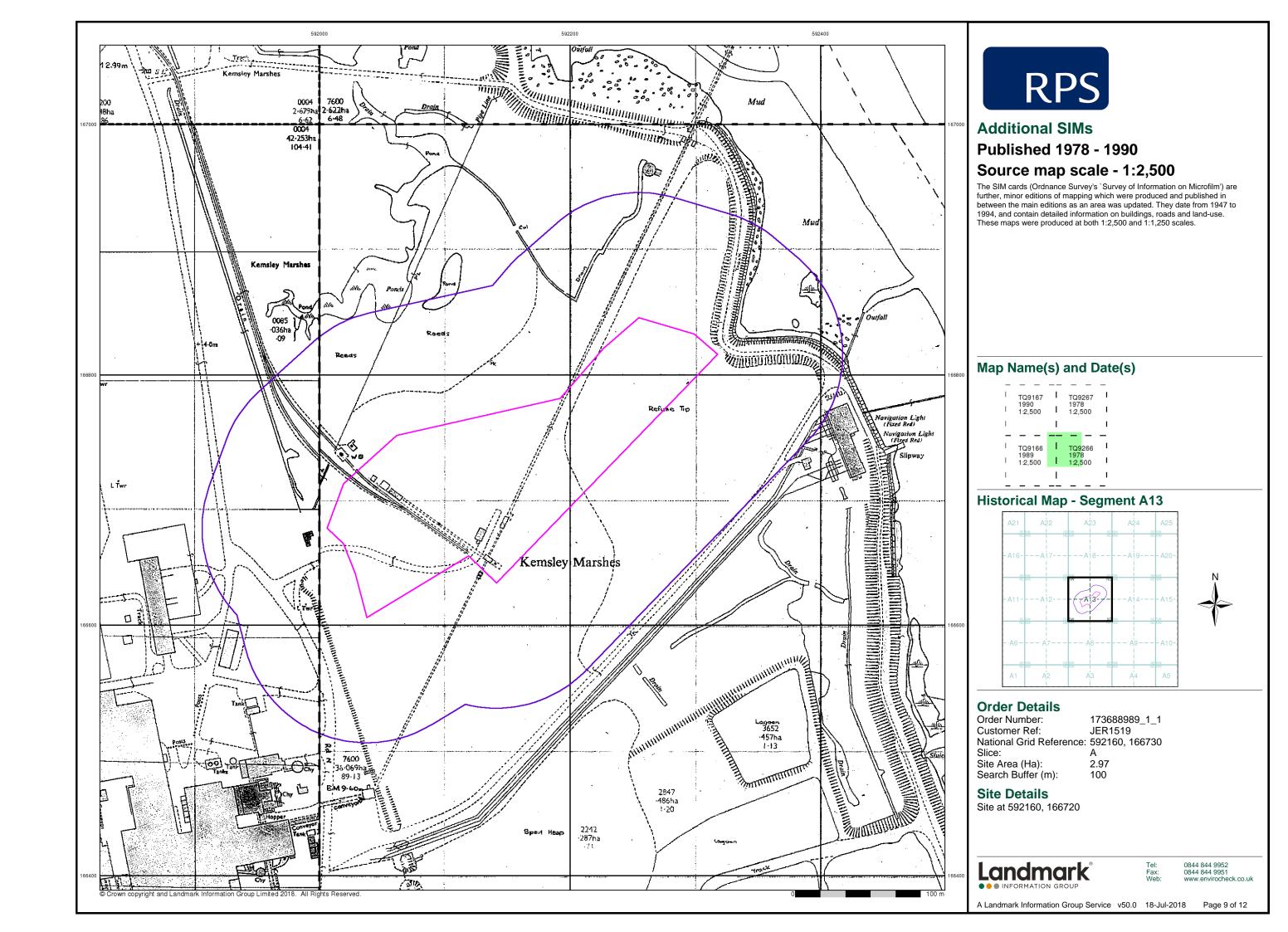
2.97

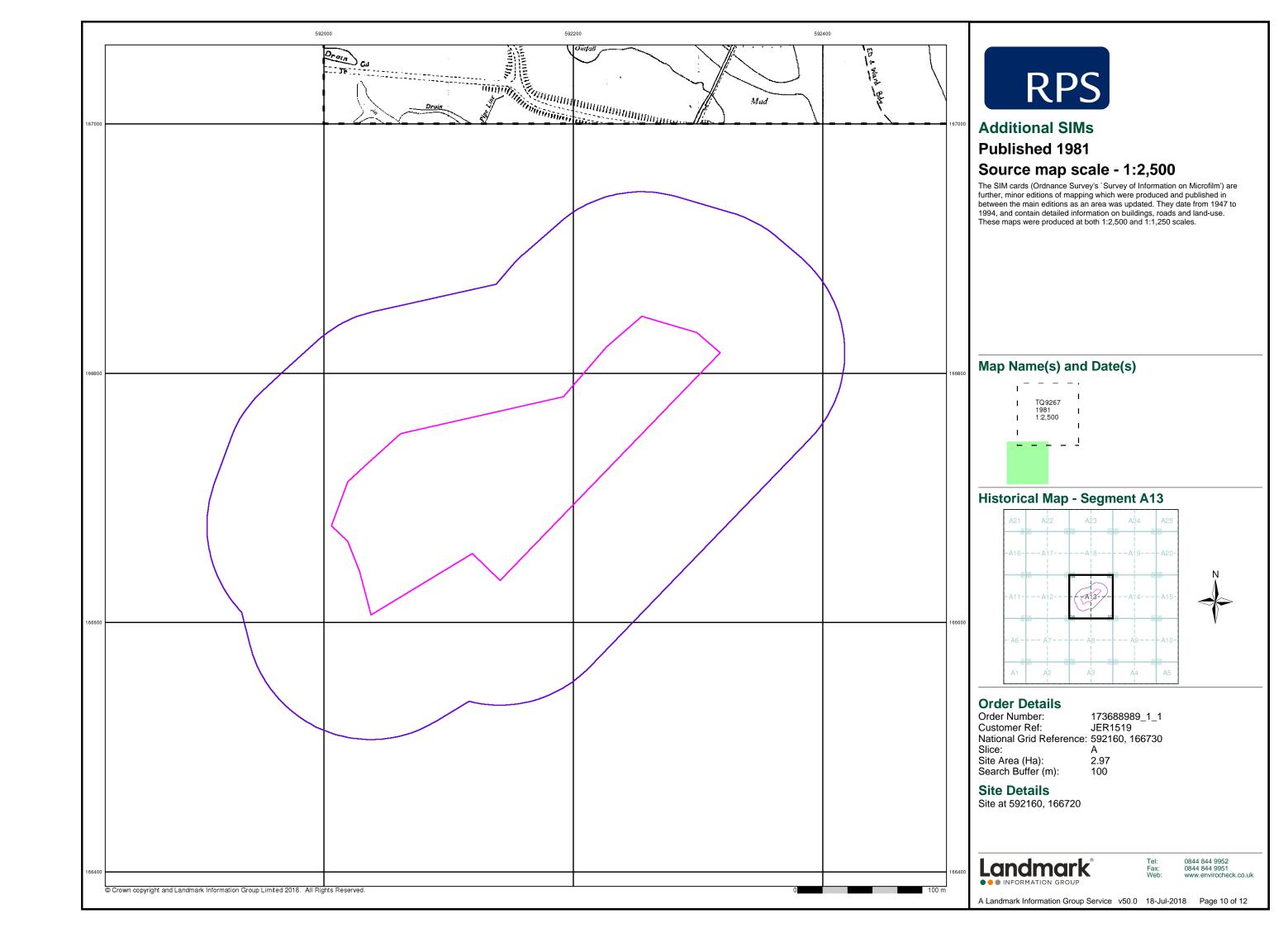
0844 844 9951 www.envirocheck.co.uk

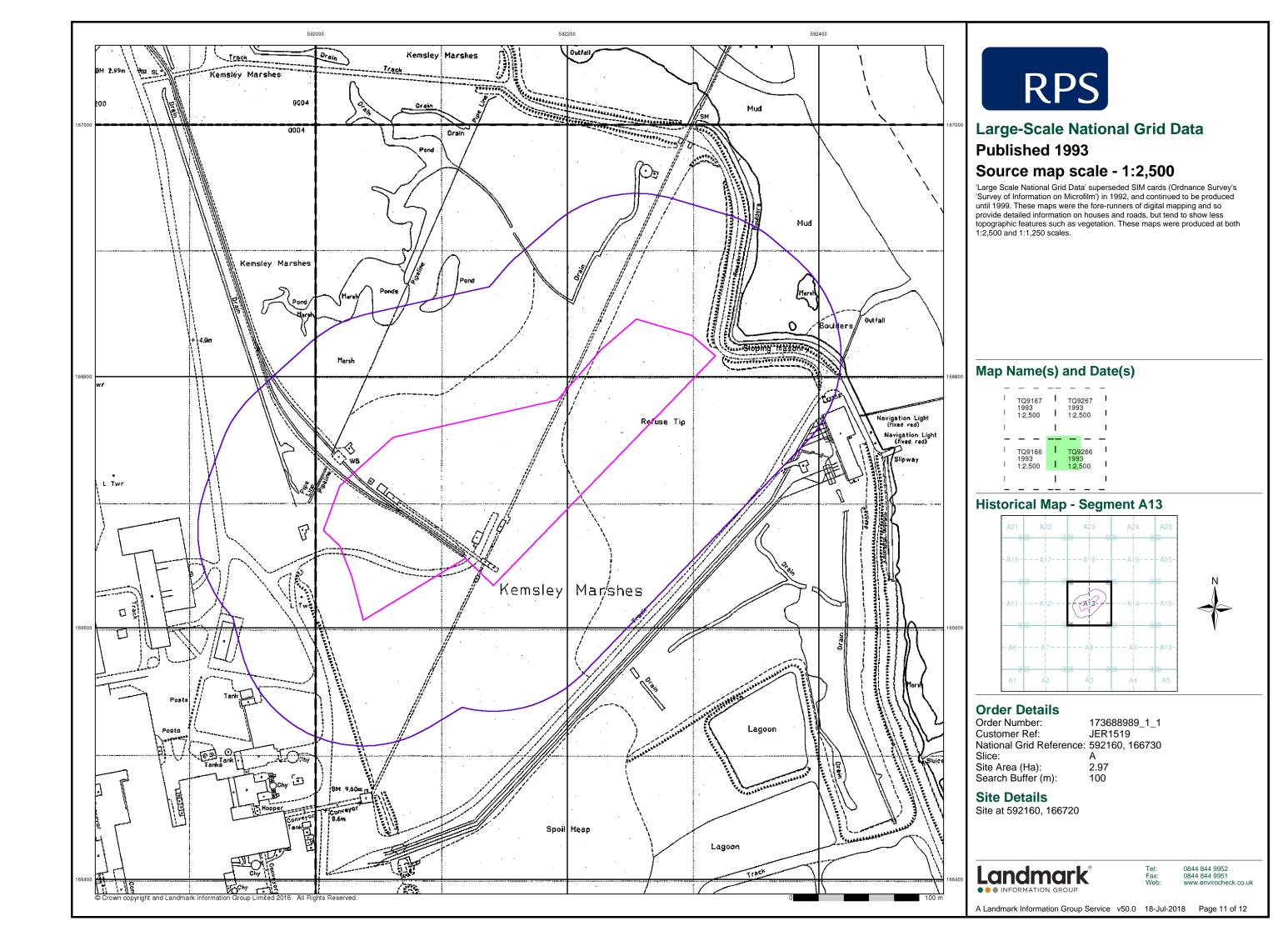
A Landmark Information Group Service v50.0 18-Jul-2018 Page 6 of 12

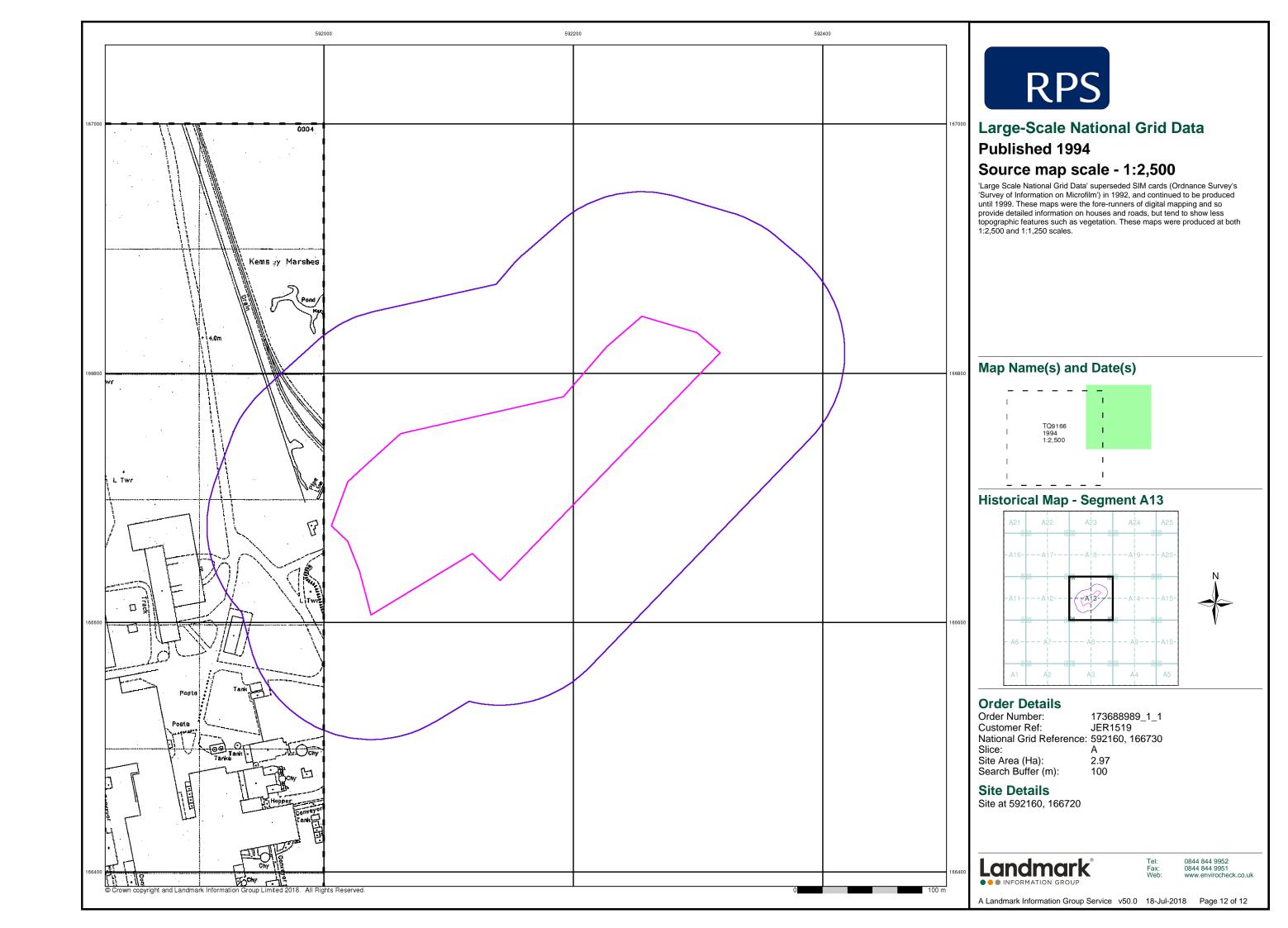


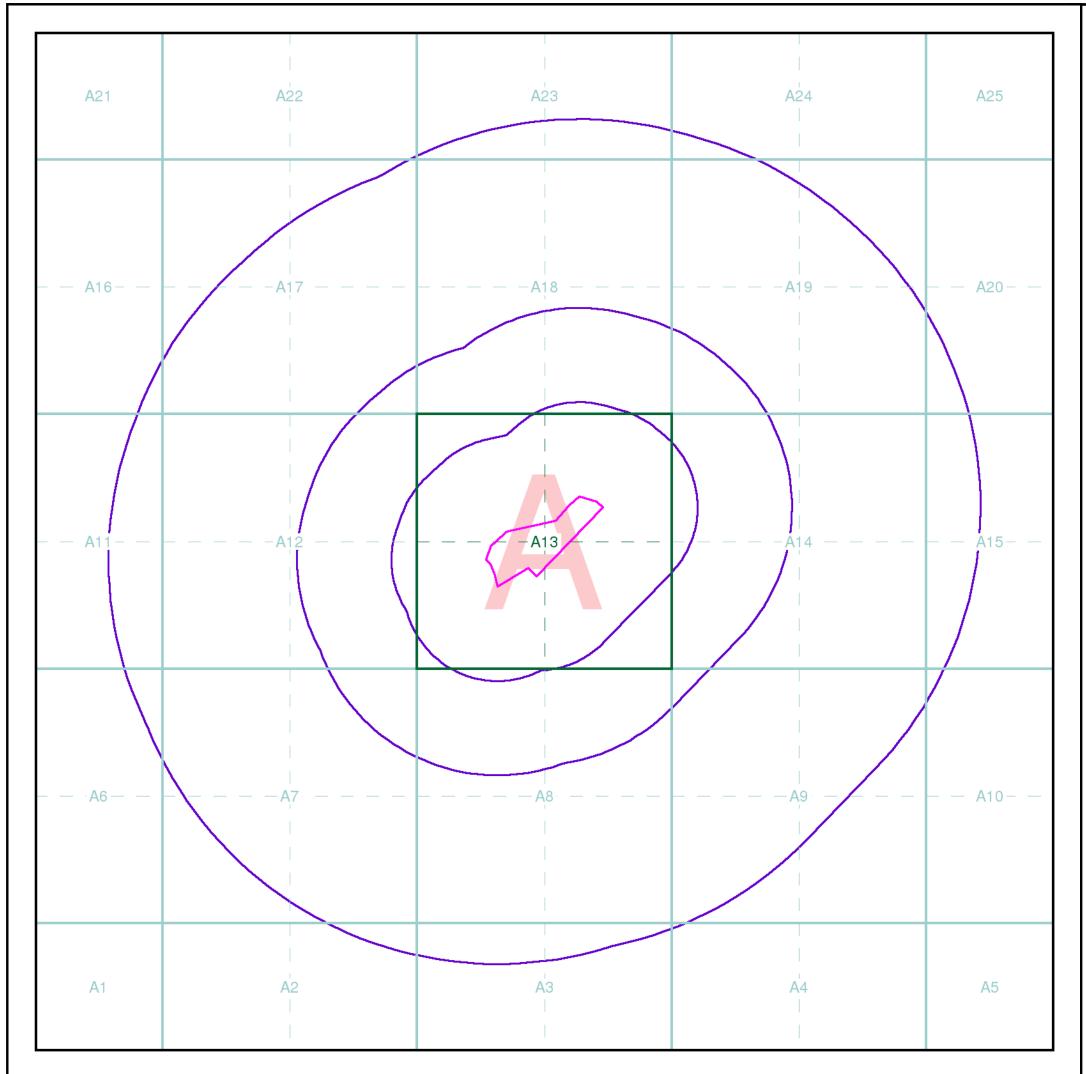














#### **Index Map**

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

#### Slice

Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

#### Segmen

A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

#### Quadrant

A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:









Envirocheck reports are compiled from 136 different sources of data.

#### **Client Details**

Ms A Thomas, RPS Consultants, 260 Park Avenue, Aztec West, Almondsbury, Bristol, BS32 4SY

#### **Order Details**

Order Number: 173688989\_1\_1
Customer Ref: JER1519
National Grid Reference: 592150, 166720

Site Area (Ha): 2.97 Search Buffer (m): 1000

#### **Site Details**

Site at 592160, 166720

Full Terms and Conditions can be found on the following link: http://www.landmarkinfo.co.uk/Terms/Show/515



el: 0844 844 9952 ax: 0844 844 9951 Veb: www.envirocheck.co.uk

A Landmark Information Group Service v50.0 18-Jul-2018 Page 1 of 1

# **APPENDIX 3**

**Site Walkover Photographs** 



Photo 1 - General view of K3 construction laydown area



Photo 3 – IBC on northern boundary



Photo 2 - General view of K3 construction laydown area. K3 is on the left hand side of the photo



Photo 4 - General view of K3 construction laydown area





Photo 5 - General view of car park. K3 is in the background



Photo 7 – General view of car park



Photo 6 - General view of car park and temporary office accommodation

# **APPENDIX 4**

**Baseline Soil Quality** 

## Summary of Land Quality (Made Ground)

		Number of	Analyses	Above LOD		Measu	red Concer	ntration	
Analyte	Unit	Samples Analysed (Made Ground)	Number	%'age	Minimum	Maximum	Average	Standard Deviation	U95
Inorganics Parameters									
Boron (H <sub>2</sub> 0 Soluble)	mg/kg	35	35	0%	0.9	13.5	3.5	3.1	4.6
Arsenic (MS)	mg/kg	35	35	0%	8.0	239.2	21.6	41.1	35.2
Cadmium (MS)	mg/kg	35	35	0%	0.15	1.1	0.4	0.2	0.5
Chromium (MS)	mg/kg	35	35	0%	3.4	81.6	28.1	13.0	32.4
Copper (MS)	mg/kg	35	35	0%	9.4	173.6	50.8	35.0	62.4
Mercury (MS)	mg/kg	35	24	31%	0.1	0.56	0.3	0.1	0.3
Nickel (MS)	mg/kg	35	35	0%	2.8	146.3	33.5	25.7	42.0
Selenium (MS)	mg/kg	35	24	31%	0.5	6.5	1.4	1.5	1.9
Zinc (MS)	mg/kg	35	35	0%	32.7	1313	164.4	215.7	235.9
Chromium VI	mg/kg	35	1	97%	0.16	0.16	0.2	-	-
Polycyclic Aromatic Hydro	ocarbons								
Naphthalene	mg/kg	38	16	58%	0.09	7.00	0.7	1.7	1.2
Acenaphthylene	mg/kg	38	13	66%	0.09	2.91	0.6	0.8	0.8
Acenaphthene	mg/kg	38	11	71%	0.08	5.46	1.2	1.7	1.7
Fluorene	mg/kg	38	9	76%	0.08	8.22	2.0	2.9	3.0
Phenanthrene	mg/kg	38	30	21%	0.08	57.3	5.1	13.5	9.4
Anthracene	mg/kg	38	17	55%	0.11	14.6	2.6	4.5	4.0
Fluoranthene	mg/kg	38	28	26%	0.09	68.2	7.5	17.3	13.0
Pyrene	mg/kg	38	29	24%	0.08	53.1	5.6	12.7	9.6
Benzo[a]anthracene	mg/kg	38	23	39%	0.12	29.4	3.8	7.4	6.1
Chrysene	mg/kg	38	23	39%	0.1	25.7	3.2	6.3	5.2
Benzo[b]fluoranthene	mg/kg	38	26	32%	0.08	29.7	3.5	7.0	5.8
Benzo[k]fluoranthene	mg/kg	38	20	47%	0.08	11.6	1.8	3.0	2.8
Benzo[a]pyrene	mg/kg	38	23	39%	0.12	25.3	3.2	6.2	5.2
Indeno[1,2,3-cd]pyrene	mg/kg	38	21	45%	0.11	17.1	2.4	4.2	3.7
Dibenzo[a,h]anthracene	mg/kg	38	10	74%	0.15	3.74	1.0	1.2	1.4
Benzo[g,h,i]perylene	mg/kg	38	21	45%	0.12	15.1	2.2	3.8	3.4

**Summary** of Land Quality (Made Ground) (Continued)

		Number of	Analyses	Above LOD		Measu	red Concer	ntration	
Analyte	Unit	Samples Analysed (Made Ground)	Number	%'age	Minimum	Maximum	Average	Standard Deviation	U95
Petroleum Hydrocarbons a	and BTEX C	Compounds							
Aliphatics >C8 - C10	mg/kg	4	1	75%	0.2	0.2	0.2	-	-
Aliphatics >C10 - C12	mg/kg	4	1	75%	0.2	0.2	0.2	-	-
Aromatics >C10 - C12	mg/kg	13	2	85%	0.011	0.017	0.0	0.0	0.0
Aliphatics >C12 - C16	mg/kg	8	1	88%	15.1	15.1	15.1	-	-
Aromatics >C12 - C16	mg/kg	8	1	88%	203	203	203.0	-	-
Aliphatics >C16 - C21	mg/kg	8	1	88%	60.5	60.5	60.5	-	-
Aromatics >C16 - C21	mg/kg	8	2	75%	7.36	929	468.2	651.7	919.8
Aliphatics >C21 - C35	mg/kg	8	2	75%	5.11	806	405.6	566.3	798.0
Aromatics >C21 - C35	mg/kg	8	4	50%	5.21	1390	358.7	687.6	835.2
Benzene	ug/kg	8	6	25%	11.7	1250	283.4	478.1	614.7
Ethylbenzene	ug/kg	4	1	75%	4	4	4.0	-	-
m and p-Xylene	ug/kg	4	2	50%	3	5	4.0	1.4	5.4
o-Xylene	ug/kg	4	1	75%	2	2	2.0	-	-
Volatile Organic Compour	ds (VOCs)								
1,1,2,2-Tetrachloroethane	ug/kg	4	1	75%	70	70	70.0	-	-
1,2,4-Trichlorobenzene	ug/kg	4	1	75%	5	5	5.0	-	-
1,2,3-Trichlorobenzene	ug/kg	4	1	75%	5	5	5.0	-	-
Chlorobenzene	ug/kg	8	5	38%	11.5	1740	404.6	747.7	922.7
Tetrachloroethene	ug/kg	8	4	50%	6.38	1800	459.2	893.9	1078.6

## Summary of Land Quality (Alluvium)

	Number of	No Analyses		Mea	sured Conce	ntration	
Analyte	Samples Analysed (Alluvium)	No. Analyses Above LOD	Minimum	Maximum	Average	Standard Deviation	U95
Boron (H20 Soluble)	4	4	1.6	2.6	2.2	0.4	2.6
Arsenic (MS)	4	4	6.2	8	6.8	0.8	7.6
Cadmium (MS)	4	4	0.18	0.45	0.3	0.1	0.4
Chromium (MS)	4	4	25.9	36.5	33.4	5.0	38.3
Copper (MS)	4	4	10.2	36.7	28.8	12.5	41.0
Mercury (MS)	4	0					
Nickel (MS)	4	4	16.4	35.2	24.3	7.9	32.0
Selenium (MS)	4	4	0.6	2.4	1.7	0.8	2.4
Zinc (MS)	4	4	56	107.5	78.4	22.1	100.0
Chromium vi:	4	0					
Naphthalene	4	0					
Acenaphthylene	4	0					
Acenaphthene	4	0					
Fluorene	4	0					
Phenanthrene	4	0					
Anthracene	4	0					
Fluoranthene	4	0					
Pyrene	4	0					
Benzo[a]anthracene	4	0					
Chrysene	4	0					
Benzo[b]fluoranthene	4	0					
Benzo[k]fluoranthene	4	0					
Benzo[a]pyrene	4	0					
Indeno[1,2,3-cd]pyrene	4	0					
Dibenzo[a,h]anthracene	4	0					
Benzo[g,h,i]perylene	4	0					

JER1464 IED and ERA
June 2108

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# **APPENDIX 5**

**Baseline Groundwater Quality** 

### Summary of Inorganic Parameters in Groundwater

Analyte	Unit	LOD	Aquifer	No. of	Analyses	above LOD	Concentration	Mean	Standard
Analyte	Unit	LOD	Unit*	Analyses	No.	%'age	Range	Concentration	Deviation
Dissolved Metals									
Arsenic	mg/l	<0.001	Shallow	12	12	100%	0.002 - 0.132	0.022	0.034
Arsenic	TTIG/T	<0.001	Deep	4	3	75%	0.001 - 0.004	0.002	0.001
Boron	mg/l		Shallow	12	12	100%	0.82 - 8.58	1.8	2.1
Boron	1119/1		Deep	4	4	100%	0.08 - 0.12	0.095	0.015
Cadmium	mg/l	<0.0001	Shallow	12	3	25%	0.0001 - 0.0007	0.0004	0.0002
Gadriidiii	rrig/i	<0.0001	Deep	4	0	0%	-	-	-
Chromium	mg/l	<0.001	Shallow	12	12	100%	0.003 - 0.019	0.011	0.005
Chromian		<0.001	Deep	4	4	100%	0.003 - 0.005	0.0035	0.0009
Chromium VI	mg/l	<0.001	Shallow	12	3	25%	0.01 - 0.26	0.16	0.11
as Cr	TTIG/T	<b>\0.001</b>	Deep	4	0	0%	-	-	-
Copper	mg/l	<0.001	Shallow	12	11	92%	0.002 - 0.019	0.006	0.005
Сорреі		<b>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</b>	Deep	4	3	75%	0.001 - 0.002	0.0013	0.0005
Mercury	mg/l	<0.0001	Shallow	12	1	8%	0.0001	Single Analysis > LOD	Single Analysis > LOD
			Deep	4	0	0%	-	-	-
Nickel	ma/l	<0.001	Shallow	12	12	100%	0.004 - 0.039	0.014	0.010
Nickei	mg/l	<0.001	Deep	4	4	100%	0.002 - 0.017	0.0073	0.0058
Selenium	ma/l	<0.001	Shallow	12	12	100%	0.001 - 0.031	0.007	0.008
Scienium	mg/l	<0.001	Deep	4	4	100%	0.002 - 0.01	0.0048	0.0031
Zinc	ma/l	<0.001	Shallow	12	11	92%	0.002 - 0.035	0.009	0.009
ZIIIU	mg/l	<0.001	Deep	4	4	100%	0.011 - 0.127	0.066	0.045

<sup>\*</sup>Aquifer Unit: "Shallow" principally refers to perched waters in the Made Ground which does not strictly constitute an aquifer unit. "Deep" refers to groundwater in the saturated granular Secondary A aquifer in the Woolich / Thanet Sands (confined beneath the London Clay Formation).

## Summary of Inorganic Parameters in Groundwater (Continued)

Analyte	Unit	LOD	Aquifer	No. of	Analyses	above LOD	Concentration	Mean	Standard
Analyte	Offic	LOD	Unit*	Analyses	No.	%'age	Range	Concentration	Deviation
Physical Paramerte	<u>s</u>								
pH units	pH Units	-	Shallow	12	12	100%	6.8 - 7.5	7.1	0.17
prrunits	prionis	-	Deep	4	4	100%	7.1 - 7.8	7.5	0.25
<u>Major Ions</u>									
Chloride	ma/l	<1	Shallow	6	6	100%	126 - 1680	885	526
Critoriae	mg/l	y/i <1	Deep	2	2	100%	50 - 87	68.5	18.5
Sulphide as S	mg/l	<0.05	Shallow	12	11	92%	0.06 - 18.5	6.0	7.2
Odiprilae as o	IIIg/I	70.00	Deep	4	4	0%	-	-	-
Total Sulphur	mg/l	<3	Shallow	12	12	100%	294 - 1020	554	217
as SO4	1119/1	?	Deep	4	4	100%	75 - 879	295	338
<u>Nutrients</u>									
Ammoniacal Nitrogen	mg/l	<0.1	Shallow	3	3	100%	14.8 - 38.9	24.8	10.3
as N	1119/1	<b>V</b> 0.1	Deep	2	2	100%	0.05 - 0.15	0.1	0.05
Cyanide Compound	<u>s</u>								
Thiocyanate	mg/l	<0.1	Shallow	12	1	8%	0.27	Single Analysis > LOD	Single Analysis > LOD
as SCN			Deep	4	0	0%	-	-	-

### Summary of Organic Parameters in Groundwater

Analyta	Unit	LOD	Aquifer	No. of	Analyses	above LOD	Concentration	Mean	Standard
Analyte	Onit	LOD	Unit*	Analyses	No.	%'age	Range	Concentration	Deviation
Petroleum Hydrocan	<u>bons</u>								
			Shallow	6	2	33%	0.101 - 0.221	0.161	0.06
Aliphatics >C8 - C40	mg/l	<0.01	Deep	3	1	33%	0.056	Single Analysis > LOD	Single Analysis > LOD
Aliphatics >C12 - C16	mg/l	<0.01	Shallow	6	1	17%	0.023	Single Analysis > LOD	Single Analysis > LOD
			Deep	3	0	0%	-	-	-
Aliahatiaa (C1C, C21		-0.01	Shallow	6	1	17%	0.05	Single Analysis > LOD	Single Analysis > LOD
Aliphatics >C16 - C21	mg/l	<0.01	Deep	3	1	33%	0.012	Single Analysis > LOD	Single Analysis > LOD
	mg/l		Shallow	6	2	33%	0.084 - 0.125	0.105	0.021
Aliphatics >C21 - C35		<0.01	Deep	3	1	33%	0.033	Single Analysis > LOD	Single Analysis > LOD
A	/1	0.04	Shallow	6	4	67%	0.01 - 0.192	0.09	0.07
Aromatics >C8 - C40	mg/l	<0.01	Deep	3	2	67%	0.012 - 0.013	0.0125	0.0005
Aromatics >C10 - C12	mg/l	<0.01	Shallow	6	1	17%	0.017	Single Analysis > LOD	Single Analysis > LOD
			Deep	3	0	0%	-	-	-
Aromatics >C12 - C16	mg/l	<0.01	Shallow	6	1	17%	0.049	Single Analysis > LOD	Single Analysis > LOD
			Deep	3	0	0%	-	-	-
Aromatics >C16 - C21	ma/l	<0.01	Shallow	6	2	33%	0.014 - 0.038	0.026	0.012
ATOTIBUES >CTO - CZT	mg/l	<0.01	Deep		0	0%	-	-	-
Aromatics >C21 - C35	ma/l	<0.01	Shallow	6	3	50%	0.04 - 0.068	0.057	0.012
ATOTIBLICS >021 - 033	mg/l	<0.01	Deep	3	0	0%	-	-	-

<sup>\*</sup>Aquifer Unit: "Shallow" principally refers to perched waters in the Made Ground which does not strictly constitute an aquifer unit. "Deep" refers to groundwater in the saturated granular Secondary A aquifer in the Woolich / Thanet Sands (confined beneath the London Clay Formation).

### Summary of Organic Parameters in Groundwater (Continued)

Analyta	Unit	LOD	Aquifer	No. of	Analyses	above LOD	Concentration	Mean	Standard
Analyte	Unit	LOD	Unit*	Analyses	No.	%'age	Range	Concentration	Deviation
Polycyclic Aromatic	Hydroca	abons (P	AHs)						
Acenaphthene	ug/l	<0.010	Shallow	12	7	58%	0.013 - 0.352	0.086	0.115
Acenaphinene			Deep	4	0	0%	•	-	-
Acenaphthylene	ug/l	<0.010	Shallow	12	2	17%	0.01 - 0.043	0.027	0.017
Acenaphinylene			Deep	4	0				
Anthracene	ug/l	<0.010	Shallow	12	2	17%	0.019 - 0.038	0.029	0.010
Antinacene			Deep	4	0	0%	-	-	-
Benzo[a]anthracene	ug/l	<0.010	Shallow	12	3	25%	0.028 - 0.04	0.034	0.005
Delizo[ajailtilacelle			Deep	4	0	0%	•	-	-
	ug/l	<0.010	Shallow	12	3	25%	0.019 - 0.048	0.031	0.012
Benzo[a]pyrene			Deep	4	1	25%	0.013	Single Analysis > LOD	Single Analysis > LOD
Danza[h]fluaranthana	ug/l	<0.010	Shallow	12	4	33%	0.01 - 0.056	0.034	0.016
Benzo[b]fluoranthene			Deep	4	2	50%	0.016 - 0.021	0.019	0.0025
Ponzola h ilnomilono	ug/l	<0.010	Shallow	12	3	25%	0.019 - 0.037	0.025	0.008
Benzo[g,h,i]perylene			Deep	4	0	0%	-	-	-
Benzo[k]fluoranthene	ug/l	<0.010	Shallow	12	3	25%	0.014 - 0.023	0.017	0.004
Denzo[k]nuorantnene			Deep	4	0	0%	-	-	-
Chrysons	ug/l	<0.010	Shallow	12	3	25%	0.018 - 0.03	0.024	0.005
Chrysene			Deep	4	0	0%	-	-	-
Fluoranthene	ug/l	<0.010	Shallow	12	7	58%	0.012 - 0.059	0.034	0.016
riuoranthene			Deep	4	3	75%	0.013 - 0.023	0.017	0.0045
Писте	ug/l	<0.010	Shallow	12	2	17%	0.056 - 0.057	0.057	0.001
Fluorene			Deep	4	0	0%	-	-	-
le desert O.O. adlasses	ug/l	<0.010	Shallow	12	3	25%	0.014 - 0.036	0.023	0.009
Indeno[1,2,3-cd]pyrene			Deep	4	0	0%	-	-	-
Nombibalana	ug/l	<0.010	Shallow	12	9	75%	0.011 - 0.243	0.054	0.068
Naphthalene			Deep	4	2	50%	0.014 - 0.015	0.015	0.0005
	ug/l	<0.010	Shallow	12	8	67%	0.011 - 0.031	0.021	0.006
Phenanthrene			Deep	4	1	25%	0.011	Single Analysis > LOD	Single Analysis > LOD
_	ug/l	<0.010	Shallow	12	8	67%	0.011 - 0.072	0.038	0.021
Pyrene			Deep	4	4	100%	0.016 - 0.055	0.029	0.015

<sup>\*</sup>Aquifer Unit: "Shallow" principally refers to perched waters in the Made Ground which does not strictly constitute an aquifer unit. "Deep" refers to groundwater in the saturated granular Secondary A aquifer in the Woolich / Thanet Sands (confined beneath the London Clay Formation).

### Summary of Organic Parameters in Groundwater (Continued)

Analyte	Unit	LOD	Aquifer	No. of	Analyses	above LOD	Concentration	Mean	Standard
Anaryte	Ollit	LOD	Unit*	Analyses	No.	%'age	Range	Concentration	Deviation
Other Organic Comp	<u>oounds</u>								
Phenol	mg/l	<0.0005	Shallow	12	1	8%	0.0105	Single Analysis > LOD	Single Analysis > LOD
			Deep	4	0	0%	-	-	-
Cresols	mg/l	<0.0005	Shallow	12	1	8%	0.0019	Single Analysis > LOD	Single Analysis > LOD
			Deep	4	0	0%	-	-	-
Dimethylphenols	mg/l	<0.0005	Shallow	12	1	8%	0.1332	Single Analysis > LOD	Single Analysis > LOD
			Deep	4	0	0%	-	-	-
Trimethylphenols	mg/l	<0.0005	Shallow	12	1	8%	0.1887	Single Analysis > LOD	Single Analysis > LOD
			Deep	4	0	0%	-	-	-
Dibenzo[a,h]anthracene	ug/l	<0.010	Shallow	12	1	8%	0.011	Single Analysis > LOD	Single Analysis > LOD
			Deep	4	0	0%	-	-	-
			Shallow	2	0	0%	-	-	-
Dibromochloromethane	ug/l	<1	Deep	1	1	100%	4	Single Analysis > LOD	Single Analysis > LOD
			Shallow	2	0	0%	-	-	-
Bromoform	ug/l	<1	Deep	1	1	100%	12	Single Analysis > LOD	Single Analysis > LOD

<sup>\*</sup>Aquifer Unit: "Shallow" principally refers to perched waters in the Made Ground which does not strictly constitute an aquifer unit. "Deep" refers to groundwater in the saturated granular Secondary A aquifer in the Woolich / Thanet Sands (confined beneath the London Clay Formation).

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