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Volume 10 Contents

Appendix 10.1 Phase 1 Geoenvironmental Desk Study

Appendix 10.1 (Appendix A)

Envirocheck Report (Part 1) (pages 1-255)



Manston Airport, Kent

Phase 1 Geoenvironmental Desk Study



Report for

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1. Summary

	AMEC Foster Wheeler Environment & Infrastructure UK Ltd (AMEC Foster Wheeler) was commissioned by RiverOak Strategic Partners (the Client) to prepare a Phase 1 Geoenvironmental Desk Study on land contamination and geotechnical considerations as part of the Environmental Impact Assessment for the Development Consent Order (DCO) application for the reopening and reinstatement of Manston Airport, Kent.
Background	With the development of a new master plan for the airport the Client is seeking to demonstrate, in accordance with Section 23 of the Planning Act, that the airport has the capacity to handle a minimum of 10,000 freight air traffic movements (ATM) per year and therefore provide key additional airport capacity to the southeast of England.
	The purpose of this report is to assist the Client, in understanding potential geotechnical hazards and environmental liabilities associated land quality for the proposed development to support the safe and economic development of the site.
	The objectives of this report are as follows:
Objectives	 Review of any existing information, including information obtained from sources such as Landmark Information Group's Envirocheck report; Provision and review of preliminary UXO Assessment Report. Site walkover, which did not include the outfall route to Pegwell Bay comprising a pipeline and the waste storage area located in the west of the site. Desk Study Reporting including collation of the results of the above tasks into a concise report and the development of a Conceptual Site Model and a preliminary Qualitative Risk Assessment (QRA), according to the source - pathway - receptor model. Identification of information gaps relating to land contamination and any requirements for further assessment. Geotechnical assessment to identify potential hazards and constraints.
Site Description	▶ The site covers 303.2 hectares and includes a 2,748 m long runway, taxiway and aprons, passenger terminal, carparks, freight handling facility, hangers and other site infrastructure. It also comprises the outfall route to Pegwell Bay and service routes from the highway to the outfall pipeline and a waste storage area located to the west of the site.
	The site is an irregular shape, bisected in the northern third by Manston Road running in an east to west direction. The majority of the operational site area is located to the south of Manston Road, including the runway and taxiway occupying the southernmost part of the site. North of the runway and south of Manston Road is the passenger terminal building and car parking in the east and a freight handling facility and aircraft hangers in the west. Some of the warehouse buildings in the western part of the site (the freight handling facility) are still in use by a range of haulage companies. There is also a small charter helicopter business operating from the area adjacent to the warehouses.
	To the north of Manston Road there are two masts at the north-western site boundary.
	▶ The elevation is 49 m above ordnance datum (AOD) both in the southern and northern parts of the site and steps down towards Manston Road to 41 m AOD.
	A Site walkover was carried out by Amec Foster Wheeler from 7 th to 9 th February 2017.
Proposed development	It is understood based on the most recent development plans that most of the central part of the site, located between the runway and the Manston road, and the part located north of the Manston road, will be covered with buildings and hardstanding with some remaining green spaces. A tank farm would be located southeast of the runway.

The site remained undeveloped from the earliest mapping (1873) until 1915 when aircraft started to use the open farmland of Manston as a site for emergency landings. As well as operational flights, a training school was established at the aerodrome. A runway was built to the south between 1943 and 1944 which include a fuel based fog dispersal system. During World War II, Manston was heavily bombed. The site was used as an emergency landing field for returning bombers suffering from low fuel or technical problems. The airfield became a storage for heavy bombers. During the 1950's the US Airforce used the site as a Strategic Air Command base for its fighter and fighter-bomber units. From 1960, the airfield was back under Royal Air Force (RAF) control. It was designated one of the country's Master Emergency Diversion Airfield for both military and civilian flights. In 1968 site had expanded with taxiway, aprons and buildings. A sub-station is noted in the extreme eastern part of the site from 1977. Two museums had also been developed in the western part of the site by 1995. The RAF operation of the site ceased in 1999 **Site History** and the airport became Kent International Airport with exclusively civilian air traffic (cargo and passenger flights). The airport closed in 2014. Between 1873 and 1894, the surrounding areas of the site were grass and agricultural lands. The settlement of Manston was present, at its closest approximately 250m to the north and 600m east of the site. The Ashford Canterbury & Ramsgate Branch railway (which is still present) ran northeast to southwest approximately 300m southeast of the site boundary. From 1894 more buildings/houses were constructed in the surroundings of the site. The road network also extended. From 1949, a tank farm comprising four above storage tanks and another one outside is present in the direct south-eastern vicinity of the site. The tank farm located south of the site has reduced in the number of tanks since 1995 and is now operated by Jentex. The A299 highway, a roundabout and a solar energy farm were constructed to the south of the site during the period 1995-2016. The site is underlain by the following geological sequence: Made Ground, Quaternary deposits (Head 1 and Head 2) in the north and east, Sand, Silt and Clay (Thanet Formation) in the north-east, White Chalk with flint (Margate Chalk Member and Seaford Chalk Formation) present at the surface in the south of the site. The site lies entirely within a groundwater source protection zones (SPZ) catchment. The inner zone (SPZ1), where risk of contamination from pollution causing activities is greatest, is identified in a strip beneath the runway. This is surrounded by a wider area of outer zone (SPZ2) that also dominates the area beneath the runway, in the south of the site. The remainder of the site falls within the wider SPZ catchment area (SPZ3). The closest public groundwater abstraction is located approximately 400m to the east of the site. The site lies within a groundwater body with poor chemical quality. The groundwater sensitivity is assessed as Very High in SPZ1 and High in SPZ2. The site in underlain by a Principal aquifer (Chalk). The soils below the site and surrounding areas are classed as variably permeable urban soils of high leaching potential. As soil information for restored mineral **Site Sensitivity** workings and urban areas is based on fewer observations a worst case vulnerability classification is assumed until proved otherwise. The surface water sensitivity is assessed as moderate to low due to the potential for pollutant transmission water located 2.5 km from site via baseflow or via an interconnected unclassified drains or streams. The site is located within a nitrate vulnerable zone. Approximately 900 m south-east of the main site boundary are The Sandwich and Pegwell Bay as well as the Thanet coast classified as National Nature

sensitivity reflecting their designation.

Reserves, Ramsar sites, Sites of Special Scientific Interest, Special Areas of Conservation and Special Protection Areas. These coastal waters are of Very High

The Preliminary Unexploded Ordnance (UXO) Risk Assessment undertaken for the site identifies that there is a medium to high probability of UXO encounter on the site (probability rating of 4, on a scale up to 5). It is recommended that in accordance with CIRIA C681 Chapter 5 on managing UXO risks, 6 Alpha, a detailed UXO threat

& risk assessment be carried out prior to any intrusive works.

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Initial Conceptual Model & Preliminary Environmental Risk Assessment	The site walkover, the initial Conceptual Model and the preliminary risk assessment have identified a number of potential contaminant linkages that are related to bulk fuel installations (BFIs), the burning of petrol along the runway, fuel pipes potentially connected to the BFI to the north east and/or to the runway, the use and storage of "Pyrene" runway foam, the 1996 diesel spill, a burning ground area, the Motor Transport (MT) workshops (former and current), the fuelling and cleaning of aircrafts / helicopters, the use and storage of de-icing chemicals, the waste oil and gas oil installations, the potential materials disposed of at a former air-raid shelter, the acid pits infilled with unknown materials, the car garages and fuel stations, the infilled chalk pits, the waste storage areas, the sub-stations, the Made Ground associated with the former development, the firefighting activities and the Jentex tank farm. The risk rating of the potential linkages range from low to moderate.		
Geotechnical Risk Assessment	► The following geotechnical constraints across the site have been identified for the site:		
	 Made Ground extending to depths of up to 0.30 m bgl has been identified within the site boundary overlying the natural soils. The Made Ground is not considered to be a suitable founding stratum and should be excavated prior to any construction or loading across the site. 		
	 A high risk of ground dissolution for soluble rocks and a moderate risk of collapsible deposits have been identified across the site associated with the underlying chalk. 		
	 A vertical shaft is recorded within the western area of the site and an adit entry in the eastern area of the site that would require further information to be obtained to determine the extent of mining activity across the site. 		
	 There is a risk of solution features across the site associated with the underlying chalk that require further investigation to determine the potential impact on any construction work or loading across the site. 		
	 The identification and location of services has not been undertaken as part of this desk study and therefore the presence of services should be considered prior to any ground investigation and construction works. Appropriate measures should be taken to avoid and protect the existing services as necessary. 		
	o Potential for infilled chalk pits.		
	In addition, the presence of existing services may pose some access constraints, with a requirement for measures to avoid or protect them.		
Conclusions	The initial CM has identified a number of potential contaminant linkages for receptors including current future site users, controlled waters (aquifer and potentially surface water features) and property.		
	The risk rating of the potential linkages range from low to high. The highest risk is associated with risks to groundwater from the Jentex fuel farm which partly overlies the groundwater Source Protection Zone 1.		

Recommendations

- A Preliminary UXO Risk Assessment has been undertaken for the site which indicates a medium to high probability of UXO encounter on the site (probability rating of 4, on a scale up to 5). As such a detailed UXO threat & risk assessment should be carried out prior to any intrusive works.
- The desk based assessment has identified a number of potential geo-environmental constraints associated with the proposed redevelopment / reopening of the airport. To gain a more detailed understanding of these constraints, further assessment is required.
- Due to the sensitivity of the groundwater we understand there is a desire from the water company operating the abstractions to avoid installation of groundwater wells at the site. It is therefore appropriate that the intrusive investigation takes a stages approach. In the first instance investigating the shallow soil using trial pits and window samples to determine if there is evidence of contamination. This would then determine the need for and scope of any direct investigation of the groundwater while minimising disturbance of the aquifer highly sensitive to turbidity.
- Whilst geotechnical issues are not a material planning consideration, geotechnical data will be required at a later stage to inform the detailed design of the proposed development. Adopting a combined geotechnical approach at the outset, making use of ground investigation undertaken to support planning, to obtain initial geotechnical data, would avoid duplication and present a saving in terms of cost and programme. The combined approach would also assist in highlighting any ground abnormals, although it is acknowledged that more detailed geotechnical assessment may be required once the form and layout of the proposed development is confirmed.

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2. Introduction

Background and objectives

AMEC Foster Wheeler Environment & Infrastructure UK Ltd (AMEC Foster Wheeler) was commissioned by RiverOak Strategic Partners (hereafter referred to as 'RiverOak') (the Client) to prepare a Phase 1 Desk Study on land contamination and geotechnical considerations as part of the Environmental Impact Assessment for the Development Consent Order (DCO) application for Manston Airport, Kent.

In order to secure the reopening and reinstatement of Manston Airport, RiverOak are seeking to secure a DCO under the Planning Act 2008. With the development of a new master plan for the airport the Client is seeking to demonstrate, in accordance with Section 23 of the Planning Act, that the airport has the capacity to handle a minimum of 10,000 freight air traffic movements (ATM) per year and therefore provide key additional airport capacity to the southeast of England.

The purpose of this report is to assist the Client, in understanding potential geotechnical hazards and environmental liabilities associated with land quality for the proposed development to support the safe and economic development of the site.

Scope of Work

This report has been completed in line with Amec Foster Wheeler's proposal to the Client and comprises the following scope of work:

- Review of any existing information, including information obtained from sources such as Landmark Information Group's Envirocheck report;
- Provision and review of preliminary UXO Assessment Report;
- Site walkover, which did not include the outfall route to Pegwell Bay comprising a pipeline and the waste storage area located in the west of the site;
- Desk Study Reporting including collation of the results of the above tasks into a concise report and the development of a Conceptual Model and a preliminary Qualitative Risk Assessment (QRA), according to the source - pathway - receptor model;
- Identification of information gaps relating to land contamination and any requirements for further assessment; and
- Geotechnical assessment to identify potential hazards and constraints.

Limitations

The conclusions reached and advice given in this report are based in part upon information and/or documents that have been prepared by third parties. In view of this, Amec Foster Wheeler accept no responsibility or liability of any kind in relation to such third party information and no representation, warranty or undertaking of any kind, express or implied, is made with respect to the completeness, accuracy or adequacy of such third party information. The site visit did not include inspection inside buildings nor discussions with current site staff

on current or previous activities on the site.

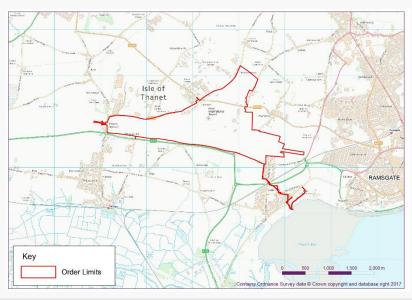
3. Site Description and Environmental Setting

3.1 Site location and description

Site address	Manston Road, Manston, Ramsgate, Kent CT12 5BQ
Grid reference	633340, 165960
Site area	Approximately 303.2 hectares
Proposed use	Redevelopment for commercial use with the reopening and reinstatement of Manston Airport. It is understood that the future development would consist of commercial buildings and hardstanding with some green areas in the northern part of the site, and buildings and hardstanding areas located in the central part of the site, between the runway and Manston Road. The tank farm would also be located within this area. An outfall pipeline will be used for treated surface run-off. It ultimately discharges to Pegwell Bay.

Site location

The site is located to the west of Ramsgate in Thanet, East Kent.



Boundaries (Land uses and relevant features)		Adjacent	Beyond (within 200m)
	North	Agricultural lands and a solar energy facility to the north-east.	Commercial and residential development and agricultural land.
	East	Manston Road, Manston village, a quarry and a golf centre.	Commercial and residential development, agricultural land and the A256.
		Canterbury Road connected to Hengist Way (A299) by a round-about.	Commercial and residential development (including Minster village and Minster primary school) and agricultural land.
	West	The B2190 and the Spitfire way Royal Air Force (RAF) Spitfire and Hurricane museum, and Manston Road.	Commercial and residential development and agricultural land.

Site description and current activities

The site covers 303.2 hectares and includes a 2,748 m long runway, taxiway and aprons, passenger terminal and carparks, freight handling facility, hangers and other site infrastructure. It also comprises the outfall route to Pegwell Bay and service routes from the highway to the outfall pipeline and a waste storage area located to the west of the site.

The site is an irregular shape, bisected in the northern third by Manston Road running in an east to west direction. The majority of the operational site area is located to the south of Manston Road, including the runway and taxiway occupying the southernmost part of the site. North of the runway and south of Manston Road is the passenger terminal building and car parking in the east and a freight handling facility and aircraft hangers in the west. Some of the warehouse buildings in the western part of the site (the freight handling facility) are still in use by a range of haulage companies. There is also a small charter helicopter business operating from the area adjacent to the warehouses. To the north of Manston Road there are two masts at the north-western site boundary and a potentially still existing tank farm to the north-east.

The elevation is about 50 m above ordnance datum (AOD) both in the southern and northern parts of the site and steps down towards Manston Road to 41 m AOD.

A Site walkover was carried out by Amec Foster Wheeler from 7th to 9th February 2017. The site visit did not include the outfall route to Pegwell Bay comprising a pipeline and the waste storage area located in the west of the site. RPS have carried out a survey of the pipeline and indicate that the pipeline is in a condition which will not require any structural works before being used for drainage purposes, works will be limited to maintenance activities (i.e. jetting and cleaning with some defects which needs to be monitored and could be treated in future)¹. The route of the pipeline crosses both private properties and public roads / railways before discharging into Pegwell Bay. However the survey report or any additional information has not been provided to AFW. No walkover of the pipeline route was undertaken by AFW during this phase 1 report preparation. The Site is mainly covered by grassed areas. Hardstanding was found in the areas associated with the aprons, the former passenger terminal and car parking, the runway and the warehouse buildings and workshops that comprise an engineering company for the maintenance of aircrafts, a helicopter pilot training, a lorry haulage company and a building that belongs to the MOD. It is understood from discussion with a former site employee that the hardstanding cover is made with reinforced concrete except for the runway.

The Site hardstanding was found in rather good condition but with some alterations or cracks noticed and grass growing in the joints between the slabs at some locations.

The observations from the site walkover have been used to inform section 3.7

The most recent development plans (dated 12/02/2018) suggest that most of the central part of the site, located between the runway and the Manston road, and the part located north of the Manston road, will be covered with buildings and hardstanding with some remaining green spaces. One tank farm would be located southeast of the runway.

Services

No detailed service plans have been obtained or reviewed as part of this Geo-environmental Desk Study report.

¹ Email from RPS (Chris Johnson) to Amec Foster Wheeler dated 11th December 2017

3.2 Environmental setting

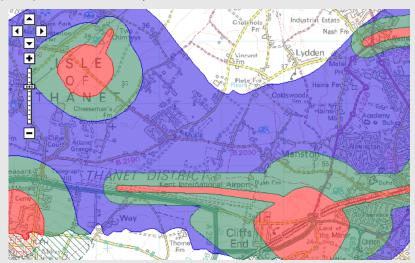
Geology & hydrogeology	Information obtained from the BGS mapping website (http://mapapps.bgs.ac.uk/geologyofbritain/home.html) including borehole logs, BGS maps (geological map, sheet no. 274, Ramsgate, 1:50,000, published 1980 and hydrogeological map of the Chalk and Lower Greensand of Kent, sheet no. 3, 1:126,720, published 1970) and the Envirocheck report included in Appendix A.			
Strata	Brief description of typical constituents	Average depth to upper surface (m bgl) or thickness (m)	Aquifer and approximate water level if known	Notable features
Topsoil	Dark grey sandy topsoil	Upper Surface at Ground Level Thickness 0.2m	n/a	Recorded in trial pits in the centre, north and east of the site
Made Ground	Fill material (cinders, chalk, building rubble)	Upper Surface at Ground Level Thickness 0.3 m (based on BGS trial pits onsite)	n/a	Recorded in trial pits in the centre and north of the site, but potentially located across the majority of the site due to site historical use.
Quaternary deposits (Head 1 and Head 2)	Mainly interglacial wind-blown sands with Clay and Silt	Upper Surface at 0.1m Thickness 1.1 m (based on BGS trial pits onsite)	n/a	Recorded in trial pits in the centre and east of the site.
Thanet Formation (TAB)	Sand, Silt and Clay	Upper Surface at Ground Level Thickness up to 30 m (based on BGS website - map)		Potentially located north-east of the site but not encountered in the trial pits recorded on BGS website
Newhaven Chalk Member (Formerly the Margate Chalk member (MaCk))	White chalk with little flint.	Upper Surface at 1 m (based on BGS trial pits on site) Thickness approximately 25 m south of the site (estimated based on BGS boreholes TR36NW3)	Bedrock Aquifer (Principal Aquifer)	Located across the whole site.
Seaford Chalk Formation (SECK)	White chalk with flint	From approximately 25 m Thickness ca. 28.5 m south of the site (estimated based on BGS boreholes TR36NW3)		
Hydrogeological sensitivity	Formation that provide Resource Zone (KT-V Aquifer is described intergranular and/or fi	The entire site and surrounding area is underlain by solid geology in the form of the Chalk Formation that provides a significant amount of water to the Southern Water Kent Thanet Water Resource Zone (KT-WRZ). The Chalk bedrock is classified as a Principal Aquifer. A Principal Aquifer is described by the EA (2015²) as layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale.		
	Borehole and Trial Pit records are available on the BGS website for several areas across a around the site. The information recorded indicates that groundwater was encountered duri drilling at 44.3 m bgl in the east of the site and 40.25 m bgl in the southeast of the site. Across			was encountered during

² http://maps.environment-

agency.gov.uk/wiyby/wiybyController?x=634500.0&y=166500.0&topic=groundwater&ep=map&scale=9&location=Manston, Kent&lang=_e&layerGroups=default&distance=&textonly=off

March 2018 Doc Ref. cLON007i4r Manston Airport site groundwater flow is from the north east to south west, with water levels falling from around 7m AOD to 3m AOD 3

The site lies entirely within a groundwater source protection zone (SPZ) catchment. The inner zone (SPZ1), where risk of contamination from pollution causing activities is greatest, is identified in a strip beneath the runway – in red on the map below. This is surrounded by a wider area of outer zone (SPZ2) that also dominates the area beneath the runway, in the south of the Site – in green on the map below. The remainder of the site falls within the wider SPZ catchment area (SPZ3) – in blue on the map below.



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There are no public water supply abstractions located within the site boundary, but a number of people and organisations abstract water from groundwater or ponds/lakes up to 1000m outside the site boundary (6 located within 500m, and a further 3 up to 1000m from the site boundary). The abstractions are for private water undertaking, public water supply and agriculture. Thanet District Council confirm that there are no known private water supplies within a 2km radius of the centre of the Manston Airport Site.

The Lord of the Manor public water supply (PWS) abstraction is closest to Manston Airport, located approximately 385 m from the eastern site boundary. The source consists of two wells, Lord of the Manor and Whitehall (the latter is disused and sealed) with three adits. The source was constructed at the southern edge of Thanet to abstract groundwater which would have discharged south towards the sea, and to intercept any high permeability zones. The Whitehall abstraction was drilled in 1850, and suffered from saline intrusion, being close to the coast. Lord of the Manor was constructed to intercept the same adit system to alleviate the saline intrusion issue (Aquaterra, 2007). There are three adits at the Lord of the Manor PWS; the Eastern, Western and South-Western Adit, constructed in the 19th and early 20th century. The most significant abstractive relevant to the Manston airport development is the Lord of the Manor source. The catchment includes Manston Airport which sits in the south west of the catchment with its runway over the western adit, the main rail-line to London, and the A299; the groundwater source protection zone for this borehole extends below the existing airport runway.

The site lies within a groundwater body with a poor chemical quality.⁴ Primarily groundwater in the Thanet Chalk Block has high levels of nitrate at levels at or exceeding current Drinking Water Standards (DWS) limits.

The soils on and surrounding the site are classed as variably permeable urban soils of high leaching potential. As soil information for restored mineral workings and urban areas is based on fewer observations a worst case vulnerability classification is assumed until proved otherwise.

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³ Hydrogeological Impact Assessment Amec Foster Wheeler March 2018

⁴ http://environment.data.gov.uk/catchment-planning/OperationalCatchment/3282/classification?item=106&status=all

Groundwater sensitivity	The groundwater sensitivity is assessed as very high ⁵ in SPZ1 and high in SPZ2. The site in underlain by a Principal Aquifer, the nearest abstraction is less than 0.5 km from the site and			
	the site is in a SPZ.			
Hydrology	There are no surface water features on the site. A reservoir is located approximately 350m to the south of the site. The nearest major river is the River Stour located approximately 2.5 km south of the site boundary, flowing eastwards to the English Channel. The River Stour is classified as Moderate ecological quality status within the Water Framework Directive assessment (WFD) as issued on the Environment Agency website. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use. Pegwell Bay is an ecological sensitive water body.			
Surface water sensitivity	The surface water sensitivity is assessed as moderate to low ⁵ due to the potential for pollutant transmission water located 2.5 km from site via baseflow or via an interconnected unclassified drain or stream.			
Coastal water sensitivity	Thanet coast is located approximately 900 m southeast of the main site boundary. The coastal water sensitivity is assessed as very high ⁵ . It is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use. The site drainage also ultimately discharges to Pegwell Bay			
Sensitive land uses	The site is located within a nitrate vulnerable zone. Approximately 900 m south-east of the site boundary are The Sandwich and Pegwell Bay as well as the Thanet coast classified as National Nature Reserves, Ramsar sites, Sites of Special Scientific Interest, Special Areas of Conservation and Special Protection Areas ⁷ .			
Ecological sensitivity	 The ecological sensitivity is assessed as very high due the sensitivity of Sandwich Bay, Pegwell Bay and the Thanet coast which are classified as: National Nature Reserves (Sandwich and Pegwell Bay); Ramsar sites (Thanet Coast and Sandwich Bay); Sites of Special Scientific Interest (Thanet Coast and Sandwich Bay); and Special Areas of Conservation and Special Protection Areas (Thanet Coast and Sandwich Bay)ⁱ. These designations are also reflected in the coastal water sensitivity. 			

3.3 Regulatory database information

Only regulatory data within 250m with the potential to impact the site has been detailed below, please refer to Appendix A for the complete regulatory data set within the Envirocheck.

Activity	On-Site	0-250m	Details
Aviation Services	2	2	Aviation Engineers (1) Control Panels (1)
			Onsite: 2 registered airports : Kent International Airport and Manston Airport
Building Services	0	1	Builders' merchants (1)

⁵ NHBC/ CIEH / Environment Agency, Guidance for the Safe Development of Housing on Land Affected by Contamination R&D66: 2008

5

 $^{^{6}\} http://environment.data.gov.uk/catchment-planning/Operational Catchment/3282/classification?item=106\&status=allowers.$

⁷ www.magic.gov.uk

Car services (body repairs and dismantlers etc)	2	7	Onsite: 1 car dealer, inactive and 1 garage service inactive – not seen during the February 2017 site visit, Car Dealers (2) Car Repair (2) Garage Services (3) Mot testing centres (2)
Dry cleaners/Cleaning Services	0	1	Carpet/Curtain Cleaners & upholstery services (1)
Generators Sales & Service	0	1	Generators sale & service (1)
Joinery & window tinting	0	2	Joinery Manufacturers (1) Window Tinting (1)
Waste management/ transfer/treatment facilities/disposal	0	1	Waste disposal service (1)
Water Coolers	0	1	Water Coolers (1).
Fuel stations	0	8	Petrol Station (4): 2 to the southwest (1 open, 1 obsolete), 1 to the southeast (closed) and 1 to the northwest (closed) Filling station (1 (inactive)- same address as obsolete petrol station to the southwest) Oil Fuel Distributors (3 – all at the Jentex site address but with a different name: Jentex petroleum ltd, Anthony Jenkins Fuel Oils, jentex)
Mineral Site	0	1	Metal Products (1)
Landfills	0	3	1 historical landfill 76 m north-northwest from site boundary- Manston road – used between 1974 to 1987 for inert waste 2 historical landfills 268 m and 270 m west from site boundary (Sunnybank used between 1976 to 1984 for inert waste and Allan Grange lane also used for inert waste).
Radon	-	-	The site is in an intermediate probability radon area, as between 1 and 3% of homes are above the action level. No radon protective measures are necessary in the construction of new dwellings or extensions.

Local Authority Information

An environmental information request was submitted to the Thanet District Council. The environmental information received includes historical land uses at the Site and its surroundings, maps with the locations of the groundwater source protection zones, the Environment Agency landfill atlas data, the discharge consents and the abstraction data. Information on the Council's Contaminated Land Register has also been provided – refer to Appendix F.

The Council information confirms that the site overlies the former Kent International Airport which had former uses as an RAF base and commercial airport. According to the Council there is a potential for contamination of the ground from leaks or spills (of fuel/oil/hydrocarbons), presence of asbestos containing materials

(ACMs), Unexploded Ordnances (UXOs) from World War II activities and a variety of products used in the running and maintenance of commercial and military airfields and aircraft.

Based on the Council's records, there are various potentially contaminated features within 250m of the Site, including former fuel depot, cemetery, hospital, laundry, military land, petroleum tanks, quarry, road haulage, filled ground, brick works, refuse disposal and Petrol Filling Station (PFS).

The Council does not hold information on historic Military of Defence (MOD) remediation of the Site.

The Council is not intending to take action under Part IIA of the Environment Protection Act 1990 based on the information currently held.

3.4 Unexploded Ordnance (UXO) Risk Assessment

A Preliminary UXO Risk Assessment has been undertaken for the site and included in Appendix B.

The report identifies that there is a medium to high probability of UXO encounter on the site (probability rating of 4, on a scale up to 5).

The report recommends that in accordance with CIRIA C681 Chapter 5 on managing UXO risks, a detailed UXO threat & risk assessment should be carried out prior to any intrusive works.

According to the Land Quality Assessment Phase One from GIBB Environmental⁸, Explosive Ordnance Disposal (EOD) clearance surveys were performed by the MOD at the site in the past, however grassed areas surrounding the runway, and notably two parcels located south east of the runway, and hardstanding covered areas were usually not subject to a EOD search and clearance.

3.5 Site history

A summary of the historical development of the site, based on historical **Ordnance Survey (**OS) maps (1:10,000 and 1:2,500) and the Land Quality Assessment Phase One from GIBB Environmental⁸, is presented below. The historical maps can be found within the Envirocheck report in Appendix A. Where relevant, interpretation of the maps is supported by knowledge from historical websites for the site and its surroundings⁹.

1873-1894

On Site: The earliest available map dates 1873 and shows the site as grassland and agricultural land. Two chalk pits have been identified within the site boundaries in the central eastern area of the site. A track and a road cross the central and southwestern parts of the site respectively. A windmill was present in the southwest part of the site.

Telegraph Hill is present in the southwest part of the site. This is noted as being an area where 'ancient British and Saxon coins' have been found. Also in the vicinity of Telegraph Hill a 'Pit' is noted. This is detailed further in the Envirocheck report as a vertical shaft with chambers at the base. It is likely that this is a former chalk mine.

Off-Site: The surrounding areas were predominantly grass and agricultural lands at that time. A reservoir and a brick works were present in the direct northern vicinity of the site. There was one pond directly to the north-east of the site. Several chalk pits were present to the east, south and southwest of the site. A number of buildings/houses with small woodlands were present around the site. The settlement of Manston is present, at its closest approximately 250m to the north and 600m east of the site. The Ashford Canterbury & Ramsgate Branch railway runs northeast to southwest approximately 300m southeast of the site boundary.

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⁸ Land Quality Assessment Phase One: Desk Study land Quality Statement. Project No. 10133 – Final report, August 1998, GIBB Environmental

⁹ http://www.spitfiremuseum.org.uk/rafmanston

1894 - 1938

On Site: No significant changes are noted within the site boundaries on the 1894 to 1938 editions. The two chalk pits are no longer present on the maps dating 1896 onwards, suggesting they may have been infilled. The windmill in the south-western part of the site was also no longer present on maps dating 1896.

Information obtained from the internet⁹ indicates that aircraft started to use the open farmland of Manston for emergency landings during the winter of 1915-16. An aerodrome was established at the site shortly after including operational flights and a training school ⁹. By 1918 the airfield comprised some hangars and wooden huts on the east side and the major concentration of hangars and buildings on the west side. Several training schools were implemented between 1921 and 1936 and additional facilities – classrooms and barracks – were built¹⁰.

Off-Site: More buildings/houses were constructed at numerous locations in the surrounding areas of the site, as well as extensions and additions to the road network. From 1908 a laundry and a tank were located south-southwest of the site. By 1938 a second reservoir had been developed to the north of the site and the brick works were no longer present. Some of the chalk pits seem to have been infilled. One of them (south) became a reservoir. The tank is no longer shown on the map from 1938.

1939 - 1951

On Site: Map detail is limited during this date range, which is likely to be due to World War II. Details of military establishments were often limited or removed from OS maps during the war period. An aerial photograph included in the Envirocheck Report dated 1947-1949 shows the presence of a runway in the southern part of the site. By 1941, the airfield had two grass strips of 5,700ft (NE/SW) and 4800ft (N/S).

During World War II, Manston was heavily bombed. The site was used as an emergency landing field for returning bombers suffering from low fuel or problems to their hydraulic systems9. Three emergency landing strips (concrete) and associated taxiways and dispersals, i.e. equipment for FIDO consisting of the burning of petrol along the runway to disperse fog8 were built between 1943 and 1944 and the runway opened in April 1944¹0. Petrol – approximately 250 000 gallons to run the system during one hour - was supplied from the tanks located in the fuel farm south-east of the runway and distributed through below and above ground pipelines running along the east of the runway8. The airfield became a storage for heavy bombers. During the 1950's the US Airforce used the site as a Strategic Air Command base for its fighter and fighter-bomber units 9.

Off-Site: A pumping station was located in the surrounding area to the northwest of the site from 1939. In the direct south-eastern vicinity of the site a tank farm is visible on an aerial photograph dating from 1949.

1960 - 1968

On Site: From 1960, the airfield was back under RAF control from the US Airforce and was designated one of the country's Master Emergency Diversion Airfield for both military and civilian flights⁹ due to its runway and its facility for foam-laying¹⁰. The most significant unit that took up residence was the Fire Service Training Establishment¹⁰. Trials associated with pyrene runway foamer¹¹ - used to cushion aircraft during emergency landings – were first tested in 1963 and then carried out between 1964 and 1980 from mobile tankers held on standby⁸. The map from 1968 shows that the site had been developed with taxiways, aprons and buildings in addition to the runway which was already present at the site.

Off-Site: More buildings / houses had been constructed at numerous locations in the surroundings of the site. A reservoir that was located south of the site near a chapel and labelled as "disused" on the previous map is no longer present at that time.

1977 – 1995

On Site: A sub-station is noted in the extreme eastern part of the site from 1977. No other significant changes are noted within the site boundaries between 1977 and 1995.

Off-Site: No significant changes are noted in the areas directly surrounding the site between 1977 and 1995.

1995 - present

¹⁰ THE MILITARY AIRFIELDS OF BRITAIN – Southern England, Ken Delve, Crowood (ISBN 1-86126-729-0)

¹¹ Product is understood to contain carbon-tetrachloride - https://www.google.com/patents/US1010870

On Site: Two museums have been developed in the western part of the site. No other major changes are noted within the site boundaries. The RAF operation of the site finished in 1999 and the airport became Kent International Airport operating civilian air traffic (cargo and passenger flights) ⁹. Kent International Airport ceased operations in 2014.

Off-Site: The tank farm located south of the site appears to have reduced in the number of tanks during this period. The A299 highway, a roundabout and a solar energy farm were constructed to the south of the site during this period.

3.6 Previous reports

Three reports were provided by the client for review by Amec Foster Wheeler.

Land Quality Assessment Phase One: Desk Study land Quality Statement. Project No. 10133 – Final report, August 1998, GIBB Environmental⁸:

A Phase 1 desk study was prepared for the Ministry of Defence (MOD) for Manston airfield. It comprised the review of publicly available and historical information from books, information provided by the Establishment Works Consultant (EWC), a summary of the site walkover carried out in May 1998, and a qualitative risk assessment.

The observations from this report have been used to inform Sections 3.4 and 3.7 of the current report.

Geo-environmental Assessment, Jentex petroleum, Cliffsend, Kent, Jentex GEA-18996-15-134, May 2015, Idom Merebrook Ltd¹²:

The Phase 1 desk study includes the findings of an intrusive Phase 2a investigation carried out at the petroleum depot located directly southeast of Manston airfield at Canterbury road. A preliminary risk assessment was prepared to advise on the geo-environmental implications of the re-development of the site from industrial/commercial to residential. The intrusive investigation included three cable percussion boreholes advanced down to 10.45 m bgl and 15 trial holes dug to 4m bgl. The western part of the site was not included in the investigation.

According to Idom Merebrook, the geology encountered was Made Ground directly overlying Chalk. Ground or perched – water was not encountered. 25 soil samples, including 14 samples from natural ground and 11 samples from Made Ground, were collected and analysed for asbestos, pH, heavy metals, TPH, BTEX, PAHs, and Phenols. Shallow soils were found to be impacted with PAHs and asbestos.

The risk to the current and future site users was assessed as being low to moderate, likely requiring mitigation measures. No volatile contamination was identified. The risk to the underlying chalk aquifer was considered to be low. However a further supplementary investigation was agreed with the EA in order to confirm whether or not the contamination had extended to the chalk strata. The supplementary investigation was reported in May 2016, which is summarised below.

Geo-environmental Assessment Report, Jentex – Supplementary Assessment, Cliffsend, Kent, Jentex Group of Companies, GEA-18996B-16-144, May 2016, Idom Merebrook Ltd¹³:

The report presents the findings of a supplementary intrusive investigation conducted at the petroleum depot, located directly southeast of Manston airfield at Canterbury road, in order to verify whether or not the hydrocarbon impacted identified during the 2015 investigation had extended to the chalk strata.

Two boreholes were advanced down to 10m bgl and eight trial pits dug to a maximum depth of 3.5m bgl. The geology encountered was Made Ground overlying Head deposits which were underlain by Chalk. Ground or perched-water was not encountered during the drilling works.

24 soil samples, including 16 from natural ground and eight from Made Ground, were collected and analysed asbestos, pH, heavy metals, TPH, BTEX, PAHs, Cyanide and Phenols. Localised hydrocarbon (mainly TPH)

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¹² Geo-environmental Assessment, Jentex petroleum, Cliffsend, Kent, Jentex GEA-18996-15-134, May 2015, Idom Merebrook Ltd

¹³ Geo-environmental Assessment Report, Jentex – Supplementary Assessment, Cliffsend, Kent, Jentex Group of Companies, GEA-18996B-16-144, May 2016, Idom Merebrook Ltd

- and lead at a few locations - impact was detected in shallow soils. No contamination was found to be extending to depth therefore the risk to the Chalk aquifer was estimated as being likely not significant.

In addition to the listed above reports, a Phase 1&2 report prepared in connection with the Kent International Airport radar mast application was reviewed by Amec Foster Wheeler as advised by the Thanet District Council.

Kent International Airport Manston, Radar Mast development, Phase 1 and 2 Contaminated Land Assessment, June 2010, Jacobs:

A Phase 1 & 2 Contaminated Land Study was undertaken by Jacobs to support the planning application for the installation of radar mast at the airport. The radar mast was proposed to be located in the north western part of the Site next to the Manston road and north of the Spitfire and Hurricane museums. A site visit was carried out in October 2009. The findings were that the area where the radar mast was intended to be installed consisted of an area of concrete hardstanding which was possibly the foundation for a previous installation. The surroundings areas were open grassed lands.

The Phase 1 study summarizes the findings of the previous investigations that were undertaken at various part of the Site - at the runway, the bulk fuel installation facilities, the fire rescue building and the former MOD domestic site. Elevated concentrations of hydrocarbons were detected above the soil screening guidelines used at the time of those investigations. Concentrations of up to 41,657 mg/kg, i.e. above the Dutch Intervention level of 5,000 mg/kg used at the time, were identified during the fuel compound's investigation in 1999. In addition the study identified the other following potential sources of contamination:

- Made ground identified as widespread across the airport during the 1999 intrusive investigation

 contaminants could include heavy metals, hydrocarbons, asbestos, volatile organic compounds;
- Historical FIDO operations potential presence of hydrocarbons;
- ▶ Potential leaks from mobile fuel tanks that were not equipped with a spill protection;
- ➤ Several waste management sites, including an historic landfill, two active waste transfer sites and a closed landfill, located within 300m east of the Site contaminants could include heavy metals, hydrocarbons, organic compounds:
- ► An active petrol station and garage (Drome) and an inactive car body works located within 250m north east of the Site contaminants could include hydrocarbons, solvents;
- An active road haulage services facility located approximately 450m east of the Site contaminants could include hydrocarbons, solvents;
- Potential presence of radioactive material as a hotspot of radioactive material was previously detected at the fire training school which is located close to the potential location of the radar mast (the source of this was not indicated and no additional evidence was provided);
- Potential residual buried UXO from previous Site use as RAF airfield during World War II; and
- Use of glyphosate based weed killers at the airport.

An intrusive Phase 2 Site investigation was carried out in March 2010. It included five window sample borings excavated down to 4m bgl in the area of the proposed radar mast location. The geology encountered was Made Ground (between 0 and 0.3m bgl) overlying Clay (between 0.25 and 3.2m bgl) which were underlain by Chalk (between 1.4 and 4m bgl). Groundwater was not encountered during the intrusive works. 10 soil samples were collected within the made ground and the chalk and analysed for heavy metals, pH, total organic carbon (TOC), PAHs, TPH, speciated extractable petroleum hydrocarbons, volatile and semi volatile organic compounds, asbestos screen and glycols. In all the samples the concentrations detected were below the relevant screening criteria (generic assessment criteria (GAC) 2009 for human health for commercial end use and withdrawn soil guideline value 2002 for lead). TPH, for which no GAC were available, were detected with concentrations ranging from 4,11mg/kg and 258mg/kg.

In addition a Phase 2 report was provided to Amec Foster Wheeler by RPS.

Site Investigation Tank 2, Base Validation, Jentex, The Storage Installation, Canterbury Road West, Ramsgate, Kent, CT12 DU, Ref: 07R898, 2007 Randall & Walsh Associates

The report summarises the findings of an intrusive site investigation carried out at the petroleum depot, located directly southeast of Manston airfield by RAW Group, following the decommissioning and demolition of a fuel oil storage tank (named Tank 2). Tank 2 was originally built on a brick bund directly over the Chalk Formation. It had a capacity of 2,000,000 litres. The intrusive investigation comprised eleven trial pits excavated down to 0.3m bgl across Tank 2's former location and six soil borings advanced down to 1m bgl in the embankment that surrounded the former location of the tank. Chalk was encountered from ground level to 0.3m bgl in the trial pits.

Topsoil including Chalk fragments was encountered from 0 to 1mbgl in the embankment. Fifteen soil samples were collected from selected trial pits and soil boreholes. A soil sample was also collected from a stockpiled Sand that had previously been scraped back from underneath Tank after it had been decommissioned. Samples were analysed for speciated TPH by GC-FID, volatile organic compounds and BTEX. A maximum TPH concentration of 11mg/kg was detected beneath the former location of Tank 2. A maximum TPH concentration of 390mg/kg was detected in the area surrounding former Tank 2's location. A maximum TPH concentration of 320mg/kg was detected in the soil embankment. In all the samples the concentrations detected were below the 2002 Soil Guidance Values (SGVs) and the RAW in-house generic soil screening values (SSV) derived using the SNIFFER model for commercial/industrial land use where SGVs were not available.

The risks to human health and building structures, were assessed by RAW as being not significant. The TPH (mainly C21-C35) concentration of 390mg/kg detected in the area surrounding the former tank location was not considered to pose a significant risk to groundwater given the low mobility and solubility properties of the hydrocarbon compounds in this carbon range. No further investigations or remediation works were recommended.

Water Quality, RiverOak Strategic Partners, Manston Airport, Kent, Hydrogeological Impact Assessment (HIA), 2018, Amec Foster Wheeler

Water quality, and in particular nitrate concentrations, have been a concern in Thanet for many years, with the levels being close to, or exceeding, the prescribed concentration or value (PCV) for nitrate of 50 mg/l as nitrate or 11.3 mg/l as nitrogen (UK Drinking Water Standard (DWS), Drinking Water Inspectorate (DWI) 2012). Other water quality issues include pesticides and organic compounds, including TCE.

Water quality data from the Lord of the Manor PWS supplied by Southern Water Services (SWS) for the period 2001 to 2015, together with historical investigations, have been used to understand water quality issues in this part of the Isle of Thanet.

Nitrate

Groundwater in the Thanet Chalk Block has high levels of nitrate at levels at or exceeding current DWS limits.

Data from twenty observation boreholes (OBHs) drilled into the Chalk between 1975 and 1984 were used to profile unsaturated zone nitrate concentrations (Southern Water Authority (SWA), 1985¹⁴), and these profiles implied a downward travel rate of nitrate through the unsaturated zone of 0.5m/a. The profiles also suggested that the majority of nitrate was coming from fertilised land, and denitrification was not identified in the aquifer. The predictive modelling undertaken as part of the SWA study indicated that there would be a steep rise in nitrate concentrations in groundwater. For example, at the Lord of the Manor PWS the rise would commence in the early 2000s and not level off until 2100, with an increase from ~ 53mg/l NO₃ in 2000 to ~79.6mg/l NO₃ by 2050, flattening off at ~110mg/l NO₃ by 2100.

High nitrate concentrations have been an issue at the Lord of the Manor PWS since the 1920s, when levels already exceeded the current DWS (SWA, 1985). Data supplied by SWS show that the trend for the period 2001 to 2005 was relatively flat, with concentrations varying between around 50 to 65mg/l NO₃. However, concentrations appear to have subsequently risen from around 57mg/l NO₃ in 2004 to 62mg/l NO₃ in 2010,

¹⁴ Southern Water Authority (SWA). 1985. Report on Thanet nitrate investigation: A study of the occurrence and cause of high concentrations of nitrate in groundwater's on the Isle of Thanet and their future trend. Southern Water Authority Technical Report, pp111

observations that are consistent with the predictions made in the 1985 SWA study. After 2010 the PWS appears to not have been used and samples rarely taken, probably because the source can only be put into supply if nitrate treatment is undertaken.

Nitrate concentrations show no seasonal trend or correlation with groundwater levels or abstraction rate. There are, however, within the dataset samples with relatively lower or higher nitrate concentrations compared to neighbouring samples, for example:

June 2001 (35.8mg/l NO₃) and May 2003 (37.5 mg/l NO₃), both of which coincide with start-up of the abstraction after a period of shut-down, and a drop in water table;

August 2003 (8.6mg/l NO₃) and November 2005 (42.6mg/l NO₃), both linked with relatively low water tables (<2m AOD), low rainfall and increased abstraction; and

August 2005 (69.5mg/l NO₃) and October 2003 (60.6mg/l NO₃), both linked to the water table falling and then rising.

These data suggest that when the water table is low (through a combination of low recharge and increased abstraction) the borehole and adits receive water with a lower nitrate concentration. When the source is started up after a period of no abstraction, low nitrate in groundwater is again reported. However, high nitrate can occur in response to a rising water table, and this may be explained by a pulse of nitrate that has diffused out of the matrix to the fissures. The nitrate porewater profiles described in Mouchel (2008)¹⁵ show that nitrate concentrations decrease with depth through the unsaturated zone.

Whilst other sources of nitrate have been considered, such as the historical use of urea-based de-icer at Manston Airport, the high nitrate has most probably arisen as a consequence of the marked increase in agricultural activity that occurred in the 1920s with the conversion of grassland to arable. Since the 1940s the area of land in arable production has generally increased in Kent, at the expense of grassland (Atkins, 2015). Ploughing up of orchards and conversion of land to market gardening created a nitrate peak in the unsaturated zone that was identified in the 1970s. High concentrations of brassica crops (cauliflowers in particular) and other intensive farming on the southern edge of Thanet also contribute to the high nitrate loading. Past activities at the Airport are not considered to be a source of nitrate.

Organic Contamination

Chlorinated solvents can include a wide range of organic chemicals containing at least one chloride ion. They have been used as degreasing and cleaning agents in military, industrial, and dry-cleaning applications for many decades, although much contamination is believed to be historical, resulting from previous careless handling and disposal procedures at a range of locations in the Lord of the Manor catchment. Carbon tetrachloride, historically used as a refrigerant, propellant, in foams and dry cleaning has been banned from use in consumer goods since 2002 due its impact on the ozone layer (EU regulation 2037/2000). Carbon tetrachloride use declined steeply since the 1980s due to concerns regarding its harmful effects.

Chlorinated solvents are volatile liquids. In liquid form they tend to sink through aquifers because they are denser than water, and are classed as dense non-aqueous phase liquid (DNAPL). They will continue to sink until they encounter low permeability strata or are exhausted by smearing and entrapment. DNAPL accumulations can form long-term sources of groundwater contamination. Much like nitrate, they can be persistent under typical oxidizing (aerobic) aquifer conditions. Some degradation does occur under favourable (reducing) environmental conditions. For example, degradation of carbon tetrachloride to trihalomethanes, and tetrachloroethene (PCE) to TCE, and dichloroethenes, Vinyl chloride can occur in groundwater as a result of reductive dechlorination. The final stage of degradation is the conversion of vinyl chloride to ethenes which generally requires oxidizing conditions. Chlorinated solvents are sparingly soluble, but their solubility far exceeds DWSs (the combined DWS for PCE and TCE is $10\mu g/l$), and vinyl chloride has a limit of 5 $\mu g/l$). They are also poorly retarded and so are relatively mobile. Due to their persistence, chlorinated solvent plumes can be very large (several kilometres long).

Mouchel, 2008. Groundwater Risk Assessment Interpretive Report – Isle of Thanet Groundwater Quality Assessment. Prepared for Southern Water. pp 39 British Geological Survey 2008. The Chalk aquifer of the North Downs. Research Report RR/08/02.

There have been two reported (Atkins 2015¹⁶) water quality incidents/issues at the Lord of the Manor PWS. These are as follows:

- June 1999 domestic fuel spill near to the PWS adit, but remedial works ensured that the source was not impacted; and
- ► February 2007 low PAH concentrations were found in an OBH at Cliff End possibly transformer oil or electric cable oil, linked to historical rail use.

Water quality data from Lord of the Manor for chlorinated solvents provided by SWS for the period 2001 to 2015 includes analysis for PCE, TCE, carbon tetrachloride, 1,1,1 trichloroethane (111 TCA), vinyl chloride, 1,2 dichloroethane, and total trihalomethanes (degradation products of carbon tetrachloride). This dataset has been examined for the period 2001 to 2015 (Amec Foster Wheeler, 2017), and is plotted in Figure 3.6 of the HIA.

- u The solvent detected most frequently at concentrations above the combined DWS is PCE. The DWS for the sum of PCE and trichloroethene (TCE) concentrations is 10μg/l. The pattern of detection is discussed below, although the lower frequency of sampling in some years means that some details are likely to have been missed:
 - ► From June 2001 to December 2002 there was a rising trend in PCE, with concentrations generally ranging between 5 and 17µg/l, and a peak of 26µg/l in September 2002;
 - Between May 2003 and December 2006 concentrations were between 0.5 and 15.2μg/l, although the sampling frequency was reduced;
 - From 2006 to 2009 concentrations were generally between 10 to 17μg/l, and there was no detection in samples taken in 2009; and
 - Samples taken after January 2010, when the PWS was out of service, contained PCE at between 4.7 and 7.5μg/l.

TCE was also detected, but always at concentrations below the combined DWS, with a peak concentration in June 2001 of 2.9µg/l. Concentrations follow a similar temporal pattern to that of PCE, with the majority of elevated concentrations between 2001 and 2004, and 2007 to 2010 (Figure 3.6 of the HIA), decreasing to lower levels in recent years, and this suggests a common source.

Other solvents detected at the Lord of the Manor PWS include:

- ▶ 1,1,1 Trichloroethane between December 2007 and February 2008, at concentrations of 2.8 to 4.8µg/l;
- Vinyl chloride with a peak value of 2.4 μg/l in September 2009, but otherwise remaining at the 0.11μg/l (the likely laboratory detection limit). The UK DWS is 0.5μg/l;
- Carbon tetrachloride was consistently detected at a low concentration throughout the dataset, with a peak value of 1μg/l in August 2002. The UK DWS is 3μg/l; and
- Trihalomethanes was at a peak value of 6µg/l in September 2001. The UK DWS for trihalomethanes is 100μg/l

The changing concentrations of PCE, and potentially TCE, appear to be correlated with groundwater levels at the abstraction. In general, samples where PCE was absent coincide with periods of lower-than-usual water table (around 2m AOD), whilst peaks in concentration typically occur when the water table is higher. This pattern may suggest that a source or plume of PCE and other solvents is present, although the decrease in concentrations in recent years suggests that the plume may have degraded over the years. Low concentrations of carbon tetrachloride, which underwent decline in use in the 1980s and was banned in 2002, suggests that the source of contamination is likely to be historical rather than ongoing.

¹⁶ Atkins, 2015. Thanet sewers programme: Geotechnical and environmental investigation Groundwater monitoring, February to June 2015. Prepared for Southern Water. pp208.

SWS records for the Lord of the Manor PWS show only sporadic occurrence of petroleum hydrocarbons in groundwater at low concentrations below DWSs. This dataset suggests that petroleum hydrocarbons are not an existing water quality issue at the abstraction.

Pesticides

SWS samples are screened for more than 30 individual pesticide compounds with varying frequencies. The total sum of identified pesticides is also reported. The majority of analytical results are below the detection limit.

The most notable event shown in the pesticide data is a high spike in diuron concentrations at the Lord of the Manor PWS in 2000/2001. The EA investigated possible sources in the urban area, and it concluded that diuron was applied at incorrect dilution rates to amenity land, leading to the high concentrations at the PWS. Users switched from diuron to glyphosphate and concentrations of diuron at Lord of the Manor fell gradually over the following two years to reach very low levels by 2003.

Diuron has rarely been detected since, but a BGS (2004)¹⁷ study identified the widespread use of diuron in the Thanet area. Diuron and its metabolites may therefore be percolating through the soil and the unsaturated zone towards groundwater, and may give rise to a further impact in years to come.

Atrazine concentrations at the Lord of the Manor PWS also exceeded the PCV in 2000–2001. Since then levels have declined and have been around 20–30µg/l. Occasional low concentrations of simazine have been detected and there was a cluster of recordings of cyanazine at all three PWSs in 2003–2005. Atrazine and simazine were banned for non-agricultural use (e.g. local authority, road and rail) in 1993, with further restrictions introduced in the 2000s.

Detection of cynazine and simazine at concentrations below the DWS in September 2004, January 2005 and September 2006 could be linked to rainfall events, flushing applied product into the aquifer. The pesticide data suggest that although the PWS is vulnerable to pollution, there are currently no issues with these substances.

Other Water Quality

Reports of saline intrusion by SWA (1985) near Margate were possibly as a result of former groundwater abstractions at a nearby PWS sources in the area (EA, 2004)¹⁸. Following abandonment of the source the level of saline intrusion may have reduced (Atkins, 2014)¹⁹.

3.7 Current and historic site activities

3.7.1 Fuel Storage and use (S1)

3.7.1.1 Bulk fuel installations (BFI)s

Seven above storage tanks (ASTs) and 15 underground storage tanks (USTs) were identified during the site walkover by Gibb in 1998. The ASTs had secondary containments/spill control measures but some cracks were identified in the bunded areas. Information regarding a potential secondary containment for the USTs was not clear. The tanks are summarised in Table 3.1

In addition a gas oil tank was identified during the 2017. This has also been included in Table 3.1.

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¹⁷ BGS 2004. Pesticides and their metabolites in groundwater - A field investigation from south east England. Groundwater Systems and Water Quality Programme Internal Report IR/04/014.

¹⁸ Environment Agency 2004 Groundwater Quality Review: River Thanet GWQR013.

¹⁹ Atkins, 2014. Thanet sewers programme - Geotechnical and environmental investigation Phase A: desk study. Prepared for Southern Water. pp110.

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Table 3.1 Historical and current fuel tanks present on site

Sources	Tank content and volumes	Age	AST/UST	Location Gibb observations	Recent observations, Amec Foster Wheeler site walkover, 2017	
Tanks ident	tified by Gibb in 199	98				
S1.1	Avtur aviation fuel, 52000 L	1965	2 USTs	Bldg. 112. Fuel interceptor. Currently empty. Proposing to remove tanks.	Only a circular area partly covered with hardstanding was visible at the BFI location of building (bldg.) 112 to the west during the site walkover. No evidence of any buildings or tanks could be found. It is not known whether the USTs have been removed and if any remediation works have been carried out	Picture 1 Location of BFI at bldg. 112
S1.2	Avtur & Avgas aviation fuel, 55000 L each	1950s	6 USTs	Bldg. 819 Part of KIA site. Unknown if secondary containment/spill control. No interceptor. No inspection possible.	Over ground pipes and pumps were present at the BFI location of bldg. 819 to the east. The installation was fenced and could not be entered for inspection. It is not known whether the USTs are still present and if any remediation works have been carried out.	Picture 2 BFI at bldg. 819
S1.3	Fuel oil, 4953 L	unknown	1 UST	Bldg. 869. Unknown if secondary containment/spill control. Visual staining at outlet point and tank inspection pit	Location of UST not clearly identified at bldg. 869 (Fire Crash Department). Some staining was observed in the Fire Department building, which was not entered.	

Sources	Tank content and volumes	Age	AST/UST	Location Gibb observations	Recent observations, Amec Foster Wheeler site walkover, 2017	
S1.4	Fuel oil, 4500L each	unknown	2 bunded ASTs	Bldg. 253. Held with bund. Recently refurbished. Minor oil staining.	The two ASTs are still present at Bldg. 253 (Hangar 3). The whole area of Hangar 3 was fenced and could not be accessed. The ASTs were observed from outside of the fence. They were corroded, but no leak was observed and they were located within a concrete bund. Two pipes connected the ASTs to the ground.	Picture 3 Corroded ASTs within a bund at bldg. 253
S1.5	Fuel oil, 6650 L	unknown		Bldg. 91. Unknown if secondary containment/spill control. Decommissioned.	The AST that had been previously identified at the former Motor Transport (MT) building (Bldg. 91) which is now the location of the RAF Manston museum is still present. The site was closed and could not be entered. The AST was observed from outside of the fence. It was located in a brick bund.	Picture 4 AST within a bund at bldg. 91
	tanks identified duri	_				
S1.6	XL Gas oil	unknown	1 Bunded AST		A gas oil tank was noticed at the back (south) of the KIA jet support building in a fenced area that could not be entered. Observations from the outside were that the tank was corroded and was in a bund.	Picture 5 Gas oil tank located at the back (south) of the KIA jet support building

3.7.1.2 Onsite fuel station (S1.7)

An Avgas fuel station with a pump was found at the former aviation training centre to south east of the site. The aviation training centre is not operating planes as the airport is closed. Staining was observed but no evidence of spill. No AST was visible. Two concrete and plastic covers were noticed in the ground. USTs may be located underneath.



Picture 6 Avgas 100LL pump at former aviation training centre.



Picture 7 Avgas fuel station at former aviation training centre

3.7.1.3 Burning of petrol along the runway (Source S2)

Historical Fog Intensive Dispersal operation (FIDO) was reported by Gibb Environmental⁸ to have been used from 1943. FIDO consisted of burning petrol along the runway to disperse fog. The report indicates that

250000 gallons were required for each hour of operation. The petrol came from 4x 350,000 gallons tanks situated south of runway 29 and was distributed along a network of below and above ground pipes along the eastern perimeter and south-east of the site. The tanks were still present on the Jentex Site at the time of the report. Jentex were reported to store only heavy fuel oils.

An AST that is believed to have been associated to the FIDO activities was still present at the south-eastern border of the site during the 2017 visit.



Picture 8 Outlets of the two fuel pipes at Jentex tank farm

3.7.1.4 Fuel pipes (Source S3)

During the current site visit the outlets of two fuel pipes that are believed to be connected to a BFI onsite or/and to the runway were found at the Jentex tank farm located in the direct south-eastern vicinity of the site. According to the Jentex site representative the pipes were believed to be connected at the Jentex site to four large ASTs (capacity unknown) and possibly a pumping station that have now been removed. RPS attempted to trace the fuel pipes from the Jentex site to the BFI in the north-east of the Manston airfield but reported that they did not have the right equipment to do so.



Picture 9 AST believed to be associated to the FIDO operations

3.7.1.5 Waste oil tanks (Source S4)

Recent observations, Amec Foster Wheeler site walkover, 2017

Two waste oil tanks in bunds were found at the front (north) of the KIA jet support building. A strong hydrocarbon odour and staining on and in the bund were observed. There was also a waste oil container located on a concrete pad at the former aviation training centre in the south-eastern part of the site. Some staining/damp and a hydrocarbon odour were observed.



Picture 10 Waste oil tanks at the front of the Kia jet support



Picture 11 Staining on the bund of the waste oil tanks (Kia jet support)



Picture 12 Staining within the bund of the waste oil tanks (Kia jet support)



Picture 13 Waste oil container at the aviation training centre



Picture 14 Staining/damp observed on the concrete pad around the container

3.7.1.6 Jentex tank farm (Source S5)

The site is stepped into three levels with a road intercepting the different levels. It is partly covered with hardstanding, and partly with grassed areas. Some cracks were noticed in the asphalted areas and road. Five ASTs were observed during Amec Foster Wheeler site visit – four of them were located in the western part of the site, the other one in the central southern part. They were located in bunded areas. Staining and a slight hydrocarbon odour were noticed. There were two areas with demolished buildings. One where concrete foundations and potential locations of removed ASTs with staining were visible. The other one is located in a grassed area with some constructions debris remaining and made ground visible. The outlets of two fuel pipes were visible in that grassed area – see section 3.7.1.4. According to a Jentex site representative four large ASTs (but capacity unknown) and possibly a pumping station used to be at the locations of the demolished buildings. Two fuelling points for the trucks are located in the vicinity of the tanks with no leak but staining and a slight hydrocarbon odour noticed.



Picture 15 Two ASTs within a bunded area in the western part of the site (view towards east)



Picture 16 Two ASTs within a bunded area in the western part of the site (view towards south-east)



Picture 17 One AST and a fuelling point located in the southern part of the site (view towards south)



Picture 18 Fuelling point in the western part of the site (view towards east)



Picture 19 Area of demolished building with concrete foundations and potential locations of removed ASTs with staining (view towards north)



Picture 20 Area of demolished building with grass and made ground (view towards west)



Picture 21 Area of demolished building with grass and remaining construction debris (view towards southeast)

3.7.2 Firefighting

3.7.2.1 Use and storage of Pyrene runway foam (Source S6)

The Gibb report indicates a Pyrene foamer was used to cushion aircraft during emergency landings which operated between 1964 and 1980. The equipment was operated from mobile tankers which were held on standby adjacent to Hangar 3. The composition of this foam is understood to contain carbon tetrachloride¹¹

No clear staining was observed along the runway during the February 2017 site visit and the area of Hangar could not be accessed and inspected.

3.7.2.2 Burning grounds (Source S7)

One small burning ground area was identified to the east of the fire station (Bldg. 869) with no drainage interceptor but on an area with a hardstanding cover in 1998.

This burning area was still present in the February 2017 visit but did not seem to be still in use. It comprises a pile of ashes partly contained in a heavily corroded caged trolley. It is located on an asphalted area but extends towards a grassed area. There is no bund.



Picture 22 Burning area located at the fire crash department

3.7.3 Maintenance activities

3.7.3.1 Motor Transport (MT) workshops (former and current) (Source S8)

During the Gibb site visit the former MT workshop had become the history club. The current MT workshop was in used for vehicle servicing & maintenance. Current and historical use of oils, petrol and lubricants were reported by Gibb Environmental⁸. Although good practices were observed to be in operation during the 1998 site visit, Gibb Environmental reported that there was a potential for historical bad practices and spills.

Neither workshop area could be accessed for inspection during the current site visit in February 2017. Both workshops area are located in areas covered with hardstanding. The former MT workshop is now part of the RAF Manston museum that was closed at the time of the visit. The current MT workshop belongs to and is operated by the MOD. Storage of tires and wooden pallets outside of the building along the fence was observed during the visit.

3.7.3.2 Storage of potentially hazardous materials at engineering workshops

Building 450 was reported by Gibb Environmental to be a storage for various organic and inorganic chemicals. The area was found clean during site Gibb's site visit in 1998. Hazardous materials were observed secured in cabinets, with warning labels present.

During the current site visit an engineering workshops, bldg. 450 and two buildings/shelters that did not seem in use were identified, as well as an active lorry haulage company with a truck park are located within the site near the western boundary. They could not be accessed for inspection. The engineering workshop and bldg. 450 are connected. A very corroded container with an unidentified bottle were observed at the back (north)

of bldg. 450. Fly tipping and storage of waste, e.g. wooden pallets, barrels, were noticed in front of the shelters and at the lorry haulage company.



Picture 23 Engineering workshops connected to bldg. 450 (green building)



Picture 24 Corroded container at the back of bldg. 450



Picture 25 shelter with waste storage at the front



Picture 26 Active lorry haulage company with storage of tires and barrels

3.7.3.3 Cleaning of aircrafts/helicopters (Source S9)

Historical activities associated with Hanger 3 (Bldg. 253): the area was used to clean helicopters and store pyrene runway foam See. 3.7.2.1). In addition the KIA Jet Support building area was used to clean aircraft, and also to carry out aircraft and vehicle servicing.

During the current site visit in February 2017, the whole area of Hangar 3 was fenced and could not be accessed. The KIA Jet Support building and the aviation training centre buildings also could not be inspected.

3.7.4 Use and storage of de-icing chemicals (Source S10)

Significant quantities of de-icing chemicals were stored in the MT area. It was not known whether specific containment measures were in place.

3.7.5 Areas of Infill

Made ground (Source S11) is potentially present across part of the site as discussed in section 3.2. In addition infilled chalk pits (Source S12) are present on the site in filled in the early 1900s (see section 3.5).

3.7.6 Waste disposal areas

3.7.6.1 Waste storage areas (Source S13)

Two waste storage areas including one on soft ground were found at the KIA jet support building during the 2017 site visit. The waste storage area located north east of the KIA building comprised half empty or empty drums of white spirit, oil, some unlabelled and rotten barrels, as well as pieces of scrap. The waste storage area located at the back the KIA building to the south comprised different containers, a canister, some rotten drums, pieces of scrap, concrete blocks, tubing, blocks of tarmac, pieces of wooden pallets and plastic. Cracks were noticed in the hardstanding cover.

A waste storage area is located on the western boundary of the site. It was not included in the site visit carried out in February 2017. Based on the Envirocheck report, the area was not constructed until 1964 when a building is first shown on the maps. The built area seems to have extended since and is labelled as 'shelter' on the 1993 map. Based on an aerial map dated August 2016 (Google maps 2017), the area is partly paved with concrete pads and partly unpaved. It comprises cars, vans, caravans and a wooden cabin. Wood pallets, tires, drums, mattresses and a skip containing pieces of scrap and wood seem to be mainly stored on the paved areas. The unpaved area, which likely corresponds to the area of the former shelter, contains construction debris, fly tipping and potentially made ground.

3.7.6.2 Potential materials disposed of at air-raid shelter (Source S14)

The Phase 1 study reports by Gibb indicate that a number of air-raid shelters may have been backfilled with other materials than foam concrete. Only one shelter was identified and located by Gibb. This was located in the vicinity of the Gilder School (Building (Bldg.) 904) and may have been used in the past to dispose of equipment such as old motor cycles and aircrafts.

From the site visit in 2017 the air raid shelter near the Glider School is no longer present to the east of the site. Only an asphalted area with a concrete border and an embankment are present.

3.7.6.3 Acid pits infilled with unknown materials (Source S15)

According to the onsite maintenance manager in 1998 and an historical plan dating from 1965, two excavated pits were used in the past to dispose of waste battery acids. The two pits were located near the History Club (Bldg. 91) and within the KIA car park (Bldg. 568) and have since been infilled with unknown material.

From the current visit, there is now a road and a pavement at the emplacement of the historical acid pit to the east of the site, near the KIA, car park mentioned in GIBB Environmental report. There is a reworked area

covered with grass at the location of the historical acid pit at the former MT building (now the RAF Manston museum).

3.7.7 Sub-stations (Source S16)

Two onsite intake substations and 10 transformers were identified as potentially containing polychlorinated biphenyls (PCBs), but no visual evidence of leakage were noticed during the visit. The EWC did not hold any records of analysis.

During the February 2017 site walkover all the 12 substations and transformers identified by Gibb were inspected. None of these transformers and substations were noted to have staining indicating potential leakages.

Staining/damp was observed around a transformer that was not listed in Gibb Environmental report along the southwestern border of the site in an area that currently belongs to the MOD lies inside the current boundary.

3.7.8 Radiological sources

A report from the DERA Radiation Protection Services included within the Gibb report suggested that as with many RAF sites, radioactive materials, and particularly radium luminising material, may have been present in equipment buried at the site and may have been disposed of in waste pits or areas where ash was disposed of. Gibb report anecdotal evidence from the EWC may have been disposed of in the air-raid shelters, notably in the vicinity of the Glider Club (Bldg. 904) although there was no documentary evidence to support this.

3.7.9 Other historic activities identified by Gibb Environmental in 1998

3.7.9.1 Asbestos in buildings

The asbestos register reviewed by Gibb in 1998 identified twelve locations/products either containing or suspect of containing asbestos. The material was listed as being in good to fair condition.

3.7.9.2 Site drainage

Gibb indicated that no oil/fuel interceptors were found to be installed along the airfield drainage system, which was located along the outer lengths of the runway and flowing in an easterly direction. The system discharge is into Pegwell Bay although no discharge consent was held for the site.

A site drainage investigation was performed by RPS during the February 2017 site walkover.

3.7.10 Off-site

3.7.10.1 1996 Diesel spill (Source S17)

Gibb report⁸ that a diesel spill occurred in August 1996 due to a leaking tank located to the north of the Domestic quarters of RAF Manston, approximately 500m outside of the site's current northern boundary. Gibb report that the tank was removed and visually impacted soils were excavated and disposed of off-site. However no laboratory analysis confirming the remediation were available.

The Gibb report refer to the four bunded tanks at bldgs. 129/1 (1 tank with volume 22800L) and 129/2 *(3 tanks with volume 17550L each) located outside of the current site boundary and is now a construction site where houses are being built. The construction site could not be entered for inspection.



Picture 27 Assumed location of bldgs. 129/1 and 129/2 - offsite

3.7.10.2 Car garage and fuel stations (Source S18)

The petrol station that was located at Garage Drome car repairs at the direct north-western vicinity of the site is closed. It is understood that the tanks have been removed and the area remediated. From the 2017 visit, the garage is still operating as car repairs.

The car garage that was located at the direct eastern border, outside of the site is no longer present in 2017. The area is fenced. No tanks were noticed from outside of the area.

3.7.10.3 Historical landfills (Source S19)

Landfill sites, Alland Grange and Sunny Bank landfills, within 300m of the site, licensed to take inert wastes mixed with slow degradable and putrescible waste. Possibility that landfill gases and leachate may migrate from these sites. In addition the Envirocheck report indicates there is another landfill to the north on Manston Road. This was an inert landfill present from 1976 to 1987.

4. Generic Qualitative Risk Assessment

4.1 Conceptual - Model

The Conceptual - Model (C-M) and potential pollutant linkages are defined below based on the desk study review of publicly available information collated in the previous sections. The C-M is carried out in line with CLR11 and is based on the proposed commercial land use. The C-M will provide an assessment of the site's potential contamination status and identify the presence of potentially significant contaminant linkages that require further consideration.

Potential contamination (Sources)

A review of the site's history and environmental setting has identified potential contaminant sources on the site and the surrounding area, as summarised below in Table 4.1. The list of contaminants has been established through a review of the relevant Department of Environment (DoE) Industry Profiles, in addition to Amec Foster Wheeler's experience of contaminated land assessment.

Table 4.1 Historical, Current and Future contaminant sources

No.	Source and Comment	Likely Contaminants	Location	Source to be considered further?
			On-site	
Fuel sto	orage and use (S1)			
1	On-site bulk fuel installations, gas oil tank and petrol station	Total petroleum hydrocarbons (TPH), aromatic hydrocarbons incl. benzene, toluene, ethylbenzene, xylenes (BTEX)	On-site	Yes - petrol station not operating. Not known whether potential associated USTs still present.
2	Burning of petrol along the runway	TPH, BTEX, polycyclic aromatic hydrocarbons (PAHs)	On-site	Yes
3	Fuel pipes	ТРН, ВТЕХ,	On-site – location unknown, potentially connected to BFI to the north east and/or to the runway off-site – outlets found at Jentex tank farm	Yes
4	Waste oil installations	TPH, BTEX, PAHs, heavy metals	On-site – at KIA jet support building and at former aviation training centre	Yes -
5	Jentex tank farm	TPH, BTEX, PAHs	Off-site in direct southern vicinity of site	Yes – intrusive investigation carried out in 2015 ^{12,13} found shallow soils contaminated with PAHs, TPH, lead and asbestos. No contamination was found to be extending to depth.
Fire figh	nting			,
6	Use and storage of Pyrene runway foam	Tetrachloromethane	On-site	yes
7	Burning ground area and firefighting areas	TPH, BTEX, PAHs, heavy metals, PFOS, radium	On-site – fire crash department	Yes – localised area on hardstanding, but no interceptor or bund
Mainten	ance activities			
8	MT workshops (former and current)	TPH, BTEX, PAHs, heavy metals, chlorinated solvents	On-site – former MT workshop is now the RAF Manston History museum	Yes
9	cleaning of aircrafts/ helicopters	TPH, BTEX, PAHs, heavy metals,	On-site – at KIA jet support building and at hangar 3	Yes

Da Jalaan				
De-icing	Llas and starage	Chronic	On-site	Yes
10	Use and storage of de-icing chemicals	Glycols	On-site	res
Waste dis	posal and infill			
11	Made Ground associated with former	Inorganics including heavy metals, pH, PAHs and TPH	Potentially across the whole site ²⁰	Yes
	development	Asbestos	Potentially across the whole site ²⁰	Yes
		Soil gases (methane and carbon dioxide)	Potentially across the whole site ²⁰	Yes
12	Infilled chalk pits	Soil gas	On-site and off-site	No – pits were small and potentially infilled in early 1900s so soil gas considered unlikely.
		Heavy metals, pH, PAHs, TPH and aromatic hydrocarbons incl. BTEX	On-site	Yes
		Asbestos	On-site	No - pits were potentially infilled in early 1900s so considered unlikely
13	Waste storage areas	TPH, solvents, emulsifiers, BTEX, phenols, PAHs, heavy metals, cyanides, asbestos	On-site – 2 at KIA jet support building and 1 on the western site boundary	Yes - The waste storage area located north east of the KIA building comprised half empty or empty drums of white spirit, oil, some unlabelled and rotten barrels, scrap. The waste storage area located at the back the KIA building to the south comprised different containers, a canister, some rotten drums, pieces of scrap, concrete blocks, tubing, blocks of tarmac, pieces of wooden pallets and plastic. Cracks were noticed in the hardstanding cover
14	Potential materials disposed of at air-raid shelter	Cyanides, asbestos, heavy metals, radium	On-site	No. These are structures which may be been infilled (see made ground)
15	Acid pits infilled with unknown materials	Acids, TPH, BTEX, PAHs, heavy metals, cyanides, asbestos, radium	On-site – one assumed to be in front of RAF Manston History museum, one assumed to be east of passenger terminal in area where asphalted pavement and road	Yes
Sub-statio	ns			
16	2 intake substations and 10 transformers	Polychlorinated Biphenyls (PCBs), TPH	On-site – across the site	Yes – as sub-station erected before 1986 (when PCB were banned). Staining/damp was observed around a transformer located along the southwestern border of the site.
Off-site				
17	1996 diesel spill	ТРН, ВТЕХ	Off-site – bunded area north of domestic quarters of RAF Manston	No –spill contained and cleared. Visually contaminated soils were removed however no verification testing was carried out ⁸
18	Car garages and petrol stations	TPH, PAHs, heavy metals	2 car garages Off-site at direct eastern and north-western vicinity	No – Garage to the east is no longer present and not

 $^{^{\}rm 20}$ Assumption based on maps, site use and site history.

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			known whether potential tanks still present and whether remediation carried out. It is understood that petrol station at garage to the north-west has been removed and decommissioned, but garage still operating as motor repairs.
19	Off-site Landfills	Soil Gas	Yes - buildings proposed within 250m of the landfill off-site structures

Potential receptors and exposure pathways

The potential receptors and associated pathways that have been identified through this desk based assessment are shown in Table 4.2.

Table 4.2 Pathways and Receptors

Receptors	Potential pathways
Future site users (commercial users, personnel on-site, passengers)	Dermal contact, ingestion and inhalation of dusts, vapours, fibres and accumulated gases, radiation from potential radioactive contamination
Buildings and Services	Direct contact, ingress and accumulation of soil gas
Controlled Waters: Coastal water (Pegwell Bay and Sandwich Bay located 900m to the site)	Surface water runoff, baseflow migration. The site drainage ultimately discharges to Pegwell Bay.
Controlled Waters: Principal Aquifer in bedrock	Leaching, migration

4.2 Exclusions from Risk Assessment

Redevelopment workers

The CM does not consider risks to construction/site maintenance workers on the basis that risks to workers will be dealt with under the Health and Safety at Work Act (1974) and regulations made under the act. Site-specific contamination data obtained from all site investigations should be included in the pre-construction information (requirement of Construction Design and management Regulations 2015) for the proposed works, to enable any contractors to address potential risk from contamination as necessary in their risk assessments and method statements. Moreover, as the exact details of the method adopted are not currently known, it is not considered appropriate to provide a wide ranging and speculative risk assessment for redevelopment workers.

The CM focusses on land contamination issues. Geotechnical constraints including sulphate and ammonia attack of concrete are not assessed as part of the assessment.

Unexploded Ordnance (UXO)

A Preliminary UXO Risk Assessment has been undertaken for the site which indicates a medium to high probability of UXO encounter on the site (probability rating of 4, on a scale up to 5). According to the Land Quality Assessment Phase One from GIBB Environmental, EOD clearance surveys were performed by the MOD at the site in the past, however grassed areas surrounding the runway, and notably two parcels located south east of the runway, and hardstanding covered areas were usually not subject to a EOD search and clearance. As such a detailed UXO threat & risk assessment should be carried out prior to any intrusive works.

As the requirement for the additional assessment has already been confirmed, the potential risk for encountering UXO has been excluded from the risk assessment.

4.3 Preliminary risk assessment

In order for land contamination risk to be realised, a 'contaminant linkage' must exist²¹. A contaminant linkage requires the presence of:

- Source of contamination;
- Receptor capable of being harmed; and
- ▶ Pathway capable of exposing a receptor to the contaminant.

A preliminary risk assessment has been undertaken for these potential source-pathway-receptor linkages to identify potentially unacceptable risks on a qualitative basis. Risk is therefore based on a consideration of both:

- ► The likelihood of an event (probability takes into account both the presence of the hazard and receptor and the integrity of the pathway); and
- ► The severity of the potential consequence (takes into account both the potential severity of the hazard and the sensitivity of the receptor).

Further information on the risk assessment methodology used is given in Appendix C. The method of dealing with identified risks and the level of significance of those risks will be a function of site use. The risk assessment is based on future proposed land use (commercial).

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²¹ Environment Agency (2004) Model Procedures for the Management of Land Contamination – Contaminated Land Report 11

Table 4.3 Preliminary Risk Assessment – Risks to future site users and environment from current/historic sources

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
1	On-site bulk fuel installations, gas oil tank and petrol station		location of bldg. 11 the installation has works have been of known whether the and the airport cea	12 to the west during been dismantled he carried out. Over great USTs are still presented operating in 20	g the site walkover. No lowever it is not known bund pipes and pumps sent and if any remedia 014. Gas oil tank locate	cular area covered with made ground was vis evidence of any buildings or tanks could be f whether the USTs have been removed and if were present at the BFI location of bldg. 819 tion works have been carried out. Military act d at the back of the KIA jet support building, v Ts at aviation training centre.	ound. It is likely that any remediation to the east. It is not vities ended in 1999
		Total petroleum hydrocarbons (TPH), aromatic hydrocarbons incl. benzene, toluene, ethylbenzene, xylenes (BTEX)	Future site users (commercial users, personnel and passengers)	Direct contact, ingestion of reworked ground	Health Hazard [Medium]	Low Likelihood Potential for exposure to shallow soils in non-paved areas. BFI located at bldg. 819 to the east is in a fenced landscaped area. Commercial users have typically limited contact with landscaped areas, decreasing the potential for the user to come into contact with any potential contaminants. Most recent development plans (dated 12/02/2018) suggest that there will potentially be commercial buildings at the BFI location of bldg. 819.	Moderate/Low
			Future site users (commercial users, personnel and passengers)	Ingress to buildings and accumulation, inhalation of gas	Health hazard [Medium]	Low likelihood It is not known whether the USTs are still present and if any remediation works have been carried out. Most recent development plans (dated 12/02/2018) suggest that there will potentially be commercial buildings at the BFI location of bldg. 819.	Moderate/Low
			Building	Buildings and services	Ingress to buildings and accumulation [Medium]	Low likelihood It is not known whether the USTs are still present and if any remediation works have been carried out. Most recent development plans (dated 12/02/2018) suggest that there will potentially be commercial buildings at the BFI location of bldg. 819.	Moderate/Low
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Likely Leaching potential via baseflow is unknown. However, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay	Moderate

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
						when the Lord of the Manor abstraction is not in use.	
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Likely Potential for leaching is unknown and migration could have occurred to underlying Principal Aquifer within the silts. Former aviation training centre is located in SPZ2. Both BFIs are located in SPZ3. Four abstractions for groundwater are present within 1km and the site is located in a source protection zone.	Moderate
2	Burning of petrol along the runway	TPH, BTEX, polycyclic aromatic hydrocarbons (PAHs)	Future site users (commercial users, personnel and passengers)	Direct contact, ingestion of reworked ground	Health Hazard [Medium]	Unlikely Potential for exposure to shallow soils in non-paved areas. However future development plan suggests that the central part of the site, located between the runway and the Manston road, will be covered with buildings and hardstanding.	Low
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Likely Leaching potential via baseflow is unknown. However, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use.	Moderate
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Likely Potential for leaching is unknown and migration could have occurred to underlying Principal Aquifer within the silts. Runway is located in SPZ2. Four abstractions for groundwater are present within 1km and the site is located in a source protection zone.	Moderate
3	Fuel pipes	ТРН, ВТЕХ	Onsite location unk	nown, potentially c	onnected to BFI to the	north east and/or to the runway	
			Future site users (commercial users, personnel and passengers)	Direct contact, ingestion of reworked ground	Health Hazard [Medium]	Low likelihood Potential for exposure to shallow soils in non-paved areas. Future development plan suggests that most of the central	Moderate/Low

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
						part of the site, located between the runway and the Manston road, will be covered with buildings and hardstanding. BFI located at bldg. 819 to the east is in a fenced landscaped area and most recent development plans (dated 12/02/2018) suggest that there will potentially be commercial buildings at the BFI location of bldg. 819. Commercial users have typically limited contact with landscaped areas, decreasing the potential for the user to come into contact with any potential contaminants.	
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Likely Leaching potential via baseflow is unknown. However, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use.	Moderate
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Likely Potential for leaching is unknown and migration could have occurred to underlying Principal Aquifer within the silts. Area located between the runway and the Manston road is located in SPZ1 to 3. Area located north and east of Manston road is located in SPZ3. Four abstractions for groundwater are present within 1km and the site is located in a source protection zone.	Moderate
4	Waste oil tanks	TPH, BTEX, PAHs, heavy metals	on-site – at KIA jet	support building a	nd at former aviation tra	aining centre	
			Future site users (commercial users, personnel and passengers)	Direct contact, ingestion, inhalation	Health Hazard [Medium]	Low likelihood Future development plan suggests that former aviation training centre will remain a passenger facility. Most recent development plans (dated 12/02/2018) suggest that there will potentially be parking areas with hardstanding at the location of the KIA jet support building. Both sites are mainly covered with hardstanding limiting the potential for the	Moderate/low

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
						users to come into direct contact with any potential contaminants in soil. However there is a potential for inhalation pathway.	
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Likely Leaching potential via baseflow is unknown. However, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use.	Moderate
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Likely Potential for leaching is unknown and migration could have occurred to underlying Principal Aquifer within the silts. Former aviation training centre is located in SPZ2. KIA jet support building and Hangar 3 are in SPZ3.	Moderate
5	Jentex tank farm	TPH, BTEX, PAHs	13 found shallow so	ils contaminated wi pth. BUT Groundwa	ith PAHs, TPH, lead an	trusive investigation carried out in 2015 ¹²¹³ and asbestos. No contamination was found to uring investigations and investigation under	
			Future site users (commercial users, personnel and passengers)	Leaks, spills on to land, migration within groundwater onto site and accumulation and inhalation of vapours	Health hazard, [medium]	Unlikely Potential for leaching is unknown and migration could have occurred to underlying Principal Aquifer within the silts. However groundwater flow anticipated to be to the south-east and so site up gradient from any potential migration.	Low
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Likely Leaching potential via baseflow is unknown. However, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay	Moderate

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
						when the Lord of the Manor abstraction is not in use.	
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	High likelihood Potential for leaching is unknown and migration could have occurred to underlying Principal Aquifer within the silts. Groundwater not encountered during site investigations. Four abstractions for groundwater are present within 1km and the area is located in a source protection zone.	High
6	Use and storage of Pyrene runway foam	Tetrachloromethane	Used along runway	and stored at Han	gar 3 west of site.		
			Future site users (commercial users, personnel and passengers)	Direct contact, ingestion of reworked ground	Health Hazard [Medium]	Low Likelihood Future development plan suggest that existing buildings within area of Hangar 3 will be demolished to allow construction of landside and airside infrastructures with some hardstanding and landscaped areas. Commercial users have typically limited contact with landscaped areas, decreasing the potential for the user to come into contact with any potential contaminants.	Moderate/Low
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Likely Leaching potential via baseflow is unknown. Tetrachloromethane has been detect at the lord of the Manor Abstraction but at concentrations below the drinking water standard and Environmental Quality standards. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use.	Moderate

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Likely Potential for leaching is unknown and migration could have occurred to underlying Principal Aquifer within the silts. Tetrachloromethane has been detect at the lord of the Manor Abstraction but at concentrations below the drinking water standards Hangar 3 is located in SPZ3. The runway is located in SPZ2.	Moderate
7	Burning ground area and firefighting areas	TPH, BTEX, PAHs, heavy metals, PFOS, radium	Burning area locali bund	sed at the fire cras	h department on hards	tanding cover, but with no interceptor or	
			Future site users (commercial users, personnel and passengers)	Direct contact, ingestion, inhalation	Health Hazard [Medium]	Low Likelihood Potential for exposure to shallow soils in non-paved areas. However future development plan suggests that airside infrastructures will be built in the area of the fire crash department with the fire crash department remaining.	Moderate/Low
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Low likelihood Localised area on hardstanding. Long- chain TPH and PAHs have low mobility.	Moderate/Low
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Low likelihood Localised area on hardstanding. Long- chain TPH and PAHs have low mobility. Area located in SPZ2 and SPZ3.	Moderate/low
8	MT workshops (former and current)	TPH, BTEX, PAHs, heavy metals, chlorinated solvents				um. Current MT workshop located in a ated in areas covered with hardstanding.	
			Future site users (commercial users, personnel and passengers)	Direct contact, ingestion, inhalation	Health Hazard [Medium]	Low Likelihood Future development plan suggests that existing buildings within the area of the current workshop will be demolished to allow construction of landside and airside infrastructures with some hardstanding and landscaped areas. Commercial users have typically limited contact with landscaped areas, decreasing the	Moderate/Low

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
						potential for the user to come into contact with any potential contaminants.	
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Low likelihood Leaching potential via baseflow is unknown. PCE was detected most frequently at concentrations above the combined DWS (SWS 2001 to 2015). Concentrations of chlorinated solvents have been declining since 2002. However, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use. However areas covered with hardstanding.	Moderate/Low
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Low likelihood Potential for leaching is unknown and migration could have occurred to underlying Principal Aquifer within the silts. PCE was detected most frequently at concentrations above the combined DWS (SWS 2001 to 2015). Concentrations of chlorinated solvents have been declining since 2002.However areas covered with hardstanding.	Moderate/low
9	Cleaning of aircrafts / helicopters	TPH, BTEX, PAHs, heavy metals,	Cleaning at KIA jet drainage.	support building, fo	ormer aviation centre a	nd Hangar 3, Area is on hardstanding with	
			Future site users (commercial users, personnel and passengers)	Direct contact, ingestion, inhalation	Health Hazard [Medium]	Low likelihood Future development plan suggests that former aviation training centre will remain a passenger facility. Most recent development plans (dated 12/02/2018) suggest that there will be parking areas with hardstanding at the location of the KIA jet support building. Both sites are	Moderate/low

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
						mainly covered with hardstanding limiting the potential for the users to come into direct contact with any potential contaminants in soil. However there is a potential for inhalation pathway. Existing buildings within the area of the Hangar 3 will be demolished to allow construction of landside and airside infrastructures with some hardstanding and landscaped areas. Commercial users have typically limited contact with landscaped areas, decreasing the potential for the user to come into contact with any potential contaminants.	
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Likely Leaching potential via baseflow is unknown. However, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use.	Moderate/low
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Likely Potential for leaching is unknown and migration could have occurred to underlying Principal Aquifer within the silts. Former aviation training centre is located in SPZ2. KIA jet support building and Hangar 3 are in SPZ3.	Moderate/low
10	Use and storage of de-icing chemicals	Glycols	Future site users (commercial users, personnel and passengers)	Direct contact, ingestion, inhalation	Health Hazard [Mild]	Unlikely Potential for exposure to shallow soils in non-paved areas. However commercial users have typically limited contact with landscaped areas, decreasing the potential for the user to come into contact with any potential contaminants and glycols have a high solubility and degradation is very likely.	Very low

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Low likelihood Leaching potential via baseflow is unknown. However, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use. However glycols have a high solubility and degradation is very likely.	low
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Mild]	Low likelihood Potential for leaching is unknown and migration could have occurred to underlying Principal Aquifer within the silts. However glycols have a high solubility and degradation is very likely.	Low
11	On-site Made Ground associated with former development	Inorganics including heavy metals, pH, PAHs and TPH	Future site users (commercial users, personnel and passengers)	Direct contact, inhalation or ingestion of reworked ground.	Health Hazard [Medium]	Low Likelihood Made Ground is recorded in the centre of the site on the BGS logs, however likely to be present in limited quantities associated with past development. Most recent development plans (dated 12/02/2018) suggest that the central part of the site, located between the runway and the Manston road, and the part located north of the Manston road, will be covered with buildings and hardstanding with some remaining green spaces. However commercial users are typically limited to contact with landscaped areas, decreasing the potential for the user to come into contact with any potential contaminants.	Moderate/Low
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Low likelihood Made Ground is recorded in the centre of the site on the BGS logs, however likely to be present in limited quantities associated with past development. Leaching potential via baseflow is unknown, however, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the	Moderate/Low

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
						groundwater. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use. However metals, PAHs and long-chain hydrocarbons generally have low mobility in soil and lighter organics are likely to have degraded.	
		Asbestos	Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Likely Made Ground is recorded in the centre of the site on the BGS logs, however likely to be present in limited quantities associated with past development. Future development plan suggests that the central part of the site, located between the runway and the Manston road, will be covered with buildings and hardstanding and that green spaces would only remain in the northern part of the site, which would reduce the potential for migration to occur to underlying Principal Aquifer. Four abstractions for groundwater are present within 1km of the site and the site is in source protection zone. However metals, PAHs and long-chain hydrocarbons generally have low mobility in soil limiting the potential.	Moderate
			Future site users (commercial users, personnel and passengers)	Inhalation of fibres	Asbestosis [Severe]	Unlikely Made Ground is recorded in the centre, east and north of the site on the BGS logs, however likely to be present in limited quantities across the site associated with past development. No analysis of Made Ground is known to have been undertaken. Potential for exposure to shallow soils in non-paved areas. Most recent development plans (dated 12/02/2018) suggest that most of the central part of the site, located between the runway and the Manston road, and the part located north of the Manston road, will be covered with buildings and hardstanding with some remaining green spaces. However commercial users are typically limited in	Moderate/low

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
						their contact with landscaped areas, and hence have limited potential to disturb and mobilise asbestos.	
		Methane and carbon dioxide ground gas	Future site users (commercial users, personnel and passengers)	Ingress to buildings and accumulation, inhalation of gas	Health hazard, explosion, asphyxiate [Severe]	Low Likelihood Made Ground is recorded in the centre of the site on the BGS logs, however likely to be present in limited quantities across the site associated with past development. Potential for soil gas generation from Made Ground is unknown but likely to be limited as significant deposits are not anticipated (excluding infilled chalk pit areas). No gas monitoring data available for the site. Most recent development plans (dated 12/02/2018) suggest that most of the central part of the site, located between the runway and the Manston road, and the part located north of the Manston road, will be covered with buildings and hardstanding with some remaining green spaces.	Moderate
		Methane and carbon dioxide ground gas	Buildings and services	Ingress to buildings and accumulation	Explosion [Severe]	Low Likelihood Made Ground is recorded in the centre of the site on the BGS logs, however likely to be present in limited quantities across the site associated with past development. Potential for soil gas generation from Made Ground is unknown but likely to be limited as significant deposits are not anticipated (excluding infilled chalk pit areas). No gas monitoring data is available for the site.	Moderate

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance		
12	On-site infilled chalk pits	Inorganics including heavy metals, pH, PAHs, TPH and aromatic hydrocarbons incl. BTEX		Pits were small and potentially infilled in early 1900s so potential for soil gas considered unlikely					
			Future site users (commercial users: personnel and passengers)	Direct contact, inhalation or ingestion of reworked ground	Health Hazard [Medium]]	Low Likelihood Potential for exposure to shallow soils in non-paved areas. Most recent development plans (dated 12/02/2018) suggest that most of the central part of the site, located between the runway and the Manston road, and the part located north of the Manston road, will be covered with buildings and hardstanding with some remaining green spaces. However commercial users are typically limited to contact with landscaped areas, decreasing the potential for the user to come into contact with any potential contaminants.	Moderate/low		
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Low likelihood Leaching potential via baseflow is unknown. However, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use.	Moderate/low		
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Likely Potential for leaching is unknown and migration could have occurred to underlying Principal Aquifer within the silts. Four abstractions for groundwater are present within 1km and the site is located in a source protection zone. Most recent development plans (dated 12/02/2018) suggest that most of the central part of the site, located between the runway and the Manston road, and the part located north of the Manston road, will be covered with buildings and	Moderate/low		

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
						hardstanding with some remaining green spaces. That would decrease potential for migration to occur to underlying Principal Aquifer. Four abstractions for groundwater are present within 1km of the site and the site is in source protection zone. However metals, PAHs and long-chain hydrocarbons generally have low mobility in soil limiting the potential.	
13	Waste storage areas	TPH, solvents, emulsifiers, BTEX, phenols, PAHs, heavy metals, cyanides, asbestos	white spirit, oil, sor the KIA building to scrap, concrete blo noticed in the hard	me unlabelled and the south comprise ocks, tubing, blocks Istanding cover. An ans, caravans, a wo	rotten barrels, scrap. The different containers, sof tarmac, pieces of worther waste storage arooden cabin, wood palle	g comprised half empty or empty drums of he waste storage area located at the back a canister, some rotten drums, pieces of coden pallets and plastic. Cracks were ea is located on the western site boundary. It ets, tires, drums, mattresses and a skip	
			Future site users (commercial users, personnel and passengers)	Direct contact, inhalation or ingestion of reworked ground	Health Hazard [Medium]	Low likelihood Most recent development plans (dated 12/02/2018) suggest that there will be parking areas with hardstanding at the location of the KIA jet support building. One of the KIA waste storage areas is mainly covered with hardstanding, the other KIA one is within a fenced perimeter, limiting the potential for the users to come into direct contact with any potential contaminants in soil. The waste storage area on the western site border would be used for the junction improvement at the airport.	Moderate/low
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Likely Leaching potential via baseflow is unknown, however, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use. One of the KIA waste storage areas is covered with hardstanding but cracks were noticed. PCE was detected most frequently at concentrations above the combined DWS (SWS 2001 to 2015). Concentrations of	Moderate

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance	
						chlorinated solvents have been declining since 2002.		
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Likely There is potential for migration to occur to underlying Principal Aquifer. One of the KIA waste storage areas is covered with hardstanding but cracks were noticed. The KIA jet support building is located in SPZ3. PCE was detected most frequently at concentrations above the combined DWS (SWS 2001 to 2015). Concentrations of chlorinated solvents have been declining since 2002.	Moderate	
15	Acid pits infilled with unknown materials	Acids, TPH, BTEX, PAHs, heavy metals, cyanides, asbestos, radium		one assumed to have been be in front of RAF Manston History in a landscaped area, one assumed to be east of passenger terminal where there are asphalted pavement and road				
			Future site users (commercial users, personnel and passengers)	Direct contact, ingestion, inhalation	Health Hazard [Medium]	Unlikely Commercial users have typically limited contact with landscaped areas, decreasing the potential for the user to come into contact with any potential contaminants	Low	
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Low likelihood Leaching potential via baseflow is unknown, however, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use. Chalk likely to act as buffer for acid	Moderate/Low	

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Low Likelihood Potential for leaching is unknown and migration could have occurred to underlying Principal Aquifer within the silts. Both sites are located in SPZ3. Chalk likely to act as buffer for acid	Moderate/low
16	On-site sub- stations	Polychlorinated Biphenyls (PCBs), TPH		observed around		eaking during the site walkover. ngs to the MOD and is located along the	
			Future site users (commercial users, personnel and passengers)	Direct contact, inhalation or ingestion of reworked ground	Health Hazard [Medium]	Low Likelihood Future development plan suggests that green spaces would remain in the area were staining/damp was observed, however commercial users are typically limited to contact with landscaped areas, decreasing the potential for the user to come into contact with the potential contaminant.	Moderate/low
			Controlled Waters: Coastal Water	Leaching, baseflow migration	Coastal Water Pollution [Medium]	Low likelihood Leaching potential via baseflow is unknown, however, it is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay when the Lord of the Manor abstraction is not in use. However PCBs generally have low aqueous mobility in soil limiting the potential ad spill likely to be localised	Moderate/Low
			Controlled Waters: Principal Aquifer	Leaching, migration	Groundwater Pollution [Medium]	Low Likelihood There is potential for migration to occur to underlying Principal Aquifer. Four abstractions for groundwater are present within 1km of the site and the site is in source protection zone. However PCBs generally have low aqueous mobility in soil limiting the potential ad spill likely to be localised	Moderate/low

No.	Potential Source	Potential Pollutant	Potential Receptors	Potential Pathways to Receptors	Associated Hazard [severity]	Likelihood of Occurrence	Risk/ Significance
19	Off-site Landfills	Soil Gas	landscaped areas received inert wast	Most recent development plans (dated 12/02/2018) suggest that there will be commercial buildings and landscaped areas within 250m of the landfill off-site structure located to the north west. That landfill received inert waste until 31st December 1987. According to the EA website the waste received was waste that remains largely unaltered once buried such as glass, concrete, bricks, tiles, soil and stones ²² .			
			Future site users (commercial users, personnel and passengers)	Ingress to buildings and accumulation, inhalation of gas	Health hazard, explosion, asphyxiate [Severe]	Unlikely The last waste input was 30 years ago and the type of waste has a low potential to generate gas.	Moderate/Low
			Buildings and services	Ingress to buildings and accumulation	Explosion [Severe]	Unlikely The last waste input was 30 years ago and the type of waste has a low potential to generate gas.	Moderate/Low

²²http://maps.environment-agency.gov.uk/wiyby/queryController?topic=waste&ep=2ndtierquery&lang=_e&layerGroups=2&x=633965.5005&y=167368.25&extraClause=HLD_REFERENCE~'EAHLD19392'&textonly=off&latest Value=&latestField=

Geotechnical Assessment

A review of the available information from the Envirocheck report (Appendix A) has been undertaken to develop the Geotechnical Risk Register (Presented in Appendix D). The Geotechnical Risk Register highlights the key geotechnical considerations with regards to the proposed development of the site. A summary of the key considerations are is presented in the following sections.

Geological considerations

- ▶ The Envirocheck data indicates that eight historical boreholes are located on site. A further twenty two boreholes are located within 250 m of the site boundary. Nine of the boreholes in the surrounding 250 m of the site boundary are classified by the BGS and are not available for review;
- ► The superficial deposits located within the site boundary are located in the northern area of the site. Head 1 Deposits are located in the northern and eastern areas of the site and in the north west corner of the site consisting of clay and silt. Head 2 Deposits consisting of clay and silt are located in the north west and north east corner of the site;
- The solid geology shown to underlie the site is the Newhaven Chalk Member consisting of marl-free white chalk with no marl content and occasional flint bands;
- ► The borehole located along the southern boundary of the site records the presence of Chalk to a depth of approximately 54 m bgl. No superficial deposits are recorded within the borehole;
- ▶ Four Trial Pits located in the centre of the site record the presence of topsoil to a depth of approximately 0.10 m bgl. The topsoil is underlain by fill (consisting of cinders, chalk, building rubble to a maximum depth of approximately 0.30 m bgl. The fill is underlain by silty CLAY (Head deposits) to a depth of approximately 1.20 m bgl. Chalk is shown to underlie the Head deposits to a proven depth of 2.30 m bgl;
- ▶ The exploratory hole locations in the northern area of the site record the presence Made Ground (consisting of brick and rubble fill and ash) which is underlain by Head Deposits consisting of sandy CLAY to a maximum depth of 0.60 m bgl. The Head Deposits are underlain by the Chalk and is proven to a maximum depth of 2.10 m bgl;
- Two further boreholes along the northern boundary (TR36NW113 and TR36NW114) of the site record the presence of topsoil to a maximum depth of 0.20 m bgl. The topsoil is underlain by Head deposits consisting of sandy CLAY and are proven to a depth of 1.70 m bgl. The Head Deposits are underlain by remoulded and weathered Chalk, proven to a depth of 2.40 m bgl;
- The boreholes in the eastern area of the site confirm the presence of topsoil to a maximum depth of 0.10 m bgl that is underlain by Head Deposits to a maximum depth of 2.10 m bgl. The Head Deposits are again underlain by the Chalk bedrock, proven to a maximum depth of 2.70 m bgl; and
- Areas of Made Ground are present and are recorded within the boreholes located across the majority of the site and are likely to be associated with the development of the airfield. No Made Ground is recorded within the eastern area or the northern edge of the site.

Running sands

► The site is detailed within the Envirocheck Report to have no hazard relating to Running Sands. As no sand is recorded to underlie the site is highly unlikely that there will be any possibility of running sand problems.

Compressible Ground Stability

► The site is detailed by the Envirocheck Report to have no hazard relating to compressible ground stability problems; and ▶ Head Deposits located in the northern areas of the site pose a potential compressible ground stability hazard.

Collapsible Deposits

▶ A Moderate to Very Low risk of collapsible deposit hazards is detailed by the Envirocheck Report to be located across the site. Given the nature of the chalk underlying the entirety of the site, a moderate hazard potential for collapsible deposits is likely across the majority of the site.

Shrink Swell Clays

- ▶ The site is classified as having a low to no hazard potential for Shrink Swell Clays located across the site by the Envirocheck Report; and
- ▶ Ground conditions in these sections are predominantly low plasticity. Near surface ground conditions are indicated to be predominately granular in nature and are not susceptible to shrinkage and swelling.

Ground Dissolution for Soluble Rocks

▶ There is a High risk of Ground Dissolution for Soluble Rocks across the site. A high risk is likely associated with the underlying chalk bedrock across the site.

Landslide Hazards

- ▶ The Envirocheck Report identifies a very low to no hazard potential of landslide hazards across the site. Existing slope instability problems are unlikely to be present and no special actions would be required to avoid problems due to landslides; and
- Significant risks may be present associated with constructed slopes in superficial head deposits on the site. Movement of materials downslope due to landslides can damage buildings and infrastructure through loss of support.

Mining Hazards

- ► Two shafts relating to previous mining activity are recorded by the Envirocheck Report to be located within the site boundary. Both are recorded to be related to the underlying chalk as a commodity;
- Chalk pits located in the surrounding area of the site within the historical mapping provided within the Envirocheck Report;
- A vertical shaft with associated chambers at the base is listed as being located in the western area of the site; and
- A further Adit Entry to a Pillar and Stall Chalk Mine is located in the eastern area of the site.

Solution Features

Solution features are a high risk across the site. Solution features are a common phenomenon with areas of chalk and are formed through dissolution of the chalk as a result of chemical weathering due to rainfall and can result in sink holes appearing at ground level.

Tree hazards

- ▶ A number of mature trees are present along the road edges running through both routes; and
- Trees require careful considerations during design and can affect the drying and wetting of soil.

5.1 Development constraints

The following geotechnical development constraints have been identified for the site:

- Made Ground extending to depths of up to 0.30 m bgl has been identified within the site boundary overlying the natural soils. The Made Ground is not considered to be a suitable founding stratum and should be excavated prior to any construction or loading across the site;
- ▶ A high risk of ground dissolution for soluble rocks and a moderate risk of collapsible deposits have been identified across the site associated with the underlying chalk;
- A vertical shaft is recorded within the western area of the site and an adit entry in the eastern area of the site that would require further information to be obtained to determine the extent of mining activity across the site;
- There is a risk of solution features across the site associated with the underlying chalk that require further investigation to determine the potential impact on any construction work or loading across the site;
- ▶ The identification and location of services has not been undertaken as part of this desk study and therefore the presence of services should be considered prior to any ground investigation and construction works. Appropriate measures should be taken to avoid and protect the existing services as necessary;
- ► The site is within an area with medium to high potential for encountering UXO. A detailed UXO threat and risk assessment is required for the site; and
- Potential for infilled chalk pits.

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6. Conclusions and Recommendations

6.1 Conclusions

Contamination

Historically the site was used extensively as a military airbase and more recently a commercial airport. A number of potential sources of contamination are associated with this past use.

Ground conditions below the site are anticipated to comprise Made Ground, associated with the former development, overlying superficial deposits of clay, silt and sand and solid deposits of Chalk. This Chalk is of high sensitivity in SPZ2 and very high sensitivity in SPZ1 as there are at least four groundwater abstractions in the vicinity of the site, the nearest being the Lord of the Manor abstraction. It is anticipated that if the Lord of the Manor abstraction is in use, it would likely capture much of the groundwater. The groundwater system is known to provide flow to Pegwell Bay (of very high sensitivity) when the Lord of the Manor abstraction is not in use.

The information relating to site and ground conditions is from published sources, a Land Quality assessment report for the site and two reports relating to ground investigations that were performed at the direct south-eastern vicinity of the site were reviewed as part of this Phase 1 study. A site walkover was undertaken in February 2017 and generally confirmed the findings of the desk studies. The initial CM has identified a number of potential contaminant linkages for receptors including current future site users, controlled waters (aquifer and coastal water features) and property. The identified potential contaminant linkages are the bulk fuel installations (BFIs), the onsite petrol station at the aviation training centre, and the gas oil tank located at the KIA jet support building, the burning of petrol along the runway, fuel pipes potentially connected to the BFI to the north east and/or to the runway, the waste oil tanks at the KIA jet support building and the aviation training centre, the Jentex tank farm, the use and storage of Pyrene runway foam, the burning ground area, the Motor Transport (MT) workshops (former and current), the cleaning of aircrafts/helicopters, the use and storage of de-icing chemicals, the Made Ground associated with the former development, the infilled chalk pits, the waste storage areas, the acid pits infilled with unknown materials, and the sub-stations.

The risk rating of the potential linkages range from low to high. The highest risk is associated with risks to groundwater from the Jentex fuel farm which partly overlies the groundwater Source Protection Zone 1.

Geotechnical

Limited data is provided across the site with no previous ground investigation provided for review as part of this desk study. Made Ground has been identified within the southern area of the site and should be delineated as part of a ground investigation. There is limited information on the strength of the bedrock. A ground investigation with appropriate sampling and subsequent laboratory testing will provide a more detailed assessment of ground and groundwater conditions across the site. This will allow an assessment of any ground dissolution, collapsible ground stability hazards and solution features located across the site associated with the chalk bedrock. There is a potential for infilled chalk pits within the site boundary and within the surrounding area of the site.

In addition, the presence of existing services may pose some access constraints, with a requirement for measures to avoid or protect them. As no site walkover has been conducted by Amec Foster Wheeler and as such the data presented within the Envirocheck Report cannot be proven. It is recommended that a site walkover is conducted to confirm the findings of this desk study and the Envirocheck Report, as well as provide information for the ground investigation, such as access availability.

6.2 Recommendations

The desk based assessment has identified a number of potential geo-environmental constraints associated with the proposed redevelopment / reopening of the airport. To gain a more detailed understanding of these constraints, further assessment is required.

Due to the sensitivity of the groundwater we understand there is a desire from the water company operating the abstractions to avoid installation of groundwater wells at the site. It is therefore appropriate that the intrusive investigation takes a stages approach. In the first instance investigating the shallow soil using trial pits and window samples to determine if there is evidence of contamination. This would then determine the need for and scope of any direct investigation of the groundwater while minimising disturbance of the aquifer highly sensitive to turbidity.

Whilst geotechnical issues are not a material planning consideration, geotechnical data will be required at a later stage to inform the detailed design of the proposed development. Adopting a combined geotechnical approach at the outset, making use of ground investigation undertaken to support planning, to obtain initial geotechnical data, would avoid duplication and present a saving in terms of cost and programme. The combined approach would also assist in highlighting any ground abnormals, although it is acknowledged that more detailed geotechnical assessment may be required once the form and layout of the proposed development is confirmed.

In order to provide a focused baseline of the sites ground and groundwater conditions the following scope of ground investigation is recommended. Note the ground investigation scope may need to be agreed with the local authority.

- Mechanically excavated trial pits and/or small diameter boreholes (window sample holes) across the site to determine the near surface deposits for potential contamination and geotechnical properties;
- Cable percussion (possibly with follow-on rotary drilling) to determine deeper soil and rock deposits;
- Collection of soil and groundwater samples;
- ▶ In-situ testing in trial pits and boreholes during excavation/drilling;
- Installation of groundwater and ground gas monitoring wells for subsequent monitoring and sampling:
- Laboratory analysis for potential contamination;
- Laboratory testing for geotechnical properties; and
- Interpretative reporting.

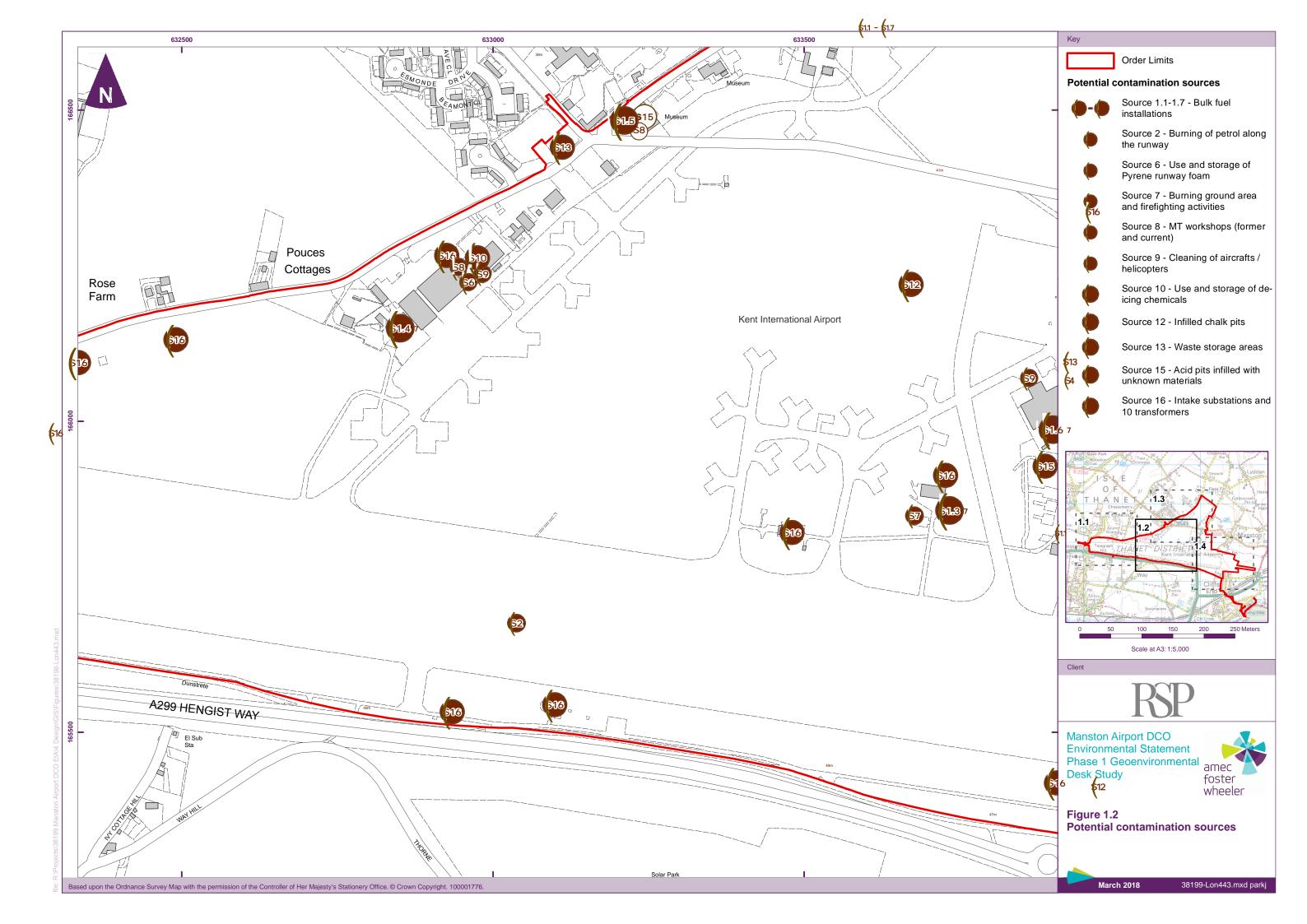
Geotechnical data would be obtained as part of the ground investigation and this would enable detailed design for the proposed future site use. Boreholes and trial pits will confirm the underlying ground and groundwater conditions across the site where no previously existing data exists. A detailed ground investigation can be produced upon receipt of the development details to allow the development areas to be targeted with the appropriate techniques. A ground investigation for geotechnical purposes may include the following scope of works:

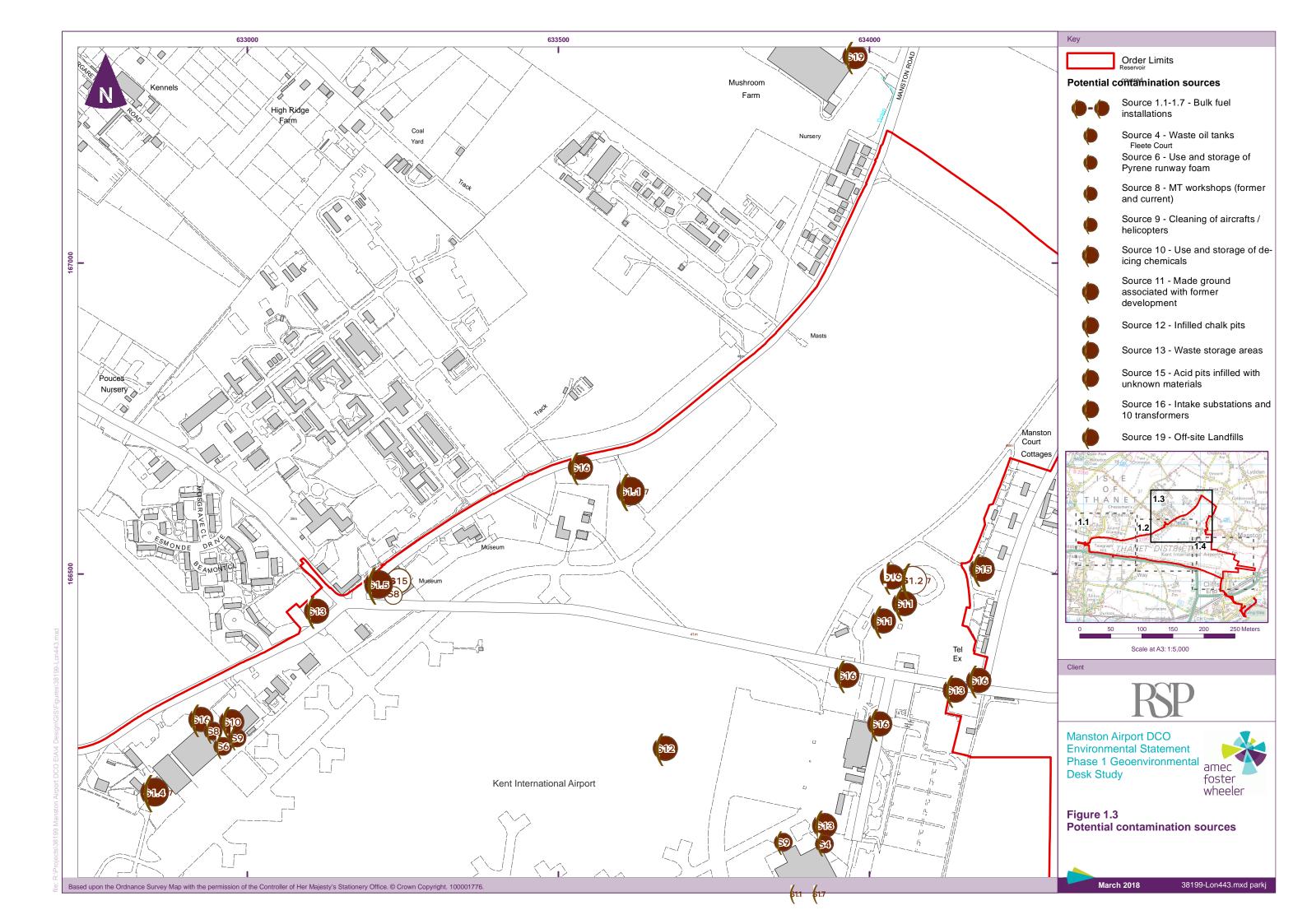
- Rotary drilled boreholes;
- Trial pits to provide assessment of shallow ground and groundwater conditions;
- Collection of soil samples;
- Laboratory testing, likely to include:
 - Moisture content;
 - Atterberg Limits;
 - ► Particle size distribution;
 - ▶ pH and sulphate on soil (2:1 water/soil extract) in accordance with SD-1;
 - ▶ pH and sulphate on water (2:1 water/soil extract) in accordance with SD-1;

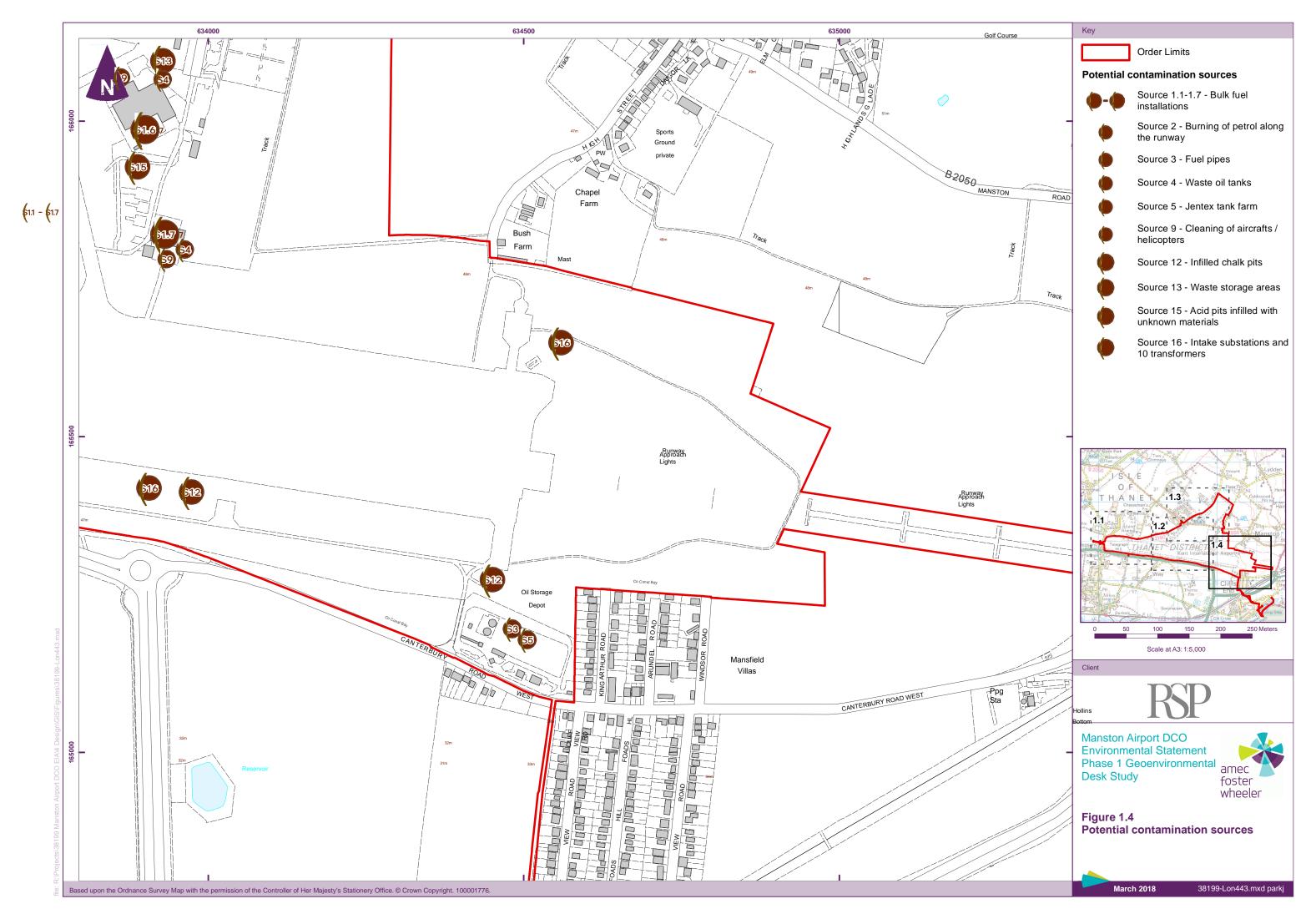
- ▶ Undrained shear strength of single 100 mm diameter specimen in triaxial compression with multistage loading and without measurement of pore pressure;
- ▶ One-dimensional consolidation properties, test period 5 days;
- Rock Point Load Testing; and
- ▶ Unconfined Compressive Strength Testing.

Figures 1.1 to 1.4 Potential Contamination Sources

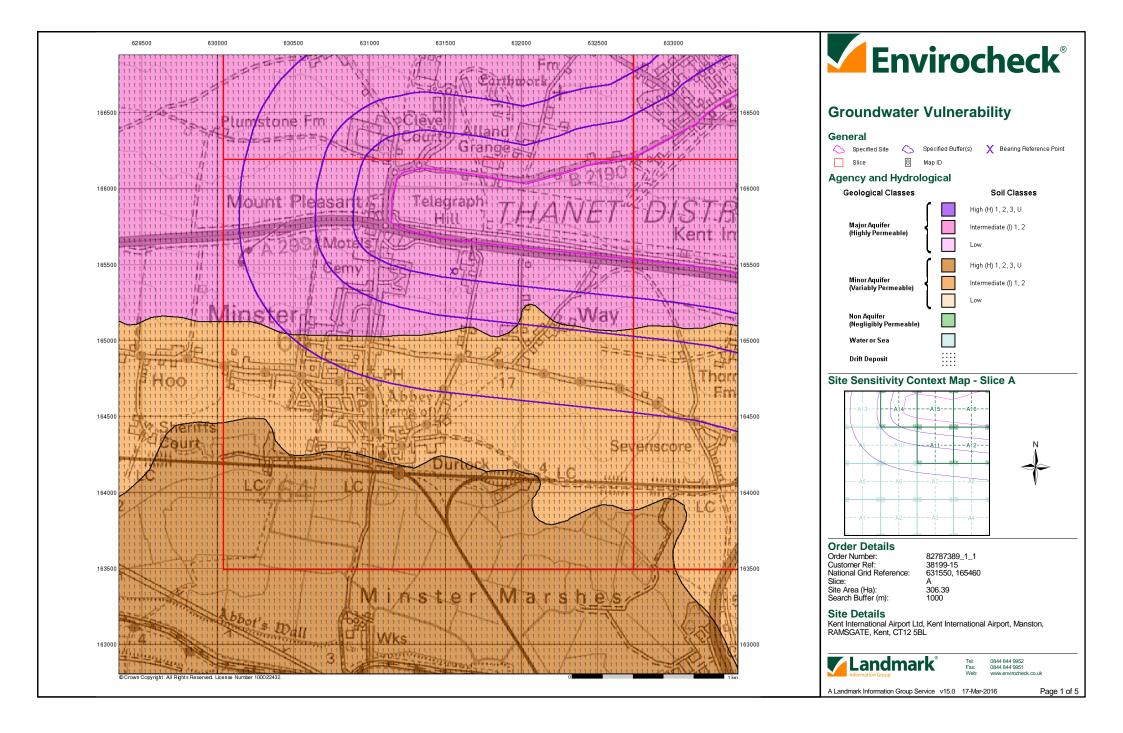
631000 632000 Key 631500 Order Limits **Potential contamination sources** Source 16 - Intake substations and 10 transformers Cottages Warehouse Cleve Court Farm Riding ALLAND Centre Alland Grange Rose Garden Farm Cottage B2190 SPITFIRE WAY B2190 316 THANET Runway Approach Lights Tan-Et Lodge Telegraph Hill Mount Pleasant Caravan Park THANE OF AS POSTRICT A299 Hotel Minster Manston Airport DCO **Environmental Statement** Phase 1 Geoenvironmental amec Cemetery Desk Study foster wheeler Hotel Figure 1.1 **Potential contamination sources** Dellside Industrial March 2018 38199-Lon443.mxd parkj Based upon the Ordnance Survey Map with the permission of the Controller of Her Majesty's Stationery Office. © Crown Copyright. 100001776.

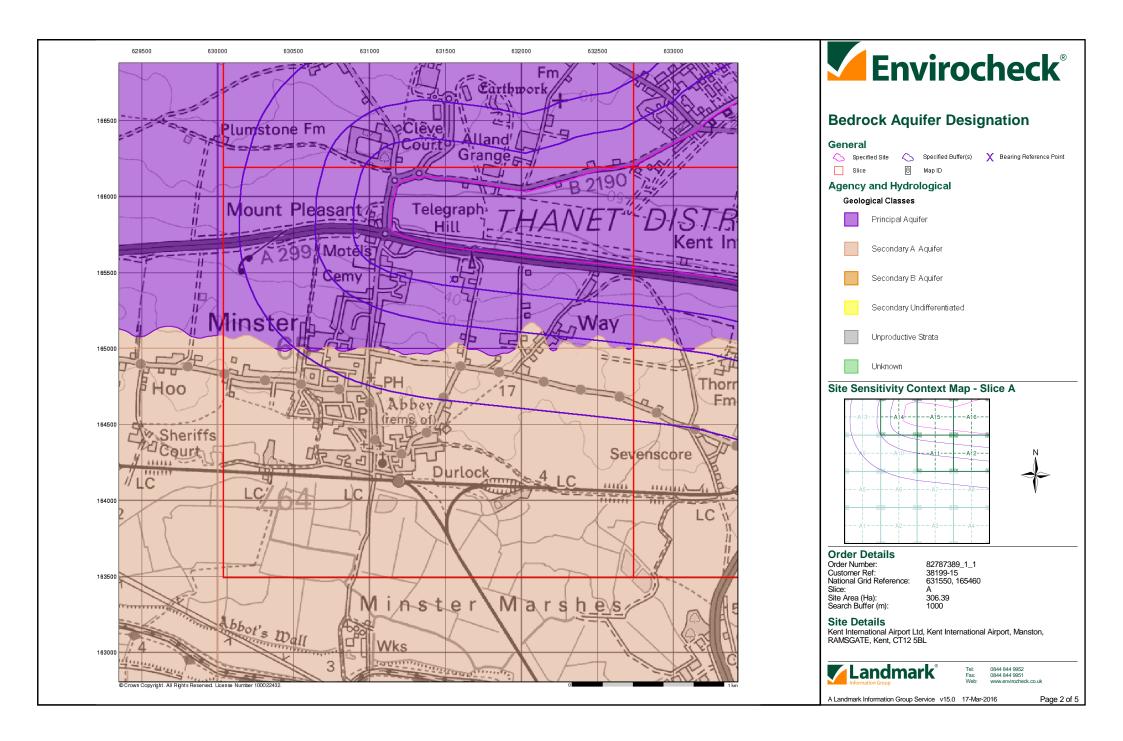


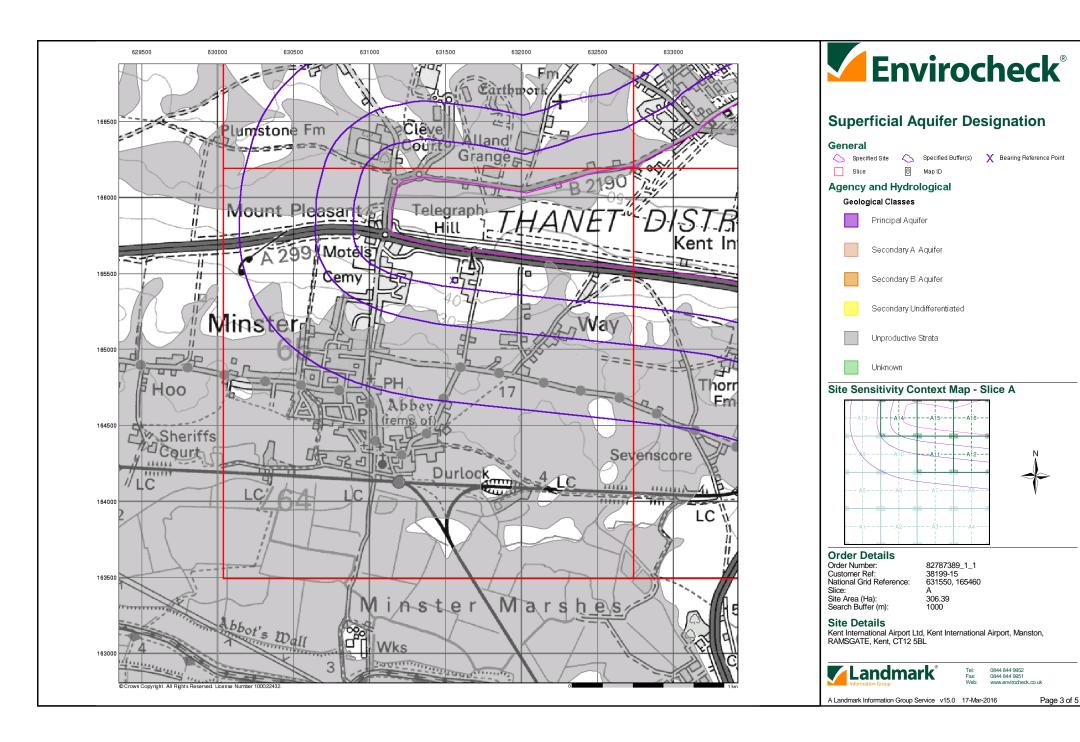


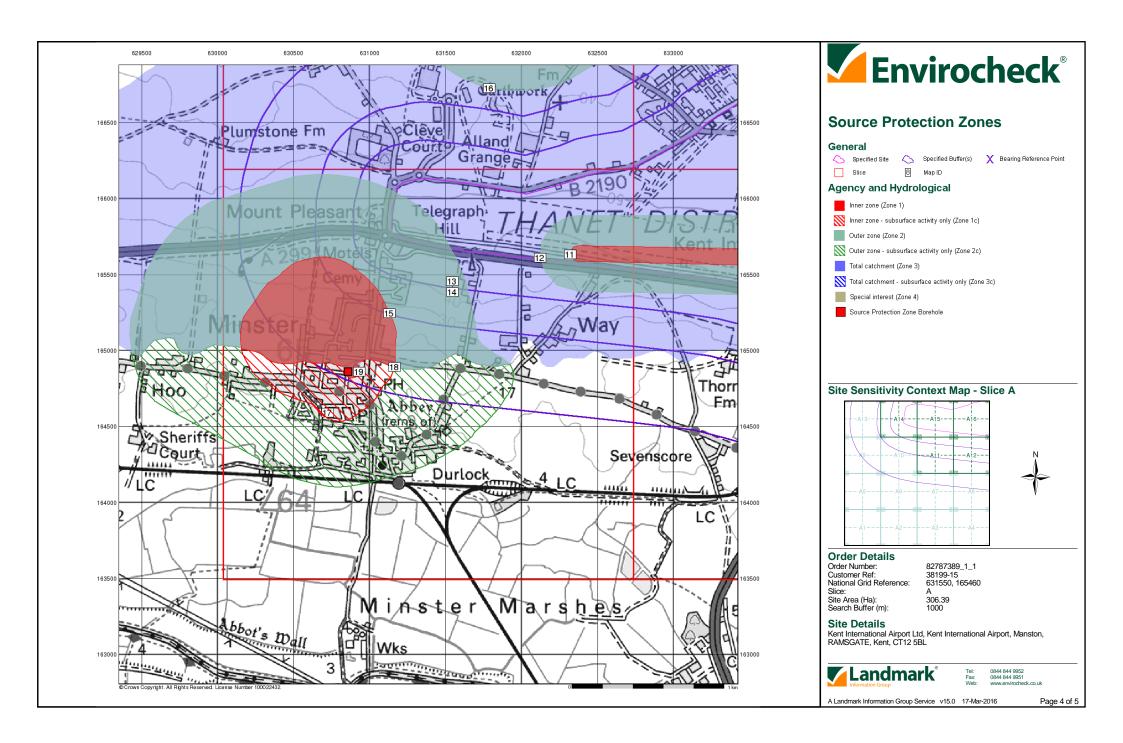


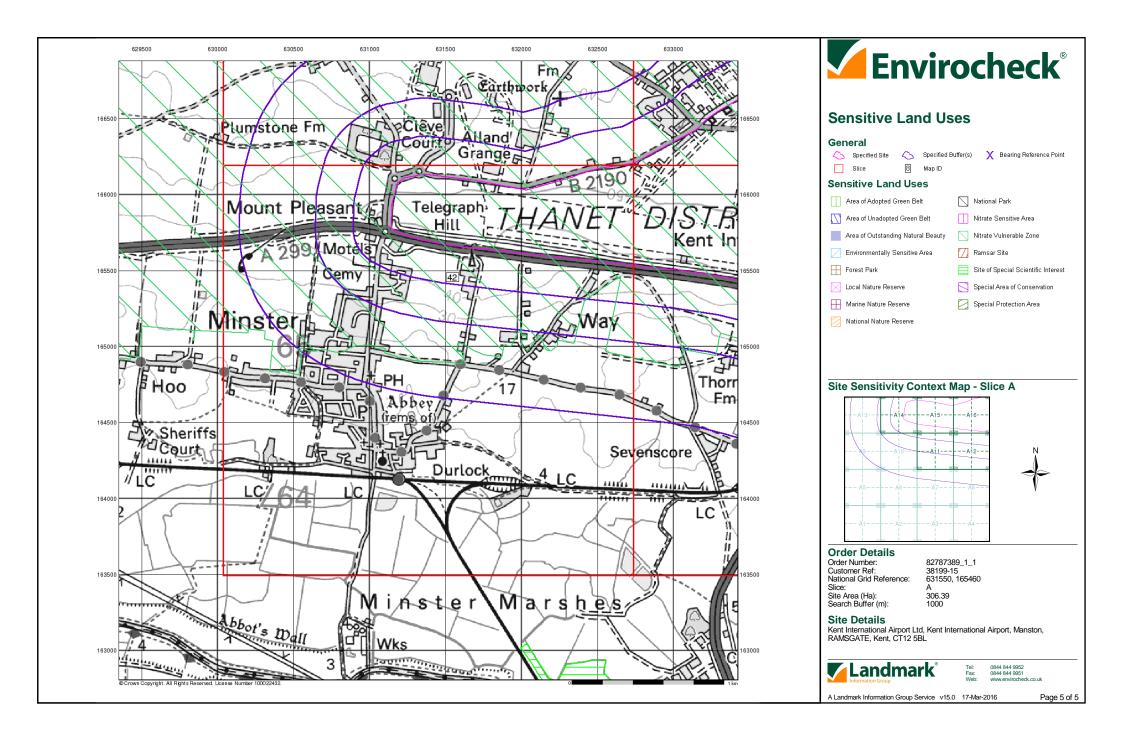
Appendix A Envirocheck report













Envirocheck® Report:

Datasheet

Order Details:

Order Number:

82787389_1_1

Customer Reference:

38199-15

National Grid Reference:

631550, 165460

Slice:

Α

Site Area (Ha):

306.39

Search Buffer (m):

1000

Site Details:

Kent International Airport Ltd Kent International Airport, Manston RAMSGATE Kent CT12 5BL

Client Details:

Ms V Dahmoun Amec Foster Wheeler E & I UK Ltd Floor 4 60 London Wall London United Kingdom EC2M 5TQ



Order Number: 82787389_1_1





Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	8
Hazardous Substances	-
Geological	9
Industrial Land Use	20
Sensitive Land Use	23
Data Currency	24
Data Suppliers	28
Useful Contacts	29

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 v50.0



Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1			1	4
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 2		2		
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 2				Yes
Pollution Incidents to Controlled Waters	pg 2				1
Prosecutions Relating to Authorised Processes					
Prosecutions Relating to Controlled Waters					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 2		1		3 (*10)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 6	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 6	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 6	Yes	n/a	n/a	n/a
Source Protection Zones	pg 6	4		1	4
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
Detailed River Network Lines					n/a
Detailed River Network Offline Drainage					n/a



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 8				2
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Recorded Landfill Sites	pg 8				2
Registered Landfill Sites					
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 9	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 9	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 16		2	1	3
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
Brine Compensation Area			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability	pg 17	Yes	n/a	n/a	n/a
Man-Made Mining Cavities	pg 17	1			
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 17	Yes		n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 18	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 18	Yes	Yes	n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 18	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards				n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 18	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas	pg 19	Yes	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 20		16	4	3
Fuel Station Entries	pg 22		2		
Sensitive Land Use					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 23	1			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent	s				
1	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:	Channel Freight Storage Limited Business Services Channel Freight Storage Limited Telegraph Hill Industrial Estate, Laundry Road, Minster, Ramsgate, Kent, Ct12 4hy Environment Agency, Southern Region Not Supplied Eprpp3020xy 1 26th October 2011 26th October 2011 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Into Land Groundwater Via Borehole New issued under EPR 2010 Located by supplier to within 10m	A11NW (S)	337	2	631530 165326
	Discharge Consent	s				
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:	Edward Stanton Farms Mixed Farming Edward Stanton Farms, Wayborough Farm, Wayborough Mill, Minster, Ramsgate Environment Agency, Southern Region Not Supplied App/So/9k 1 1st April 1999 1st April 1999 1st April 2004 Trade Discharge - Process Water Into Land Into Land Revoked Groundwater Regulations Authorisation Located by supplier to within 10m	A11SE (SE)	575	2	631850 165050
3	Operator:	S	A12SW	620	2	632180
	Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Domestic Property (Single) Environment Agency, Southern Region River Stour & Minster P21533 1 8th August 2007 8th August 2007 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Land/Soakaway Underground Strata New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	(SE)		_	164970
	Discharge Consent	s				
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:	Cosgrove Leisure (Wayside) Limited Other Tourist/Short Stay Accommadation Premises At Wayside Caravan Park Way Hill, Minster, Nr Ramsgate, Kent, Ct12 4hw Environment Agency, Southern Region River Stour & Minster P21409 2 21st December 2012 21st December 2012 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Into Land Underground Strata Varied under EPR 2010 Located by supplier to within 10m	A12SW (SE)	707	2	632110 164890



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent	s				
4	Operator: Property Type: Location:	Other Tourist/Short Stay Accommadation	A12SW (SE)	707	2	632110 164890
	Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:	Environment Agency, Southern Region River Stour & Minster P21409 1 11th July 2007 11th July 2007 20th December 2012 Sewage Discharges - Final/Treated Effluent - Not Water Company Land/Soakaway Underground Strata New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)				
	Positional Accuracy:	Located by supplier to within 10m				
5	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:	Iution Prevention and Controls Somerfield Tothill Street, Minster, CT12 Thanet District Council, Environmental Health Department 01-05/06 29th July 2005 Local Authority Pollution Prevention and Control PG1/14 Petrol filling station Permitted Located by supplier to within 10m	A14SE (NW)	114	3	631162 165640
	-	lution Prevention and Controls				
6	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:	Cross Channel Service Station Mount Pleasant, MINSTER, Kent, CT12 4AU Thanet District Council, Environmental Health Department 02/03 13th May 1998 Local Authority Pollution Prevention and Control PG1/14 Petrol filling station Permitted	A14SW (NW)	129	3	631014 165797
	Positional Accuracy:	Automatically positioned to the address				
	Nearest Surface Wa	ater Feature	A11SE (SE)	702	-	631867 164921
7	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Not Given Not Given Sewage - Other Category 3 - Minor Incident Located by supplier to within 100m	A10SW (SW)	768	2	631001 165001
	Water Abstractions					
8	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:	Wilson & Wilson Ltd 9/40/04/0171/Gr 100 Point W At Minster Environment Agency, Southern Region Private Water Undertaking: General Use (Medium Loss) Water may be abstracted from a single point Groundwater Not Supplied Not Supplied As Edged In Green On The Said Map 01 October 30 September 1st December 2006 Not Supplied Located by supplier to within 100m	A11NW (E)	176	2	631690 165470



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	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:	Southern Water Services Ltd 9/40/04/0441/G 100 Point 1, Borehole At Minster-In-Thanet Environment Agency, Southern Region Public Water Supply: Potable Water Supply - Direct Water may be abstracted from any point within an area Groundwater Not Supplied Not Supplied N/A 01 January 31 December 13th December 2006 Not Supplied Located by supplier to within 10m	A9SE (W)	805	2	630650 165140
10	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:	Southern Water Services Ltd 9/40/04/0049/Gr 100 Boreholes At Minster Ps Environment Agency, Southern Region Public Water Supply: Potable Water Supply - Direct Water may be abstracted from a single point Groundwater 1364 497787 N/A 01 October 30 September 2nd November 2006 Not Supplied Located by supplier to within 100m	A10SW (SW)	949	2	630860 164860
10	· ·	Southern Water Services Plc 4/0049/B/GR Not Supplied Minster Pumping Station , MINSTER Environment Agency, Southern Region Agriculture (General) Not Supplied Pond or Lake 1364 497787 Additional Purpose: Public Water Supply Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Located by supplier to within 100m	A10SW (SW)	954	2	630860 164855
	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:	Mr D H Clifton 9/40/04/0258/Sr 100 Watercourses At Clapper Hill, Minster Environment Agency, Southern Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from any point within an area Surface 1000 10000 As Shown Hatched Green On The Map. 01 May 31 July 1st December 2006 Not Supplied Located by supplier to within 10m	A6NE (S)	1173	2	631270 164520



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:	Mr E Spanton 9/40/04/0095/Sr 100 Watercourse At Minster House, Minster (Point 1) Environment Agency, Southern Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from a single point Surface 232 20457 As Shown Coloured Green And Yellow And Edged Red On The Map. 01 May 31 August 2nd November 2006 Not Supplied Located by supplier to within 100m	A5SE (SW)	1632	2	630620 164220
	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 D H Clifton 09/208 100 Point A Environment Agency, Southern Region General Agriculture: Spray Irrigation - Storage Water may be abstracted from a single point Surface Not Supplied Not Supplied Edged Red On Licence Map 01 November 31 March 1st April 2012 Not Supplied Located by supplier to within 10m	A2NE (S)	1668	2	631276 164016
	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:	Mr D H Clifton 09/208 100 Point A Environment Agency, Southern Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from a single point Surface Not Supplied Not Supplied Lands Hatched Green On Licence Map 01 April 31 October 1st April 2012 Not Supplied Located by supplier to within 10m	A2NE (S)	1668	2	631276 164016
	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:	F A Fuller And Son 09/170 101 Area 1, Minster Stream & Watercourses. Environment Agency, Southern Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from any point within an area Surface Not Supplied Not Supplied As Boldly Outlined On Licence Map. 01 April 30 September 20th October 2006 Not Supplied Located by supplier to within 10m	(W)	1764	2	629630 164870



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:	Mr F A Fuller 09/170 100 Area 1, Minster Stream & Watercourses. Environment Agency, Southern Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from any point within an area Surface Not Supplied Not Supplied As Boldly Outlined On Licence Map. 01 April 30 September 22nd January 1992 Not Supplied Located by supplier to within 10m	(W)	1764	2	629630 164870
	Water Abstractions 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:	Mr E Spanton 9/40/04/0095/Sr 100 Watercourse At Minster House, Minster (Point 2) Environment Agency, Southern Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from a single point Surface Not Supplied Not Supplied As Shown Coloured Green And Yellow And Edged Red On The Map. 01 May 31 August 2nd November 2006 Not Supplied	A1NE (SW)	1775	2	630640 164060
	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:	Located by supplier to within 100m St Nicholas Court Farms Ltd So/040/0009/006 1 Unnamed Drain At Sheriffs Court, Minster, Ramsgate Environment Agency, Southern Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from a single point Surface Not Supplied Not Supplied Not Supplied Not Supplied O1 April 31 October 22nd July 2011 Not Supplied Located by supplier to within 10m	(SW)	1900	2	629922 164321
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Es Linington & Son 9/40/04/0468/S 101 Area 1, Minster Stream & Trib. Dykes At Minster. Environment Agency, Southern Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from any point within an area Surface Not Supplied Not Supplied As Outlined In Red On Licence Map. 01 April 30 September 8th January 2002 Not Supplied Located by supplier to within 10m	A1NE (SW)	1977	2	630400 163940



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	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:	Es Linington And Son 9/40/04/0468/S 100 Area 1, Minster Stream & Trib. Dykes At Minster. Environment Agency, Southern Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from any point within an area Surface Not Supplied Not Supplied As Outlined In Red On Licence Map. 01 April 30 September 5th November 1984 Not Supplied Located by supplier to within 10m	A1NE (SW)	1977	2	630400 163940
	Groundwater Vulne Soil Classification: Map Sheet: Scale:	Soils of Intermediate Leaching Potential (I1) - Soils which can possibly transmit a wide range of pollutants Sheet 47 East Kent 1:100,000	A11NW (N)	0	2	631547 165455
	Drift Deposits Drift Deposit: Map Sheet: Scale:	Low permeability drift deposits occuring at the surface and overlying Major and Minor Aquifers are head, clay-with-flints, brickearth, peat, river terrace deposits and marine and estuarine alluvium Sheet 47 East Kent 1:100,000		0	2	631398 165241
	Bedrock Aquifer De Aquifer Designation:	-	A11NW (N)	0	4	631547 165455
	Superficial Aquifer Aquifer Designation:	Designations Unproductive Strata	(NE)	0	4	632552 166923
	Superficial Aquifer Aquifer Designation:	Designations Unproductive Strata	A15NW (N)	0	4	631547 165884
11	Source Protection 2 Name: Source: Reference: Type:	Zones Lord Of The Manor Environment Agency, Head Office Su036 Zone I (Inner Protection Zone): Travel time of 50 days or less to the groundwater source.	A16SW (E)	0	2	632323 165633
12	Source Protection 2 Name: Source: Reference: Type:	Various Environment Agency, Head Office Not Supplied Zone II (Outer Protection Zone): Either 25% of the source area or a 400 day travel time whichever is greater.	A16SW (E)	0	2	632125 165610
13	Source Protection 2 Name: Source: Reference: Type:	Zones Minster Environment Agency, Head Office Su349 Zone II (Outer Protection Zone): Either 25% of the source area or a 400 day travel time whichever is greater.	A11NW (N)	0	2	631547 165455
14	Source Protection 2 Name: Source: Reference: Type:	Various Environment Agency, Head Office Not Supplied Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A11NW (N)	0	2	631547 165455
15	Source Protection 2 Name: Source: Reference: Type:	Zones Minster Environment Agency, Head Office Su349 Zone I (Inner Protection Zone): Travel time of 50 days or less to the groundwater source.	A10NE (SW)	332	2	631133 165244
16	Source Protection A Name: Source: Reference: Type:	Zones Sparrows Castle Environment Agency, Head Office Su032 Zone II (Outer Protection Zone): Either 25% of the source area or a 400 day travel time whichever is greater.	(N)	628	2	631787 166725



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Source Protection	on Zones				
17	Name: Source: Reference: Type:	Minster Environment Agency, Head Office Su349 Zone IIc (Outer Protection Zone): Either 25% of the source area or a 400 day travel time whichever is greater - subsurface activity only.	A11SW (S)	674	2	631571 164982
	Source Protection	on Zones				
18	Name: Source: Reference: Type:	Minster Environment Agency, Head Office Su349 Zone Ic (Inner Protection Zone): Travel time of 50 days or less to the groundwater source - subsurface activity only.	A10SE (SW)	816	2	631166 164892
	Source Protection	on Zones				
19	Name: Source: Reference: Type:	Divers Bridge Springs, Corsley, Spr4 Environment Agency, Head Office Sw074 Groundwater Source	A10SW (SW)	949	2	630860 164860
	Extreme Floodir None	ng from Rivers or Sea without Defences				
	Flooding from R None	ivers or Sea without Defences				
	Areas Benefiting	g from Flood Defences				
	Flood Water Sto	rage Areas				
	None					
	Flood Defences					
	None					
	Detailed River N	etwork Lines				
	None					
	Detailed River N None	etwork Offline Drainage				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	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:	H Crow Minster, hanet, Kent Tothill Street Not Supplied As Supplied EAHLD19430 Not Supplied 31st December 1973 Deposited Waste included Inert Waste 0 Not Supplied 2200/7268 Not Supplied	A10NE (SW)	507	2	631084 165249
	Other Ref: Historical Landfill S					
21	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:	Major L Thomas Prospect Road, Minster, Kent Prospect Gardens Not Supplied As Supplied EAHLD19436 Not Supplied Not Supplied Deposited Waste included Inert Waste 0 Not Supplied 2200/7260 Not Supplied TH16	A9SE (W)	807	2	630682 165106
	Local Authority Lar Name:	ndfill Coverage Thanet District Council - Has supplied landfill data		0	3	631547 165455
	Local Authority Lar	ndfill Coverage				
	Name:	Kent County Council - Had landfill data but passed it to the relevant environment agency		0	9	631547 165455
22	Location: Reference: Authority: Last Reported Status: Types of Waste:	Tothill Street TH23 Thanet District Council, Environmental Health Department Closed Non Degradable, Slowly Degradable - Scrap Metal, Putrescible, Hazardous, Inert	A10NE (SW)	522	3	631067 165239
	Date of Closure: Positional Accuracy: Boundary Quality:	Not Supplied Positioned by the supplier Good				
23	Location: Reference: Authority: Last Reported Status: Types of Waste: Date of Closure:	Corded Landfill Sites Prospect Gardens TH16 Thanet District Council, Environmental Health Department Unknown Unknown Not Supplied Positioned by the supplier Good	A9SE (W)	815	3	630671 165111





BGS 1:625,000 Solid Description:	I Caplany	Direction)	From Site		
Description:	a Geology				
	White Chalk Subgroup	A11NW (N)	0	4	631547 165455
BGS Estimated Soil					
Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A15NE (NE)	0	4	632000 166000
Cadmium Concentration: Chromium Concentration:	<1.8 mg/kg 60 - 90 mg/kg				
Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
BGS Estimated Soil	Chemistry				
Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A15NW (N)	0	4	631547 166000
Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
Concentration: Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
BGS Estimated Soil	Chemistry				
Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11NW (N)	0	4	631547 165455
Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
Concentration: Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
BGS Estimated Soil	Chemistry				
Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A15NW (N)	0	4	631547 165885
Cadmium Concentration:	<1.8 mg/kg				
Concentration: Lead Concentration:	<150 mg/kg				
Nickei Concentration:	15 - 30 mg/kg				
	•	A15NE	0	Δ	632000
Soil Sample Type: Arsenic	Sediment <15 mg/kg	(NE)		7	165960
Cadmium Concentration:	<1.8 mg/kg				
Concentration: Lead Concentration: Nickel					
	Chemistry				
Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11NE (E)	0	4	632000 165455
Concentration: Cadmium Concentration: Chromium	<1.8 mg/kg				
Concentration: Lead Concentration: Nickel					
COCCOLNO - B SSACCOCOLNO	Concentration: Cadmium Concentration: Cadmium Concentration: Cancentration: Cance	Anneantation: Anneantation	Concentration:	Concentration: At 18 mg/kg Concentration: At 50 mg/kg Co	Concentration:





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A15NW (N)	0	4	631547 166010
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	(NE)	0	4	632121 166293
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	•		_		
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A15NE (NE)	5	4	632025 166047
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	-	A14NE	12	4	624200
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	(N)	12	4	631298 166134
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	•	A 4 4 1 1 -	40	_	000000
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11NE (E)	13	4	632000 165295
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A15NE (NE)	38	4	632000 166075
	Concentration: Cadmium	<1.8 mg/kg				
	Concentration: Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil					
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A10NW (W)	143	4	631000 165455
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	•				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A14NW (NW)	146	4	631000 165888
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A14NW (NW)	159	4	631000 166000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A12NW (E)	269	4	632293 165286
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	•				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11NE (SE)	293	4	632000 165244
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil Chemistry					
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A12NE (E)	298	4	632547 165191
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11NE (SE)	316	4	631917 165240
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel					
	Concentration:	To to myrky				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11NW (SW)	366	4	631433 165258
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11NW (S)	371	4	631508 165277
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A10NW (W)	408	4	631000 165392
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11SE (SE)	433	4	632008 165133
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A12SE (E)	443	4	632720 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soi	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A12SE (SE)	471	4	632457 165053
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 ma/ka				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soi	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11SE (SE)	490	4	632000 165120
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soi	l Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A10SW (SW)	493	4	631000 165148
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soi	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A12SW (SE)	499	4	632230 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soi	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11SE (SE)	501	4	632000 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soi	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A12SE (E)	533	4	632685 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	I Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A12SW (SE)	585	4	632181 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 ma/ka				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11SW (S)	609	4	631547 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	(NW)	611	4	630788 166541
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11SW (S)	614	4	631636 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11SW (S)	615	4	631566 165041
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A11SW (S)	664	4	631499 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A10SE (SW)	740	4	631101 165000
	Concentration: Cadmium	<1.8 mg/kg				
	Concentration:					
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source:	British Geological Survey, National Geoscience Information Service	A10SW	764	4	631000
	Soil Sample Type: Arsenic	Sediment <15 mg/kg	(SW)			165005
	Concentration:					
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration:					
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type:	British Geological Survey, National Geoscience Information Service Sediment	A10SW (SW)	769	4	631000 165000
	Arsenic	15 - 25 mg/kg	(300)			103000
	Concentration: Cadmium	<1.8 mg/kg				
	Concentration:					
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel	<150 mg/kg 15 - 30 mg/kg				
	Concentration:	13 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A10SW (SW)	802	4	630906 165000
	Concentration: Cadmium	<1.8 mg/kg				
	Concentration: Chromium					
	Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel	<150 mg/kg 15 - 30 mg/kg				
	Concentration:					
	BGS Estimated Soil	•				
	Source: Soil Sample Type:	British Geological Survey, National Geoscience Information Service Sediment	A10SW (SW)	860	4	630771 165000
	Arsenic	<15 mg/kg	(344)			
	Concentration: Cadmium	<1.8 mg/kg				
	Concentration: Chromium	60 - 90 mg/kg				
	Concentration:					
	Lead Concentration: Nickel	<150 mg/kg 15 - 30 mg/kg				
	Concentration:					
	BGS Estimated Soil					
	Source: Soil Sample Type:	British Geological Survey, National Geoscience Information Service Sediment	A8NE (SE)	869	4	632437 164643
	Arsenic	<15 mg/kg	(02)			
	Concentration: Cadmium	<1.8 mg/kg				
	Concentration: Chromium					
	Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel	<150 mg/kg 15 - 30 mg/kg				
	Concentration:	10 00 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	(NW)	878	4	630429 166528
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A9SE (SW)	903	4	630682 165000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	·				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A9SE (SW)	961	4	630576 165000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Recorded Mine	eral Sites				
24	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location:	Mount Pleasant Chalk Pit , Minster, Ramsgate, Kent British Geological Survey, National Geoscience Information Service 132289 Opencast Ceased Unknown Operator Unknown Operator	A14SE (NW)	72	4	631072 165821
	Periodic Type: Geology:	Cretaceous Margate Chalk Member				
	Commodity: Positional Accuracy:	Chalk Located by supplier to within 10m				
	BGS Recorded Mine	eral Sites				
25	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Dellside Chalk Pit , Way, Minster, Ramsgate, Kent British Geological Survey, National Geoscience Information Service 132292 Opencast Ceased Unknown Operator Unknown Operator Cretaceous Margate Chalk Member Chalk Located by supplier to within 10m	A15SE (E)	80	4	632032 165529
	BGS Recorded Mine					
26	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity:	Way Chalk Pit , Way, Minster, Ramsgate, Kent British Geological Survey, National Geoscience Information Service 132293 Opencast Ceased Unknown Operator Unknown Operator Cretaceous Seaford Chalk Formation Chalk	A12SW (SE)	466	4	632309 165111
	Positional Accuracy:	Located by supplier to within 10m				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Recorded Mineral Sites					
27	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity:	The Freehold Chalk Pit , Minster, Ramsgate, Kent British Geological Survey, National Geoscience Information Service 132290 Opencast Ceased Unknown Operator Unknown Operator Cretaceous Seaford Chalk Formation Chalk Located by supplier to within 10m	A10NW (SW)	575	4	631042 165191
	BGS Recorded Mine	eral Sites				
28	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity:	Pinks Corner Brick Field , Minster, Ramsgate, Kent British Geological Survey, National Geoscience Information Service 132295 Opencast Ceased Unknown Operator Unknown Operator Quaternary Head, 1 Common Clay and Shale Located by supplier to within 10m	A11SW (S)	736	4	631470 164931
-	BGS Recorded Mine	eral Sites				
29	Periodic Type: Geology: Commodity:	Poorman'S Hole , Minster, Ramsgate, Kent British Geological Survey, National Geoscience Information Service 132291 Opencast Ceased Unknown Operator Unknown Operator Cretaceous Seaford Chalk Formation Chalk Located by supplier to within 10m	A9SE (W)	856	4	630638 165085
	-					
	BGS Measured Urba No data available	an Soil Chemistry				
	BGS Urban Soil Che No data available	emistry Averages				
	Coal Mining Affected In an area that might	d Areas not be affected by coal mining				
	Mining Instability Mining Evidence: Source: Boundary Quality:	Conclusive Rock Mining Ove Arup & Partners As Supplied	A11NW (N)	0	-	631547 165455
	Man-Made Mining C Easting: Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Commodity: Solid Geology Detail: Superficial Geology Detail:	632000 165700 0 A15 SE NE Denehole:- vertical shaft having chambers at the base Chalk Chalk Group	A15SE (NE)	0	5	632000 165700
	Non Coal Mining Are Risk: Source:	eas of Great Britain Unlikely British Geological Survey, National Geoscience Information Service	A15SW (N)	0	4	631542 165540
	Non Coal Mining Are Risk: Source:		A16SW (E)	0	4	632165 165658
	Non Coal Mining Are		(=)			103030
	Risk: Source:	Highly Unlikely British Geological Survey, National Geoscience Information Service	A11NW (N)	0	4	631547 165455
	Non Coal Mining Are	eas of Great Britain Highly Likely British Geological Survey, National Geoscience Information Service	A16SW (E)	0	4	632213 165671





Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11NW (N)	0	4	631547 165455
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A15NW (N)	0	4	631547 165885
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A14NE (N)	12	4	631298 166134
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A11NW (SW)	13	4	631433 165258
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A11SW (S)	243	4	631547 165000
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11NW (N)	0	4	631547 165455
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SW (S)	160	4	631547 165000
	Potential for Ground Dissolution Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11NW (N)	0	4	631547 165455
	Potential for Ground Dissolution Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A12NE (E)	127	4	632443 165235
	Potential for Landslide Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11NW (N)	0	4	631547 165455
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A15NW (N)	0	4	631547 165885
	Potential for Landslide Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A14NE (N)	12	4	631298 166134
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11NW (SW)	13	4	631433 165258
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SW (S)	243	4	631547 165000
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11NW (N)	0	4	631547 165455
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SW (S)	160	4	631547 165000
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A15NW (N)	0	4	631547 165885
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11NW (N)	0	4	631547 165455
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A14NE (N)	12	4	631298 166134
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A11NW (SW)	13	4	631433 165258
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A11SW (S)	243	4	631547 165000



Geological

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Radon Potential - R	adon Protection Measures				
	Protection Measure:	No radon protective measures are necessary in the construction of new dwellings or extensions	A11NW (N)	0	4	631547 165455
	Source:	British Geological Survey, National Geoscience Information Service				
	Radon Potential - R	adon Protection Measures				
	Protection Measure:	No radon protective measures are necessary in the construction of new dwellings or extensions	A15SW (N)	0	4	631547 165799
	Source:	British Geological Survey, National Geoscience Information Service				
	Radon Potential - R	adon Protection Measures				
	Protection Measure:	No radon protective measures are necessary in the construction of new dwellings or extensions	A11NW (SW)	0	4	631480 165324
	Source:	British Geological Survey, National Geoscience Information Service				
	Radon Potential - R	adon Affected Areas				
	Affected Area:	The property is in a lower probability radon area, as less than 1% of homes	A11NW	0	4	631547
	Source:	are above the action level British Geological Survey, National Geoscience Information Service	(N)			165455
	Radon Potential - R	adon Affected Areas				
	Affected Area:	The property is in an intermediate probability radon area, as between 1 and 3% of homes are above the action level	A15SW (N)	0	4	631547 165799
	Source:	British Geological Survey, National Geoscience Information Service				
	Radon Potential - R	Radon Potential - Radon Affected Areas				
	Affected Area:	The property is in an intermediate probability radon area, as between 1 and 3% of homes are above the action level	A11NW (SW)	0	4	631480 165324
	Source:	British Geological Survey, National Geoscience Information Service	(500)			100024



Industrial Land Use

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
30	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Bill Reeves M G Centre Rose Farm, Spitfire Way, Manston, Ramsgate, Kent, CT12 5BU Car Dealers Active Automatically positioned to the address	A16NE (NE)	29	-	632468 166190
31	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Summit Aviation Merlin House, Merlin Way, Manston, Ramsgate, Kent, CT12 5FE Aviation Engineers Active Automatically positioned to the address	A15NE (N)	92	-	631807 166167
31	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Aerospace & Controls Technology Merlin House, Merlin Way, Manston, Ramsgate, CT12 5FE Control Panels Active Automatically positioned to the address	A15NE (N)	92	-	631767 166175
32	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	le Directory Entries Cross Channel Service Station Mount Pleasant, Minster, Ramsgate, Kent, CT12 4AU Petrol Filling Stations Inactive Automatically positioned to the address	A14SW (NW)	129	-	631014 165797
33	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Mirage Of Kent Ltd Unit 12, Laundry Road, Minster, Ramsgate, CT12 4HY Window Tinting Active Automatically positioned to the address	A11NW (E)	150	-	631706 165495
33	Contemporary Trad Name: Location: Classification: Status:		A11NW (E)	170	-	631672 165478
33	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Advanced Engineering Unit 5, Laundry Road, Minster, Ramsgate, Kent, CT12 4HY Metal Products - Fabricated Inactive Automatically positioned to the address	A11NW (E)	170	-	631672 165478
33	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Manex Joinery Unit 5, Laundry Road, Minster, Ramsgate, Kent, CT12 4HY Joinery Manufacturers Inactive Automatically positioned to the address	A11NW (E)	170	-	631672 165478
33	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Le Directory Entries East Kent Cartons Unit 2, Laundry Road, Minster, Ramsgate, Kent, CT12 4HY Boxes & Cartons Inactive Manually positioned within the geographical locality	A11NW (E)	179	-	631679 165468
33	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Trucklife Unit 7-8, Laundry Road, Minster, Ramsgate, Kent, CT12 4HY Commercial Vehicle Servicing, Repairs, Parts & Accessories Active Automatically positioned to the address	A11NW (E)	179	-	631679 165468
33	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Minster Mot & Service Centre Ltd Unit 24, Laundry Road, Minster, Ramsgate, Kent, CT12 4HY Mot Testing Centres Active Automatically positioned to the address	A11NW (E)	179	-	631679 165468
33	Contemporary Trad Name: Location: Classification: Status:	· · · · · · · · · · · · · · · · · · ·	A11NW (E)	179	-	631679 165468



Industrial Land Use

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
33	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Tri-Air & Diving Products Innovations Laundry Rd, Minster, Ramsgate, Kent, CT12 4HL Ventilators & Ventilation Systems Inactive Manually positioned within the geographical locality	A11NW (E)	179	-	631679 165468
34	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Whites Transport Ltd Laundry Road, Minster, Ramsgate, Kent, CT12 4HY Road Haulage Services Active Automatically positioned to the address	A11NW (NE)	169	-	631614 165486
34	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Total Energy Control Ltd Laundry Road, Minster, Ramsgate, Kent, CT12 4HY Generators - Sales & Service Inactive Automatically positioned to the address	A11NW (NE)	169	-	631614 165486
34	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries M T N Products Unit 23,Laundry Rd, Minster, Ramsgate, Kent, CT12 4HY Water Coolers Inactive Manually positioned to the address or location	A11NW (E)	200	-	631620 165454
35	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Houston Wire Works Unit 29, Laundry Road, Minster, Ramsgate, Kent, CT12 4HY Water Coolers Inactive Automatically positioned to the address	A11NW (SE)	271	-	631672 165376
35	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Selous Unit 31, Laundry Road, Minster, Ramsgate, Kent, CT12 4HY Printers Active Automatically positioned to the address	A11NW (SE)	272	-	631672 165376
35	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries The Water Delivery Co Ltd Unit 29, Laundry Road, Minster, Ramsgate, Kent, CT12 4HY Water Coolers Inactive Manually positioned to the address or location	A11NW (SE)	272	-	631672 165376
36	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Euro Team 93, Tothill Street, Minster, Ramsgate, Kent, CT12 4AP Road Haulage Services Inactive Automatically positioned to the address	A10NE (W)	462	-	631058 165305
37	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Adrian Smith Associates Ltd 22, Orchard Close, Minster, RAMSGATE, Kent, CT12 4AL Road Haulage Services Active Automatically positioned to the address	A10SW (SW)	660	-	630938 165142
38	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Fuelsure The Outlook, Foxborough Lane, Minster, Ramsgate, Kent, CT12 4AH Tank Cleaning & Repairing Inactive Automatically positioned to the address	A10SE (SW)	763	-	631097 164977
39	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries V Technical Tothill Street, Minster, Ramsgate, Kent, CT12 4AG Office Equipment Servicing & Maintenance Active Manually positioned within the geographical locality	A6NW (SW)	941	-	630965 164831



Industrial Land Use

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
40	Fuel Station Entries Name: Location: Brand: Premises Type: Status: Positional Accuracy:	Co-Op Minster Tothill Street, Minster, Thanet, Kent, CT12 4AY Texaco Service Area Open Manually positioned to the address or location	A14SE (NW)	90	-	631173 165661
41	Status:	Cross Channel Service Station Mount Pleasant, Minster, RAMSGATE, Kent, CT12 4AU Total Not Applicable Obsolete Automatically positioned to the address	A14SW (NW)	129	-	631014 165797



Sensitive Land Use

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
42	Nitrate Vulnerable Name: Description: Source:	e Zones Not Supplied Groundwater Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	A11NW (N)	0	6	631547 165455

Order Number: 82787389_1_1 Date: 17-Mar-2016 rpr_ec_datasheet v50.0 A Landmark Information Group Service Page 23 of 29



Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Thanet District Council - Environmental Health Department Dover District Council - Environmental Health Department	April 2014 January 2015	Annual Rolling Update Annual Rolling Update
Discharge Consents Environment Agency - Southern Region	January 2016	Quarterly
Enforcement and Prohibition Notices	January 2010	Quarterly
Environment Agency - Southern Region	March 2013	As notified
Integrated Pollution Controls Environment Agency - Southern Region	October 2008	Not Applicable
Integrated Pollution Prevention And Control Environment Agency - Southern Region	January 2016	Quarterly
Local Authority Integrated Pollution Prevention And Control Thanet District Council - Environmental Health Department Dover District Council - Environmental Health Department	April 2014 June 2014	Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Controls Thanet District Council - Environmental Health Department Dover District Council - Environmental Health Department	April 2014 June 2014	Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements Thanet District Council - Environmental Health Department Dover District Council - Environmental Health Department	April 2014 June 2014	Annual Rolling Update Annual Rolling Update
Nearest Surface Water Feature Ordnance Survey	July 2012	Quarterly
Pollution Incidents to Controlled Waters Environment Agency - Southern Region	December 1999	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - Southern Region	March 2013	As notified
Prosecutions Relating to Controlled Waters Environment Agency - Southern Region	March 2013	As notified
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 - Southern Region - Kent Area Environment Agency - Southern Region - Kent and East Sussex	January 2016 January 2016	Quarterly Quarterly
Water Abstractions Environment Agency - Southern Region	January 2016	Quarterly
Water Industry Act Referrals Environment Agency - Southern Region	January 2016	Quarterly
Groundwater Vulnerability Environment Agency - Head Office	April 2015	Not Applicable
Drift Deposits Environment Agency - Head Office	January 1999	Not Applicable
Bedrock Aquifer Designations British Geological Survey - National Geoscience Information Service	October 2012	As notified
Superficial Aquifer Designations British Geological Survey - National Geoscience Information Service	January 2015	As notified
Source Protection Zones		



Agency & Hydrological	Version	Update Cycle
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	February 2016	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	February 2016	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	February 2016	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	February 2016	Quarterly
Flood Defences Environment Agency - Head Office	February 2016	Quarterly
Detailed River Network Lines Environment Agency - Head Office	March 2012	Annually
Detailed River Network Offline Drainage Environment Agency - Head Office	March 2012	Annually
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	October 2013	As notified
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	October 2013	As notified
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	October 2013	As notified
Surface Water Suitability Environment Agency - Head Office	October 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	March 2016	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - Southern Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - Southern Region - Kent Area Environment Agency - Southern Region - Kent and East Sussex	February 2016 February 2016	Quarterly Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency - Southern Region - Kent Area Environment Agency - Southern Region - Kent and East Sussex	January 2016 January 2016	Quarterly Quarterly
Local Authority Landfill Coverage Dover District Council - Environmental Health Department Kent County Council - Waste Management Group Thanet District Council - Environmental Health Department	May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable
Local Authority Recorded Landfill Sites Dover District Council - Environmental Health Department Kent County Council - Waste Management Group Thanet District Council - Environmental Health Department	May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable
Registered Landfill Sites Environment Agency - Southern Region - Kent Area	March 2003	Not Applicable
Registered Waste Transfer Sites Environment Agency - Southern Region - Kent Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency - Southern Region - Kent Area	March 2003	Not Applicable



Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		5
Health and Safety Executive	February 2016	Bi-Annually
Explosive Sites	F-1	D' Assessables
Health and Safety Executive	February 2016	Bi-Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
Thanet District Council	February 2016	Annual Rolling Update
Dover District Council - Planning Department	January 2016	Annual Rolling Update
Kent County Council	January 2016	Annual Rolling Update
Planning Hazardous Substance Consents		
Thanet District Council	February 2016	Annual Rolling Update
Dover District Council - Planning Department	January 2016	Annual Rolling Update
Kent County Council	January 2016	Annual Rolling Update
Geological	Version	Update Cycle
DOS 4.525 000 Solid Coology		
BGS 1:625,000 Solid Geology	lonuony 2000	Not Applicable
British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry	_	
British Geological Survey - National Geoscience Information Service	January 2010	Annually
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	November 2015	Bi-Annually
Brine Compensation Area		
Cheshire Brine Subsidence Compensation Board	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
	Way 2010	Trot / tppiloabio
Potential for Collapsible Ground Stability Hazards	luna 2015	Annually
British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Compressible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Ground Dissolution Stability Hazards		
British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Running Sand Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards		•
British Geological Survey - National Geoscience Information Service	June 2015	Annually
	04110 2010	, unidany
Radon Potential - Radon Affected Areas	hub. 2044	An notified
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



Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	November 2015	Quarterly
Fuel Station Entries Catalist Ltd - Experian	November 2015	Quarterly
Sensitive Land Use	Version	Update Cycle
Areas of Outstanding Natural Beauty Natural England	October 2015	Bi-Annually
Environmentally Sensitive Areas Natural England	October 2015	Annually
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	October 2015	Bi-Annually
Marine Nature Reserves Natural England	October 2015	Bi-Annually
National Nature Reserves Natural England	October 2015	Bi-Annually
National Parks Natural England	March 2016	Bi-Annually
Nitrate Sensitive Areas Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	October 2015	Not Applicable
Nitrate Vulnerable Zones Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	October 2015	Annually
Ramsar Sites Natural England	October 2015	Bi-Annually
Sites of Special Scientific Interest Natural England	October 2015	Bi-Annually
Special Areas of Conservation Natural England	October 2015	Bi-Annually
Special Protection Areas Natural England	October 2015	Bi-Annually



Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Ordnance Survey®
Environment Agency	Environment Agency
Scottish Environment Protection Agency	SEP Scottish 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
Natural England	NATURAL ENGLAND
Public Health England	Public Health England
Ove Arup	ARUP
Peter Brett Associates	peterbrett



Useful Contacts

Contact	Name and Address	Contact Details	
2	Environment Agency - National Customer Contact Centre (NCCC)	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk	
	PO Box 544, Templeborough, Rotherham, S60 1BY		
3	Thanet District Council - Environmental Health Department	Telephone: 01843 577000 Fax: 01843 290906 Website: www.thanet.gov.uk	
	Council Offices, Cecil Street, Margate, Kent, CT9 1XZ		
4	British Geological Survey - Enquiry Service	Telephone: 0115 936 3143 Fax: 0115 936 3276	
	British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk	
5	Peter Brett Associates	Telephone: 0118 950 0761 Fax: 0118 959 7498	
	Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN	Email: reading@pba.co.uk Website: www.pba.co.uk	
6	Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	Telephone: 0113 2613333 Fax: 0113 230 0879	
	Government Buildings, Otley Road, Lawnswood, Leeds, West Yorkshire, LS16 5QT		
7	Natural England	Telephone: 0845 600 3078 Email: enquiries@naturalengland.org.uk	
	Suite D, Unex House, Bourges Boulevard, Peterborough, Cambridgeshire, PE1 1NG	Website: www.naturalengland.org.uk	
8	Environment Agency - Head Office	Telephone: 01454 624400 Fax: 01454 624409	
	Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	1 ax. 01434 024409	
9	Kent County Council - Waste Management Group	Telephone: 01622 605976 Website: www.kent.gov.uk	
	Block H, The Forstal, Beddow Way, Aylesford, Kent, ME20 7BT	Wobolie. WW.Ronagov.uk	
-	Public Health England - Radon Survey, Centre for	Telephone: 01235 822622 Fax: 01235 833891	
	Radiation, Chemical and Environmental Hazards	Email: radon@phe.gov.uk Website: www.ukradon.org	
	Chilton, Didcot, Oxfordshire, OX11 0RQ	Western www.uniadon.org	
-	Landmark Information Group Limited	Telephone: 0844 844 9952 Fax: 0844 844 9951	
	Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	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.

Historical Mapping Legends

Ordnance Survey County Series 1:10,560 Gra∨el 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 Plan 1:10,000

Errinn	Chalk Pit, Clay Pit or Quarry	000000000000000000000000000000000000000	Gravel Pit
	Sand Pit	(Disused Pit or Quarry
	Refuse or Slag Heap	((()	Lake, Loch or Pond
	. Dunes	000	Boulders
弁	Coniferous Trees	44	Non-Coniferous Trees
ቀ ቀ	Orchard Ωn_	Scrub	∖Y₁v Coppice
ជា ជា	Bracken	Heath '	, 、 , , , , Rough Grassland
<u> </u>	- Marsh \\\\\\\\\\	Reeds	<u> ২-১-</u> Saltings
		ion of Flow of	Water
	Building		Shingle
	Glasshouse		
	Sloping Masonry	Pylon — — — — Pole — — • —	ElectricityTransmissionLine
••		''''''''''''''''''''''''''''''''''''''	' Multiple Track Standard Gauge
Road ' Under	''∏''' Road Leve Over Crossi		Single Track
			Siding, Tramway or Mineral Line
			→ Narrow Gauge
	Geographical Cou	inty	
	Administrative Co	unty, County	Borough
	Municipal Boroug Burgh or District (ural District,
	Borough, Burgh o		
	Civil Parish Shown alternately wh	nen coincidence	of boundaries occurs
BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta FB	Fire Engine Station Foot Bridge	PH SB	Public House Signal Box
гв Fn	Foot Bridge Fountain	SB Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MD	Mile Boot	TCB	Telephone Call Boot

TCP

Telephone Call Post

Mile 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
TITTETT!	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
_•-•	County boundary (England only)	• • • • • •	Ci∨il, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
۵ ⁰ **	Area of wooded vegetation	۵ ^۵	Non-coniferous trees
\Box	Non-coniferous trees (scattered)	**	Coniferous trees
* *	Coniferous trees (scattered)	č̈̈́	Positioned tree
ф ф ф ф	Orchard	* *	Coppice or Osiers
ωTr,	Rough Grassland	www.	Heath
On_	Scrub	7 <u>\</u> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Marsh, Salt Marsh or Reeds
4	Water feature	← ←	Flow arrows
MHW(S)	Mean high water (springs)	MLW(S)	Mean low water (springs)
	Telephone line (where shown)		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)	\boxtimes	Pylon, flare stack or lighting tower
+	Site of (antiquity)		Glasshouse
	General Building		Important Building

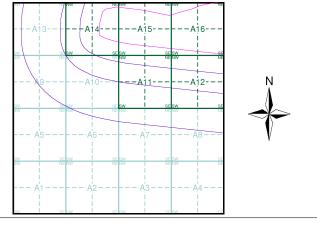
Building



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Kent	1:10,560	1877	2
Kent	1:10,560	1898 - 1899	3
Kent	1:10,560	1908	4
Kent	1:10,560	1908	5
Kent	1:10,560	1908	6
Kent	1:10,560	1931 - 1939	7
Kent	1:10,560	1931	8
Kent	1:10,560	1938 - 1946	9
Historical Aerial Photography	1:10,560	1945 - 1949	10
Kent	1:10,560	1948 - 1951	11
Historical Aerial Photography	1:10,560	1948 - 1949	12
Ordnance Survey Plan	1:10,000	1960 - 1961	13
Ordnance Survey Plan	1:10,000	1968	14
Ordnance Survey Plan	1:10,000	1975	15
Ordnance Survey Plan	1:10,000	1982	16
Ordnance Survey Plan	1:10,000	1990 - 1991	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2016	19

Historical Map - Slice A



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice:

Site Area (Ha): 306.39 Search Buffer (m): 1000

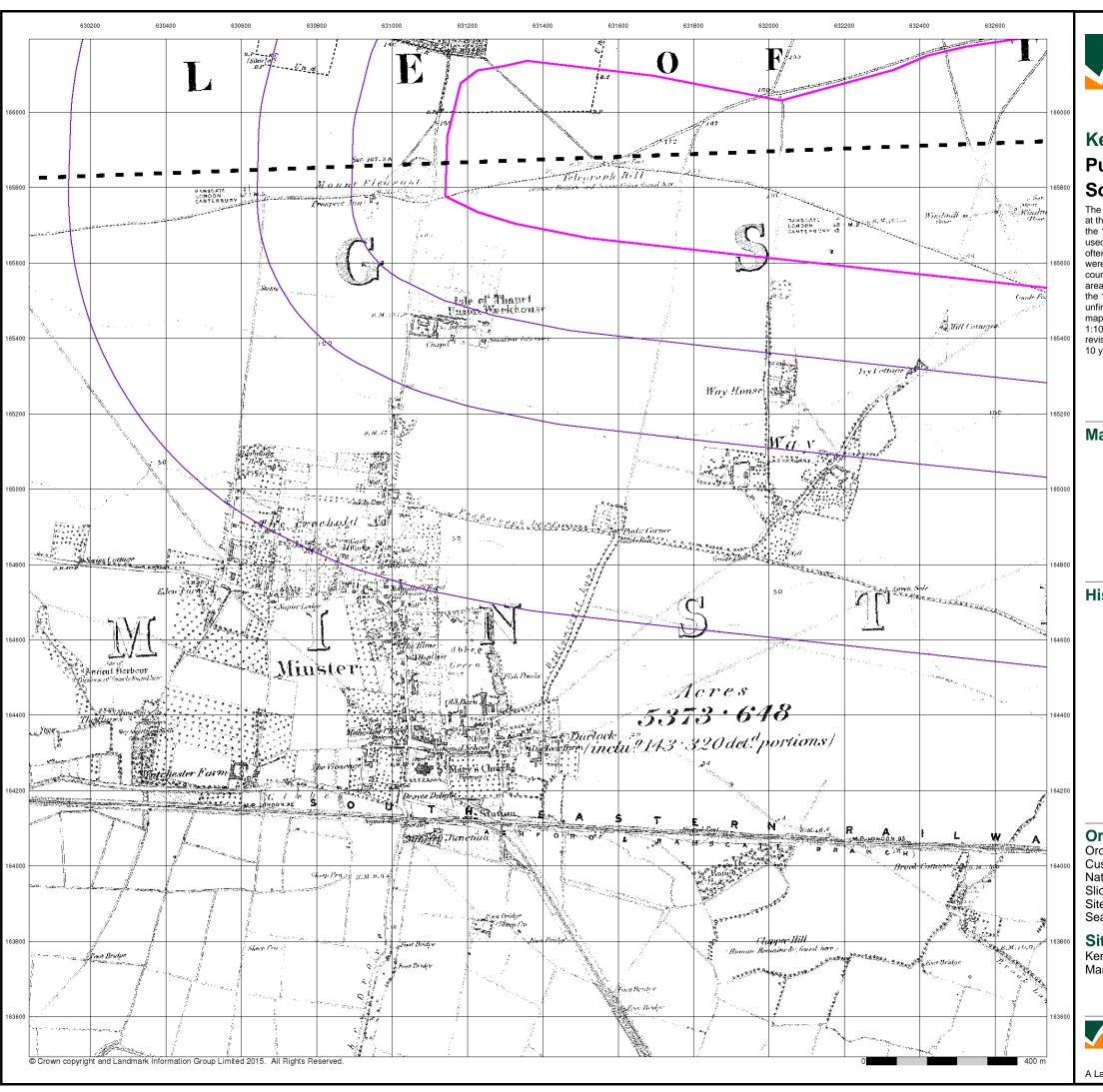
Site Details

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A Landmark Information Group Service v47.0 17-Mar-2016 Page 1 of 19

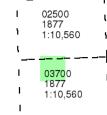




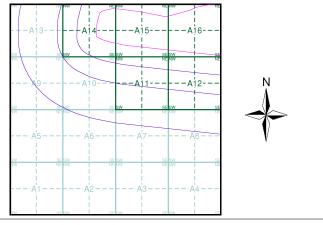
Published 1877 Source map scale - 1:10,560

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 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 631550, 165460
Slice: A

Site Area (Ha): 306.39 Search Buffer (m): 1000

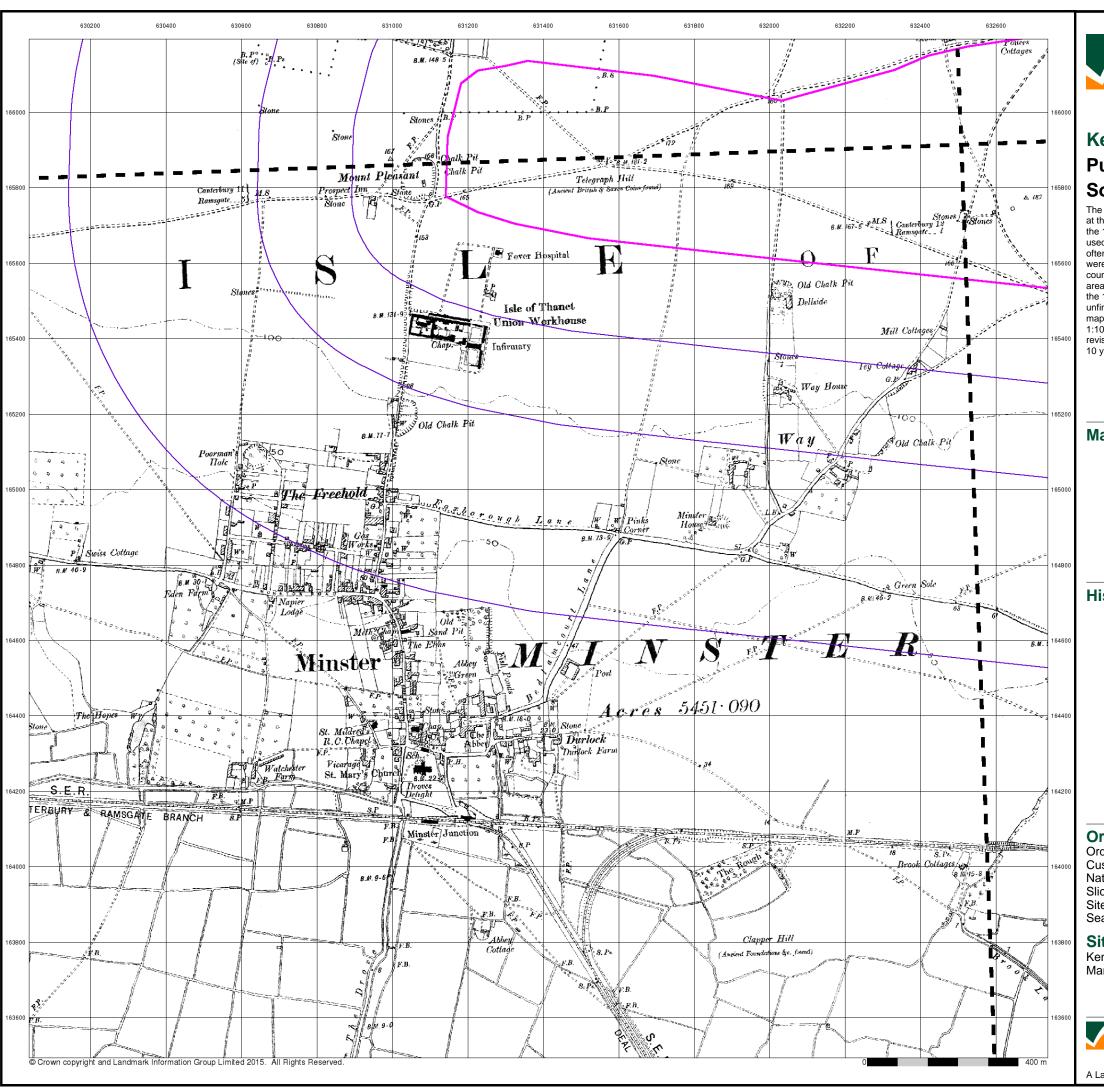
Site Details

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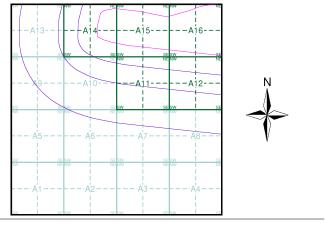
Published 1898 - 1899 Source map scale - 1:10,560

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 10 years or so for urban areas.

Map Name(s) and Date(s)

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1	025SW 1898	1	025SE 1899	ı
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1	1:10,560	- 1	1:10,560	- 1
		1		

Historical Map - Slice A



Order Details

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 631550, 165460
Slice: A

Site Area (Ha): 306.39 Search Buffer (m): 1000

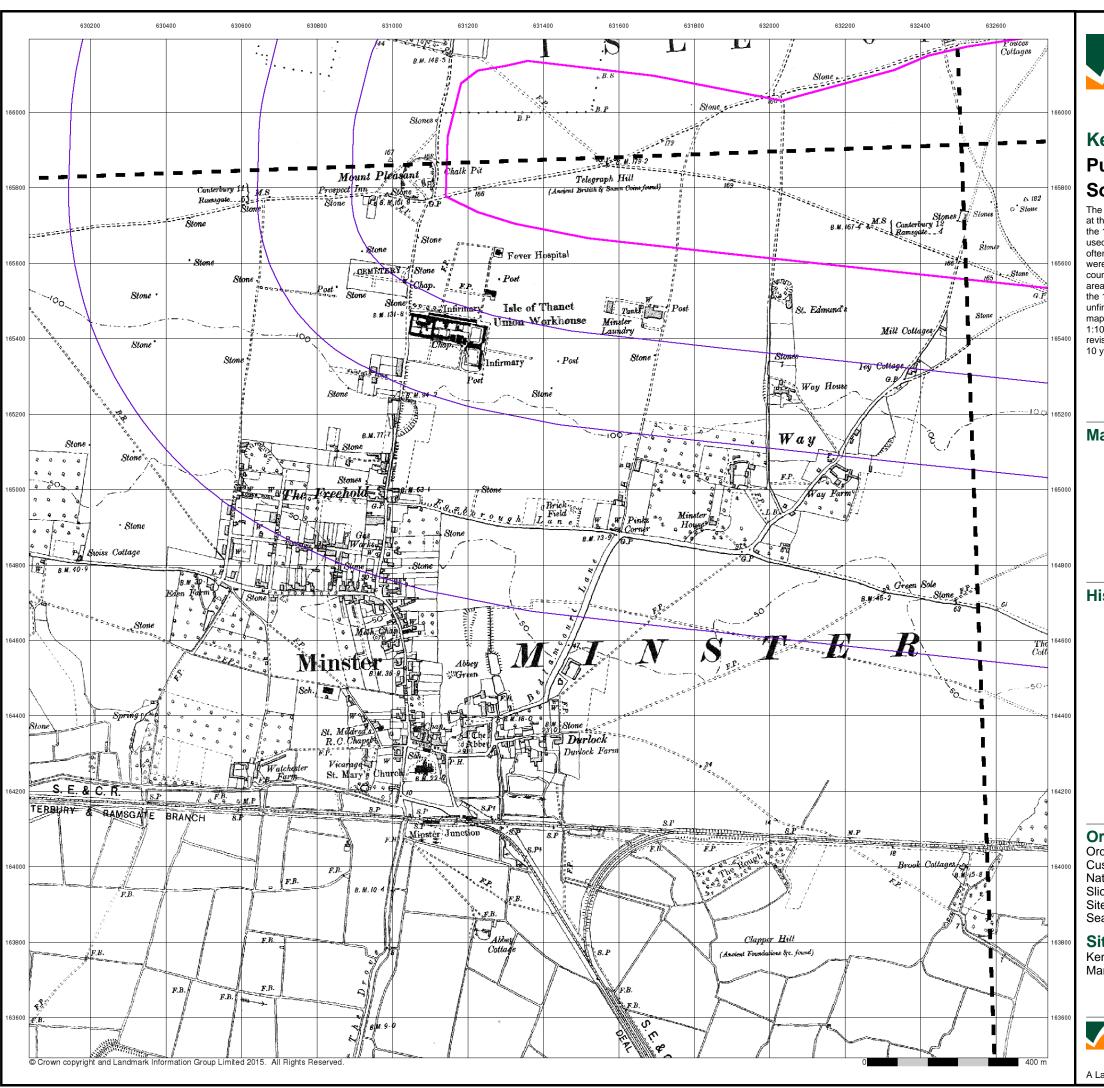
Site Details

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el: 0844 844 9952 ux: 0844 844 9951 eb: www.envirocheck.

A Landmark Information Group Service v47.0 17-Mar-2016 Page 3 of 19





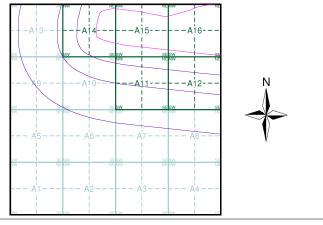
Published 1908 Source map scale - 1:10,560

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 10 years or so for urban areas.

Map Name(s) and Date(s)

		Т		- 1
ı	025S W 1908	ı	025SE 1908	ŀ
- 1	1:10,560	I	1:10,560	I
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ı	037 NW 1908	Ţ	037NE 1908	- 1
1	1:10,560	- }	1:10,560	-1
		1		

Historical Map - Slice A



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice:

Site Area (Ha):

306.39 Search Buffer (m): 1000

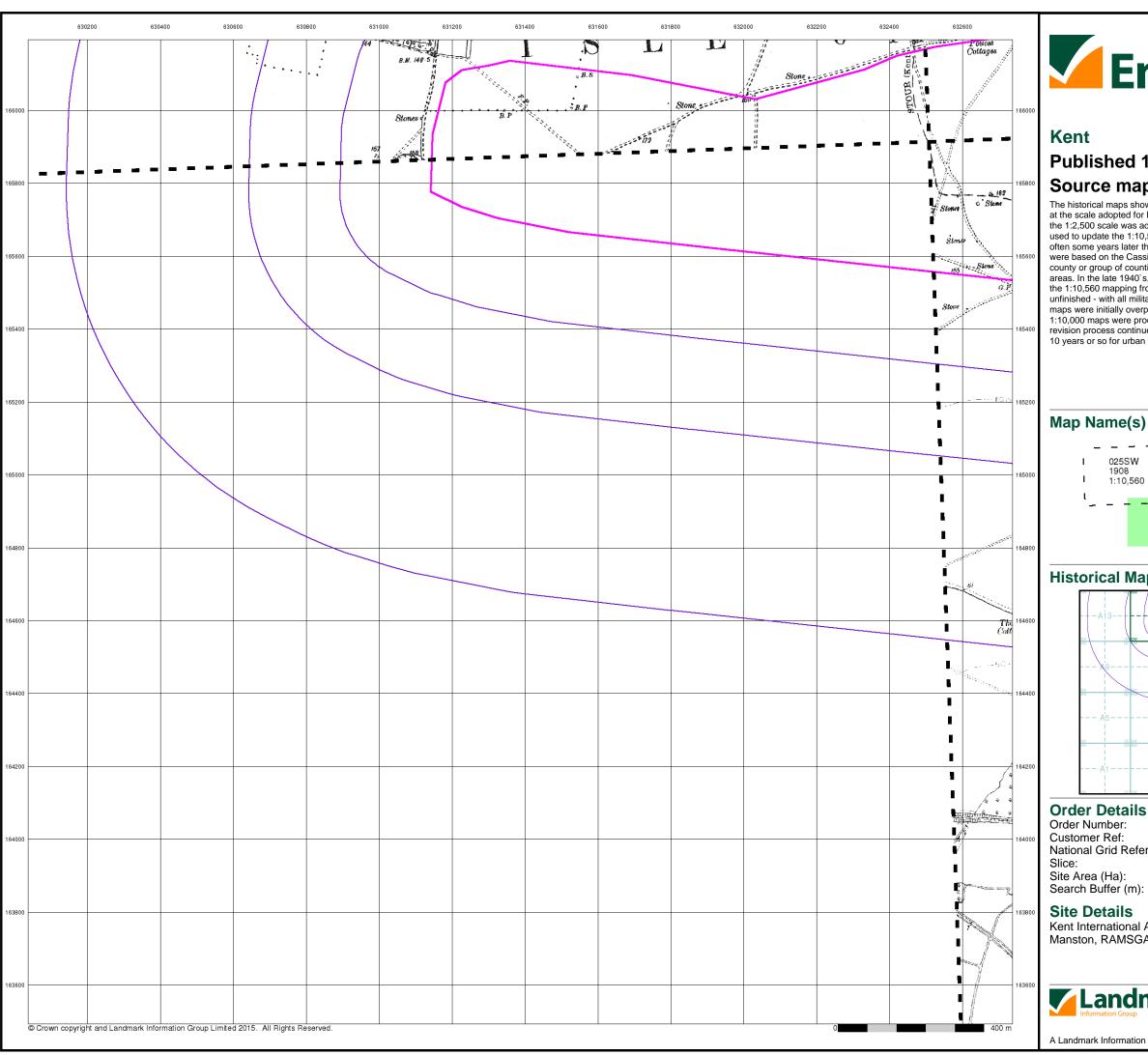
Site Details

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A Landmark Information Group Service v47.0 17-Mar-2016 Page 4 of 19

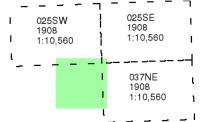




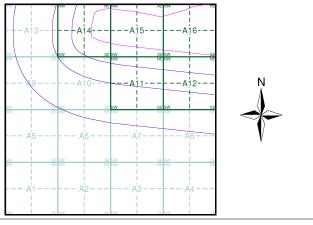
Published 1908 Source map scale - 1:10,560

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 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice: Site Area (Ha): 306.39

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

1000



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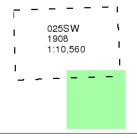




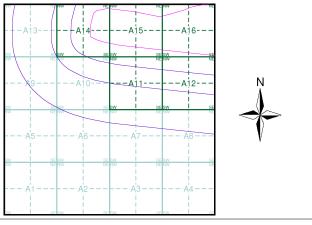
Published 1908 Source map scale - 1:10,560

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 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice:

Site Area (Ha):

306.39 Search Buffer (m): 1000

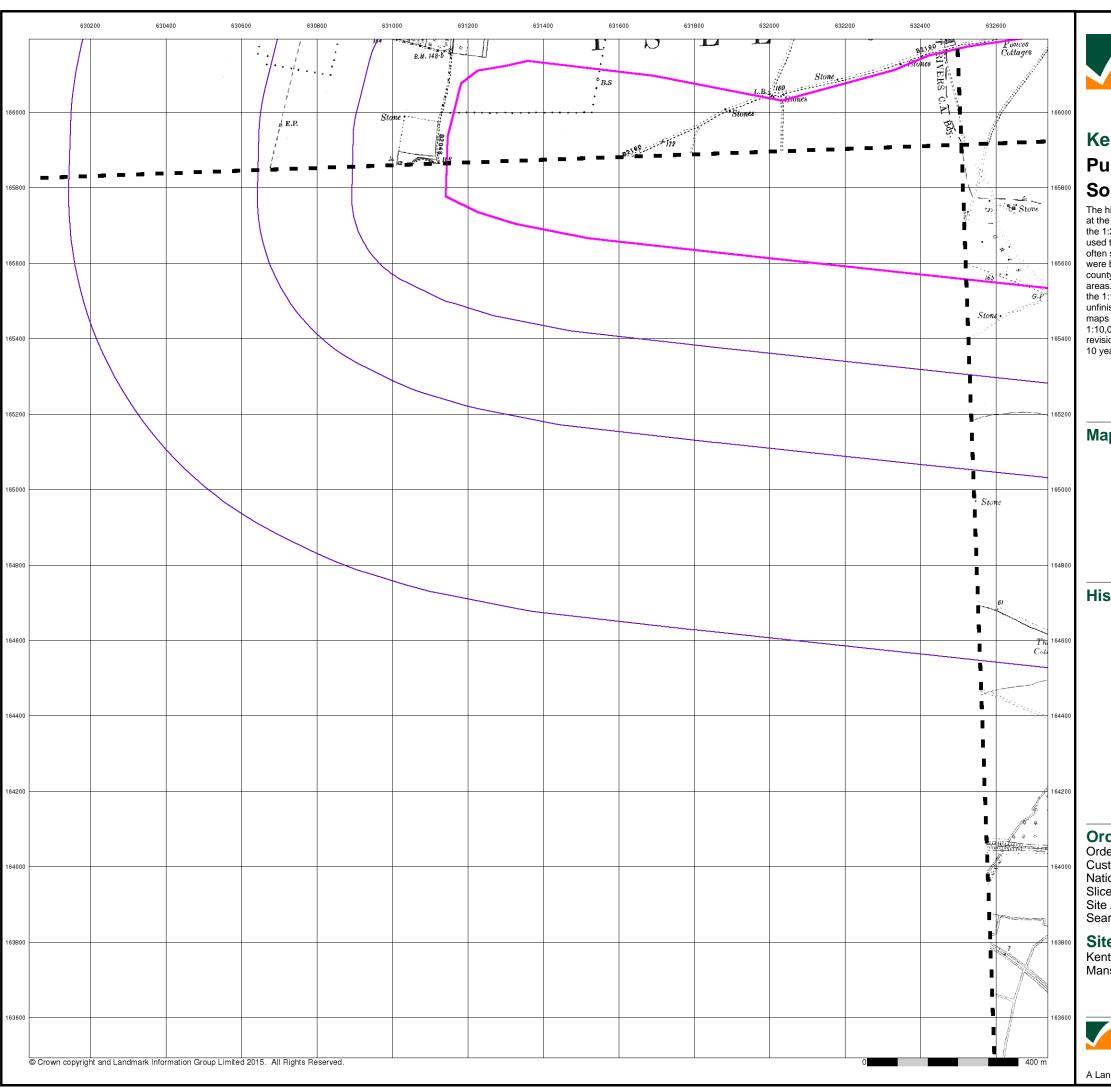
Site Details

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A Landmark Information Group Service v47.0 17-Mar-2016 Page 6 of 19

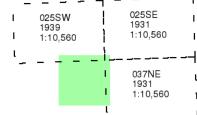




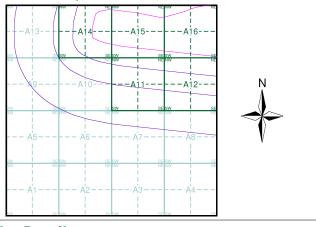
Published 1931 - 1939 Source map scale - 1:10,560

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 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice: 306.39

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

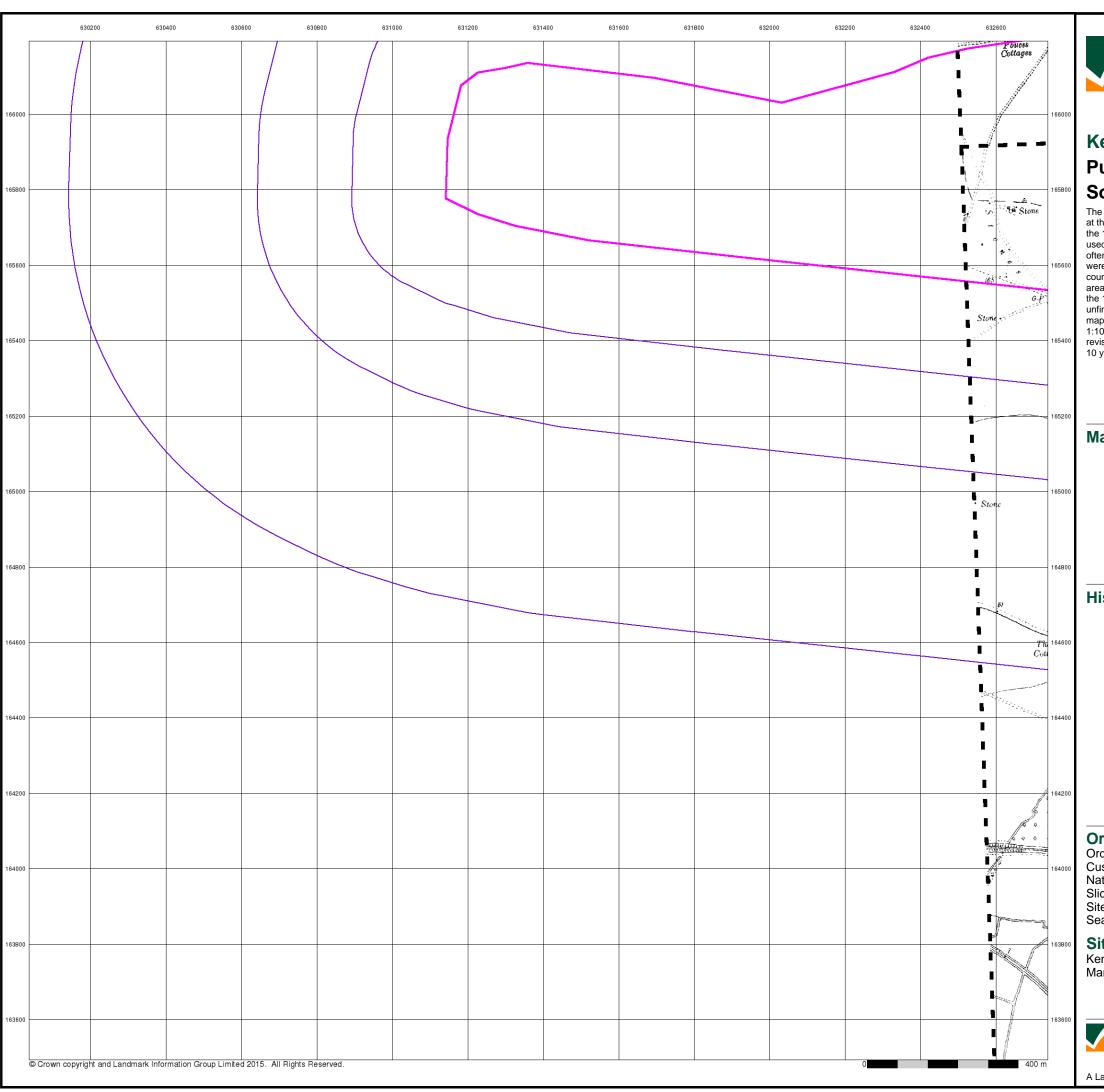
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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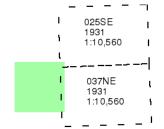




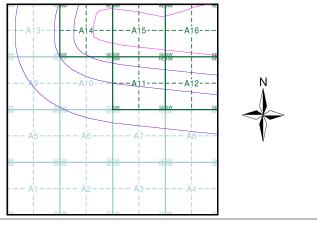
Published 1931 Source map scale - 1:10,560

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 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice: 306.39

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

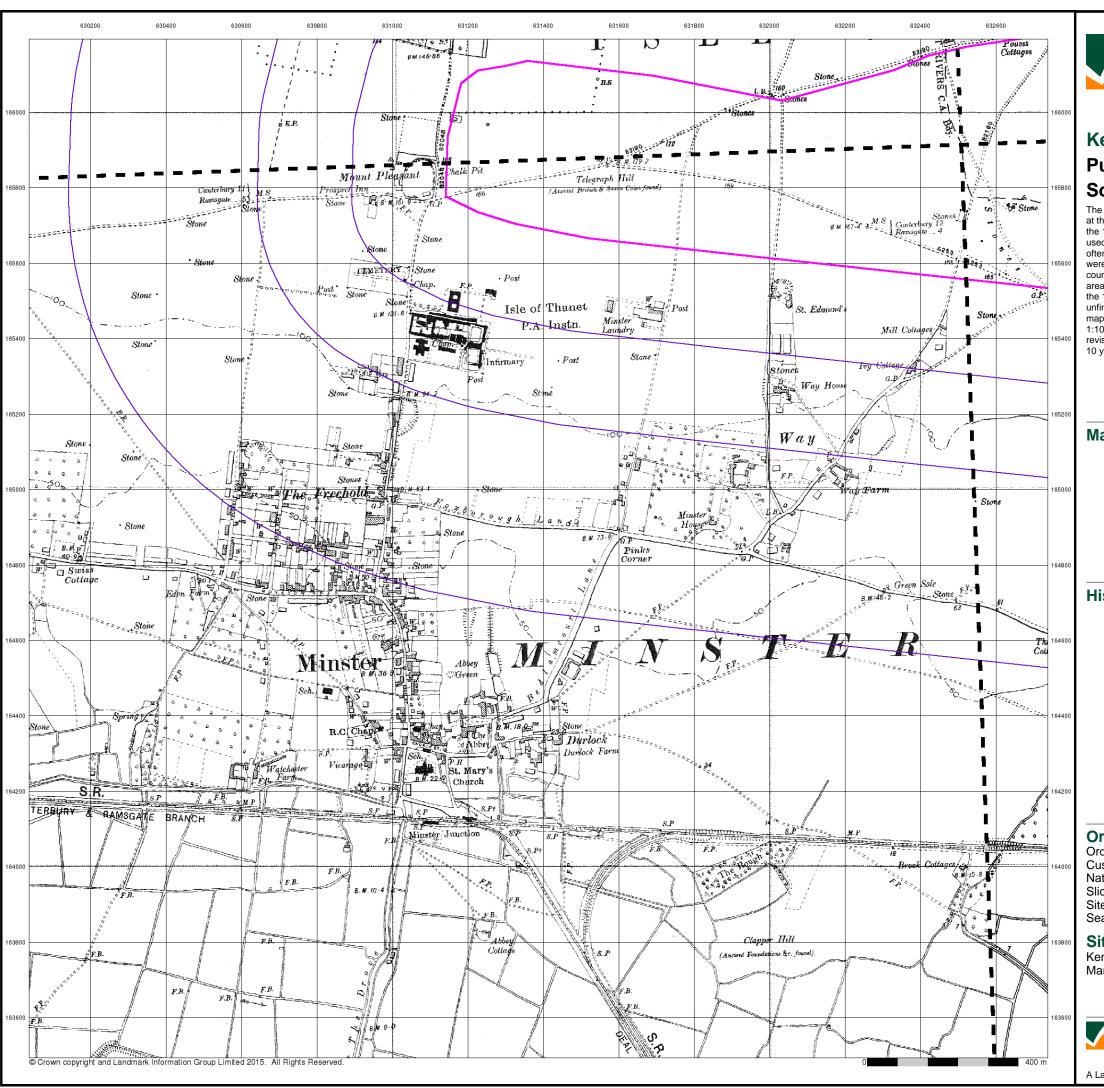
Site Details

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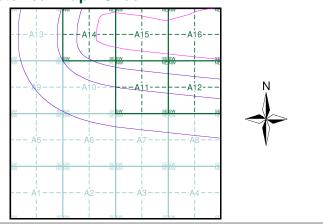
Published 1938 - 1946 Source map scale - 1:10,560

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 10 years or so for urban areas.

Map Name(s) and Date(s)

		т —	
1	025SW 1946	I 025SE 1938	1
1	1:10,560	1:10,56	30 I
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1	037 NW 1938	037NE 1938	,
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		1	

Historical Map - Slice A



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice:

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

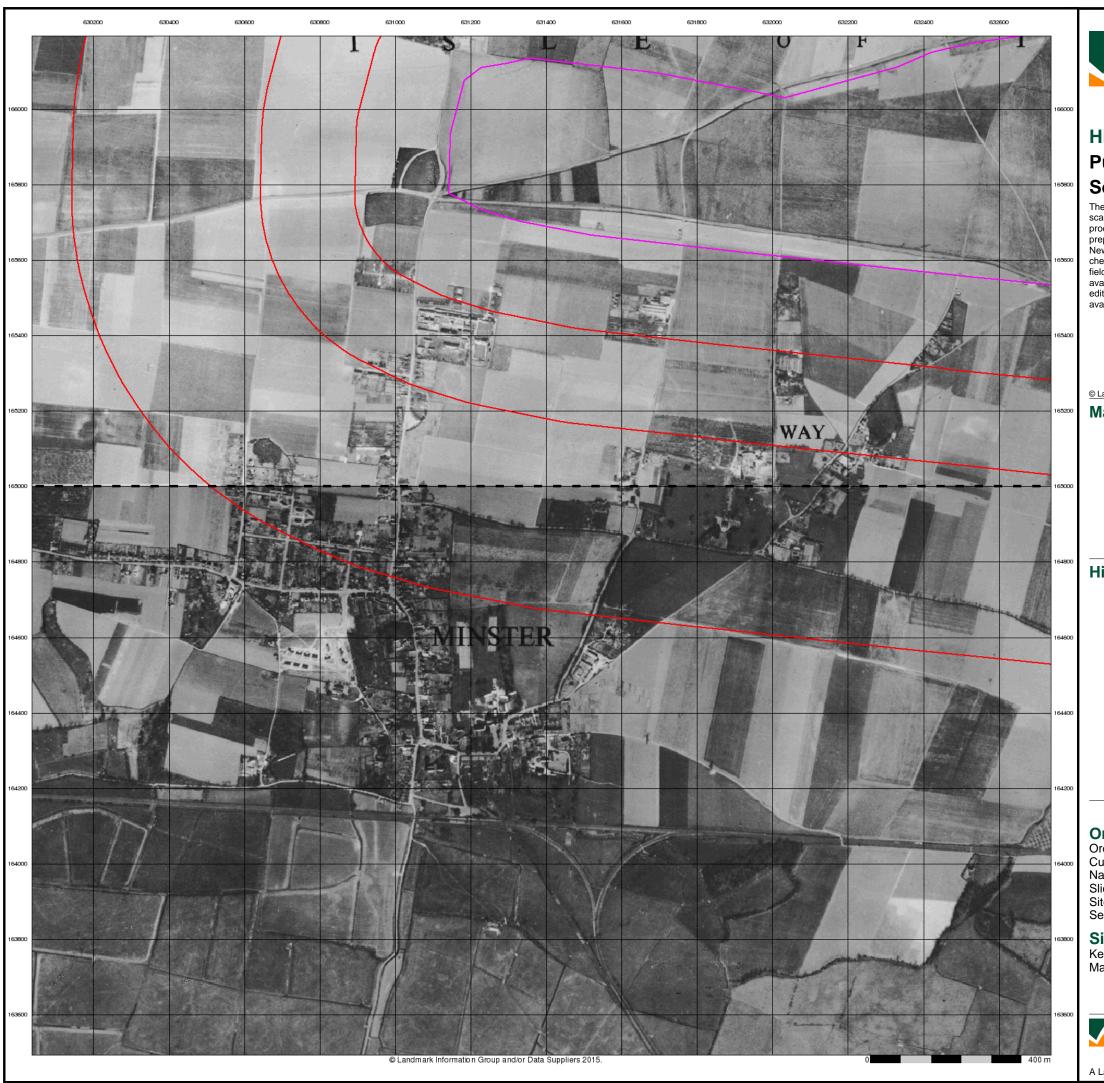
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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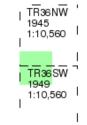


Historical Aerial Photography Published 1945 - 1949 Source map scale - 1:10,560

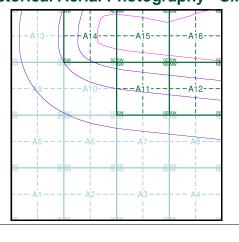
The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was rechecked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

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Map Name(s) and Date(s)



Historical Aerial Photography - Slice A



Order Details

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 631550, 165460
Slice: A

Site Area (Ha): 306.39 Search Buffer (m): 1000

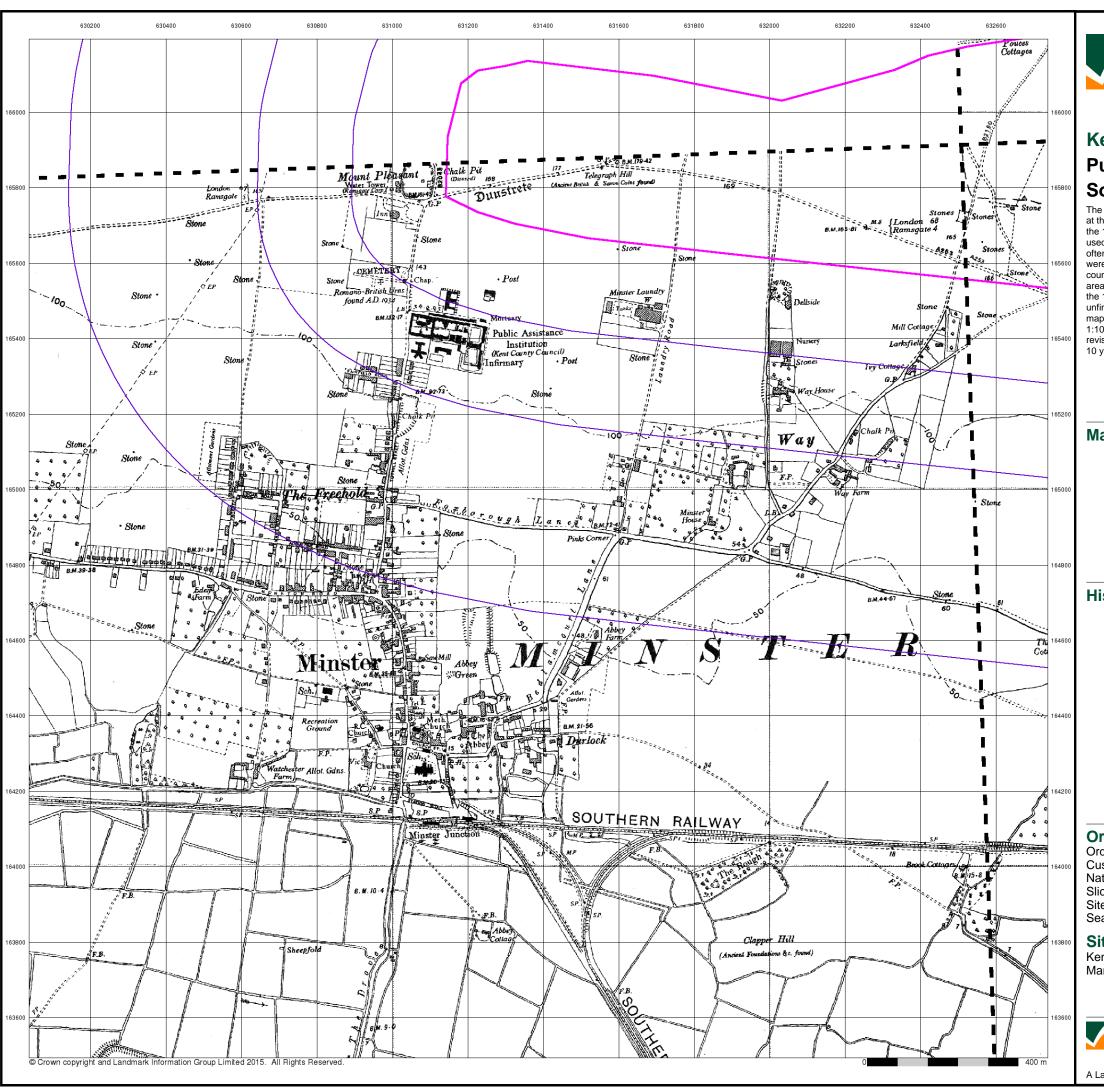
Site Details

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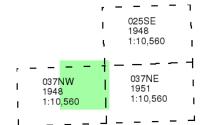




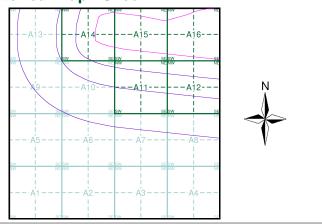
Published 1948 - 1951 Source map scale - 1:10,560

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 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice:

Site Area (Ha):

306.39 Search Buffer (m): 1000

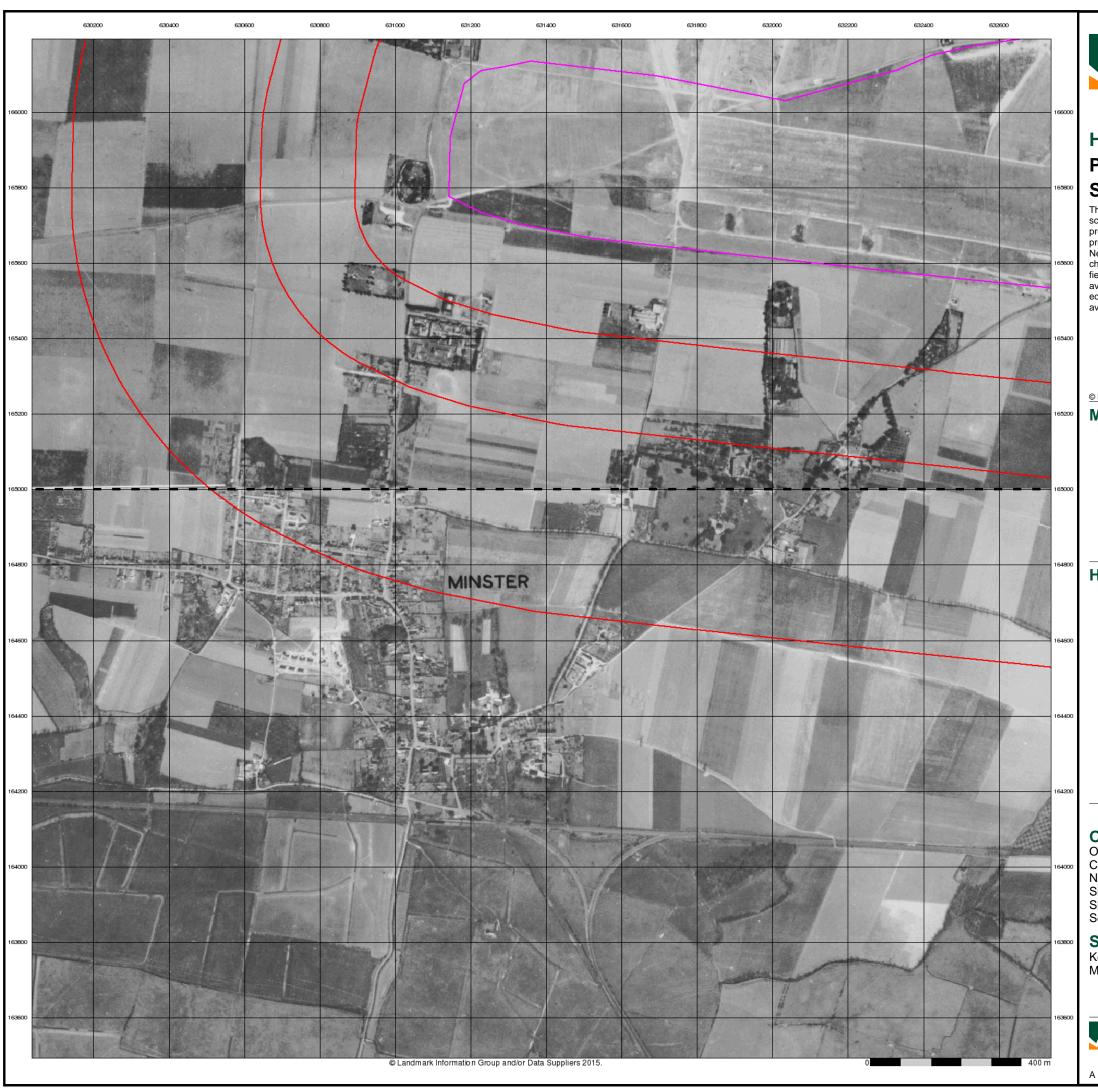
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 11 of 19



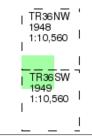


Historical Aerial Photography Published 1948 - 1949 Source map scale - 1:10,560

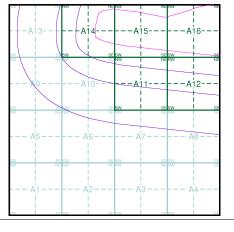
The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was rechecked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

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Map Name(s) and Date(s)



Historical Aerial Photography - Slice A



Order Details

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 631550, 165460
Slice: A

Site Area (Ha): 306.39 Search Buffer (m): 1000

Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 12 of 19

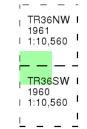




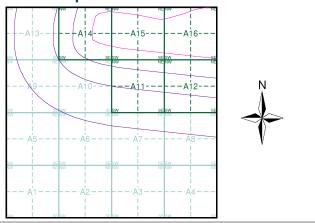
Ordnance Survey Plan Published 1960 - 1961 Source map scale - 1:10,000

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



Order Details

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 631550, 165460
Slice: A

Site Area (Ha): 306.39 Search Buffer (m): 1000

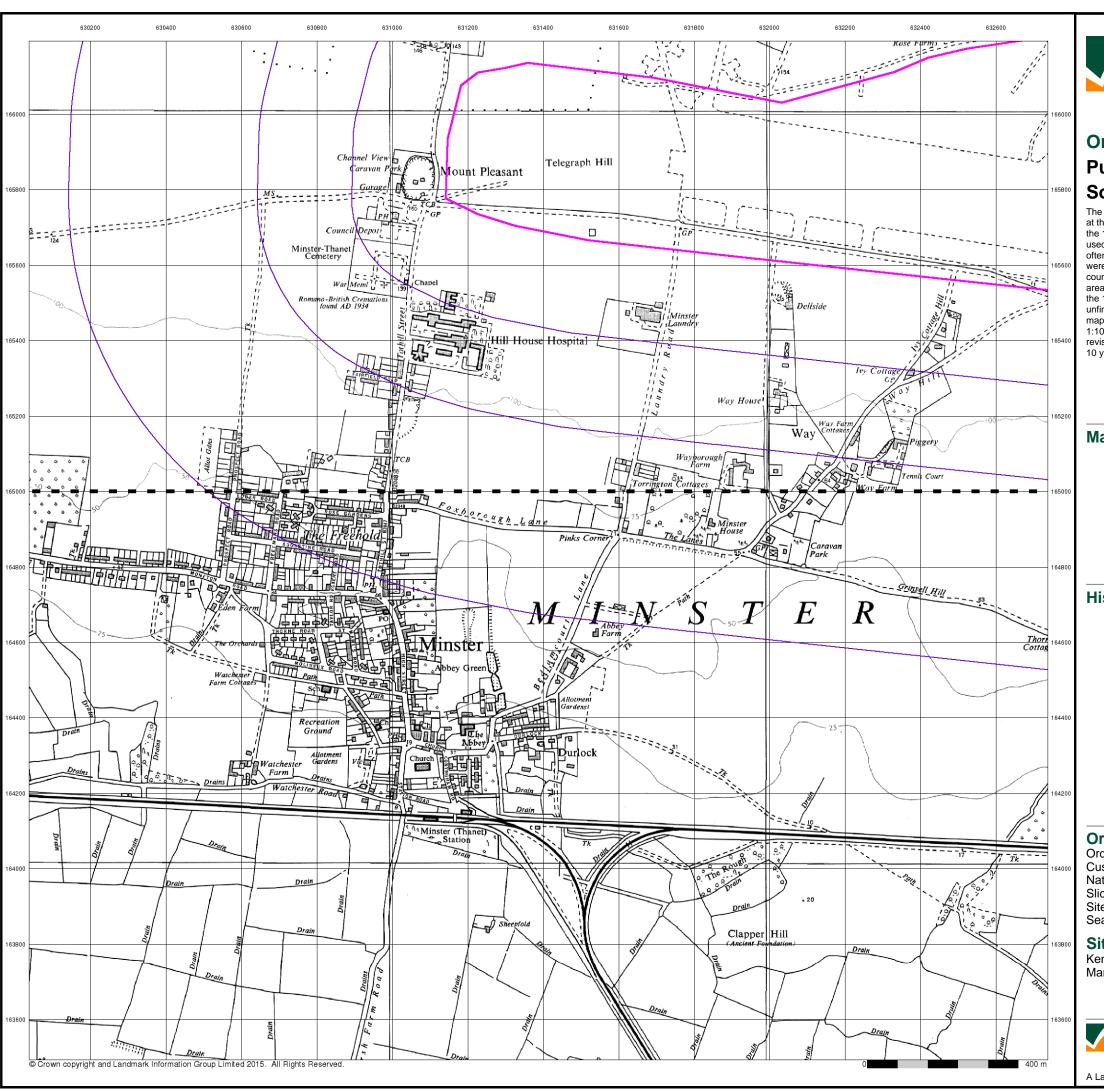
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 13 of 19

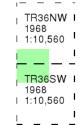




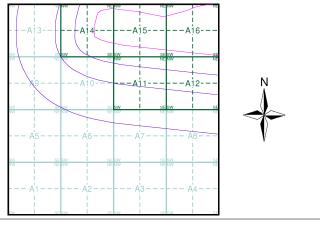
Ordnance Survey Plan Published 1968 Source map scale - 1:10,000

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: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 631550, 165460
Slice: A

Site Area (Ha): 306.39 Search Buffer (m): 1000

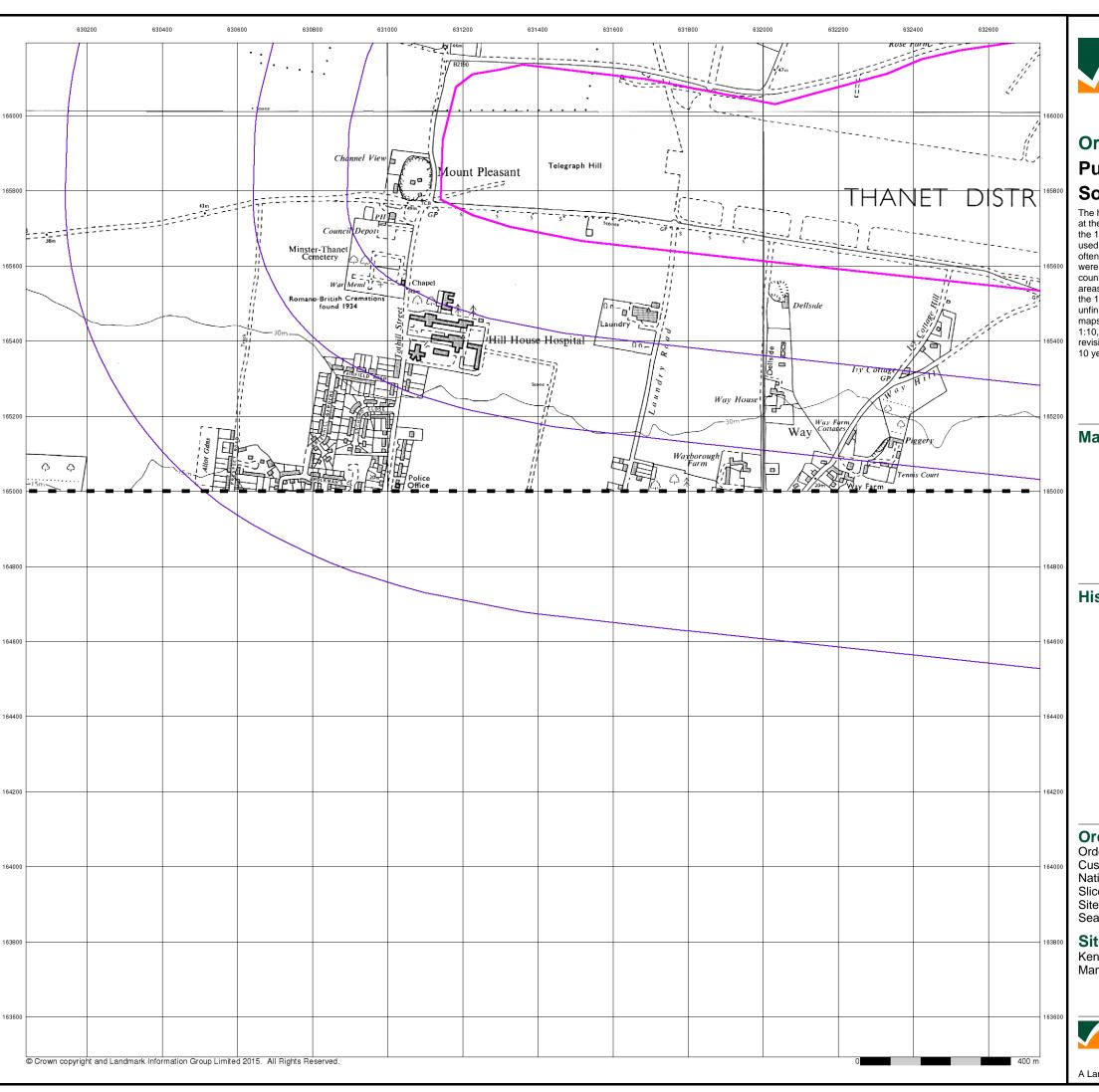
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 14 of 19

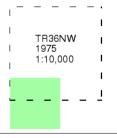




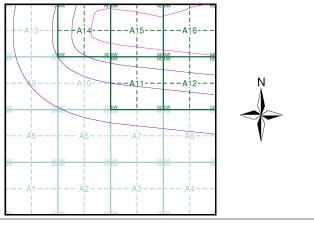
Ordnance Survey Plan Published 1975 Source map scale - 1:10,000

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: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 631550, 165460
Slice: A

Site Area (Ha): 306.39

Search Buffer (m): 306.39

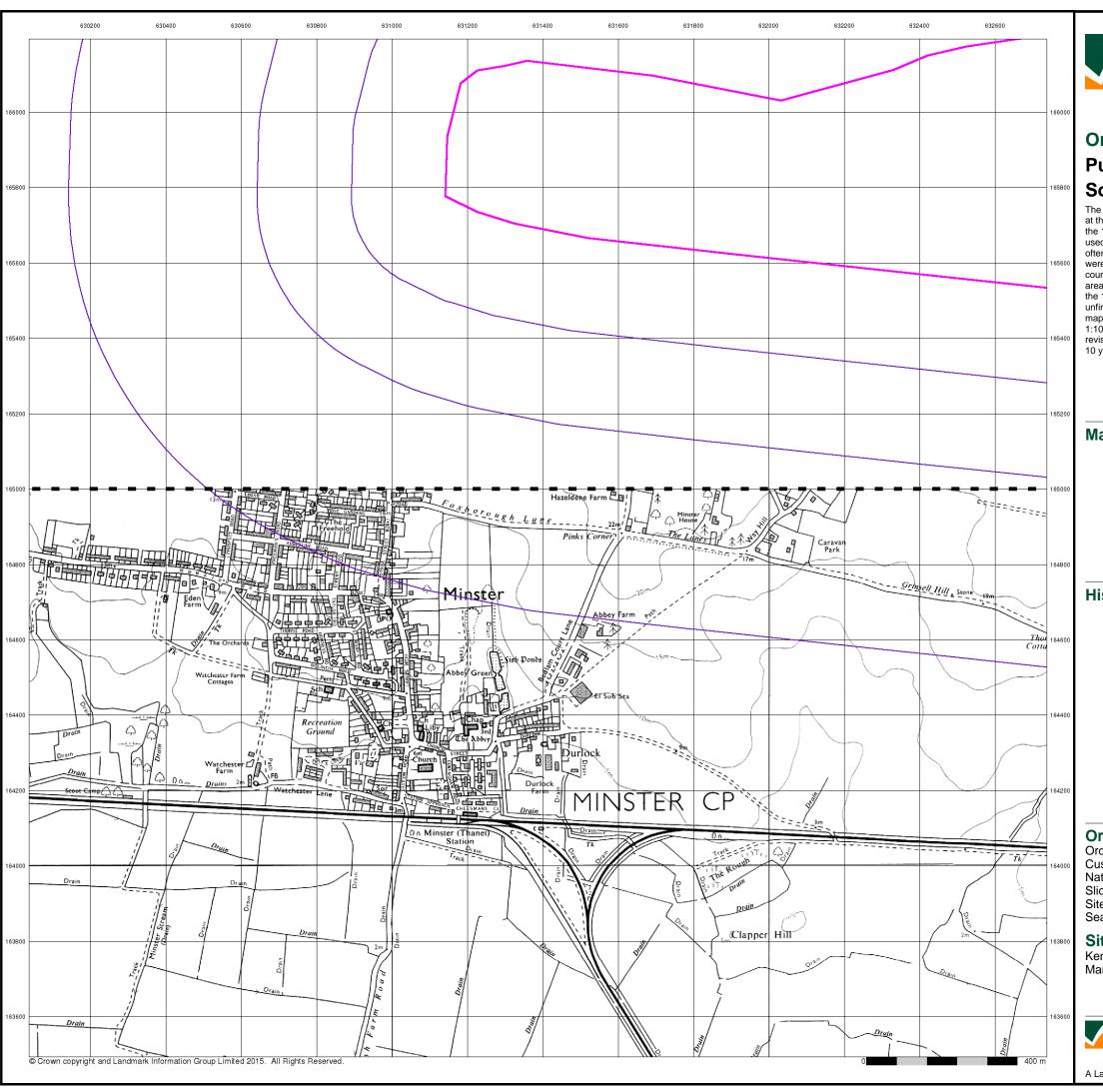
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



el: 0844 844 9952 ix: 0844 844 9951 eb: www.envirocheck.

A Landmark Information Group Service v47.0 17-Mar-2016 Page 15 of 19

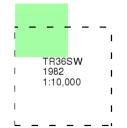




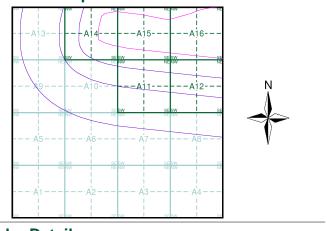
Ordnance Survey Plan Published 1982 Source map scale - 1:10,000

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: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice:

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

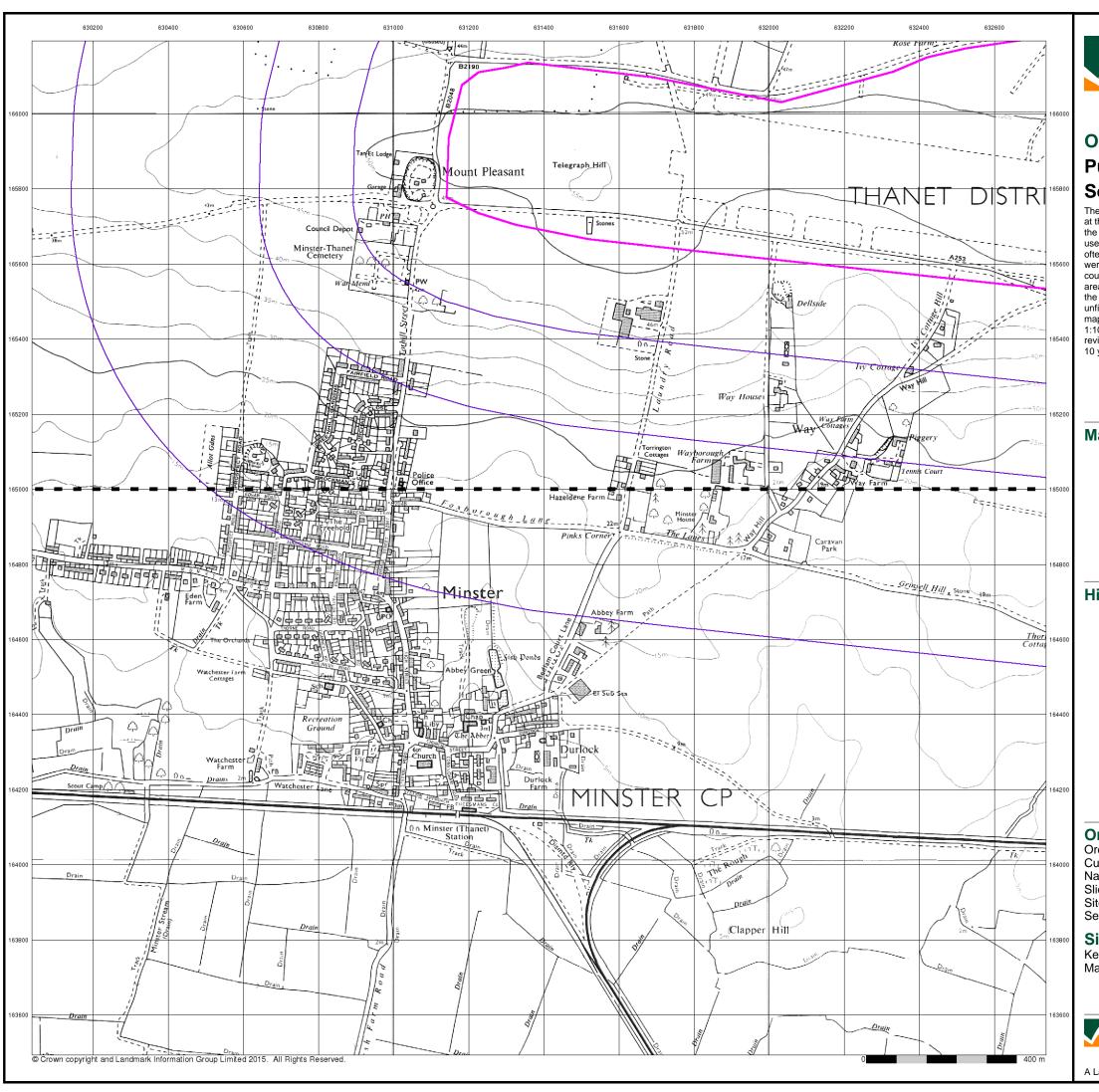
Site Details

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A Landmark Information Group Service v47.0 17-Mar-2016 Page 16 of 19

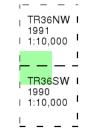




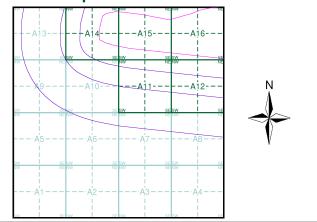
Ordnance Survey Plan Published 1990 - 1991 Source map scale - 1:10,000

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: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 631550, 165460
Slice: A
Site Asso (Us): 306.30

Site Area (Ha): 306.39 Search Buffer (m): 1000

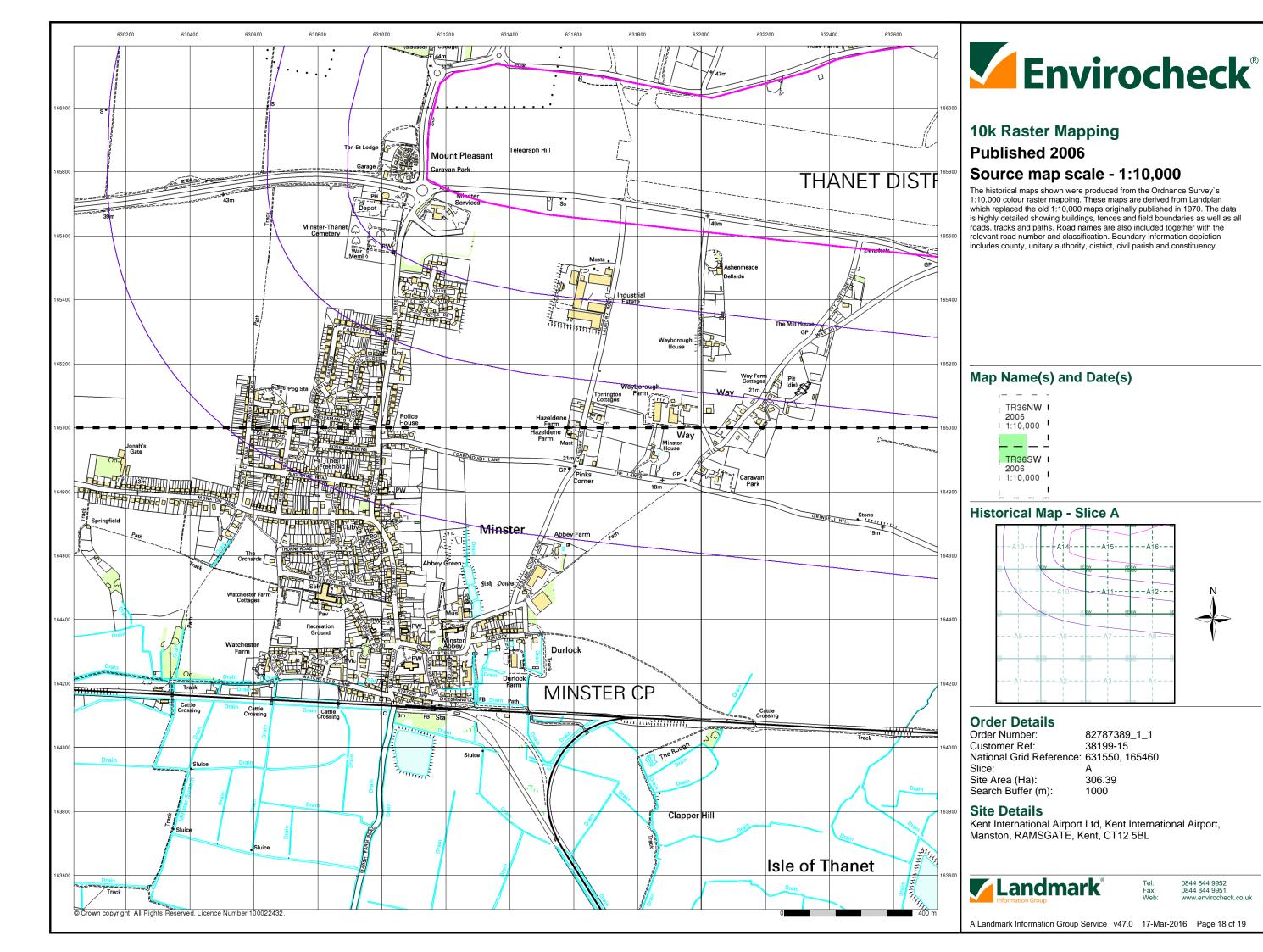
Site Details

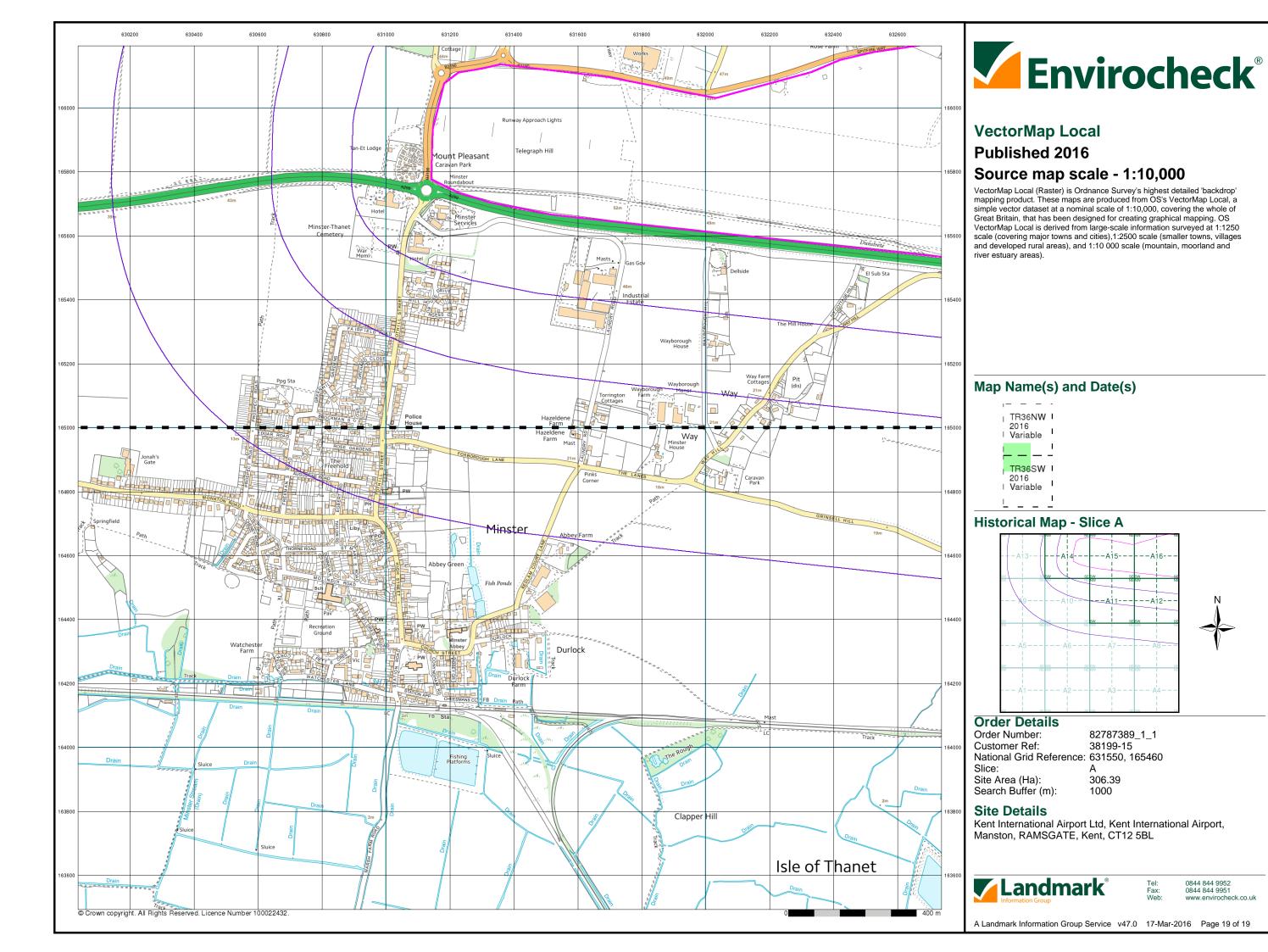
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

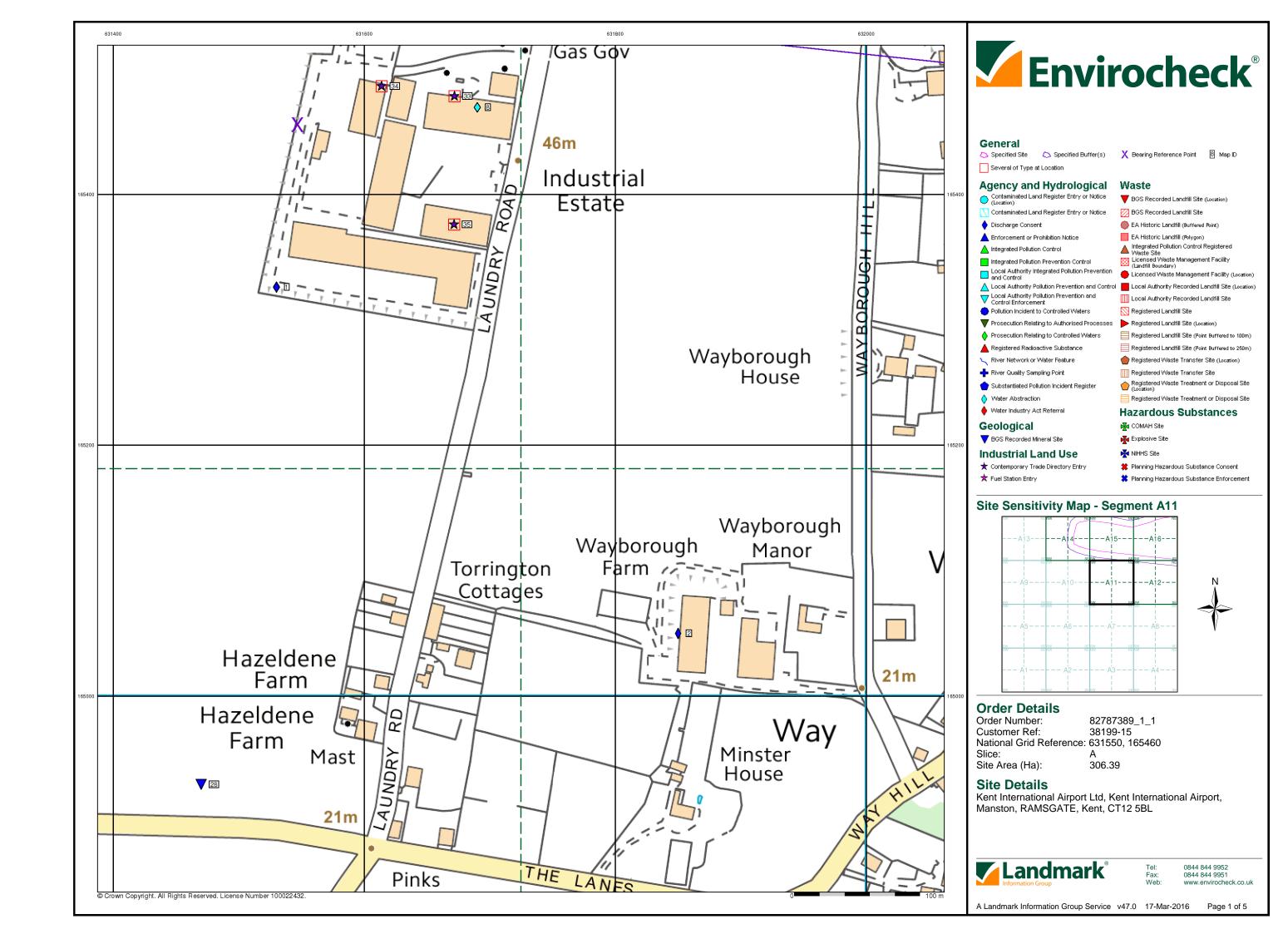


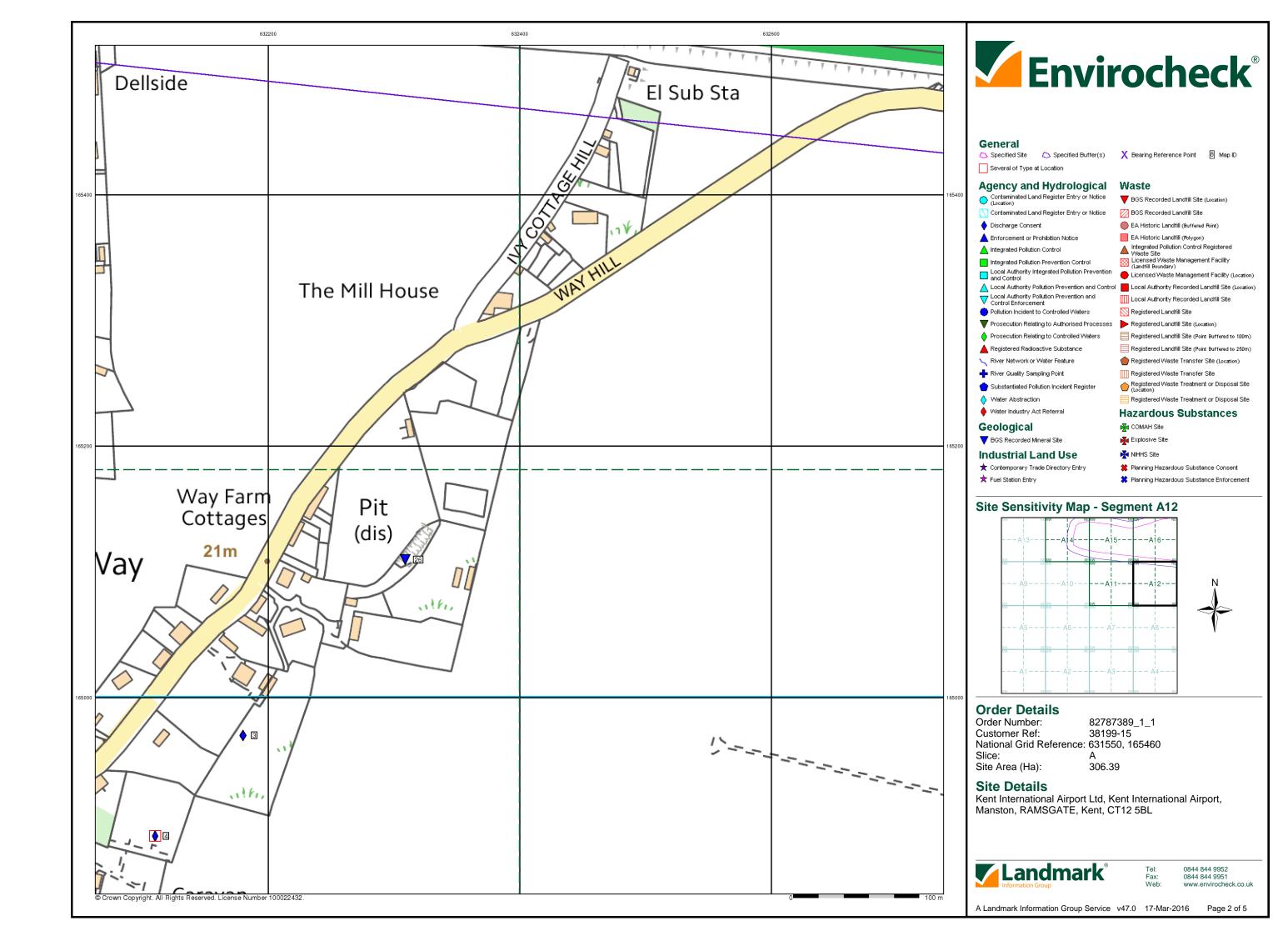
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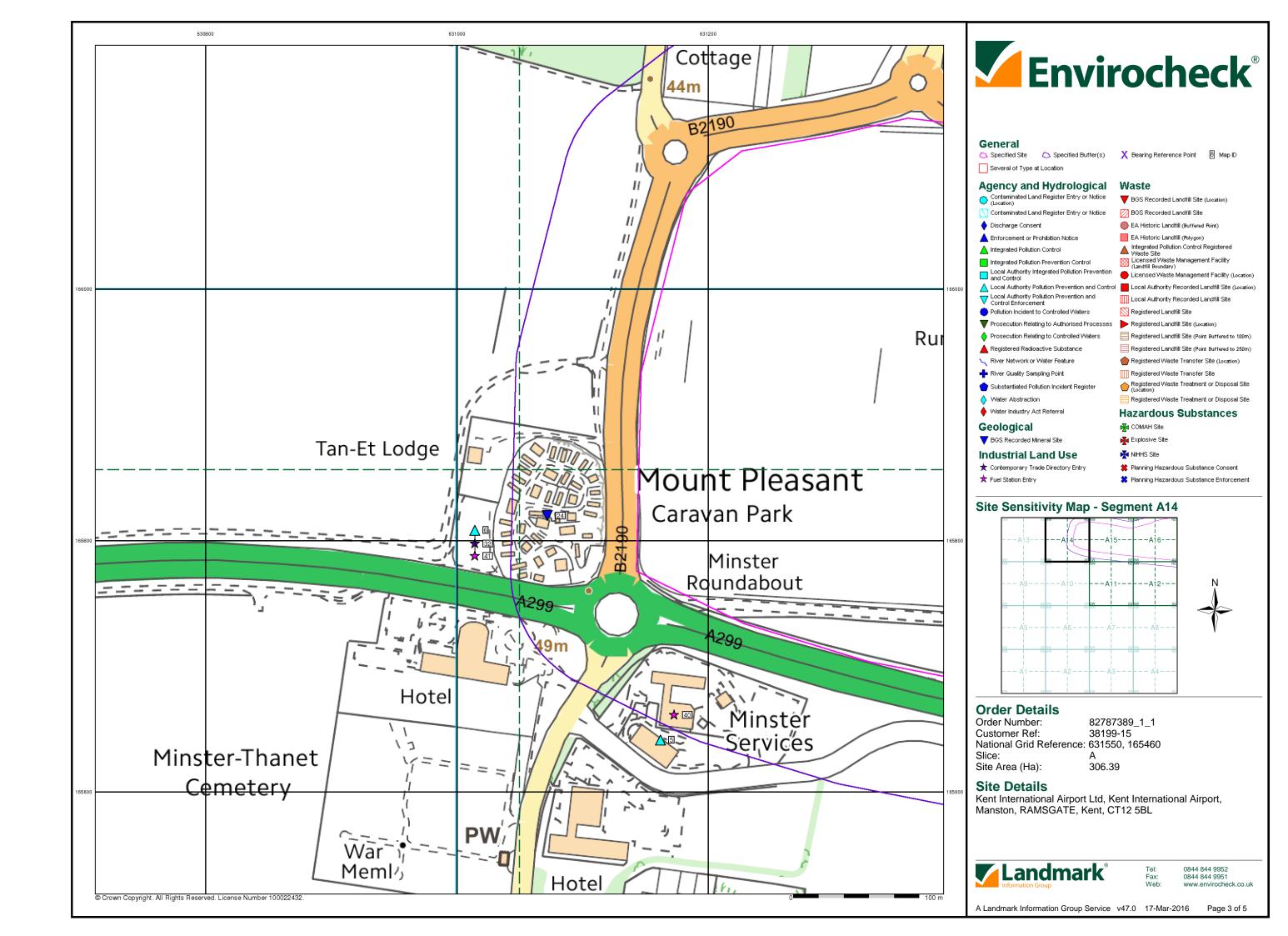
A Landmark Information Group Service v47.0 17-Mar-2016 Page 17 of 19

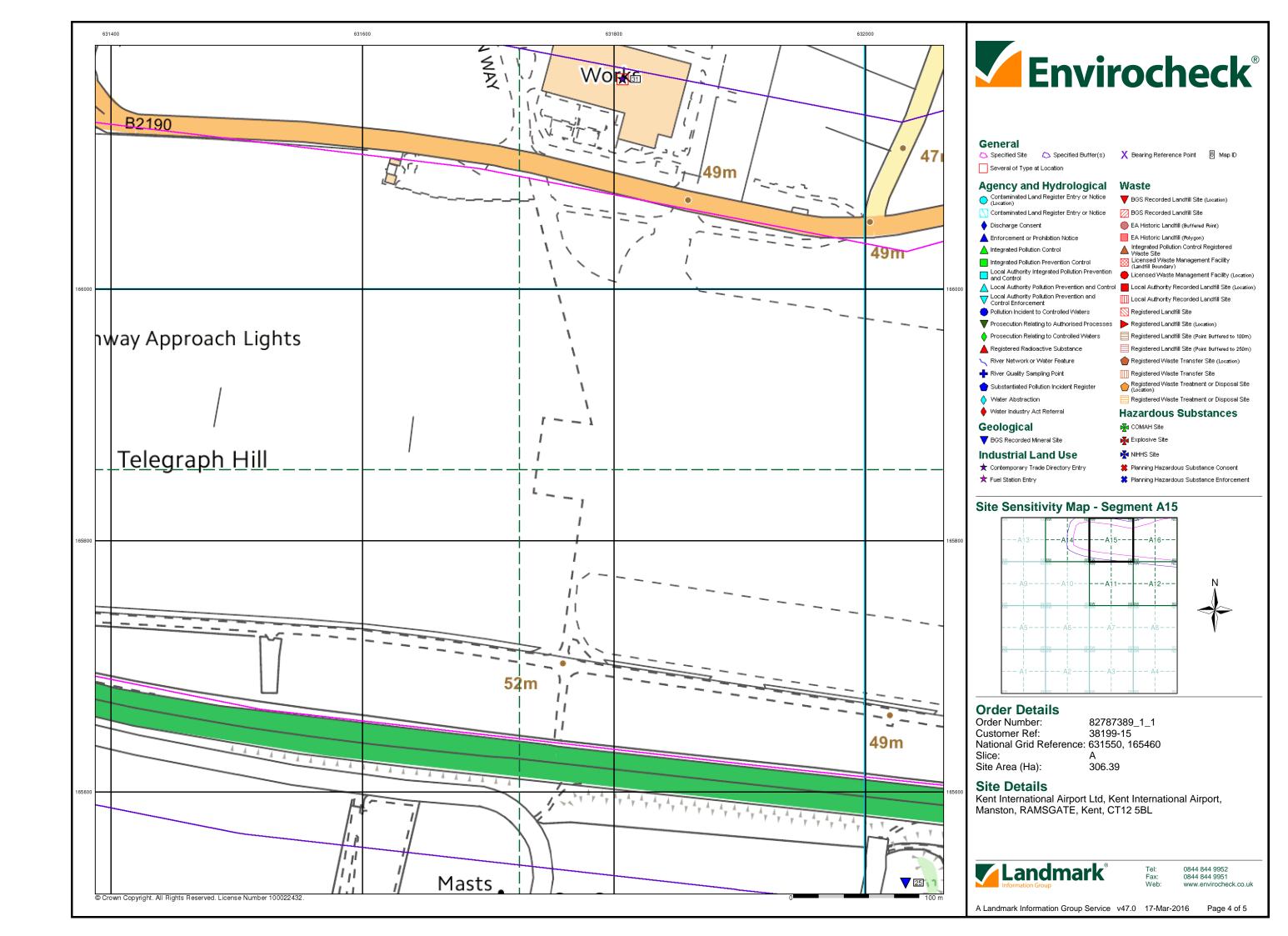


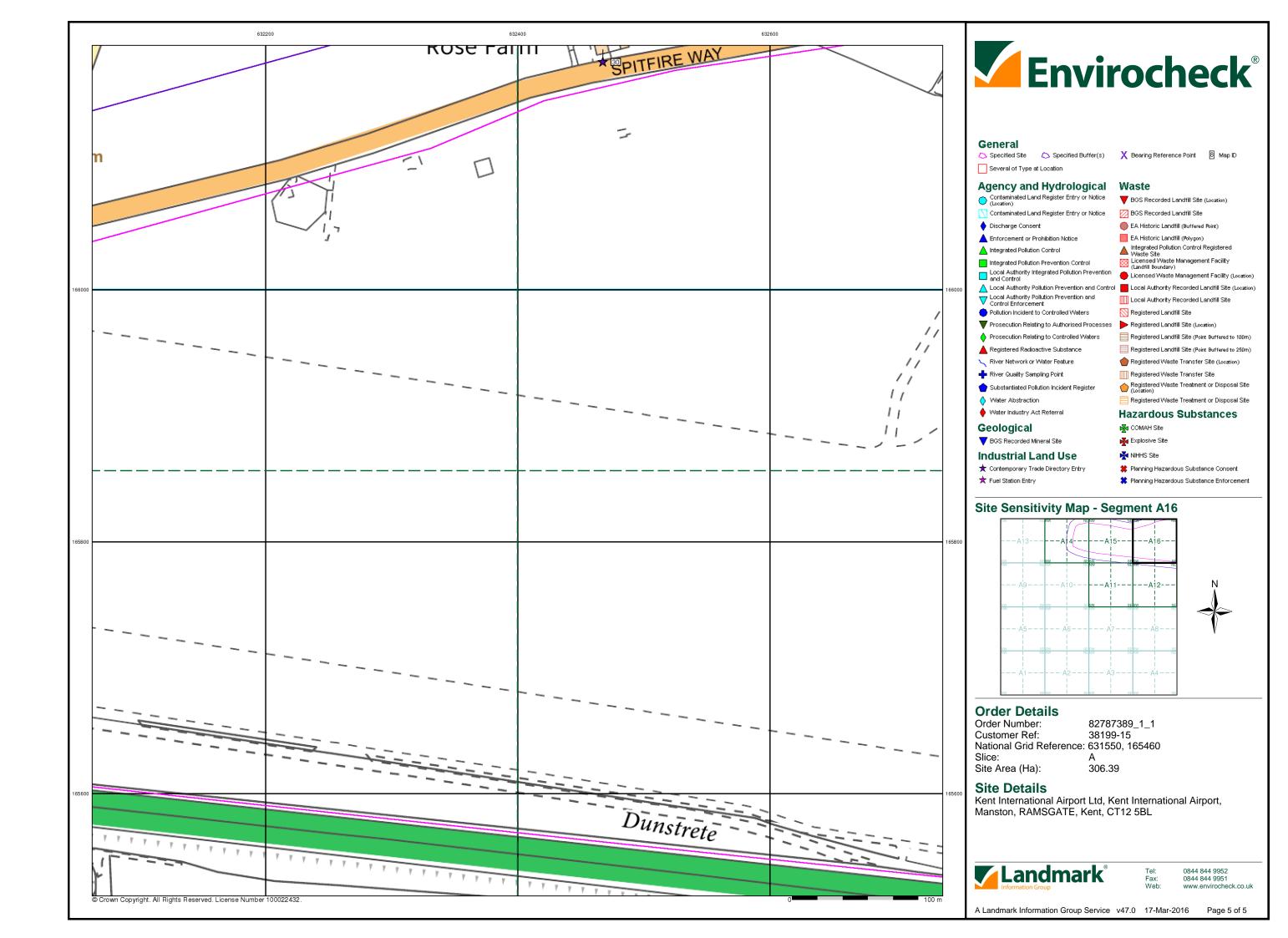


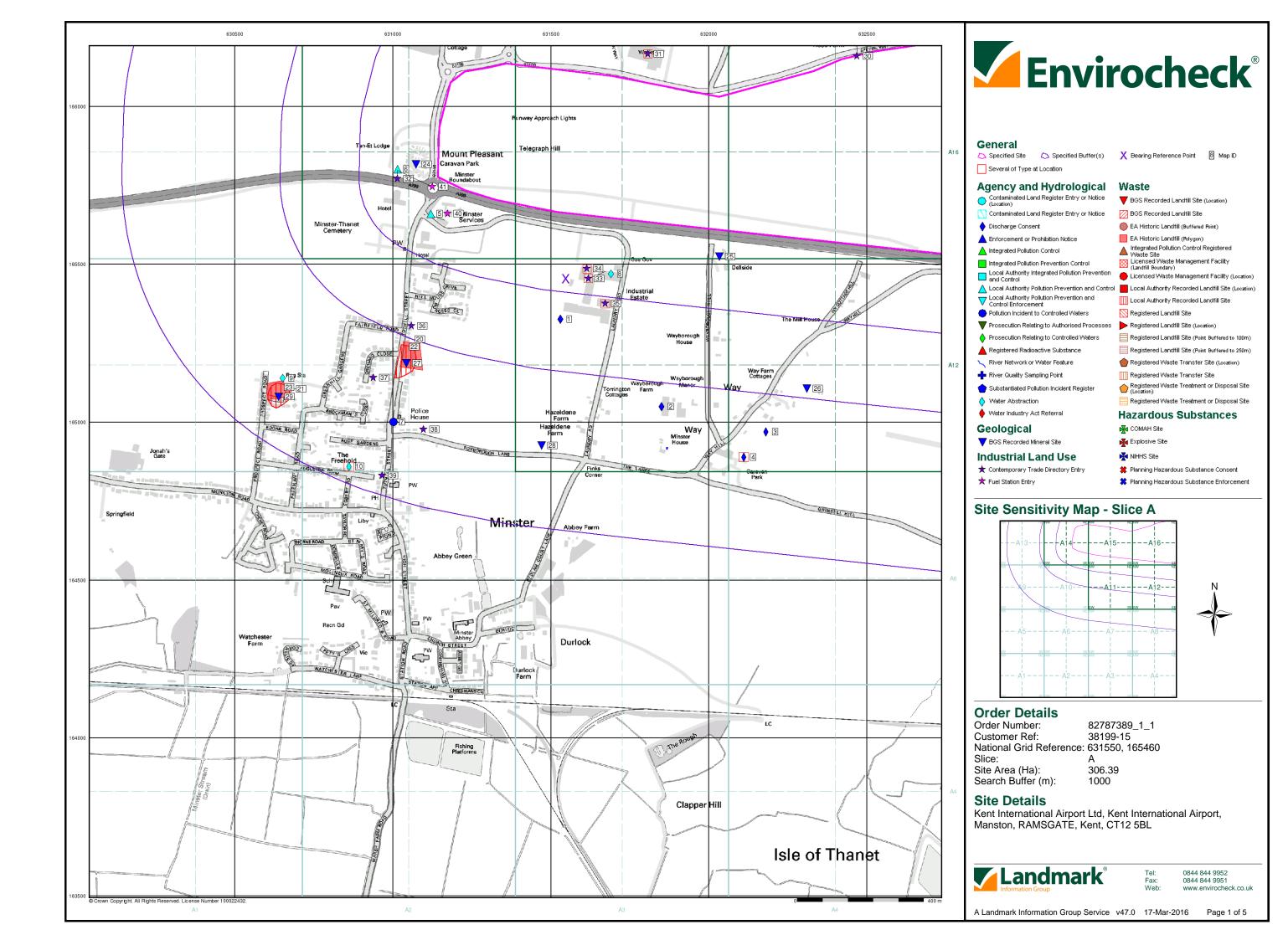


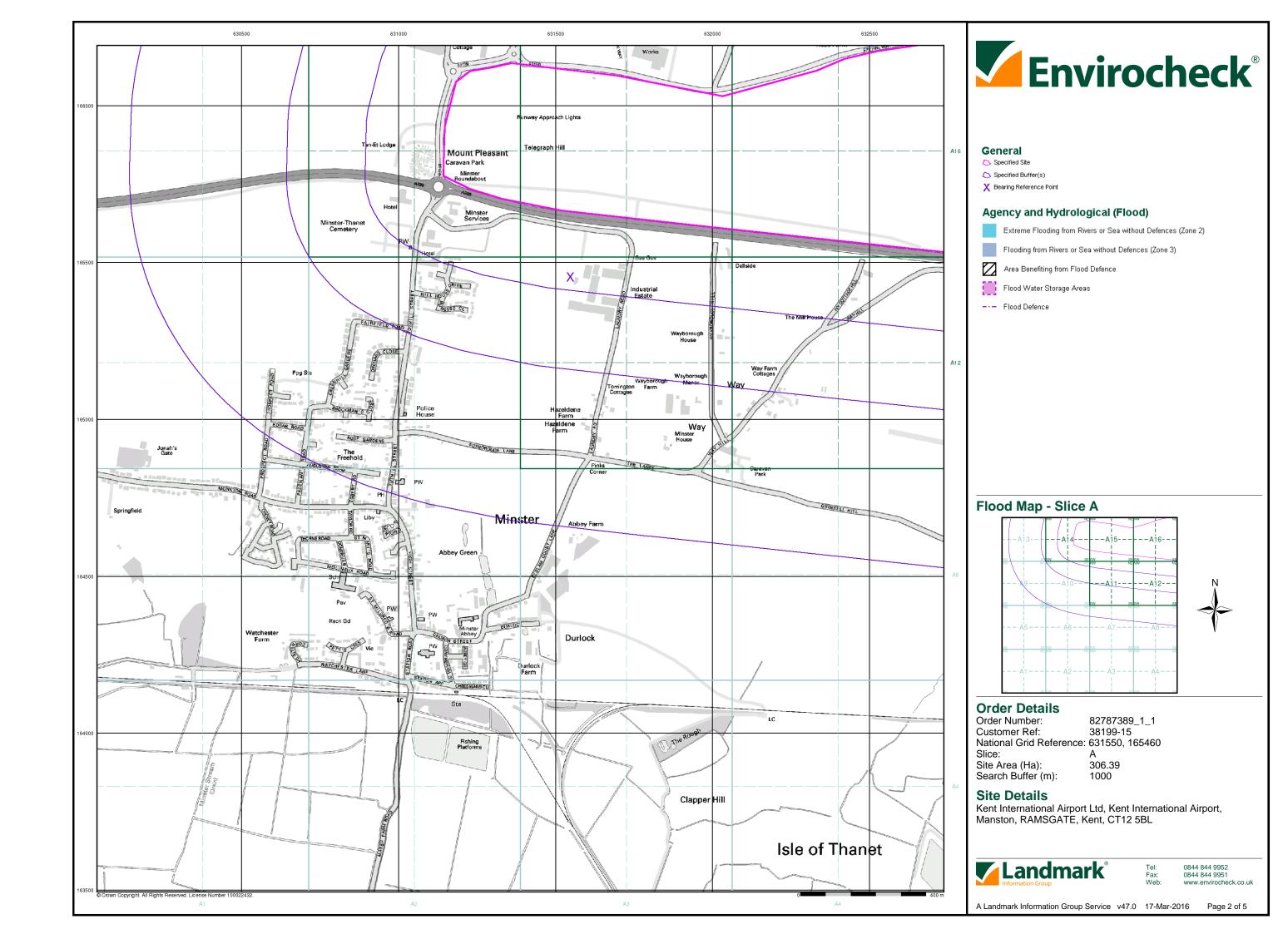


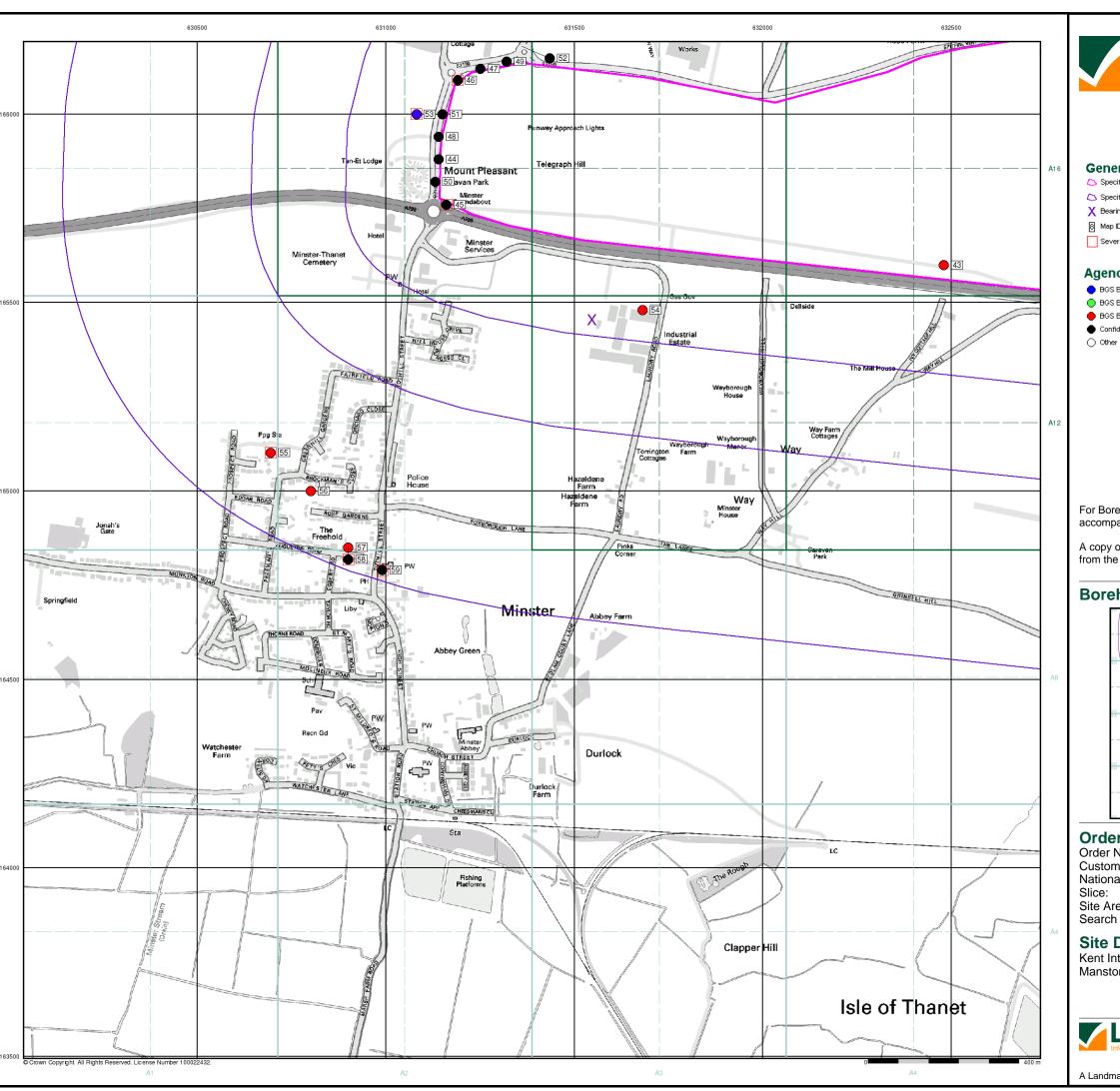














General

Specified Buffer(s)

X Bearing Reference Point

8 Map ID

Several of Type at Location

Agency and Hydrological (Boreholes)

BGS Borehole Depth 0 - 10m

BGS Borehole Depth 10 - 30m

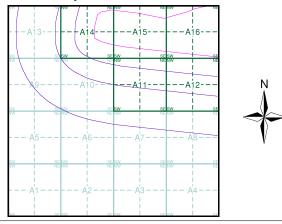
BGS Borehole Depth 30m +

Confidential

For Borehole information please refer to the Borehole .csv file which

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460

Slice:

Site Area (Ha): Search Buffer (m): 306.39 1000

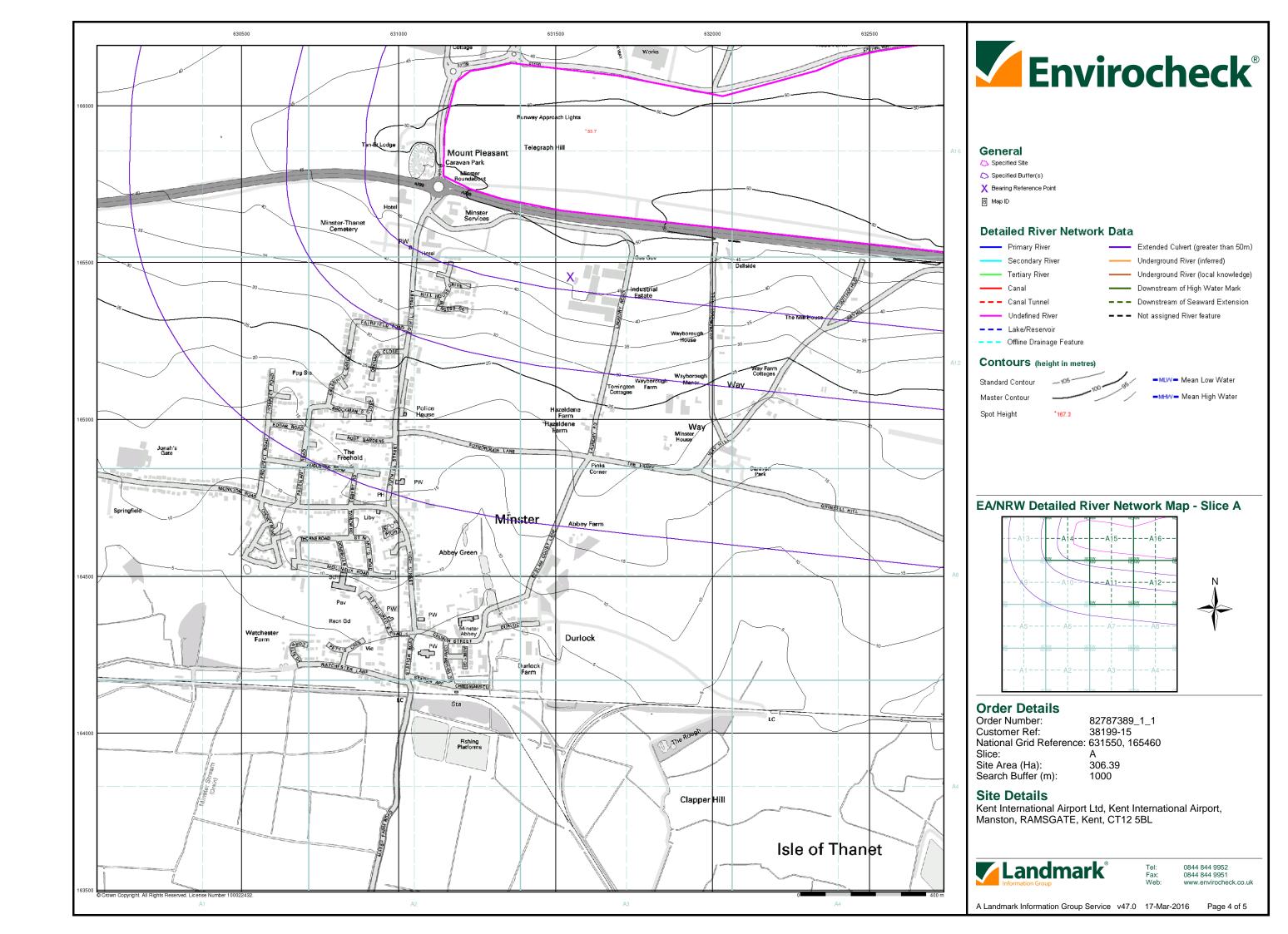
Site Details

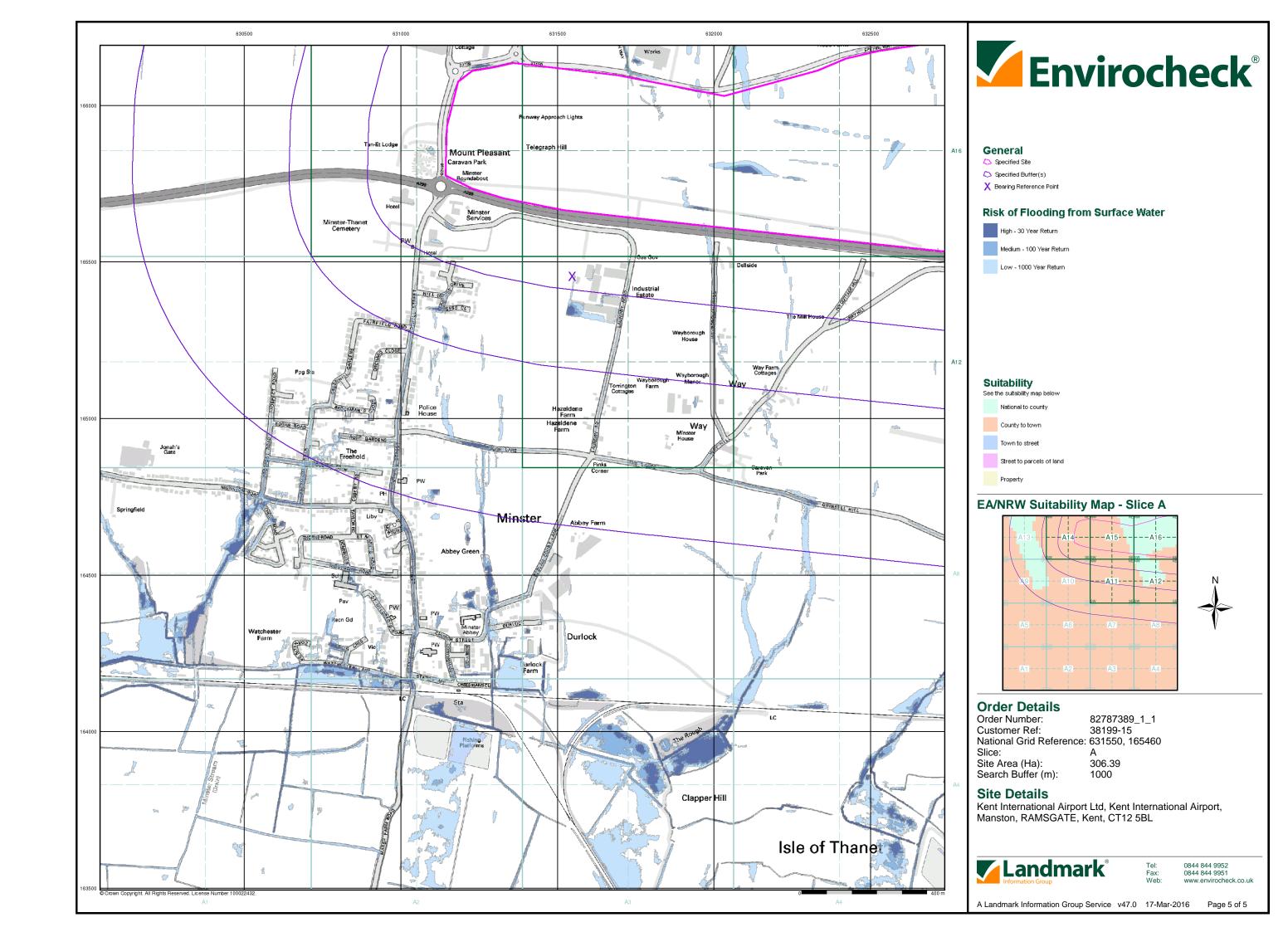
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

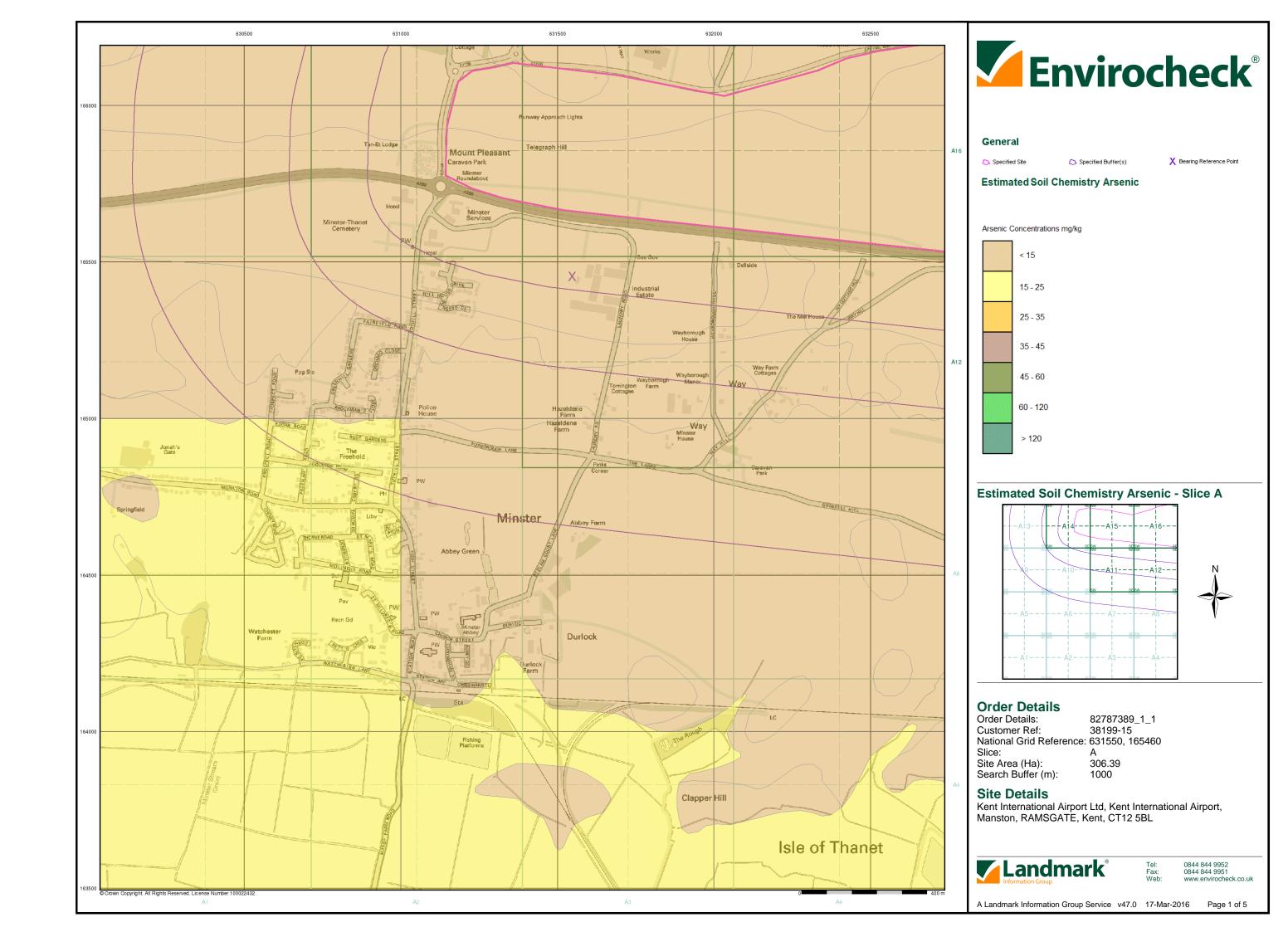


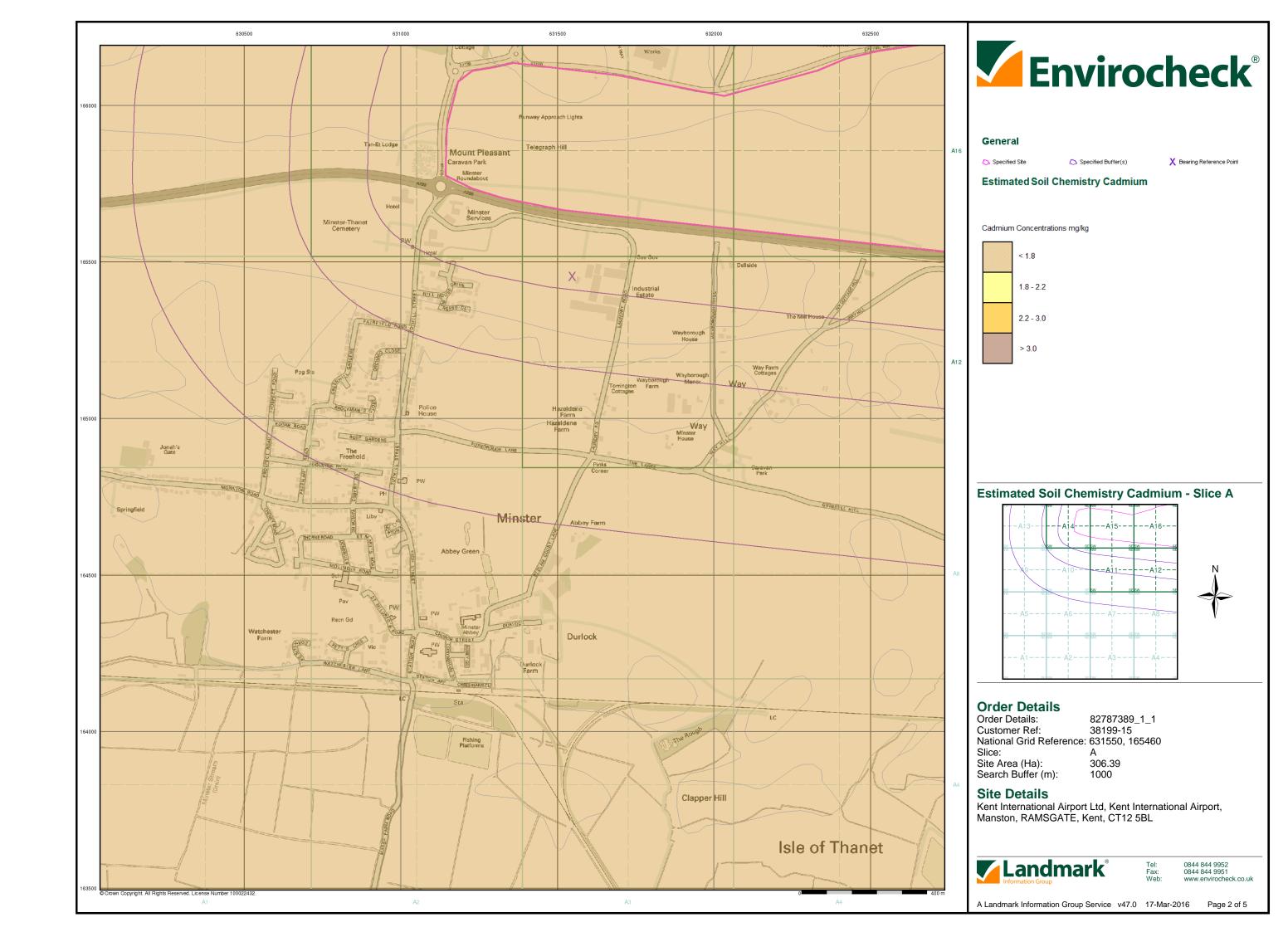
0844 844 9952 0844 844 9951

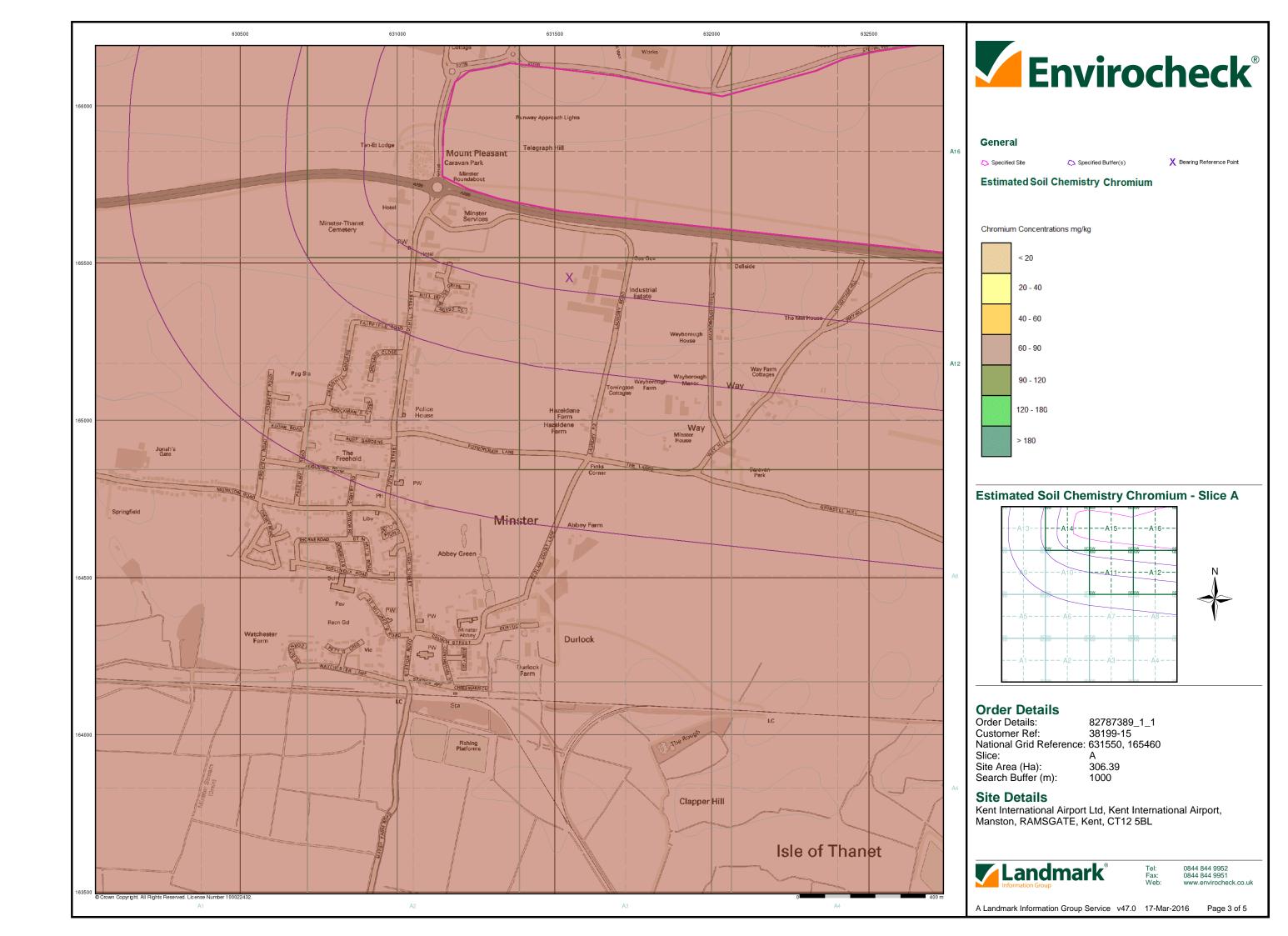
A Landmark Information Group Service v47.0 17-Mar-2016 Page 3 of 5

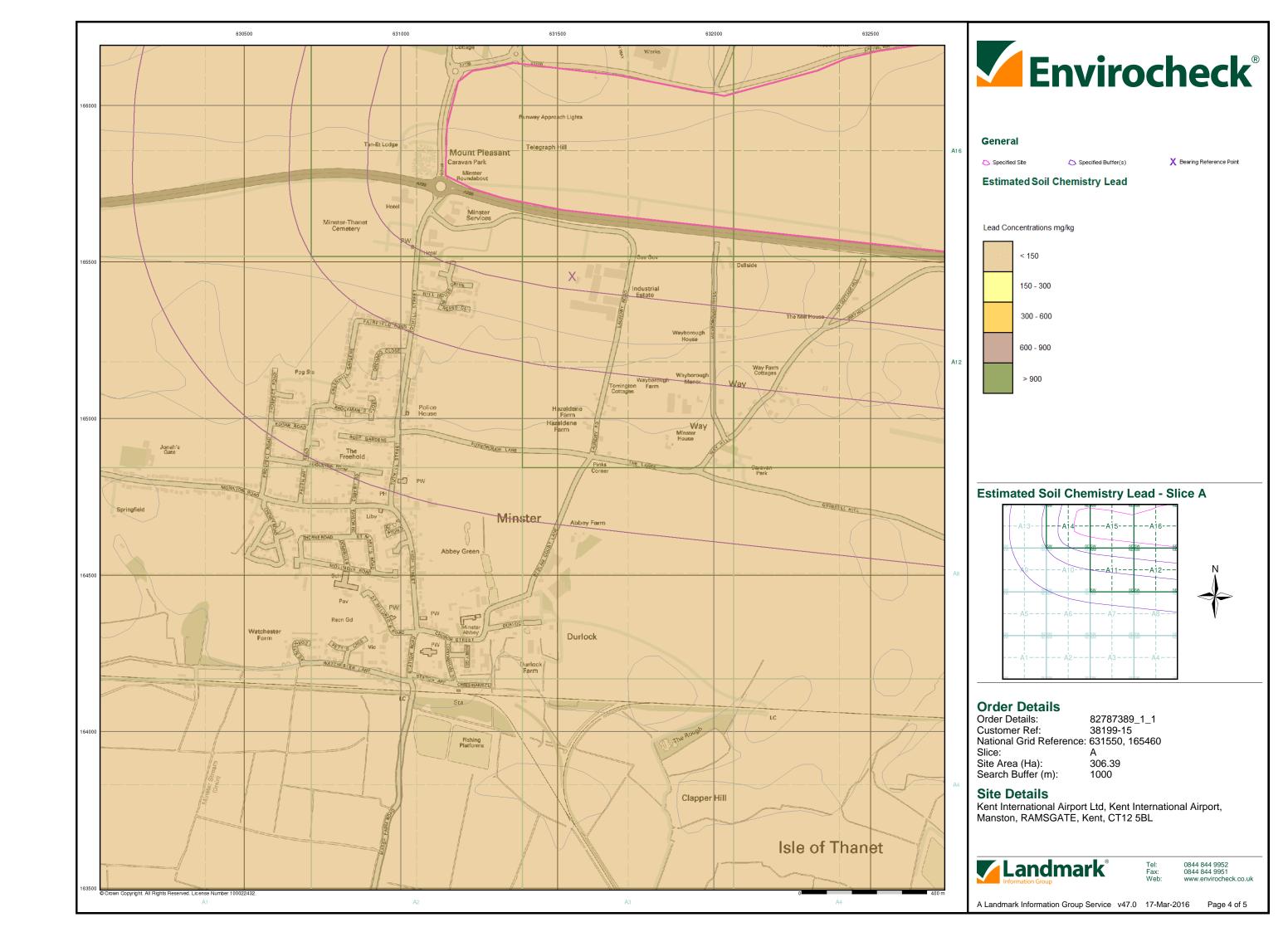


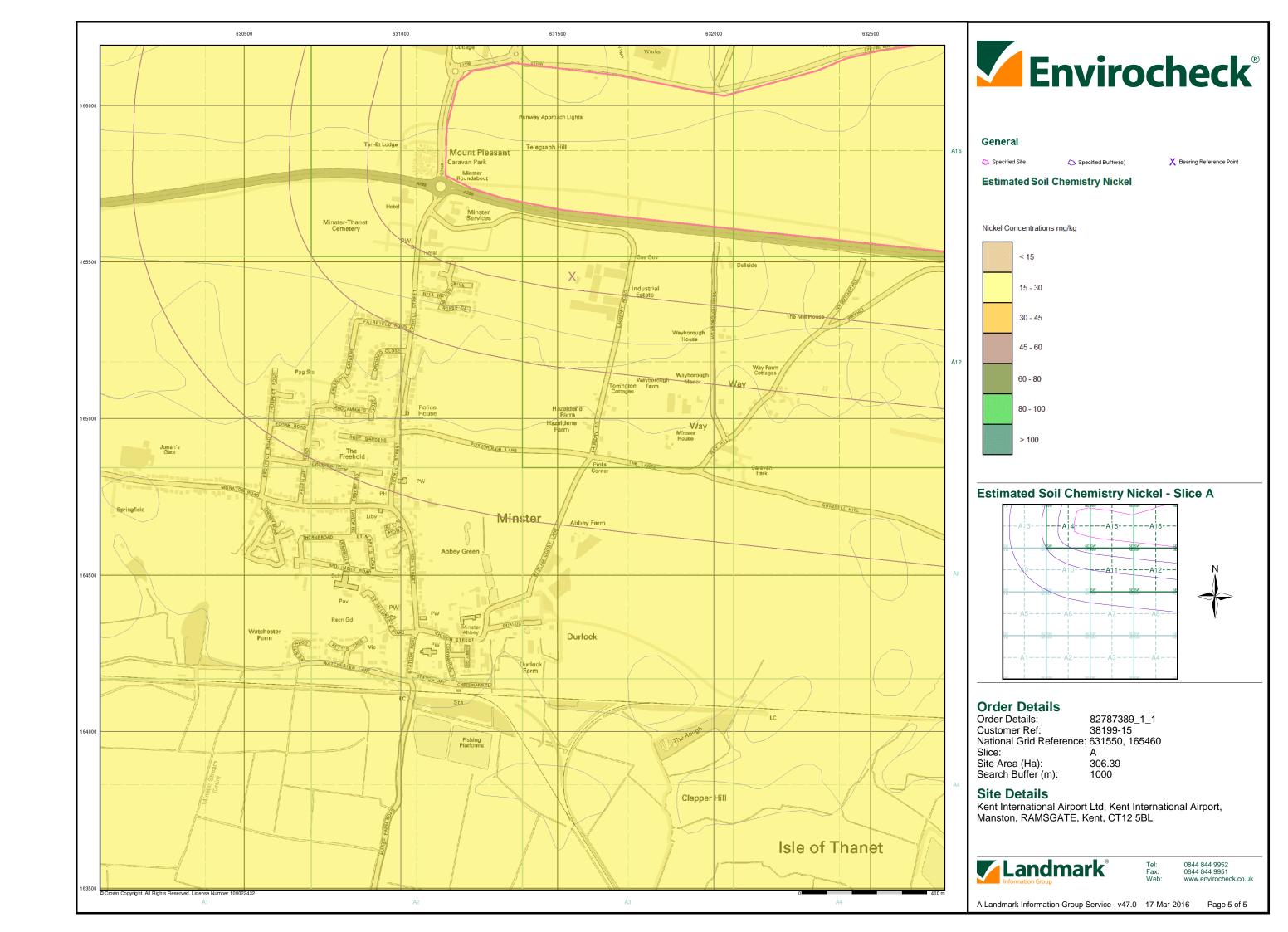




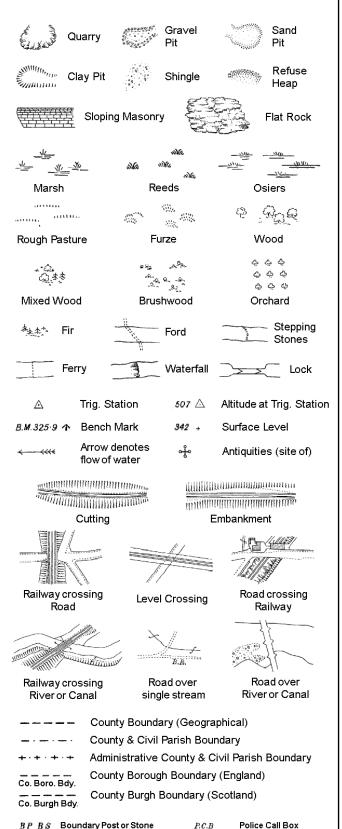








Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



Pump

Sluice

Spring

Trough Well

Signal Post

Telephone Call Box

S.P

Sl.

Tr:

B.R.

E.P

F.B.

Bridle Road

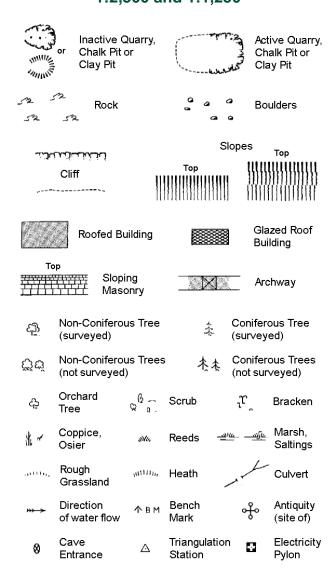
Foot Bridge

Mile Stone

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

Electricity Pylor

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 Transn	nission 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

		Slo	opes
	لكنات	Тор	Top
	Cliff		;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
·	ii.		111111111111111111111111111111111111111
523	Rock	23	Rock (scattered)
\triangle	Boulders	<i>△</i>	Boulders (scattered)
	Positioned Boulder		Scree
2월	Non-Coniferous Tree (surveyed)	4	Coniferous Tree (surveyed)
Öö	Non-Coniferous Tree (not surveyed)	s AA	Coniferous Trees (not surveyed)
Ą.	Orchard & 6 în.	Scrub	_າ ຕຸ Bracken
* ~	Coppice, Osier	Reeds 🛥	u <u>் அம்</u> Marsh, Saltings
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Rough "աստ, Grassland	Heath	Culvert
>>> ≻	Direction △ of water flow	Triangulatior Station	Antiquity (site of)
E <u>TL</u>	_ Electricity Transm	ission Line	Electricity Pylon
\ }\ BM	291.60m Bench Mark	· #	Buildings with Building Seed
	Roofed Building		Glazed Roof Building
	Civil paris District bo	h/community b oundary	ooundary
_ •	—— County bo	oundary	
٥	Boundary	post/stone	
مر			ool (note: these ed pairs or groups
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC Pn	Public Convenience
Chy Cis	Chimney Cistern	Pp Ppg Sta	Pump Pumping Station
Dismtd R		PW	Place of Worship
El Gen St	-	g Sewage P	pg Sta Sewage Pumping Station
EIP	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
	a Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	. Tk	Tank or Track

Gas Valve Compound

Mile Post or Mile Stone

Gas Governer

Guide Post

Manhole

GP

Tr

Wd Pp

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

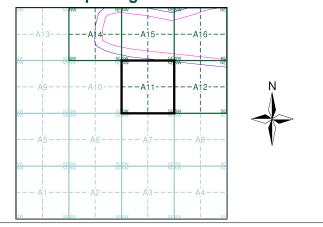
Works (building or area)



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Kent	1:2,500	1873	2
Kent	1:2,500	1896	3
Kent	1:2,500	1907	4
Kent	1:2,500	1938	5
Ordnance Survey Plan	1:2,500	1963 - 1964	6
Ordnance Survey Plan	1:2,500	1968 - 1969	7
Supply of Unpublished Survey Information	1:2,500	1973	8
Additional SIMs	1:2,500	1977 - 1989	9
Additional SIMs	1:2,500	1979	10
Large-Scale National Grid Data	1:2,500	1993	11
Large-Scale National Grid Data	1:2,500	1995	12
Large-Scale National Grid Data	1:2,500	1996	13

Historical Map - Segment A11



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice:

Site Area (Ha):

306.39 Search Buffer (m): 100

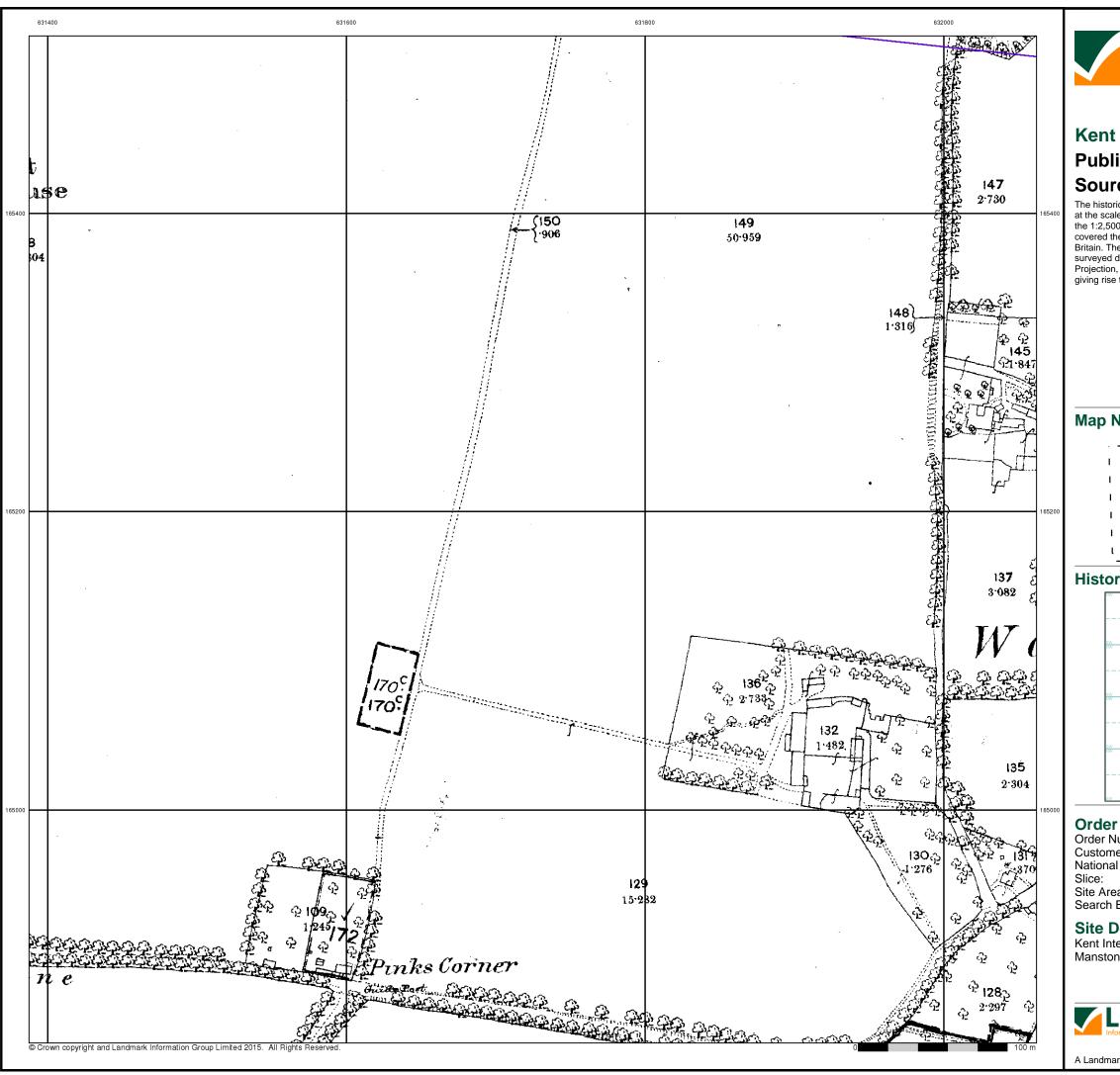
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 1 of 13

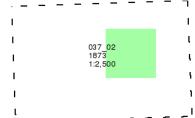




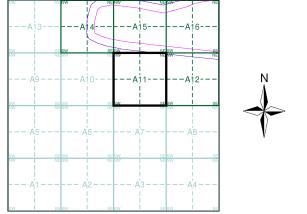
Published 1873 Source map scale - 1:2,500

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 A11



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460

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

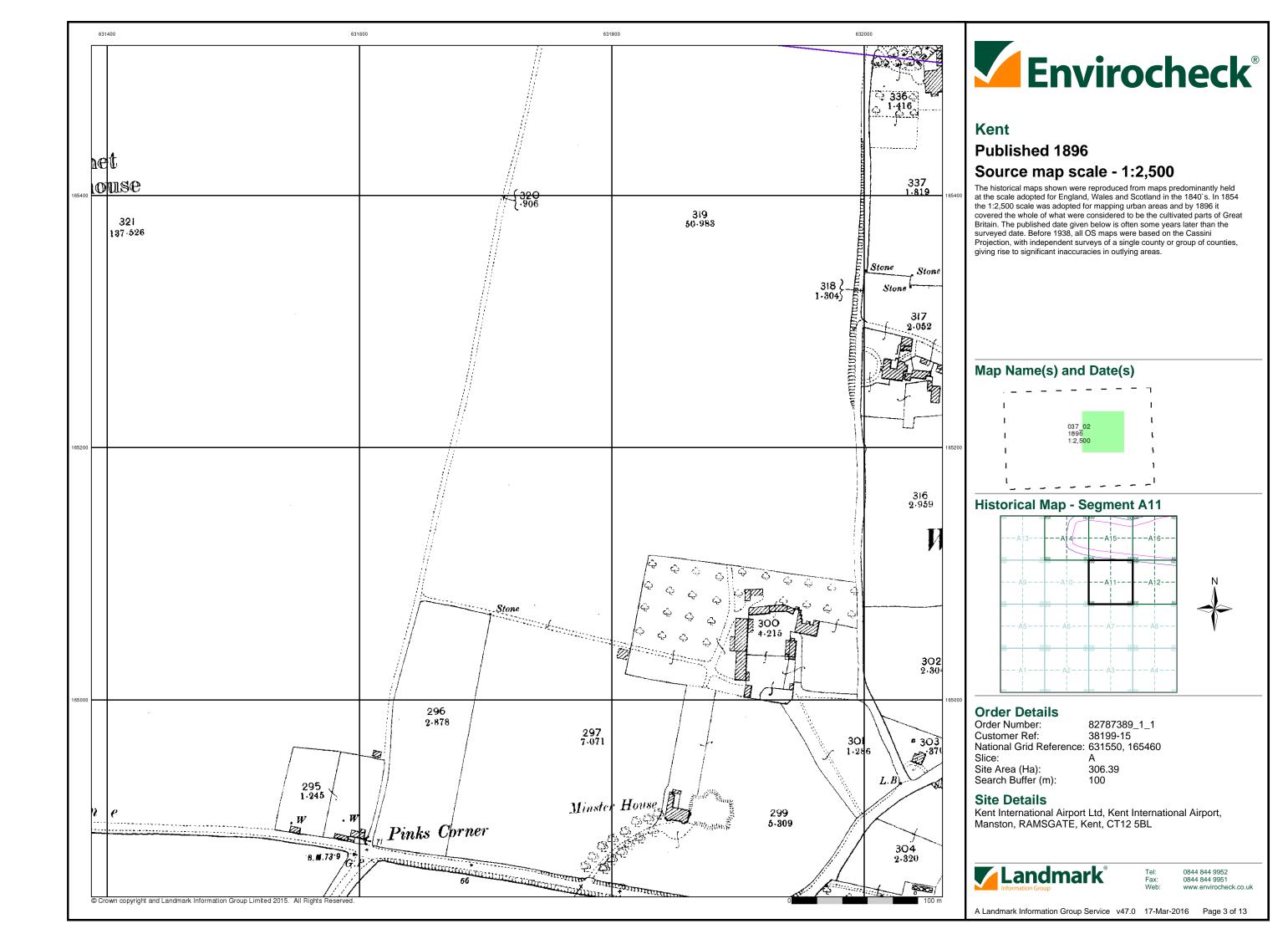
Site Details

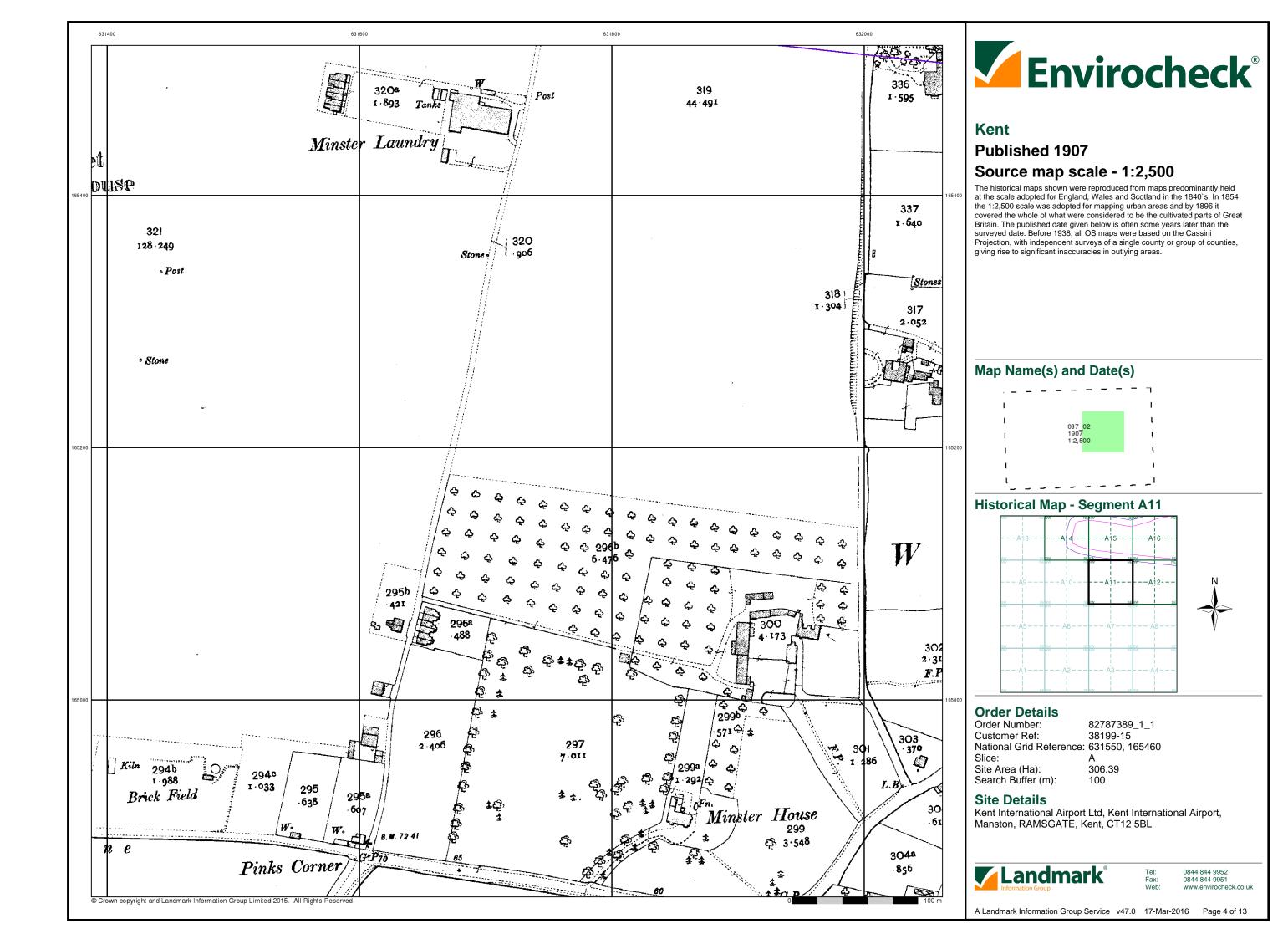
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

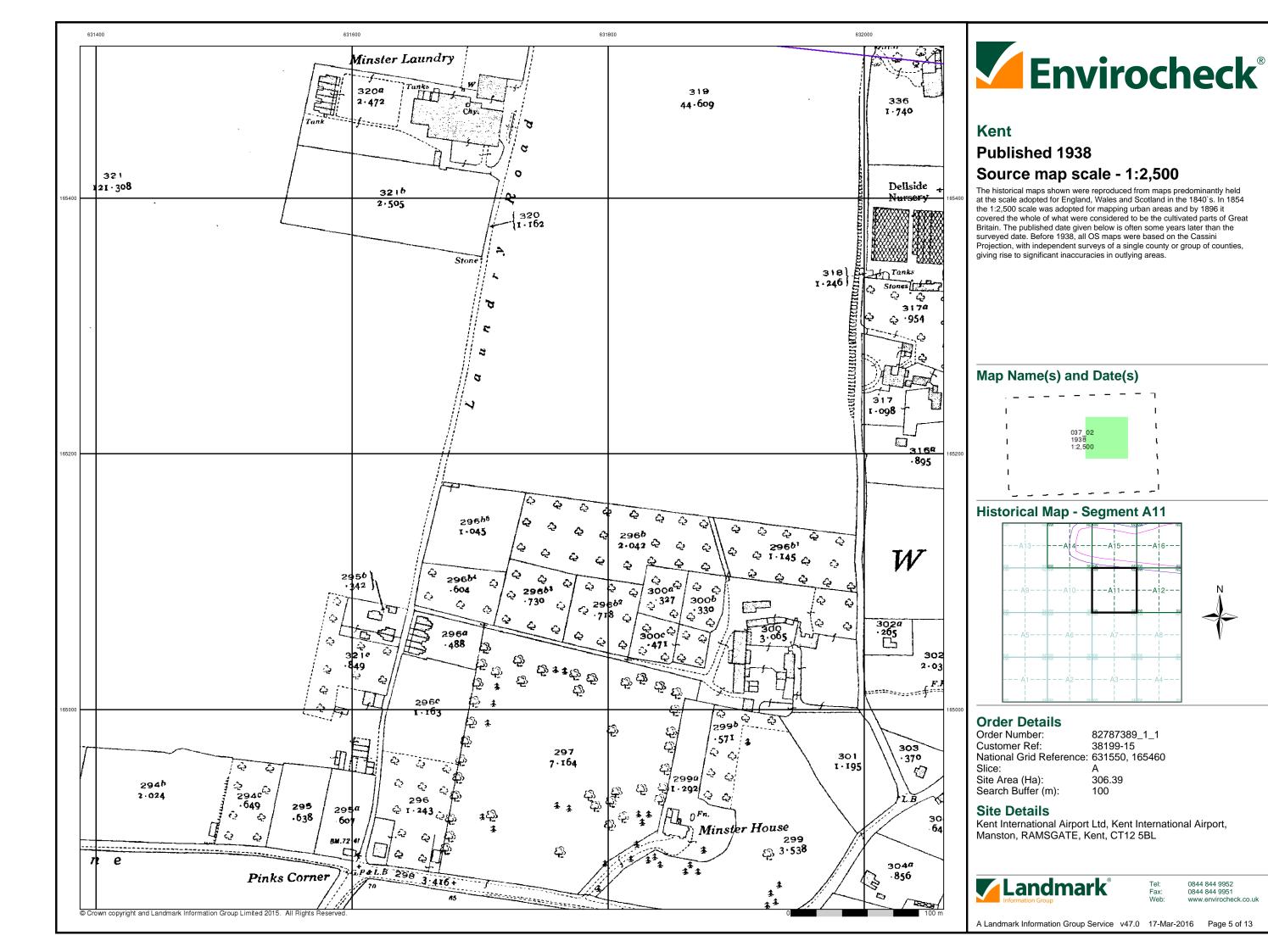


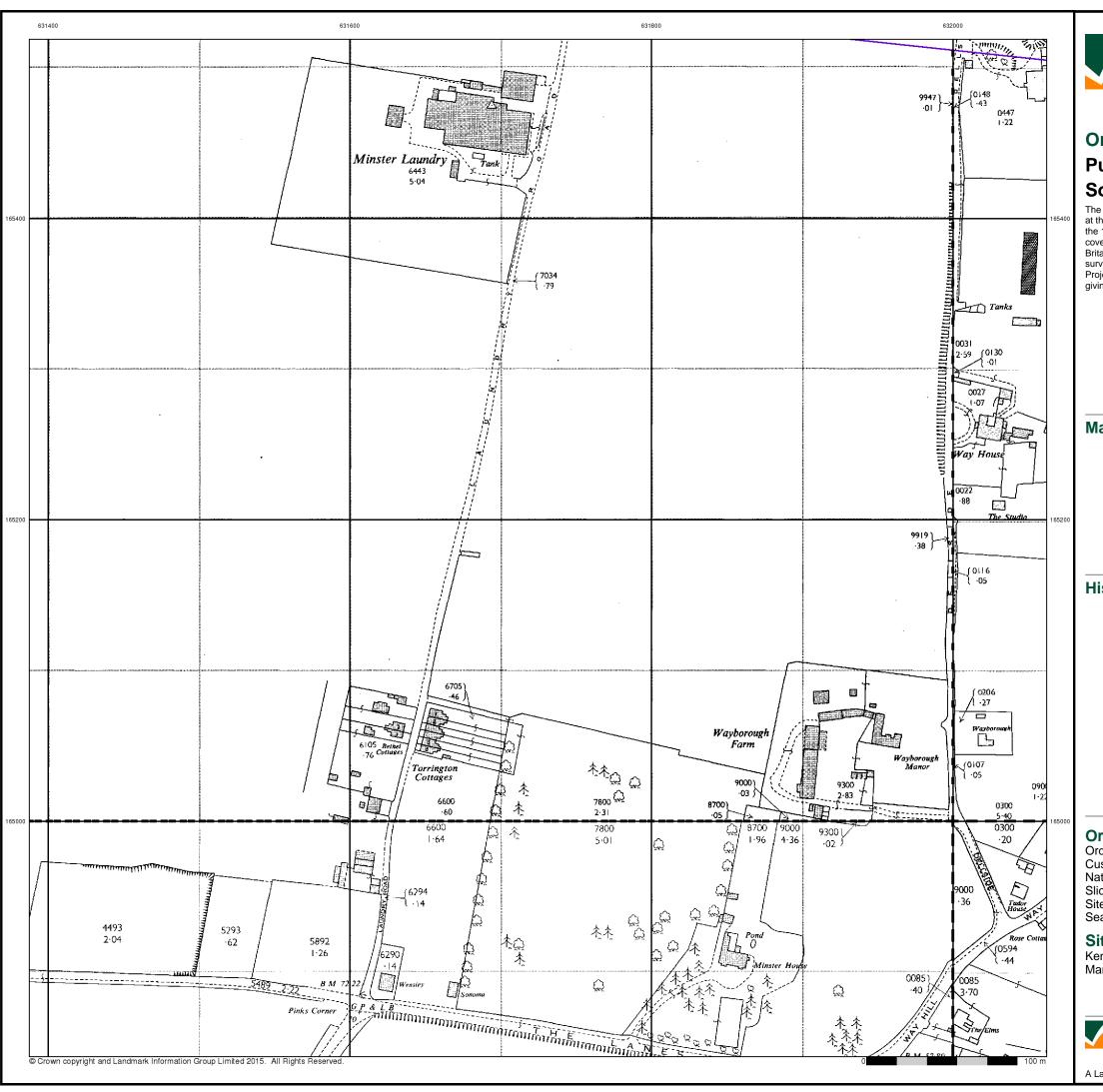
0844 844 9952 0844 844 9951

A Landmark Information Group Service v47.0 17-Mar-2016 Page 2 of 13







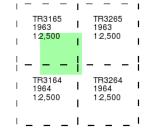




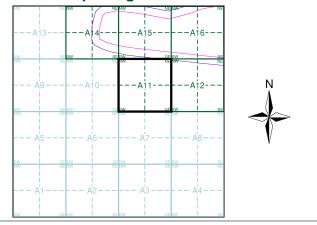
Ordnance Survey Plan Published 1963 - 1964 Source map scale - 1:2,500

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 A11



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice:

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

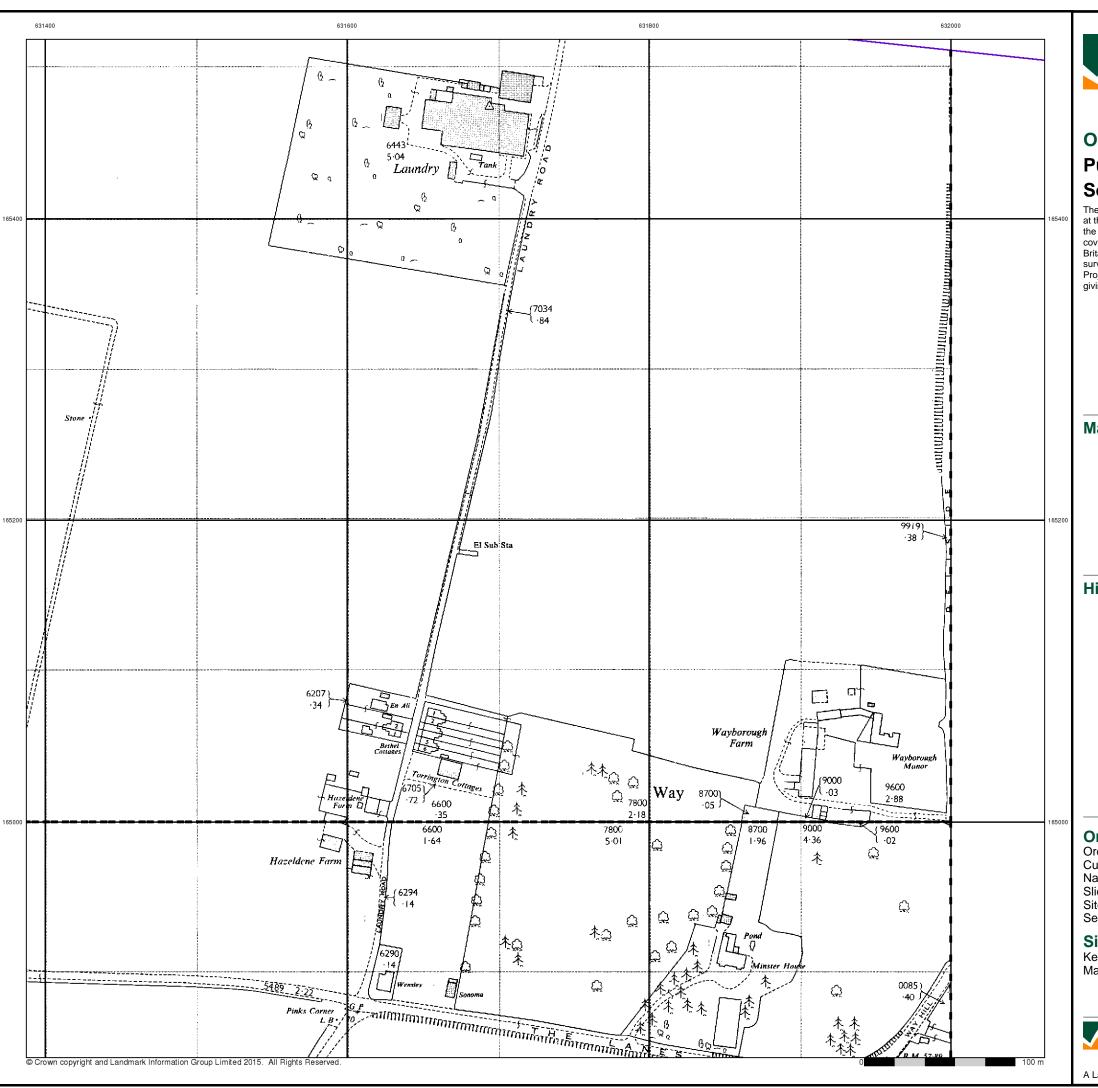
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 6 of 13

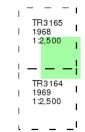




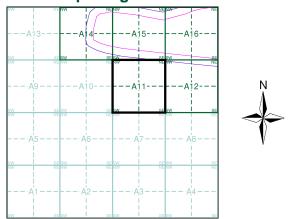
Ordnance Survey Plan Published 1968 - 1969 Source map scale - 1:2,500

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 A11



Order Details

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 631550, 165460
Slice: A

Site Area (Ha): 306.39 Search Buffer (m): 100

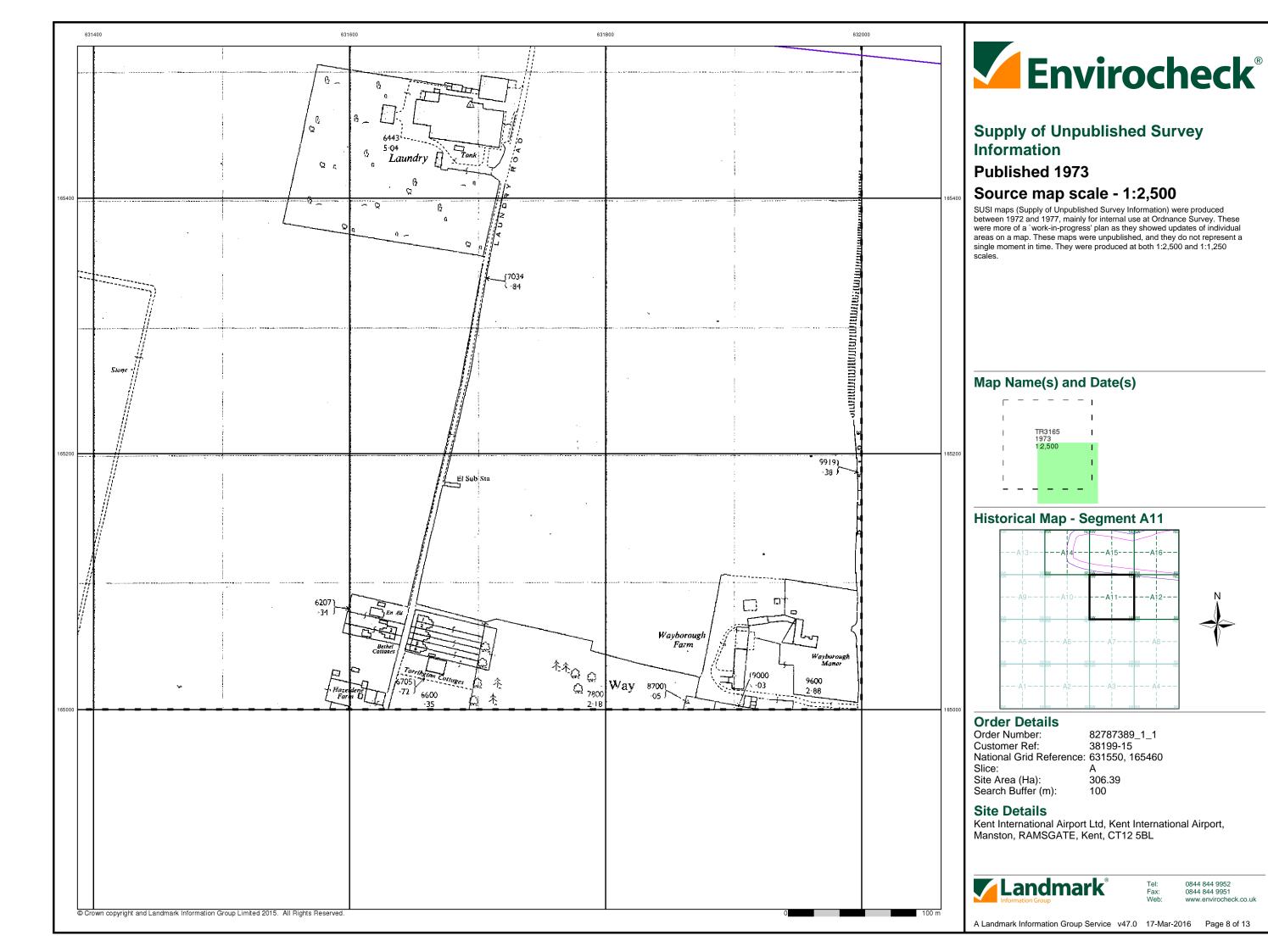
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



l: 0844 844 9952 x: 0844 844 9951 eb: www.envirocheck.

A Landmark Information Group Service v47.0 17-Mar-2016 Page 7 of 13





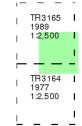


Additional SIMs

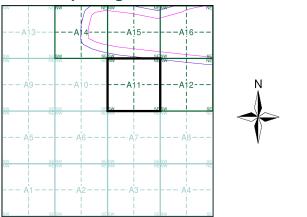
Published 1977 - 1989 Source map scale - 1:2,500

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A11



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460

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

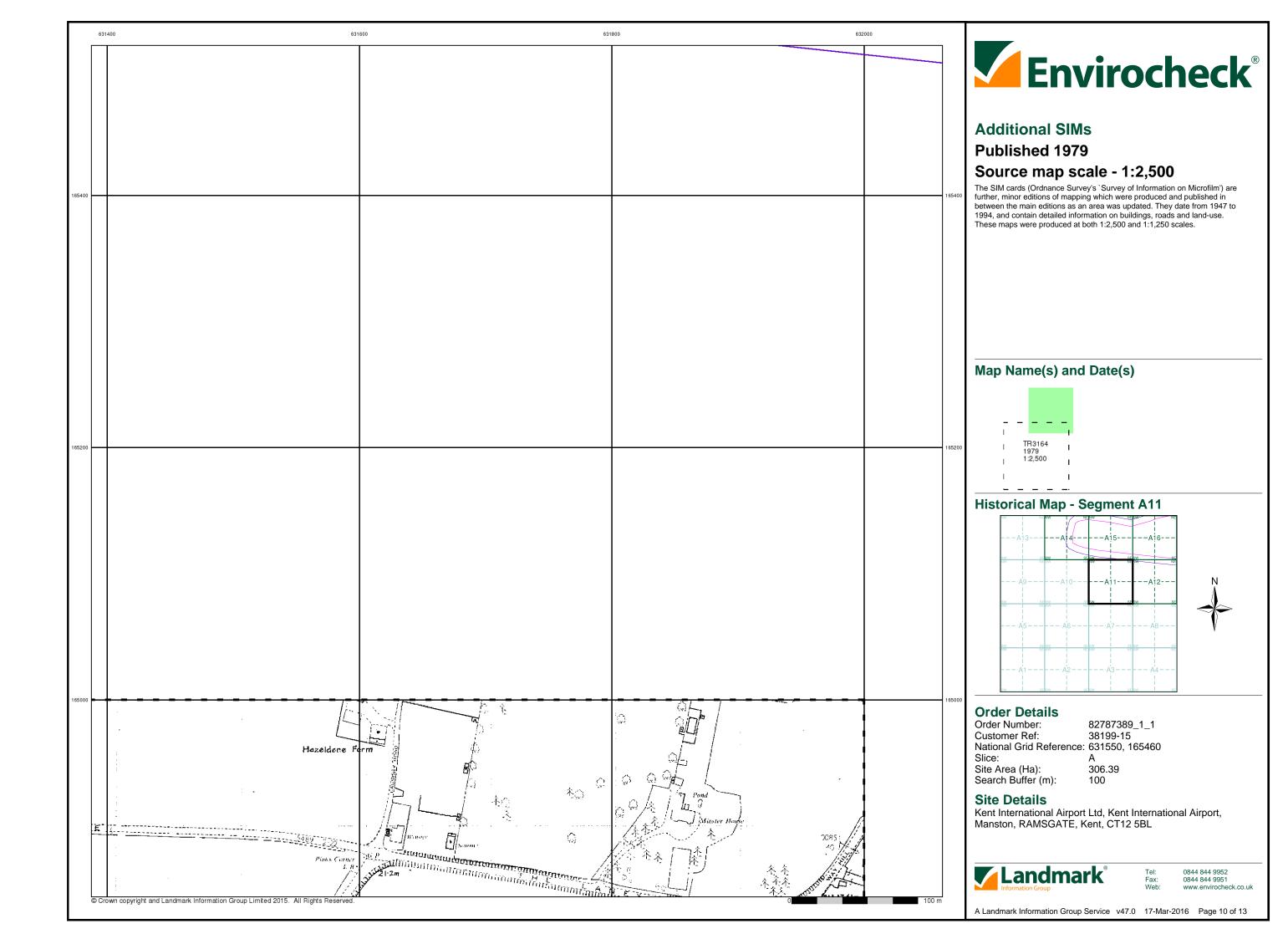
Site Details

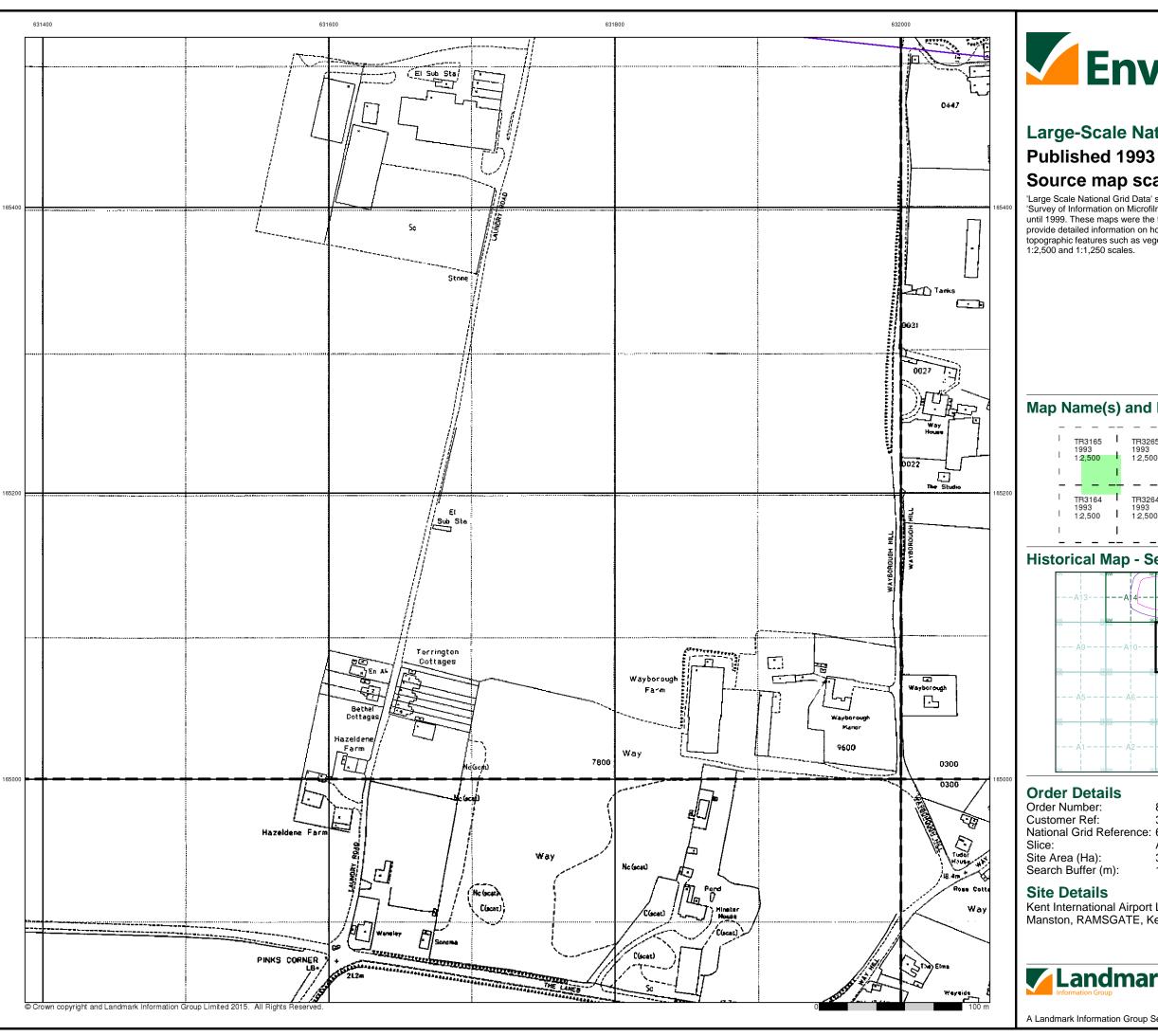
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 9 of 13







Large-Scale National Grid Data

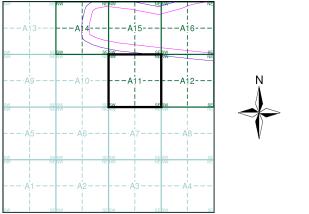
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

1	TR31		- 1	TR3265	- 1
1	1993 1:2,5			1993 1:2,500	1
1			- 1		- 1
_					
_	_	_			_
ī	TR31		T	TR3264	ī
 	TR31 1993 1:2,5		T	TR3264 1993 1:2,500	_
 - -	1993		T 	1993	_

Historical Map - Segment A11



82787389_1_1 38199-15 National Grid Reference: 631550, 165460

306.39

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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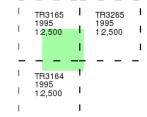


Large-Scale National Grid Data Published 1995

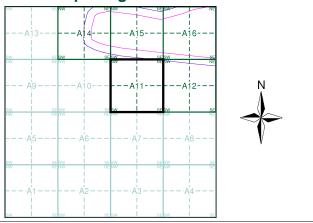
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A11



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460

Slice:

306.39 Site Area (Ha): Search Buffer (m):

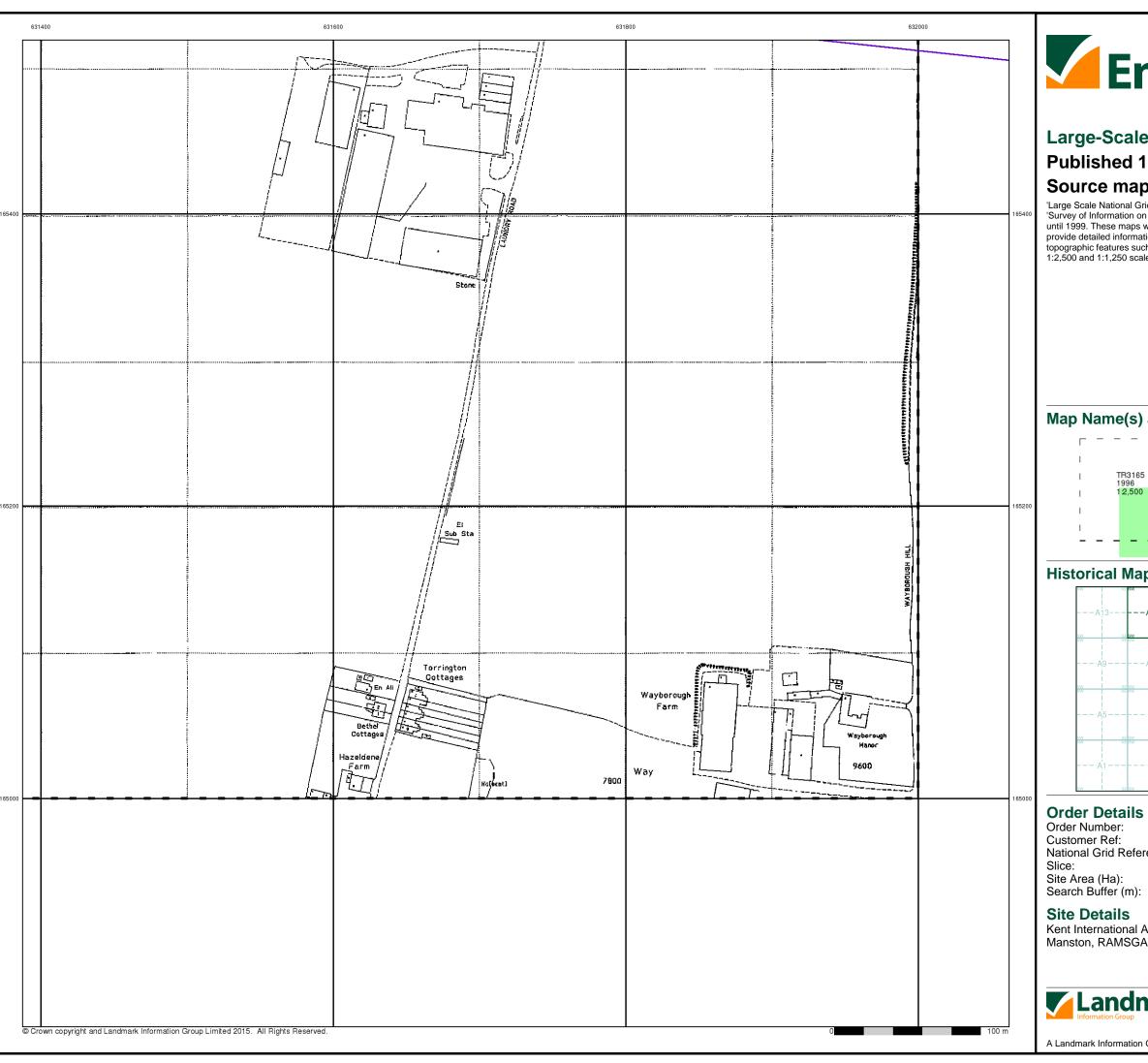
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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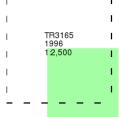
Large-Scale National Grid Data

Published 1996

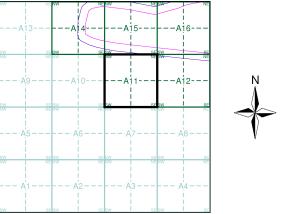
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A11



82787389_1_1 38199-15 National Grid Reference: 631550, 165460

306.39 100

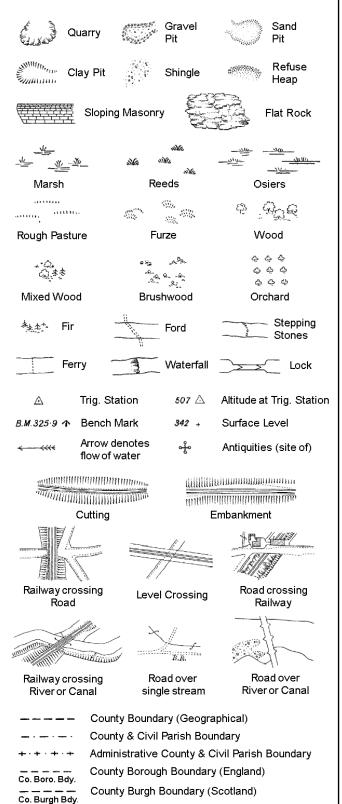
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



0844 844 9952 0844 844 9951

A Landmark Information Group Service v47.0 17-Mar-2016 Page 13 of 13

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



B.R.

E.P

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

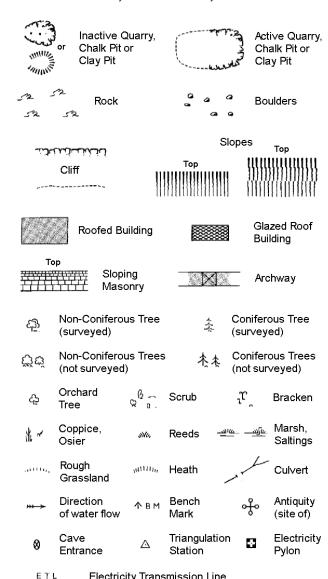
Trough Well

S.P

Sl.

 T_{T}

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



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

لالكاف الداراتات

Slopes

Clitt		Тор	!!!!!!!!! !!!!!!!!!!	
SZ₂ Ro	ck	S	Rock (sca	ttered)
△ Bo	ulders	<u> </u>	Boulders (scattered)
△ Pos	sitioned Boulder		Scree	
Cii	n-Coniferous Tree urveyed)	-1-	Coniferou surveyed	
C 3 Cu.1	n-Coniferous Trees ot surveyed)		Coniferou (not surve	
ද _ු Ord Tre	chard ${}^{{}^{{}^{\circ}}}_{{}^{\circ}} \widehat{{}_{a}} \widehat{{}_{a}} .$ See	crub	ıπ e	sracken
∦ ~ Co Os	ppice, 🚜 Ro ier	eeds <u></u>		/larsh, Saltings
1,000	ugh "աստ, H assland	eath /	1	Culvert
		riangulation tation		Antiquity site of)
E <u>T</u> L	Electricity Transmissi	on Line		Electricity Pylon
\ 	ձնտ Bench Mark		Buildings Building	
	Roofed Building		Glaz Build	ed Roof ding
	• • Civil parish/co	ommunity bo	undary	
	 District bound 	dary		
	— County bound	dary		
٥	Boundary pos	st/stone		
م	Boundary me always appea of three)		. ` .	
Bks B	3arracks	Р	Pillar, Pole	or Post
Bty B	Battery	PO	Post Office	
-	Cemetery	PC	Public Con	venience
-	Chimney Cistern	Pp Ppg Sta	Pump Pumping S	tation
Dismtd Rly	Dismantled Railway	PW Sta	Place of Wo	
El Gen Sta	Electricity Generating Station	Sewage Pp	g Sta Sew	
EIP E	Electricity Pole, Pillar	SB, S Br	Signal Box	or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Pos	t or Light
	ilter Bed	Spr	Spring	
Fn/DFn F	ountain / Drinking Ftn.	Tk	Tank or Tra	ck

Gas Valve Compound

Mile Post or Mile Stone

Gas Governer

Guide Post

Manhole

GVC

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

Wd Pp

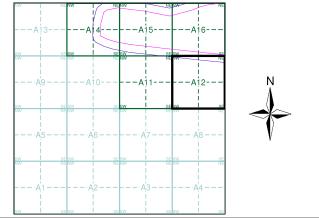
Wks



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Kent	1:2,500	1873	2
Kent	1:2,500	1896	3
Kent	1:2,500	1907	4
Kent	1:2,500	1938	5
Ordnance Survey Plan	1:2,500	1963 - 1964	6
Large-Scale National Grid Data	1:2,500	1993	7
Large-Scale National Grid Data	1:2,500	1995	8

Historical Map - Segment A12



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice:

Site Area (Ha):

306.39 Search Buffer (m): 100

Site Details

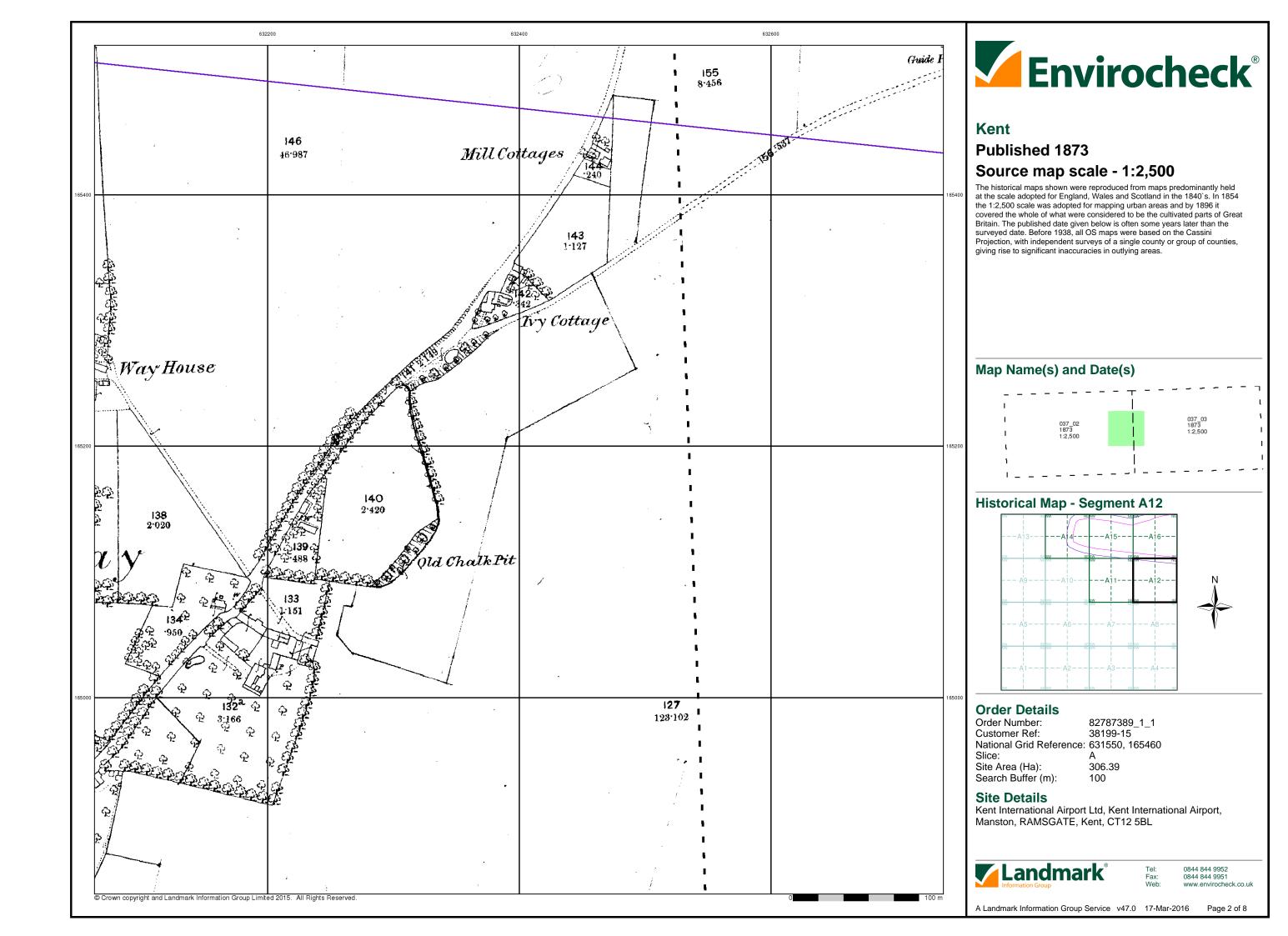
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

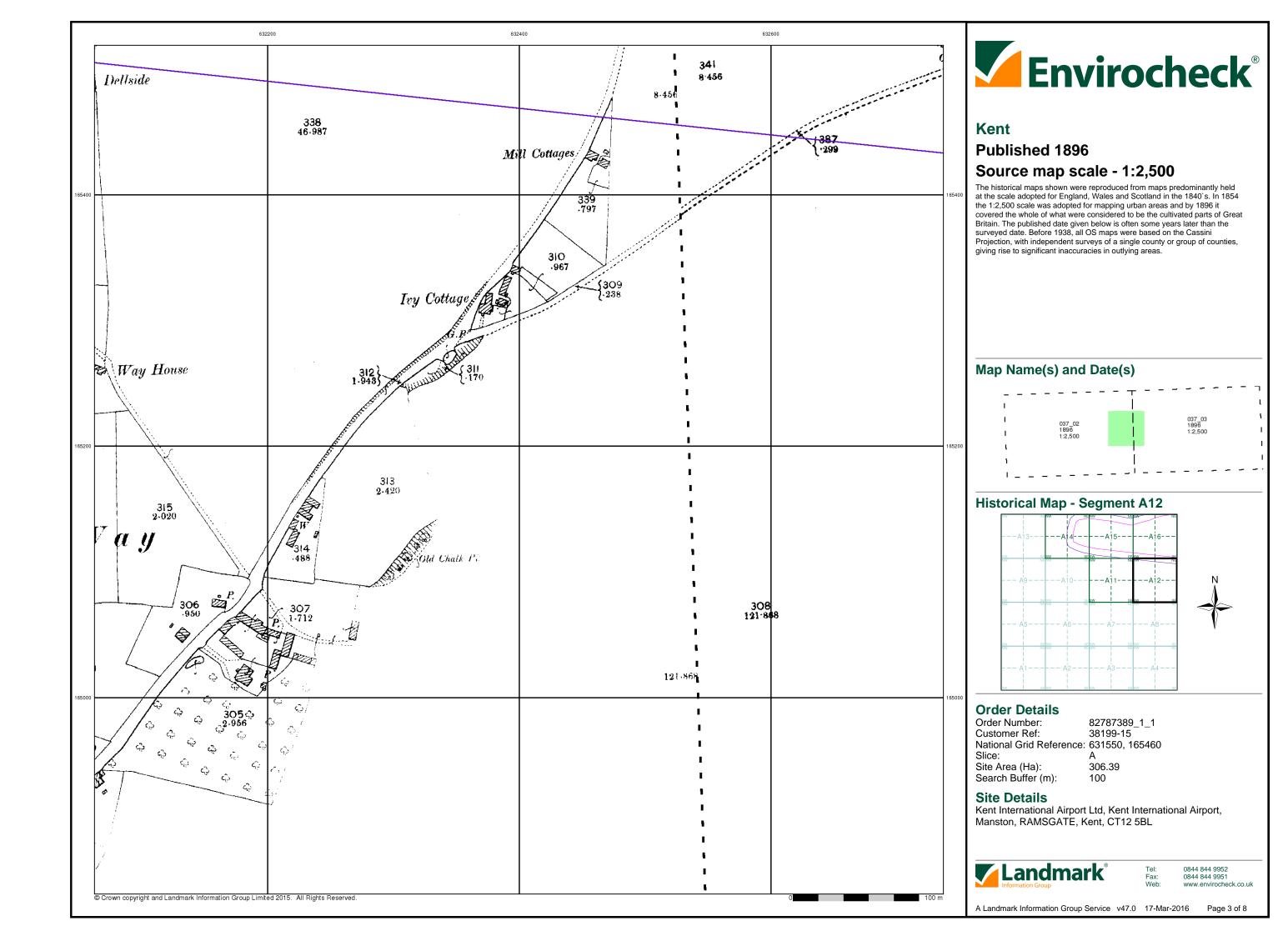


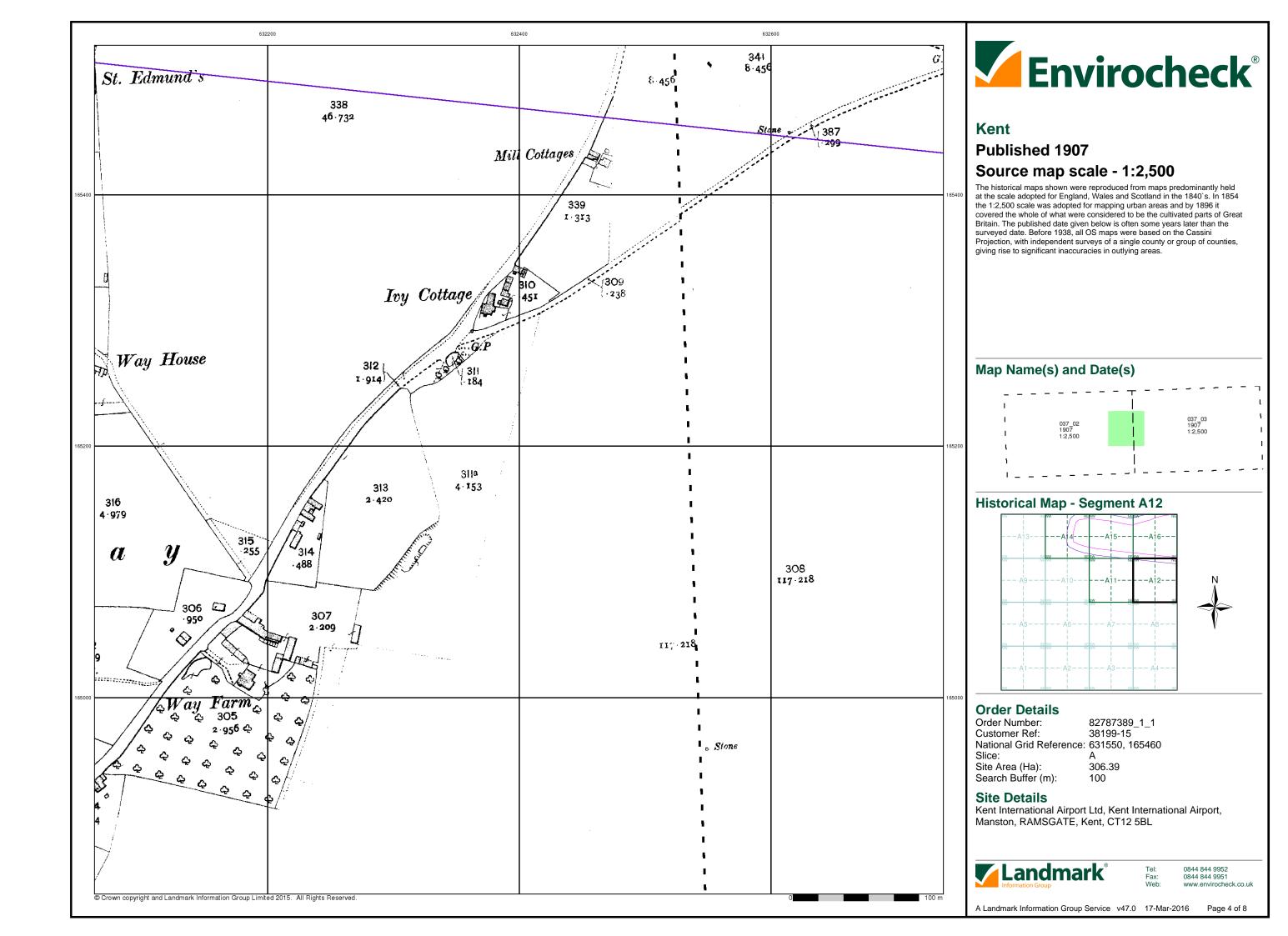
0844 844 9952 0844 844 9951

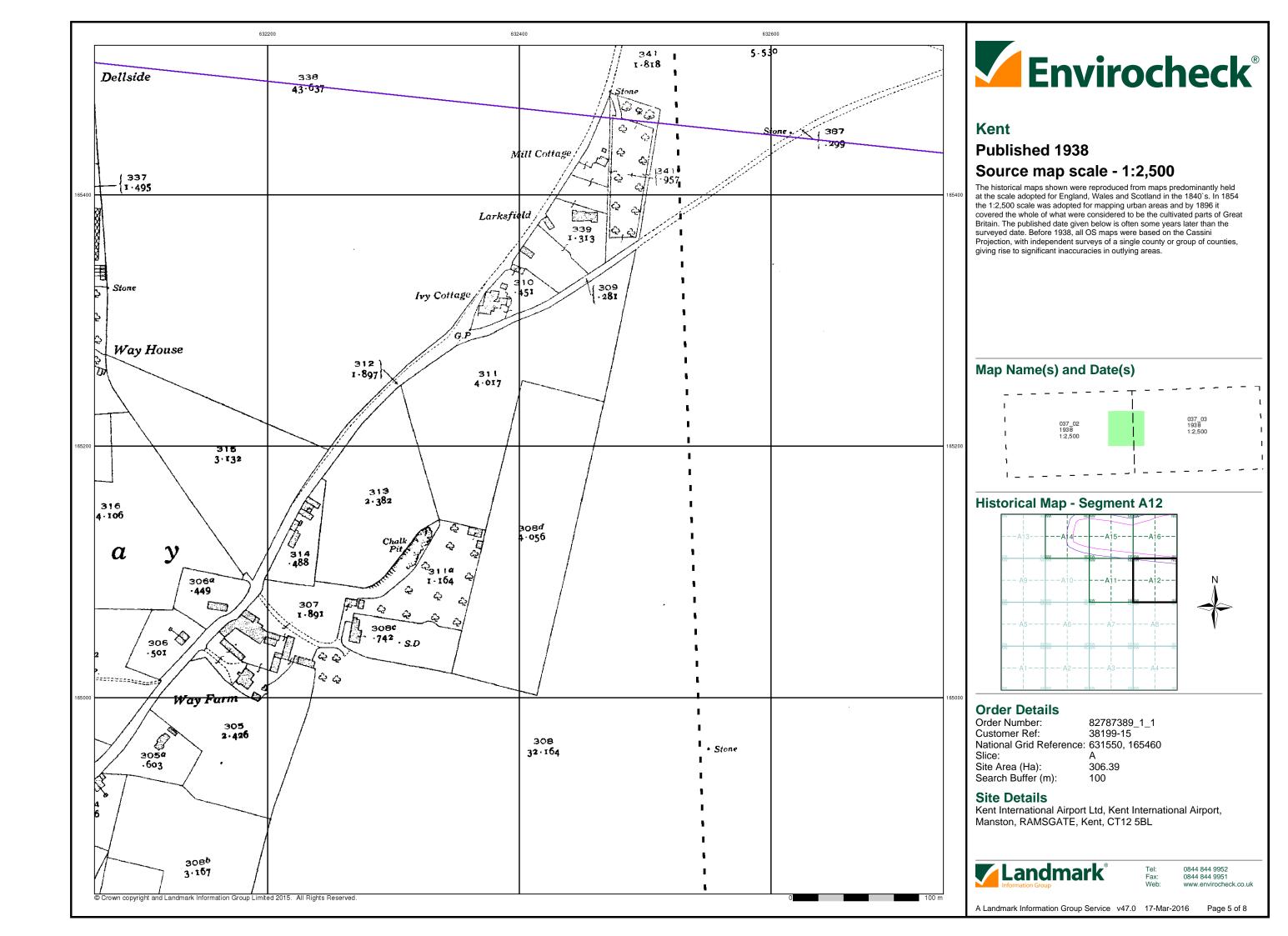
Page 1 of 8

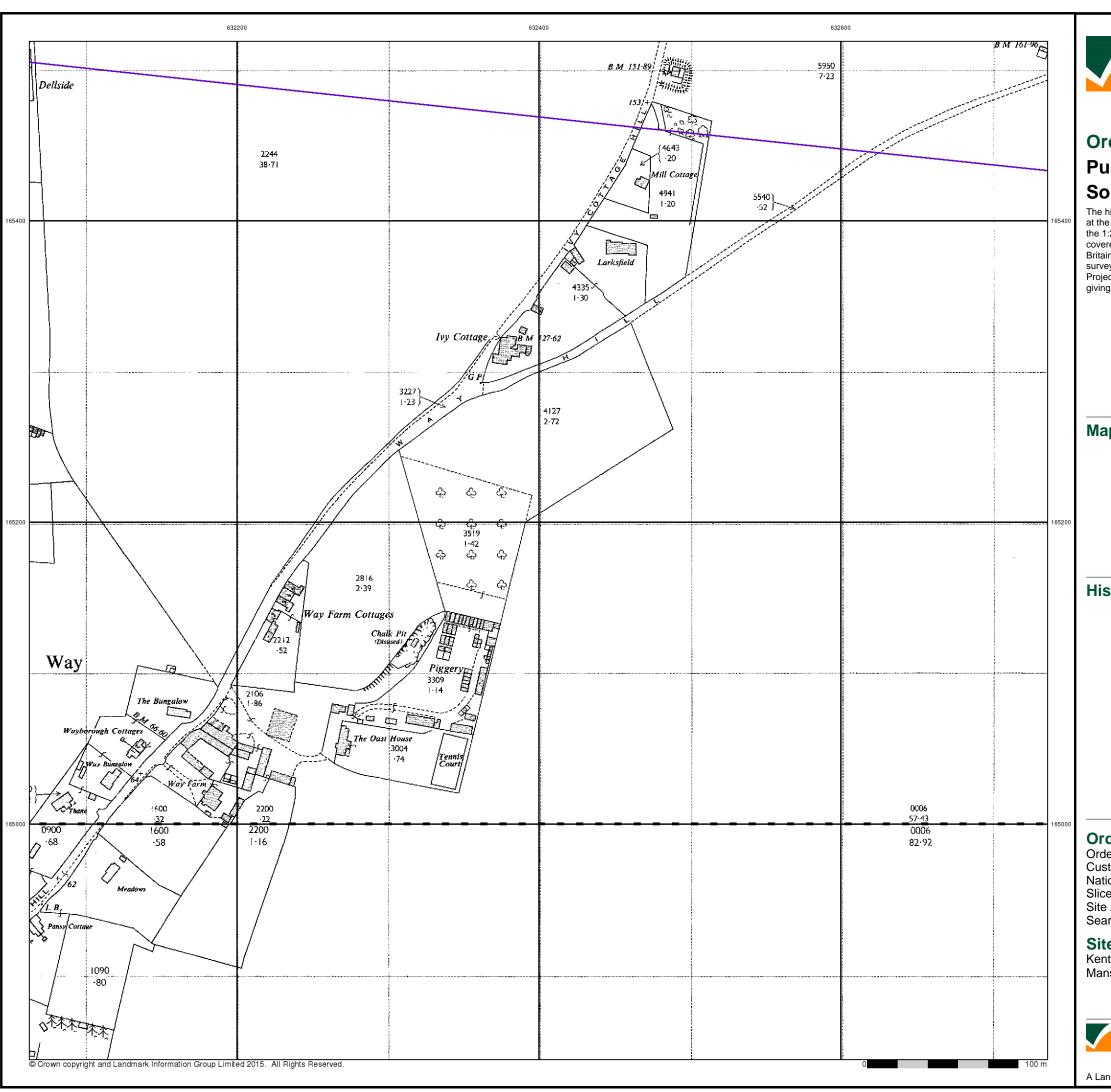
A Landmark Information Group Service v47.0 17-Mar-2016









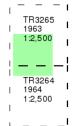




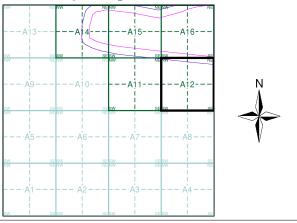
Ordnance Survey Plan Published 1963 - 1964 Source map scale - 1:2,500

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 A12



Order Details

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 631550, 165460
Slice: A

Site Area (Ha): 306.39 Search Buffer (m): 100

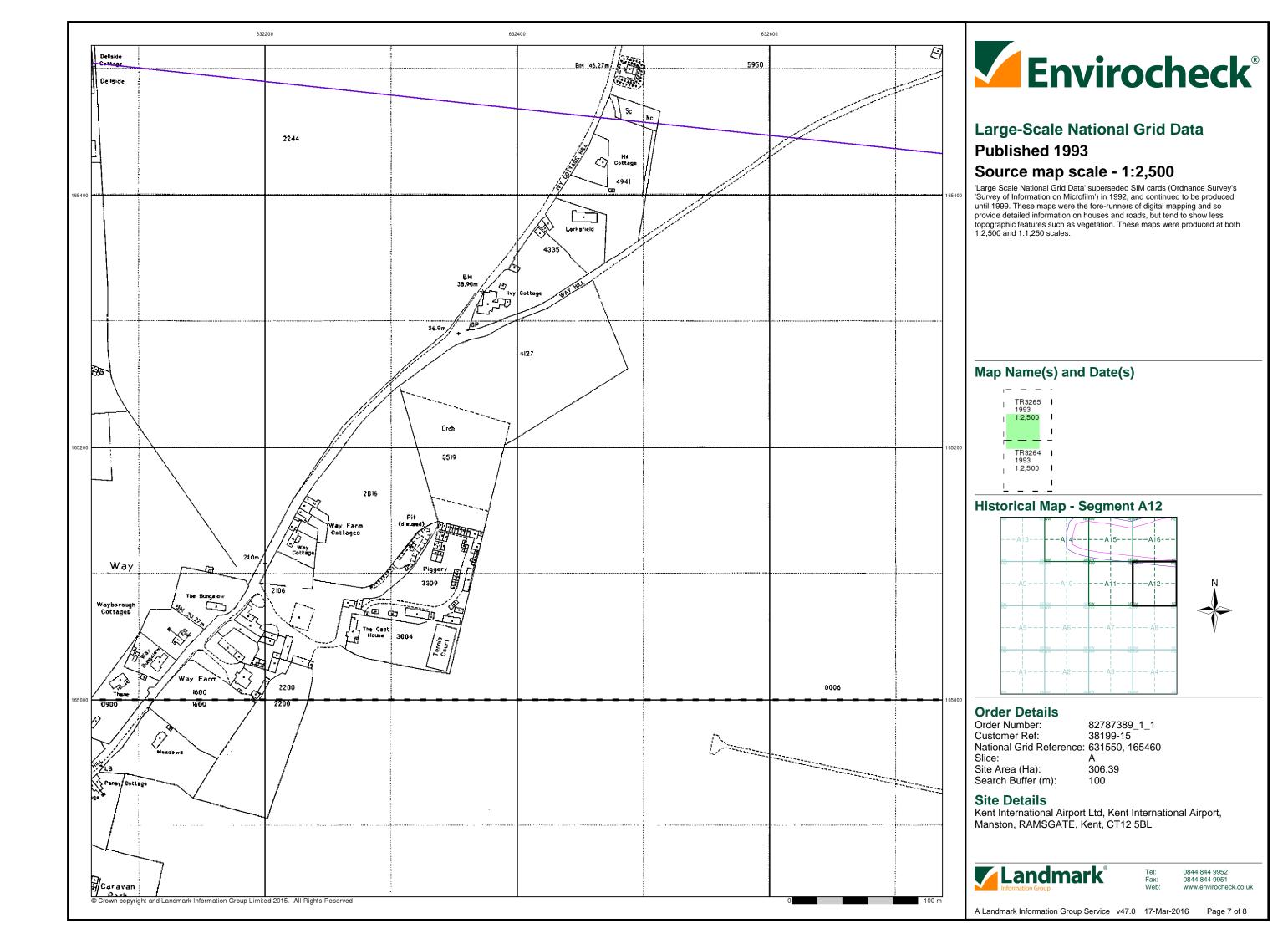
Site Details

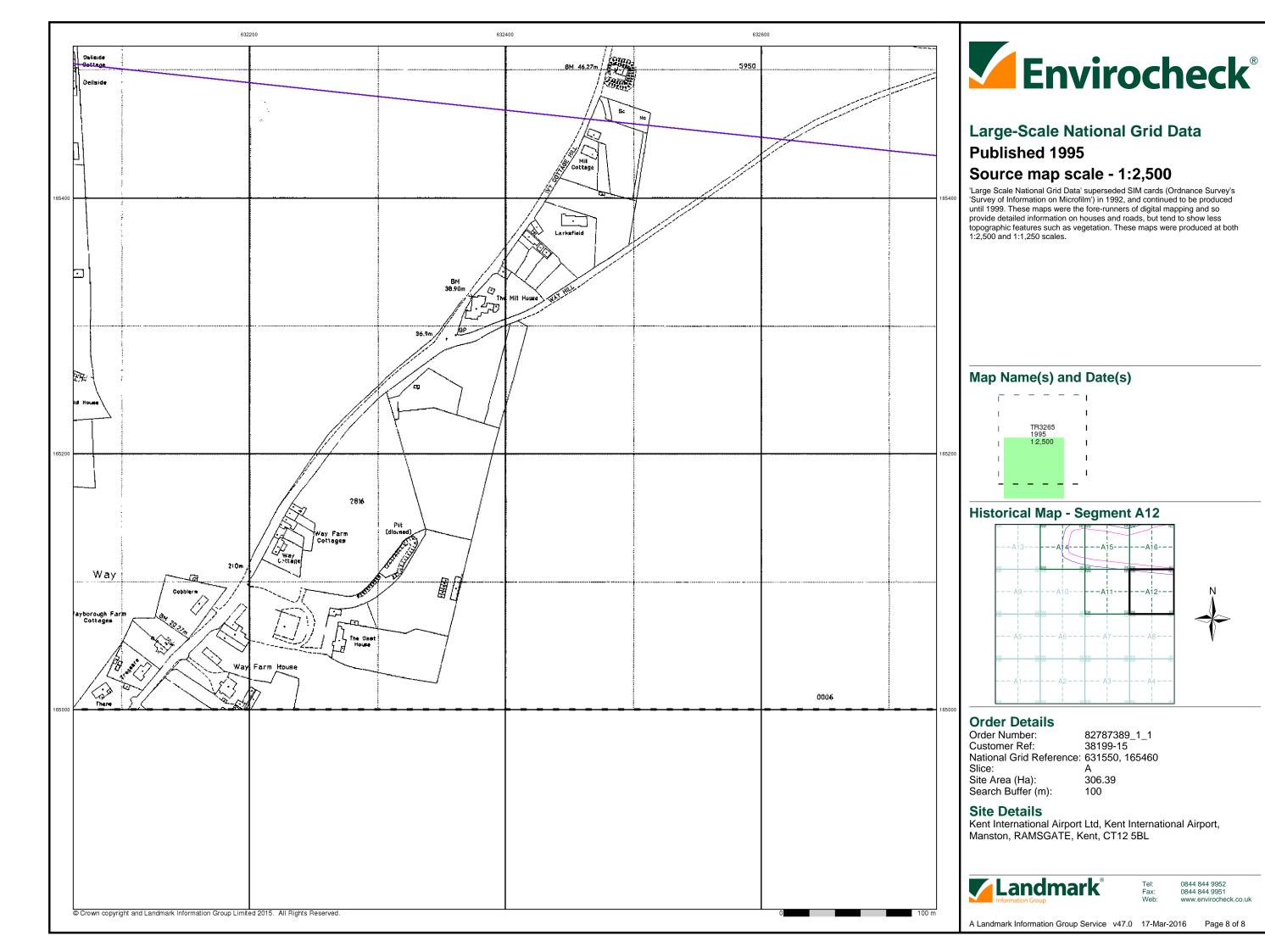
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



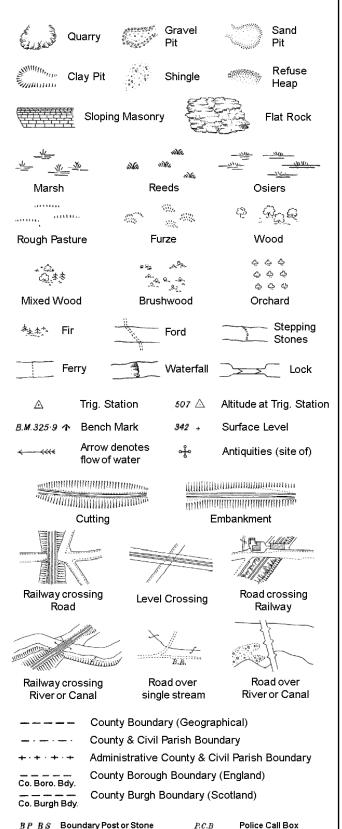
el: 0844 844 9952 ax: 0844 844 9951 (eb: www.envirocheck.

A Landmark Information Group Service v47.0 17-Mar-2016 Pa





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



Pump

Sluice

Spring

Trough Well

Signal Post

Telephone Call Box

S.P

Sl.

 T_{T}

B.R.

E.P

F.B.

M.S

Bridle Road

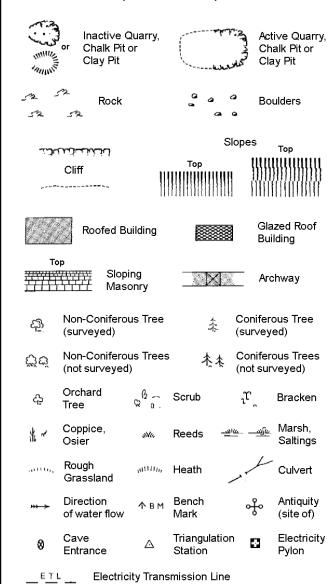
Foot Bridge

Mile Stone

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

Electricity Pylor

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



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

_		Slopes Top			
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	Cliff	11111111	111111111111]]]]]]]	!]]]]]]))
			111111111111111111111111111111111111111	111111111	111111111
23	Rock		7,5	Rock (sc	attered)
\triangle_{a}	Boulders		Δ	Boulders	(scattered)
	Positioned Bou	ılder		Scree	
ফ্টো	Non-Coniferou (surveyed)	s Tree	-1-	Conifero (surveye	
ඊ්ජ	Non-Coniferou (not surveyed)		A A	Conifero (not surv	us Trees eyed)
දා	Orchard Tree	Ç ^{lo} a. Sc	rub	Jr,	Bracken
* ~	Coppice, Osier	.w. Re	eds 🗝	<u> ————————————————————————————————————</u>	Marsh, Saltings
artite,	Rough Grassland	^{mum} , He	eath	1 to	Culvert
>>→	Direction of water flow		angulation ation	ઌ૾ૢૺ૰	Antiquity (site of)
E <u>T</u> L	_ Electricity T	ransmissio	n Line	\boxtimes	Electricity Pylon
/ / / ВМ	291.60m Benc	h Mark		Building Building	s with Seed
	Roofed B	uilding		4	zed Roof Iding
	• • • Civ	il parish/co	mmunity bo	oundary	
		trict bounda			
		unty bounda	-		
		ındary post	=		
		undary mer		ıl (note: t	hese
Å	∘ alw	ays appear hree)			
Bks	Barracks		Р	Pillar, Pole	or Post
Bty	Battery		PO	Post Offic	
Cemy	Cemetery		PC Pn		nvenience
Chy Cis	Chimney Cistern		Pp Ppg Sta	Pump Pumping	Station
Dismtd F		Railway	PW	Place of W	
El Gen S	-	-	Sewage Pp	g Sta Se	wage mping Station
EIP	Electricity Pole,	Pillar	SB, S Br		x or Bridge
	ta Electricity Sub		SP, SL	_	st or Light
FB	Filter Bed		Spr	Spring	-
Fn / D Fr	n Fountain / Drink	ing Ftn.	Tk	Tank or Tr	ack
00			т.	Tuerrale	

Gas Valve Compound

Mile Post or Mile Stone

Gas Governer

Guide Post

Manhole

GVC

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

Wd Pp

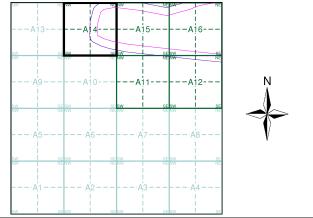
Wks



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Kent	1:2,500	1873	2
Kent	1:2,500	1896	3
Kent	1:2,500	1907	4
Kent	1:2,500	1938 - 1939	5
Ordnance Survey Plan	1:2,500	1963 - 1964	6
Additional SIMs	1:2,500	1964 - 1989	7
Ordnance Survey Plan	1:2,500	1968 - 1984	8
Supply of Unpublished Survey Information	1:2,500	1973	9
Ordnance Survey Plan	1:2,500	1984	10
Large-Scale National Grid Data	1:2,500	1993	11
Large-Scale National Grid Data	1:2,500	1995	12
Large-Scale National Grid Data	1:2,500	1996	13
Large-Scale National Grid Data	1:2,500	1996	14

Historical Map - Segment A14



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice:

Site Area (Ha): 306.39 Search Buffer (m): 100

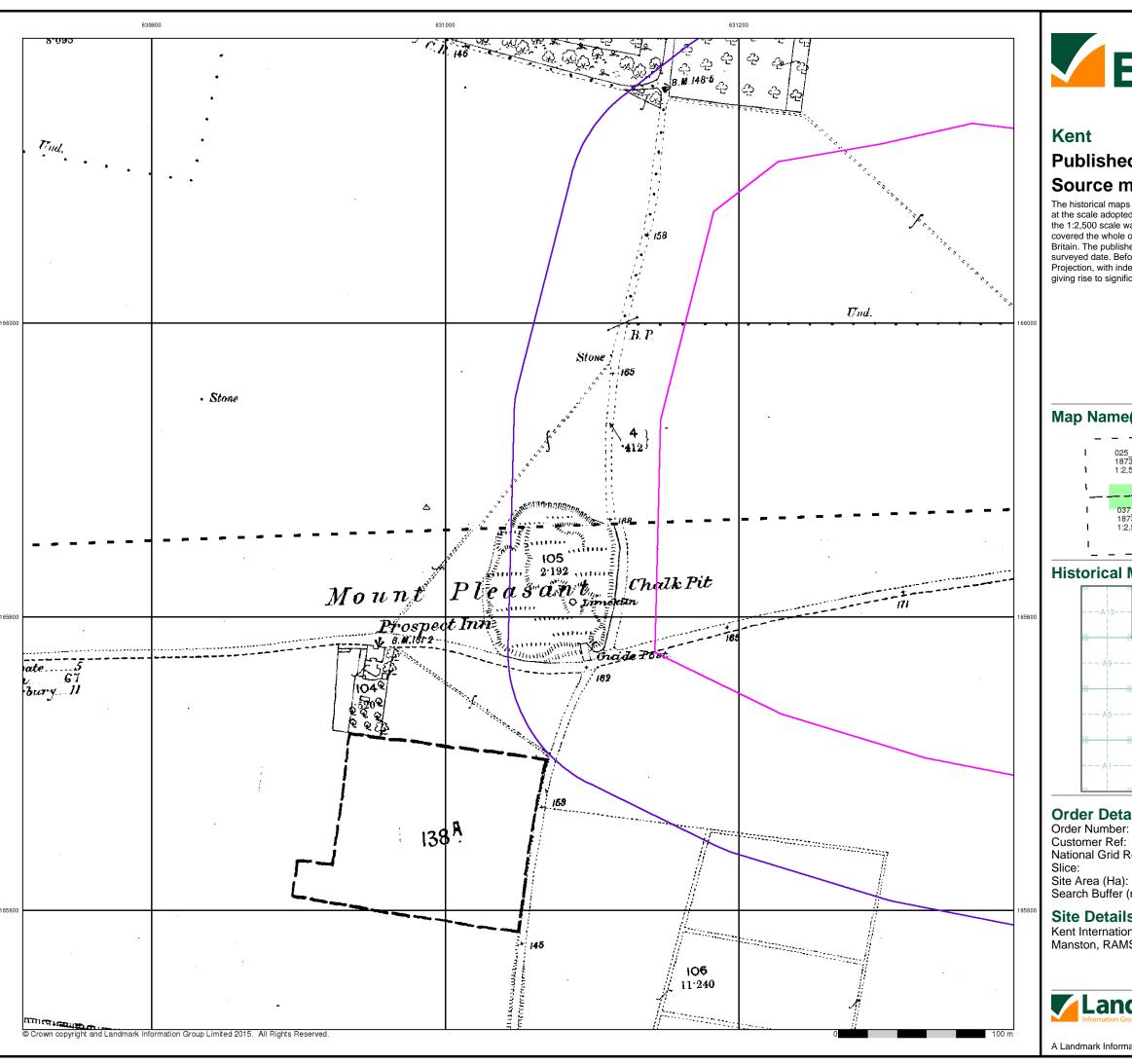
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 1 of 14

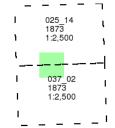




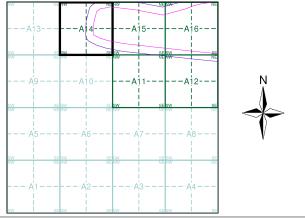
Published 1873 Source map scale - 1:2,500

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 A14



Order Details

82787389_1_1 38199-15 Customer Ref: National Grid Reference: 631550, 165460

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

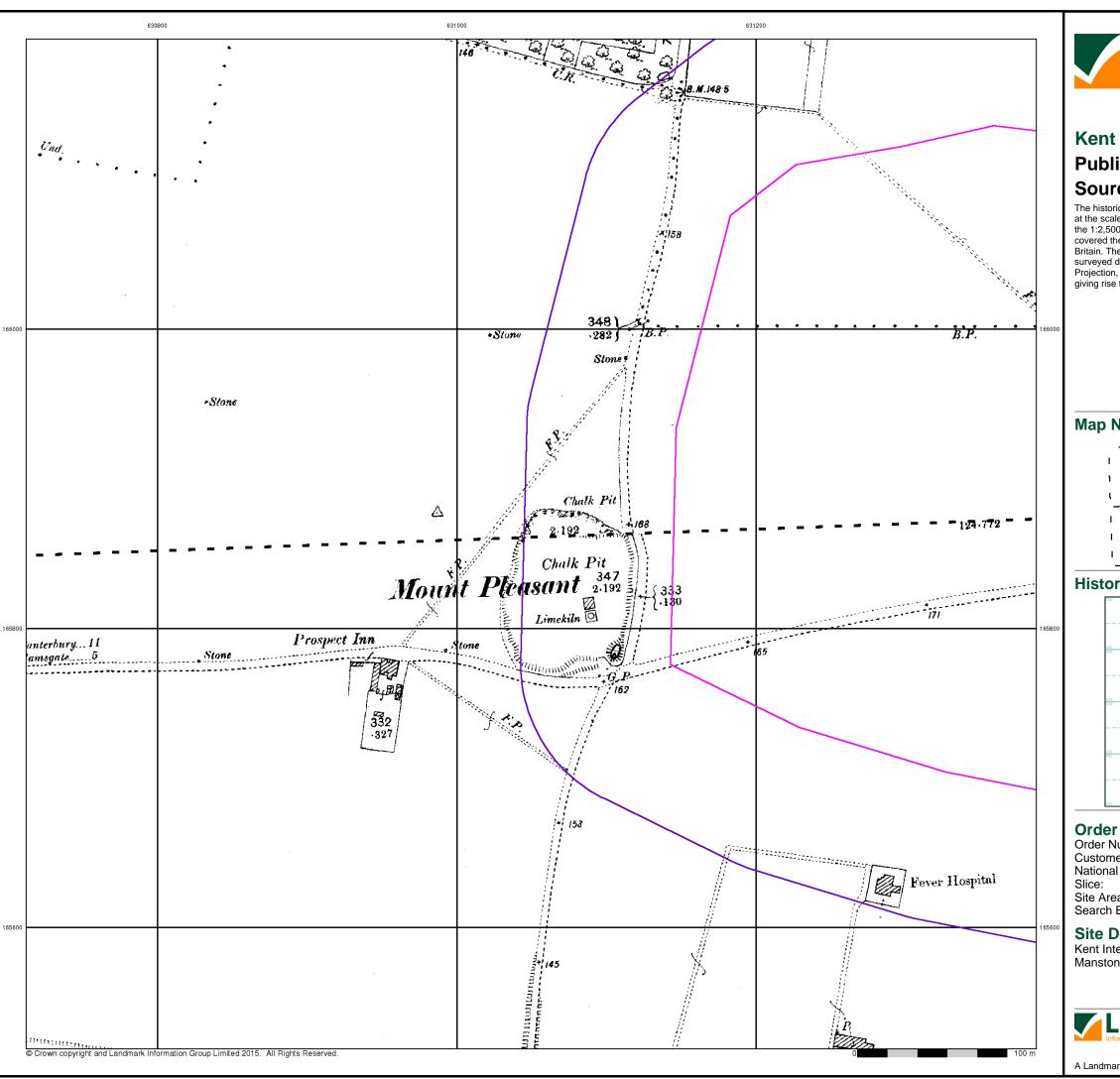
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 2 of 14

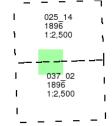




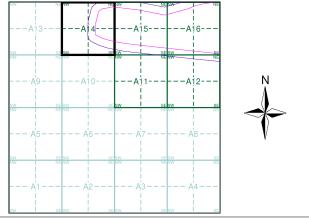
Published 1896 Source map scale - 1:2,500

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 A14



Order Details

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460

Site Area (Ha): 306.39 Search Buffer (m): 100

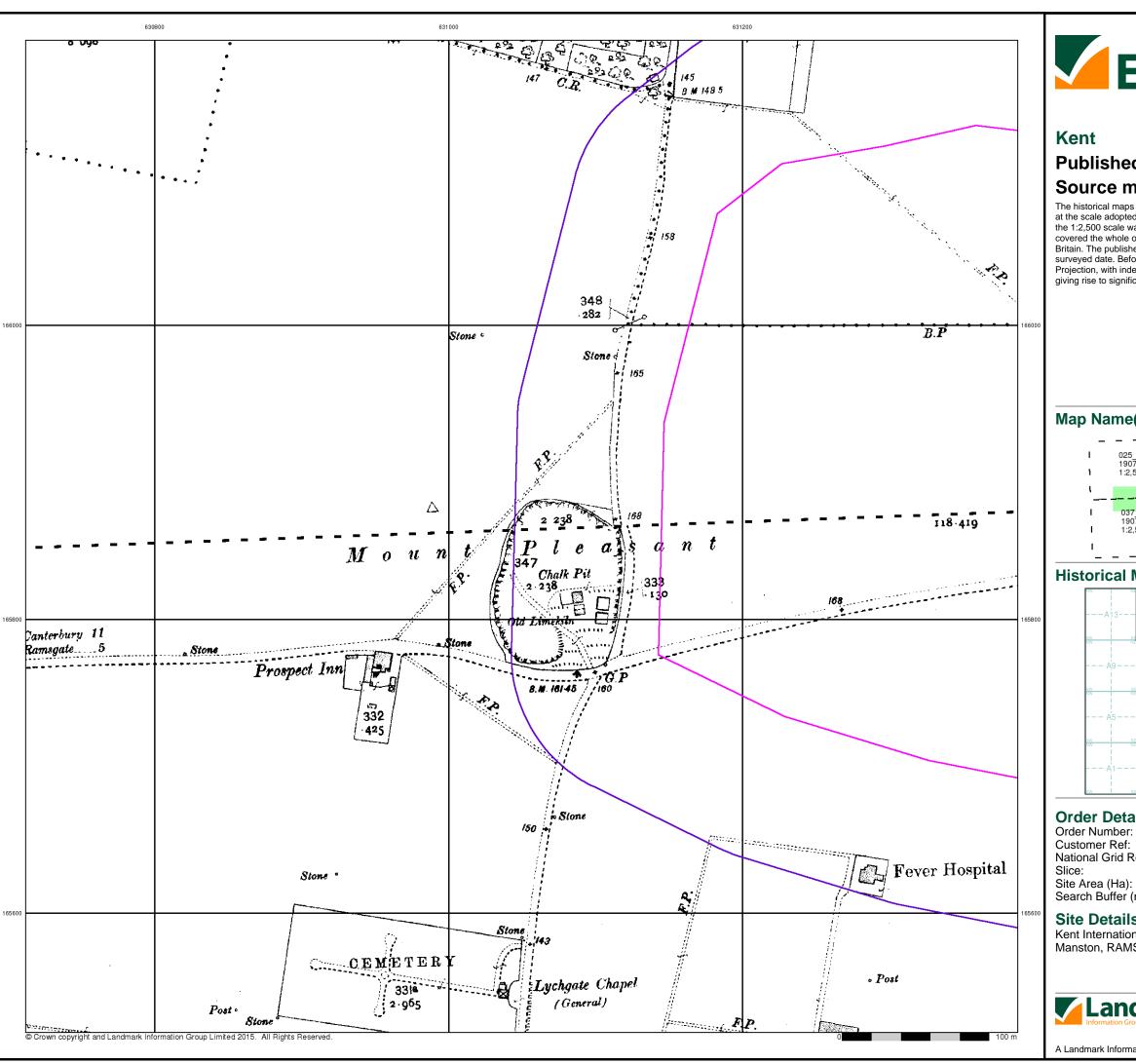
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



0844 844 9952 0844 844 9951

A Landmark Information Group Service v47.0 17-Mar-2016 Page 3 of 14

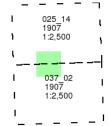




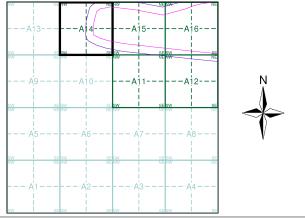
Published 1907 Source map scale - 1:2,500

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 A14



Order Details

82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460

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

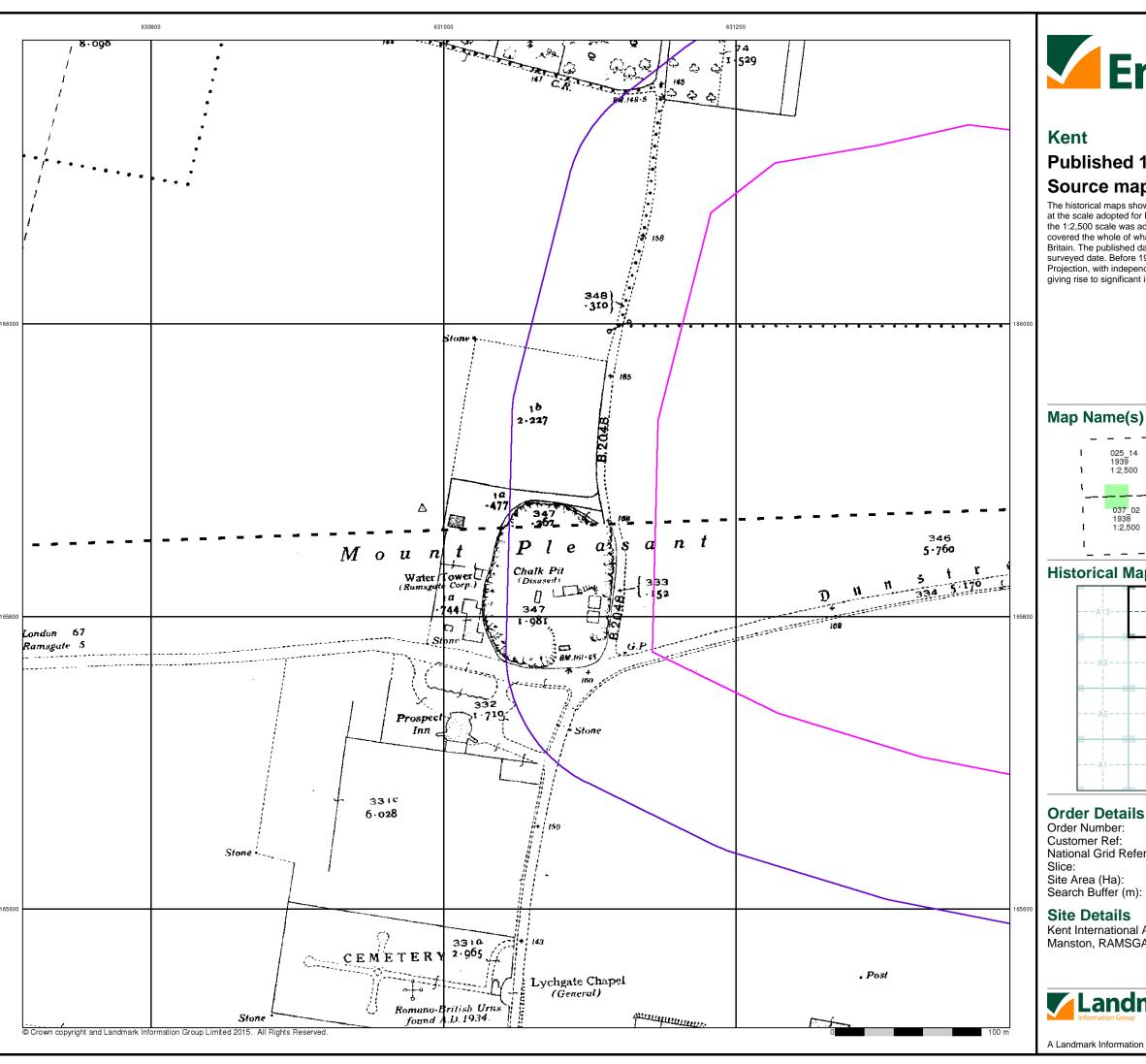
Site Details

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 4 of 14

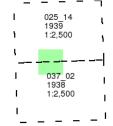




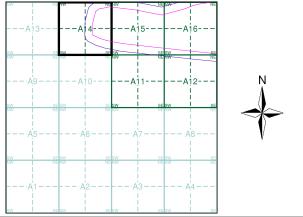
Published 1938 - 1939 Source map scale - 1:2,500

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 A14



82787389_1_1 38199-15 National Grid Reference: 631550, 165460

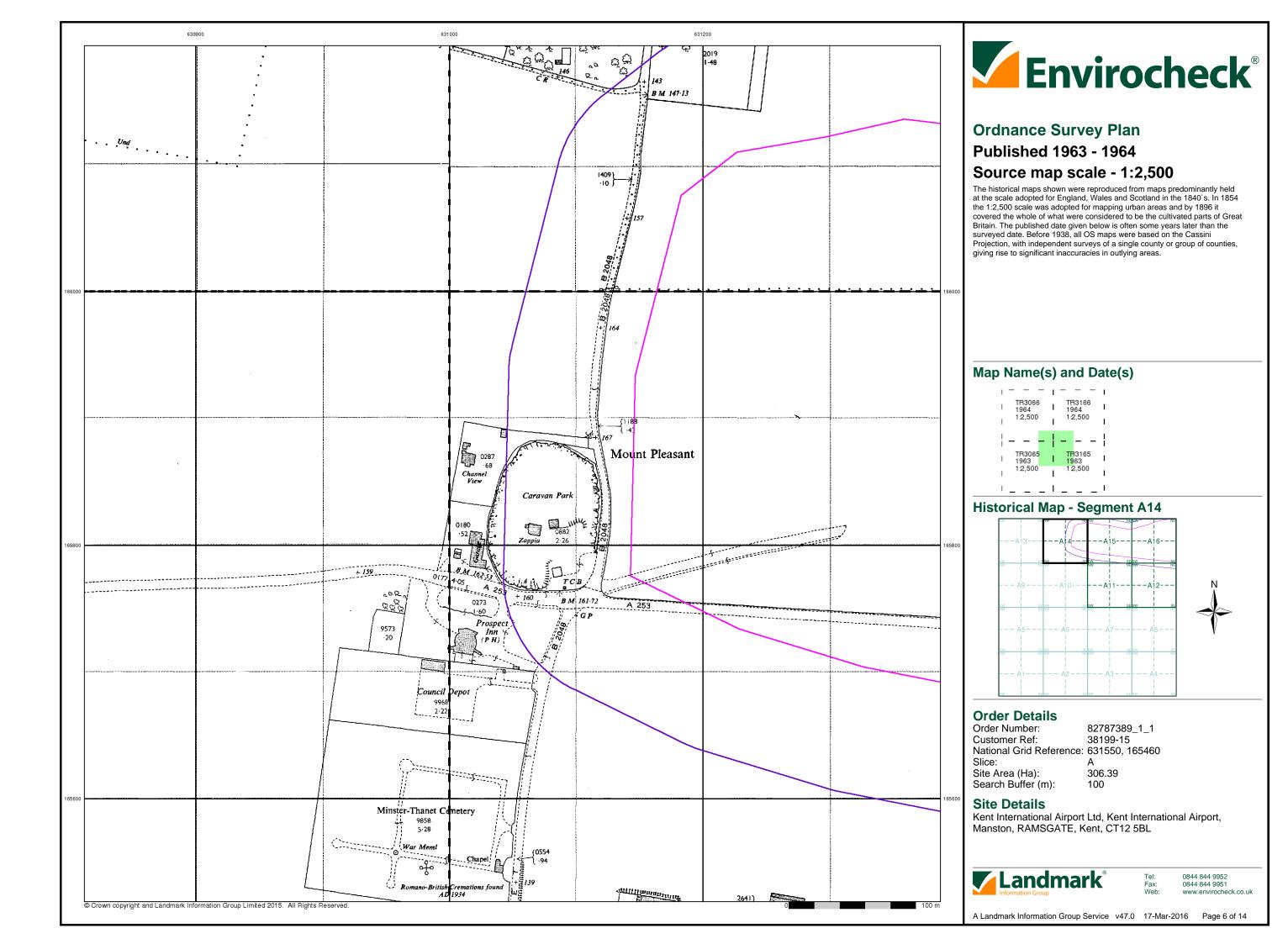
306.39 100

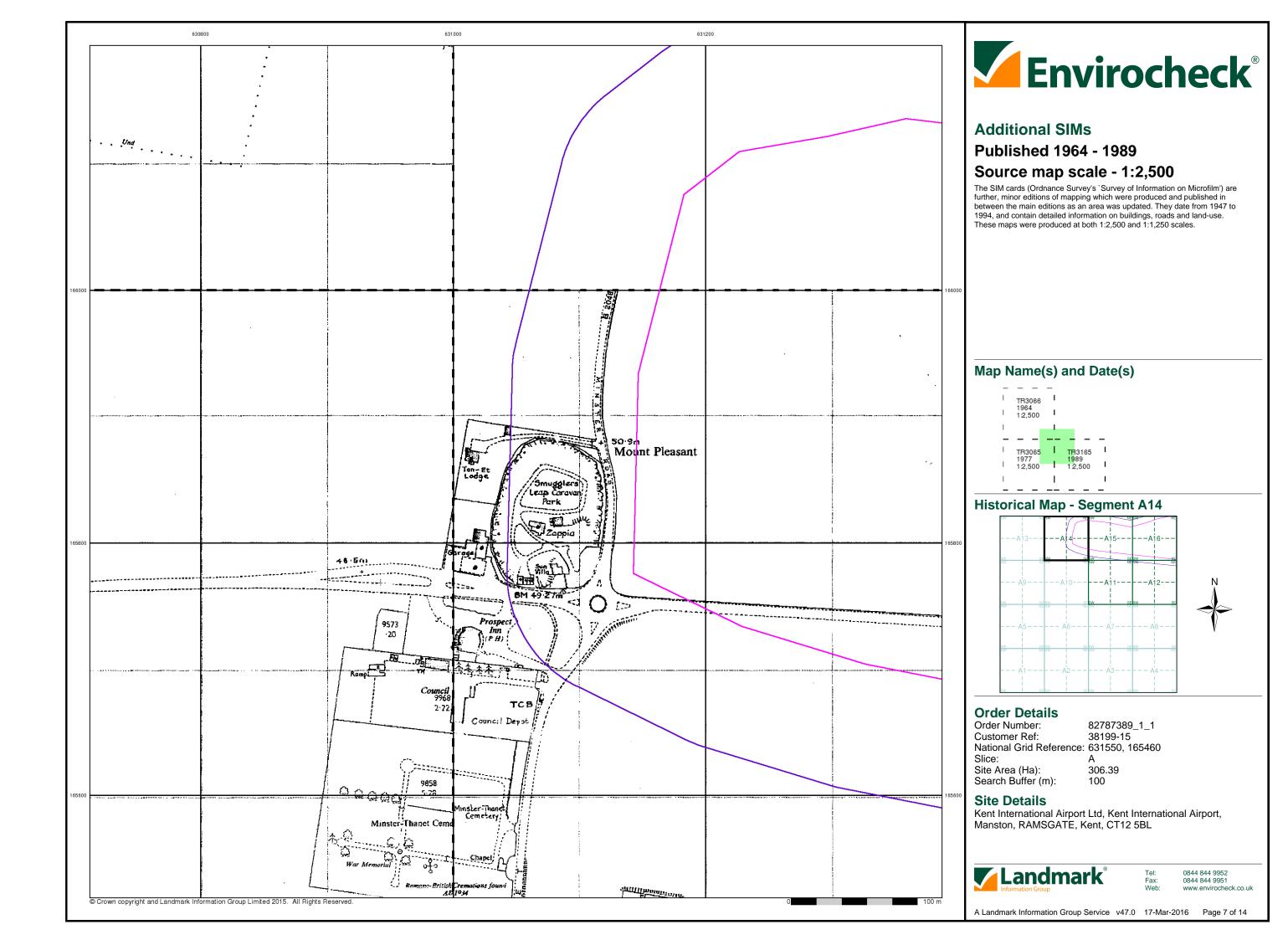
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

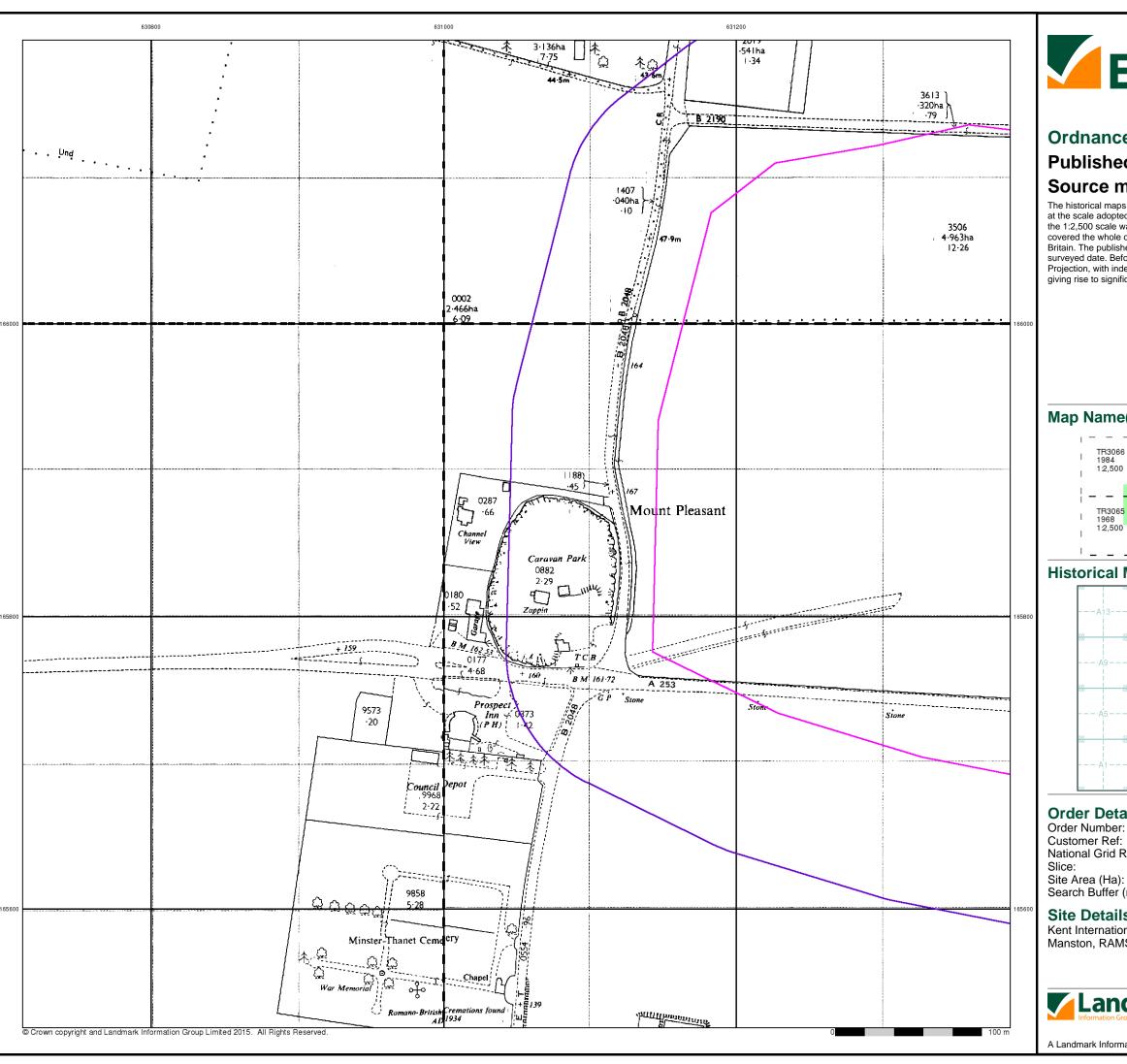


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A Landmark Information Group Service v47.0 17-Mar-2016 Page 5 of 14









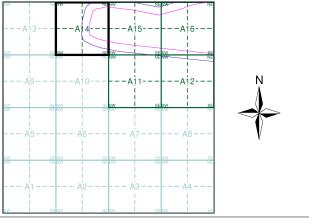
Ordnance Survey Plan Published 1968 - 1984 Source map scale - 1:2,500

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)

- 1		ı		ı
- 1	TR3066 1984	ı	TR3166 1977	ı
- 1	1:2,500	I	1:2,500	I
		1		ł
1	TR3065 1968	ı	TR3165 1968	ı
I	1:2,500	I	1:2,500	I
- 1		Τ		ı

Historical Map - Segment A14



Order Details

Order Number: 82787389_1_1 38199-15 Customer Ref: National Grid Reference: 631550, 165460

306.39 Search Buffer (m): 100

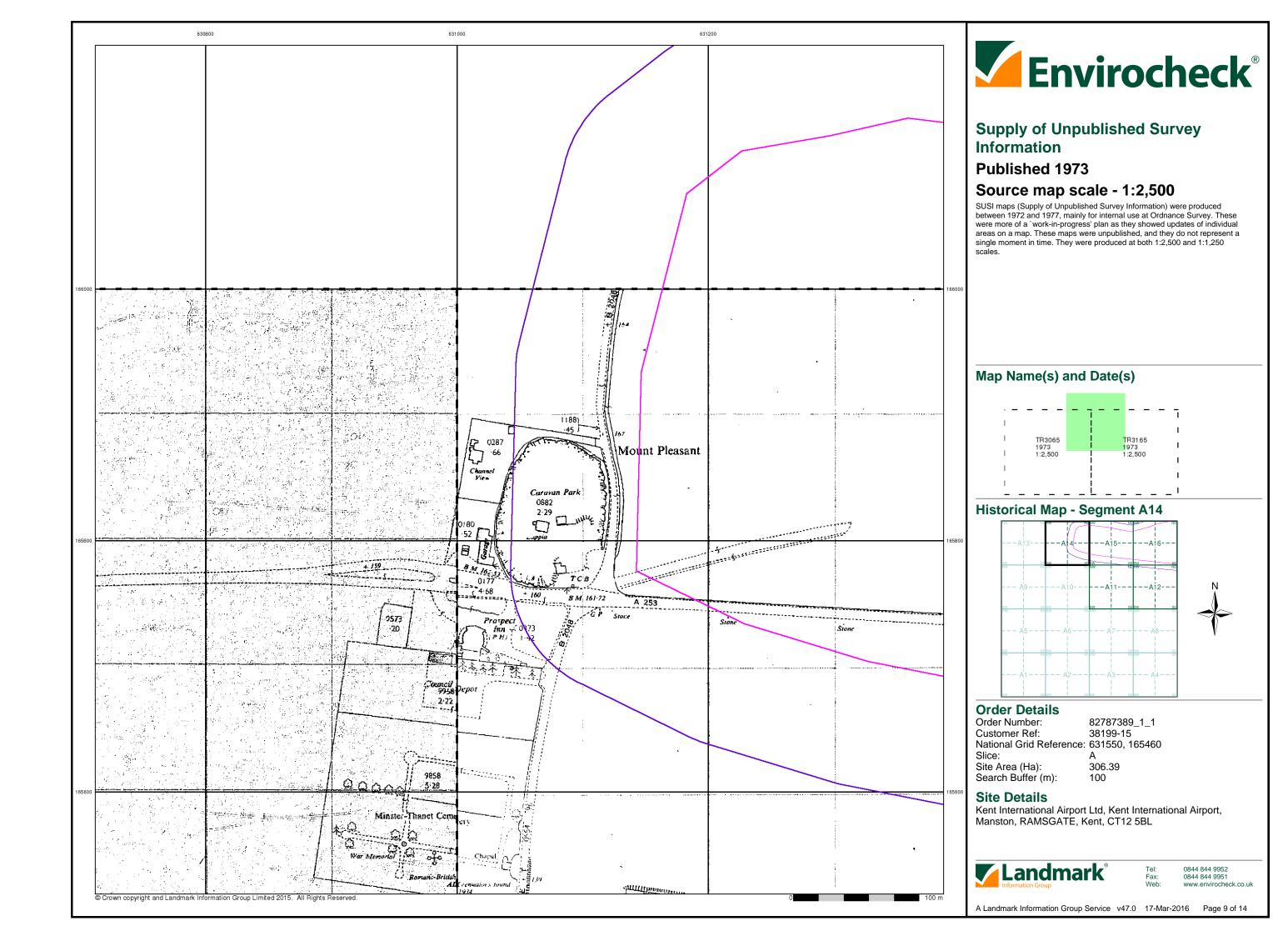
Site Details

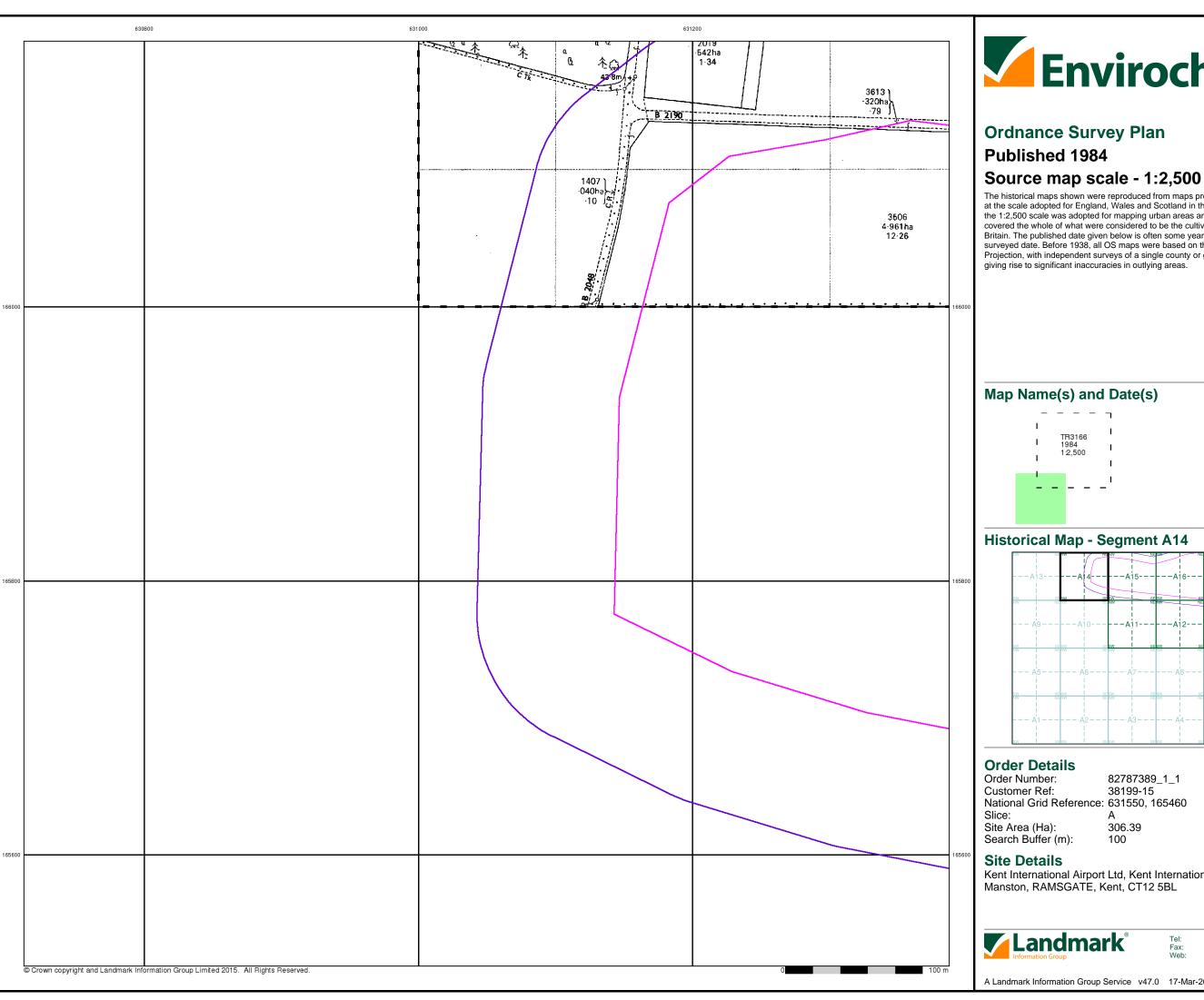
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 8 of 14



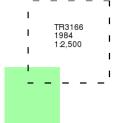




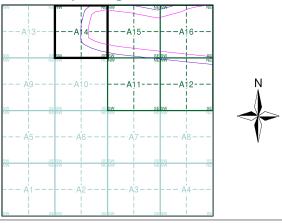
Ordnance Survey Plan Published 1984

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 A14



82787389_1_1 38199-15 National Grid Reference: 631550, 165460

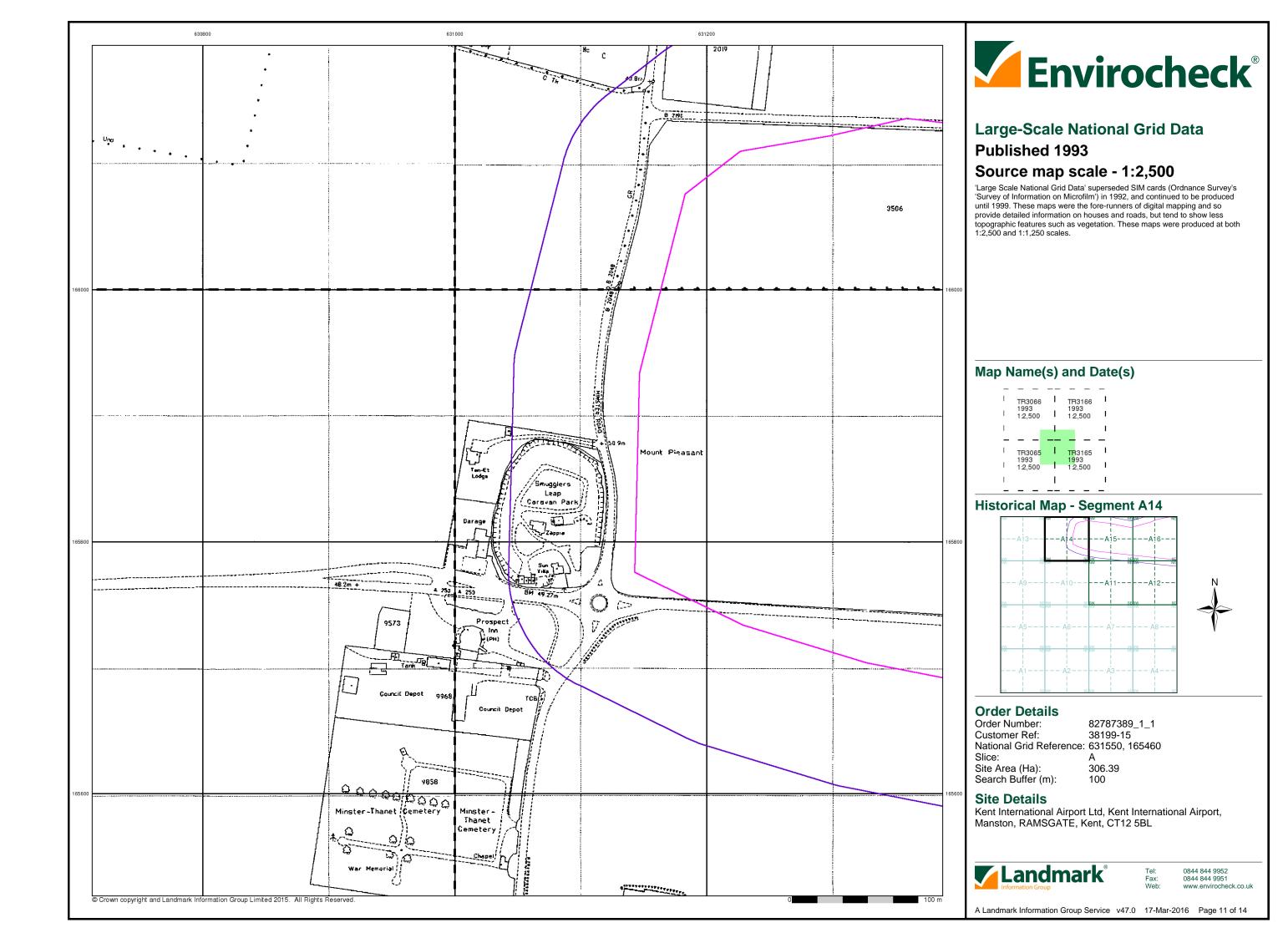
306.39 100

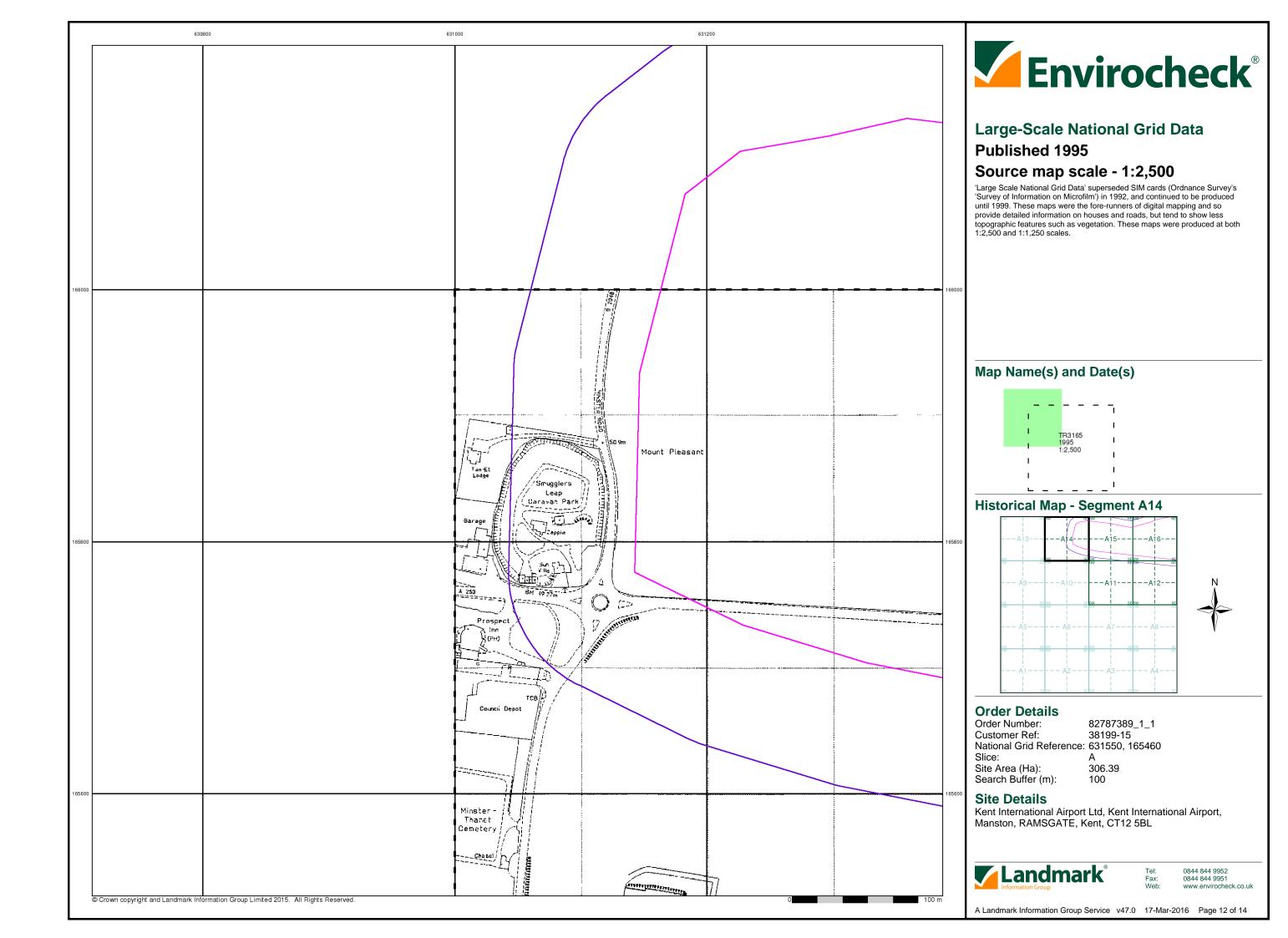
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

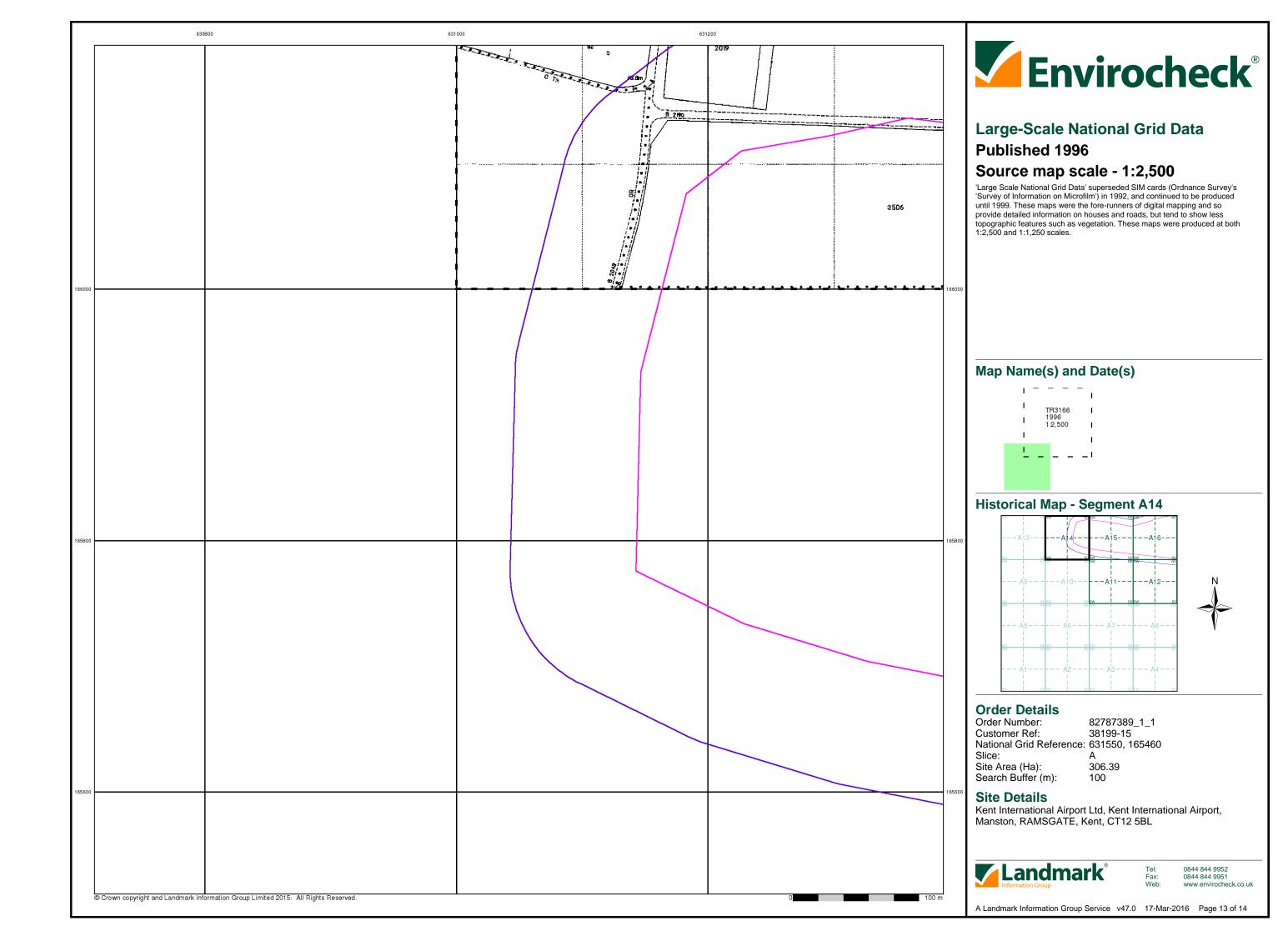


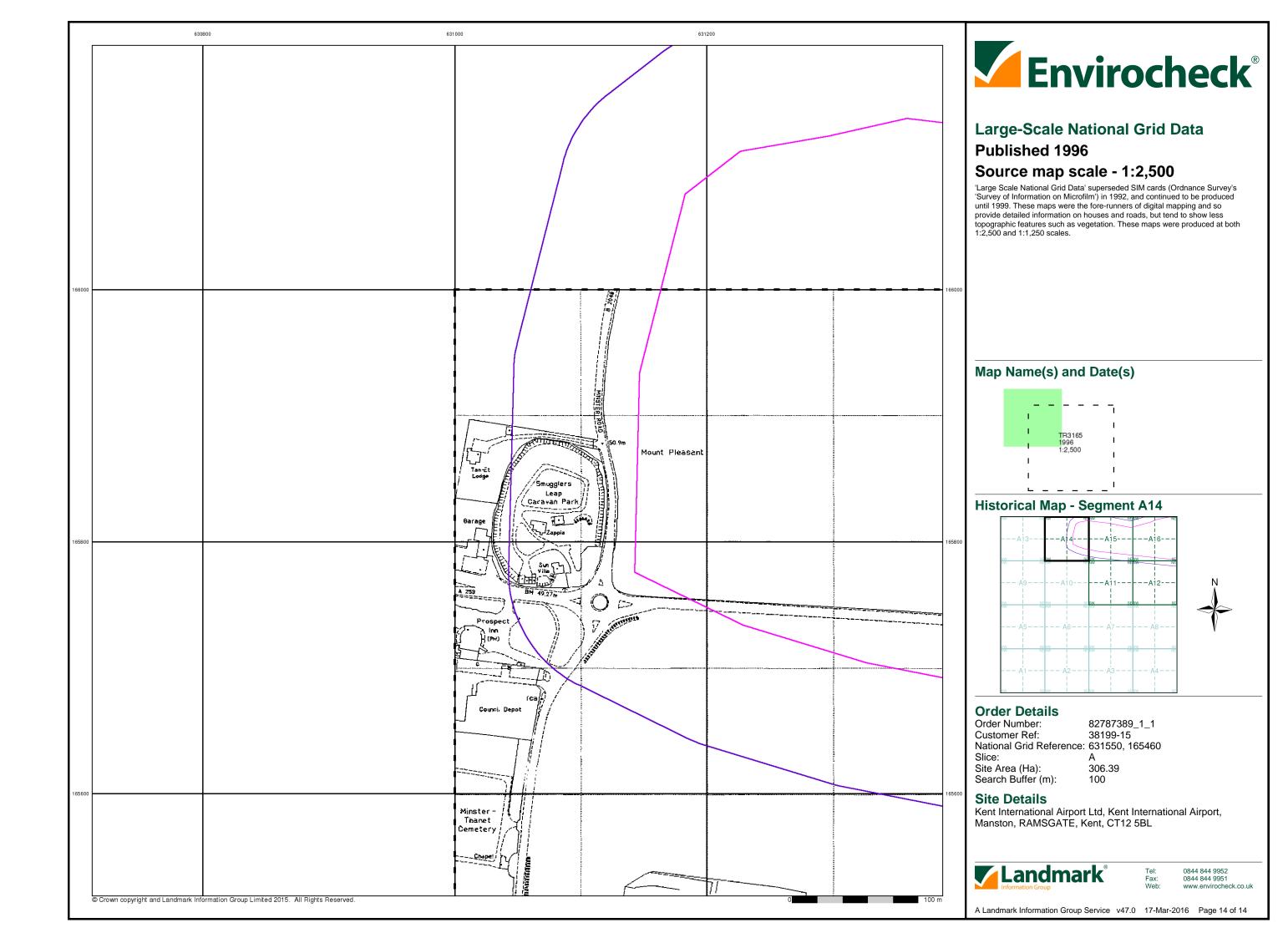
0844 844 9952 0844 844 9951 www.envirocheck.co.uk

A Landmark Information Group Service v47.0 17-Mar-2016 Page 10 of 14

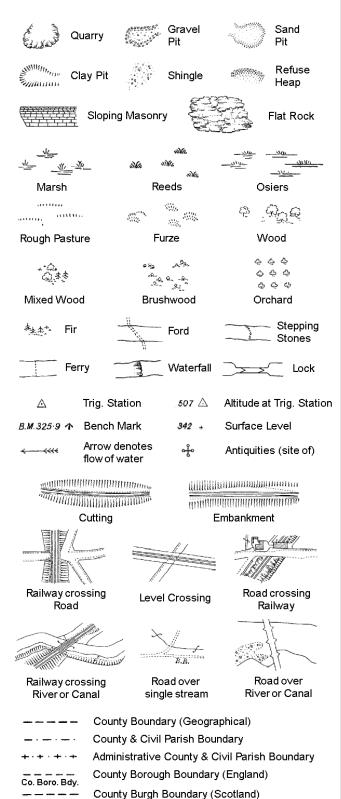








Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



Police Call Box

Telephone Call Box

Signal Post

Pump

Sluice

Spring

Trough Well

S.P

Sl.

 T_{T}

Co. Burgh Bdy.

Bridle Road

Foot Bridge

Mile Stone

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

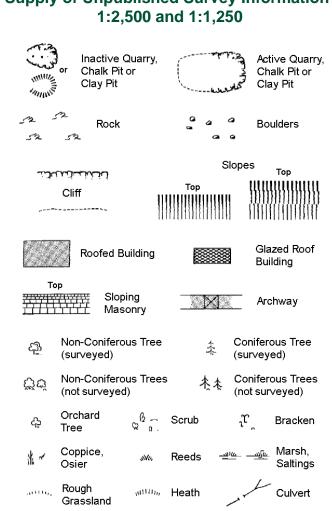
Electricity Pylor

B.R.

E.P

F.B.

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



Direction Bench Antiquity of water flow (site of) Electricity Cave Triangulation

ETL Elec	tricity Transmission Line
	County Boundary (Geographical)
	County & Civil Parish Boundary
	Civil Parish Boundary
· · ·	Admin. County or County Bor. Boundary
- 	London Borough Boundary
N. S.	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

	Slopes			
רוני. הלאנדיונייניי	т	ор	IIIIII	uuuuu
Cliff	111111111	11111111111		!!!!!!!!!
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	11111111	HHHHHH		11111111111
≤2 ₅₂ Rock		23	Rock (s	cattered)
extstyle  ext		<u>a</u>	Boulder	s (scattered)
○ Positioned	Boulder		Scree	
रिन्ने Non-Conife (surveyed)	erous Tree	-1-	Conifero	ous Tree ed)
ූධ Non-Conife (not surve	erous Trees yed)	/IN .A.	Conifero (not sun	ous Trees veyed)
습 Orchard Tree	Q Ω . Scr	ub	r,	Bracken
Coppice, Osier	ww. Ree	eds 🗝	<u> </u>	Marsh, Saltings
Rough Grassland	_{num,} He	ath	1	Culvert
Direction of water flo		angulation tion	ઌ૾ૺ૰	Antiquity (site of)
ETL Electric	ity Transmissio	n Line	$\boxtimes$	Electricity Pylon
\ €\ BM 231.60m	ench Mark			gs with g Seed
Roofe	ed Building		g	lazed Roof uilding
	Ci∨il parish/cor	nmunity b	nundary	
	District bounda	-	Januar y	
	County bounda	-		
_ • _				
Boundary post/stone				О
٥	Boundary mere always appear of three)			
Bks Barracks		Р	Pillar, Po	le or Post
Bty Battery		PO	Post Off	ice
Cemy Cemetery		PC	Public C	onvenience
Chy Chimney		Pp	Pump	
Cis Cistern		Ppg Sta	Pumping	_
-	tled Railway	PW	Place of	•
El Gen Sta Electric Station	ity Generating	Sewage P		ewage umping Station
EIP Electricity	Pole, Pillar	SB, S Br		ox or Bridge
El Sub Sta Electricity	•	SP, SL	_	ost or Light
FB Filter Bed		Spr	Spring	=

Fn / D Fn Fountain / Drinking Ftn.

Gas Governer

**Guide Post** 

Manhole

Gas Valve Compound

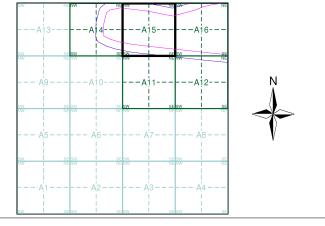
Mile Post or Mile Stone



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

Mapping Type	Scale	Date	Pg
Kent	1:2,500	1873	2
Kent	1:2,500	1896	3
Kent	1:2,500	1907	4
Kent	1:2,500	1938 - 1939	5
Ordnance Survey Plan	1:2,500	1963 - 1964	6
Ordnance Survey Plan	1:2,500	1968 - 1977	7
Supply of Unpublished Survey Information	1:2,500	1973	8
Ordnance Survey Plan	1:2,500	1984	9
Additional SIMs	1:2,500	1989	10
Large-Scale National Grid Data	1:2,500	1993	11
Large-Scale National Grid Data	1:2,500	1995	12
Large-Scale National Grid Data	1:2,500	1996	13
Large-Scale National Grid Data	1:2,500	1996	14

#### **Historical Map - Segment A15**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice:

Site Area (Ha): 306.39 Search Buffer (m): 100

#### **Site Details**

Tank or Track

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

Tr

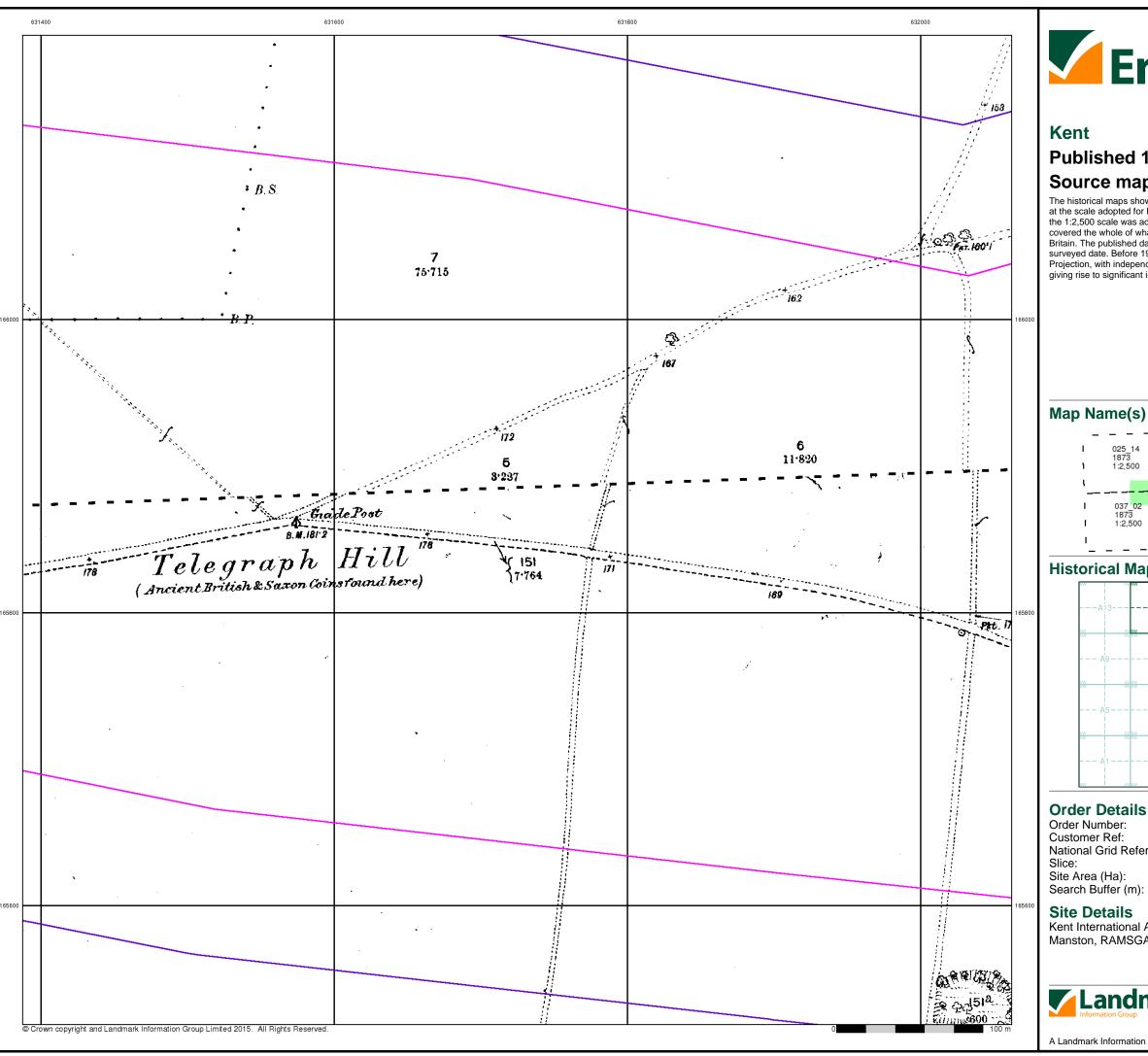
Wd Pp

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 1 of 14

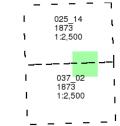




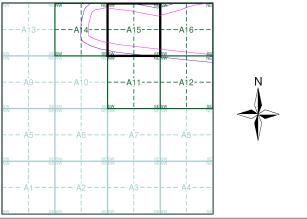
# **Published 1873** Source map scale - 1:2,500

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 A15**



82787389_1_1 38199-15 National Grid Reference: 631550, 165460

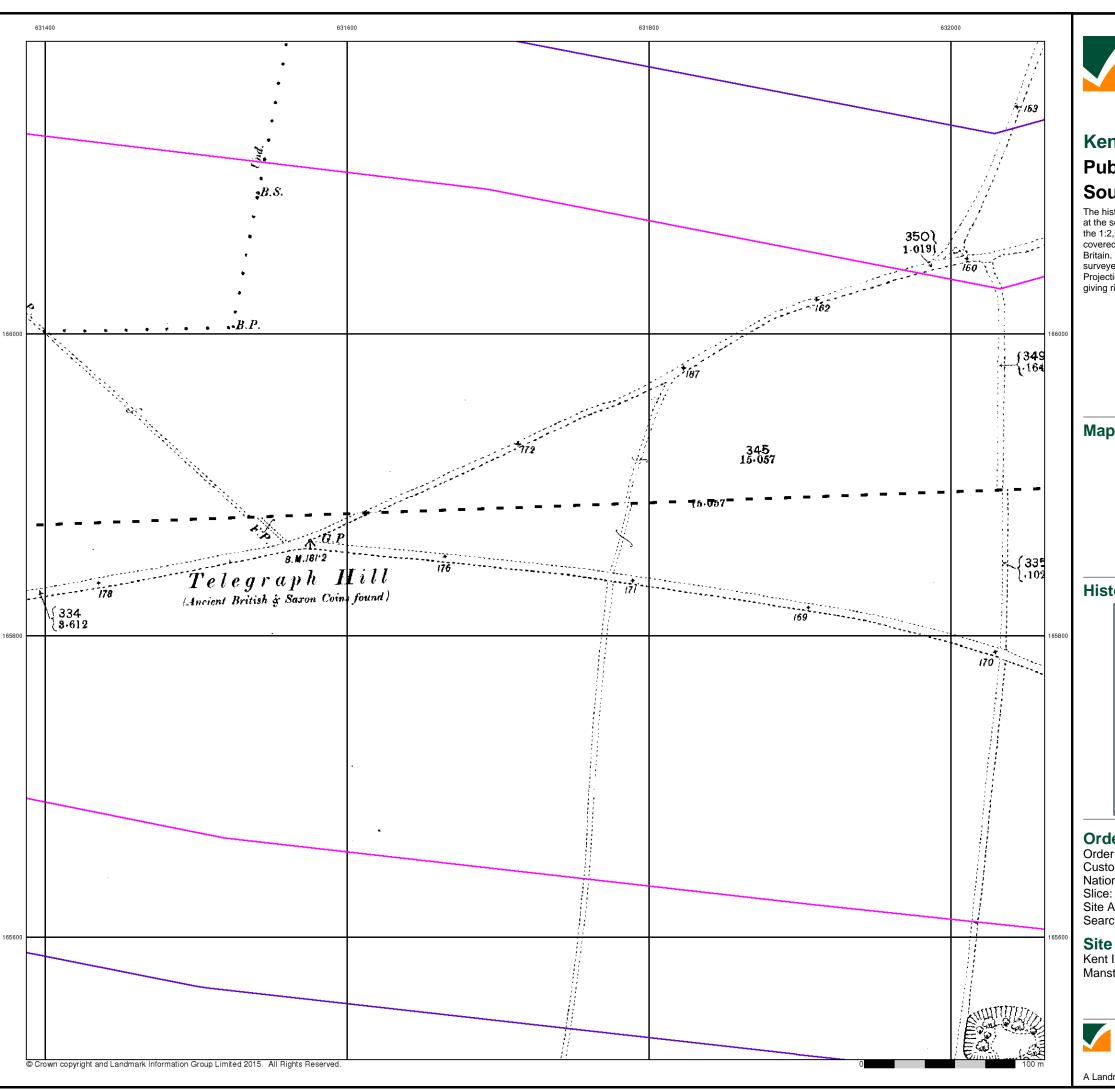
> 306.39 100

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



0844 844 9952 0844 844 9951

A Landmark Information Group Service v47.0 17-Mar-2016 Page 2 of 14

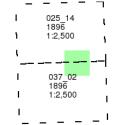




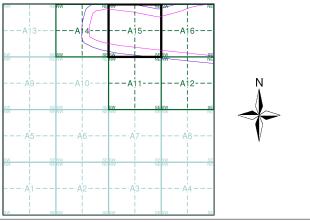
# **Published 1896** Source map scale - 1:2,500

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 A15**



### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460

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

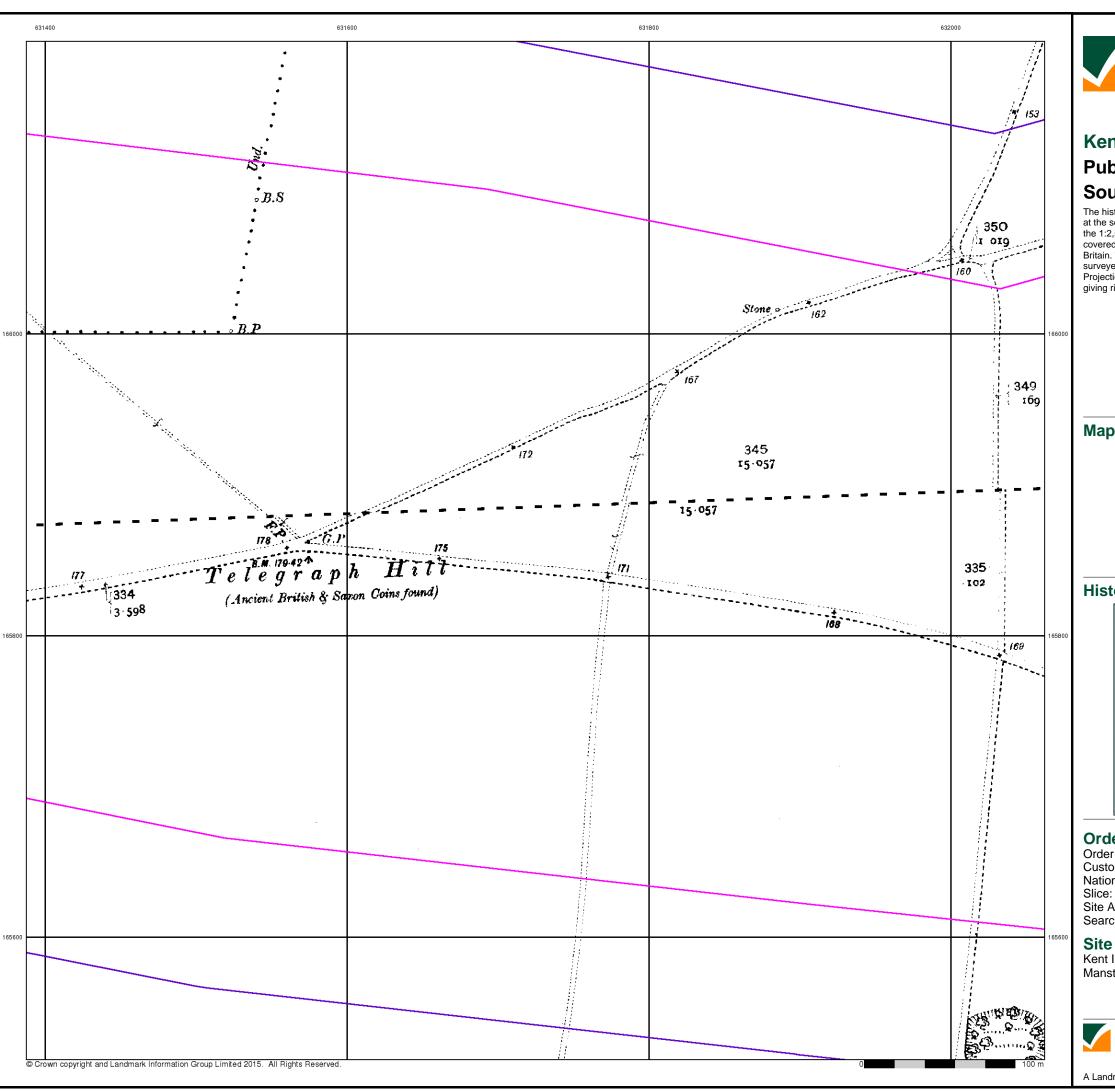
#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 3 of 14

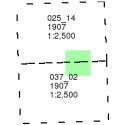




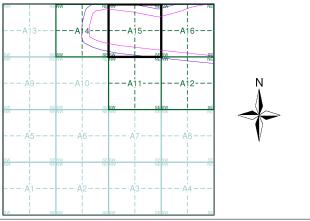
# **Published 1907** Source map scale - 1:2,500

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 A15**



### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460

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

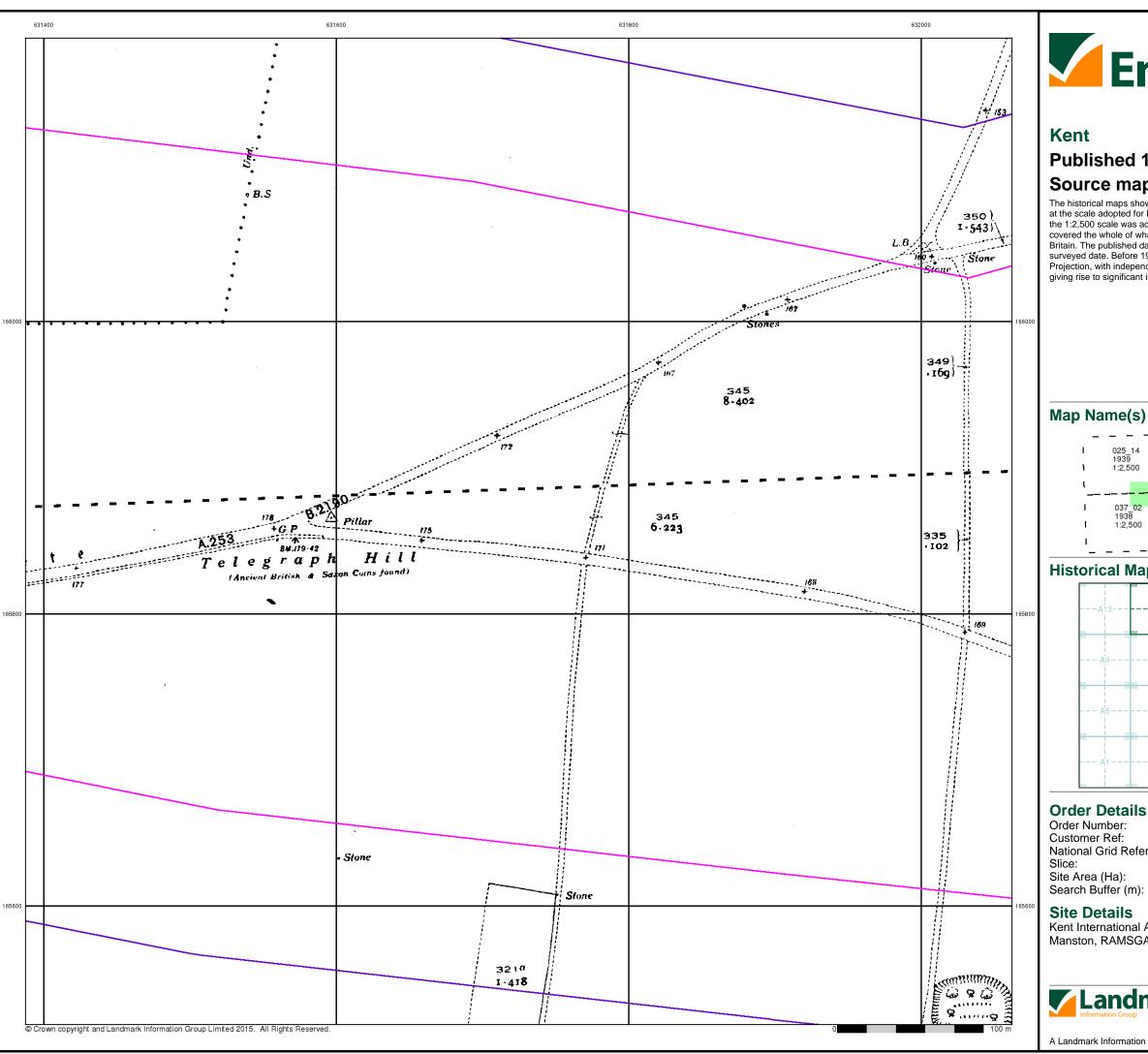
#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 4 of 14

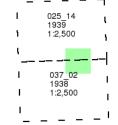




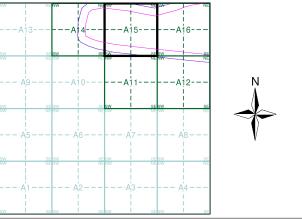
# **Published 1938 - 1939** Source map scale - 1:2,500

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 A15**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460

Site Area (Ha):

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

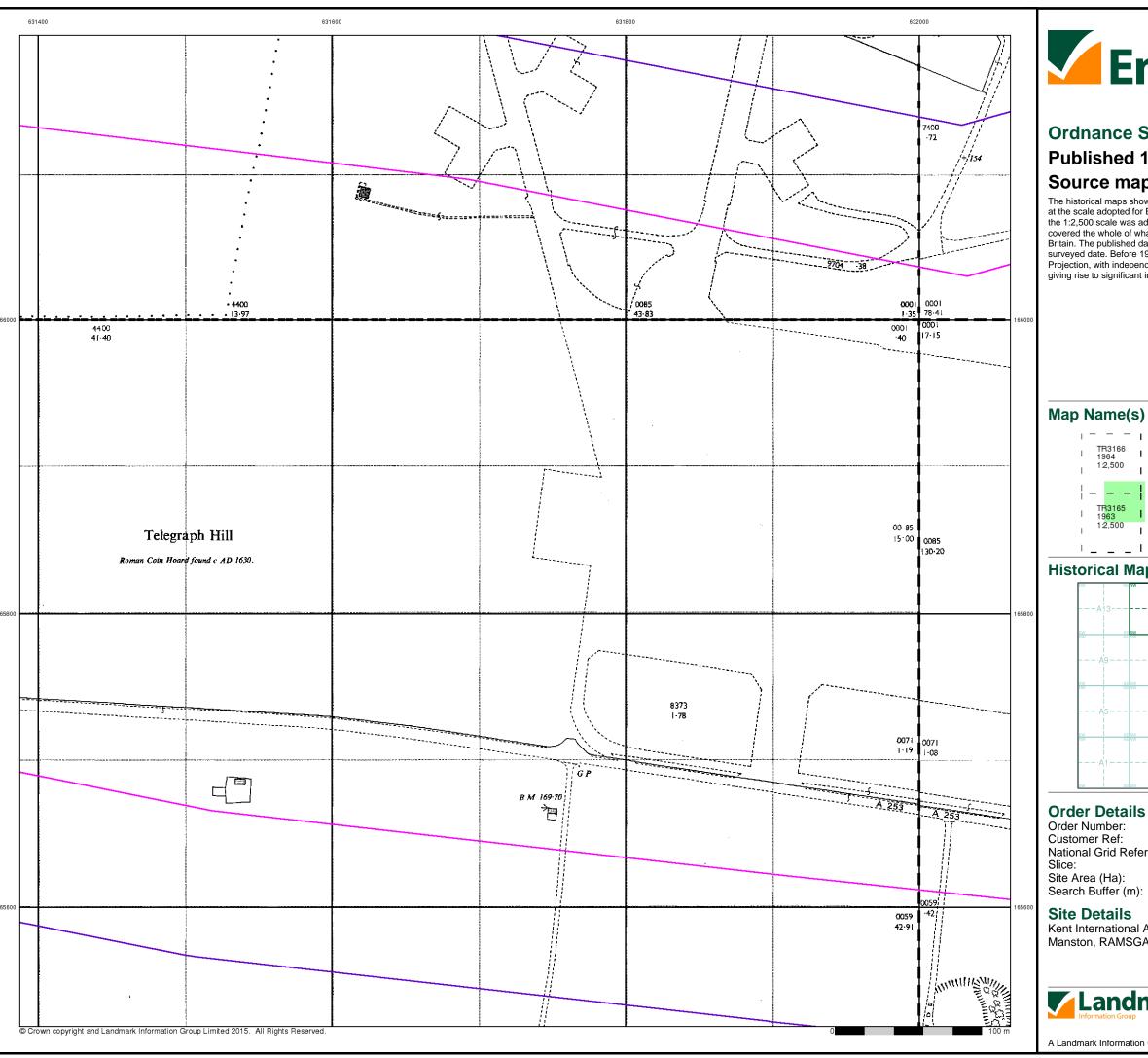
306.39

100



0844 844 9952 0844 844 9951

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# **Ordnance Survey Plan** Published 1963 - 1964

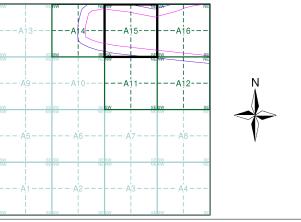
Source map scale - 1:2,500

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)

-		-		- 1
	TR3166 1964	ı	TR3266 1964	ı
1	1:2,500	I	1:2,500	ı
-		1		¦
	TR3165 1963	1	TR3265 1963	ı
1	1:2,500	I	1:2,500	I
1 _		1		1

### **Historical Map - Segment A15**



82787389_1_1 38199-15 National Grid Reference: 631550, 165460

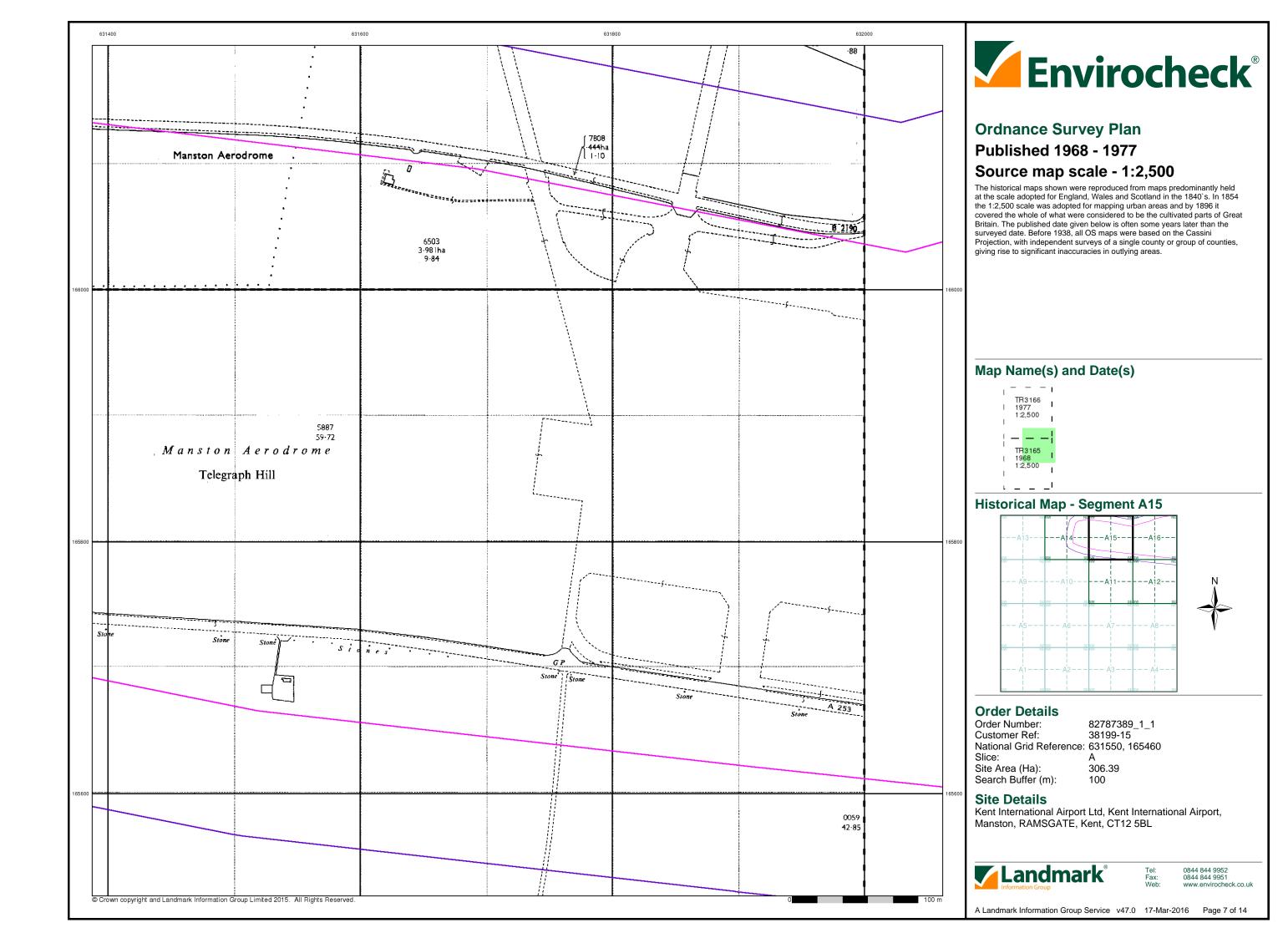
306.39 100

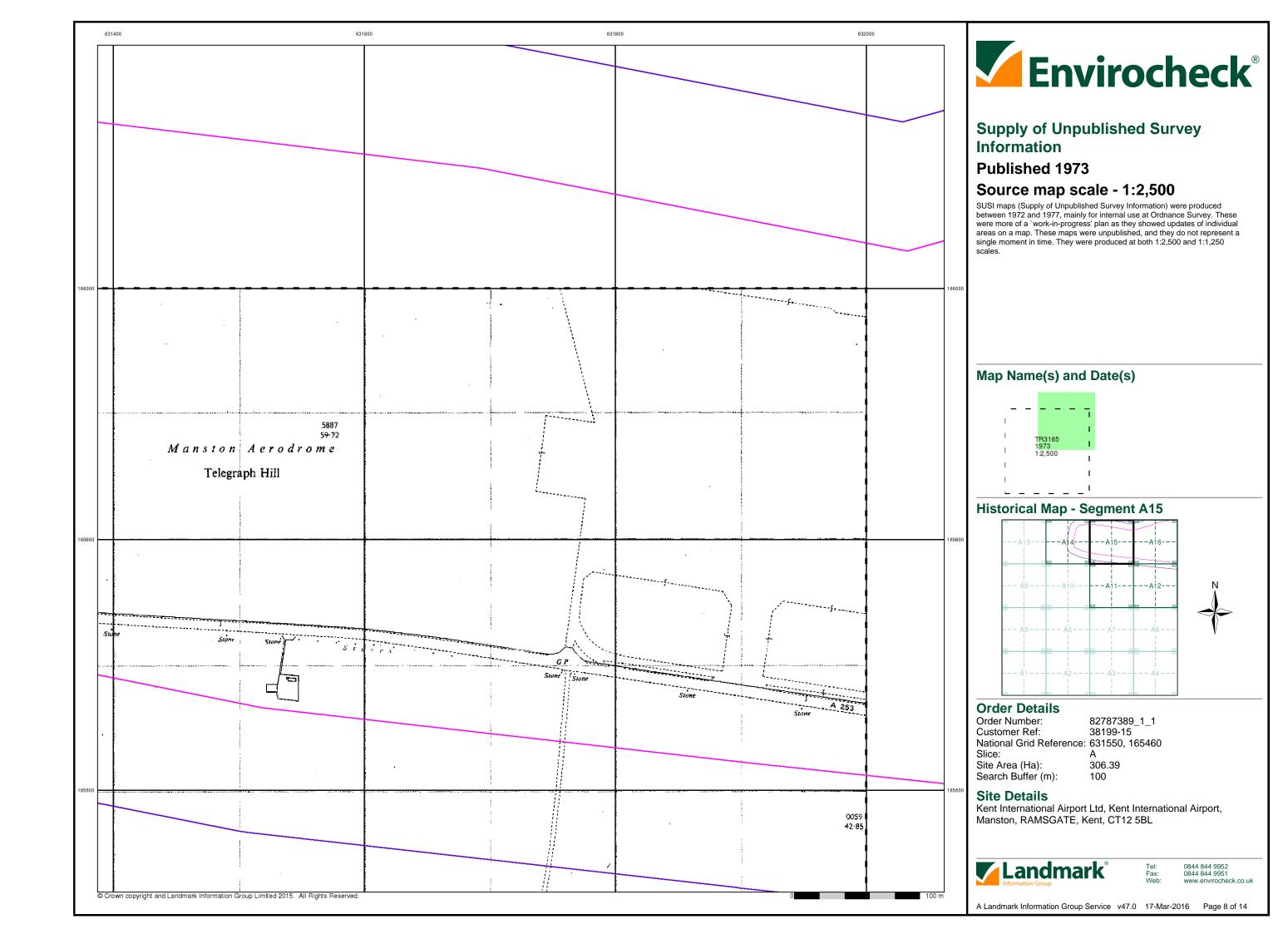
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

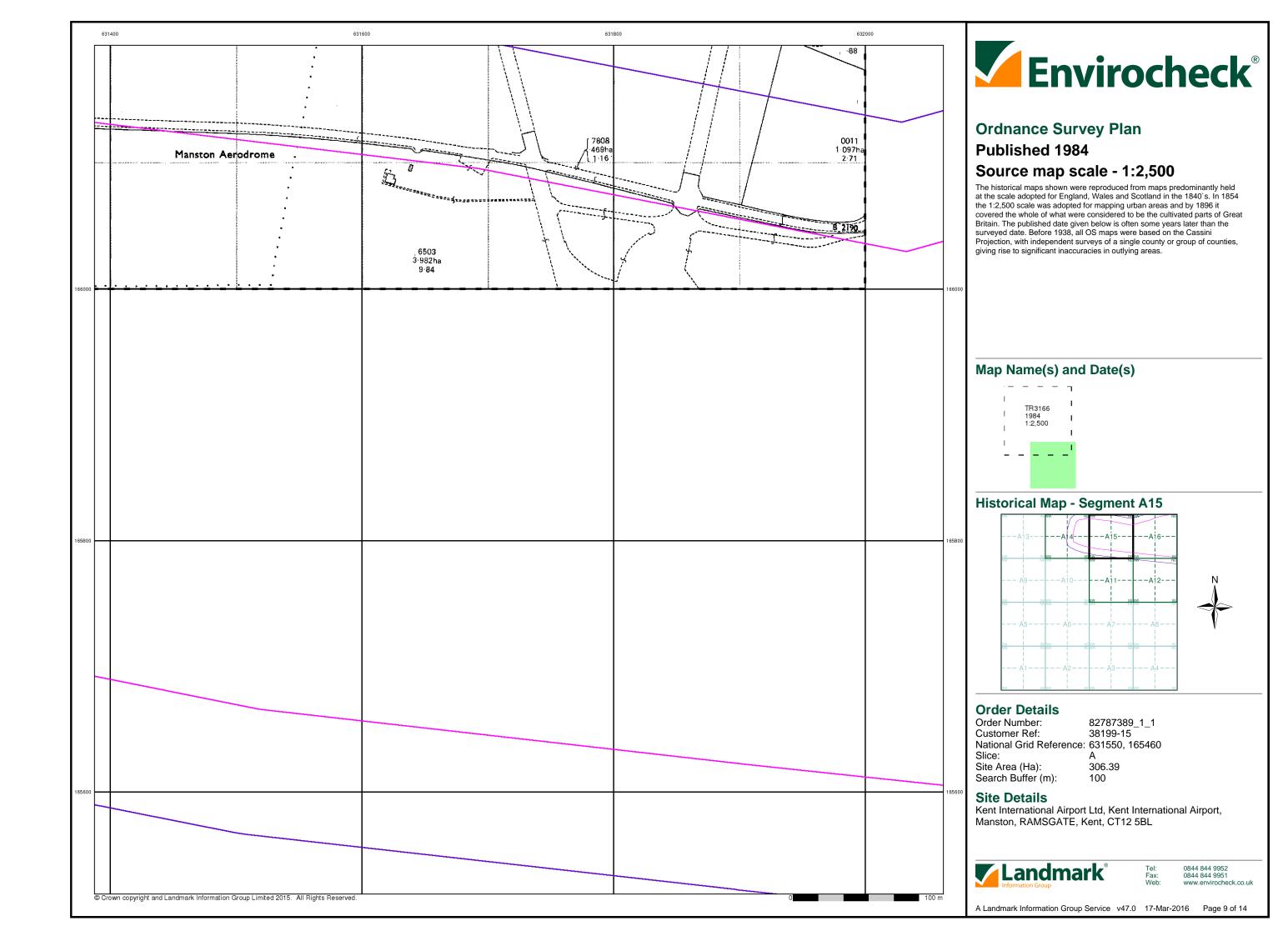


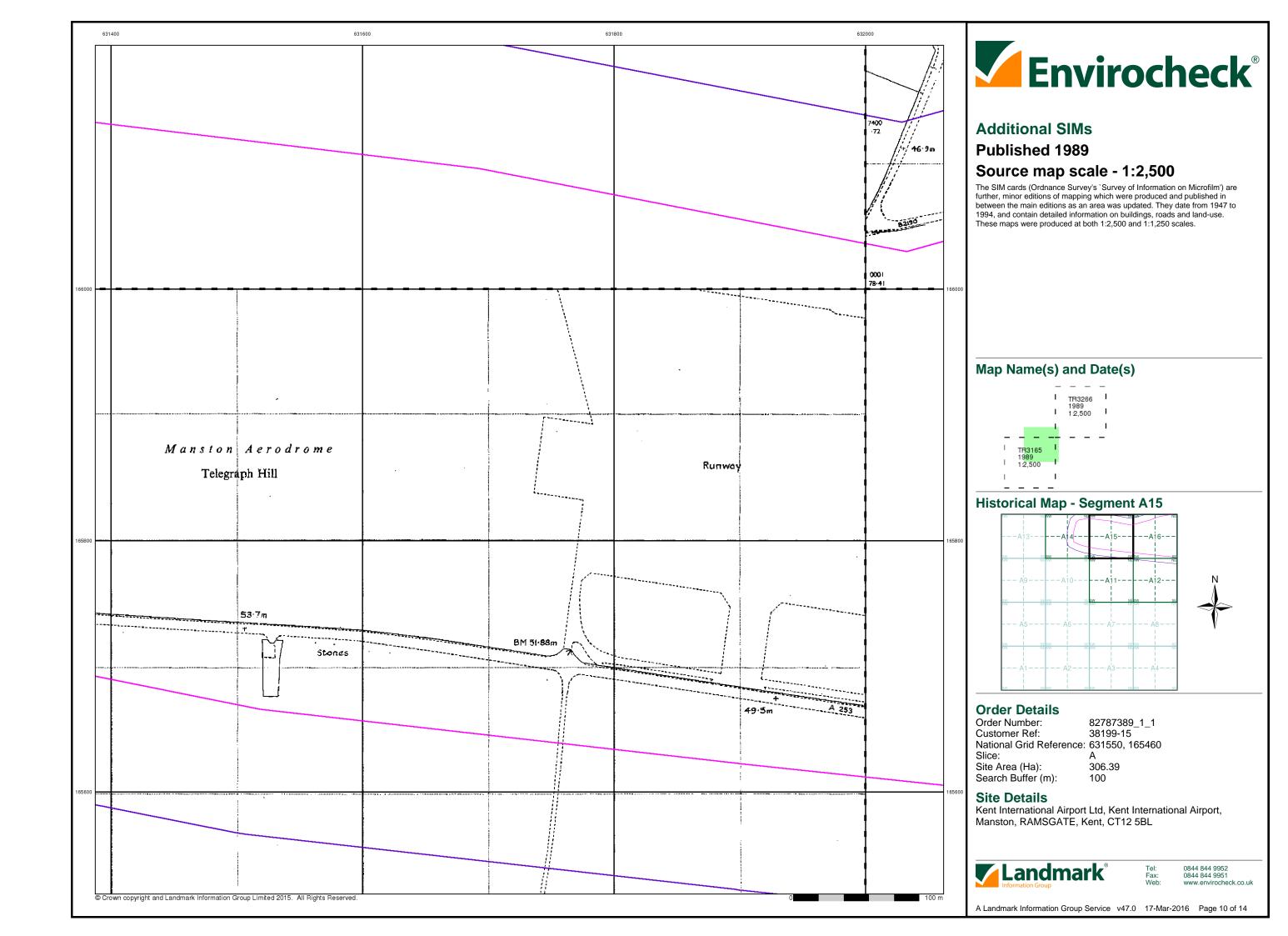
0844 844 9952 0844 844 9951

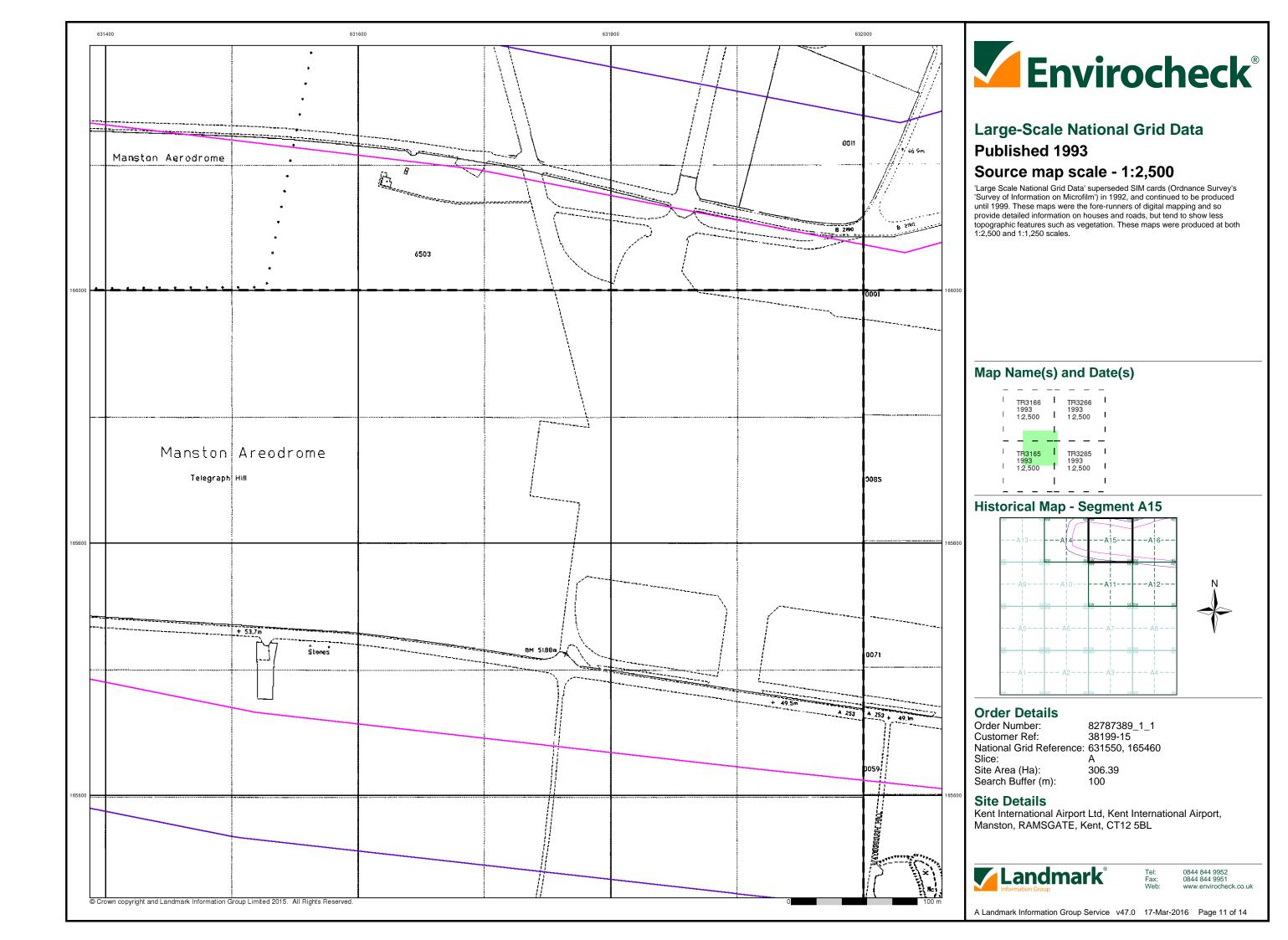
A Landmark Information Group Service v47.0 17-Mar-2016 Page 6 of 14

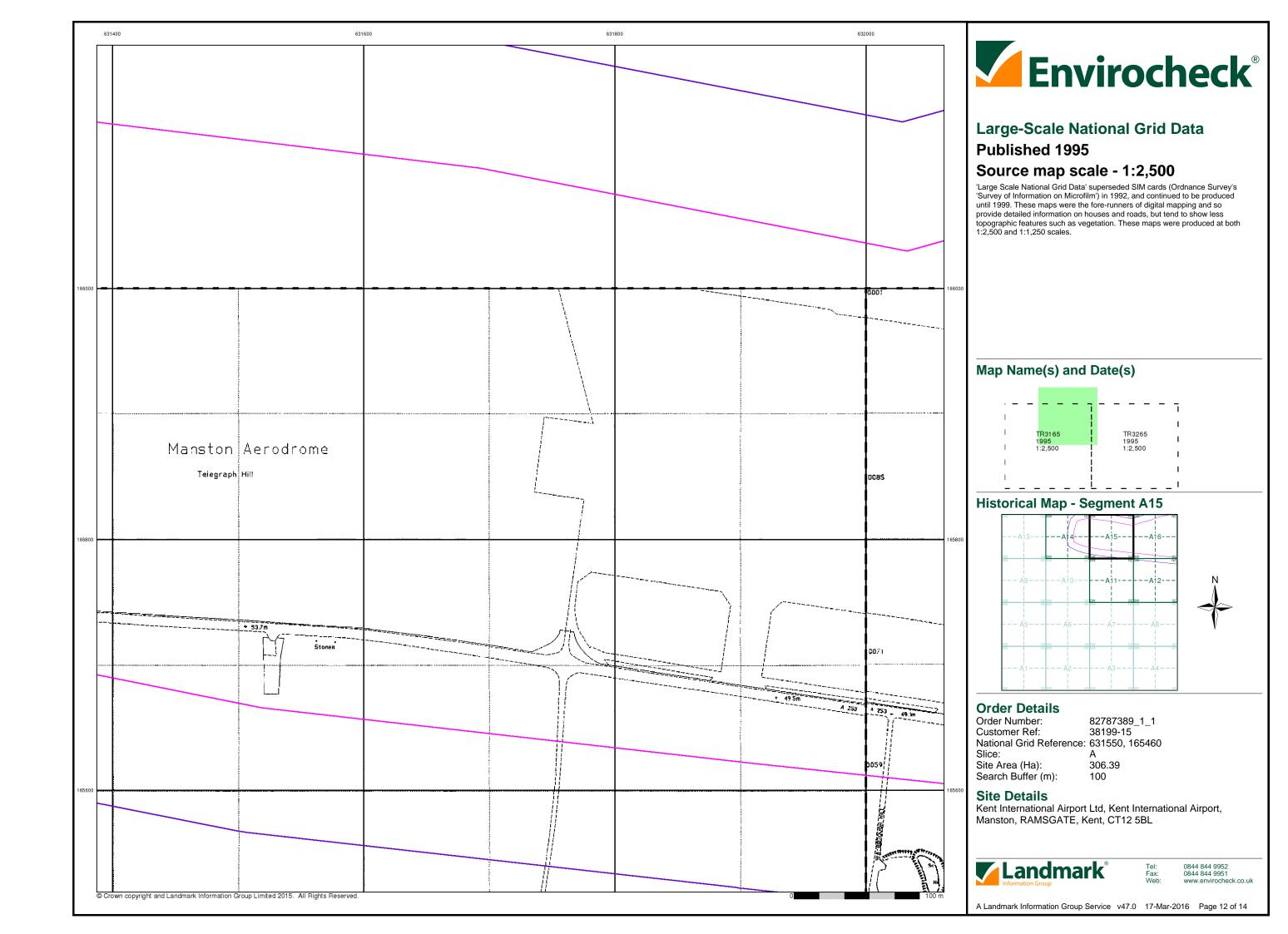


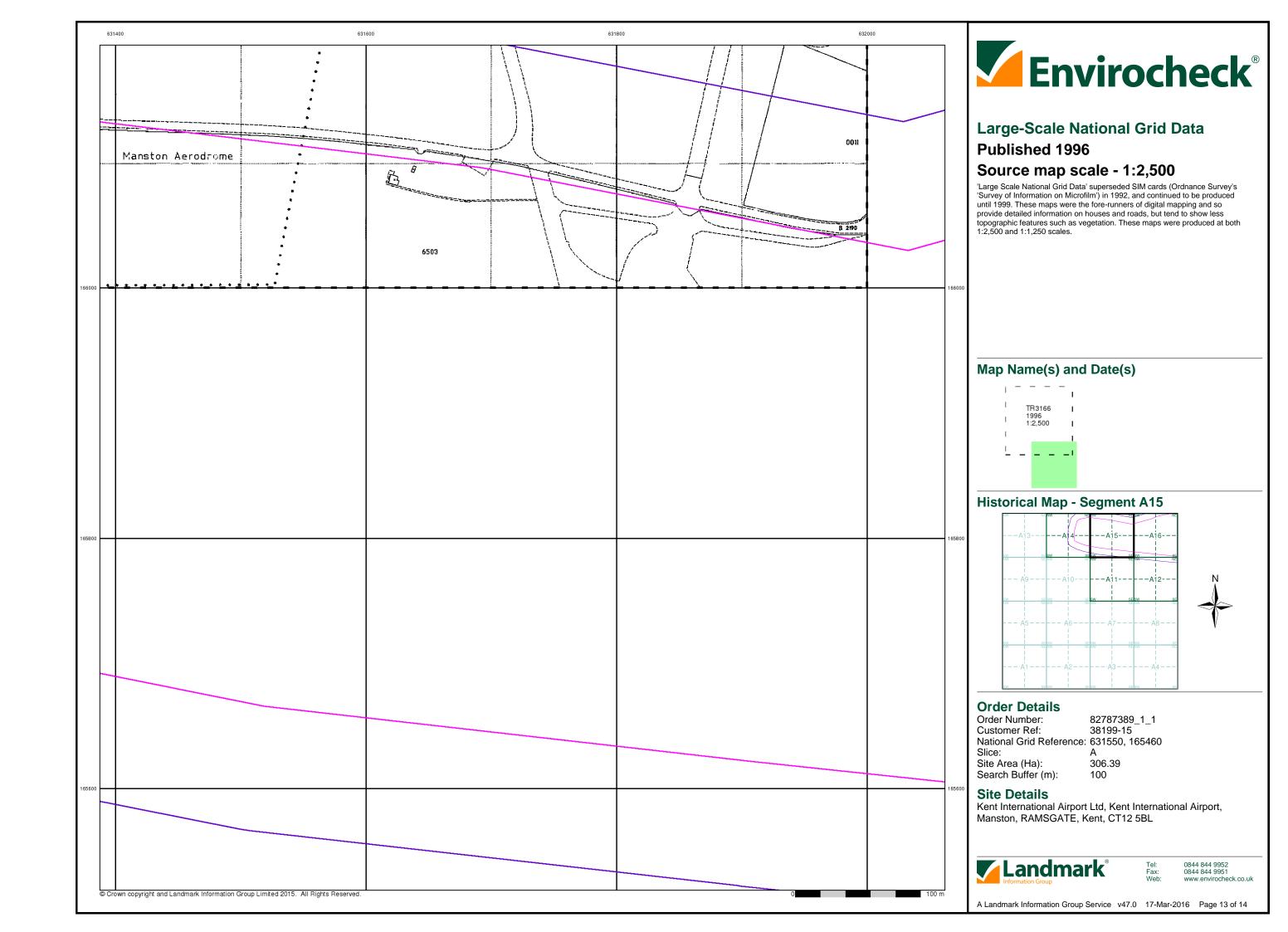


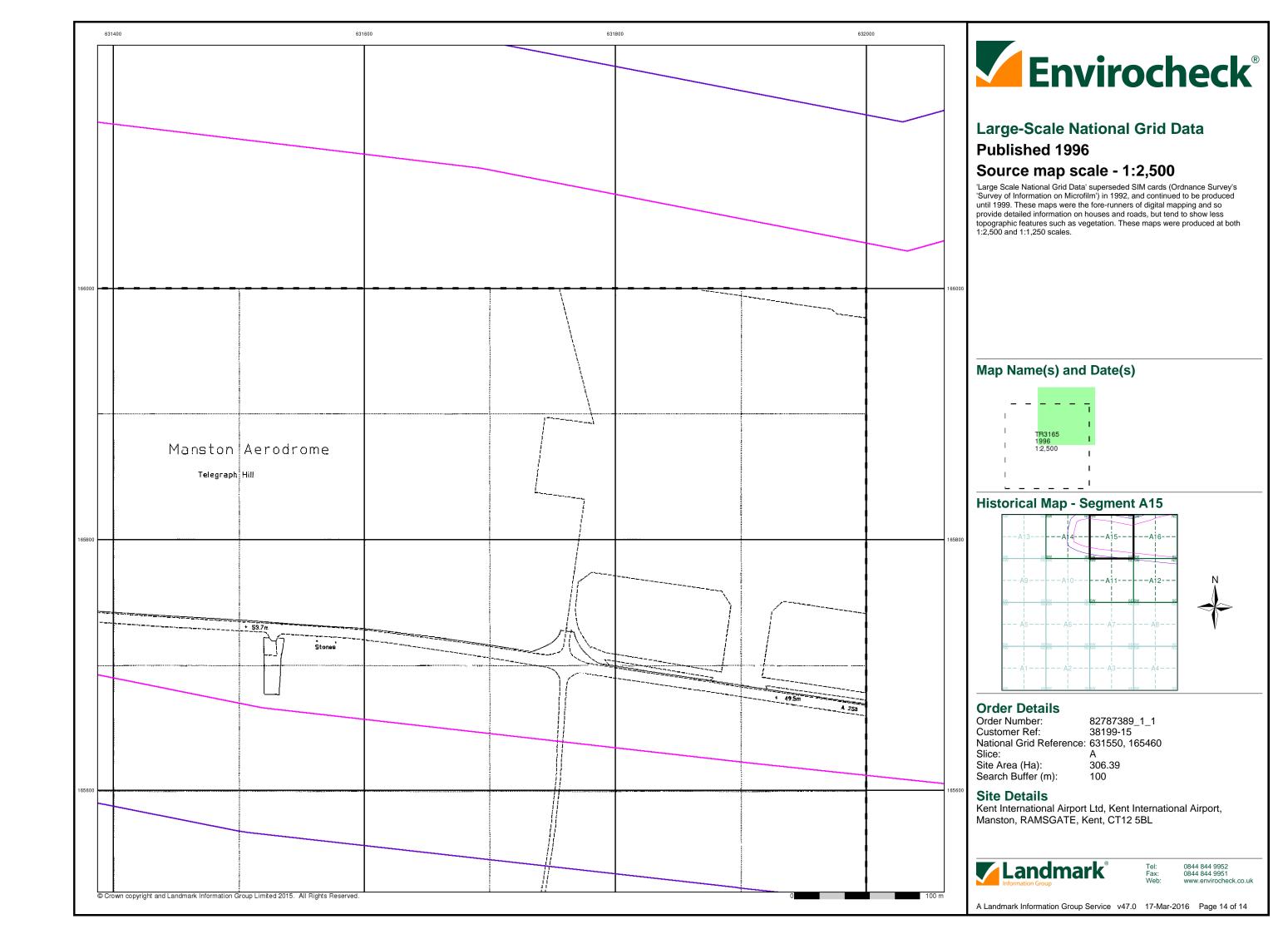






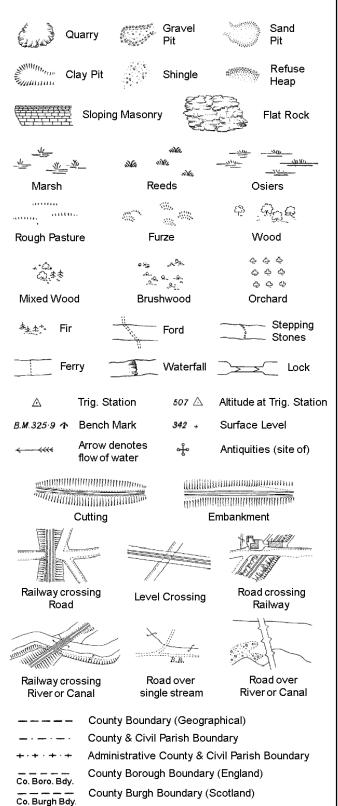






# **Historical Mapping Legends**

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



B.R.

E.P

F.B.

Bridle Road

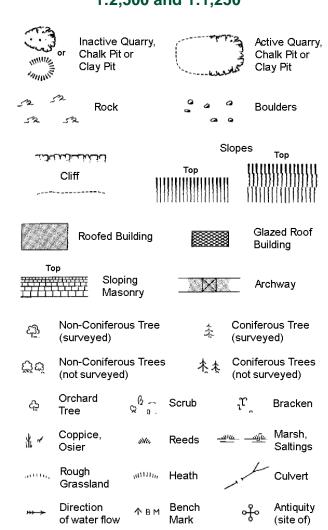
Foot Bridge

Mile Stone

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

Electricity Pylor

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



⊗ Ca∨e Entrance	Δ	Triangulation Station		Electricity Pylon
ETL Electr	icity Trans	smission Line		
L B Bdy	County & Ci∨il Par Admin. 0	Boundary (Geog & Civil Parish Bo rish Boundary County or County Borough Bounda	oundai y Bor.	ry

~ **

Police Call Box

Telephone Call Box

Signal Post

Pump

Sluice

Spring

Trough Well

S.P

Sl.

Tr:

·y •	,	-	
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

mereing changes

Symbol marking point where boundary

# 1:1,250

لالكاف الداراتات

Slopes

	الكنائد		Тор	ulu	100
	Cliff	!!!!		- ;;;;;;	!!!!!!!!!
•		[][1	[111]][[[[[[[[]]]]]]	[[]][]]	1111111111
23	Rock		52	Rock (so	cattered)
	Boulders		<i>D</i>	Boulders	s (scattered)
	Positioned	Boulder		Scree	
ফ্র	Non-Conif (surveyed	erous Tree )	*	Coniferd (surveye	ous Tree ed)
ජීජ	Non-Conif (not surve	erous Trees yed)	* **	Conifero (not sur	ous Trees veyed)
දා	Orchard Tree	Q a.	Scrub	J,	Bracken
北~	Coppice, Osier	siNts,	Reeds 🛥	।ए <i>नगीं</i> ए	Marsh, Saltings
attle,	Rough Grassland	,11111 <i>11</i> ,	Heath	1	Culvert
* <del>** &gt;</del>	Direction of water flo	Δ ow	Triangulation Station	, ÷	Antiquity (site of)
_ E_TL _	_ Electric	ity Transmis	ssion Line	$\boxtimes$	Electricity Pylon
\ <del>€</del> \ 8₩	291.60m E	Bench Mark			gs with g Seed
	Roofe	ed Building		<b>8</b>	azed Roof uilding
		Civil parish	/community b	oundary	
		District box			
		County box	-		
٥		Boundary	=		
٥		Boundary r	mereing symb pear in oppose	•	
Bks	Barracks		Р	Pillar, Po	le or Post
Bty	Battery		PO	Post Offi	ice
Cemy	Cemetery		PC		onvenience
Chy	Chimney		Pp	Pump	0
Cis Dismtd R	Cistern	tlad Dailera	Ppg Sta PW	Pumping Place of	-
El Gen Si	ta Electric	tled Railway ity Generating			ewage
ELD	Station	Dala Dill	00.00		umping Station
EI P	•	Pole, Pillar	SB, S Br	_	ox or Bridge
FB FB	ta Electricity Filter Bed	JUD STRITON	SP, SL Spr	Signal P Spring	ost or Light
Fn/DFn		Drinking Ftn.	Spr Tk	Tank or	Track
	samunii		10	I ALIK OF	ii won

Gas Valve Compound

Mile Post or Mile Stone

Gas Governer

**Guide Post** 

Manhole

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

Wd Pp

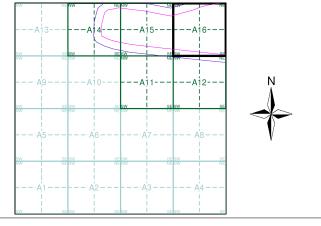
Wks



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

Mapping Type	Scale	Date	Pg
Kent	1:2,500	1873 - 1894	2
Kent	1:2,500	1896	3
Kent	1:2,500	1907	4
Kent	1:2,500	1938 - 1939	5
Ordnance Survey Plan	1:2,500	1963 - 1964	6
Additional SIMs	1:2,500	1989	7
Large-Scale National Grid Data	1:2,500	1993	8
Large-Scale National Grid Data	1:2,500	1995	9

### **Historical Map - Segment A16**



### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460 Slice:

Site Area (Ha):

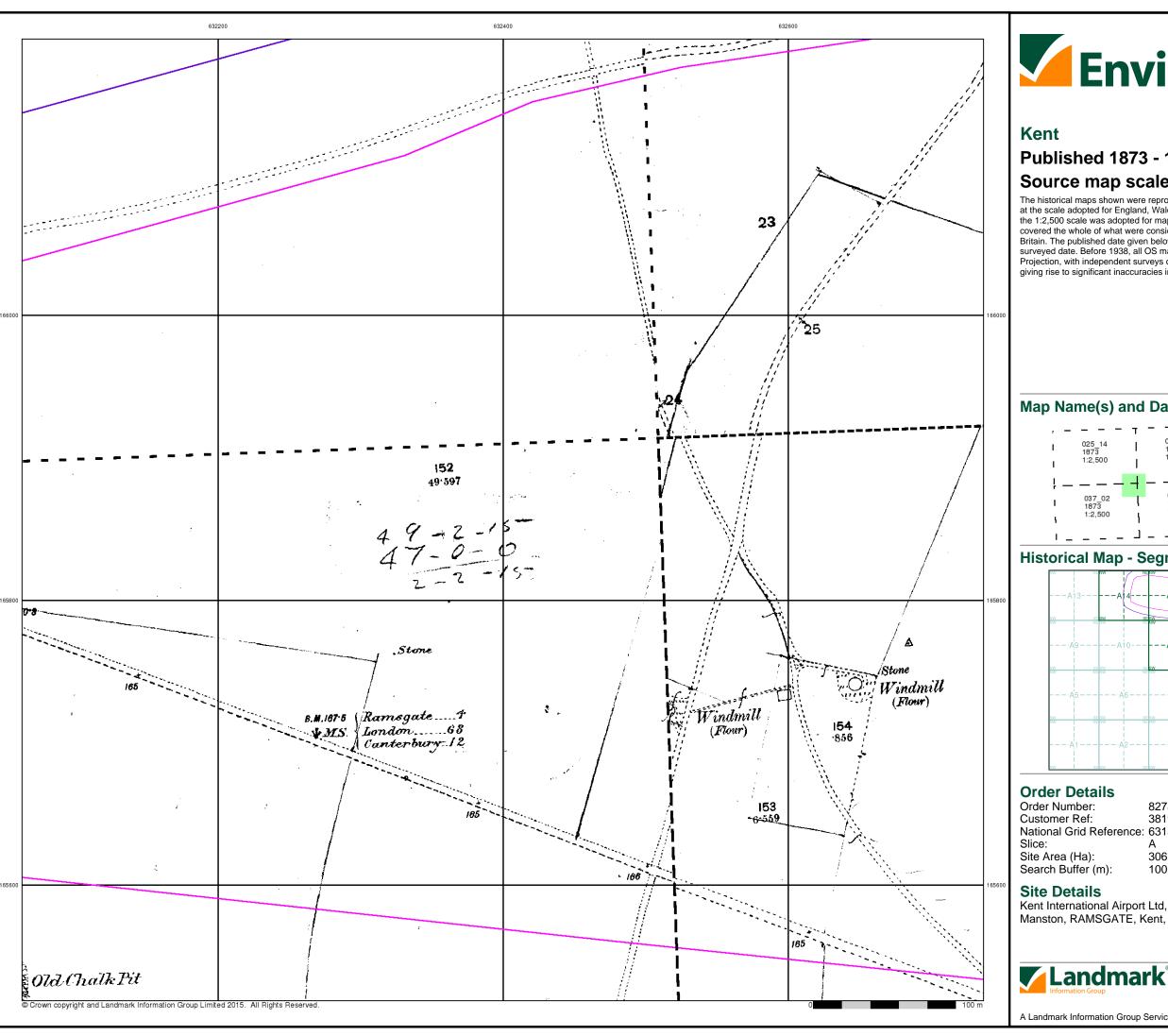
306.39 Search Buffer (m): 100

#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



0844 844 9951

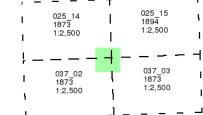




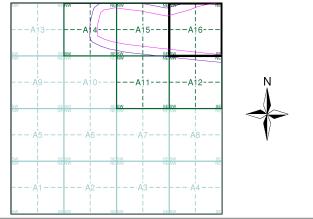
## Published 1873 - 1894 Source map scale - 1:2,500

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 A16**



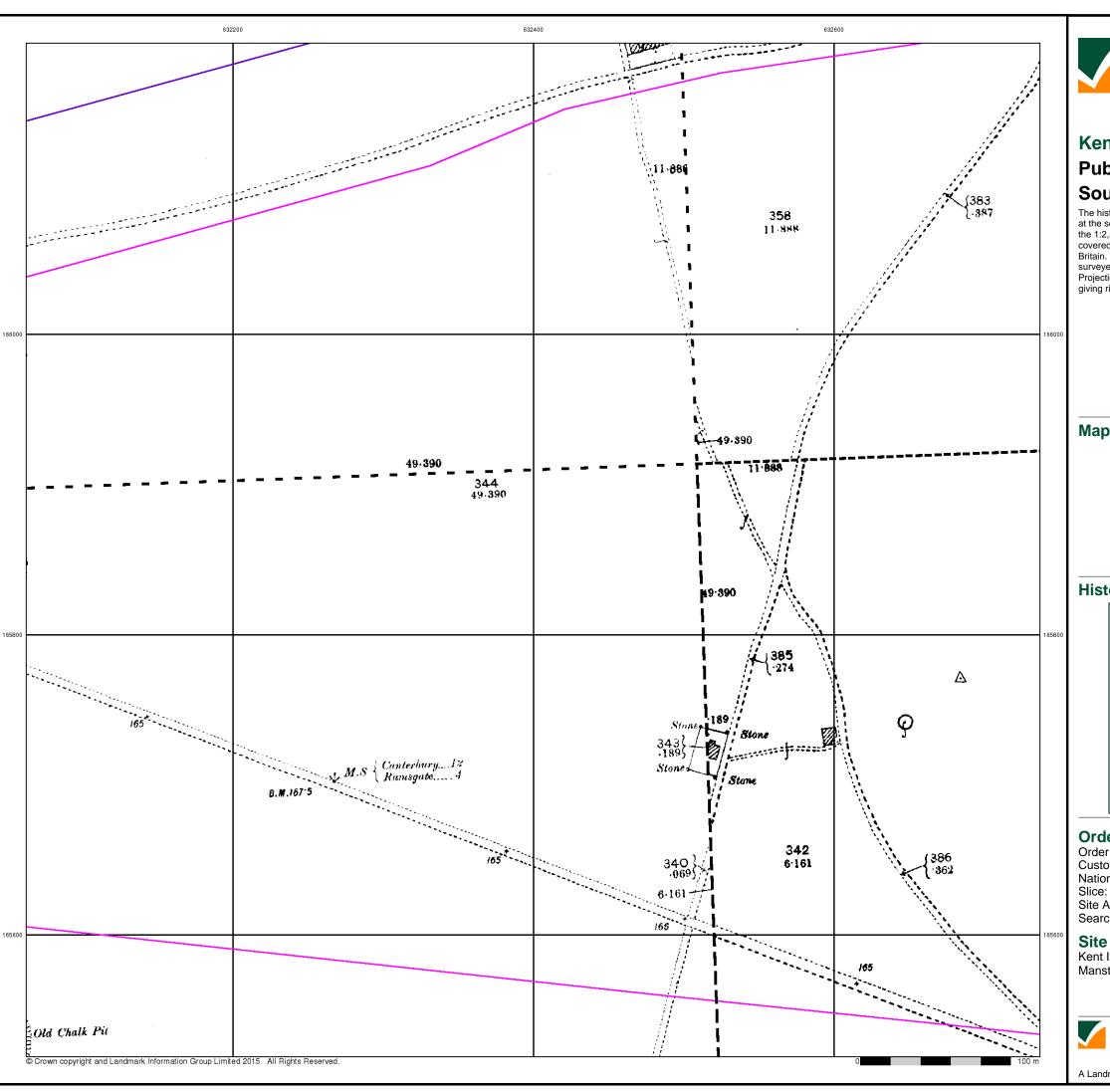
82787389_1_1 38199-15 National Grid Reference: 631550, 165460

> 306.39 100

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



0844 844 9952 0844 844 9951

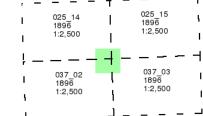




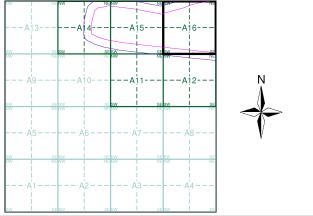
# **Published 1896** Source map scale - 1:2,500

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 A16**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460

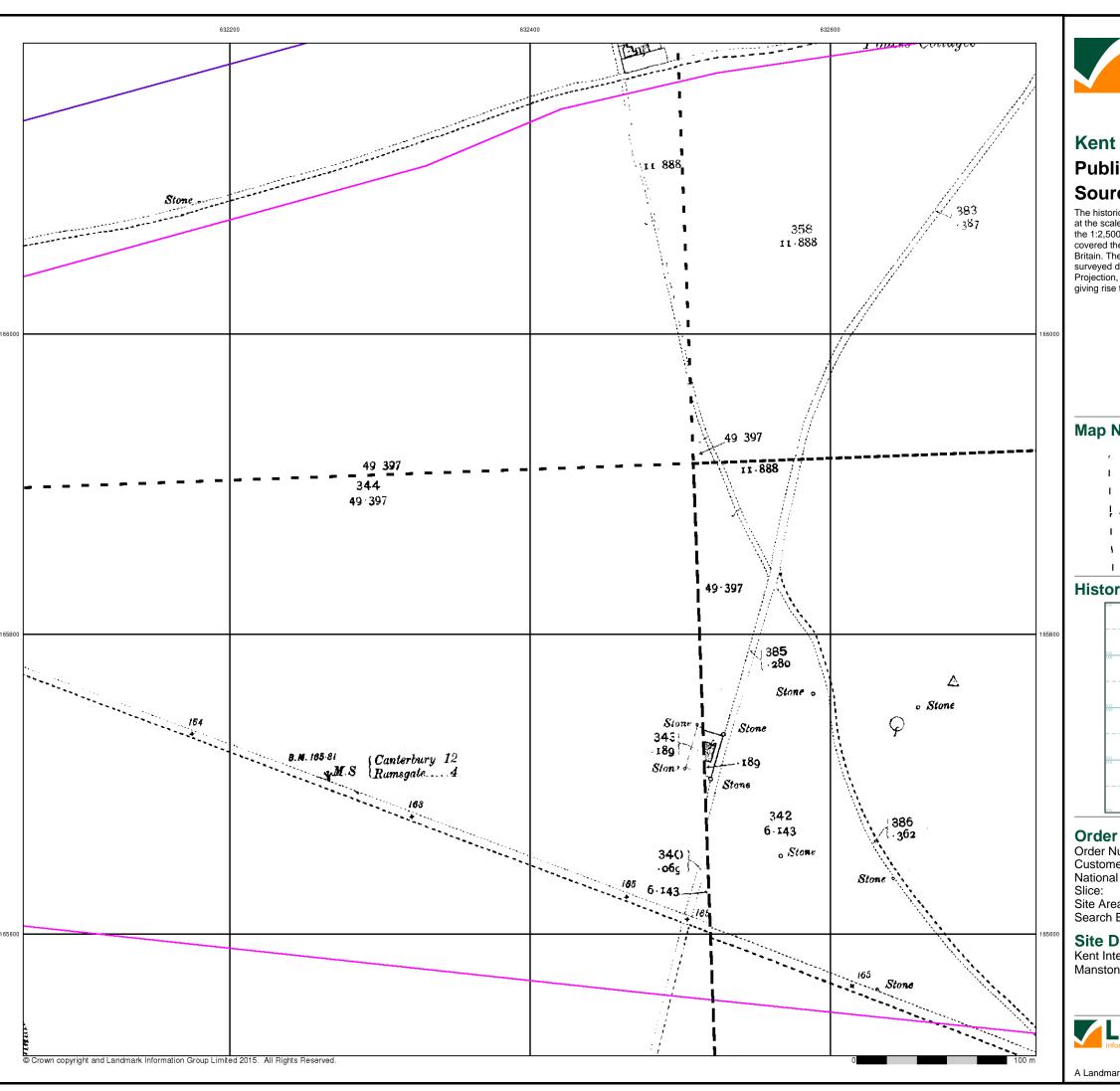
306.39 Site Area (Ha): Search Buffer (m): 100

#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



0844 844 9952 0844 844 9951

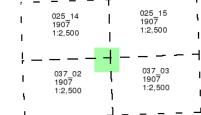




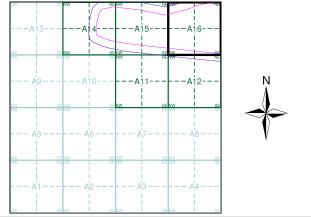
# **Published 1907** Source map scale - 1:2,500

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 A16**



### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460

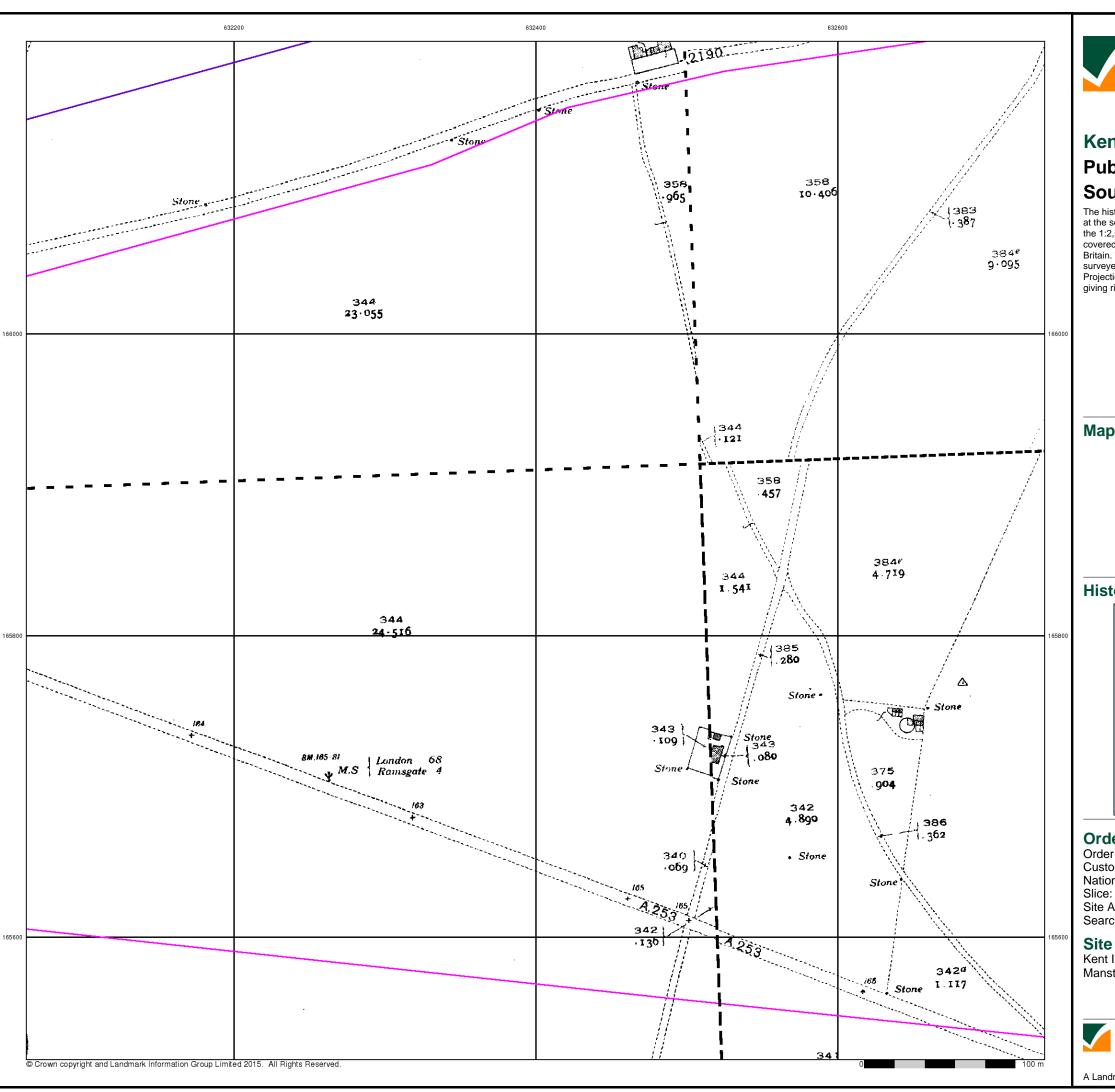
306.39 Site Area (Ha): Search Buffer (m): 100

#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



0844 844 9952 0844 844 9951

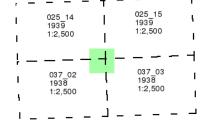




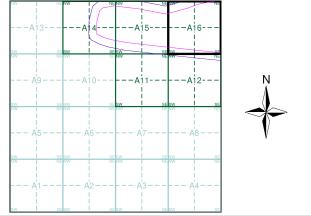
# **Published 1938 - 1939** Source map scale - 1:2,500

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 A16**



### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 631550, 165460

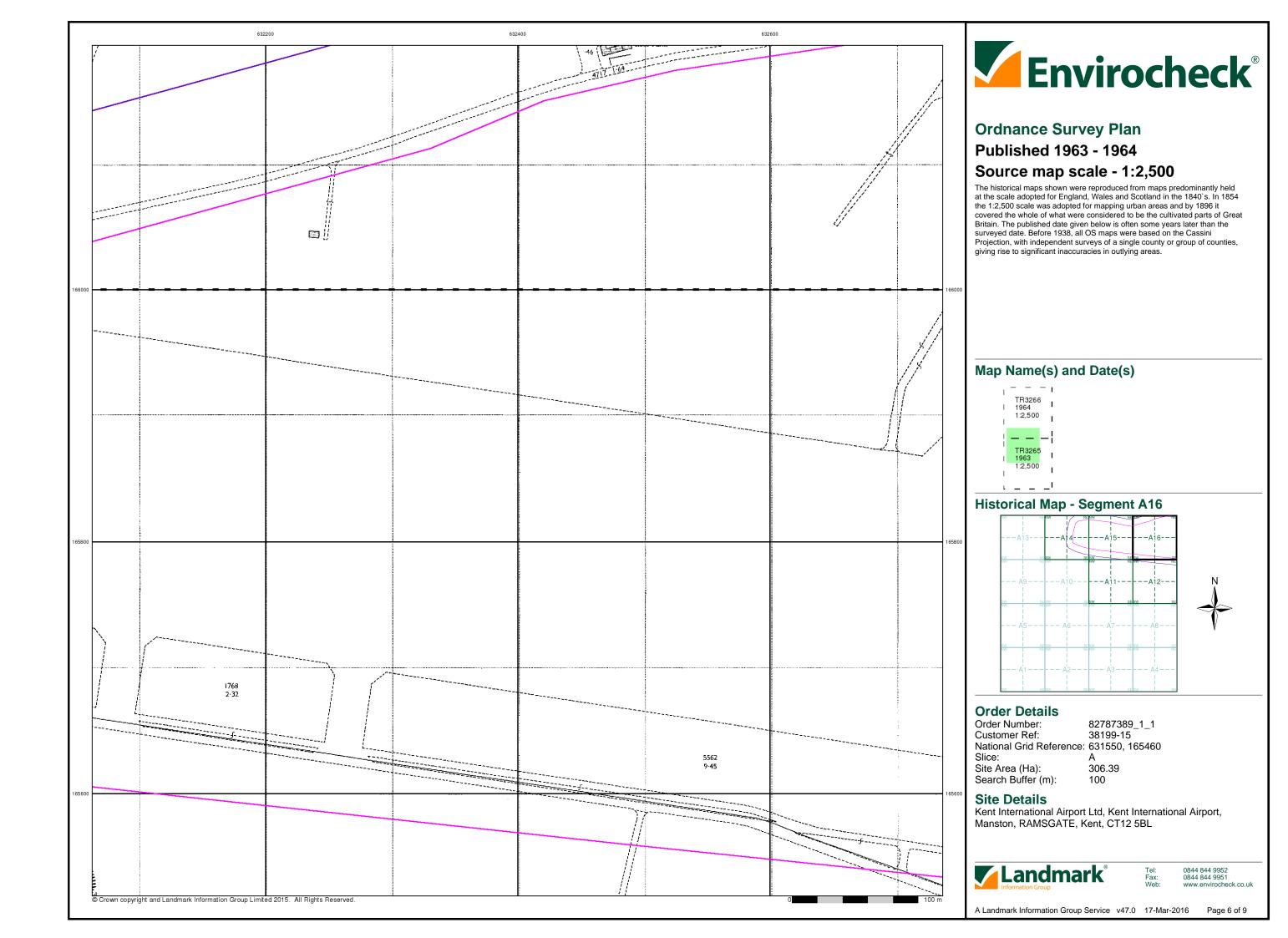
306.39 Site Area (Ha): Search Buffer (m): 100

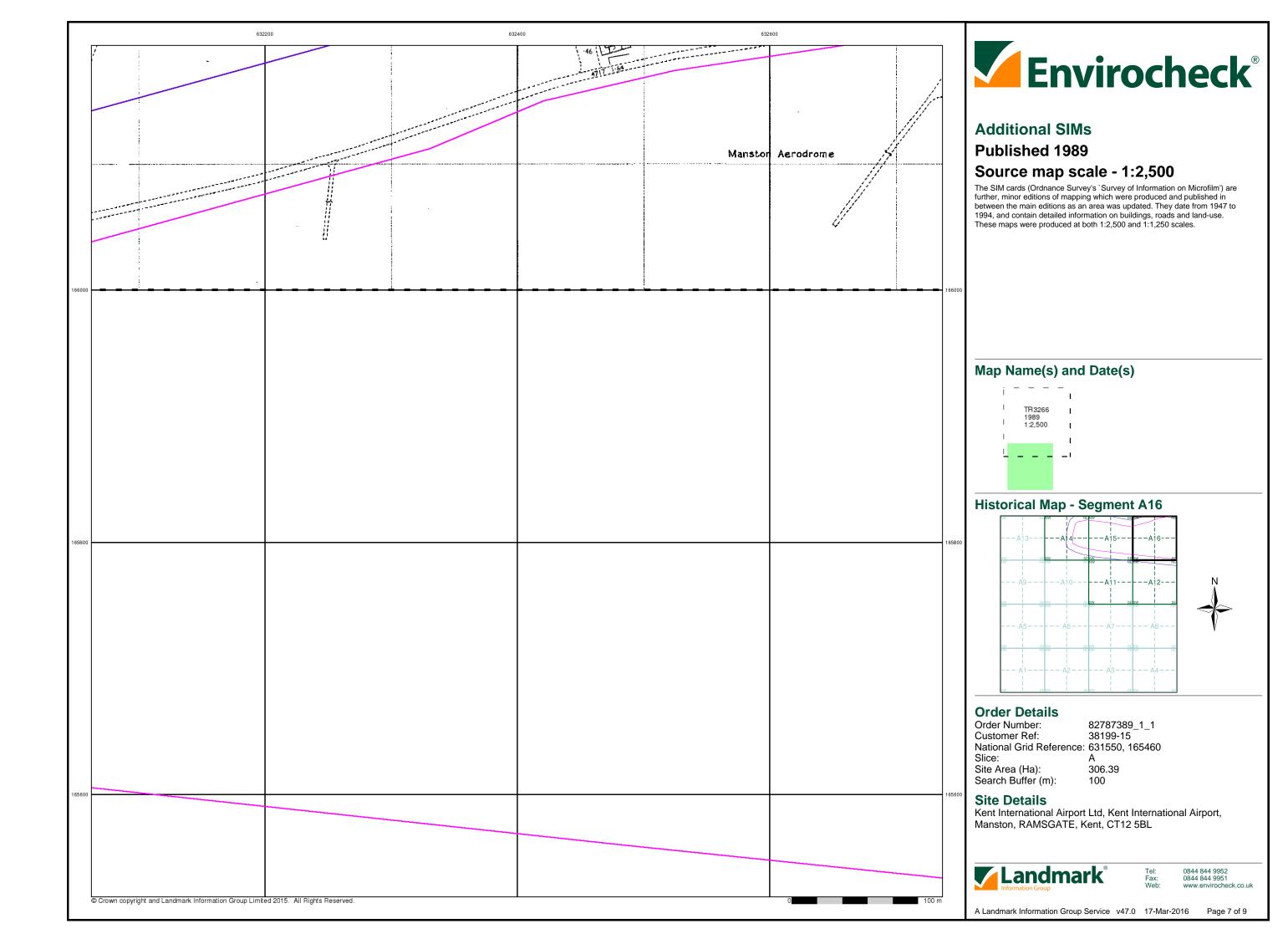
#### **Site Details**

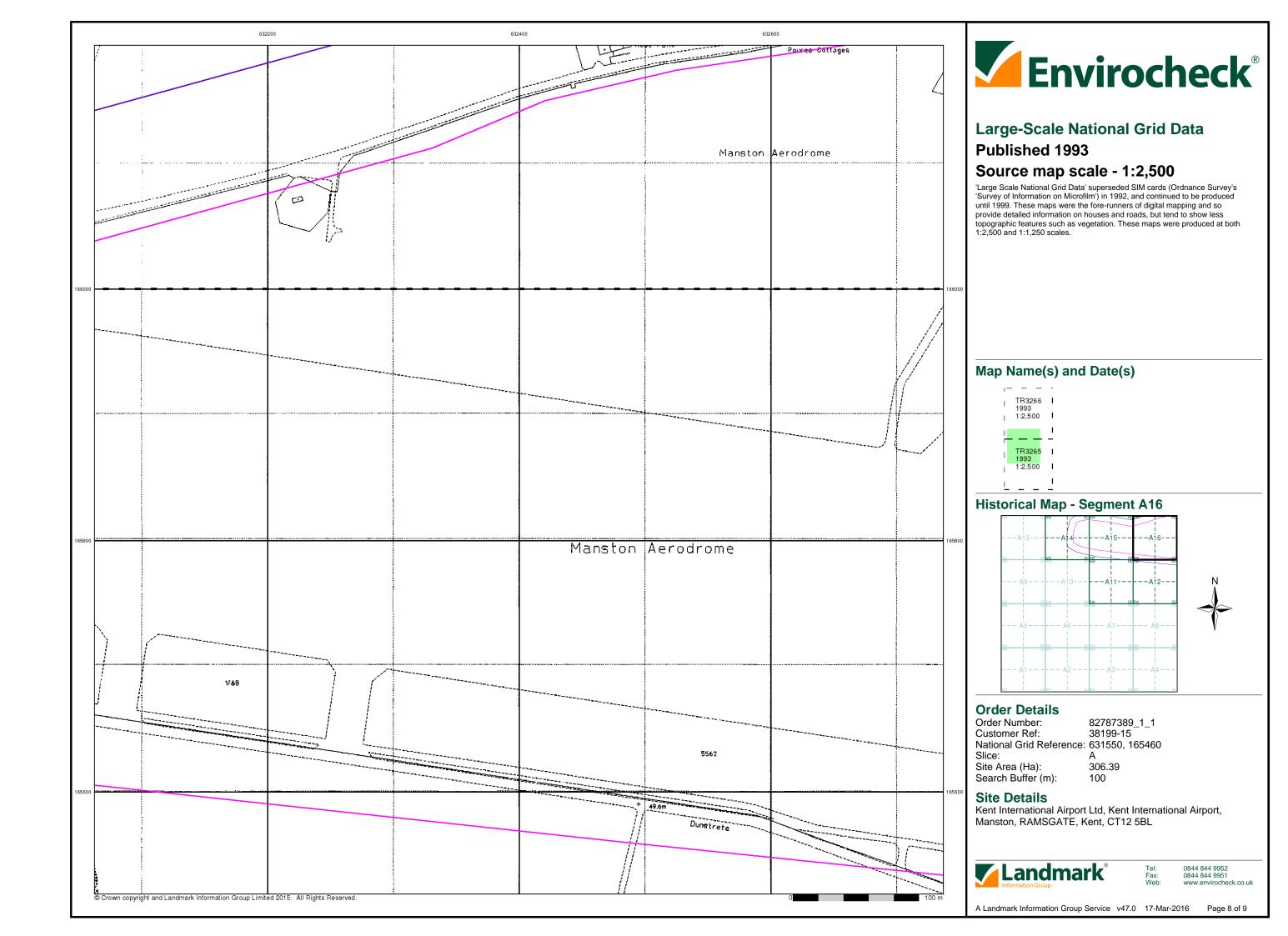
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

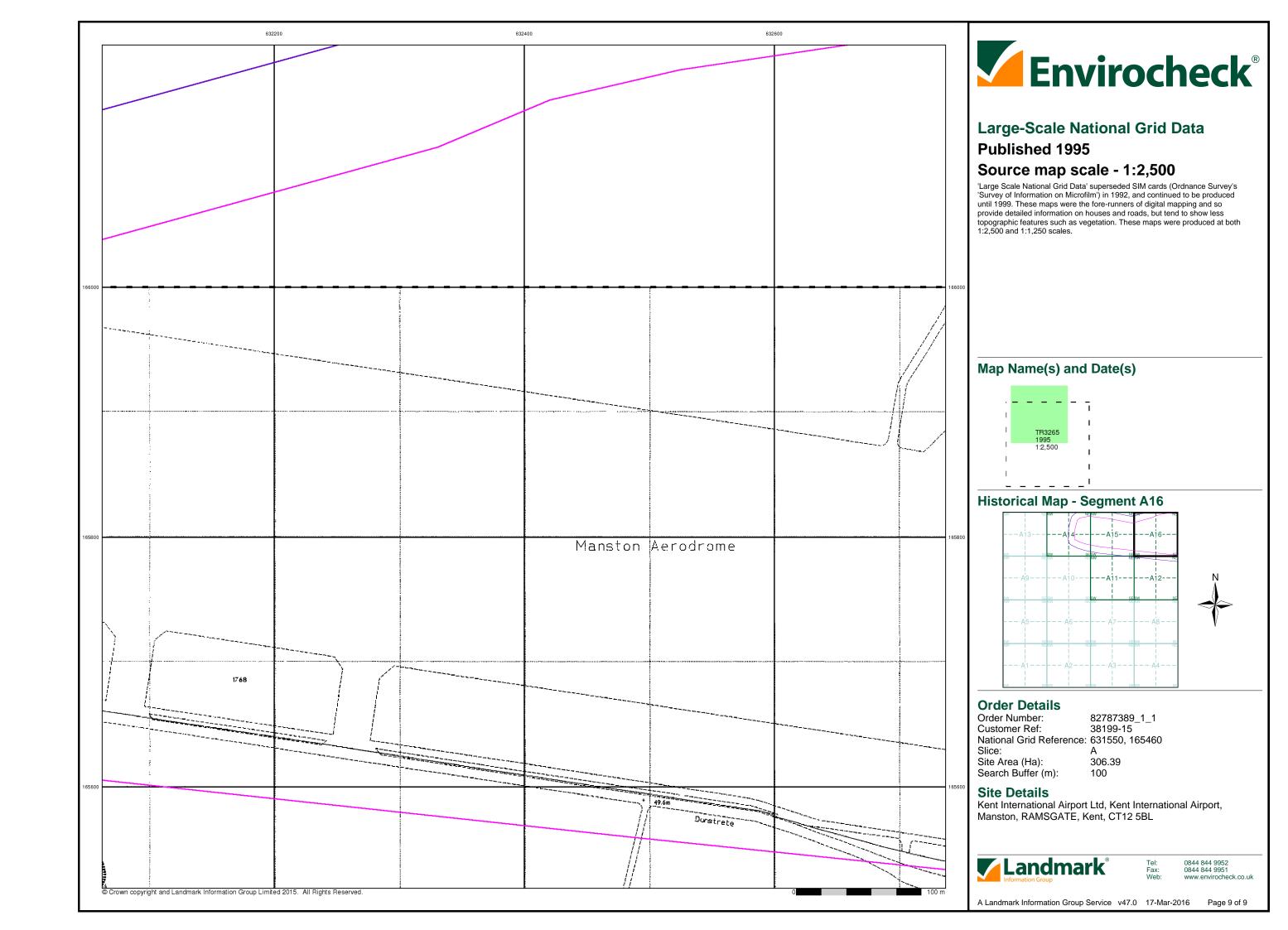


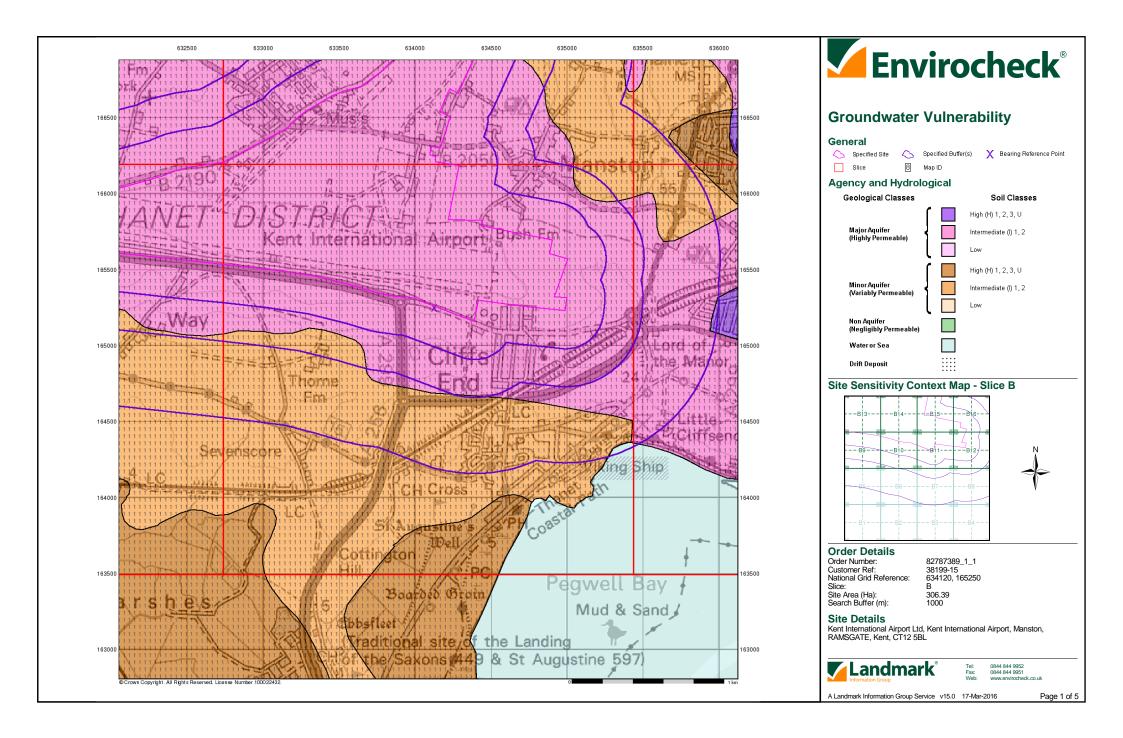
0844 844 9952 0844 844 9951

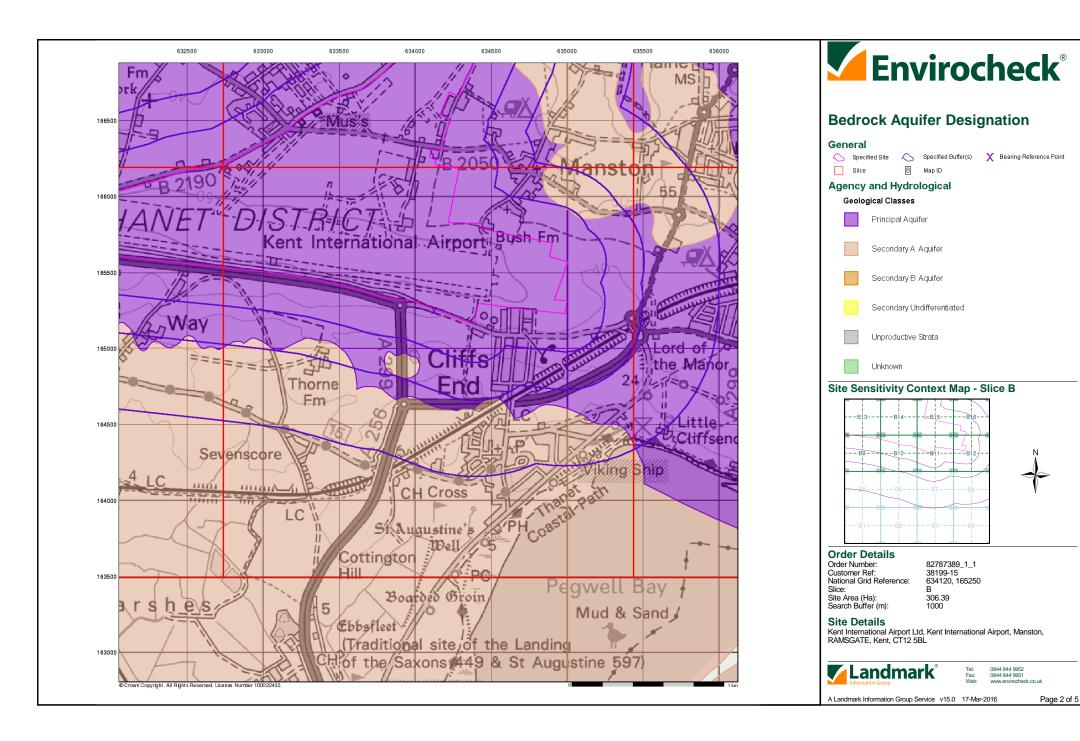


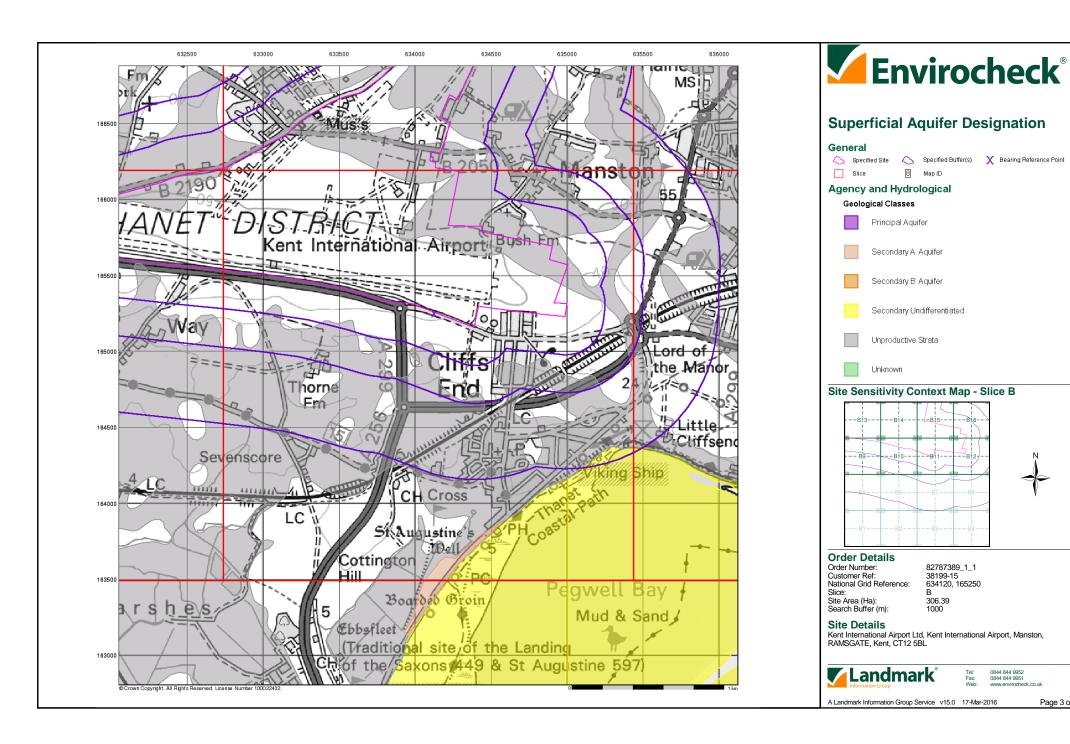




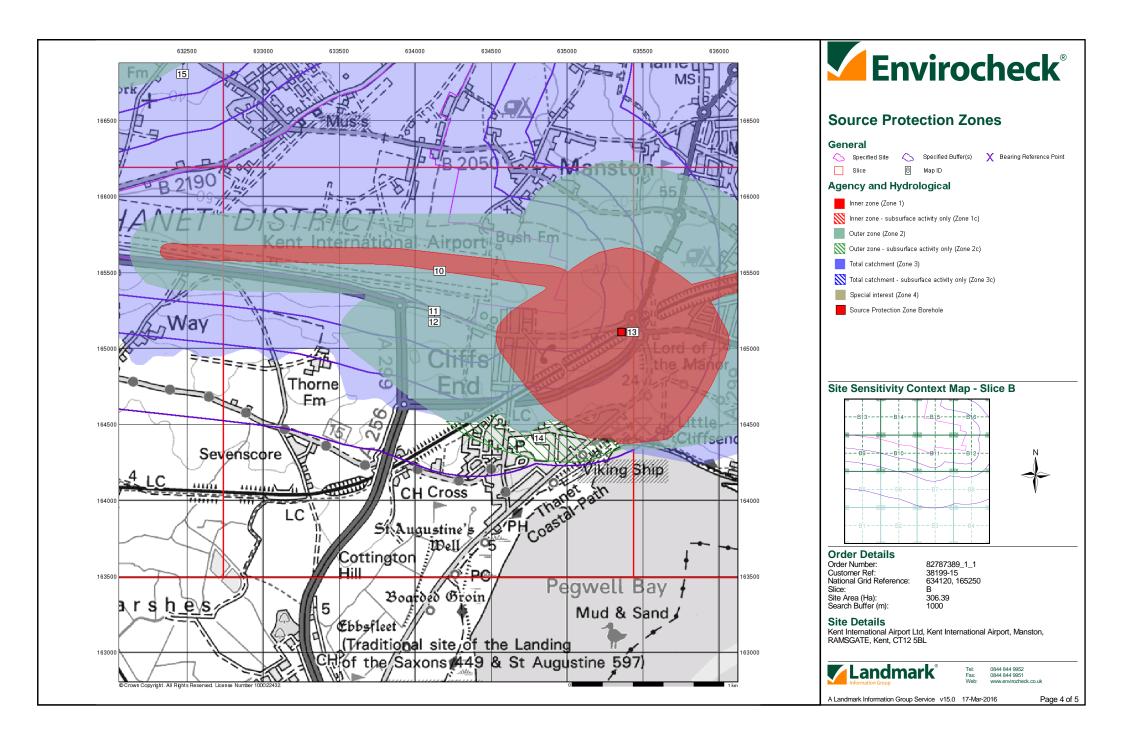


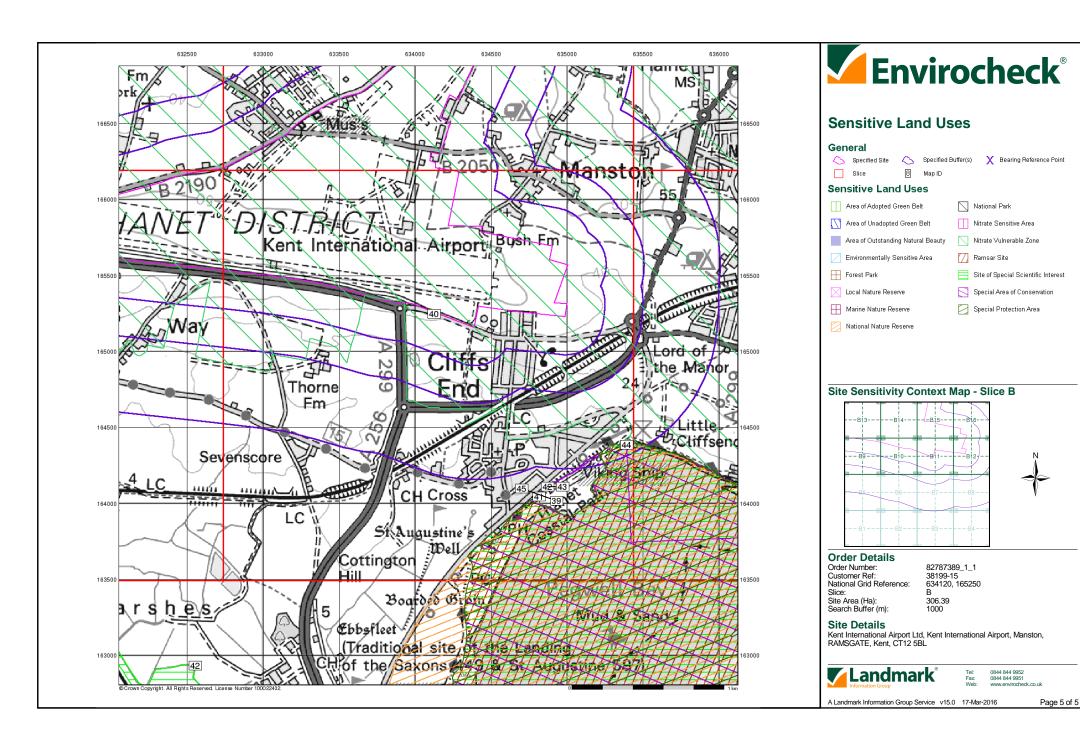






Page 3 of 5







# **Envirocheck® Report:**

### **Datasheet**

#### **Order Details:**

**Order Number:** 

82787389_1_1

**Customer Reference:** 

38199-15

**National Grid Reference:** 

634120, 165250

Slice:

В

Site Area (Ha):

306.39

Search Buffer (m):

1000

#### **Site Details:**

Kent International Airport Ltd Kent International Airport, Manston RAMSGATE Kent CT12 5BL

#### **Client Details:**

Ms V Dahmoun Amec Foster Wheeler E & I UK Ltd Floor 4 60 London Wall London United Kingdom EC2M 5TQ



Order Number: 82787389_1_1





Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	6
Hazardous Substances	-
Geological	8
Industrial Land Use	27
Sensitive Land Use	29
Data Currency	30
Data Suppliers	34
Useful Contacts	35

#### 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 v50.0



# **Summary**

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1	1			2
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
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 1			Yes	
Pollution Incidents to Controlled Waters	pg 1		2	1	2
Prosecutions Relating to Authorised Processes					
Prosecutions Relating to Controlled Waters					
Registered Radioactive Substances					
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 2			2	(*6)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 4	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 4	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 4	Yes	n/a	n/a	n/a
Source Protection Zones	pg 5	3		1	2
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
Detailed River Network Lines					n/a
Detailed River Network Offline Drainage					n/a



# **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 6			2	
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 6		1		
Local Authority Recorded Landfill Sites	pg 6			2	
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites	pg 7		1		
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 8	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 8	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 21			3	
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
Brine Compensation Area			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability	pg 21	Yes	n/a	n/a	n/a
Man-Made Mining Cavities	pg 21	1		1	
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 22	Yes	Yes	n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 22	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 23	Yes	Yes	n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 24	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards				n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 25	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas	pg 26	Yes	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 27		6	4	12
Fuel Station Entries	pg 28		1		
Sensitive Land Use					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves	pg 29				1
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 29	1			
Ramsar Sites	pg 29				1
Sites of Special Scientific Interest	pg 29				1
Special Areas of Conservation	pg 29				2
Special Protection Areas	pg 29				1



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	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:	The Modern Jet Support Centre Ltd Air Transport Hangar One, Manston Airport, Ramsgate, Kent, Ct12 5bn Environment Agency, Southern Region Not Supplied P10757 1 27th September 2002 27th September 2002 8th October 2004 Trade Effluent Discharge-Site Drainage Into Land Into Land Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	B14NE (N)	0	2	633960 166000
2	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: Revisional Acquirects	Southern Water Services Ltd (K) Sewerage Network - Sewers - Water Company Foads Lane, Ramsgate Kent Environment Agency, Southern Region Not Given A00431 1 1st April 1991 1st April 1991 1st April 1997 Public Sewage: Storm Sewage Overflow Controlled Sea Controlled Sea Post National Rivers Authority Legislation where issue date > 31/08/1989	B7NE (SE)	506	2	634600 164700
	Positional Accuracy:	Located by supplier to within 100m				
3	•	Southern Water Services Ltd (K) Sewerage Network - Sewers - Water Company Cliffsend & Manston Sewerage, Ramsgate, Kent Environment Agency, Southern Region Not Given K01522 1 9th June 1961 9th June 1961 Not Supplied Public Sewage: Storm Sewage Overflow Saline Estuary  Saline Estuary  Pre National Rivers Authority Legislation where issue date < 01/09/1989 Located by supplier to within 100m	B8SE (SE)	976	2	635160 164270
	Nearest Surface Wa	ater Feature	B10SE	303	_	634002
			(SW)			164984
4	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters  Oil Industry (Not Garages) Jentex, Canterbury Road West, Cliffsend, RAMSGATE Environment Agency, Southern Region Oils - Kerosene Fuel Oil A Range Of Fuel Tanks Caught Fire Possible Leakage 10th May 1992 CD/099/92 Not Given Not Given Not Given Oils/Related Products Category 3 - Minor Incident Located by supplier to within 100m	B11NE (E)	87	2	634500 165200



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters  Other General Premises Jentex, RAMSGATE Environment Agency, Southern Region Crude Sewage Beach Oil And Water Worked Into Drains; Miscellaneous Premises: Other 22nd July 1995 295203 Not Given Not Given Not Given Plc Sewage Other Category 3 - Minor Incident Located by supplier to within 100m	B11SE (E)	125	2	634500 165100
	,	to Controlled Waters				
6	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	Domestic/Residential Romney Marsh, RUCKINGE, Kent Environment Agency, Southern Region Oils - Kerosene Fuel Oil Kerosene Leak 31st December 1997	B10SE (SW)	287	2	634001 165001
	Positional Accuracy:	Located by supplier to within 100m				
7	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Not Given Not Given Unknown Category 3 - Minor Incident	B8SW (SE)	729	2	635001 164501
8	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	Water Company Sewage: Sewage Treatment Works Cliffes End Environment Agency, Southern Region Oils - Waste Oil Oil Pollution Arriving At Foads Lane Ps (Sewage) 10th August 1992	B8SW (SE)	885	2	634900 164350
9	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:	Southern Water Services Ltd 9/40/04/0049/Gr 100 Borehole At Lord Of The Manor Ps Environment Agency, Southern Region Public Water Supply: Potable Water Supply - Direct Water may be abstracted from a single point Groundwater 14774 4091400 N/A 01 October 30 September 2nd November 2006 Not Supplied Located by supplier to within 10m	B12SE (E)	384	2	635350 165100



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	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:	Southern Water Services Plc 4/0049/F/GR Not Supplied Whitehall Pumping Station & , Lord Of The Manor Pumping Station Environment Agency, Southern Region Public Water Supply Not Supplied Pond or Lake 14774 4091400 Additional Purpose: Public Water Supply Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Located by supplier to within 100m	B12SE (E)	386	2	635350 165095
	Water Abstractions 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:	Edward Spanton Farms 4/0442//S Not Supplied CLIFFSEND Environment Agency, Southern Region Spray Irrigation Not Supplied Surface 545 14809.1 Ebbsfleet Stream Not Supplied	B2SE (S)	1522	2	633930 163710
	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:	Located by supplier to within 100m  Edward Spanton Farms 9/40/04/0442/S 100 Points 1-2, Ebbsfleet Stream At Cliffsend. Environment Agency, Southern Region General Agriculture: Spray Irrigation - Direct Water may be abstracted from a river or stream reach, or a row of wellpoints Surface 545 14809 As Outlined In Red On Licence Map. 01 April 31 October 13th December 2006 Not Supplied Located by supplier to within 10m	B2SE (S)	1531	2	633930 163700
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Stonelees Golf Centre 09/179 101 Point A, Drainage Dyke Ne Of B2048, Ebbsfleet Environment Agency, Southern Region General Agriculture: Spray Irrigation - Storage Water may be abstracted from a single point Surface Not Supplied Not Supplied As Boldly Outlined On Map 01 November 31 March 20th October 2006 Not Supplied Located by supplier to within 10m	B2SE (S)	1649	2	633830 163610



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:	Stonelees Golf Centre 09/179 101 Point A, Drainage Dyke Ne Of B2048, Ebbsfleet Environment Agency, Southern Region General Agriculture: Spray Irrigation - Storage Water may be abstracted from a single point Surface Not Supplied Not Supplied As Boldly Outlined On Map 01 April 31 October 20th October 2006 Not Supplied Located by supplier to within 10m	B2SE (S)	1649	2	633830 163610
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Permit Start Date: Permit End Date:	Mr R J Chapman 09/179 100 Point A, Drainage Dyke Ne Of B2048, Ebbsfleet Environment Agency, Southern Region General Agriculture: Spray Irrigation - Storage Water may be abstracted from a single point Surface Not Supplied Not Supplied Not Supplied As Boldly Outlined On Map 01 November 31 March 16th May 1997 Not Supplied Located by supplier to within 10m	B2SE (S)	1649	2	633830 163610
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Permit Start Date: Permit End Date:	Mr R J Chapman 09/179 100 Point A, Drainage Dyke Ne Of B2048, Ebbsfleet Environment Agency, Southern Region General Agriculture: Spray Irrigation - Storage Water may be abstracted from a single point Surface Not Supplied Not Supplied As Boldly Outlined On Map 01 April 31 October 16th May 1997 Not Supplied	B2SE (S)	1649	2	633830 163610
	Positional Accuracy:	Located by supplier to within 10m				
	Groundwater Vulne Soil Classification: Map Sheet: Scale:	Soils of Intermediate Leaching Potential (I1) - Soils which can possibly transmit a wide range of pollutants Sheet 47 East Kent 1:100,000	B11NW (SE)	0	2	634125 165247
	Drift Deposits Drift Deposit:  Map Sheet: Scale:	Low permeability drift deposits occuring at the surface and overlying Major and Minor Aquifers are head, clay-with-flints, brickearth, peat, river terrace deposits and marine and estuarine alluvium Sheet 47 East Kent 1:100.000	B11SW (S)	0	2	634090 165066
	Scale:					
	Bedrock Aquifer De Aquifer Designation:	_	B11NW (SE)	0	3	634125 165247
	Bedrock Aquifer De Aquifer Designation:	-	B12NW (E)	0	3	635005 165247
	Superficial Aquifer Aquifer Designation:	<b>Designations</b> Unproductive Strata	B12NW (E)	0	3	635005 165420
	Superficial Aquifer Aquifer Designation:	<b>Designations</b> Unproductive Strata	B15SW (NE)	0	3	634313 165647



# **Agency & Hydrological**

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Superficial Aquifer Designations Aquifer Designation: Unproductive Strata	(NW)	0	3	632995 166315
10	Source Protection Zones  Name: Lord Of The Manor Source: Environment Agency, Head Office Reference: Su036  Type: Zone I (Inner Protection Zone): Travel time of 50 days or less to groundwater source.	B11NW (N)	0	2	634163 165512
11	Source Protection Zones  Name: Various Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone II (Outer Protection Zone): Either 25% of the source area travel time whichever is greater.	B11NW (SE) or a 400 day	0	2	634125 165247
12	Source Protection Zones  Name: Various Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone III (Total Catchment): The total area needed to support the from the protected groundwater source.	B11NW (SE)	0	2	634125 165247
13	Source Protection Zones  Name: Potgate Farm Source: Environment Agency, Head Office Reference: Ne243 Type: Groundwater Source	B12SE (E)	391	2	635360 165110
14	Source Protection Zones  Name: Not Supplied Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone IIc (Outer Protection Zone): Either 25% of the source area travel time whichever is greater - subsurface activity only.	B7NW (S) or a 400 day	599	2	634207 164519
15	Source Protection Zones  Name: Sparrows Castle Source: Environment Agency, Head Office Reference: Su032  Type: Zone II (Outer Protection Zone): Either 25% of the source area travel time whichever is greater.	(NW)	628	2	632471 166880
	Extreme Flooding from Rivers or Sea without Defences None Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
	None  Detailed River Network Lines  None  Detailed River Network Offline Drainage				
	None				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	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: Regis Ref:	A Montgomery Thorne Hill, Cliffs End, Kent Thorne Farm Not Supplied As Supplied EAHLD19437 Not Supplied Not Supplied Deposited Waste included Inert Waste	B10SW (W)	309	2	633555 165068
	WRC Ref: BGS Ref: Other Ref:	2200/7261 Not Supplied TH17				
17	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:	Mr Hoeness Off Foads Hill, Cliffs End, Thanet, Kent Cliffsend Crossing Not Supplied As Supplied	B7NE (SE)	442	2	634490 164728
18	Licence Number: Location: Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference:	Inagement Facilities (Locations)  19467 Land/ Premises At, Canterbury Road West, Ramsgate, Kent, CT12 5DU Anthony Jenkins Fuel Oil Limited Not Supplied Environment Agency - South East Region, Kent & South London Area Physico-chemical Treatment Facilities Issued 21st May 1996 Not Supplied Located by supplier to within 10m	B11SE (E)	155	2	634559 165124
	Local Authority Lan Name:	ndfill Coverage Thanet District Council - Has supplied landfill data		0	4	634125 165247
	Local Authority Lan Name:	ndfill Coverage  Kent County Council  - Had landfill data but passed it to the relevant environment agency		0	9	634125 165247
19	Location: Reference: Authority: Last Reported Status: Types of Waste: Date of Closure:	Thorne Farm TH17 Thanet District Council, Environmental Health Department Open  Non Degradable, Slowly Degradable - Scrap Metal, Putrescible, Hazardous Not Supplied Positioned by the supplier Good	B10SW (W)	315	4	633518 165072
20	Location: Reference: Authority: Last Reported Status: Types of Waste: Date of Closure:	Corded Landfill Sites Cliffsend Crossing TH18 Thanet District Council, Environmental Health Department Closed  Non Degradable, Slowly Degradable - Scrap Metal, Inert Not Supplied Positioned by the supplier Good	B7NE (SE)	450	4	634510 164727





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Registered Waste T	reatment or Disposal Sites				
21	Site Location:	Antony Jenkins Fuel Oil Ltd P/08/09 Oil Storage Installation, Canterbury Road West, RAMSGATE, Kent, CT12 5DU As Site Address	B11SE (E)	158	2	634560 165120
	Authority: Site Category: Max Input Rate: Waste Source Restrictions:	Environment Agency - Southern Region, Kent Area Transfer - with treatment Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) No known restriction on source of waste				
	Licence Status: Dated: Preceded By Licence:	Operational as far as is knownOperational 21st May 1996 Not Given				
	Superseded By Licence:	Not Given				
	Positional Accuracy: Boundary Quality: Authorised Waste	Located by supplier to within 100m Not Supplied Fuel Oil Kerosene And Derv. Max.Waste Permitted By Licence Mineral Oils Oil/Water Mixtures Vegetable And Other Oils				
	Prohibited Waste	Special Wastes (As In S17 1980) Waste N.O.S.				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Soli	d Geology				
	Description:	White Chalk Subgroup	B11NW (SE)	0	3	634125 165247
	BGS Estimated Soi	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	(NW)	0	3	632990 166316
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B11NW (SE)	0	3	634125 165247
	Cadmium Concentration: Chromium Concentration:	<1.8 mg/kg 60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soi					
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B15SE (NE)	0	3	634576 165650
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soi	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B14SE (N)	0	3	633978 165739
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soi		B. (2)			00555
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B12NW (E)	0	3	635000 165421
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel	<150 mg/kg 15 - 30 mg/kg				
	Concentration:	100 miles				
	BGS Estimated Soil Source: Soil Sample Type:	British Geological Survey, National Geoscience Information Service Sediment	B9NW (W)	0	3	633000 165247
	Arsenic Concentration: Cadmium	<15 mg/kg <1.8 mg/kg				
	Concentration: Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10NE (W)	0	3	634000 165247
	Cadmium Concentration: Chromium Concentration:	<1.8 mg/kg 60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration: Cadmium	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B14NE (N)	0	3	634000 165896
	Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B15SW (NE)	0	3	634312 165646
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 ma/ka				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B14NE (N)	0	3	634000 166111
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel	<150 mg/kg				
	Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B15NW (N)	0	3	634125 166000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B13NW (NW)	0	3	633000 166000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B14NE (N)	0	3	634079 166000
	Cadmium Concentration: Chromium Concentration:	<1.8 mg/kg 60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration: Cadmium	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B14NE (N)	0	3	634060 166109
	Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B14NE (N)	0	3	634000 166000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B12NW (E)	2	3	635000 165247
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B16SW (NE)	25	3	635000 165624
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B16SW (NE)	42	3	634910 165749
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B15NE (NE)	50	3	634459 165890
	Cadmium Concentration: Chromium	<1.8 mg/kg				
	Concentration: Lead Concentration: Nickel					
	Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B16SW (NE)	50	3	634847 165772
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	I Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B16SW (NE)	117	3	635000 165763
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B11SW (S)	160	3	634128 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chamiotry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10SW (W)	185	3	633621 165085
	Concentration: Cadmium	<1.8 mg/kg				
	Concentration: Chromium	60 - 90 mg/kg				
	Concentration: Lead Concentration:	<150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	l Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B11SW (S)	197	3	634088 165064
	Concentration: Cadmium	<1.8 mg/kg				
	Concentration: Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B15NE (NE)	207	3	634551 166000
	Cadmium Concentration: Chromium Concentration:	<1.8 mg/kg 60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration: Cadmium	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg <1.8 mg/kg	B12SW (E)	231	3	635000 165000
	Concentration: Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	B16NW (NE)	232	3	635000 165915
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 mg/ka				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	B16NW (NE)	239	3	634885 165994
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration:	<150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B11SW (S)	243	3	634125 165000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 mg/ka				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10SE (SW)	246	3	633785 165050
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B9NW (W)	264	3	633000 165239
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 ma/ka				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10SE (SW)	267	3	634000 165023
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B9SW (W)	269	3	632974 165171
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10SE (SW)	288	3	634000 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B11SE (SE)	289	3	634533 164905
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	I Chemistry			<u> </u>	
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	B16NW (NE)	294	3	634880 166000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B9SW (W)	298	3	632747 165014
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	•				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10SE (SW)	301	3	633965 165000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B12NE (E)	312	3	635305 165446
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	B16NW (NE)	319	3	635000 166000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	•				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B16NW (NE)	330	3	635058 166000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10SE (SW)	332	3	633802 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B9SW (W)	334	3	633000 165168
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	•				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B9SE (W)	335	3	633228 165046
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10SE (S)	338	3	634000 164946
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B9SW (W)	338	3	632875 165039
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	•				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10SE (SW)	340	3	633997 164942
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B16NW (NE)	341	3	635045 166013
	Concentration: Cadmium	<1.8 mg/kg				
	Concentration: Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil					
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10SE (S)	344	3	634000 164941
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	-			_	
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10SW (SW)	345	3	633718 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	I Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	B10SE (SW)	368	3	633806 164964
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	B10SE (S)	371	3	634025 164902
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	-				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	B10SW (W)	374	3	633508 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	l Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	B10SE (S)	385	3	634000 164896
	Concentration: Cadmium	<1.8 mg/kg				
	Concentration: Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B8NW (SE)	391	3	635000 164840
	Cadmium Concentration: Chromium Concentration:	<1.8 mg/kg 60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	B6NE (S)	402	3	633996 164680
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10SE (SW)	418	3	633794 164915
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 mg/ka				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B9SW (W)	440	3	632961 165063
	Cadmium Concentration: Chromium	<1.8 mg/kg				
	Concentration: Lead Concentration:	60 - 90 mg/kg <150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	•				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B9SW (W)	443	3	633000 165042
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	B9SW (W)	459	3	633058 165000
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B7NE (SE)	460	3	634688 164715
	Cadmium Concentration: Chromium Concentration:	<1.8 mg/kg 60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration: Cadmium	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg <1.8 mg/kg	B9SW (W)	475	3	632824 165046
	Concentration: Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B9SE (W)	482	3	633135 165000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 ma/ka				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B7NE (SE)	495	3	634449 164660
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration:	<150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	•				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B9SW (W)	501	3	633000 165000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	B6NE (S)	503	3	634000 164678
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B10SW (SW)	533	3	633519 164844
	Cadmium Concentration: Chromium Concentration:	<1.8 mg/kg 60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration: Cadmium	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B6NE (SW)	577	3	633817 164751
	Concentration: Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment 15 - 25 mg/kg	B16NE (NE)	587	3	635407 166000
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B6NE (SW)	604	3	633784 164729
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel	<150 mg/kg				
	Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B7NE (SE)	607	3	634717 164562
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg <150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B8NW (SE)	620	3	635000 164611
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration: Lead Concentration:	60 - 90 mg/kg				
	Nickel Concentration:	<150 mg/kg 15 - 30 mg/kg				





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Source:	British Geological Survey, National Geoscience Information Service	B8NW	626	3	635000
	Soil Sample Type: Arsenic Concentration:	Sediment <15 mg/kg	(SE)			164604
	Cadmium Concentration: Chromium	<1.8 mg/kg 60 - 90 mg/kg				
	Concentration: Lead Concentration:	<150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil					
	Source: Soil Sample Type:	British Geological Survey, National Geoscience Information Service Sediment	B8NW (SE)	632	3	635014 164599
	Arsenic Concentration:	15 - 25 mg/kg				
	Cadmium	<1.8 mg/kg				
	Concentration: Chromium	60 - 90 mg/kg				
	Concentration: Lead Concentration:	<150 ma/ka				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	Chemistry British Geological Survey, National Geoscience Information Service	B7SE	790	3	634730
	Soil Sample Type: Arsenic	Sediment <15 mg/kg	(SE)	790	3	164431
	Concentration: Cadmium	<1.8 mg/kg				
	Concentration: Chromium	60 - 90 mg/kg				
	Concentration: Lead Concentration:	<150 mg/kg				
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil	•	DOLUM.			
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	B6NW (SW)	800	3	633584 164557
	Concentration: Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration:					
	Nickel Concentration:	15 - 30 mg/kg				
	BGS Estimated Soil Source:	Chemistry British Geological Survey, National Geoscience Information Service	B8SW	908	3	635000
	Soil Sample Type: Arsenic	Sediment  15 - 25 mg/kg	(SE)	900	3	164170
	Concentration: Cadmium	<1.8 mg/kg				
	Concentration:	60 - 90 mg/kg				
	Concentration: Lead Concentration: Nickel	<150 mg/kg 15 - 30 mg/kg				
	Concentration:					
	BGS Estimated Soil Source:	-	B8SE	963	3	635434
	Source: Soil Sample Type: Arsenic	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	(SE)	903	S	164376
	Concentration:					
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel	<150 mg/kg 15 - 30 mg/kg				
	Concentration:					





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Recorded Mine	eral Sites				
22	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity:	Thorne Chalk Pit , Cliffs End, Ramsgate, Kent British Geological Survey, National Geoscience Information Service 132297 Opencast Ceased Unknown Operator Unknown Operator Cretaceous Margate Chalk Member Chalk Located by supplier to within 10m	B10SW (W)	336	3	633474 165077
	BGS Recorded Mine	oral Sites				
23	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity:	Thorne Chalk Pit , Cliffs End, Ramsgate, Kent British Geological Survey, National Geoscience Information Service 132301 Opencast Ceased Unknown Operator Unknown Operator Cretaceous Margate Chalk Member Chalk Located by supplier to within 10m	B10SE (SW)	340	3	633980 164952
	BGS Recorded Mine	eral Sites				
24	Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Cliffsend Crossing Chalk Pit , Cliffs End, Ramsgate, Kent British Geological Survey, National Geoscience Information Service 132300 Opencast Ceased Unknown Operator Unknown Operator Cretaceous Margate Chalk Member Chalk Located by supplier to within 10m	B7NE (SE)	474	3	634550 164714
	BGS Measured Urb	an Soil Chemistry				
	No data available  BGS Urban Soil Che No data available	emistry Averages				
	Coal Mining Affecte In an area that might	not be affected by coal mining				
	Mining Instability Mining Evidence: Source: Boundary Quality:	Conclusive Rock Mining Ove Arup & Partners As Supplied	B11NE (NE)	0	-	634500 165500
	Man-Made Mining C	Cavities				
	Easting: Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Commodity: Solid Geology Detail: Superficial Geology Detail:	634400 165700 0 : B15 : SW NE Adit Entry Pillar and Stall Chalk Mine Chalk : Chalk Group	B15SW (NE)	0	5	634400 165700
	Man-Made Mining C	Cavities				
	Easting: Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Commodity:	635000 166000 319 : B16 : NW NE Reference to Deneholes Chalk : Thanet Sand Formation, Chalk Group	B16NW (NE)	319	5	635000 166000





Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Non Coal Mining Areas of Great Britain  Risk: Unlikely Source: British Geological Survey, National Geoscience Information Service	B11NW (NE)	0	3	634192 165402
	Non Coal Mining Areas of Great Britain  Risk: Unlikely Source: British Geological Survey, National Geoscience Information Service	B12NW (E)	0	3	635000 165247
	Non Coal Mining Areas of Great Britain  Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	B11NW (SE)	0	3	634125 165247
	Non Coal Mining Areas of Great Britain  Risk: Likely Source: British Geological Survey, National Geoscience Information Service	B16SW (NE)	31	3	635000 165625
	Non Coal Mining Areas of Great Britain  Risk: Likely Source: British Geological Survey, National Geoscience Information Service	B16SW (NE)	50	3	634995 165636
	Non Coal Mining Areas of Great Britain  Risk: Rare Source: British Geological Survey, National Geoscience Information Service	B16NW (NE)	69	3	634885 165994
	Non Coal Mining Areas of Great Britain  Risk: Highly Likely Source: British Geological Survey, National Geoscience Information Service	B16SW (NE)	81	3	635041 165655
	Non Coal Mining Areas of Great Britain  Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	B12SW (E)	110	3	635000 165121
	Non Coal Mining Areas of Great Britain  Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	B11SW (S)	160	3	634125 165000
	Non Coal Mining Areas of Great Britain  Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	B12SW (E)	231	3	635000 165000
	Non Coal Mining Areas of Great Britain  Risk: Rare Source: British Geological Survey, National Geoscience Information Service	B16NW (NE)	232	3	635000 165915
	Potential for Collapsible Ground Stability Hazards  Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B11NW (SE)	0	3	634125 165247
	Potential for Collapsible Ground Stability Hazards  Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	(NW)	0	3	632990 166316
	Potential for Collapsible Ground Stability Hazards  Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B15SW (NE)	0	3	634312 165646
	Potential for Collapsible Ground Stability Hazards  Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B12NW (E)	0	3	635000 165421
	Potential for Collapsible Ground Stability Hazards  Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B12NW (E)	2	3	635000 165247
	Potential for Collapsible Ground Stability Hazards  Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B10SW (W)	13	3	633621 165085
	Potential for Collapsible Ground Stability Hazards  Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B16SW (NE)	25	3	635000 165624
	Potential for Collapsible Ground Stability Hazards  Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B16SW (NE)	42	3	634910 165749
	Potential for Collapsible Ground Stability Hazards  Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B15NE (NE)	50	3	634459 165890
	Potential for Collapsible Ground Stability Hazards  Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B11SW (S)	160	3	634128 165000





Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Collap Hazard Potential: Source:	sible Ground Stability Hazards  Moderate  British Geological Survey, National Geoscience Information Service	B11SW (S)	197	3	634088 165064
	Potential for Collap Hazard Potential: Source:	sible Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	B12SW (E)	231	3	635000 165000
	Potential for Collap Hazard Potential: Source:	sible Ground Stability Hazards Moderate British Geological Survey, National Geoscience Information Service	B11SW (S)	243	3	634125 165000
	Potential for Collap Hazard Potential: Source:	sible Ground Stability Hazards Moderate British Geological Survey, National Geoscience Information Service	B10SE (SW)	246	3	633785 165050
	Potential for Compi Hazard Potential: Source:	ressible Ground Stability Hazards  No Hazard  British Geological Survey, National Geoscience Information Service	B11NW (SE)	0	3	634125 165247
	Potential for Compi Hazard Potential: Source:	ressible Ground Stability Hazards  No Hazard  British Geological Survey, National Geoscience Information Service	B12NW (E)	0	3	635000 165247
	Potential for Compi Hazard Potential: Source:	ressible Ground Stability Hazards  No Hazard  British Geological Survey, National Geoscience Information Service	B11SW (S)	160	3	634125 165000
	Potential for Compl Hazard Potential: Source:	ressible Ground Stability Hazards  No Hazard  British Geological Survey, National Geoscience Information Service	B12SW (E)	231	3	635000 165000
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards High British Geological Survey, National Geoscience Information Service	B15SE (NE)	0	3	634697 165819
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards  Very Low British Geological Survey, National Geoscience Information Service	B11NW (SE)	0	3	634125 165247
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards  Very Low  British Geological Survey, National Geoscience Information Service	B12NW (E)	0	3	635000 165247
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards High British Geological Survey, National Geoscience Information Service	B16SW (NE)	38	3	635000 165613
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards  Moderate British Geological Survey, National Geoscience Information Service	B16SW (NE)	40	3	635000 165624
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards  Moderate British Geological Survey, National Geoscience Information Service	B16SW (NE)	42	3	634910 165749
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards  Moderate British Geological Survey, National Geoscience Information Service	B15NE (NE)	50	3	634614 165906
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards  Low  British Geological Survey, National Geoscience Information Service	B16NW (NE)	69	3	634885 165994
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards  Low  British Geological Survey, National Geoscience Information Service	B16SW (NE)	74	3	634984 165670
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards  Low  British Geological Survey, National Geoscience Information Service	B16SW (NE)	75	3	635000 165654
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards  Moderate British Geological Survey, National Geoscience Information Service	B16SW (NE)	102	3	635029 165675
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards High British Geological Survey, National Geoscience Information Service	B16SW (NE)	117	3	635000 165763
	Potential for Groun Hazard Potential: Source:	d Dissolution Stability Hazards  Moderate British Geological Survey, National Geoscience Information Service	B10SE (S)	127	3	634053 165055





/lap ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Ground Dissolution Stability Hazards				
	Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B11SW (SE)	160	3	634300 165000
	Potential for Ground Dissolution Stability Hazards				
	Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	B11SW (S)	172	3	634128 165000
	Potential for Ground Dissolution Stability Hazards	(0)			100000
	Hazard Potential: Moderate	B11SW	182	3	634107
	Source: British Geological Survey, National Geoscience Information Service	(S)			165042
	Potential for Ground Dissolution Stability Hazards Hazard Potential: High	B10SW	185	3	633621
	Source: British Geological Survey, National Geoscience Information Service	(W)			165085
	Potential for Ground Dissolution Stability Hazards	D400E	044	0	004070
	Hazard Potential: High Source: High British Geological Survey, National Geoscience Information Service	B10SE (S)	211	3	634079 165049
	Potential for Ground Dissolution Stability Hazards				
	Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	B12SW (E)	231	3	635000 165000
	Potential for Ground Dissolution Stability Hazards	(-)			100000
	Hazard Potential: Low	B16NW	232	3	635000
	Source: British Geological Survey, National Geoscience Information Service	(NE)			165915
	Potential for Ground Dissolution Stability Hazards Hazard Potential: High	B11SW	243	3	634125
	Source: British Geological Survey, National Geoscience Information Service	(S)			165000
	Potential for Ground Dissolution Stability Hazards Hazard Potential: High	B10SE	246	3	633785
	Hazard Potential: High Source: High British Geological Survey, National Geoscience Information Service	(SW)	240	3	165050
	Potential for Landslide Ground Stability Hazards				
	Hazard Potential: No Hazard Source: No Hazard British Geological Survey, National Geoscience Information Service	B11NW (SE)	0	3	634125 165247
	Potential for Landslide Ground Stability Hazards	(- /			
	Hazard Potential: Very Low	(NW)	0	3	632990 166316
	Source: British Geological Survey, National Geoscience Information Service  Potential for Landslide Ground Stability Hazards				100310
	Hazard Potential: Very Low	B15SW	0	3	634312
	Source: British Geological Survey, National Geoscience Information Service	(NE)			165646
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low	B12NW	0	3	635000
	Source: British Geological Survey, National Geoscience Information Service	(E)	0	3	165421
	Potential for Landslide Ground Stability Hazards				
	Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B12NW (E)	2	3	635000 165247
	Potential for Landslide Ground Stability Hazards				
	Hazard Potential: Very Low	B10SW	13	3	633621
	Source: British Geological Survey, National Geoscience Information Service	(W)			165085
	Potential for Landslide Ground Stability Hazards Hazard Potential: No Hazard	B16SW	25	3	635000
	Source: British Geological Survey, National Geoscience Information Service	(NE)			165624
	Potential for Landslide Ground Stability Hazards	B16SW	42	3	624010
	Hazard Potential: No Hazard Source: No Hazard British Geological Survey, National Geoscience Information Service	(NE)	42	3	634910 165749
	Potential for Landslide Ground Stability Hazards				
	Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B15NE (NE)	50	3	634459 165890
	Potential for Landslide Ground Stability Hazards	(/			12330
	Hazard Potential: No Hazard	B11SW	160	3	634128
	Source: British Geological Survey, National Geoscience Information Service	(S)			165000
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low	B11SW	197	3	634088
	Source: British Geological Survey, National Geoscience Information Service	(S)	107		165064
	Potential for Landslide Ground Stability Hazards				
	Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B12SW (E)	231	3	635000 165000





Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Landslide Ground Stability Hazards				
	Hazard Potential: Very Low British Geological Survey, National Geoscience Information Service	B11SW (S)	243	3	634125 165000
	Potential for Landslide Ground Stability Hazards				
	Hazard Potential: Very Low British Geological Survey, National Geoscience Information Service	B10SE (SW)	246	3	633785 165050
	Potential for Running Sand Ground Stability Hazards  Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B11NW (SE)	0	3	634125 165247
	Potential for Running Sand Ground Stability Hazards  Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B12NW (E)	0	3	635000 165247
	Potential for Running Sand Ground Stability Hazards  Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B11SW (S)	160	3	634125 165000
	Potential for Running Sand Ground Stability Hazards  Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B12SW (E)	231	3	635000 165000
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	(NW)	0	3	632990 166316
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B15SW (NE)	0	3	634312 165646
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B12NW (E)	0	3	635000 165421
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B11NW (SE)	0	3	634125 165247
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Source: No Hazard Source: British Geological Survey, National Geoscience Information Service	B12NW (E)	2	3	635000 165247
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B10SW (W)	13	3	633621 165085
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B16SW (NE)	25	3	635000 165624
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B16SW (NE)	42	3	634910 165749
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B15NE (NE)	50	3	634459 165890
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B11SW (S)	160	3	634128 165000
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B11SW (S)	197	3	634088 165064
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	B12SW (E)	231	3	635000 165000
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B11SW (S)	243	3	634125 165000
	Potential for Shrinking or Swelling Clay Ground Stability Hazards  Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	B10SE (SW)	246	3	633785 165050



# **Geological**

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Radon Potential - R	adon Protection Measures				
	Protection Measure: Source:	No radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	B11NW (SE)	0	3	634125 165247
	Radon Potential - R	adon Protection Measures				
	Protection Measure: Source:	No radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	B15SW (N)	0	3	634255 165574
	Padon Potential - P	adon Protection Measures				
		No radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	B10SE (SW)	0	3	633855 165099
	Radon Potential - R	adon Protection Measures				
	Protection Measure: Source:	No radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	B12NW (E)	0	3	635005 165324
	Radon Potential - R	adon Affected Areas				
	Affected Area: Source:	The property is in a lower probability radon area, as less than 1% of homes are above the action level British Geological Survey, National Geoscience Information Service	B11NW (SE)	0	3	634125 165247
	Radon Potential - R	adon Affected Areas				
	Affected Area: Source:	The property is in an intermediate probability radon area, as between 1 and 3% of homes are above the action level British Geological Survey, National Geoscience Information Service	B15SW (N)	0	3	634255 165574
		adon Affected Areas				
	Affected Area:	The property is in an intermediate probability radon area, as between 1 and 3% of homes are above the action level	B10SE (SW)	0	3	633855 165099
	Source:	British Geological Survey, National Geoscience Information Service				
	Radon Potential - R	adon Affected Areas				
	Affected Area: Source:	The property is in an intermediate probability radon area, as between 1 and 3% of homes are above the action level British Geological Survey, National Geoscience Information Service	B12NW (E)	0	3	635005 165324



## **Industrial Land Use**

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
25	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	le Directory Entries Industrial Oil Services Canterbury Rd West, Cliffsend, Ramsgate, Kent, CT12 5DU Waste Disposal Services Inactive Manually positioned to the road within the address or location	B11SE (E)	58	-	634436 165124
25	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Jentex Petroleum Ltd Canterbury Road West, Cliffsend, Ramsgate, Kent, CT12 5DU Oil Fuel Distributors Inactive Automatically positioned to the address	B11SE (E)	61	-	634449 165143
25	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	le Directory Entries Antony Jenkins Fuel Oils Ltd Canterbury Road West, Cliffsend, Ramsgate, Kent, CT12 5DU Oil Fuel Distributors Inactive Automatically positioned to the address	B11SE (E)	61	-	634449 165143
26	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Jentex Jentex Canterbury Road West, Cliffsend, Ramsgate, Kent, CT12 5DU Oil Fuel Distributors Inactive Manually positioned within the geographical locality	B11SE (SE)	82	-	634438 165094
27	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Manna Hutte Service Station 9, Canterbury Road West, Cliffsend, Ramsgate, Kent, CT12 5DY Garage Services Inactive Automatically positioned to the address	B11SE (E)	171	-	634647 165096
27	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Manna Hutte Service Station 9, Canterbury Road West, Cliffsend, Ramsgate, Kent, CT12 5DY Garage Services Inactive Manually positioned to the address or location	B11SE (E)	173	-	634644 165094
28	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Abate 28, High Street, Manston, Ramsgate, Kent, CT12 5BG Pest & Vermin Control Inactive Automatically positioned to the address	B15NE (NE)	294	-	634690 166037
29	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Dormy Heating Systems 15, Sea View Road, Cliffsend, Ramsgate, Kent, CT12 5EH Under Floor Heating Inactive Automatically positioned to the address	B11SE (SE)	310	-	634732 164947
30	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Mobile Trailer Hire Services The Cheviotes, Manston Road, Manston, Ramsgate, Kent, CT12 5BE Trailers & Towing Equipment Inactive Automatically positioned to the address	B16NW (NE)	378	-	634992 166063
31	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	le Directory Entries Aviation Management 4, Daigor Lane, Manston, Ramsgate, Kent, CT12 5BY Aviation Engineers Inactive Automatically positioned to the address	B16NW (NE)	384	-	634777 166112
32	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Bel-Air Packaging Ltd Unit 5 Thorne Farm, Thorne Hill, Ramsgate, Kent, CT12 5DS Packaging Materials Manufacturers & Suppliers Inactive Manually positioned within the geographical locality	B9SE (SW)	508	-	633388 164922
32	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	le Directory Entries  Bubble Factory & Converters Ltd  Unit 5, Thorne Farm, Thorne Hill, Ramsgate, Kent, CT12 5DS  Packaging & Wrapping Equipment & Supplies  Inactive  Automatically positioned to the address	B9SE (SW)	508	-	633388 164922



## **Industrial Land Use**

Map ID	Details		Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
32	Contemporary Trade Directory Entries  Name: Systematics (Thanet) Ltd  Location: Unit 3, Thorne Farm House, Thorne Hill, Ramsga Classification: Electronic Engineers  Status: Inactive  Positional Accuracy: Automatically positioned in the proximity of the a		B9SE (SW)	532	-	633361 164904
32	Contemporary Trade Directory Entries  Name: Challis Location: Unit 8, Thorne Farm House, Thorne Hill, Ramsga Classification: Rubber & Plastic Products - Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	ate, Kent, CT12 5DS	B9SE (SW)	533	-	633332 164910
32	Contemporary Trade Directory Entries  Name: P M G Fabrication Location: Unit 8, Thorne Farm, Thorne Hill, Ramsgate, Ker Classification: Tungsten Tool Manufacturers & Distributors Status: Active  Positional Accuracy: Automatically positioned to the address	nt, CT12 5DS	B9SE (SW)	533	-	633332 164910
33	Contemporary Trade Directory Entries  Name: J & K Frames Location: Unit 2, Thorne Farm, Thorne Hill, Ramsgate, Kei Classification: Seating Manufacturers Status: Active Positional Accuracy: Automatically positioned to the address	nt, CT12 5DS	B10SW (SW)	512	-	633421 164910
34	Contemporary Trade Directory Entries  Name: Laybell Design Ltd Location: Thorne Farm House, Thorne Hill, Ramsgate, Ker Classification: Joinery Manufacturers Status: Inactive Positional Accuracy: Automatically positioned to the address	nt, CT12 5DS	B5NE (SW)	612	-	633301 164836
34	Contemporary Trade Directory Entries  Name: R & R Welding Location: Thorne Farm House, Thorne Hill, Ramsgate, Ker Classification: Wrought Ironwork Status: Inactive Positional Accuracy: Automatically positioned to the address	nt, CT12 5DS	B5NE (SW)	612	-	633301 164836
34	Contemporary Trade Directory Entries  Name: Sincro Location: Unit 4,Thorne Farm,Thorne Hill, Ramsgate, Kent Classification: Engineers - General Status: Inactive Positional Accuracy: Manually positioned within the geographical loca	,	B5NE (SW)	632	-	633284 164820
35	Contemporary Trade Directory Entries  Name: Atlas Scaffolding Location: 2, Cliffsend Farm Cottages, Cliffsend Road, Cliffs 5JG Classification: Scaffolding & Work Platforms Status: Inactive Positional Accuracy: Automatically positioned to the address	send, Ramsgate, Kent, CT12	B8SW (SE)	806	-	634862 164434
36	Contemporary Trade Directory Entries  Name: Countrywide Property Care Location: 61, Sandwich Road, Cliffsend, Ramsgate, Kent, Classification: Damp & Dry Rot Control Status: Active Positional Accuracy: Automatically positioned to the address	CT12 5HY	B8SW (SE)	981	-	634951 164250
37	Contemporary Trade Directory Entries  Name: Zebredellas Location: 3, Lavender Lane, Ramsgate, Kent, CT12 5LJ Classification: Jewellery Manufacturers & Repairers Status: Active Positional Accuracy: Automatically positioned to the address		B7SW (S)	989	-	634138 164204
38	Fuel Station Entries  Name: Manna Hutte Service Station Location: 9 Canterbury Road West, King Arthur Road, RAI Brand: Unbranded Premises Type: Petrol Station Status: Closed Positional Accuracy: Manually positioned to the address or location	MSGATE, Kent, CT12 5DY	B11SE (E)	182	-	634640 165086



## **Sensitive Land Use**

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
39	National Nature Res Name: Multiple Areas: Total Area (m2): Source: Reference: Designation Date:	Serves Sandwich & Pegwell Bay Y 6293106.5 Natural England 1007228 Not Supplied	B4NW (SE)	900	6	634817 164058
40	Nitrate Vulnerable 2 Name: Description: Source:	Zones  Not Supplied Groundwater Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	B11NW (SE)	0	7	634125 165247
41	Ramsar Sites Name: Multiple Areas: Total Area (m2): Source: Reference: Designation Date:	Thanet Coast & Sandwich Bay Y 21821338.06 Natural England UK11070 Not Supplied	B4NW (SE)	900	6	634817 164058
42	Designation Date: Date Type: Designation Details: Designation Date: Date Type: Designation Details: Designation Details: Designation Date: Date Type: Designation Details: Designation Date: Date Type: Designation Details: Designation Date: Date Type: Designation Details: Designation Details: Designation Details: Designation Details: Designation Details: Designation Date: Date Type: Designation Details: Designation Details: Designation Details: Designation Details: Designation Date: Designation Date: Designation Date: Designation Date: Designation Date: Designation Date:	Sandwich Bay To Hacklinge Marshes Y 17901009.98 Natural England 1001128 Local Wildlife Site 28th June 1993 Notified National Nature Reserve 28th June 1993 Notified Special Area Of Conservation 28th June 1993 Notified Special Protection Area 28th June 1993 Notified Site Of Special Scientific Interest 28th June 1993 Notified Site Of Special Scientific Interest 28th June 1993 Notified National Trust Reserve 28th June 1993 Notified Ramsar Site	B4NW (SE)	900	6	634872 164111
43	Special Areas of Co Name: Multiple Areas: Total Area (m2): Source: Reference: Status:	Sandwich Bay N 11366986.85 Natural England UK0013077 Designated	B4NW (SE)	900	6	634872 164111
44	Special Areas of Co Name: Multiple Areas: Total Area (m2): Source: Reference: Status:	Thanet Coast Y 28159852.32 Natural England UK0013107 Designated	B8SE (SE)	935	6	635393 164388
45	Special Protection A Name: Multiple Areas: Total Area (m2): Source: Reference: Designation Date:	Areas Thanet Coast & Sandwich Bay Y 18812616.56 Natural England UK9012071 Not Supplied	B4NW (SE)	900	6	634817 164058



Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Thanet District Council - Environmental Health Department Dover District Council - Environmental Health Department	April 2014 January 2015	Annual Rolling Update Annual Rolling Update
Discharge Consents Environment Agency - Southern Region	January 2016	Quarterly
Enforcement and Prohibition Notices	January 2010	Quarterly
Environment Agency - Southern Region	March 2013	As notified
Integrated Pollution Controls Environment Agency - Southern Region	October 2008	Not Applicable
Integrated Pollution Prevention And Control Environment Agency - Southern Region	January 2016	Quarterly
Local Authority Integrated Pollution Prevention And Control Thanet District Council - Environmental Health Department Dover District Council - Environmental Health Department	April 2014 June 2014	Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Controls Thanet District Council - Environmental Health Department Dover District Council - Environmental Health Department	April 2014 June 2014	Annual Rolling Update Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements Thanet District Council - Environmental Health Department Dover District Council - Environmental Health Department	April 2014 June 2014	Annual Rolling Update Annual Rolling Update
Nearest Surface Water Feature Ordnance Survey	July 2012	Quarterly
Pollution Incidents to Controlled Waters Environment Agency - Southern Region	December 1999	Not Applicable
Prosecutions Relating to Authorised Processes Environment Agency - Southern Region	March 2013	As notified
Prosecutions Relating to Controlled Waters Environment Agency - Southern Region	March 2013	As notified
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 - Southern Region - Kent Area Environment Agency - Southern Region - Kent and East Sussex	January 2016 January 2016	Quarterly Quarterly
Water Abstractions Environment Agency - Southern Region	January 2016	Quarterly
Water Industry Act Referrals Environment Agency - Southern Region	January 2016	Quarterly
Groundwater Vulnerability Environment Agency - Head Office	April 2015	Not Applicable
Drift Deposits Environment Agency - Head Office	January 1999	Not Applicable
Bedrock Aquifer Designations British Geological Survey - National Geoscience Information Service	October 2012	As notified
Superficial Aquifer Designations British Geological Survey - National Geoscience Information Service	January 2015	As notified
Source Protection Zones		

Order Number: 82787389_1_1 Date: 17-Mar-2016 rpr_ec_datasheet v50.0 A Landmark Information Group Service



Agency & Hydrological	Version	Update Cycle
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	February 2016	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	February 2016	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	February 2016	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	February 2016	Quarterly
Flood Defences Environment Agency - Head Office	February 2016	Quarterly
Detailed River Network Lines Environment Agency - Head Office	March 2012	Annually
Detailed River Network Offline Drainage Environment Agency - Head Office	March 2012	Annually
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	October 2013	As notified
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	October 2013	As notified
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	October 2013	As notified
Surface Water Suitability Environment Agency - Head Office	October 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	March 2016	Quarterly
Integrated Pollution Control Registered Waste Sites Environment Agency - Southern Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries) Environment Agency - Southern Region - Kent Area Environment Agency - Southern Region - Kent and East Sussex	February 2016 February 2016	Quarterly Quarterly
Licensed Waste Management Facilities (Locations) Environment Agency - South East Region - Kent & South London Area Environment Agency - Southern Region - Kent Area Environment Agency - Southern Region - Kent and East Sussex	January 2016 January 2016 January 2016	Quarterly Quarterly Quarterly
Local Authority Landfill Coverage  Dover District Council - Environmental Health Department  Kent County Council - Waste Management Group  Thanet District Council - Environmental Health Department	May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable
Local Authority Recorded Landfill Sites  Dover District Council - Environmental Health Department  Kent County Council - Waste Management Group  Thanet District Council - Environmental Health Department	May 2000 May 2000 May 2000	Not Applicable Not Applicable Not Applicable
Registered Landfill Sites Environment Agency - Southern Region - Kent Area	March 2003	Not Applicable
Registered Waste Transfer Sites Environment Agency - Southern Region - Kent Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites Environment Agency - Southern Region - Kent Area	March 2003	Not Applicable



Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		5
Health and Safety Executive	February 2016	Bi-Annually
Explosive Sites	F-1	D' Assessables
Health and Safety Executive	February 2016	Bi-Annually
Notification of Installations Handling Hazardous Substances (NIHHS) Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
Thanet District Council	February 2016	Annual Rolling Update
Dover District Council - Planning Department	January 2016	Annual Rolling Update
Kent County Council	January 2016	Annual Rolling Update
Planning Hazardous Substance Consents		
Thanet District Council	February 2016	Annual Rolling Update
Dover District Council - Planning Department	January 2016	Annual Rolling Update
Kent County Council	January 2016	Annual Rolling Update
Geological	Version	Update Cycle
DOS 4.525 000 Solid Coology		
BGS 1:625,000 Solid Geology	lanuary 2000	Not Applicable
British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry	_	
British Geological Survey - National Geoscience Information Service	January 2010	Annually
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	November 2015	Bi-Annually
Brine Compensation Area		
Cheshire Brine Subsidence Compensation Board	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		1
British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
	Way 2010	Trot ripplicable
Potential for Collapsible Ground Stability Hazards	luna 2015	Annually
British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Compressible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Ground Dissolution Stability Hazards		
British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Running Sand Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards		-
British Geological Survey - National Geoscience Information Service	June 2015	Annually
Radon Potential - Radon Affected Areas	545 2010	,
Radon Potential - Radon Affected Areas  British Geological Survey - National Geoscience Information Service	July 2011	As notified
	July 2011	AS HOUNEU
Radon Potential - Radon Protection Measures		
British Geological Survey - National Geoscience Information Service	July 2011	As notified



Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	November 2015	Quarterly
Fuel Station Entries Catalist Ltd - Experian	November 2015	Quarterly
Sensitive Land Use	Version	Update Cycle
Areas of Outstanding Natural Beauty Natural England	October 2015	Bi-Annually
Environmentally Sensitive Areas Natural England	October 2015	Annually
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	October 2015	Bi-Annually
Marine Nature Reserves Natural England	October 2015	Bi-Annually
National Nature Reserves Natural England	October 2015	Bi-Annually
National Parks Natural England	March 2016	Bi-Annually
Nitrate Sensitive Areas Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	October 2015	Not Applicable
Nitrate Vulnerable Zones Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	October 2015	Annually
Ramsar Sites Natural England	October 2015	Bi-Annually
Sites of Special Scientific Interest Natural England	October 2015	Bi-Annually
Special Areas of Conservation Natural England	October 2015	Bi-Annually
Special Protection Areas Natural England	October 2015	Bi-Annually



## **Data Suppliers**

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Cicensed Partner
Environment Agency	Environment Agency
Scottish Environment Protection Agency	SEPA Scottish 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 Oymru Natural Resources Wales
Scottish Natural Heritage	SCOTTISH NATURAL HERITAGE 必公司
Natural England	NATURAL ENGLAND
Public Health England	Public Health England
Ove Arup	ARUP
Peter Brett Associates	peterbrett



## **Useful Contacts**

Contact	Name and Address	Contact Details
2	Environment Agency - National Customer Contact Centre (NCCC)	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
	PO Box 544, Templeborough, Rotherham, S60 1BY	
3	British Geological Survey - Enquiry Service  British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
4	Thanet District Council - Environmental Health Department Council Offices, Cecil Street, Margate, Kent, CT9 1XZ	Telephone: 01843 577000 Fax: 01843 290906 Website: www.thanet.gov.uk
5	Peter Brett Associates Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN	Telephone: 0118 950 0761 Fax: 0118 959 7498 Email: reading@pba.co.uk Website: www.pba.co.uk
6	Natural England Suite D, Unex House, Bourges Boulevard, Peterborough, Cambridgeshire, PE1 1NG	Telephone: 0845 600 3078 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
7	Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)  Government Buildings, Otley Road, Lawnswood, Leeds, West Yorkshire, LS16 5QT	Telephone: 0113 2613333 Fax: 0113 230 0879
8	Environment Agency - Head Office  Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
9	Kent County Council - Waste Management Group Block H, The Forstal, Beddow Way, Aylesford, Kent, ME20 7BT	Telephone: 01622 605976 Website: www.kent.gov.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.

## **Historical Mapping Legends**

## **Ordnance Survey County Series 1:10,560** Gravel Pit 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 Plan 1:10,000

وسسم	Chalk Pit, Clay Pit or Quarry	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Gravel Pit
	Sand Pit	(	Disused Pit or Quarry
(	Refuse or Slag Heap		Lake, Loch or Pond
	Dunes		Boulders
<b>* * /</b>	Coniferous Trees	446	Non-Coniferous Trees
ቀ ቀ	Orchard no_	Scrub	∖Yn⁄ Coppice
ជា ជា	Bracken	Heath	, 、 , , , , Rough Grasslan
<u> </u>	- Marsh 👊 🗥	Reeds	그 <u>ょ</u> Saltings
	Direct Building	ction of Flow of	f Water
	Glasshouse	Pylon	Sand
	Sloping Masonry	□ Pole •	Electricity Transmission Line
	Embankn	nent	
Road '	<u>U</u>		Standard Gauge
Under	Over Cros	sing Bridg	e Siding, Tramwa or Mineral Line
+		+ + +	→ Narrow Gauge
	— Geographical Co	ounty	
	— — Administrative Cor County of City		Borough
	Municipal Borou Burgh or Distric		tural District,
	Borough, Burgh Shown only when r		
	Civil Parish Shown alternately	when coincidence	of boundaries occurs
BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB Fn	Foot Bridge Fountain	SB Snr	Signal Box
Fn GP	Fountain Guide Post	Spr	Spring
GP MD	Guide Post	TCB	Telephone Call Box

Mile Post

TCP

Telephone Call Post

### 1:10,000 Raster Mapping

	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders	<i>a o</i>	Boulders (scattered)
	Shingle	Mud	Mud
Sand	Sand		Sand Pit
11111111111111111111111111111111111111	Slopes		Top of cliff
	General detail		Underground detail
	- Overhead detail	<del></del>	Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)	• • • • •	Civil, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
۵ ^۵	Area of wooded ∨egetation		Non-coniferous trees
Ω Ω	Non-coniferous trees (scattered)	**	Coniferous trees
* *	Coniferous trees (scattered)	Ö	Positioned tree
4 4 4 4	Orchard	* *	Coppice or Osiers
alle.	Rough Grassland	www.	Heath
On_	Scrub	7 <u>√</u> /۲	Marsh, Salt Marsh or Reeds
4	Water feature	←	Flow arrows
MHW(S)	Mean high water (springs)	MLW(S)	Mean low water (springs)
	Telephone line (where shown)	<b></b>	Electricity transmission lin (with poles)
← BM 123.45 m	Bench mark (where shown)	Δ	Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)	$\boxtimes$	Pylon, flare stac or lighting tower
+	Site of (antiquity)		Glasshouse
	General Building		Important Building

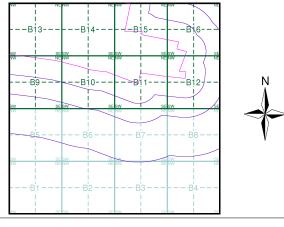
Building



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

Mapping Type	Scale	Date	Pg
Kent	1:10,560	1877	2
Kent	1:10,560	1899	3
Kent	1:10,560	1908	4
Kent	1:10,560	1908	5
Kent	1:10,560	1931	6
Kent	1:10,560	1931	7
Kent	1:10,560	1938	8
Historical Aerial Photography	1:10,560	1945 - 1949	9
Historical Aerial Photography	1:10,560	1947 - 1949	10
Kent	1:10,560	1948 - 1951	11
Ordnance Survey Plan	1:10,000	1960 - 1962	12
Ordnance Survey Plan	1:10,000	1968 - 1969	13
Ordnance Survey Plan	1:10,000	1973 - 1977	14
Ordnance Survey Plan	1:10,000	1979	15
Ordnance Survey Plan	1:10,000	1982	16
Ordnance Survey Plan	1:10,000	1990 - 1995	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2016	19

### **Historical Map - Slice B**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 634120, 165250 Slice:

Site Area (Ha): 306.39 Search Buffer (m): 1000

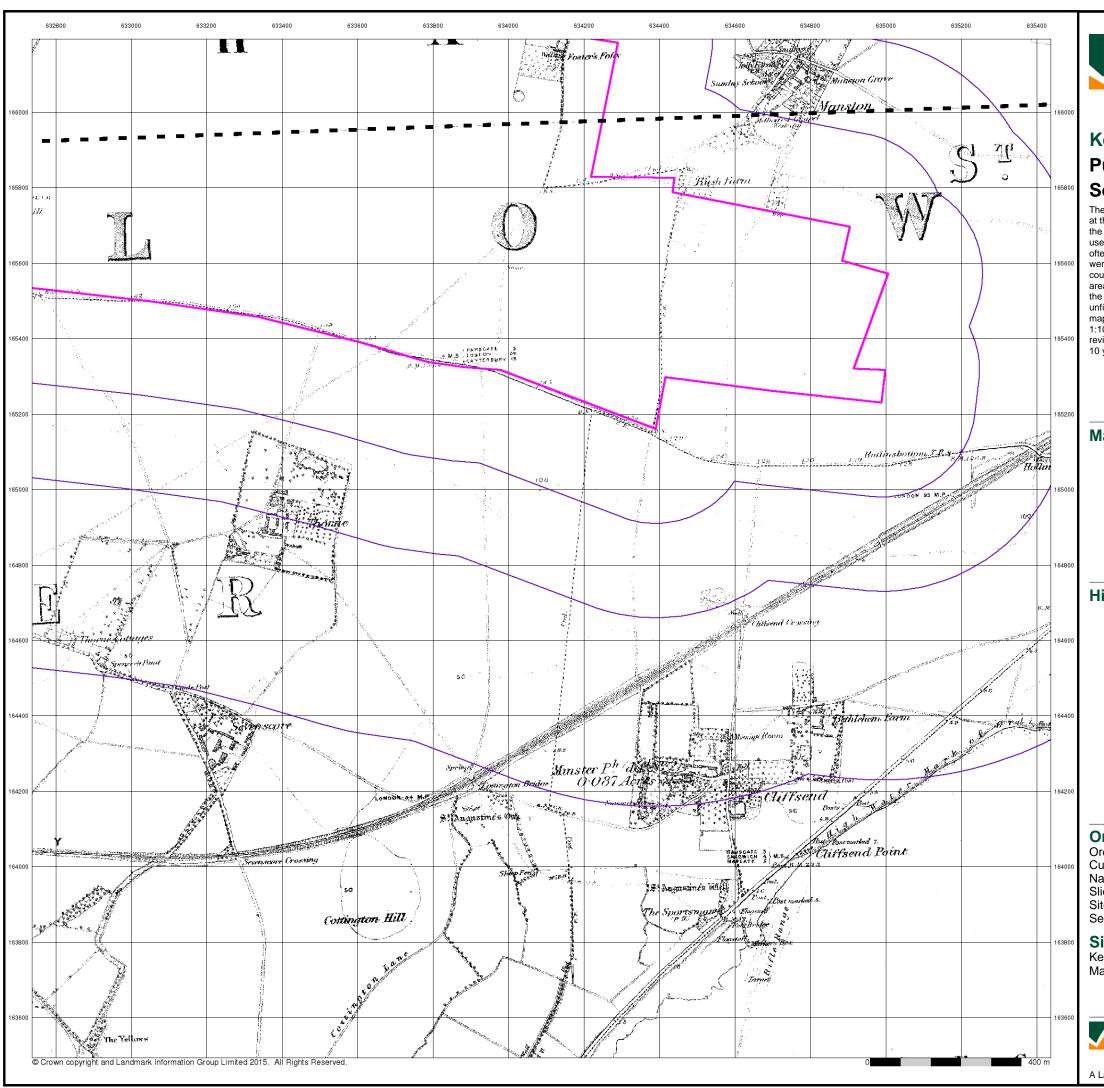
**Site Details** 

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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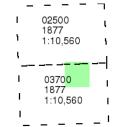




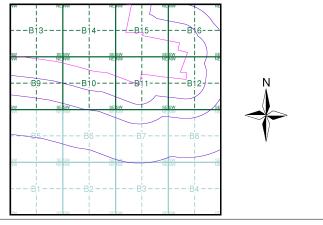
## Published 1877 Source map scale - 1:10,560

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 10 years or so for urban areas.

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



### **Historical Map - Slice B**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B

Site Area (Ha): 306.39 Search Buffer (m): 1000

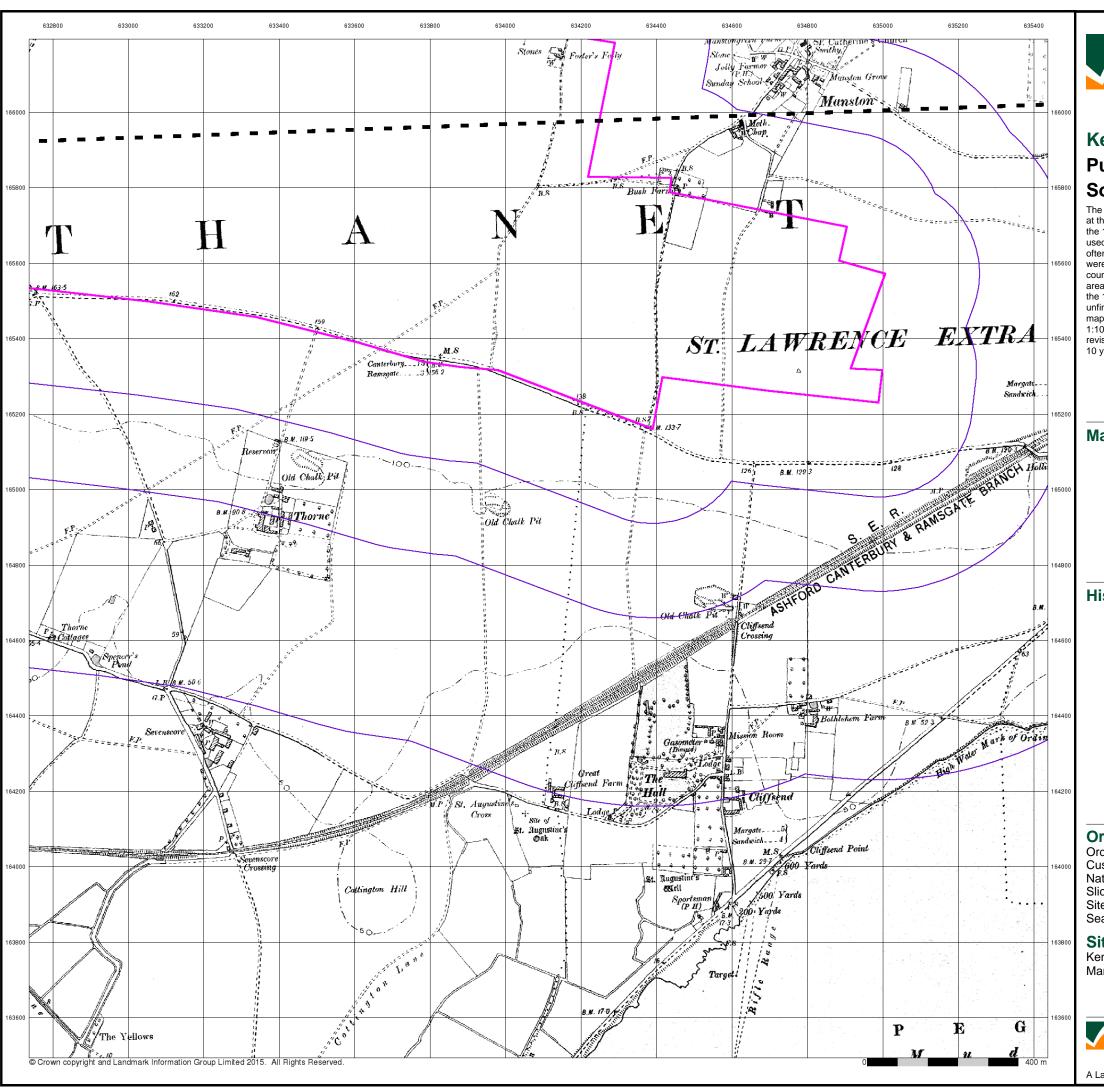
### **Site Details**

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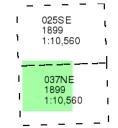




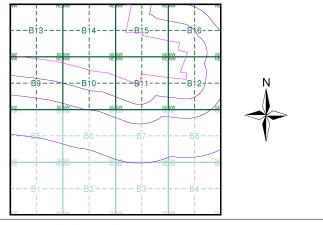
## Published 1899 Source map scale - 1:10,560

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 10 years or so for urban areas.

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



## **Historical Map - Slice B**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B

Site Area (Ha): 306.39 Search Buffer (m): 1000

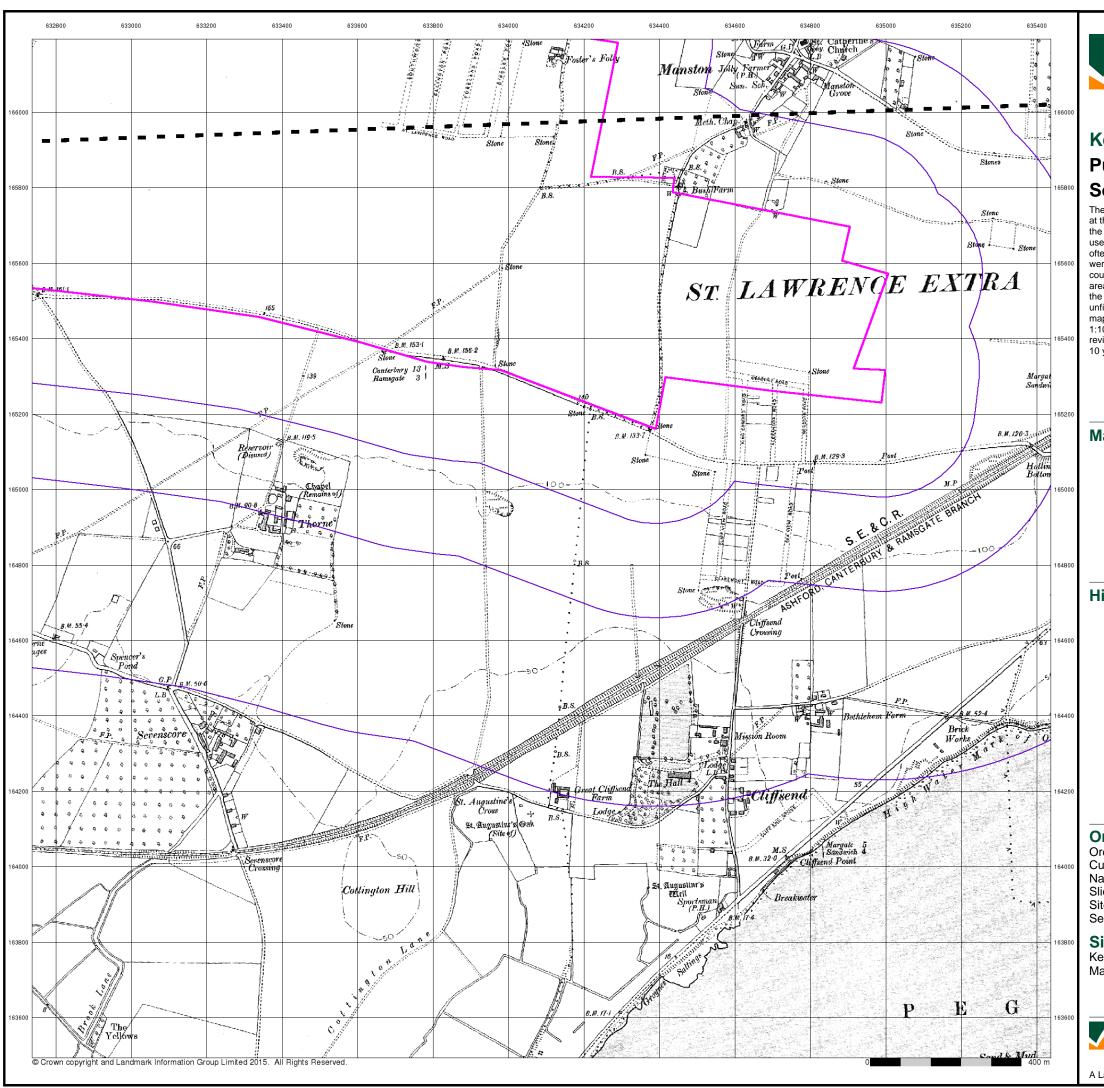
#### **Site Details**

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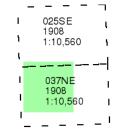




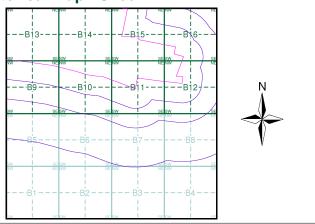
## Published 1908 Source map scale - 1:10,560

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 10 years or so for urban areas.

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



## **Historical Map - Slice B**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B
Site Area (He): 206.30

Site Area (Ha): 306.39 Search Buffer (m): 1000

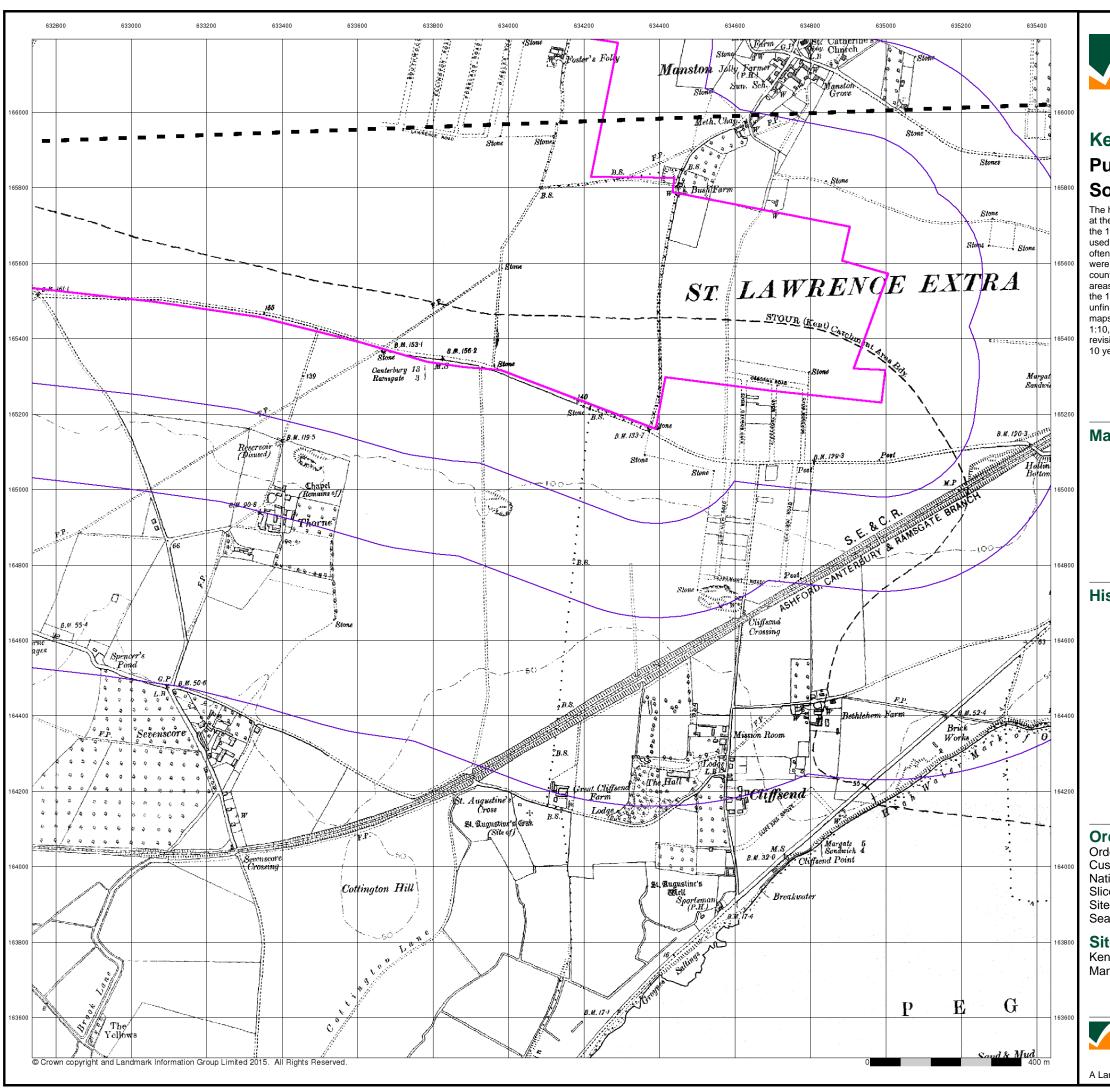
#### **Site Details**

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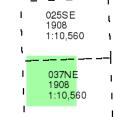




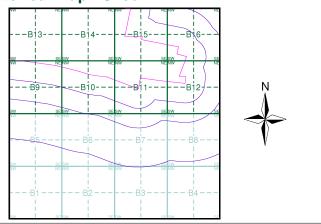
## **Published 1908** Source map scale - 1:10,560

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 10 years or so for urban areas.

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



## **Historical Map - Slice B**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 634120, 165250 Slice:

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

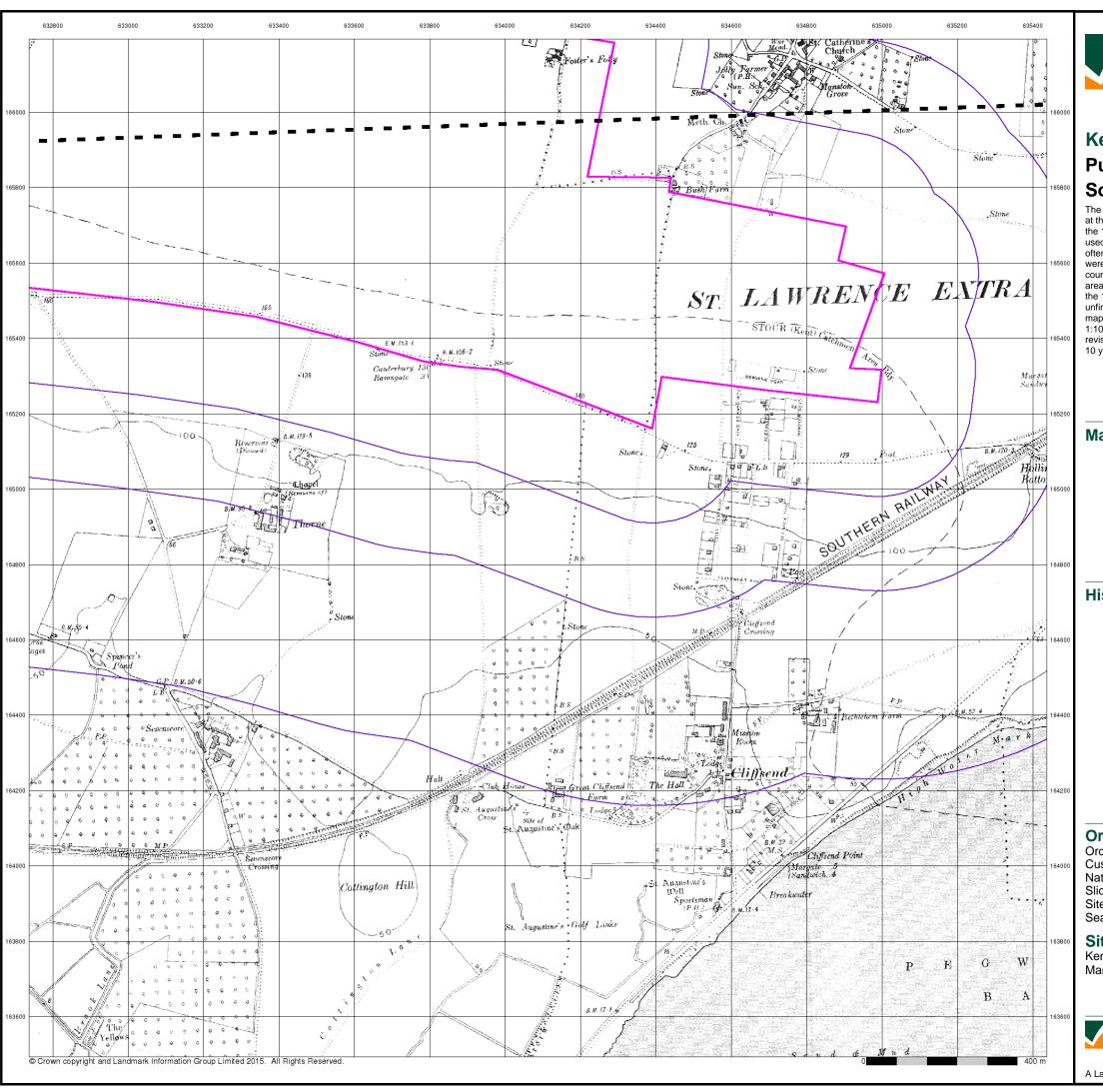
### **Site Details**

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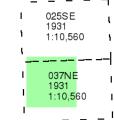




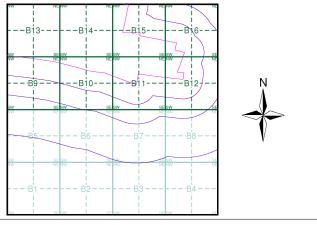
#### Published 1931 Source map scale - 1:10,560

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 10 years or so for urban areas.

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



#### **Historical Map - Slice B**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B

Site Area (Ha): 306.39 Search Buffer (m): 1000

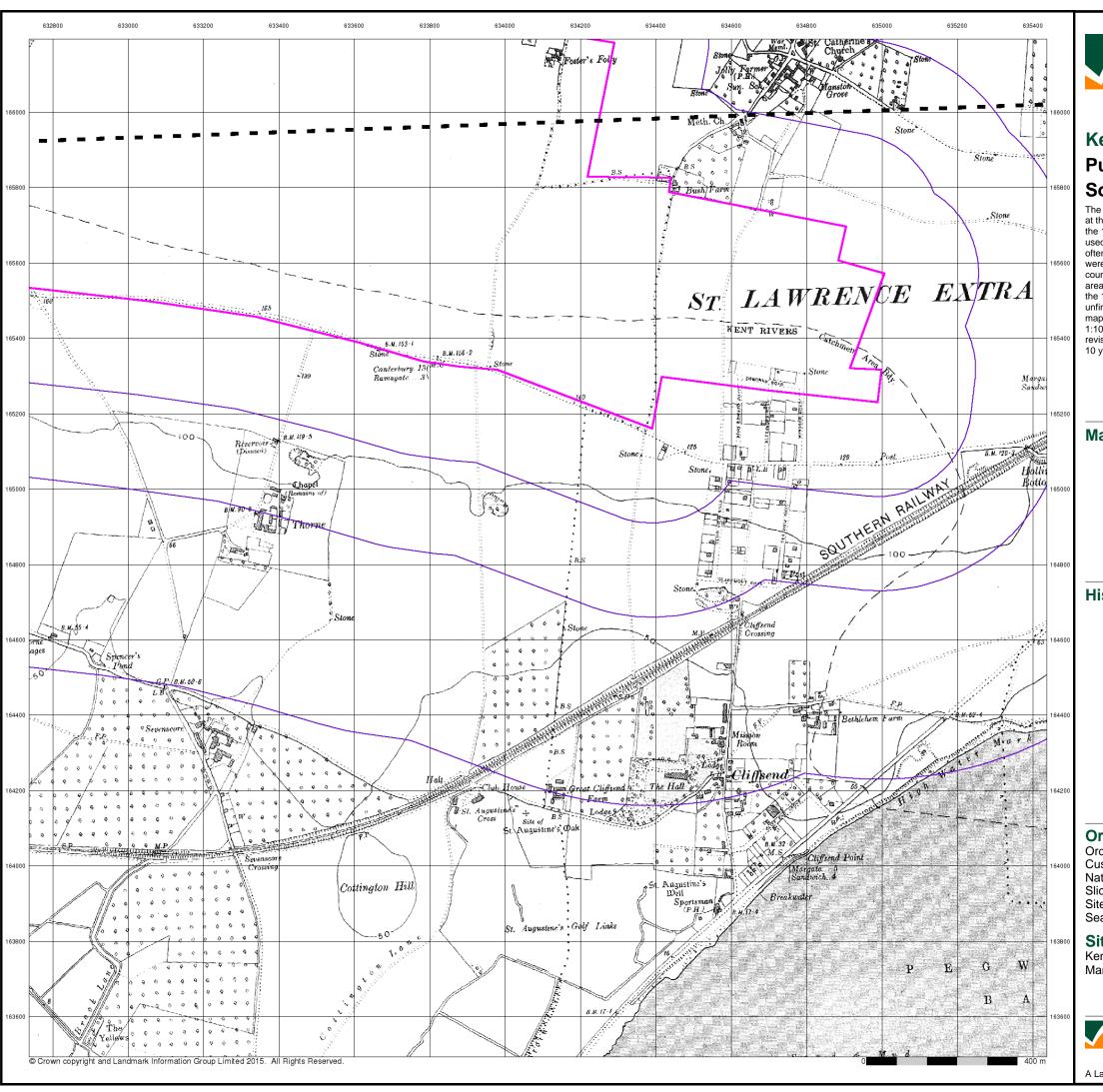
#### **Site Details**

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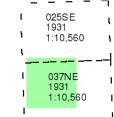




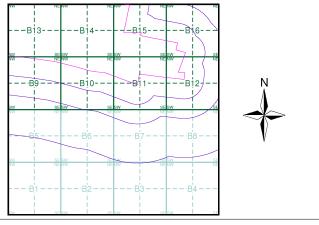
#### Published 1931 Source map scale - 1:10,560

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 10 years or so for urban areas.

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



#### **Historical Map - Slice B**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B

Site Area (Ha): 306.39 Search Buffer (m): 1000

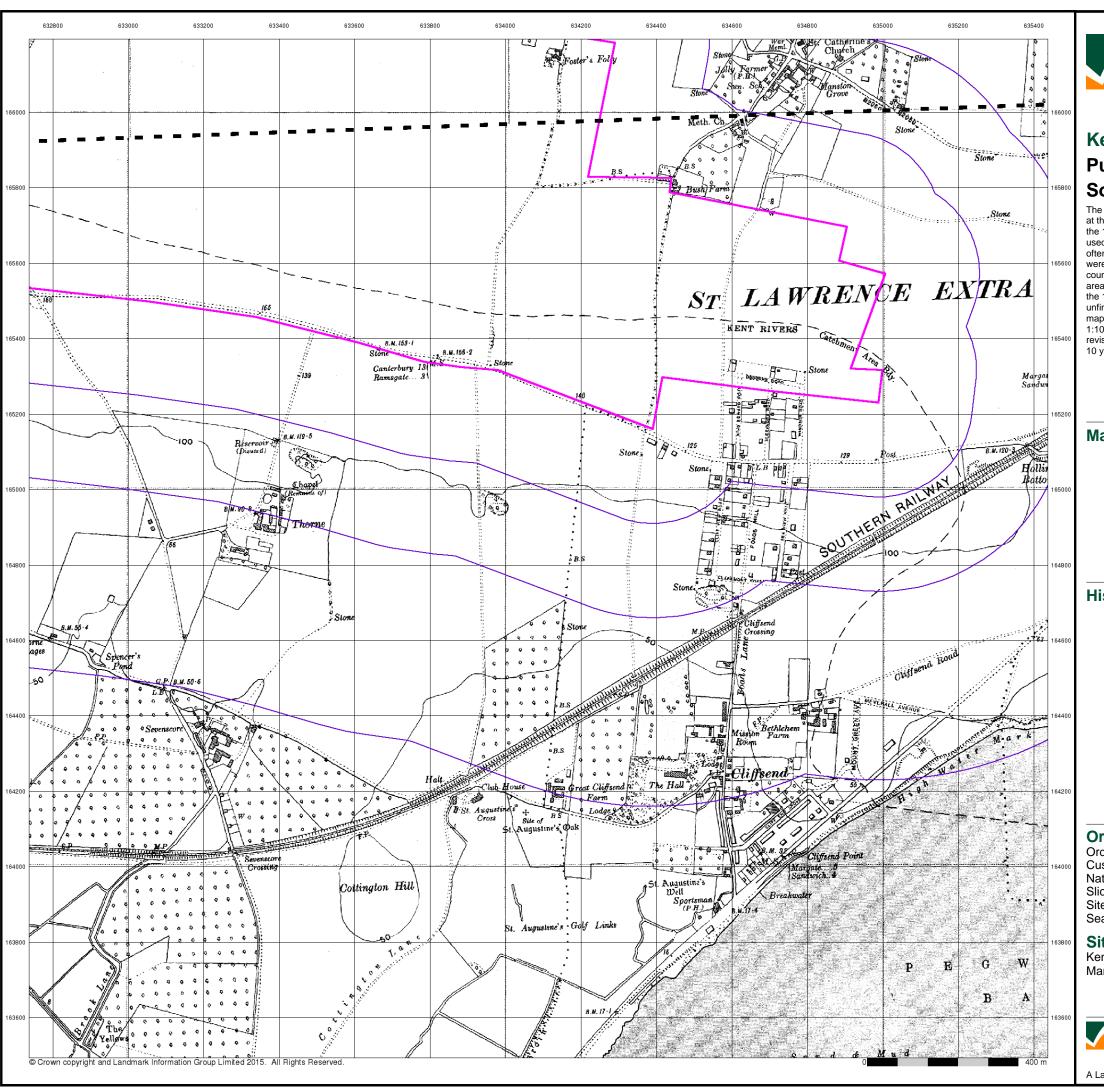
#### **Site Details**

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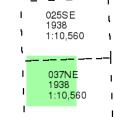




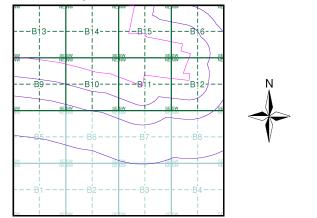
#### Published 1938 Source map scale - 1:10,560

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 10 years or so for urban areas.

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



#### **Historical Map - Slice B**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B

Site Area (Ha): 306.39 Search Buffer (m): 1000

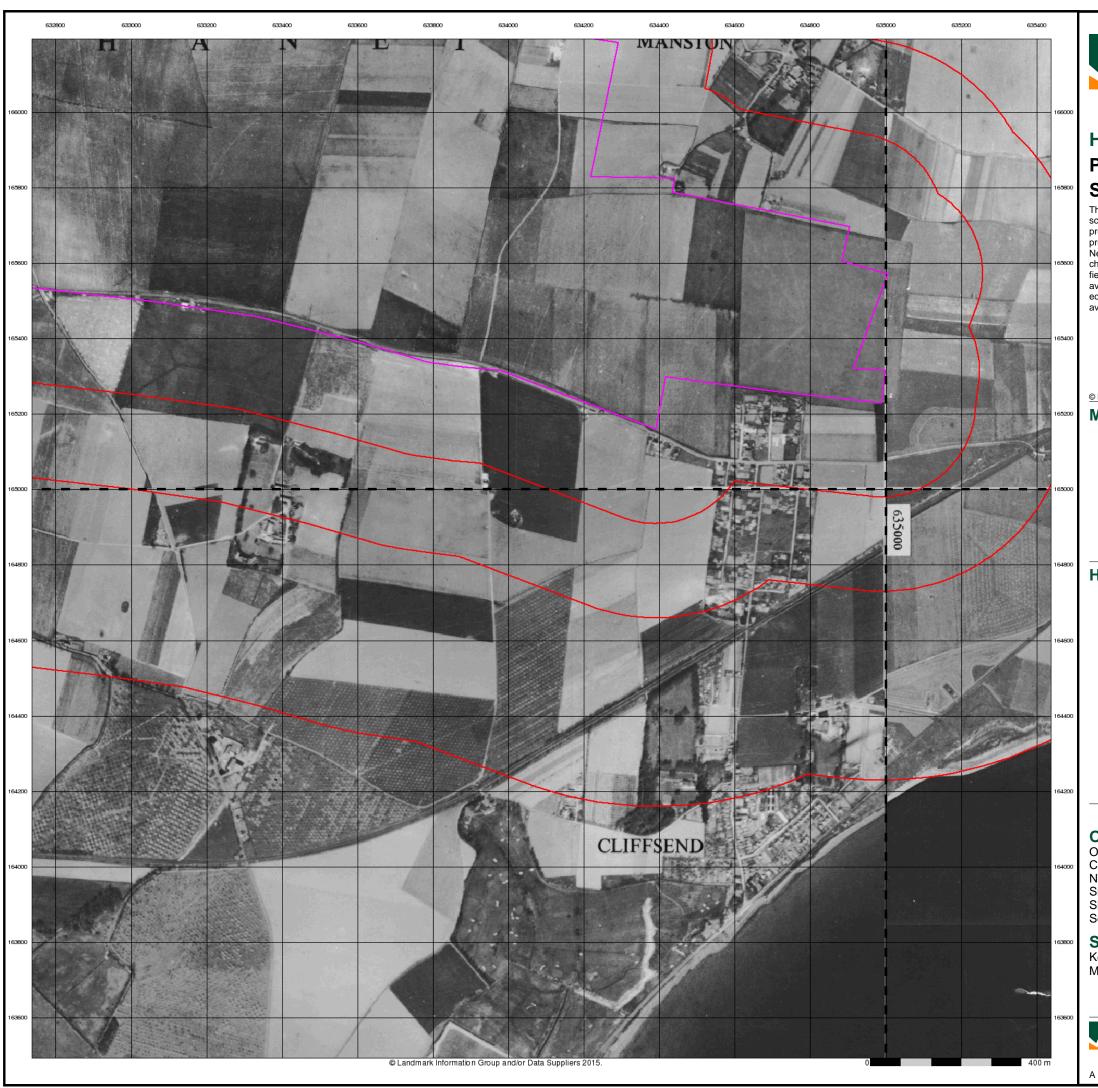
#### **Site Details**

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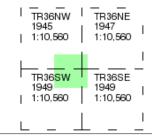


### **Historical Aerial Photography Published 1945 - 1949** Source map scale - 1:10,560

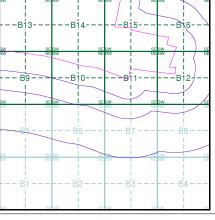
The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was rechecked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

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



#### **Historical Aerial Photography - Slice B**





#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 634120, 165250 Slice:

Site Area (Ha): 306.39 Search Buffer (m): 1000

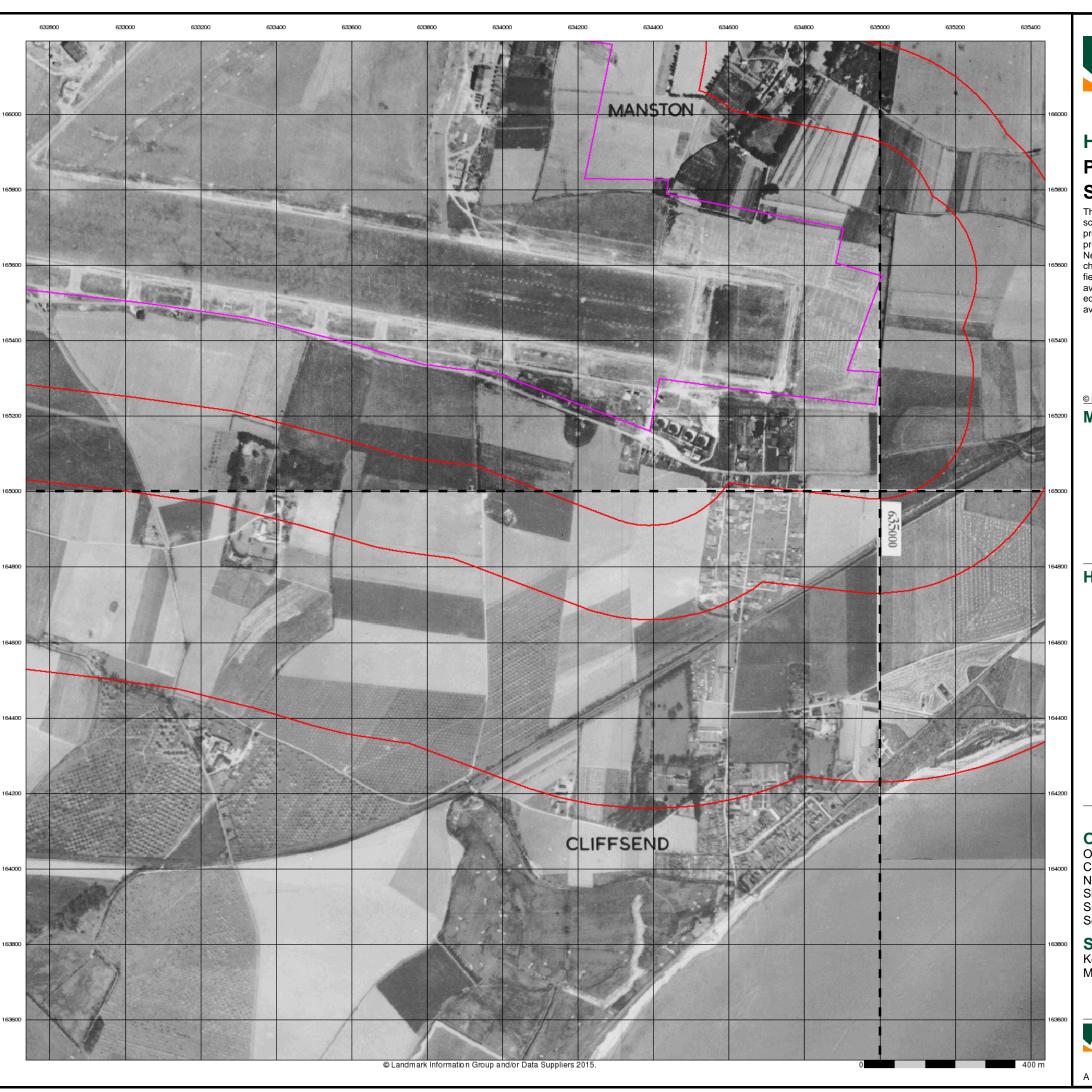
**Site Details** 

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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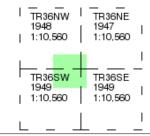


### Historical Aerial Photography Published 1947 - 1949 Source map scale - 1:10,560

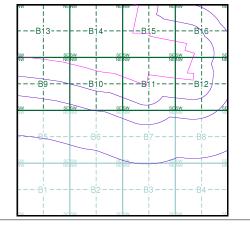
The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was rechecked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

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



#### **Historical Aerial Photography - Slice B**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B

Site Area (Ha): 306.39 Search Buffer (m): 1000

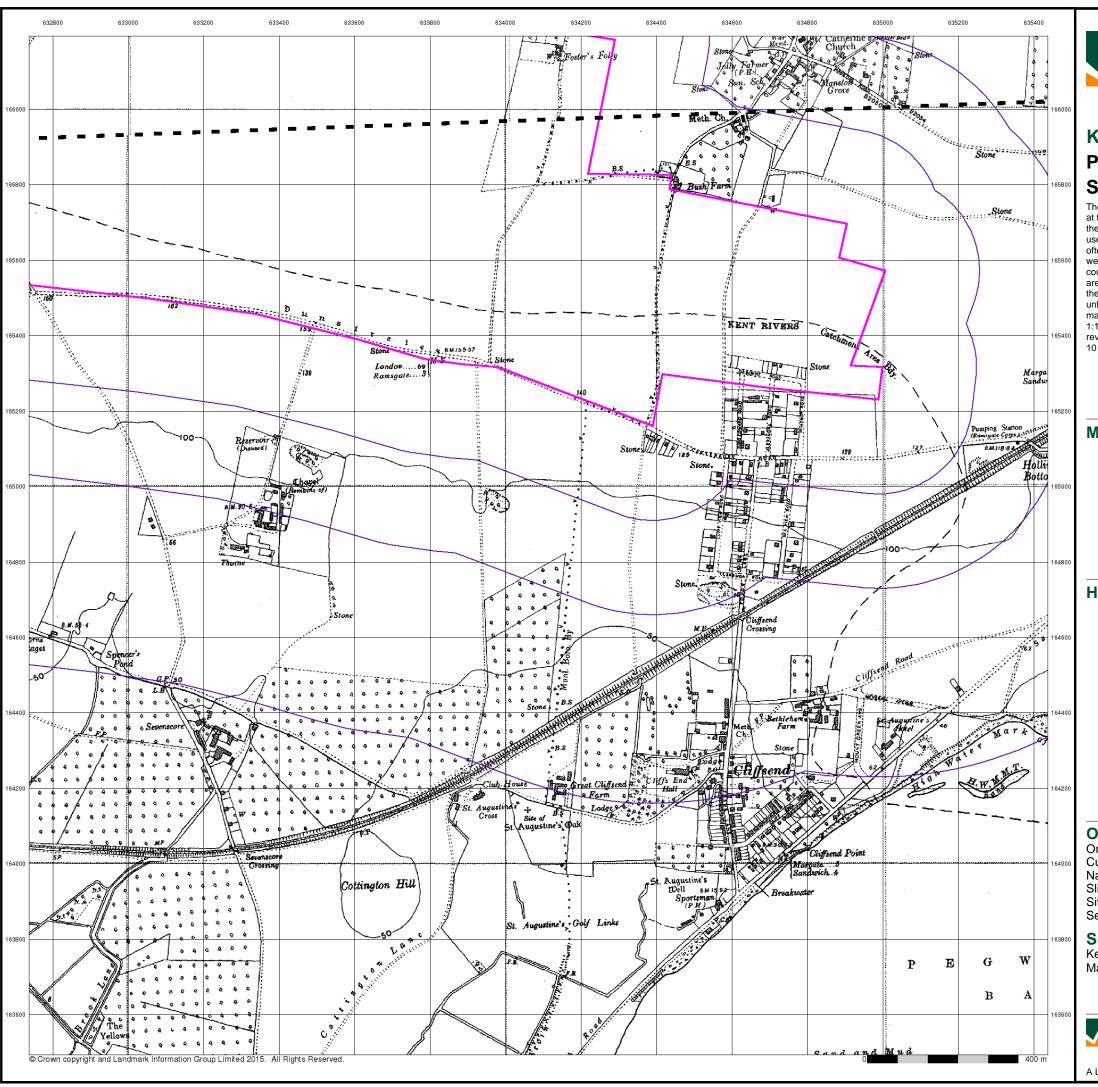
#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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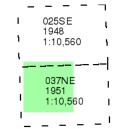




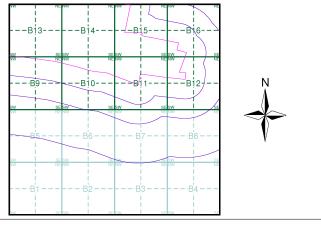
#### Published 1948 - 1951 Source map scale - 1:10,560

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 10 years or so for urban areas.

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



#### **Historical Map - Slice B**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 634120, 165250 Slice:

Site Area (Ha):

306.39 Search Buffer (m): 1000

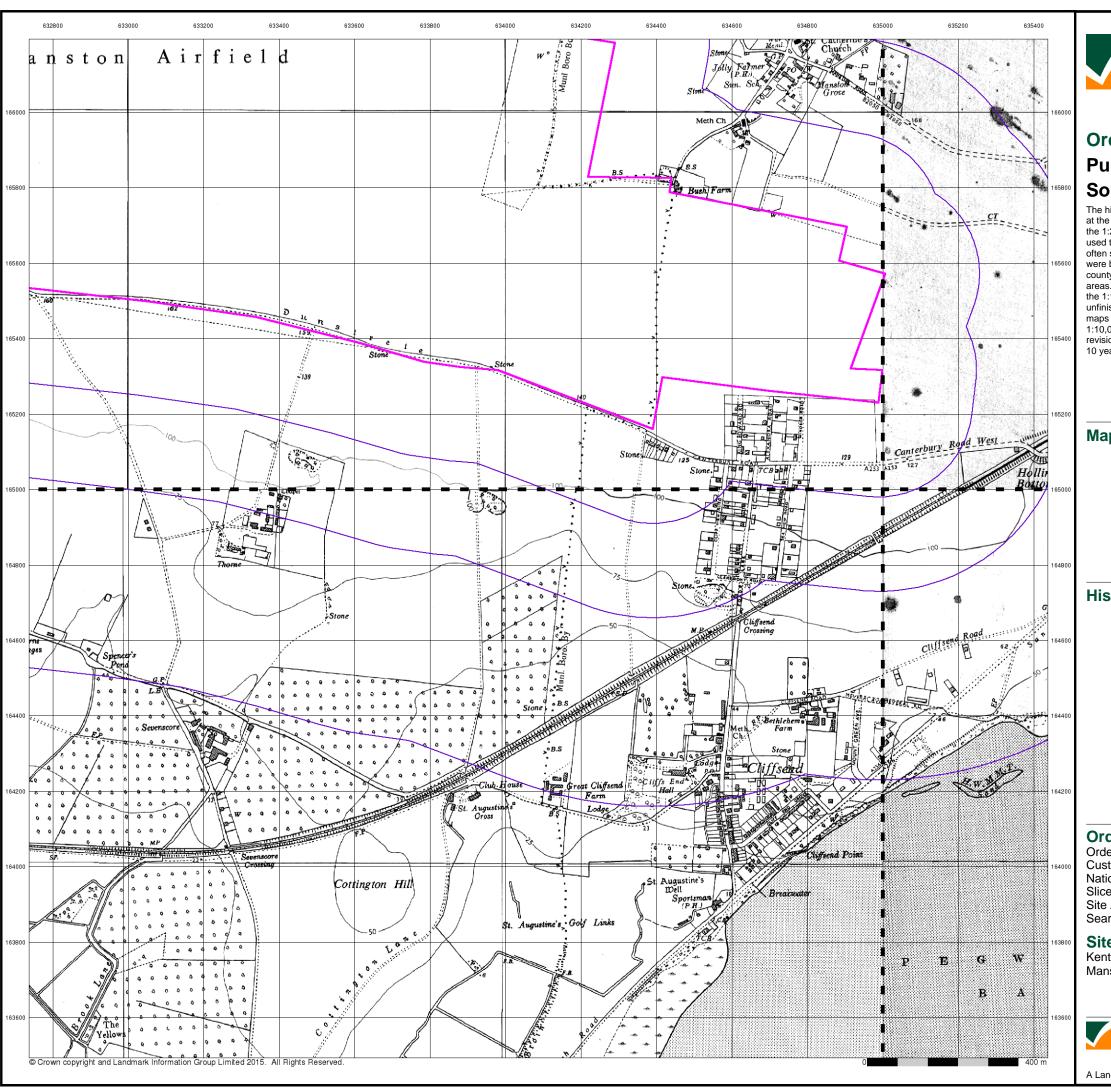
#### **Site Details**

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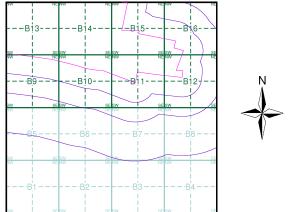
### **Ordnance Survey Plan** Published 1960 - 1962 Source map scale - 1:10,000

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)

_	_	_		_	_	_
I	TR36	NW	ı	TR3	6NE	- 1
I	1961 1:10,	560	ı	196	2 ),560	ı
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I	TR36	sw	1	TRS	6SE	ı
1	1960 1:10,	560	1	196	1 ),560	- 1
I	1.10,	000	1		,,,,,,,,,,	ı

#### **Historical Map - Slice B**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 634120, 165250 Slice:

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

#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 12 of 19

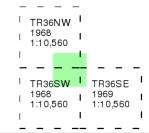




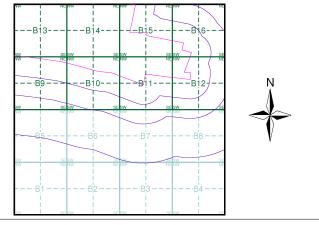
# Ordnance Survey Plan Published 1968 - 1969 Source map scale - 1:10,000

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 B**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B
Site Area (Ha): 306.39

Site Area (Ha): 306.3 Search Buffer (m): 1000

#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 13 of 19

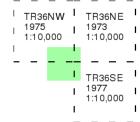




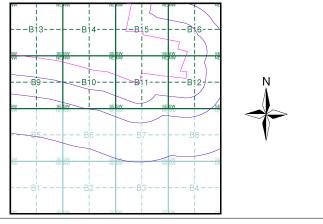
# Ordnance Survey Plan Published 1973 - 1977 Source map scale - 1:10,000

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 B**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B

Site Area (Ha): 306.39 Search Buffer (m): 1000

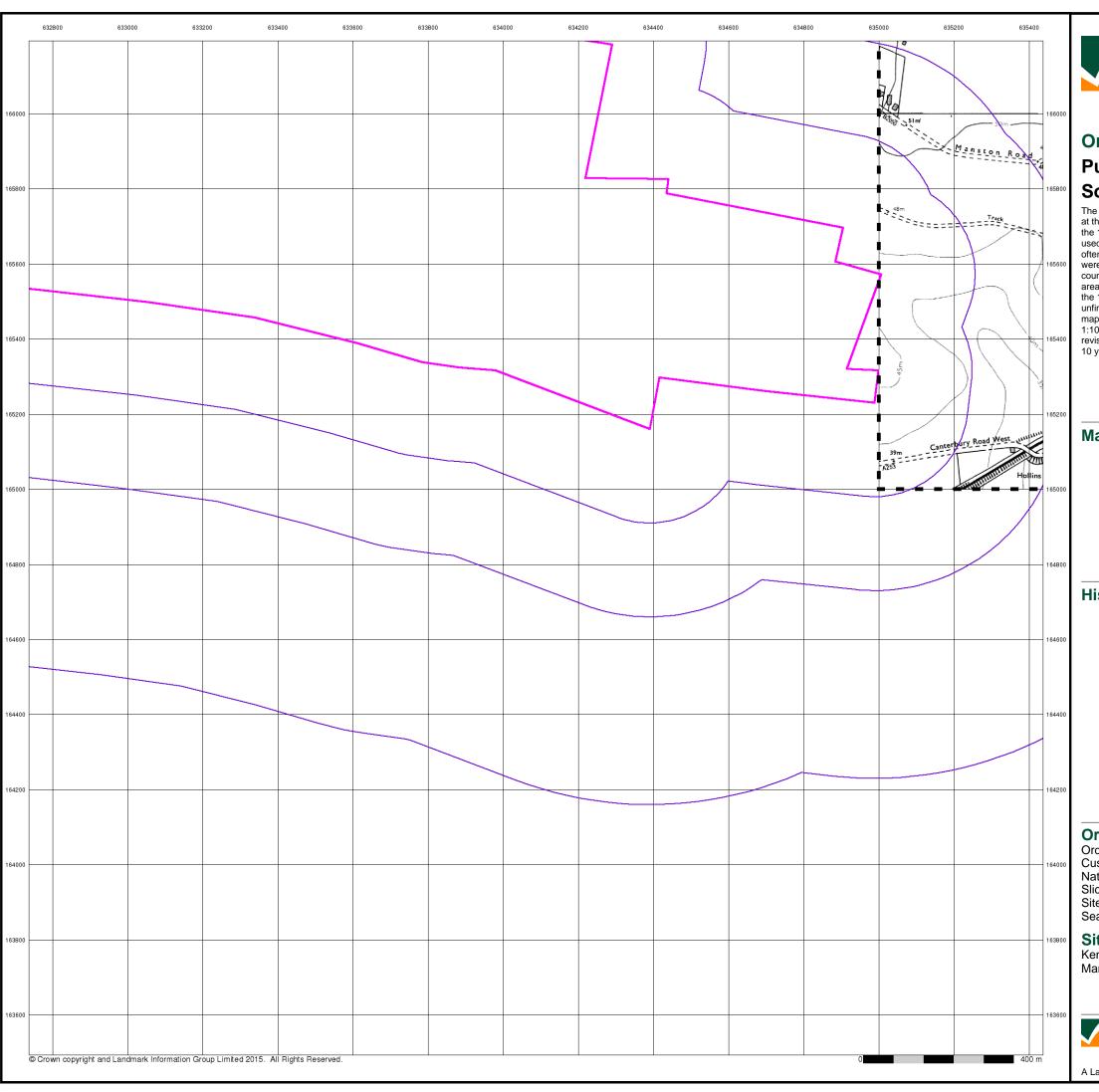
#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



0844 844 9952 0844 844 9951 : www.envirocheck.c

A Landmark Information Group Service v47.0 17-Mar-2016 Page 14 of 19

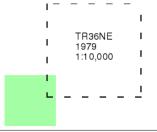




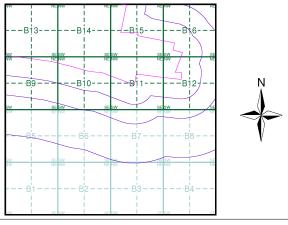
### **Ordnance Survey Plan Published 1979** Source map scale - 1:10,000

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 B**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 634120, 165250 Slice:

Site Area (Ha):

306.39 Search Buffer (m): 1000

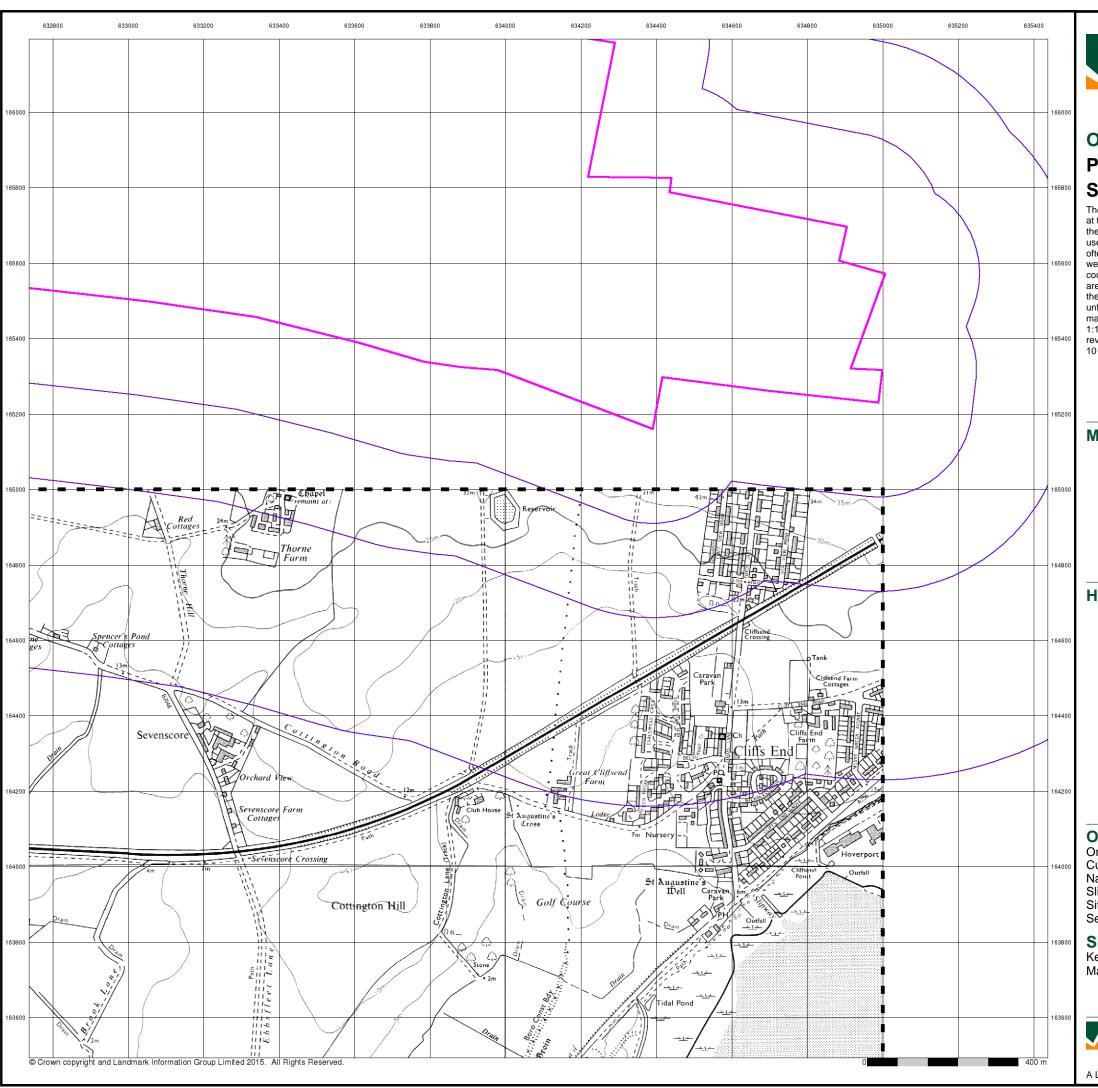
#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



0844 844 9951

A Landmark Information Group Service v47.0 17-Mar-2016 Page 15 of 19

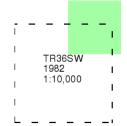




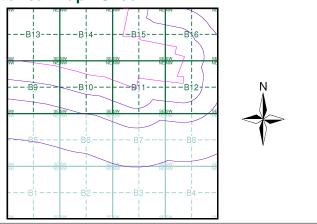
# Ordnance Survey Plan Published 1982 Source map scale - 1:10,000

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 B**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B

Site Area (Ha): 306.39 Search Buffer (m): 1000

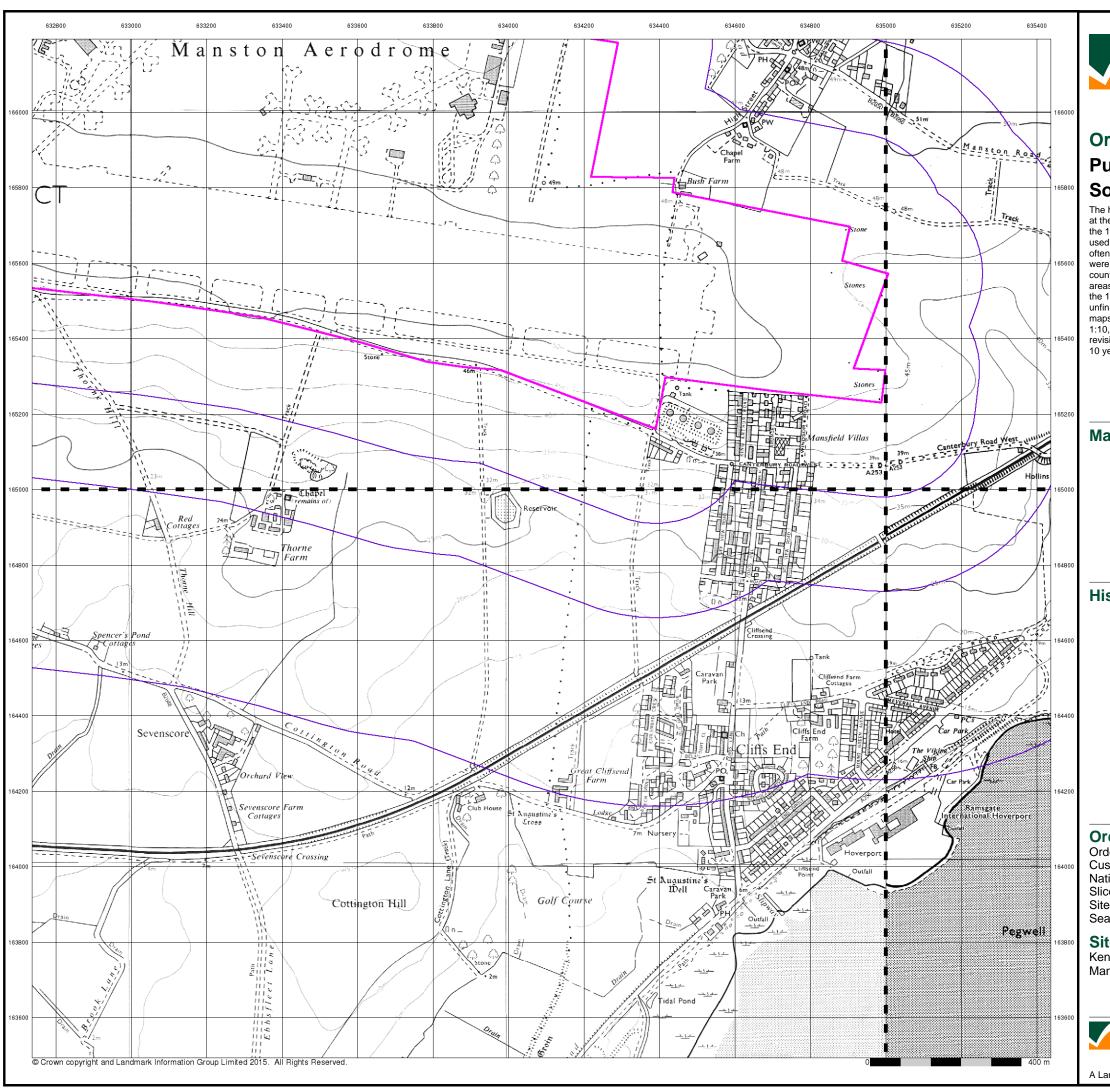
#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



el: 0844 844 9952 xx: 0844 844 9951 eb: www.envirocheck.

A Landmark Information Group Service v47.0 17-Mar-2016 Page 16 of 19





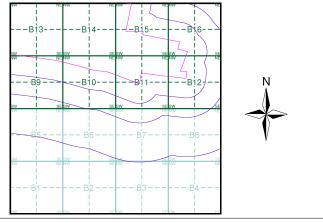
# Ordnance Survey Plan Published 1990 - 1995 Source map scale - 1:10,000

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)

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#### **Historical Map - Slice B**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B

Site Area (Ha): 306.39 Search Buffer (m): 1000

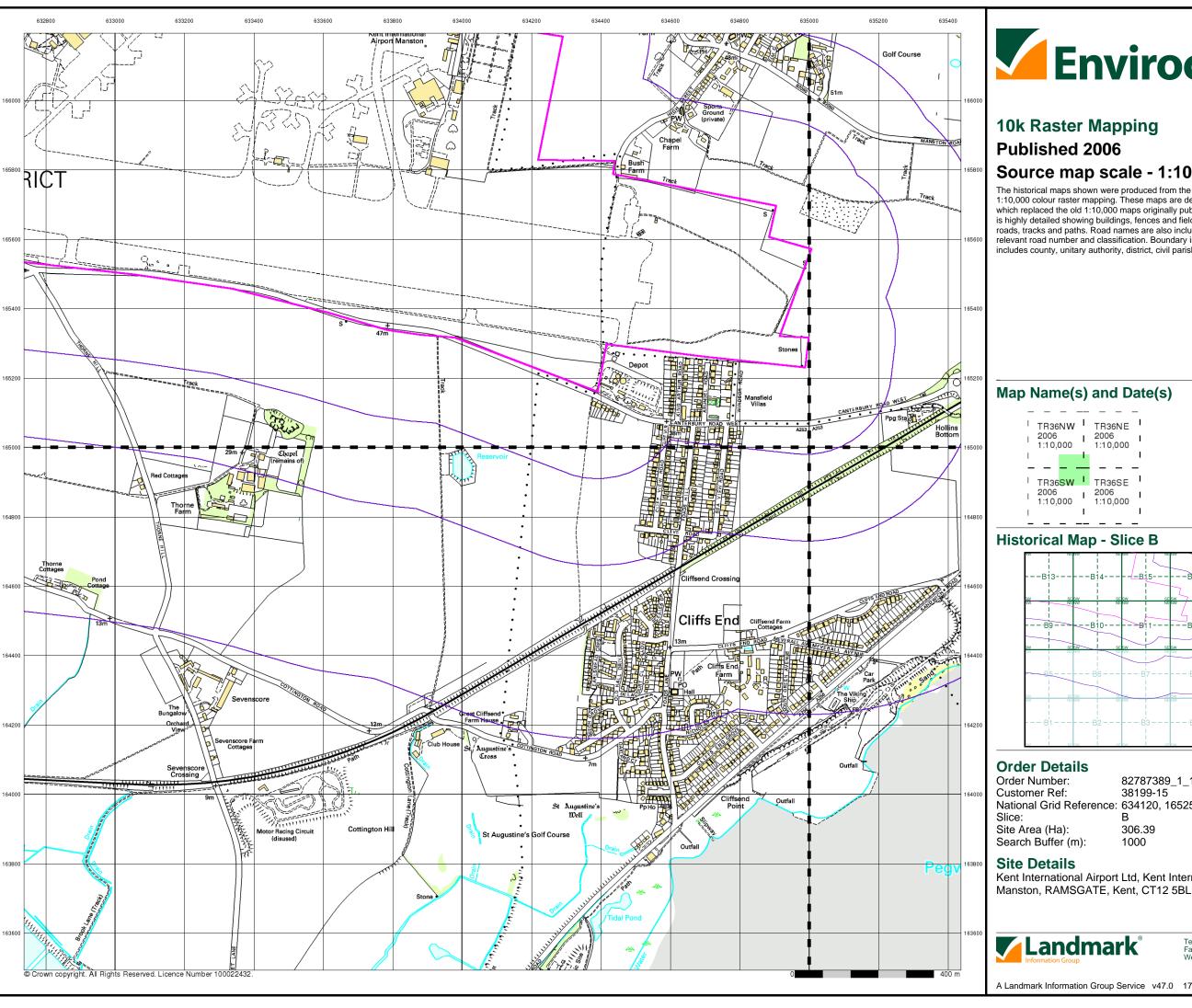
#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



l: 0844 844 9952 x: 0844 844 9951 eb: www.envirocheck

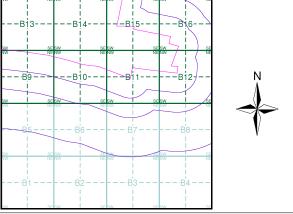
A Landmark Information Group Service v47.0 17-Mar-2016 Page 17 of 19





# Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

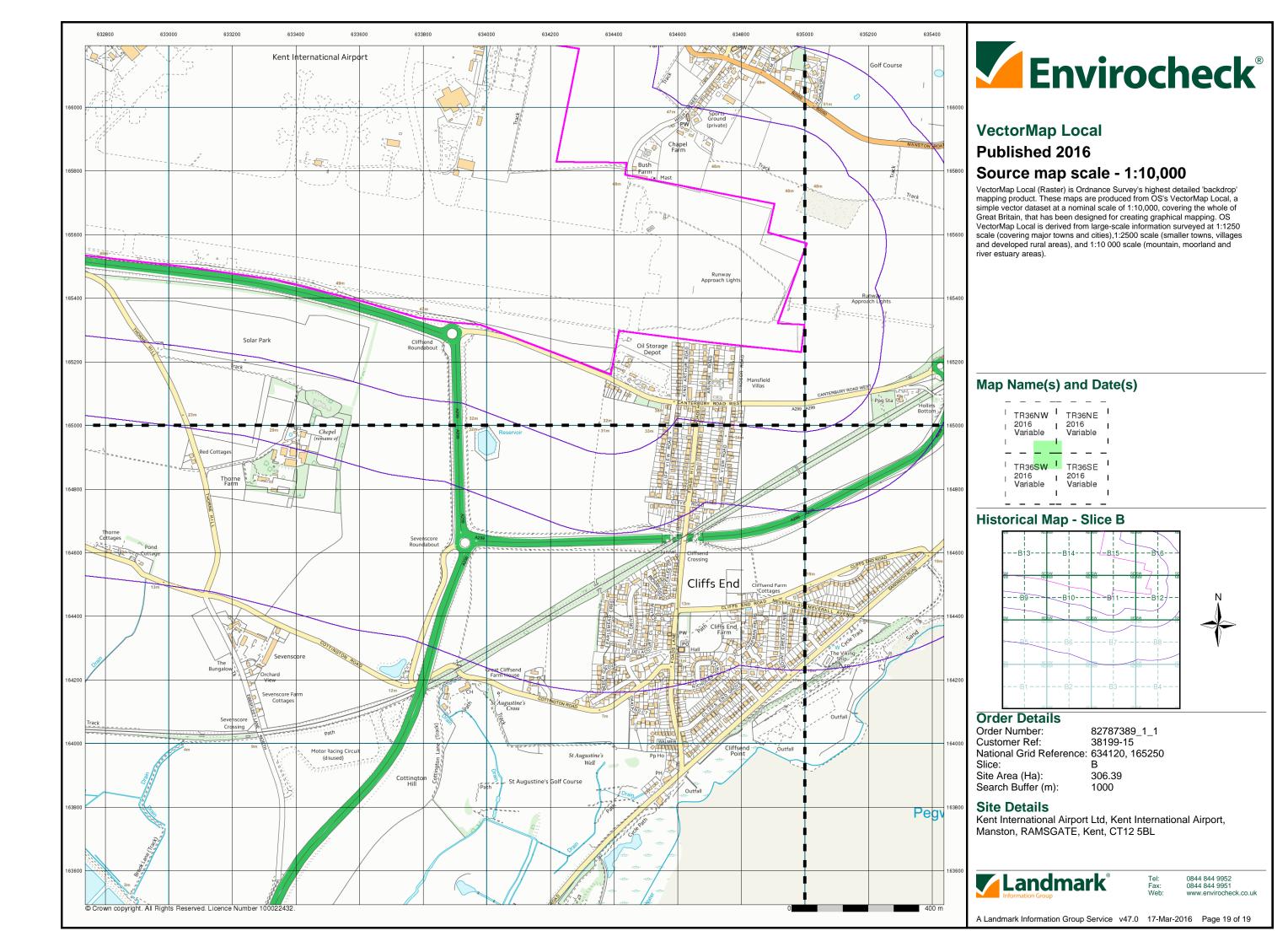


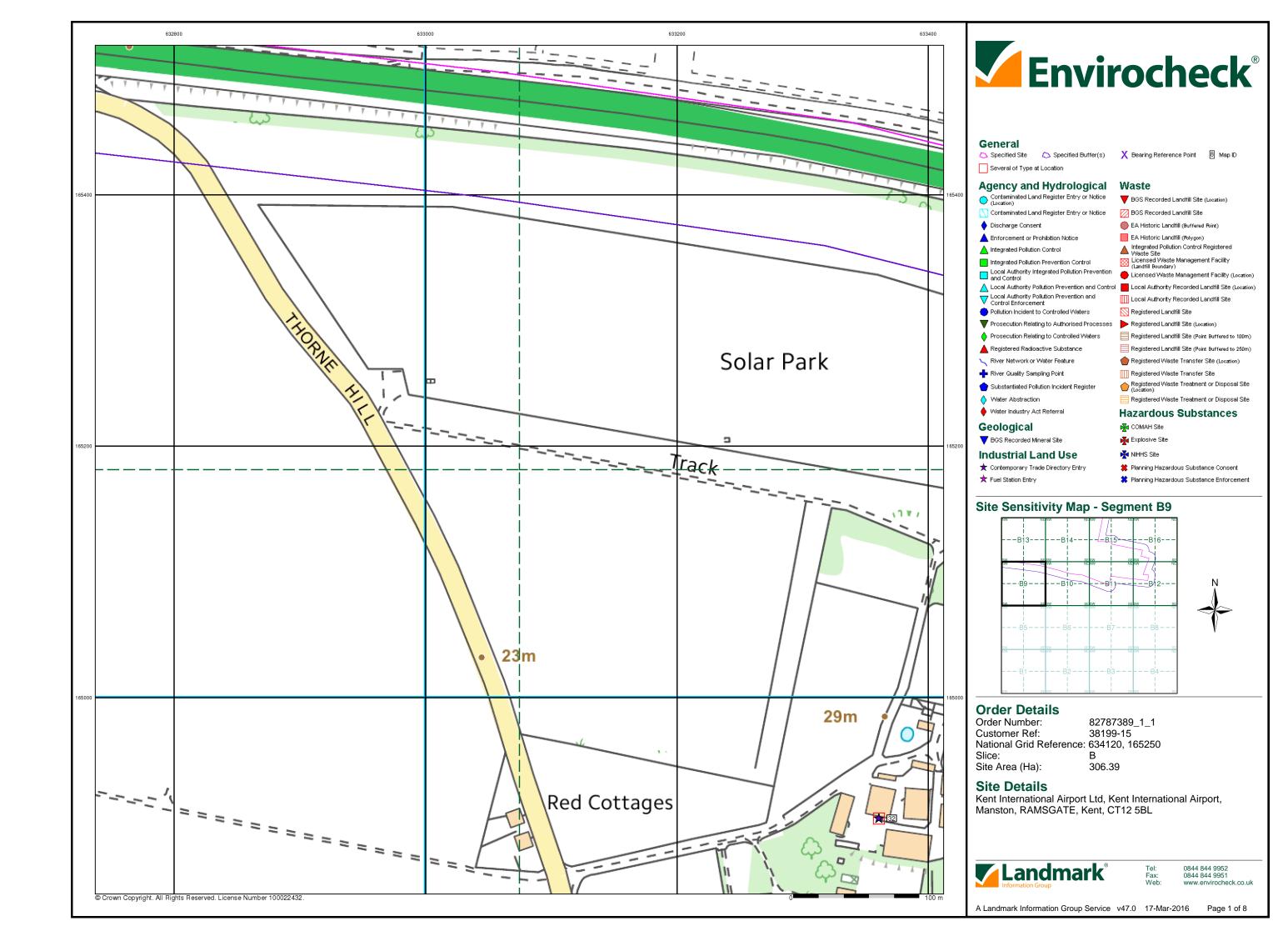
82787389_1_1 38199-15 National Grid Reference: 634120, 165250

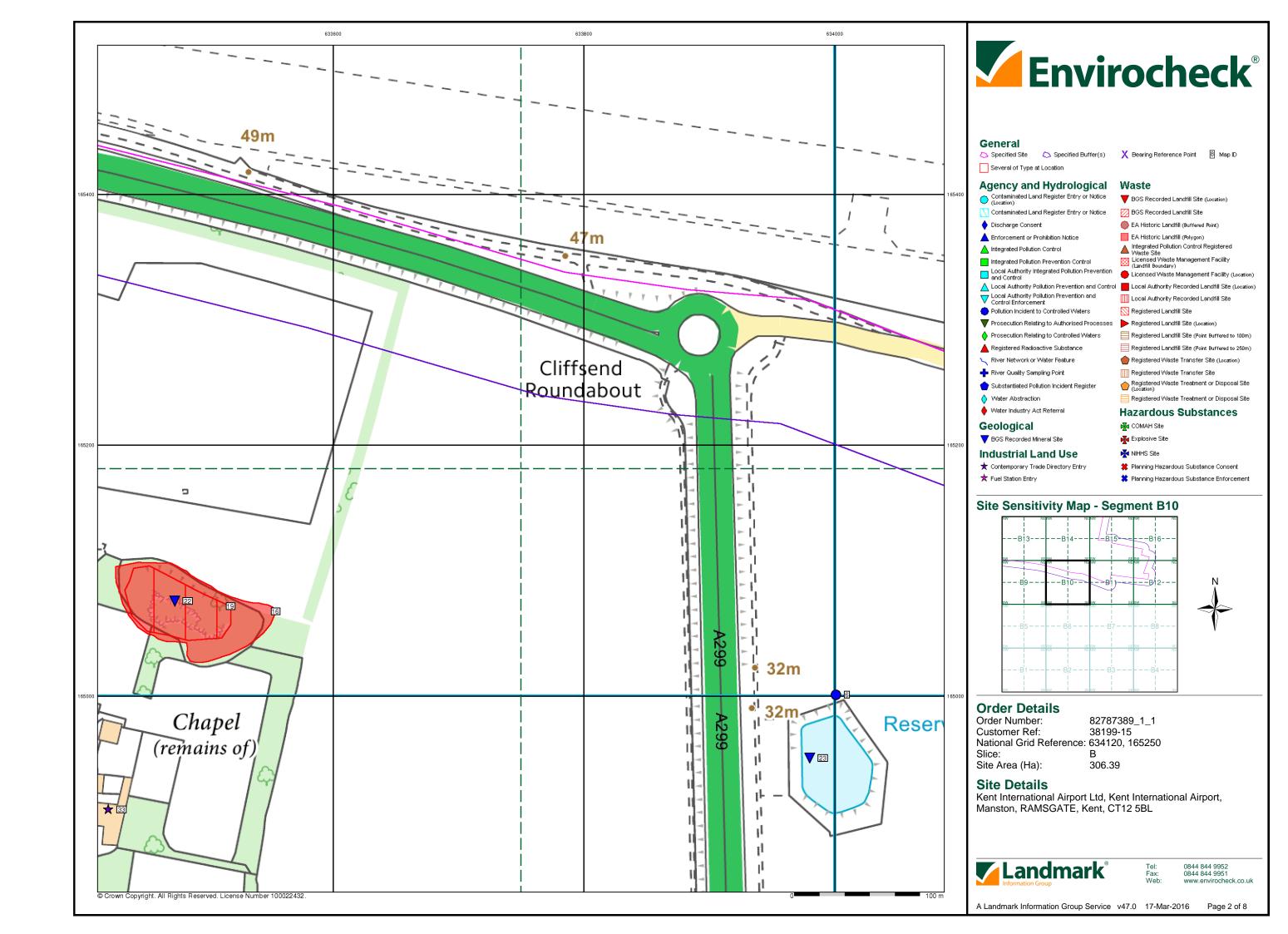
Kent International Airport Ltd, Kent International Airport,

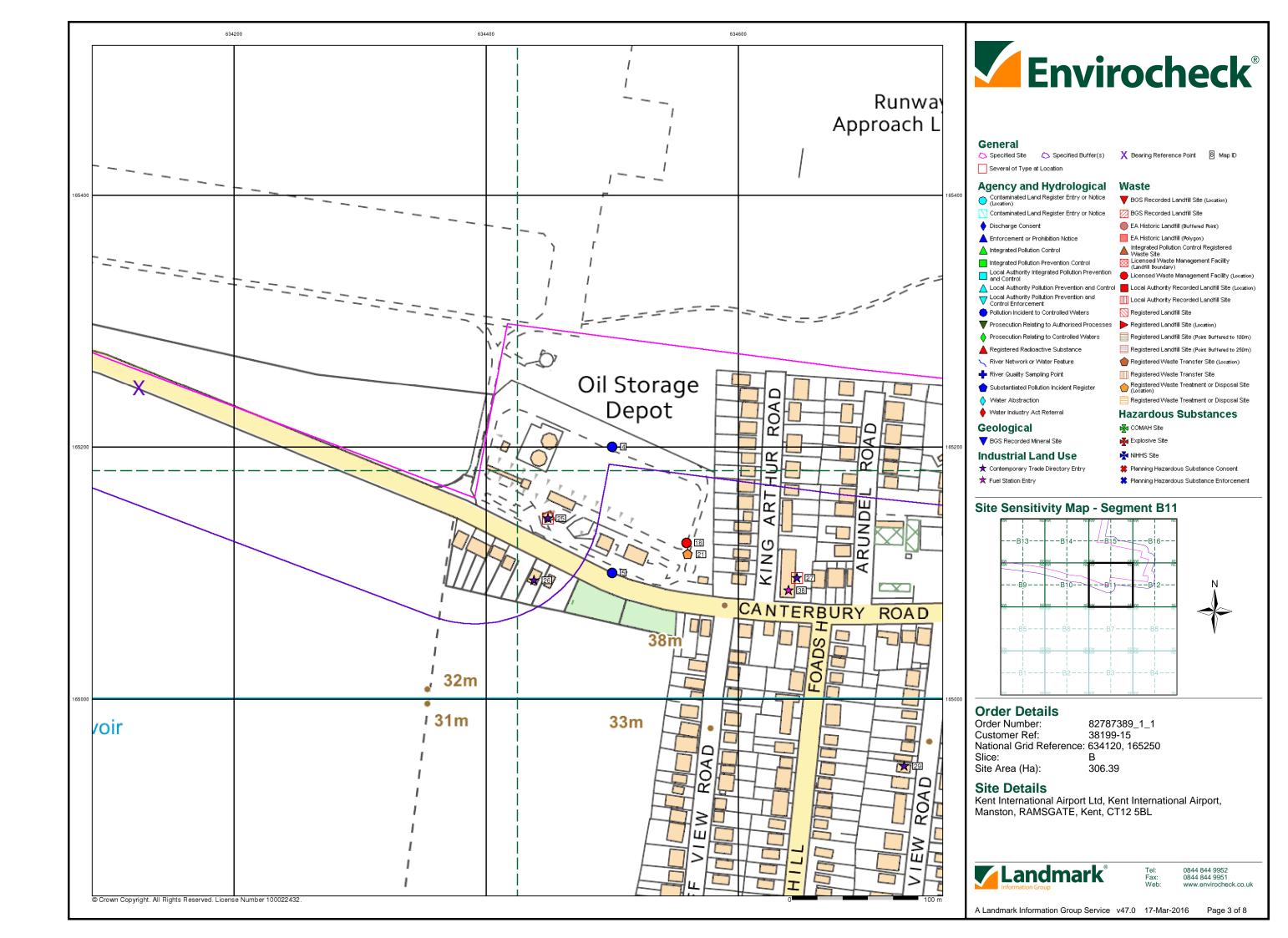
0844 844 9952 0844 844 9951

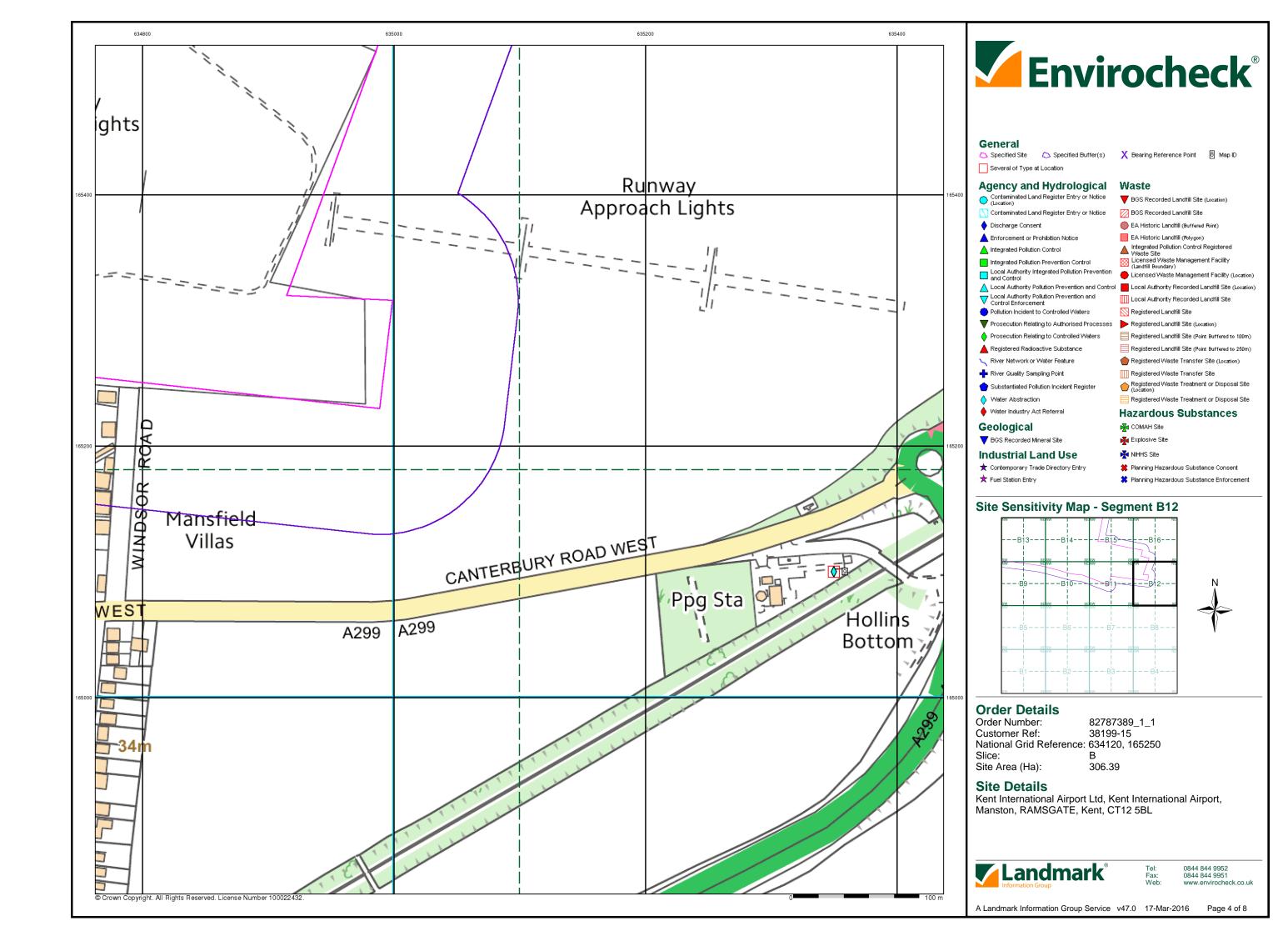
A Landmark Information Group Service v47.0 17-Mar-2016 Page 18 of 19

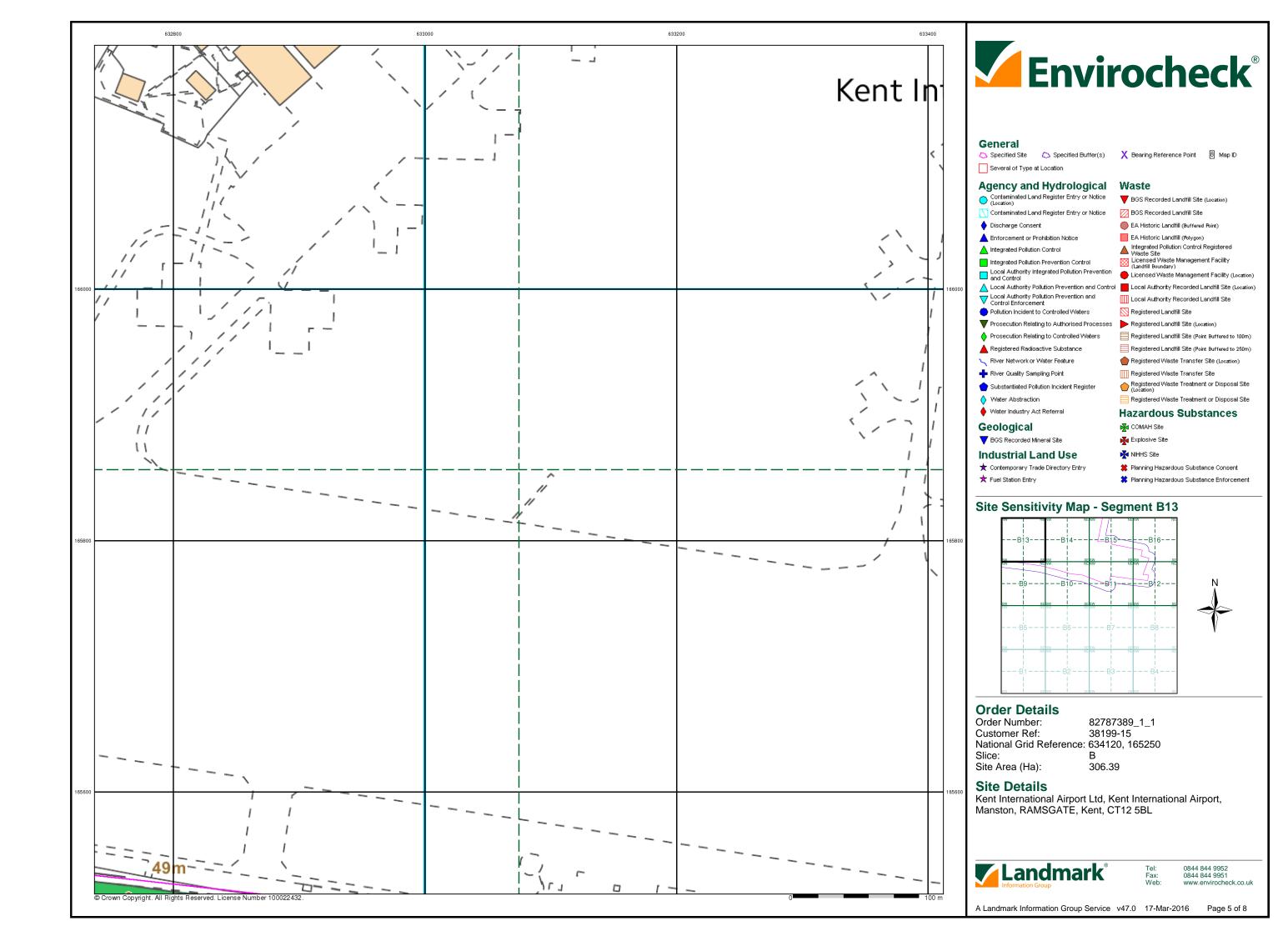


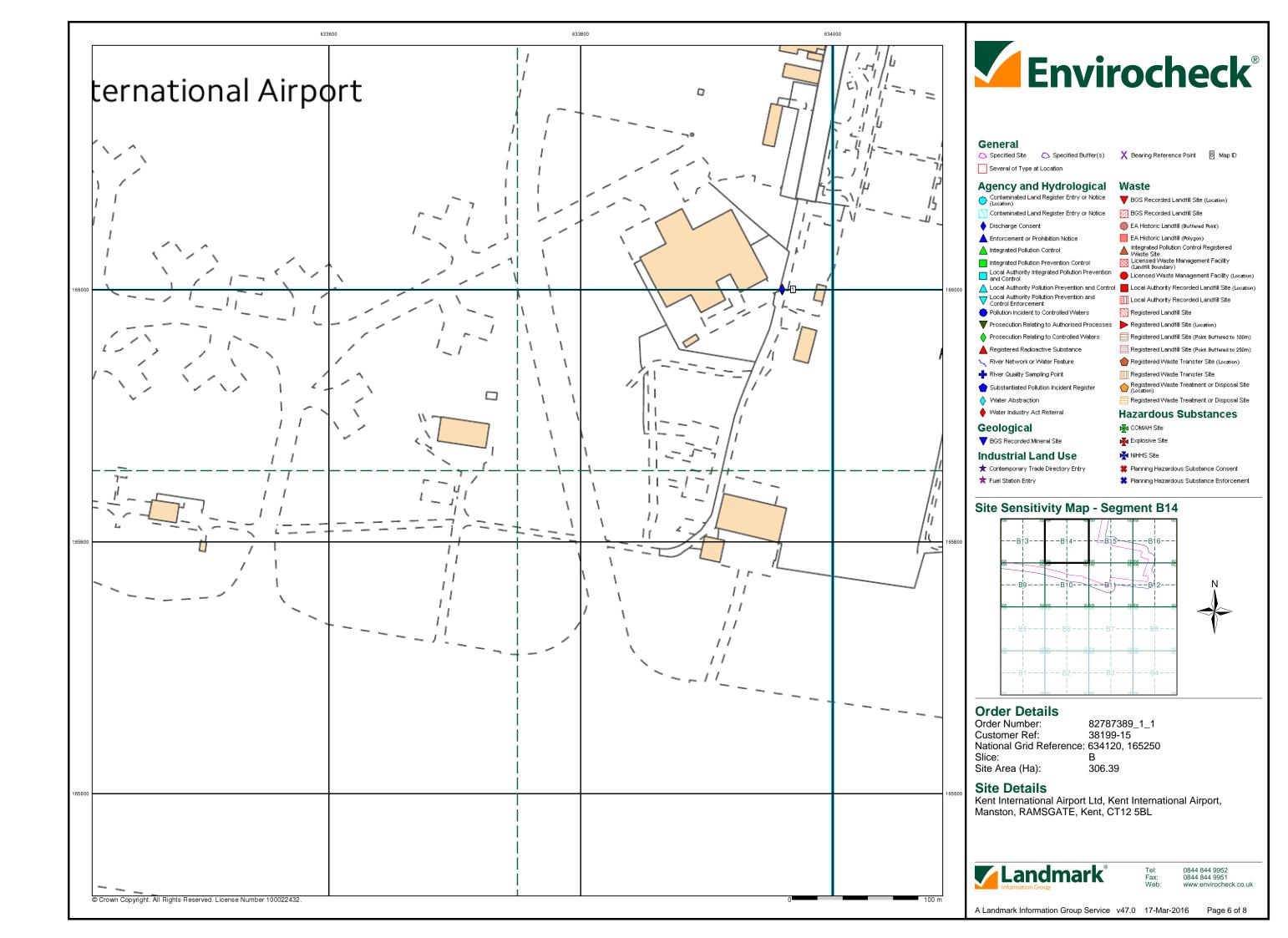


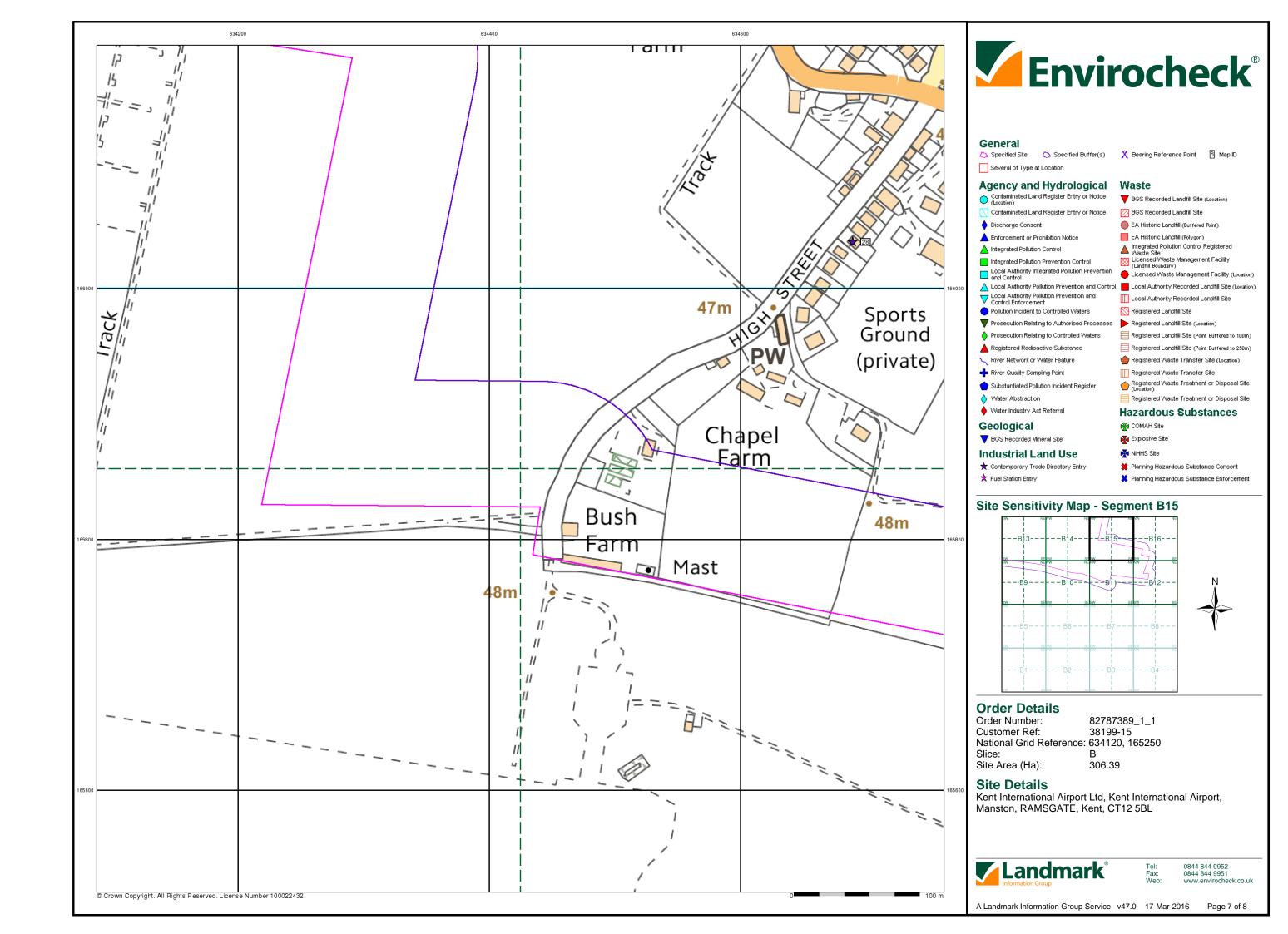


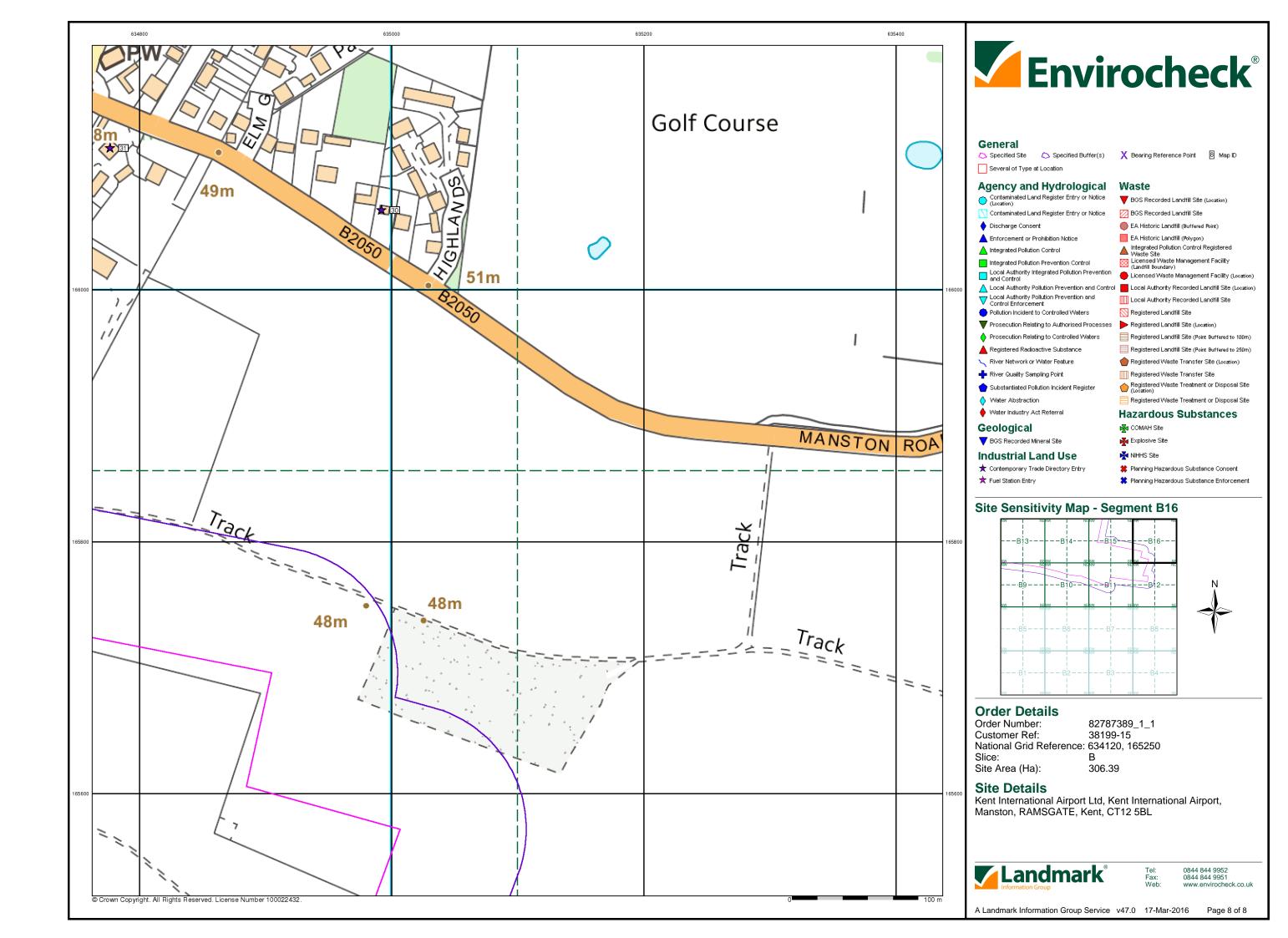


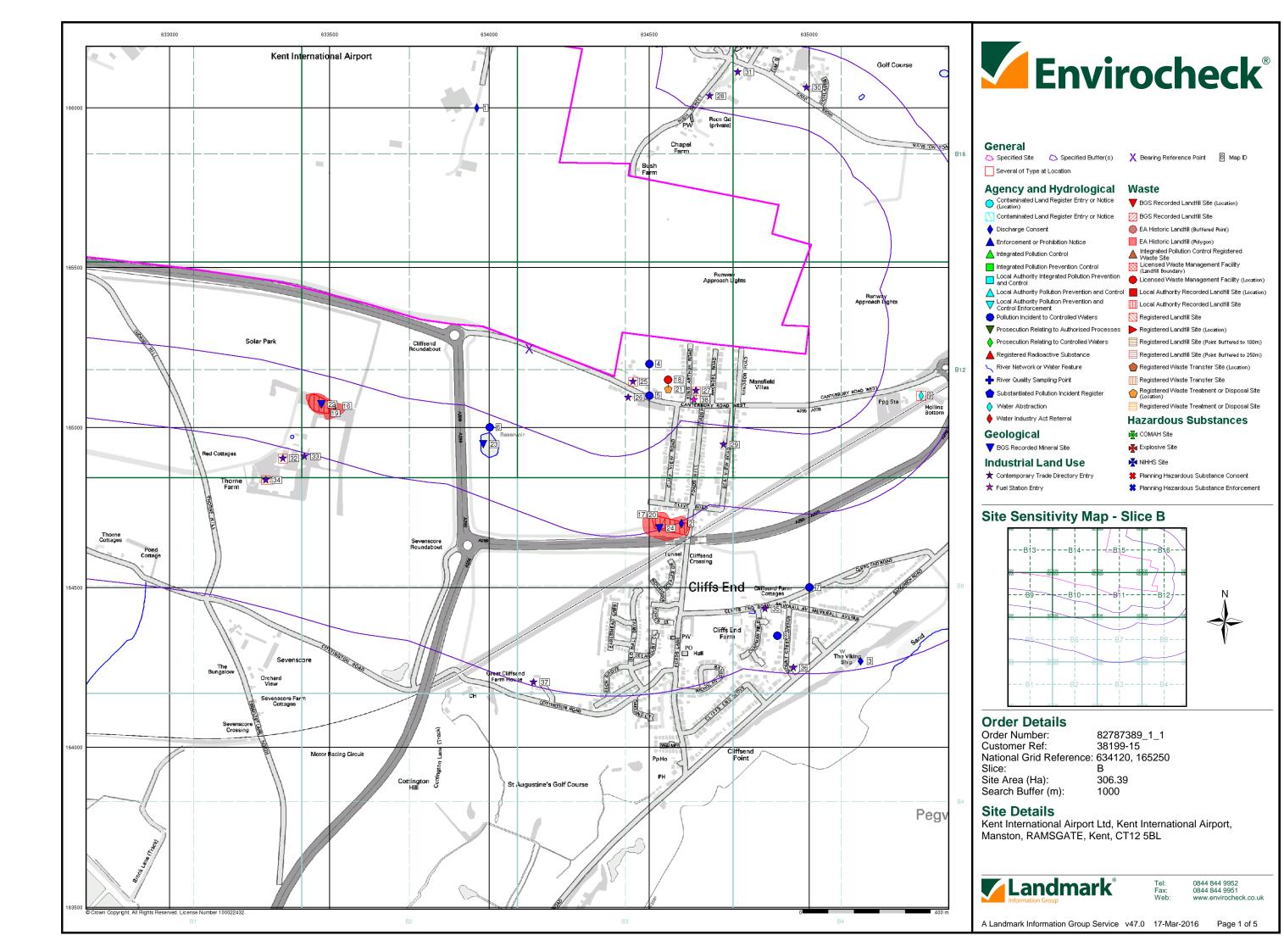


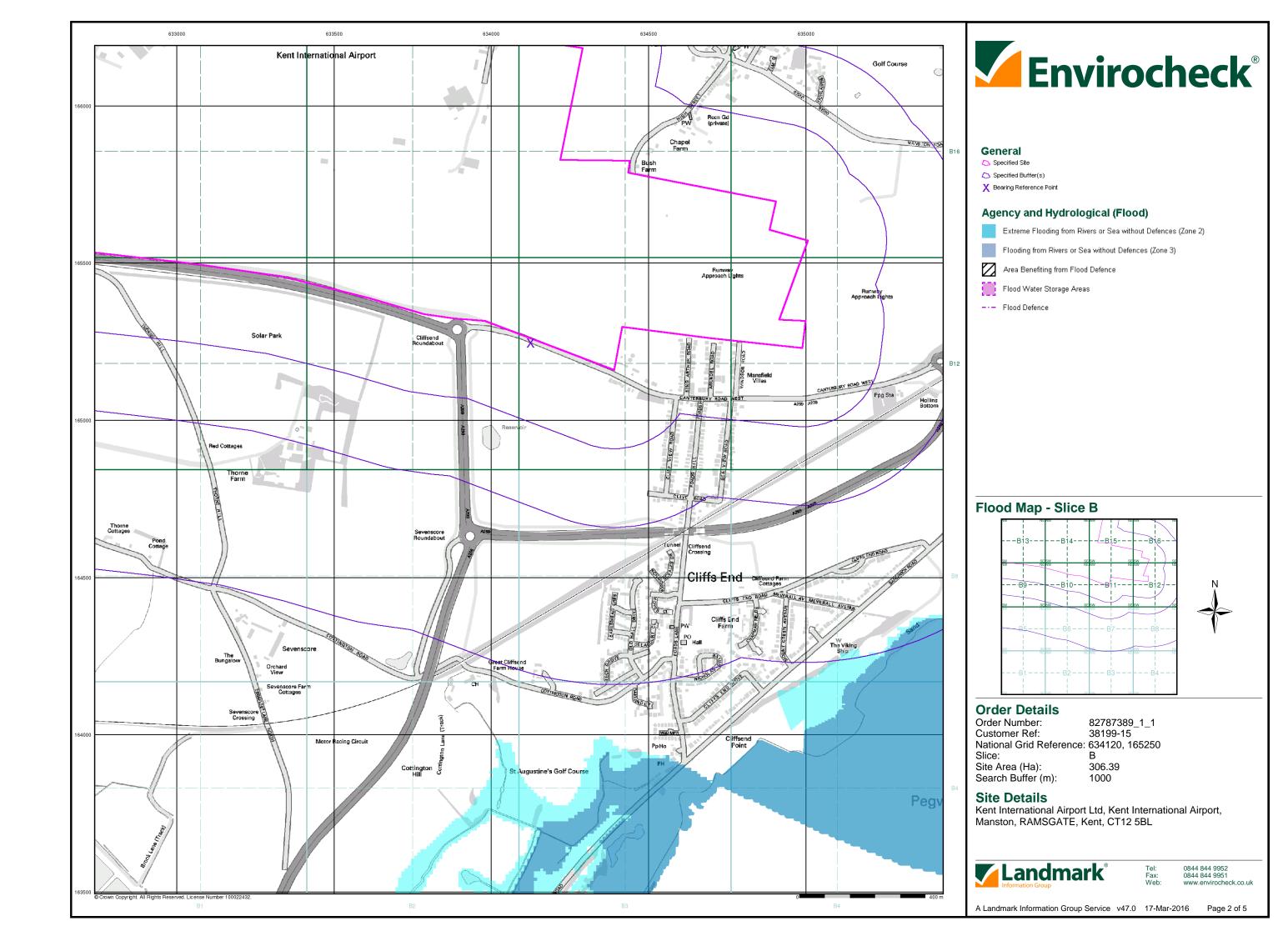


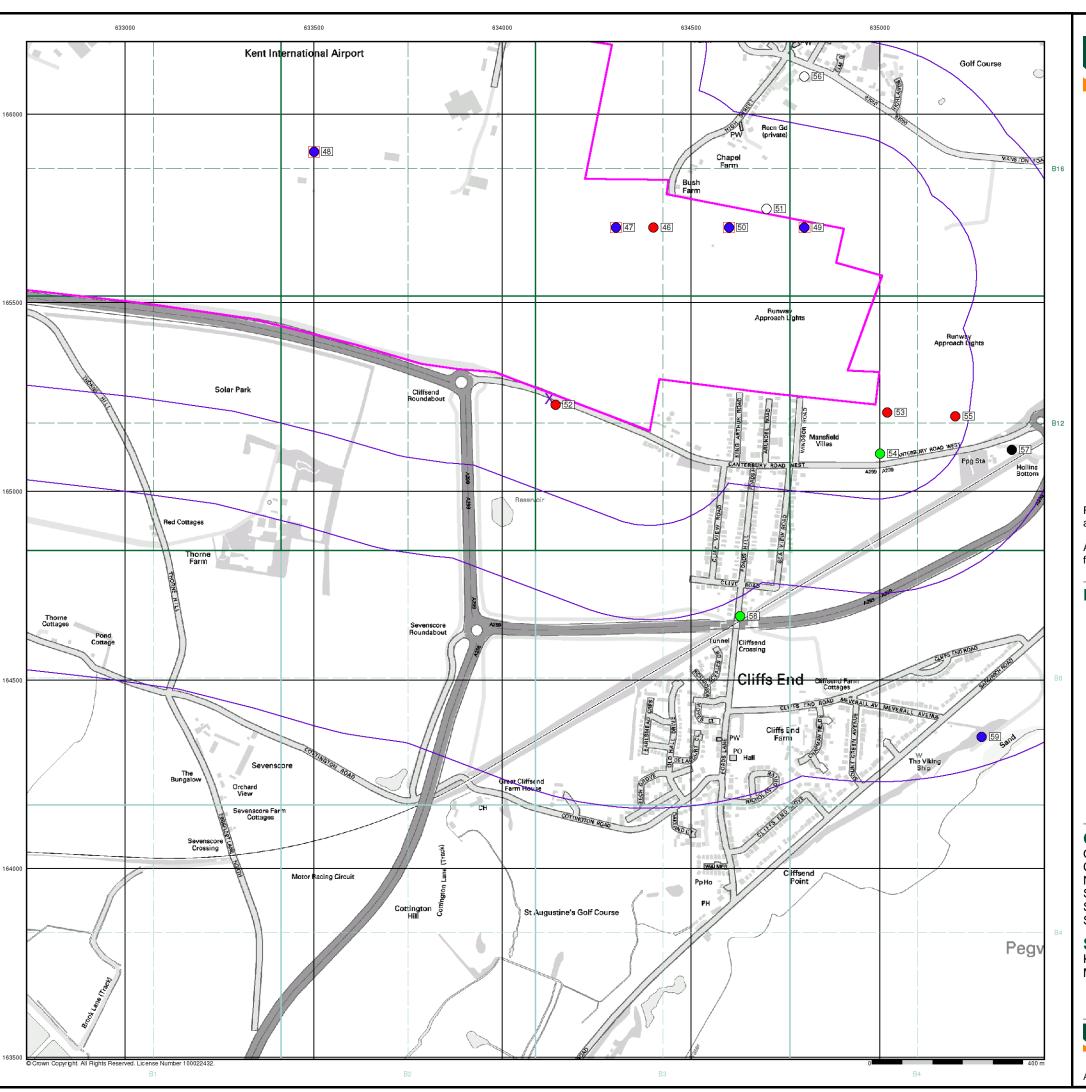














#### General

Specified Site

Specified Buffer(s)

X Bearing Reference Point

8 Map ID

Several of Type at Location

#### Agency and Hydrological (Boreholes)

BGS Borehole Depth 0 - 10m

BGS Borehole Depth 10 - 30m

BGS Borehole Depth 30m +

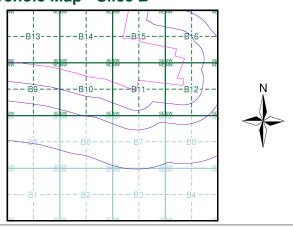
Confidential

Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

#### **Borehole Map - Slice B**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250

Slice:

Site Area (Ha): 306.39 Search Buffer (m): 1000

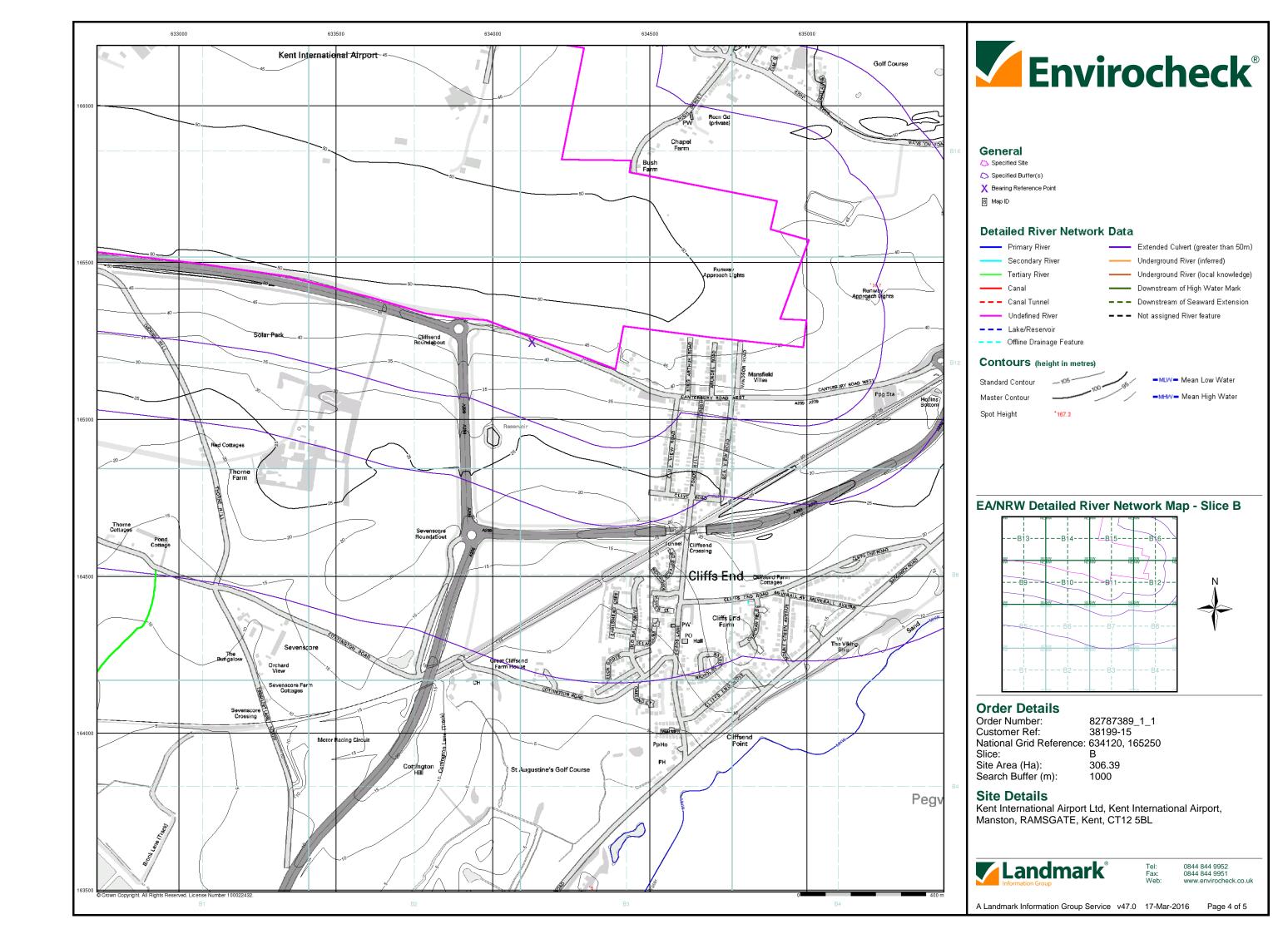
#### **Site Details**

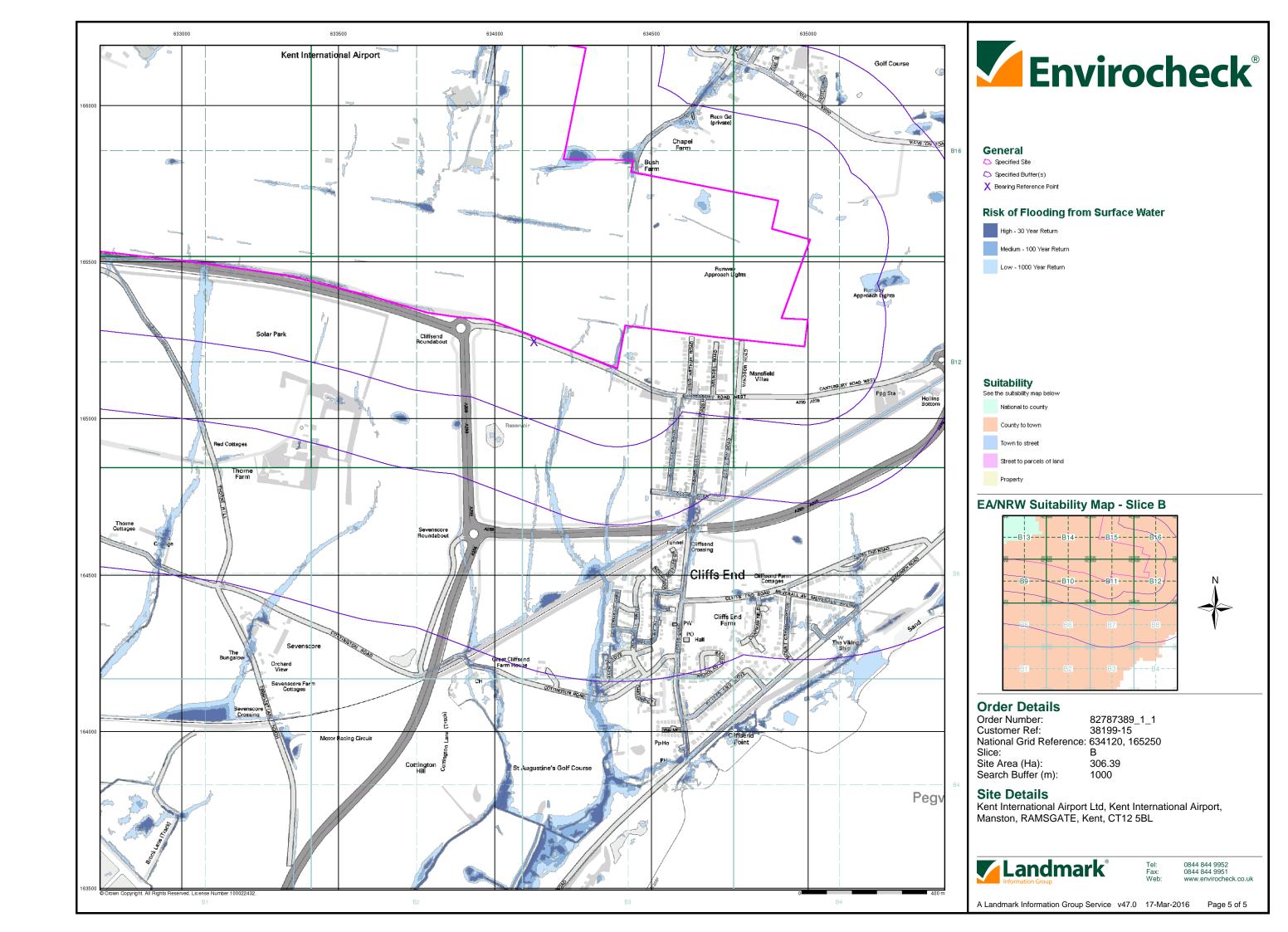
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

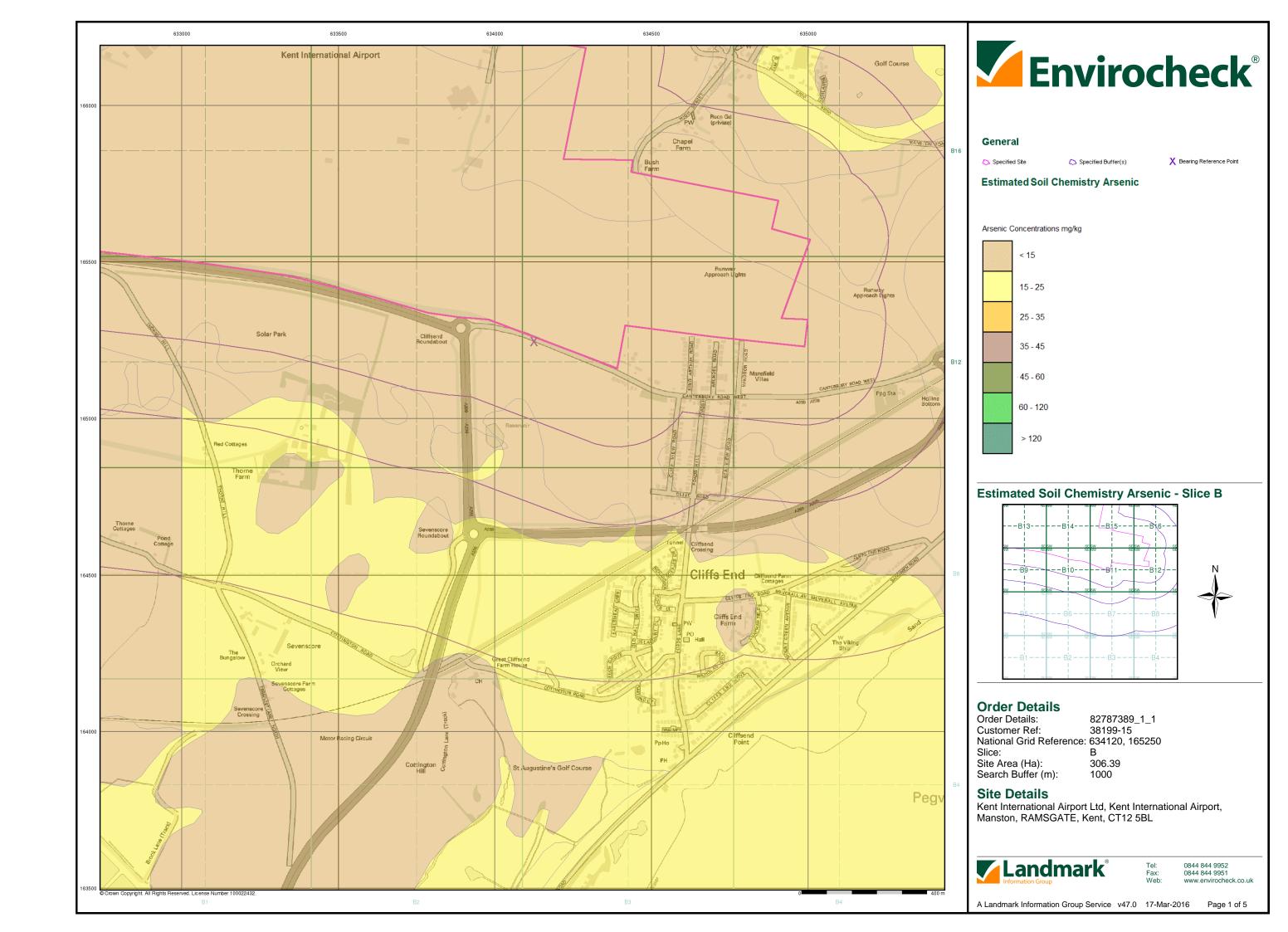


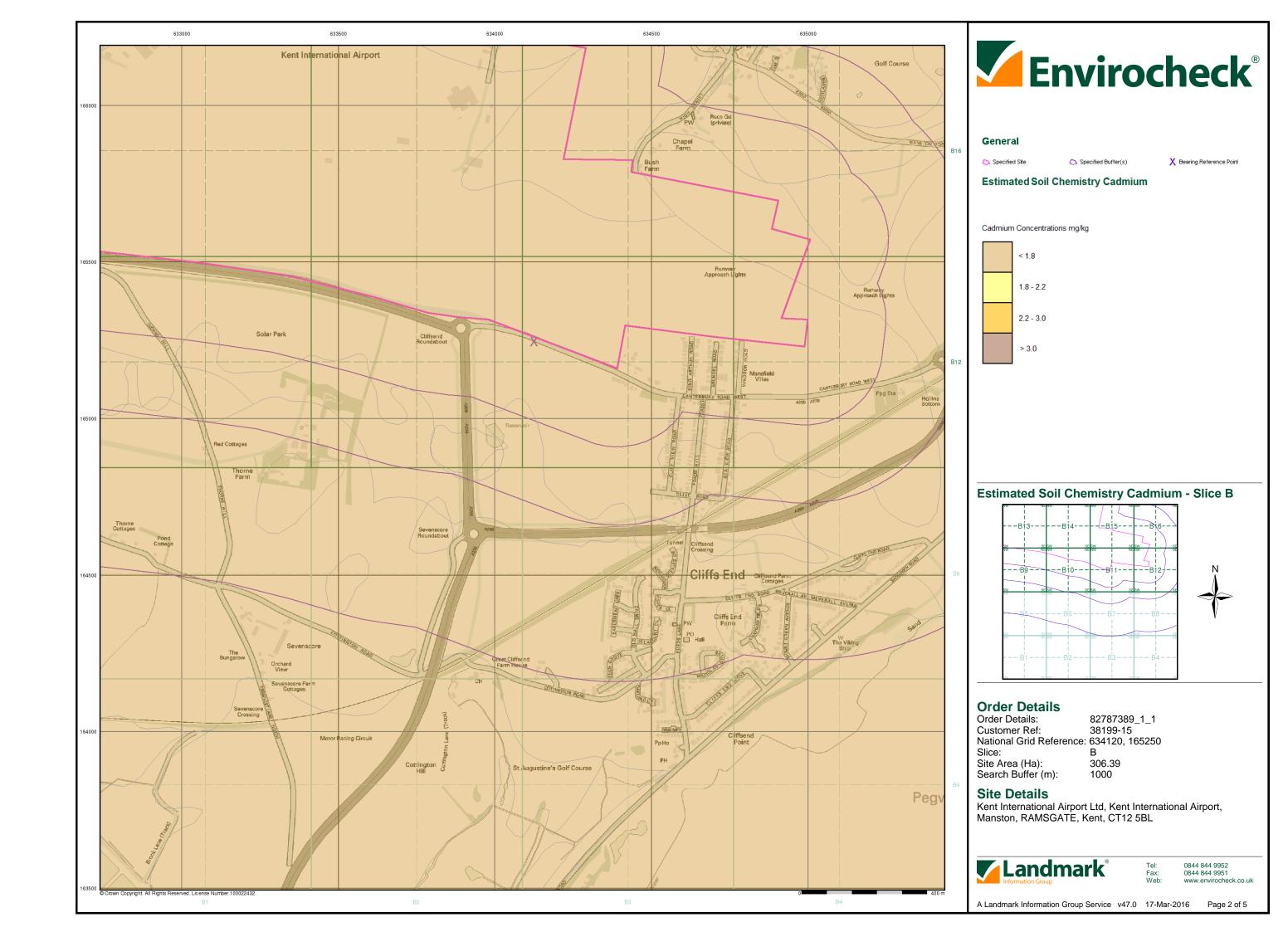
l: 0844 844 9952 x: 0844 844 9951 eb: www.envirocheck.

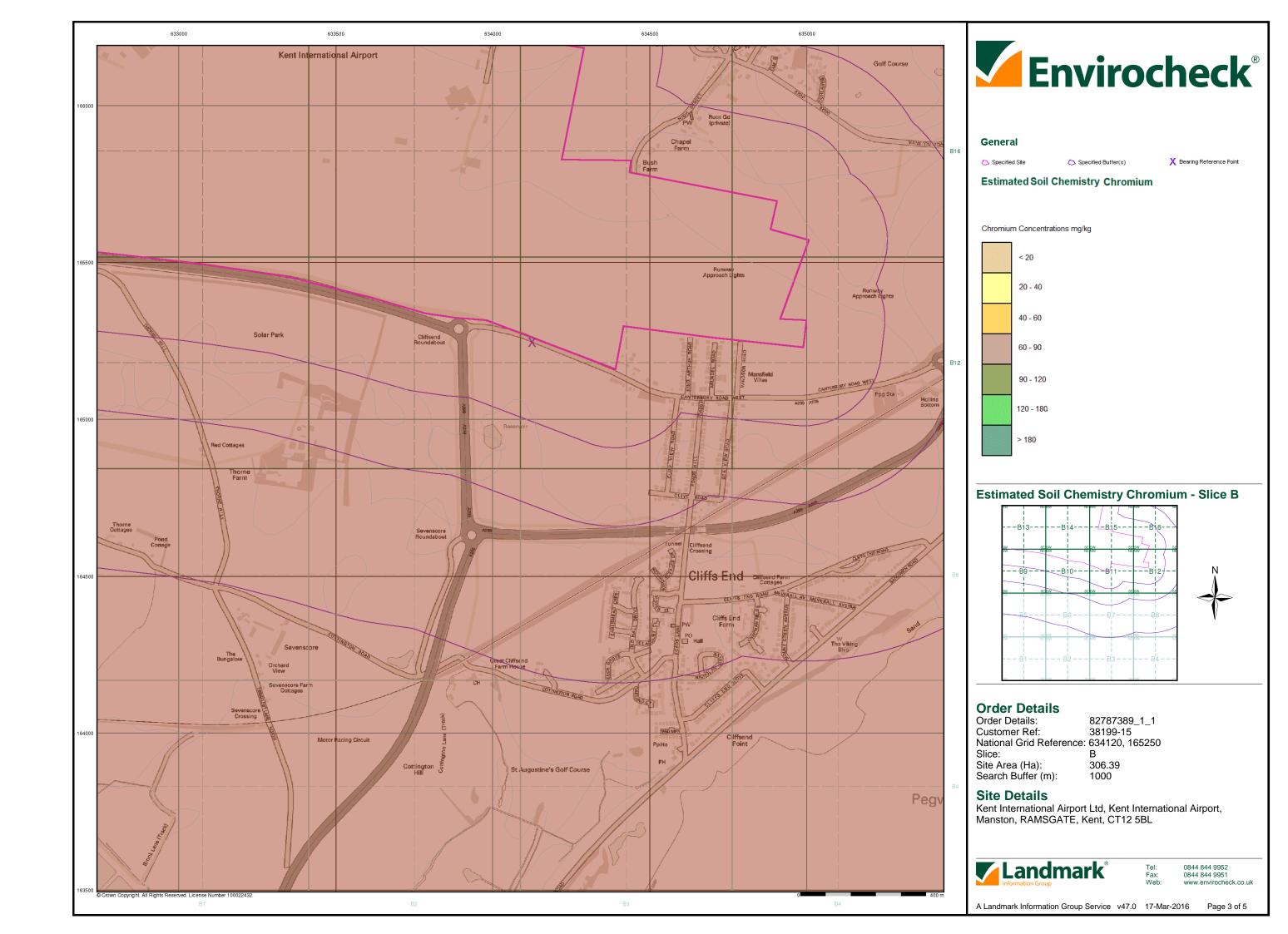
A Landmark Information Group Service v47.0 17-Mar-2016 Page 3 of 5

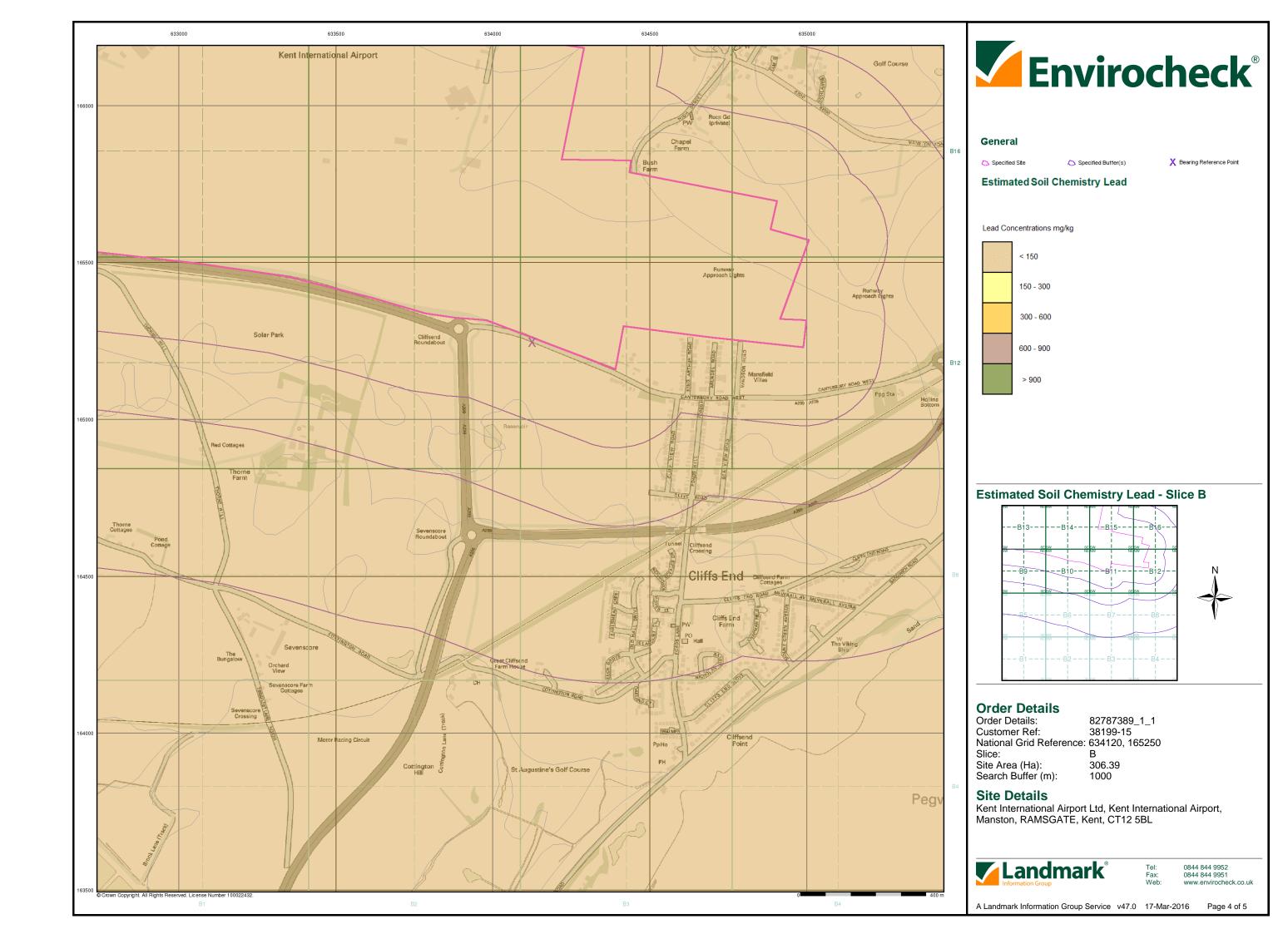


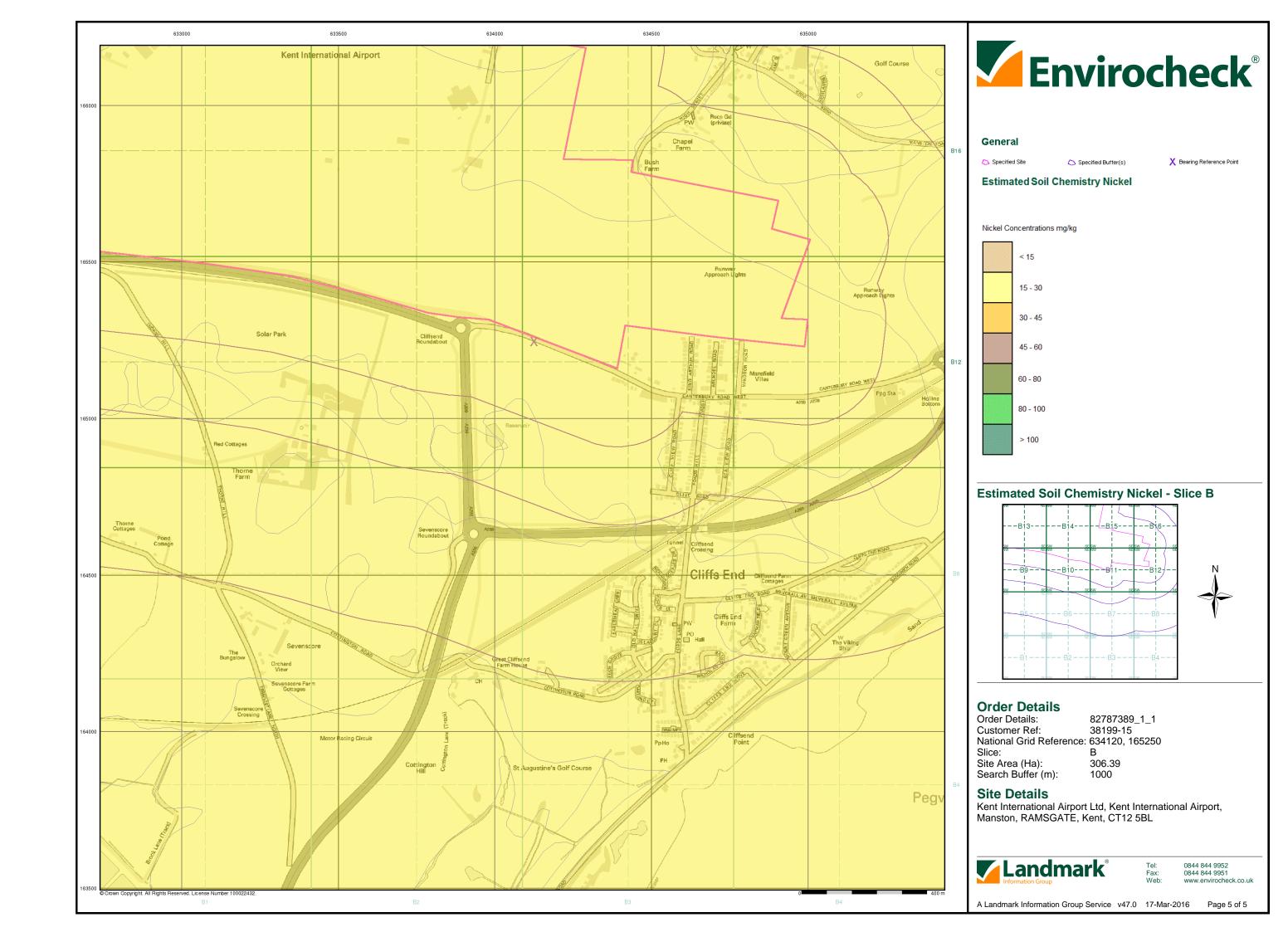






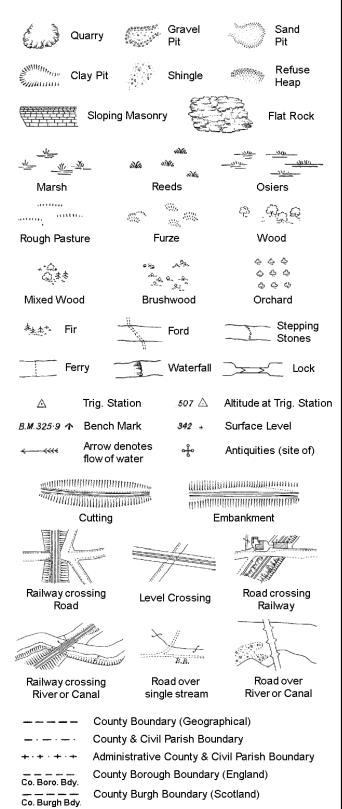






### **Historical Mapping Legends**

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



B.R.

E.P

F.B.

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

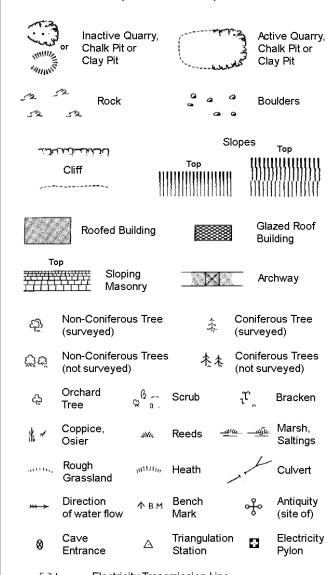
Trough Well

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



ETL Elec	tricity Transmission Line
	County Boundary (Geographical)
	County & Civil Parish Boundary
	Civil Parish Boundary
· <del></del> · <del></del> ·	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

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C 17	lon-Conife surveyed)	rous Tree	*	Conifero (surveye	
C 3 C 5	lon-Conife not sur∨ey		<b>木</b> 木	Coniferd (not surv	ous Trees reyed)
45	orchard ree	Q 6 a.	Scrub	ı́ι,	Bracken
	Coppice, Osier	siVe,	Reeds 🛥	<u> </u>	Marsh, Saltings
	Rough Grassland	mun,	Heath	1	Culvert
,,,,	Direction of water flow	w A	Triangulation Station	· &	Antiquity (site of)
E <u>TL</u>	Electricit	y Transmis	sion Line	$\boxtimes$	Electricity Pylon
\ BM 2	31.60m Be	ench Mark		Building Building	
	Roofed	d Building		81	azed Roof ilding
		Civil parish	/community b	oundary	
		District bou	=	,	
_		County bou	•		
_ •					
0		Boundary p			
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Bks	Barracks		Р	Pillar, Pol	e or Post
Bty	Battery		PO	Post Offic	
Cemy	Cemetery		PC	Public Co	onvenience
Chy	Chimney		Pp	Pump	
Cis	Cistern		Ppg Sta	Pumping	Station
Dismtd Rly	Dismantle	ed Railway	PW	Place of \	Vorship
El Gen Sta	Electricit Station	y Generating	Sewage P	pg Sta Se Pu	wage mping Station
EIP	Electricity P	ole, Pillar	SB, S Br	Signal Bo	ox or Bridge

SP, SL

Spr

Tr

Wd Pp

Wks

Signal Post or Light

Works (building or area)

Spring

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

Tank or Track

El Sub Sta Electricity Sub Station

Filter Bed

Gas Governer

**Guide Post** 

Manhole

Fountain / Drinking Ftn.

Gas Valve Compound

Mile Post or Mile Stone

FΒ

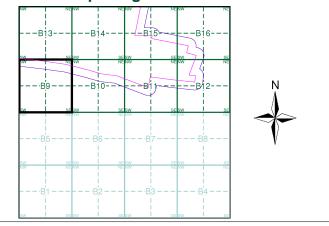
Fn/DFn



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

Mapping Type	Scale	Date	Pg
Kent	1:2,500	1873	2
Kent	1:2,500	1896	3
Kent	1:2,500	1907	4
Kent	1:2,500	1938	5
Ordnance Survey Plan	1:2,500	1963 - 1964	6
Additional SIMs	1:2,500	1988	7
Large-Scale National Grid Data	1:2,500	1993	8
Large-Scale National Grid Data	1:2,500	1995	9

#### **Historical Map - Segment B9**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 634120, 165250 Slice: Site Area (Ha): 306.39

Search Buffer (m):

100

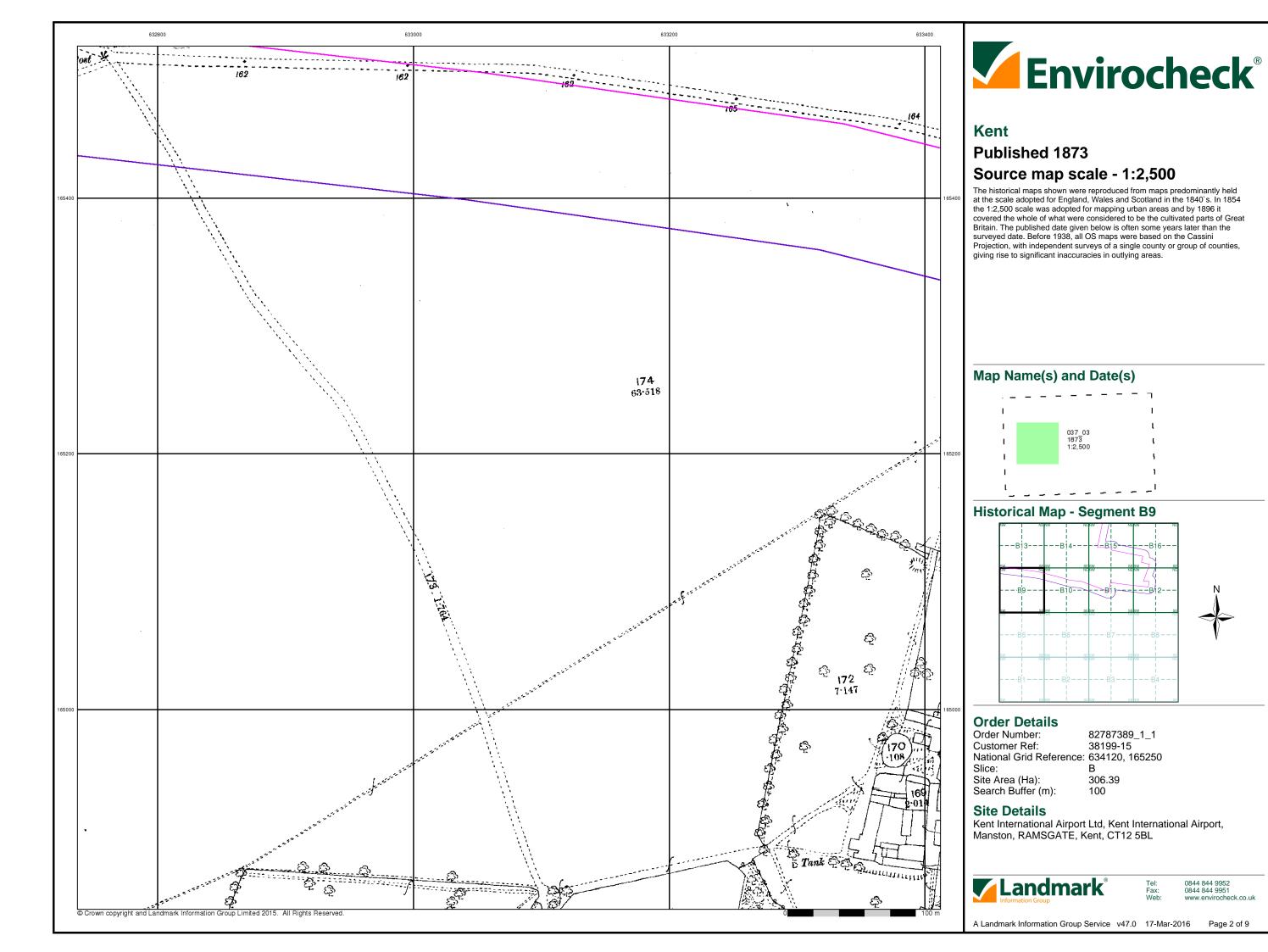
#### **Site Details**

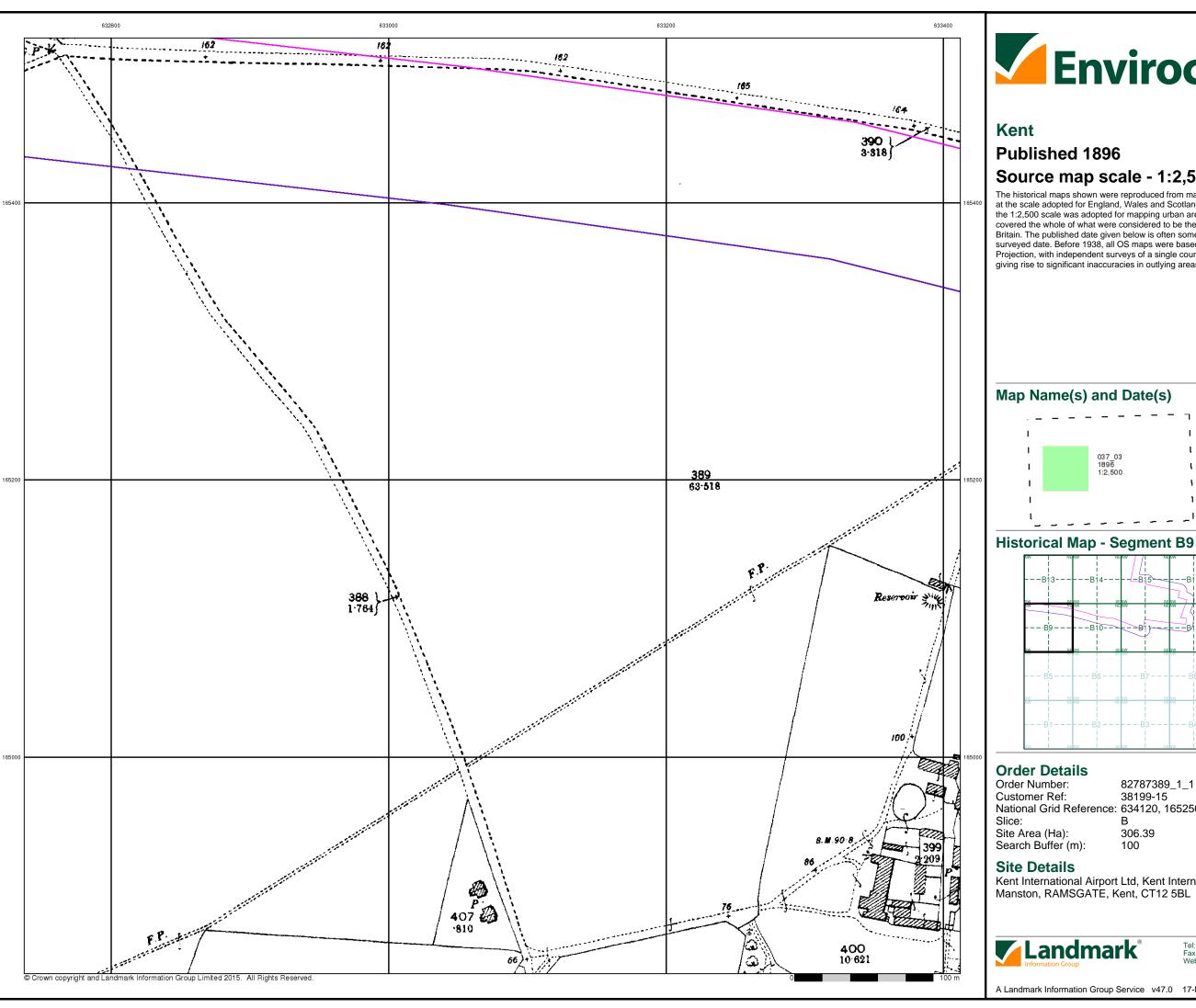
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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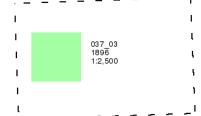


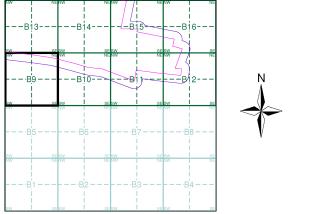




## Source map scale - 1:2,500

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.





82787389_1_1 38199-15 National Grid Reference: 634120, 165250

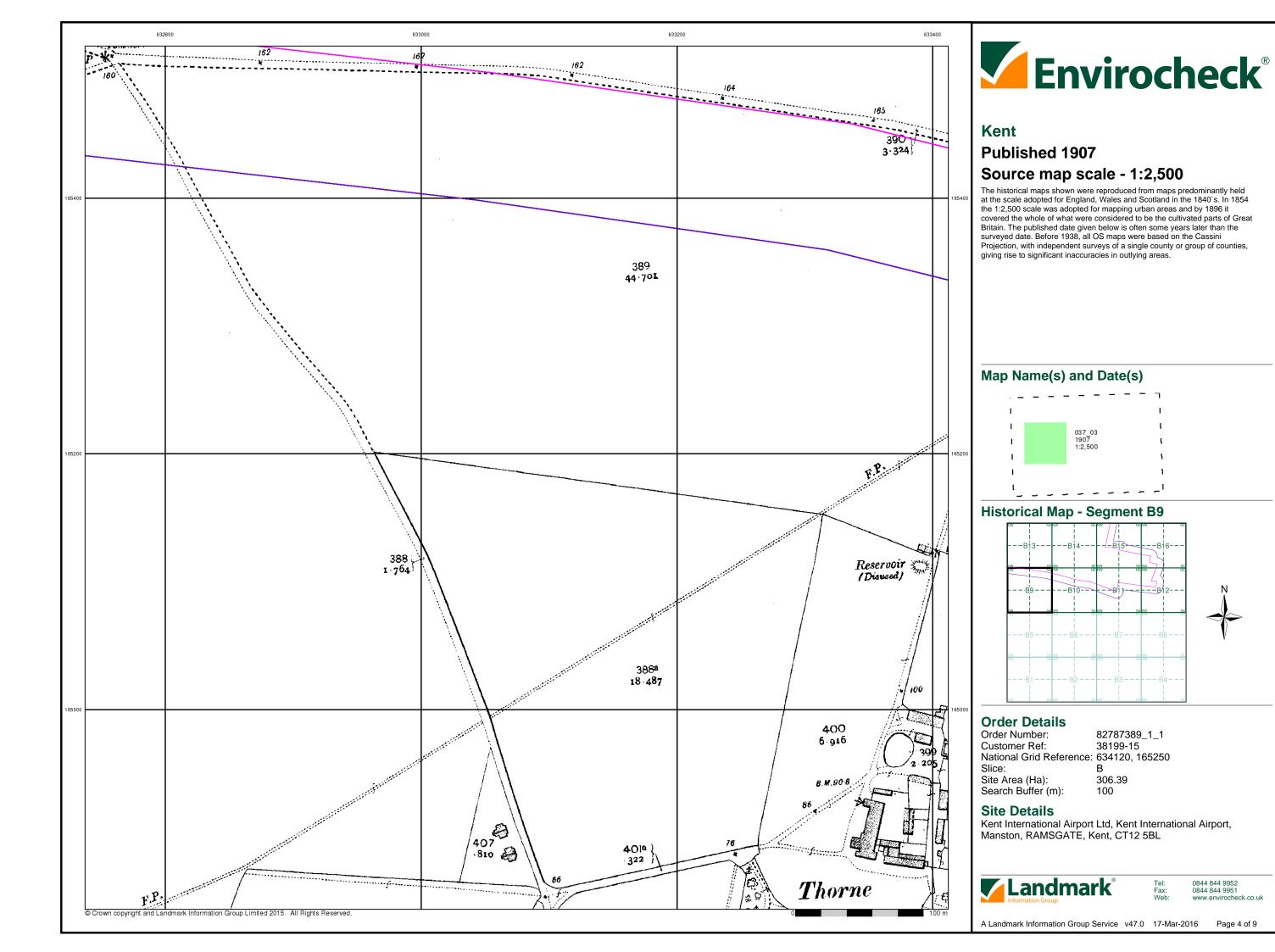
306.39 100

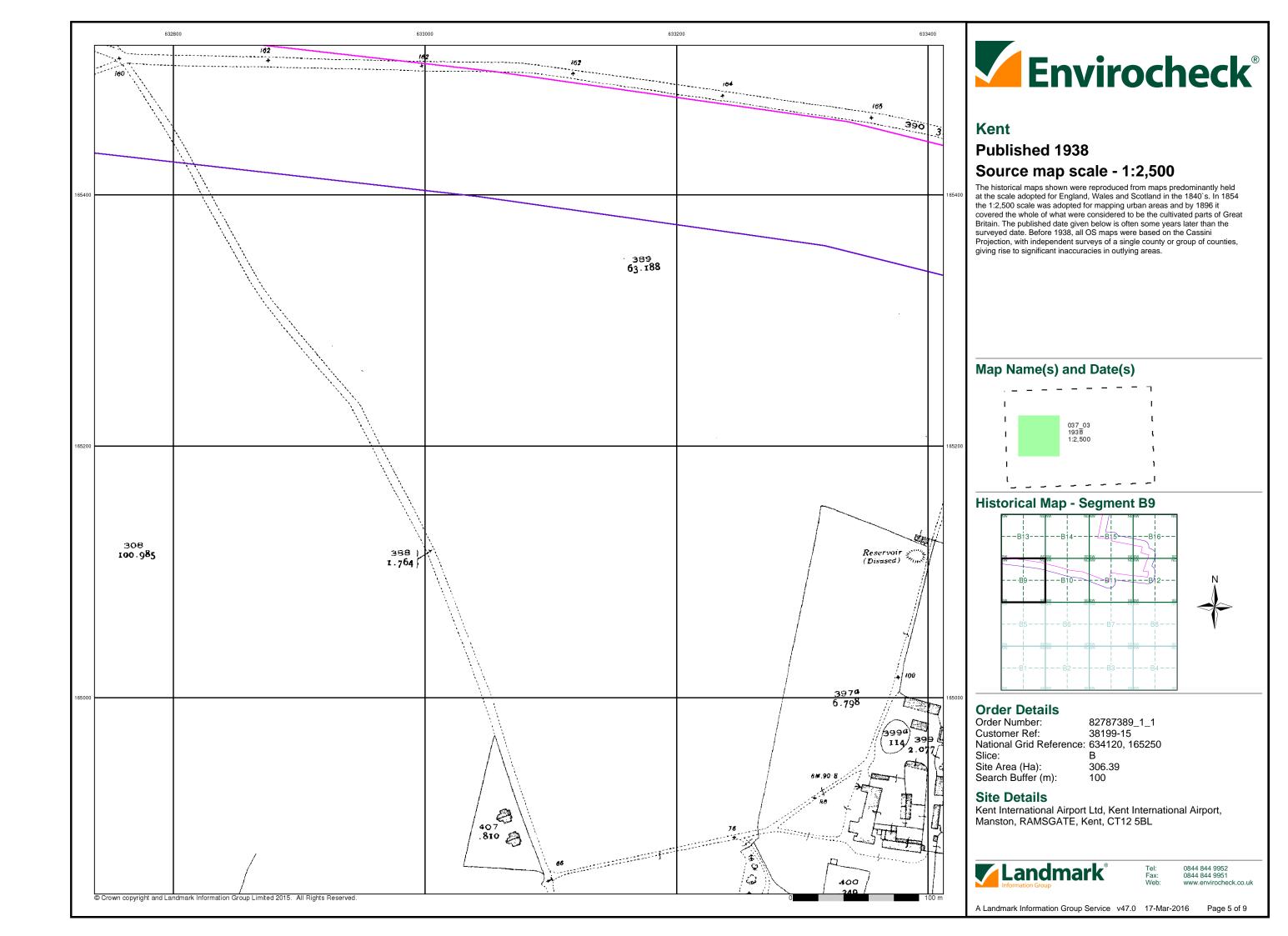
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

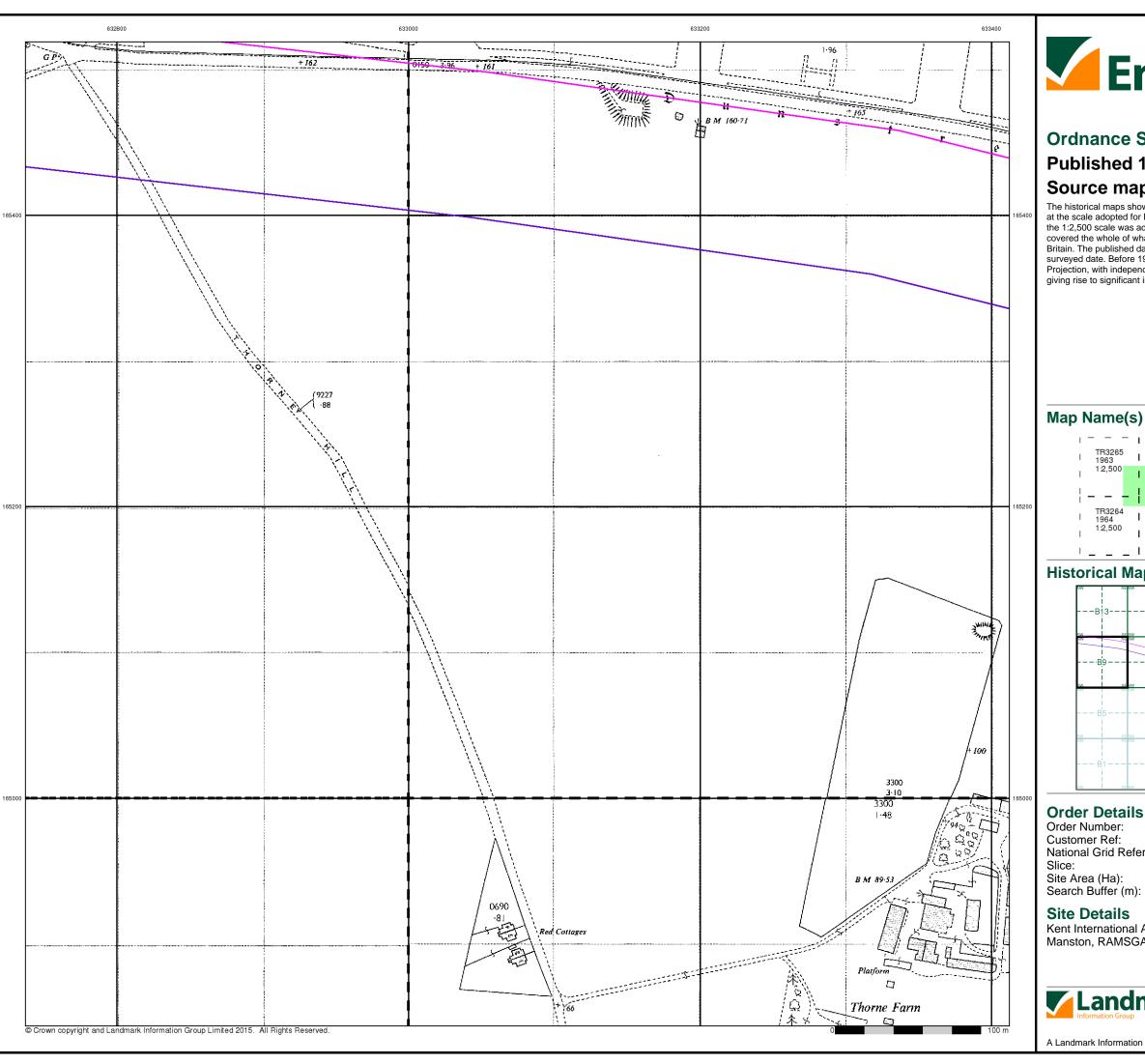


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A Landmark Information Group Service v47.0 17-Mar-2016





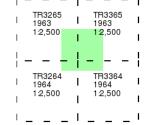




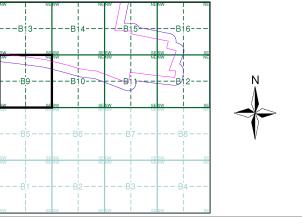
# **Ordnance Survey Plan** Published 1963 - 1964 Source map scale - 1:2,500

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 B9**



82787389_1_1 38199-15 National Grid Reference: 634120, 165250

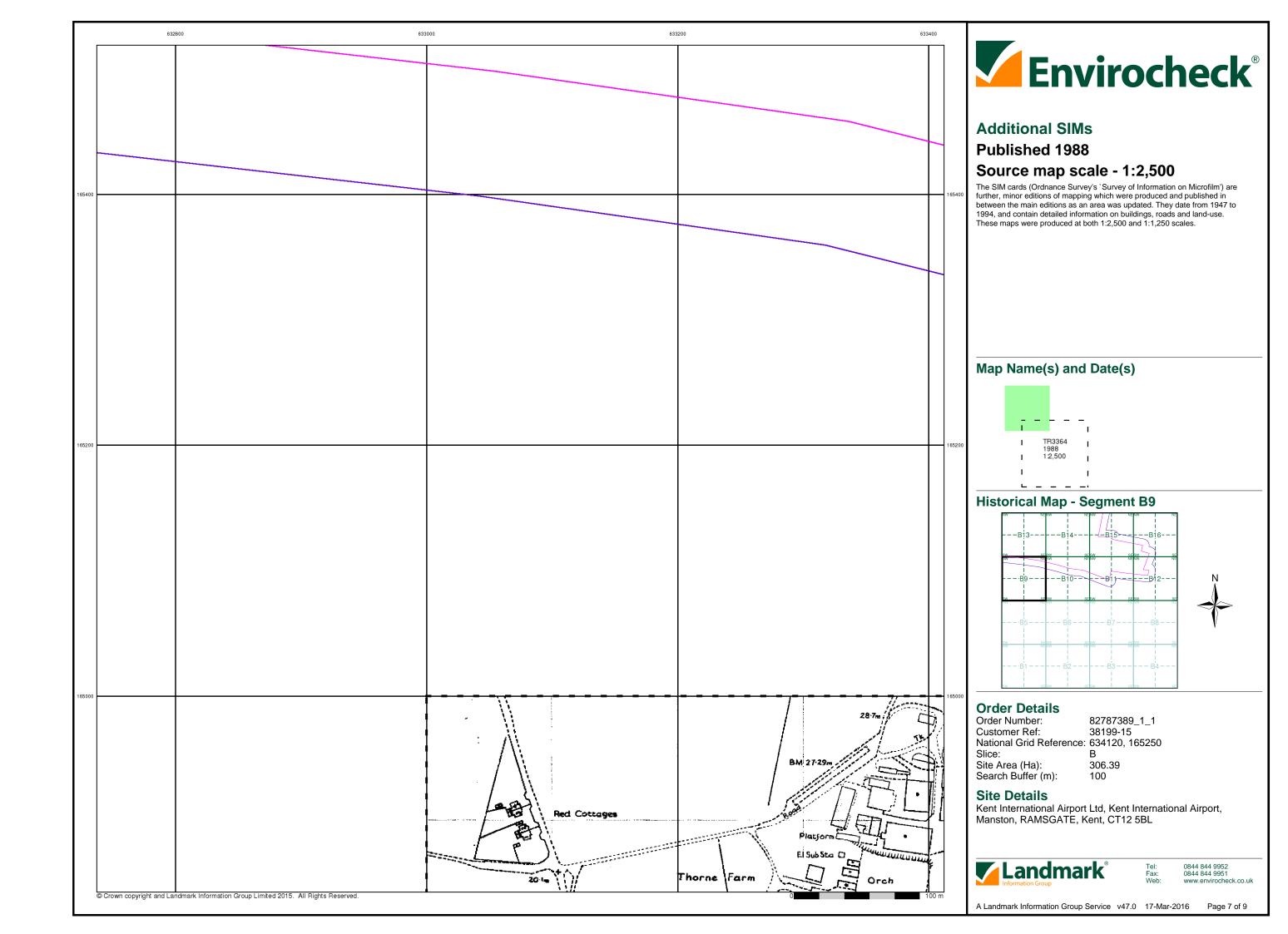
306.39 100

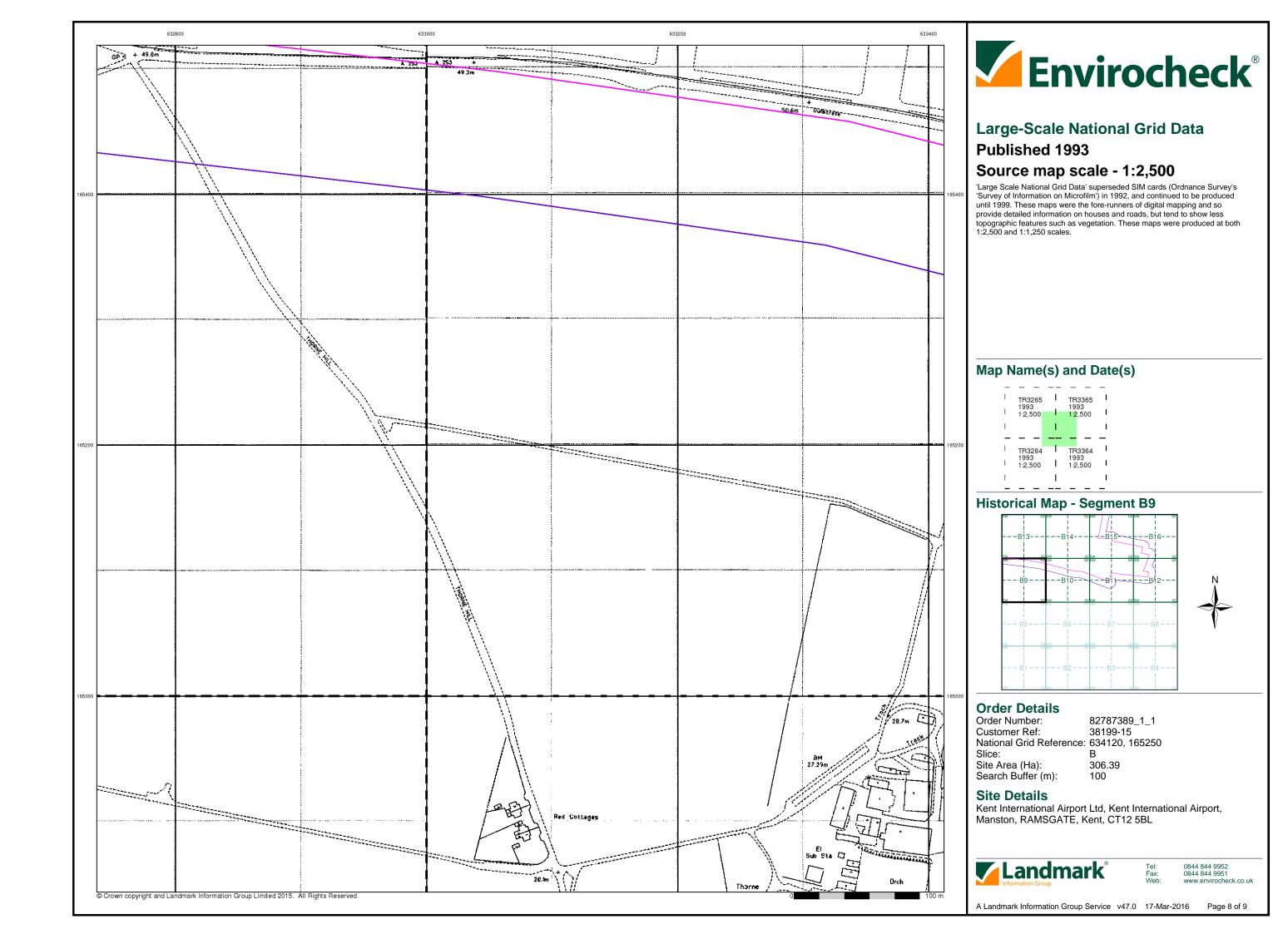
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

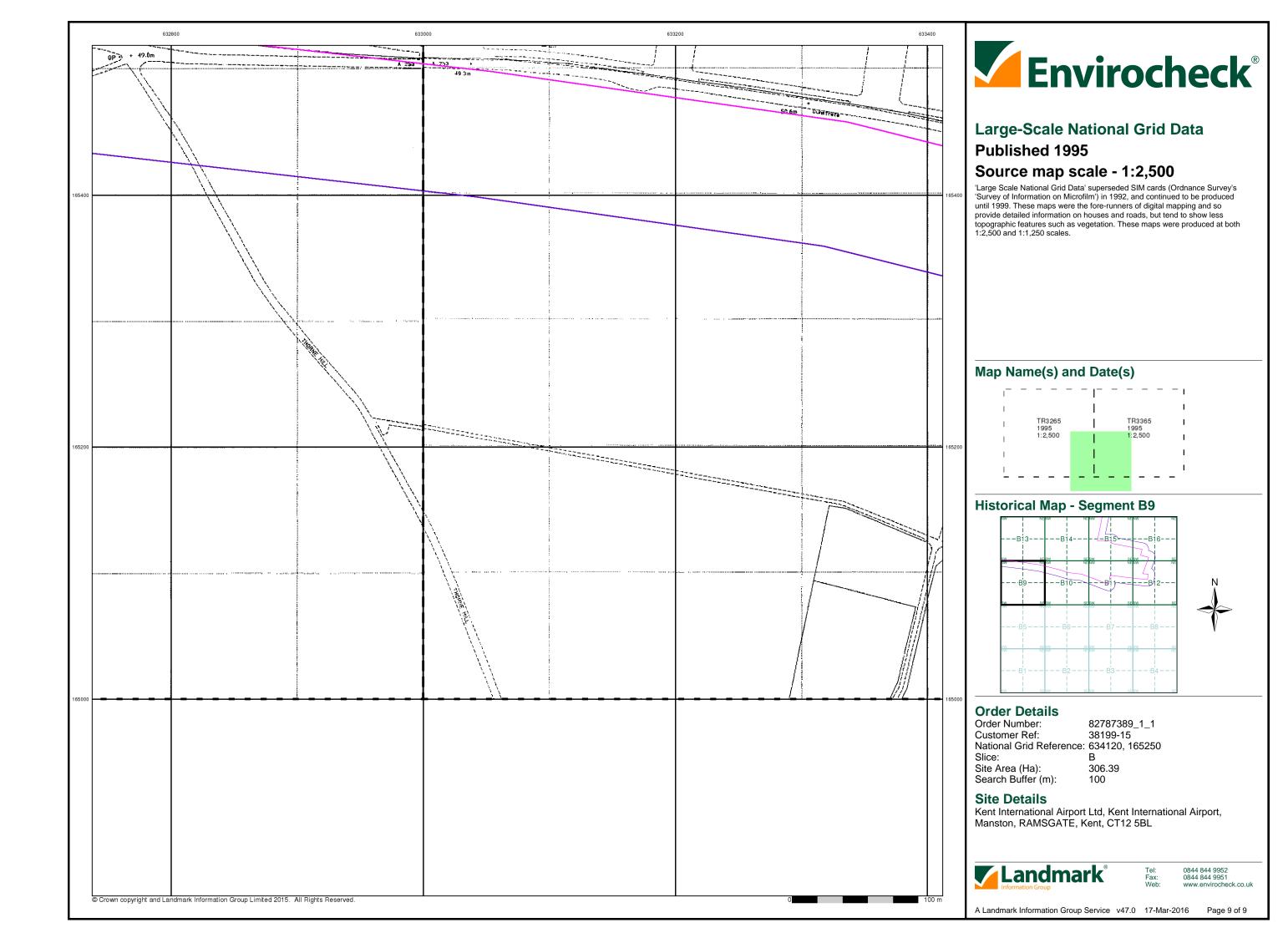


0844 844 9952 0844 844 9951

A Landmark Information Group Service v47.0 17-Mar-2016

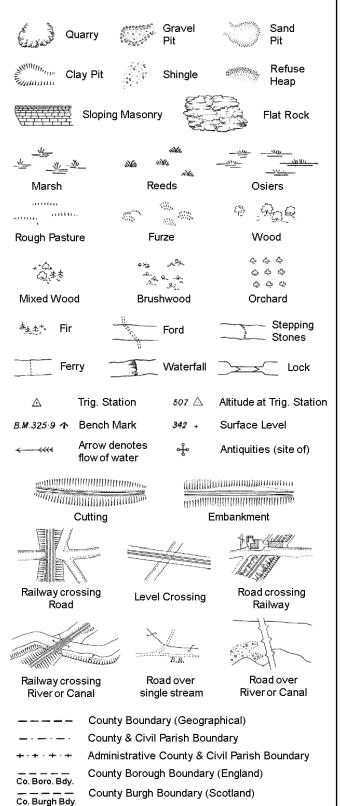






# **Historical Mapping Legends**

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



B.R.

E.P

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

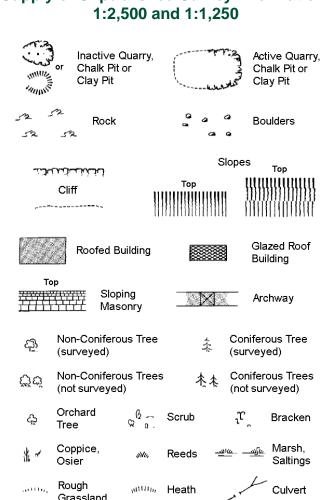
Trough Well

S.P

Sl.

 $T_{T}$ 

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



Direction Bench Antiquity of water flow (site of) Electricity Cave Triangulation ÷ **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

***************************************			Slopes _{Top}			
	 Clitt		Тор	<b>,,,,,,,,</b> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
233	Rock		7.5	Rock (so	cattered)	
$\triangle_{\alpha}$	Boulders		Δ	Boulders	(scattered)	
$\triangle$	Positioned	Boulder		Scree		
<u> දකු</u>	Non-Conif (surveyed	erous Tree )	\$	Coniferd (surveye		
ζţά	Non-Conif (not surve	erous Trees yed)	**	Conifero	ous Trees /eyed)	
ද	Orchard Tree	Q a.	Scrub	¹ L	Bracken	
* ~	Coppice, Osier	siVis,	Reeds 🛥	<u> </u>	Marsh, Saltings	
artite,	Rough Grassland	1111111 ₁₁	Heath	1	Culvert	
<del>*** &gt;</del>	Direction of water flo	Δ ow	Triangulation Station	, of	Antiquity (site of)	
E <u>T</u> L	_ Electric	ity Transmis	ssion Line	$\boxtimes$	Electricity Pylon	
<b>∤</b> ∤Вм	231.60m E	Bench Mark	7	Building Building		
	Roofe	ed Building		251	azed Roof iilding	
		Ci∨il parish	/community b	oundary		
		District bou	undary	•		
_ •		County bou	ındarv			
٥		Boundary p				
,c	>	Boundary r	nereing symb ear in oppose			
Bks	Barracks		Р	Pillar, Pol	le or Post	
Bty	Battery		PO	Post Offic	ce	
Cemy	Cemetery		PC -		onvenience	
Chy	Chimney		Pp Ppg Sta	Pump	Station	
Cis Dismtd F	Cistern	tled Railway	Ppg Sta PW	Pumping Place of\		
El Gen S	-	ity Generating	Sewage P	pg Sta Se	wage umping Station	
EIP	Electricity	Pole, Pillar	SB, S Br		ox or Bridge	
El Sub S	ta Electricity	Sub Station	SP, SL	Signal Po	ost or Light	
FB	Filter Bed		Spr	Spring		
Fn/DFr	Fountain /	Drinking Ftn.	Tk	Tank or T	rack	
			<b>T</b>	T		

Gas Valve Compound

Mile Post or Mile Stone

Gas Governer

**Guide Post** 

Manhole

Tr

Wd Pp

Wks

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

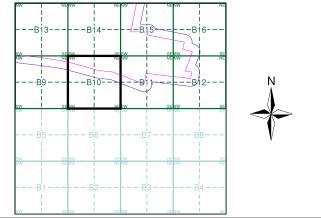
Works (building or area)



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

Mapping Type	Scale	Date	Pg
Kent	1:2,500	1873	2
Kent	1:2,500	1896	3
Kent	1:2,500	1907	4
Kent	1:2,500	1938	5
Ordnance Survey Plan	1:2,500	1963 - 1964	6
Ordnance Survey Plan	1:2,500	1973 - 1977	7
Additional SIMs	1:2,500	1977 - 1988	8
Additional SIMs	1:2,500	1979	9
Ordnance Survey Plan	1:2,500	1982 - 1984	10
Large-Scale National Grid Data	1:2,500	1993	11
Large-Scale National Grid Data	1:2,500	1995	12

#### **Historical Map - Segment B10**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 634120, 165250 Slice:

Site Area (Ha):

306.39 Search Buffer (m): 100

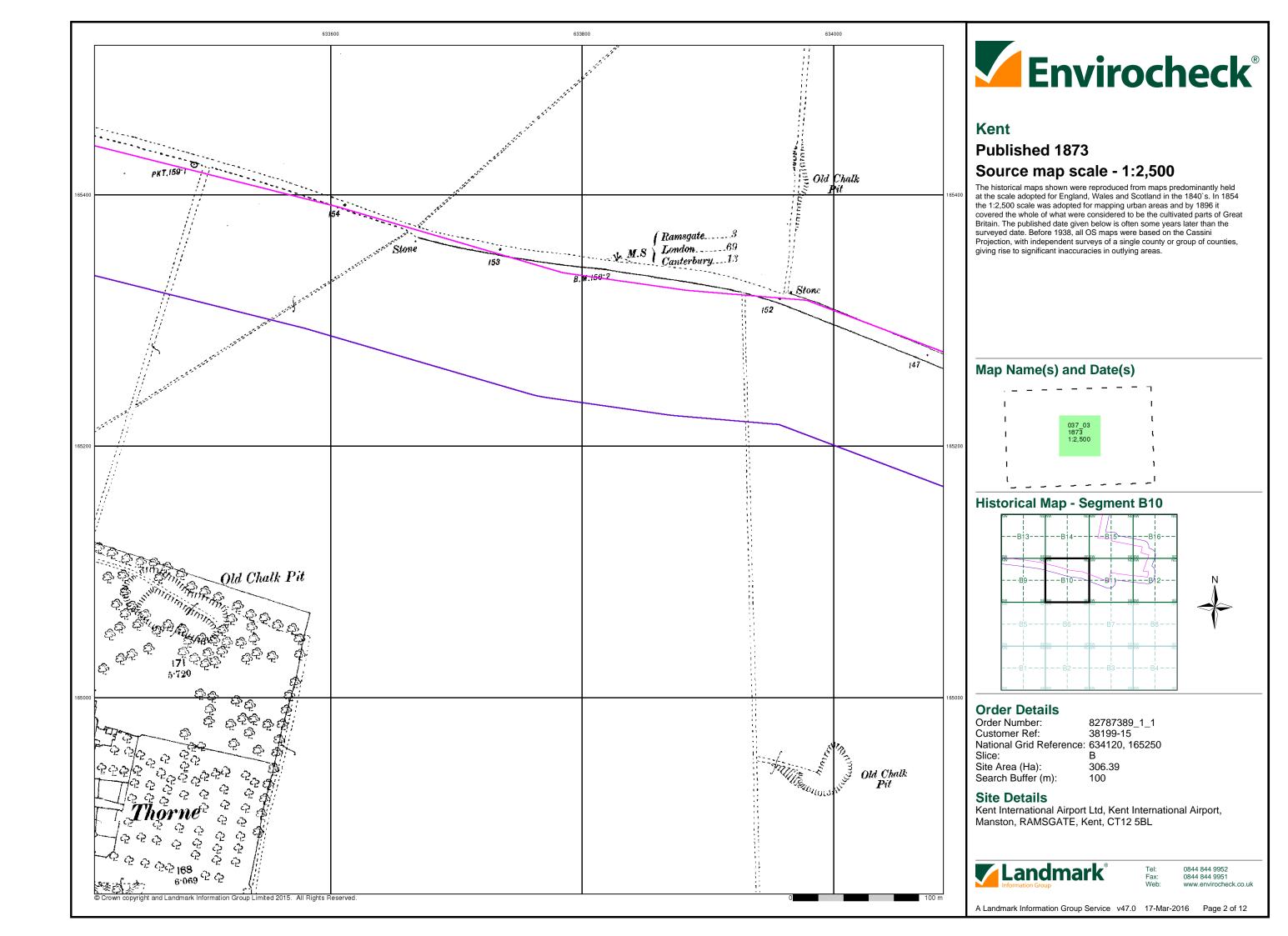
#### **Site Details**

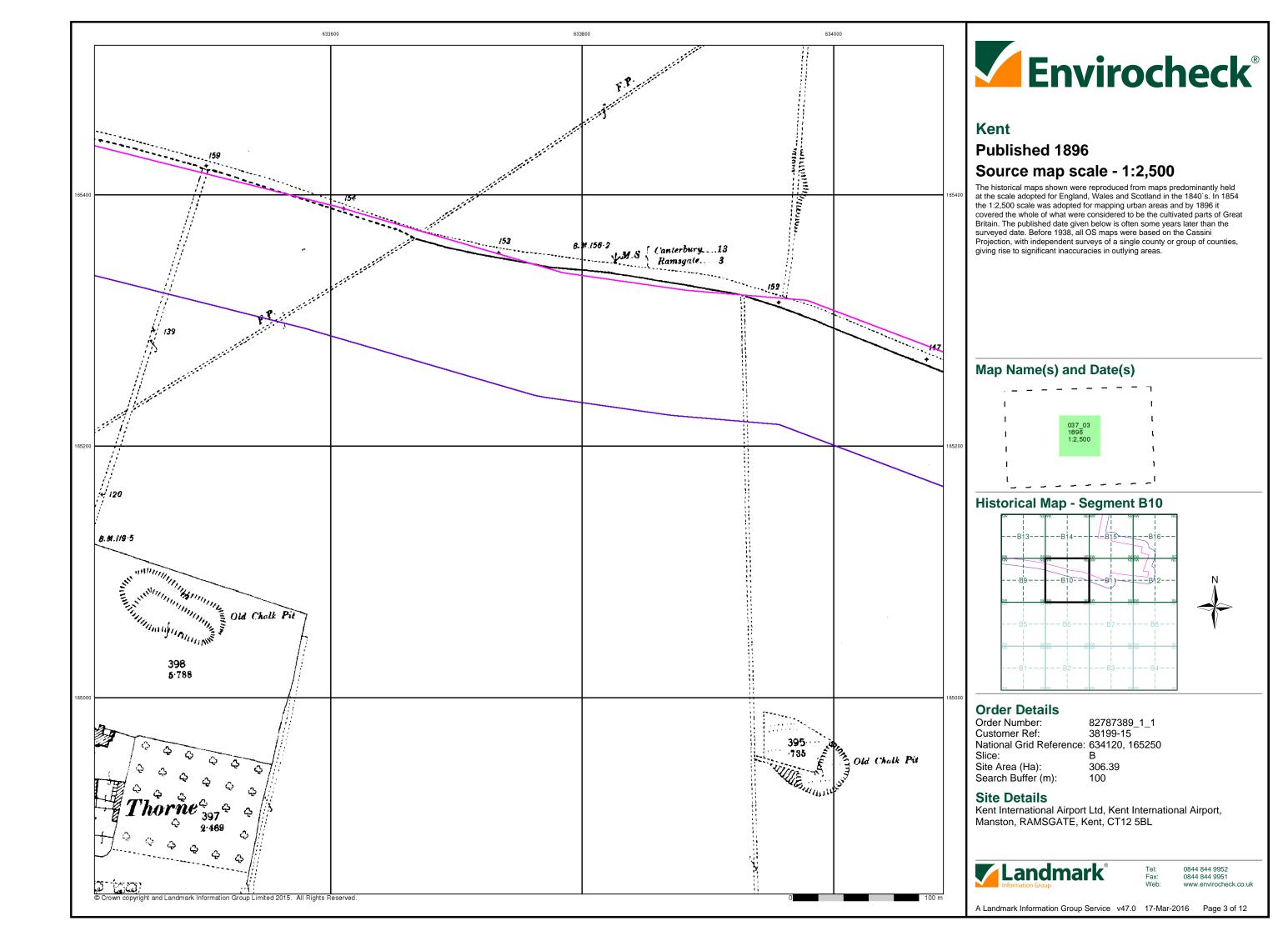
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

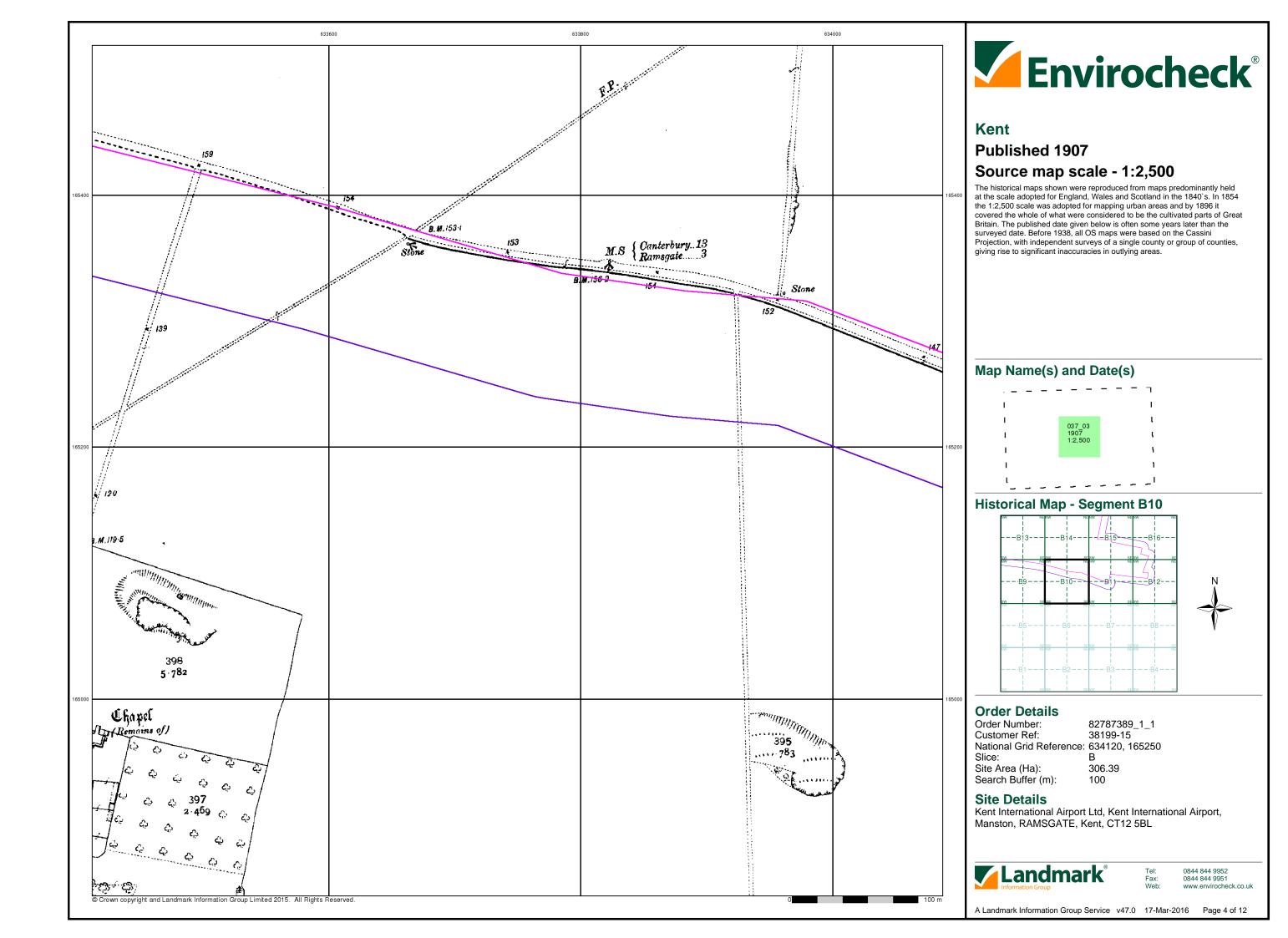


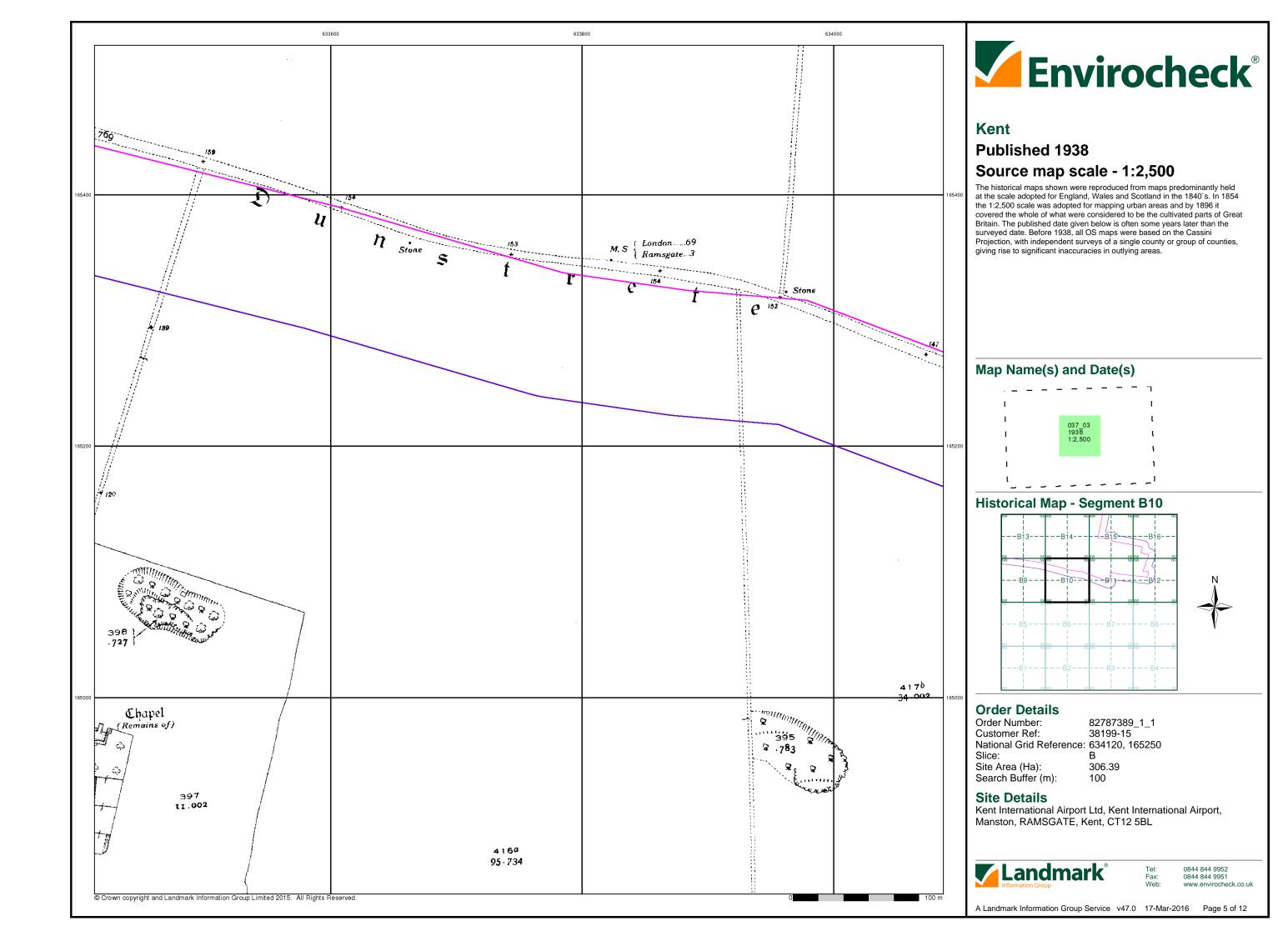
0844 844 9952 0844 844 9951

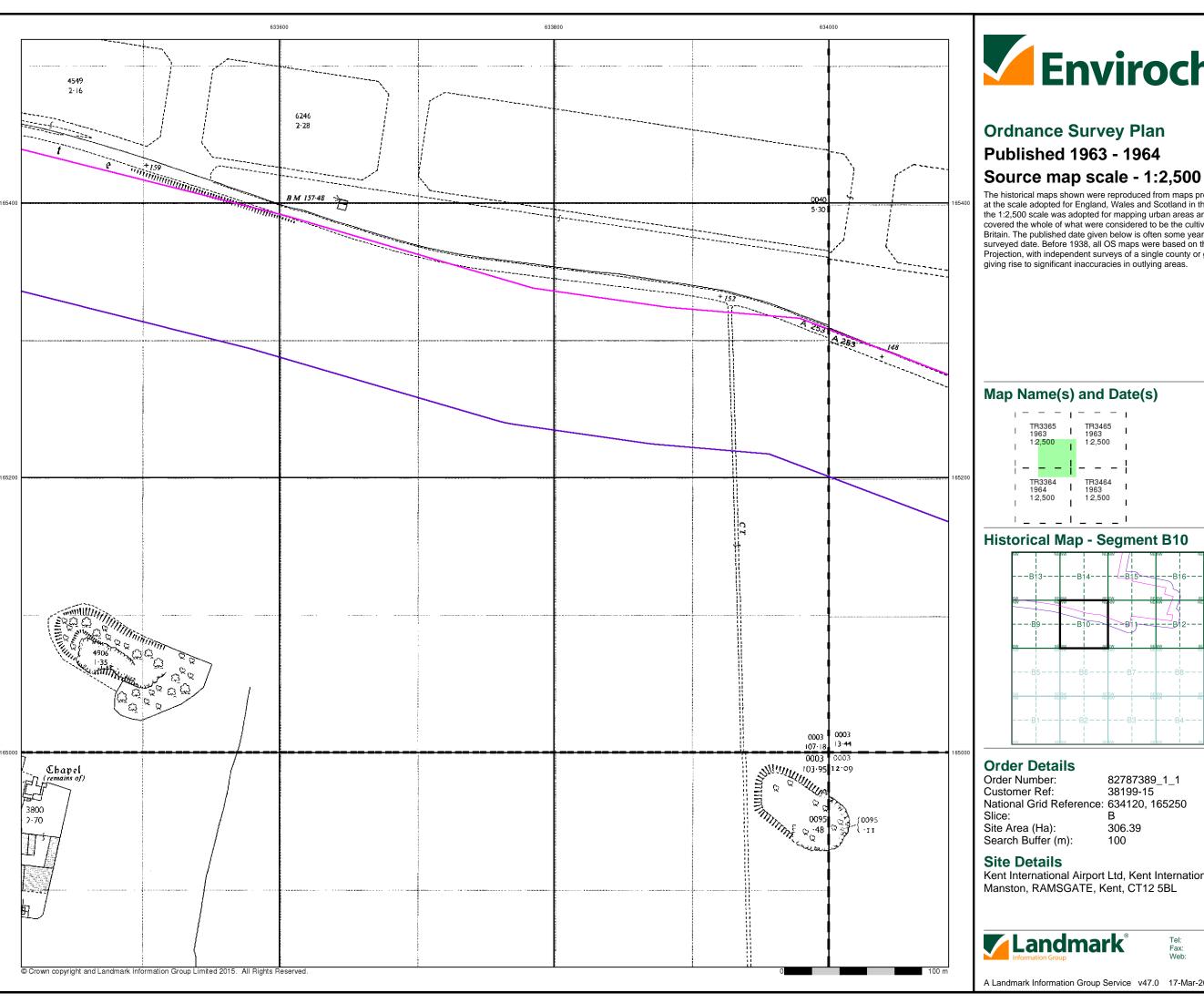
A Landmark Information Group Service v47.0 17-Mar-2016 Page 1 of 12









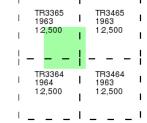




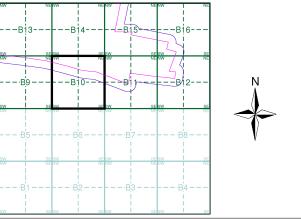
# **Ordnance Survey Plan** Published 1963 - 1964

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 B10**



#### **Order Details**

82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 634120, 165250

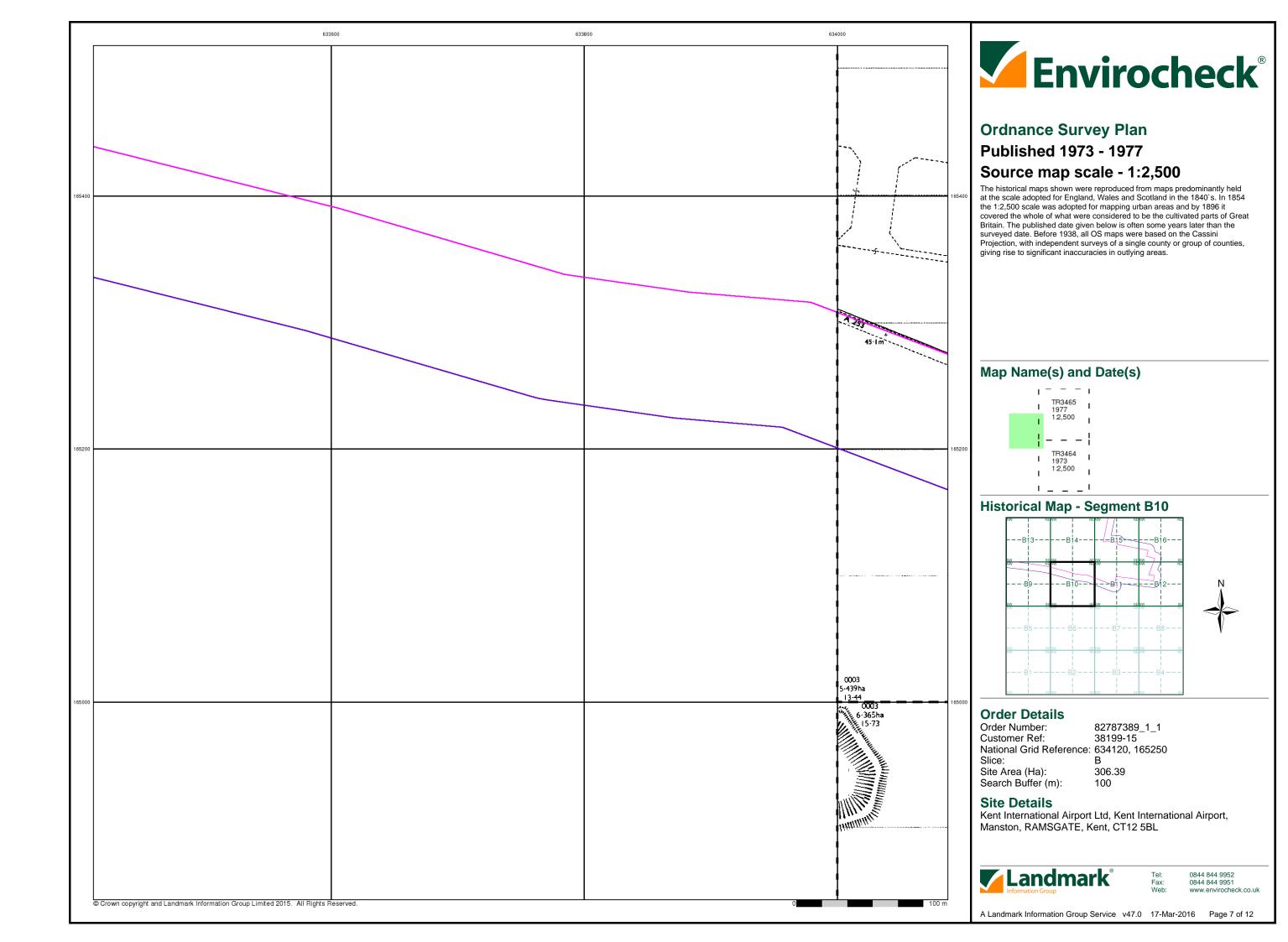
306.39 Search Buffer (m): 100

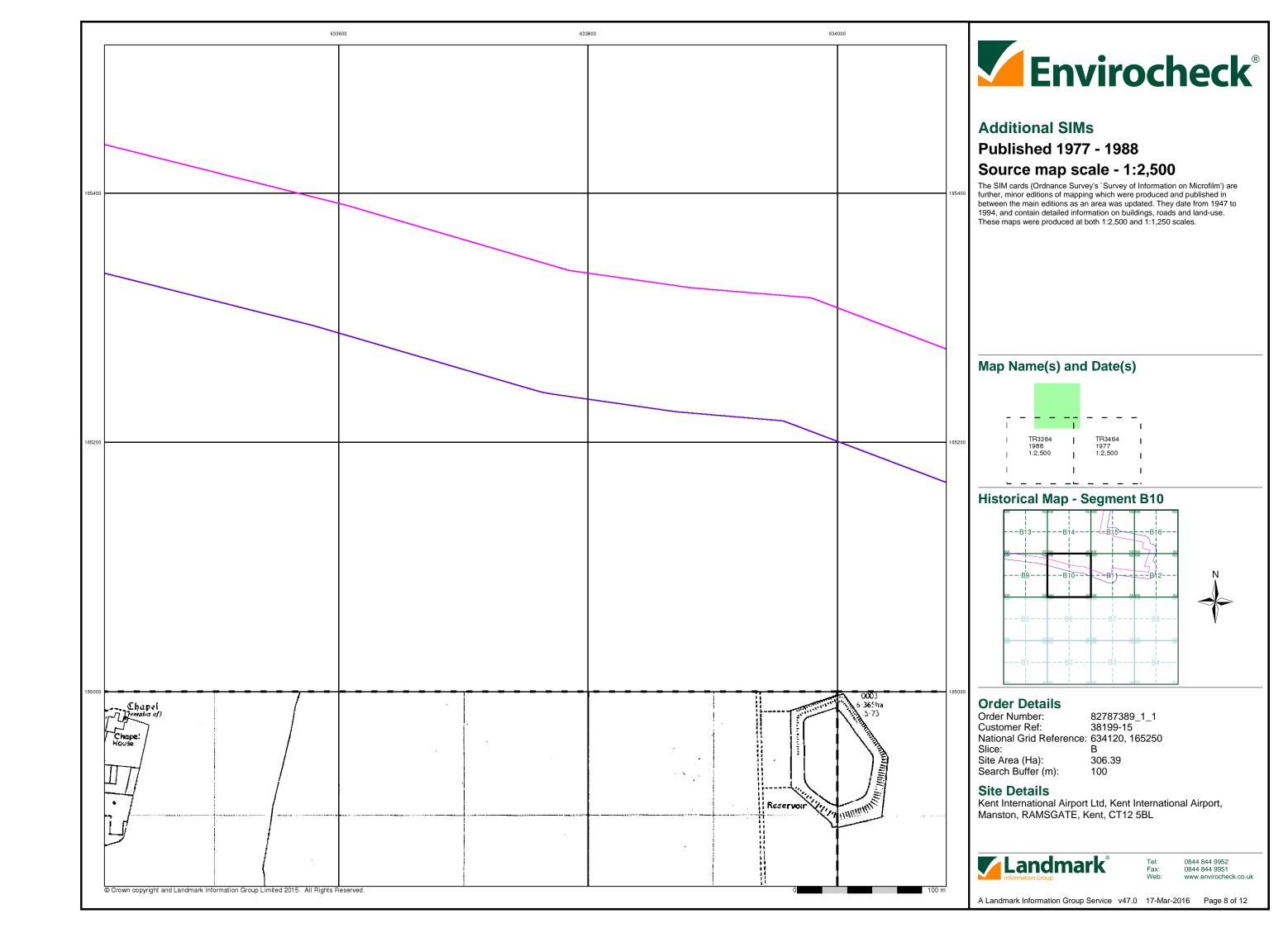
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

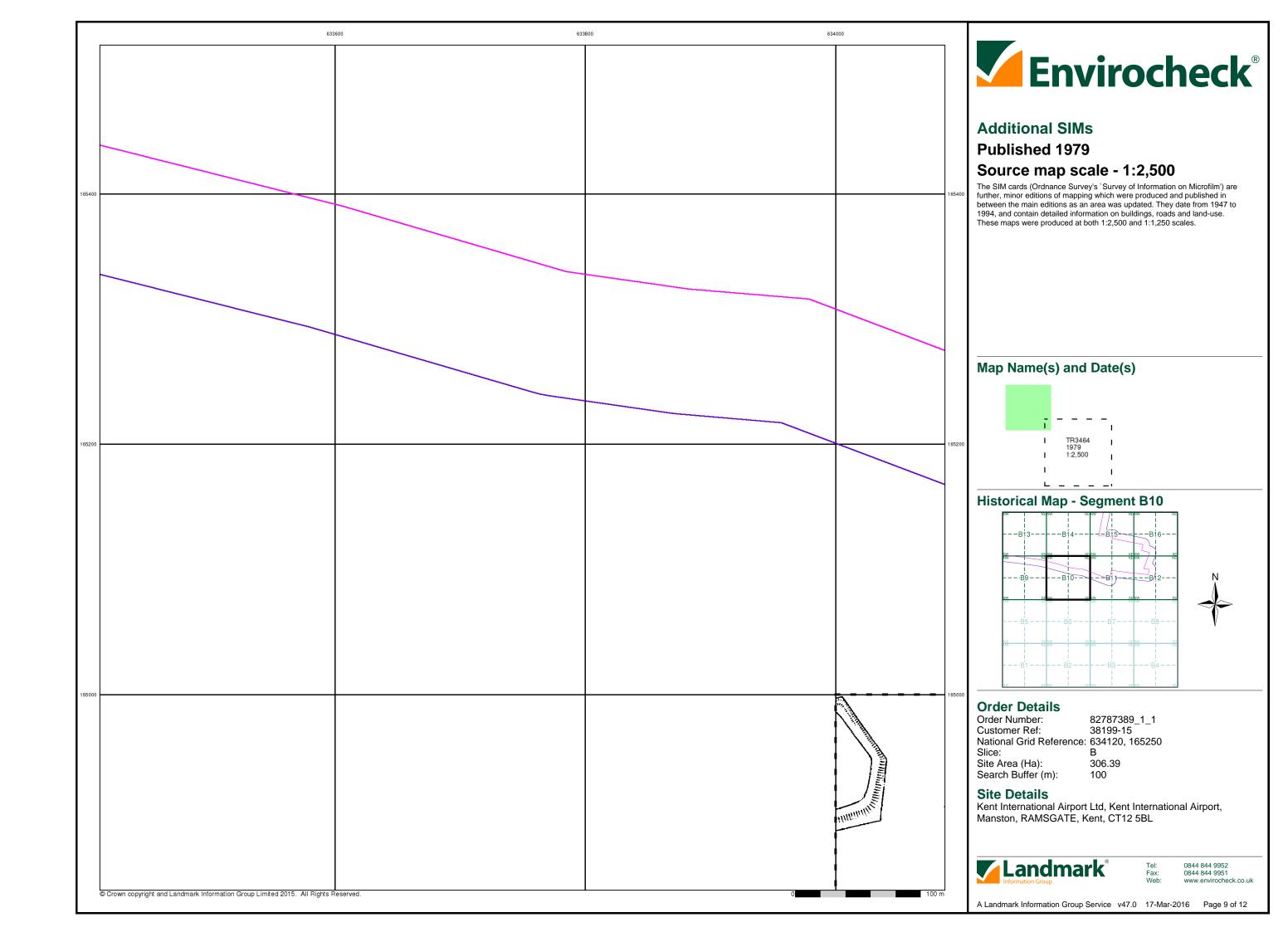


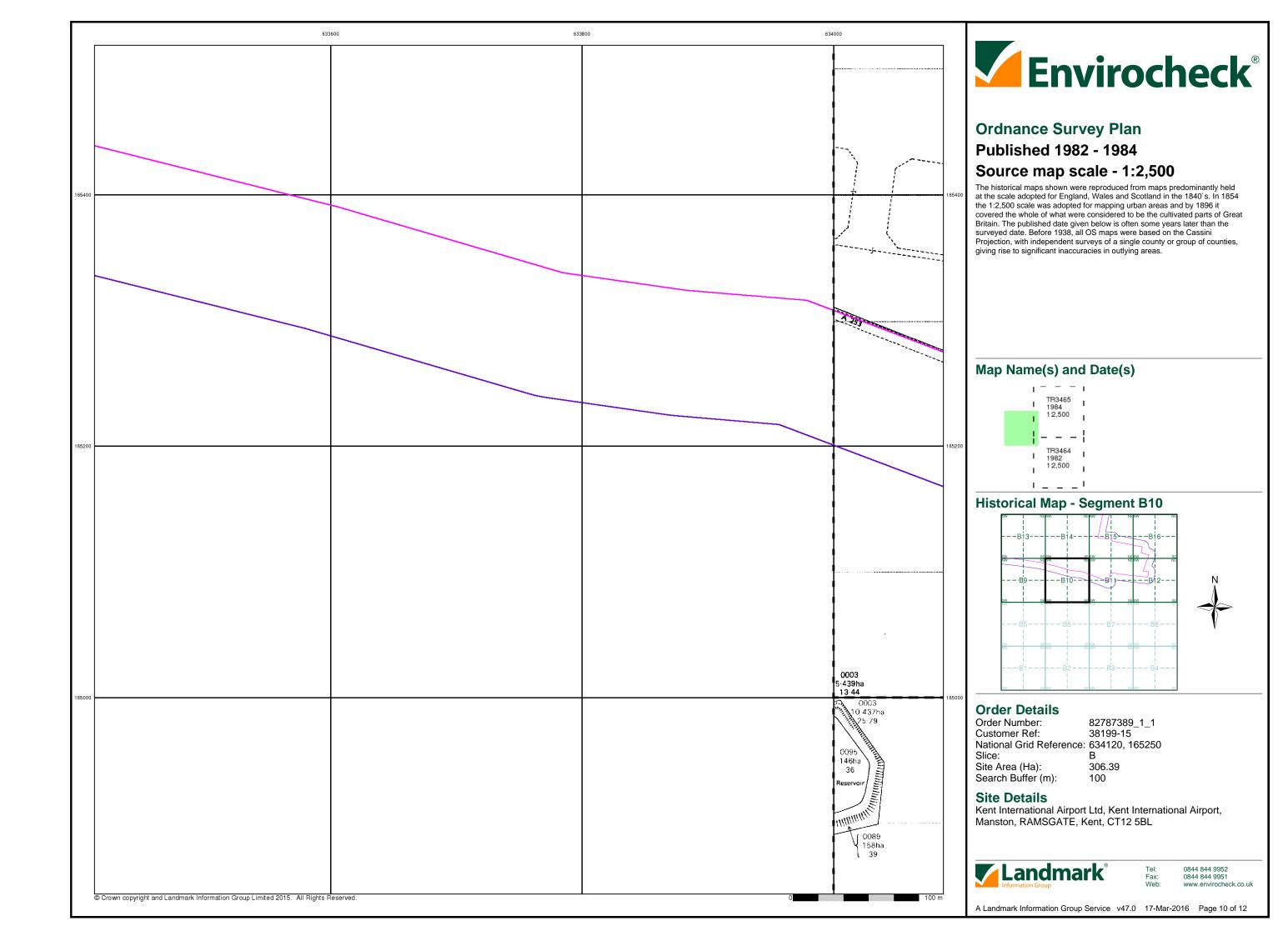
0844 844 9952 0844 844 9951

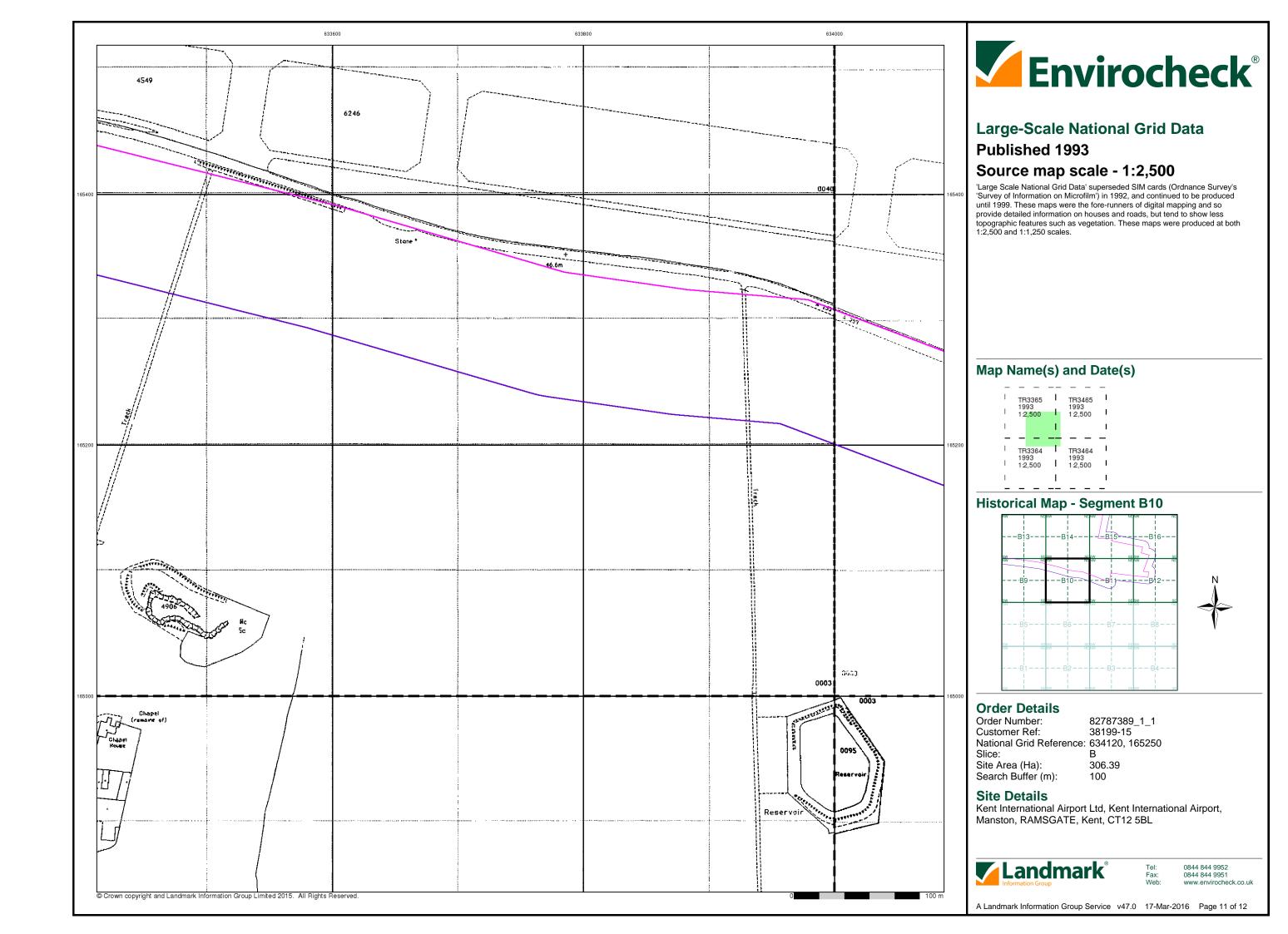
A Landmark Information Group Service v47.0 17-Mar-2016 Page 6 of 12

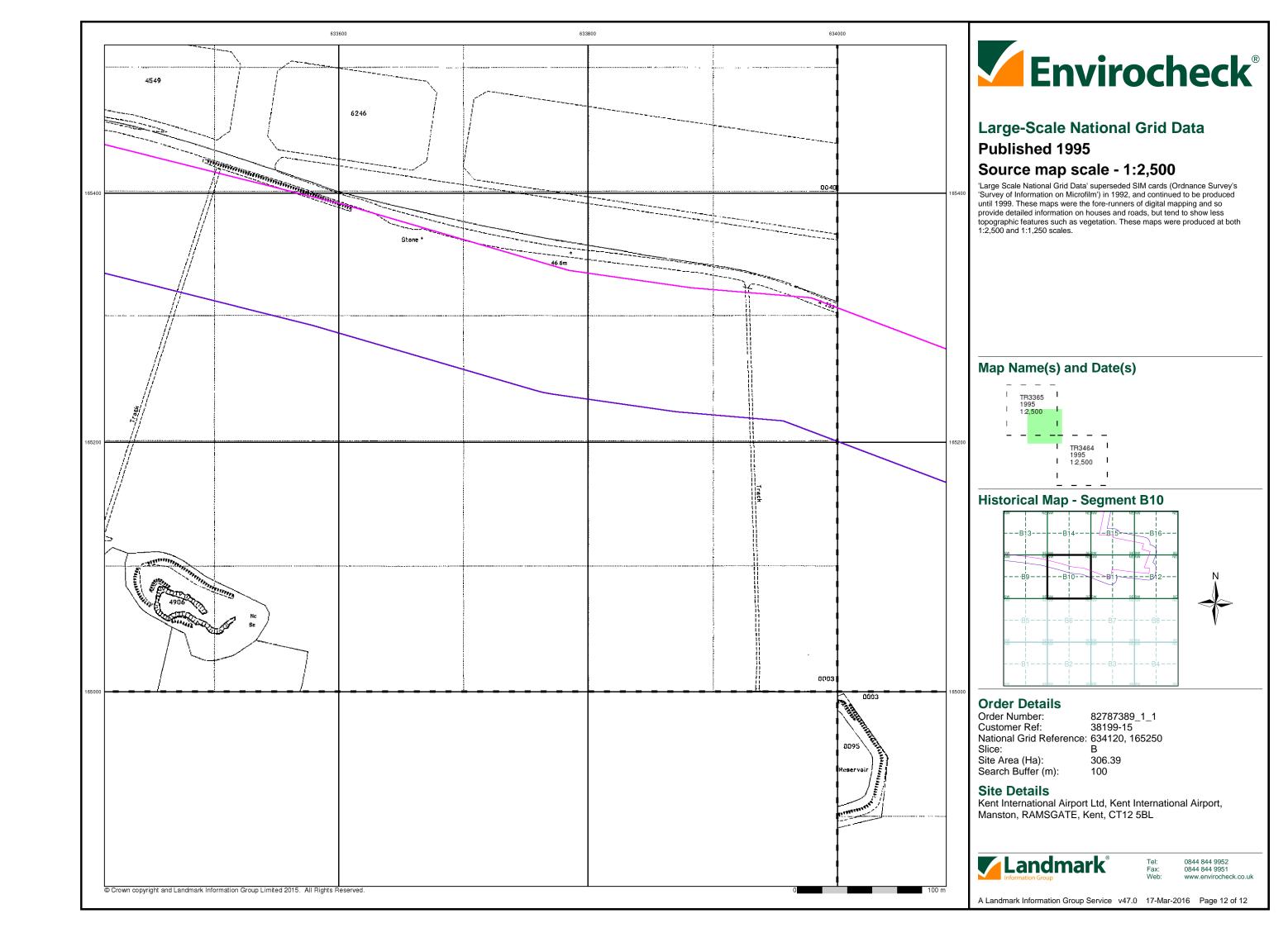






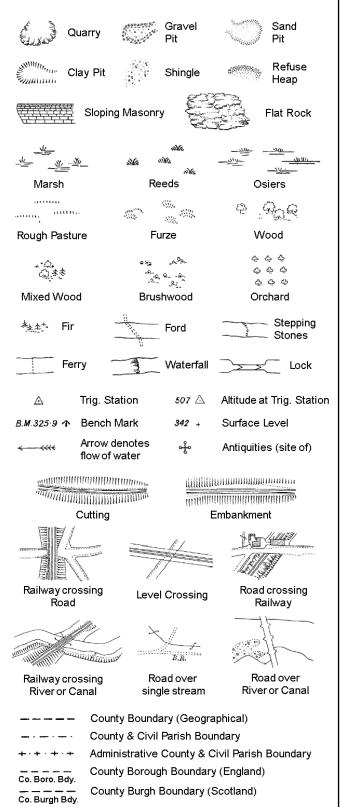






# **Historical Mapping Legends**

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



B.R.

E.P

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

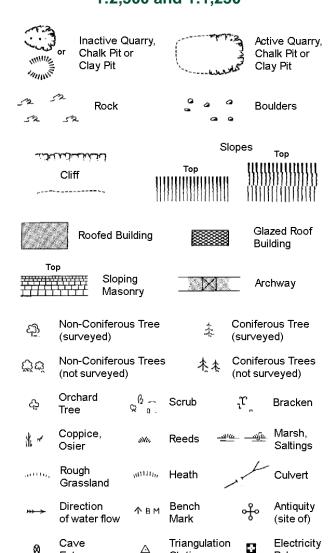
Trough Well

S.P

Sl.

 $T_{T}$ 

#### 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	P	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

Slopes

			Slopes Top		
لانتبانيهان			Тор	111111111111111111111111111111111111111	
	Cliff	1111	111111111111111111111111111111111111111		
·		1111		(11())(()()()()()()()()()()()()()()()()	
		1111	111111111111111111111111111111111111111	111111111111111111111111111111111111111	
523	Rock		22	Rock (scattered)	
$\triangle_{a}$	Boulders		<i>D</i>	Boulders (scattered	)
	Positioned	Boulder		Scree	
දුමු	Non-Conif	erous Tree )	\$	Coniferous Tree (surveyed)	
Ďΰ	Non-Conife (not surve	erous Trees yed)	大大	Coniferous Trees (not surveyed)	
දා	Orchard Tree	Q 6 a.	Scrub	_າ ຕຸ Bracken	
* ~	Coppice, Osier	sWe,	Reeds 🛥	القد <u>سال</u> ت Marsh, Saltings	
artitir,	Rough Grassland	m1111111111111111111111111111111111111	Heath	Culvert	
<del>&gt;&gt;&gt;</del>	Direction of water flo	Δ w	Triangulatior Station	Antiquity (site of)	
E_TL	_ Electric	ity Transmis	sion Line	⊠ Electricity Pylon	
/ <del>/</del> / вм	231.60m E	ench Mark		Buildings with Building Seed	
	Roofe	ed Building		Glazed Roof Building	
		Civil pariob	/oommunity b	oundary	
• •			/community b	louridar y	
		District boo	undary		
_ •		County box	ındary		
٥		Boundary	oetletone		
~	,			17 ( 0	
ß				ol (note: these ed pairs or groups	
Bks	Barracks		Р	Pillar, Pole or Post	
Bty	Battery		PO	Post Office	
Cemy	Cemetery		PC	Public Convenience	
Chy	Chimney		Pp	Pump	
Cis	Cistern		Ppg Sta	Pumping Station	
Dismtd F	Rly Disman	tled Railway	PW	Place of Worship	
El Gen S	ta Electric	ity Generating	Sewage P	pg Sta Sewage	
		ity Generating	_		
	Station		_	Pumping Station	1
EIP	Station Electricity	Pole, Pillar	SB, S Br	Signal Box or Bridge	1
EIP	Station	Pole, Pillar	_		1

Fn / D Fn Fountain / Drinking Ftn.

Gas Governer

**Guide Post** 

Manhole

Gas Valve Compound

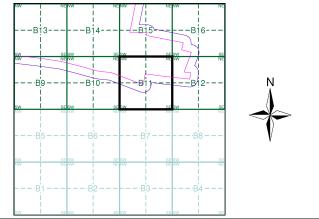
Mile Post or Mile Stone



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

Mapping Type	Scale	Date	Pg
Kent	1:2,500	1873	2
Kent	1:2,500	1896	3
Kent	1:2,500	1907	4
Kent	1:2,500	1938	5
Ordnance Survey Plan	1:2,500	1963	6
Ordnance Survey Plan	1:2,500	1973 - 1977	7
Additional SIMs	1:2,500	1977	8
Additional SIMs	1:2,500	1979	9
Ordnance Survey Plan	1:2,500	1982 - 1984	10
Large-Scale National Grid Data	1:2,500	1993	11
Large-Scale National Grid Data	1:2,500	1995	12

#### **Historical Map - Segment B11**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 634120, 165250 Slice:

Site Area (Ha):

306.39 Search Buffer (m): 100

#### **Site Details**

Tank or Track

Trough

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

Works (building or area)

Tr

Wd Pp

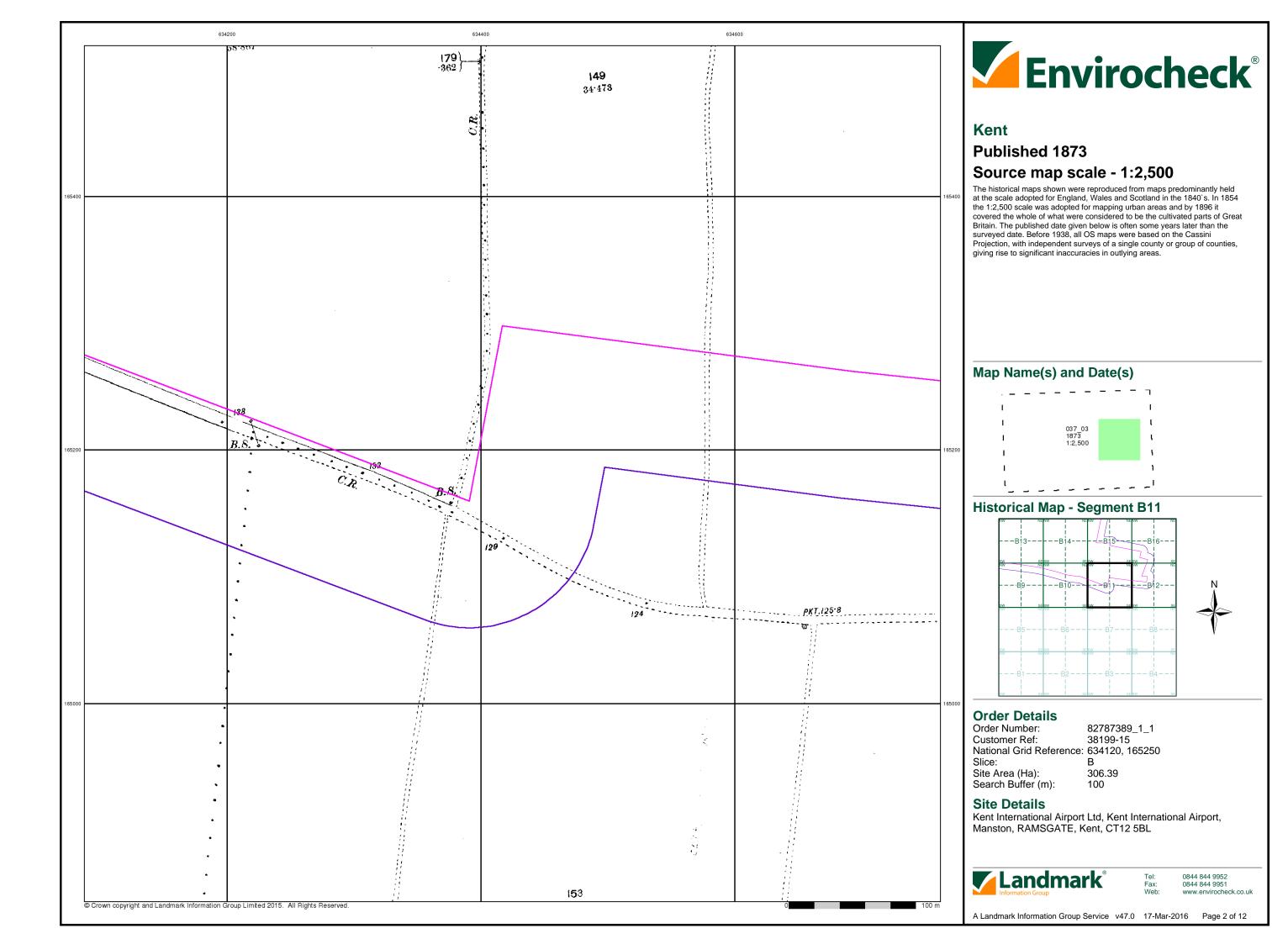
Wks

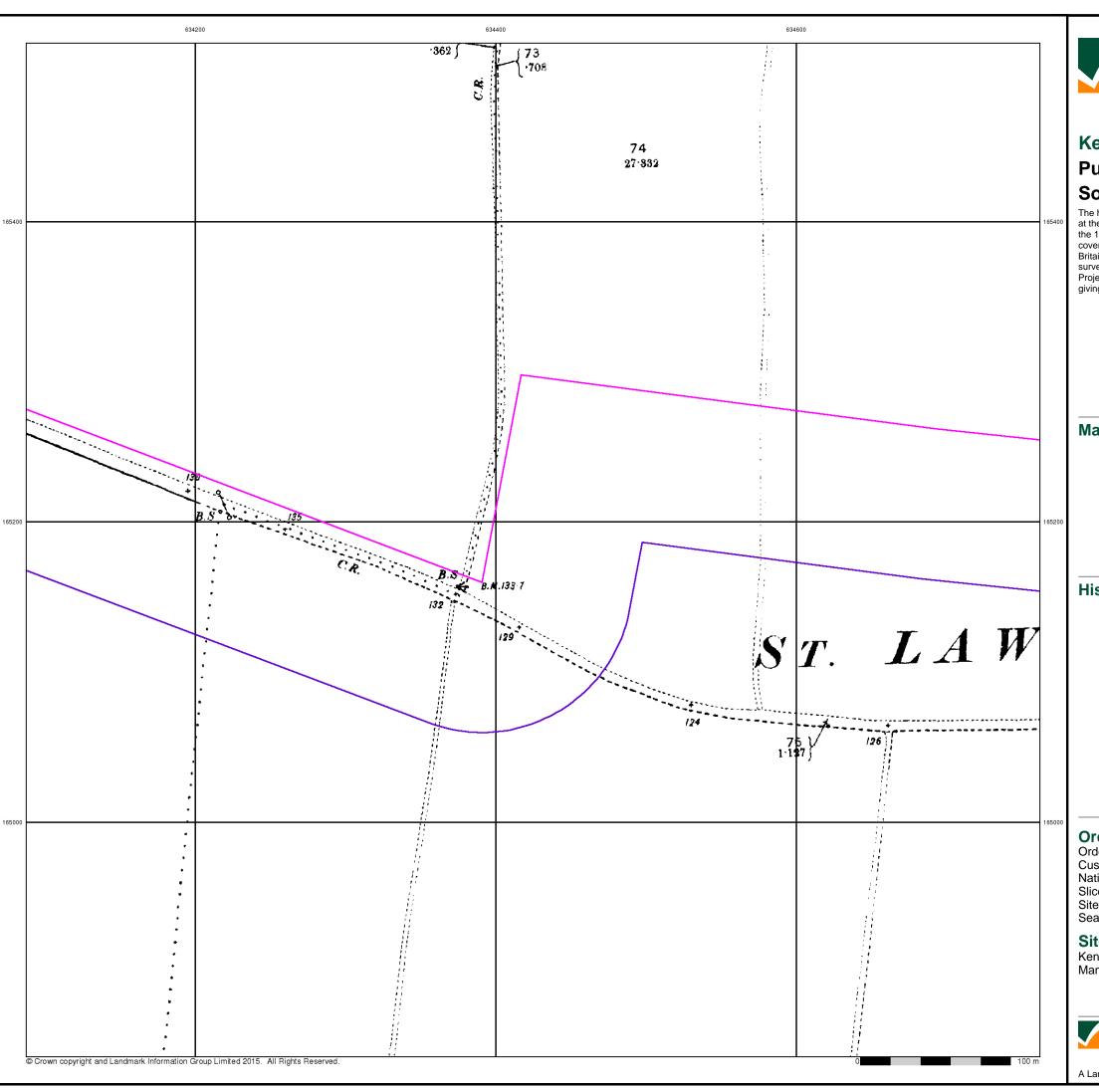
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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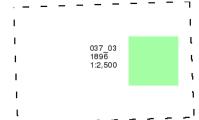


#### Kent

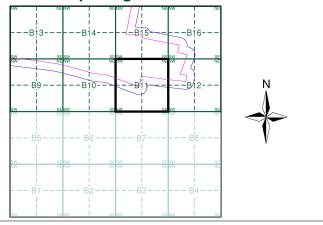
### **Published 1896** Source map scale - 1:2,500

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 B11**



#### **Order Details**

Order Number: 82787389_1_1 38199-15 Customer Ref: National Grid Reference: 634120, 165250 Slice:

Site Area (Ha):

306.39 Search Buffer (m): 100

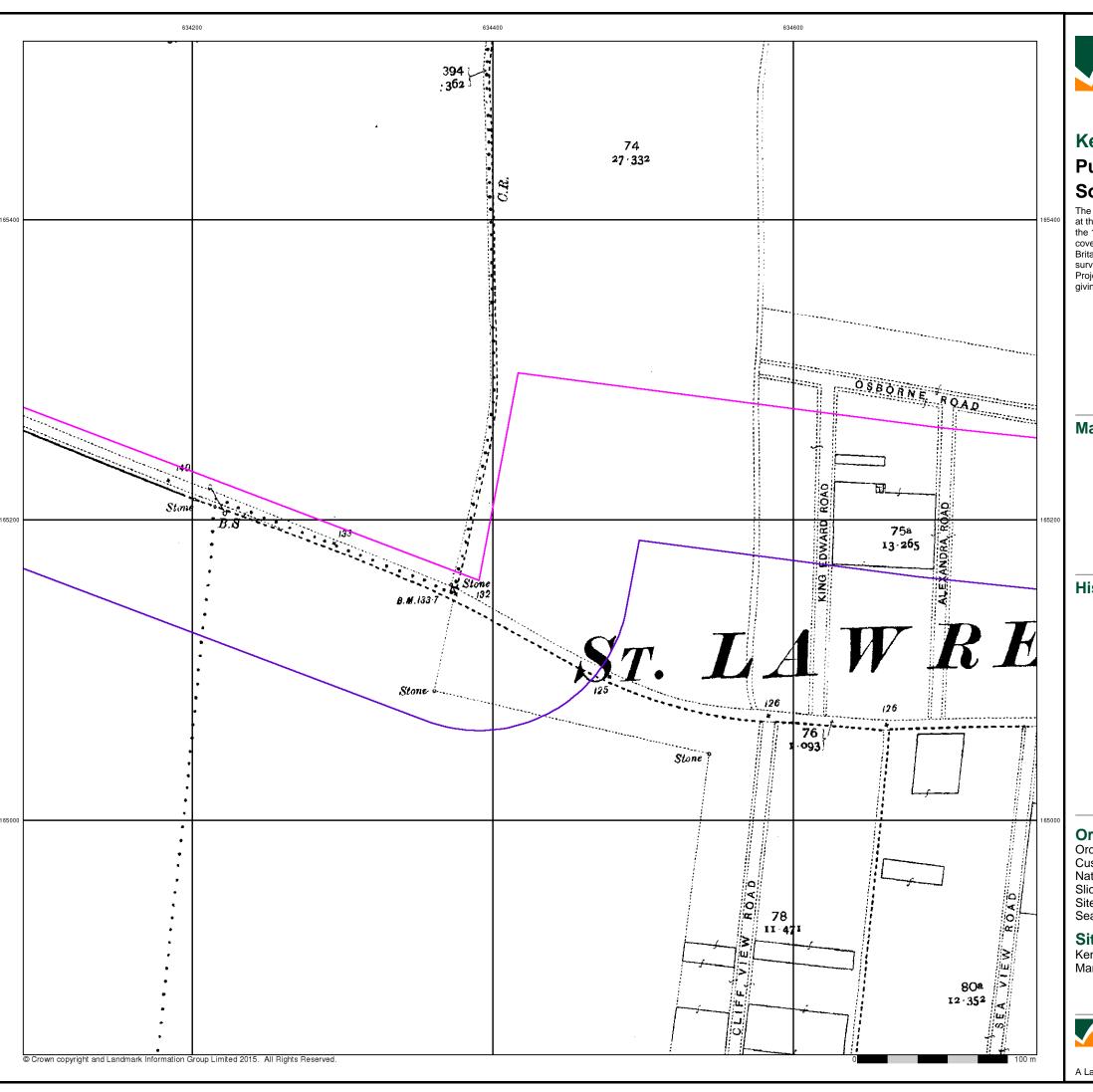
#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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A Landmark Information Group Service v47.0 17-Mar-2016 Page 3 of 12



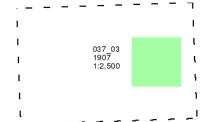


#### Kent

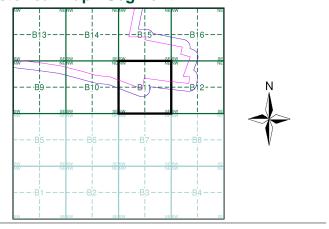
### Published 1907 Source map scale - 1:2,500

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 B11**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B

Site Area (Ha): 306.39 Search Buffer (m): 100

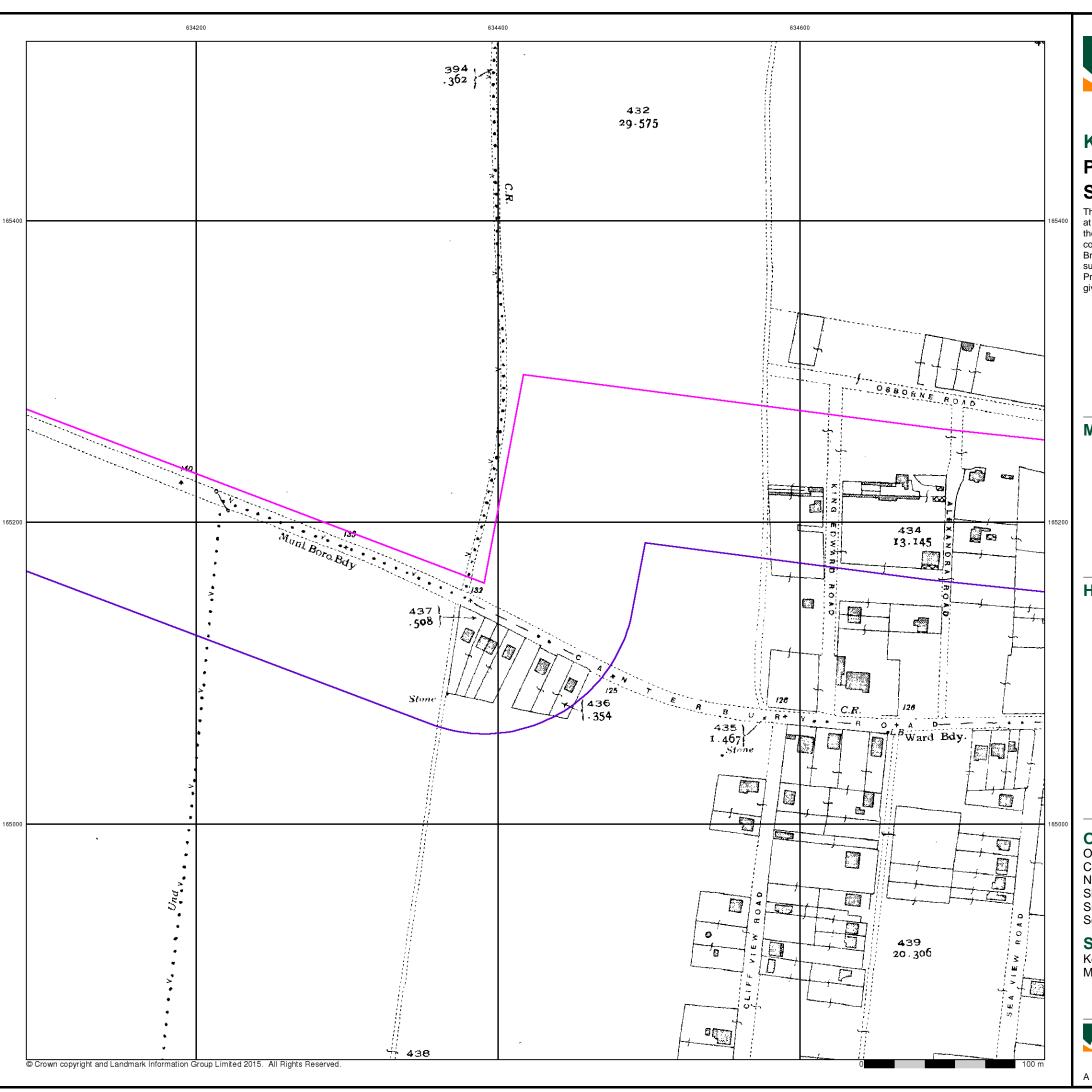
#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



el: 0844 844 9952 ax: 0844 844 9951 (eb: www.envirocheck.c

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#### Kent

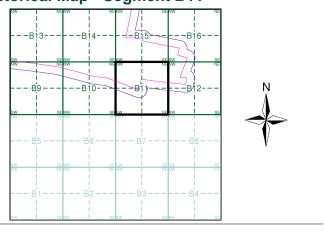
## **Published 1938** Source map scale - 1:2,500

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 B11**



#### **Order Details**

Order Number: 82787389_1_1 38199-15 Customer Ref: National Grid Reference: 634120, 165250 Slice:

Site Area (Ha): 306.39 Search Buffer (m): 100

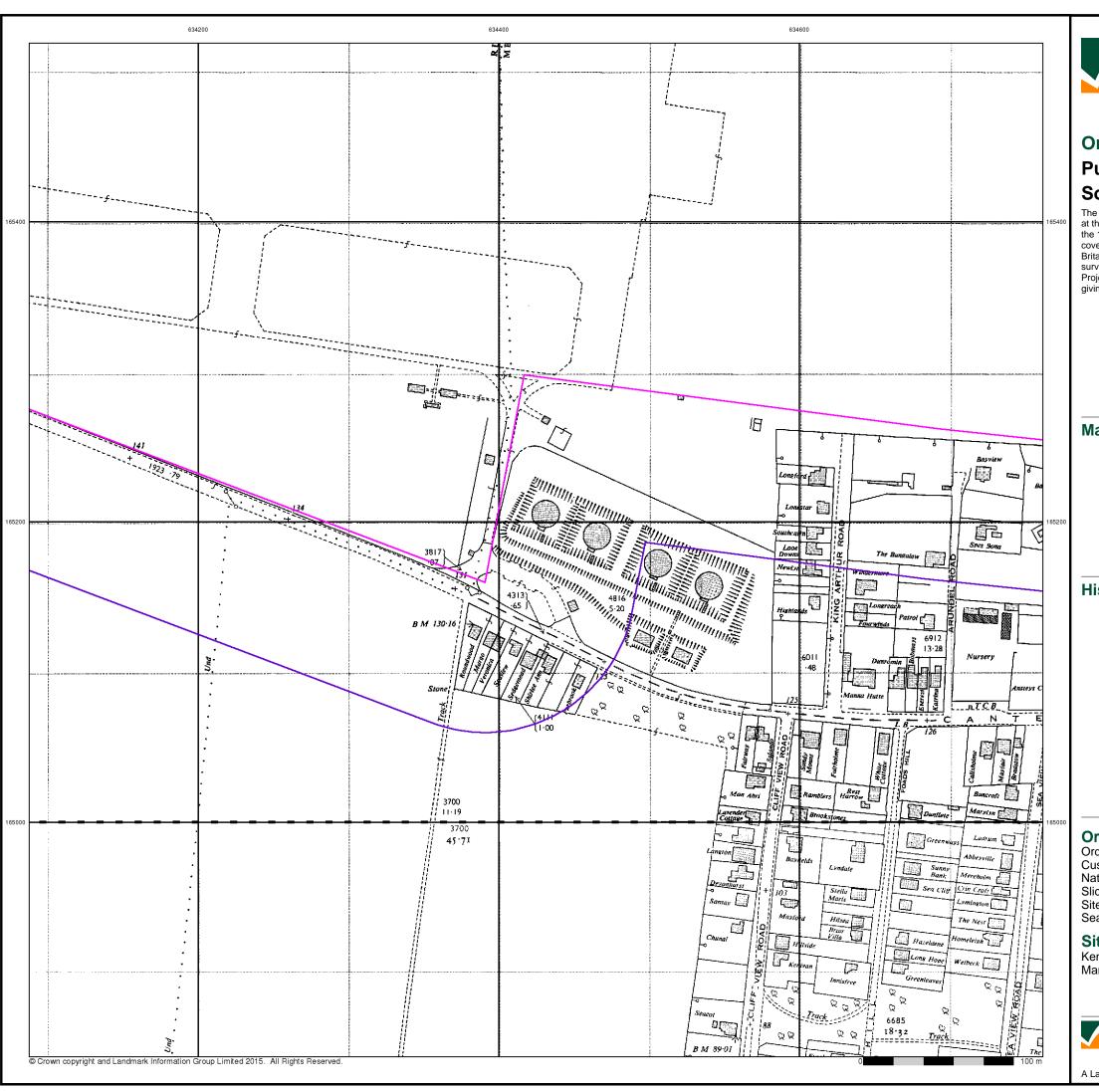
#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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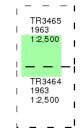




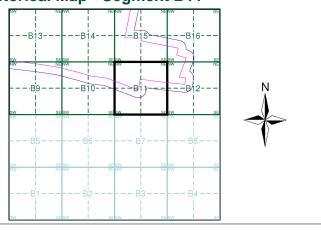
# Ordnance Survey Plan Published 1963 Source map scale - 1:2,500

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 B11**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250

Slice:

Site Area (Ha): 306.39 Search Buffer (m): 100

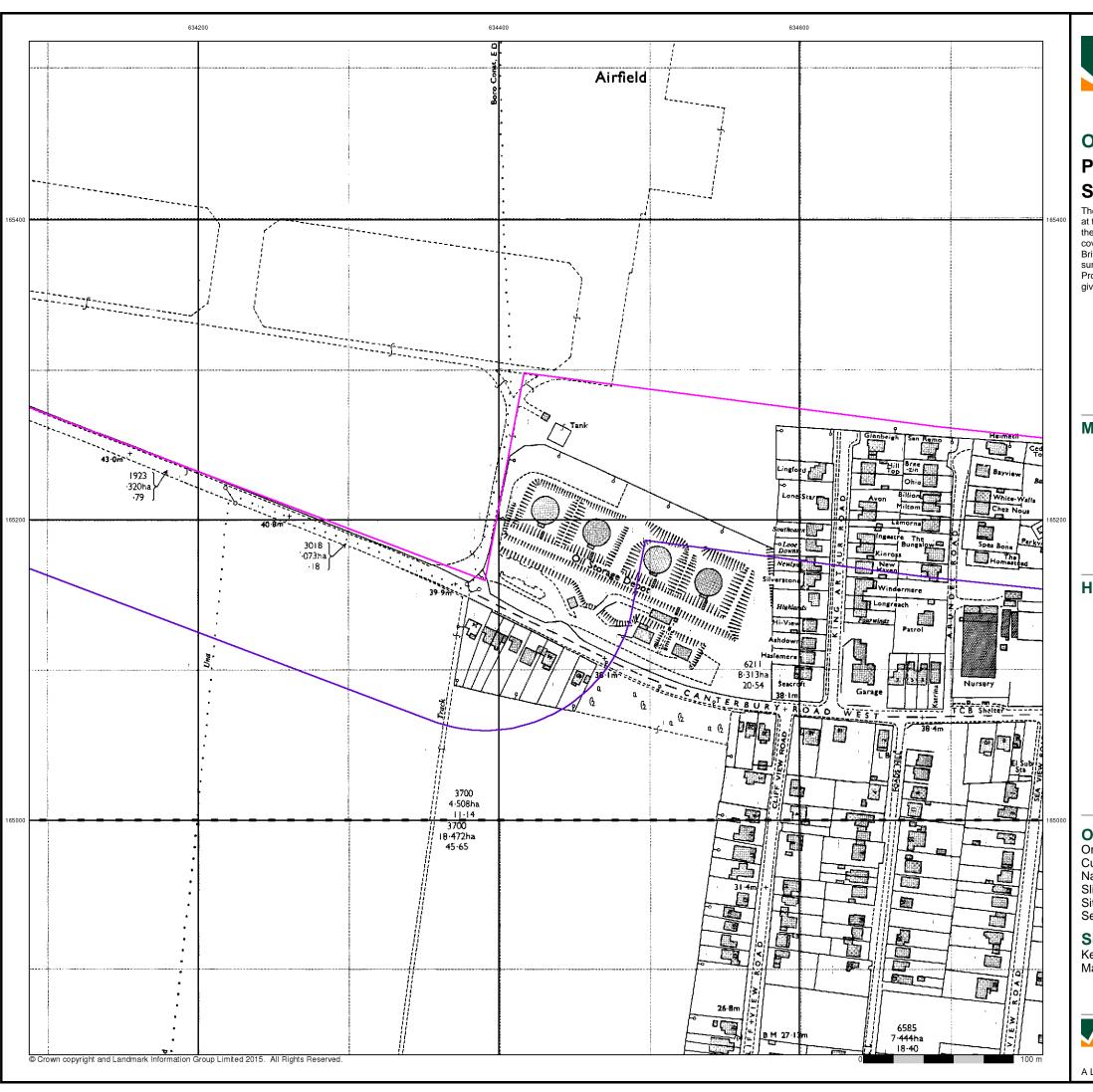
#### **Site Details**

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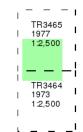


# **Ordnance Survey Plan Published 1973 - 1977** Source map scale - 1:2,500

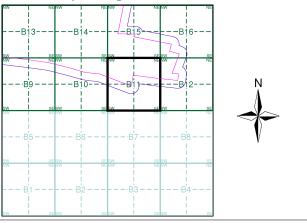
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great

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 B11**



#### **Order Details**

Order Number: 82787389_1_1 38199-15 Customer Ref: National Grid Reference: 634120, 165250

Slice:

306.39 Site Area (Ha): Search Buffer (m):

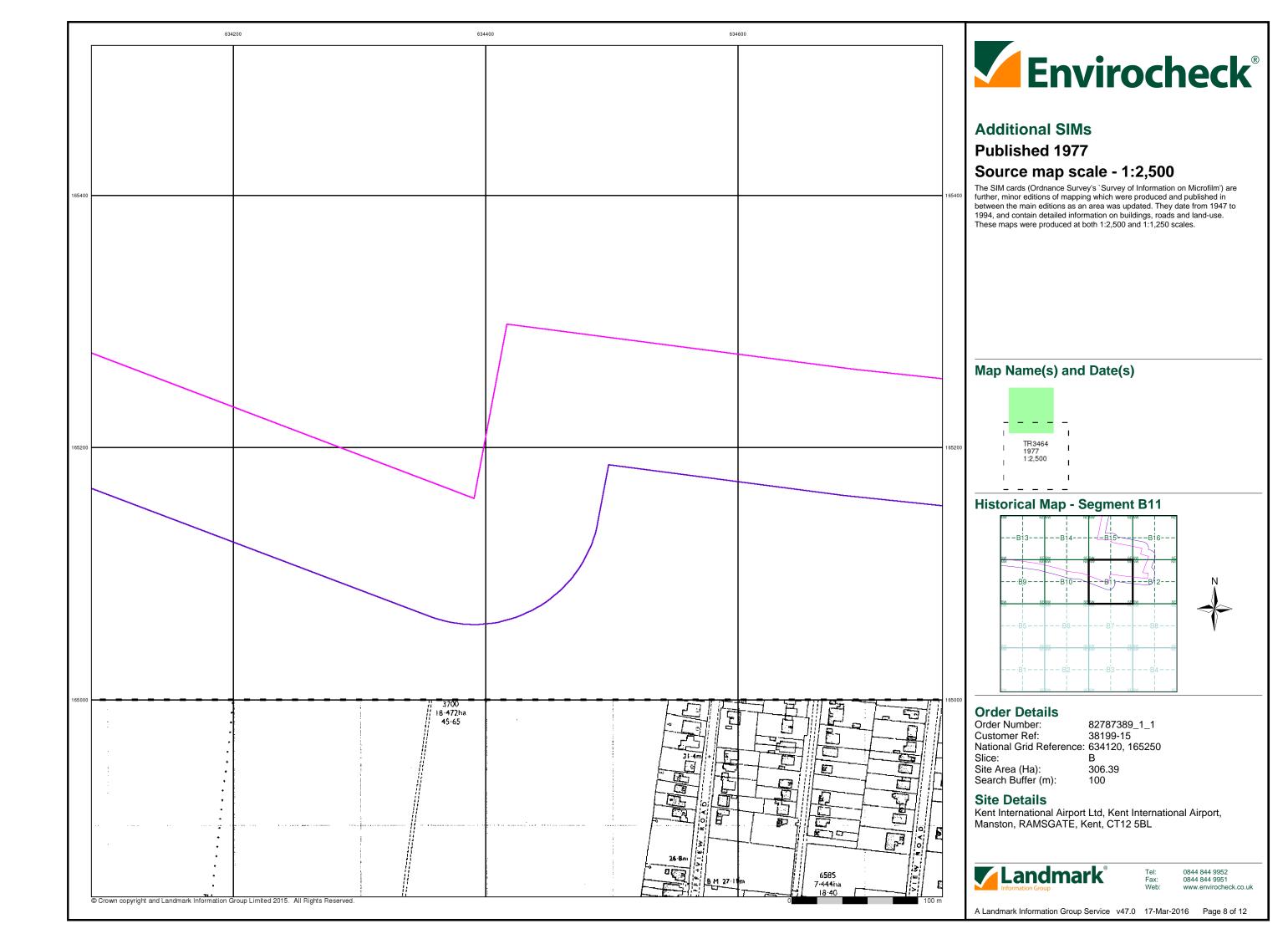
#### **Site Details**

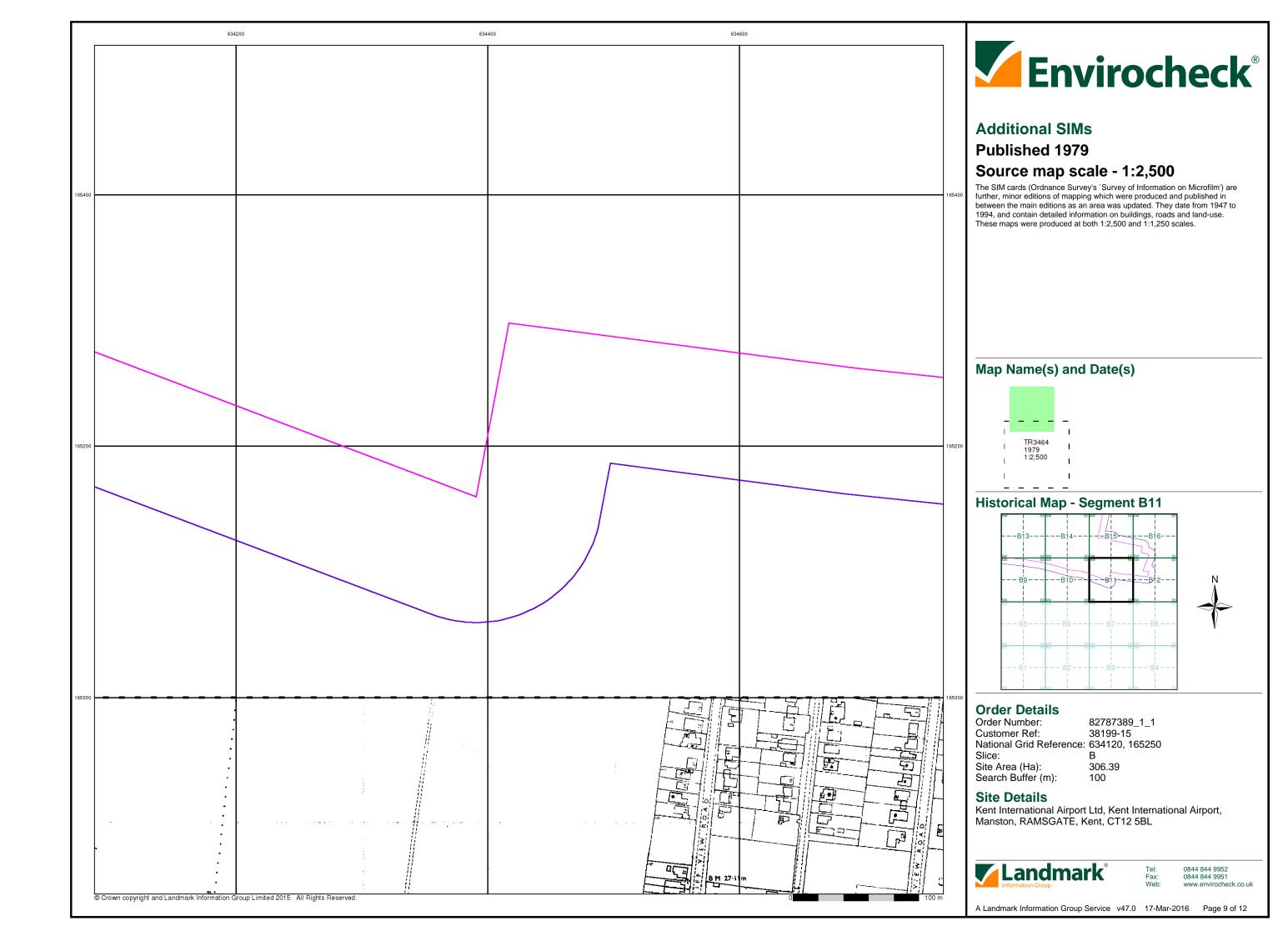
Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL

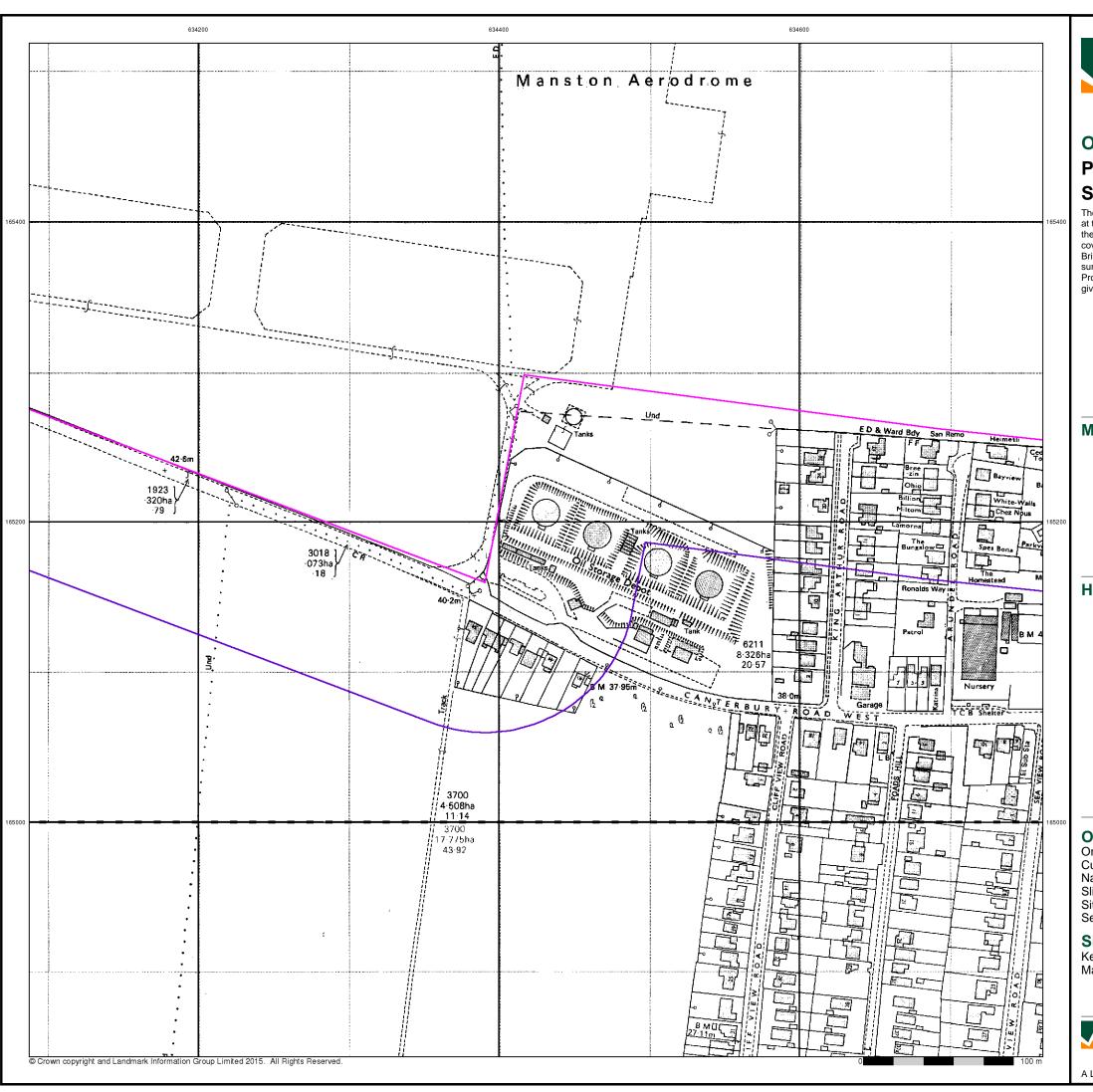


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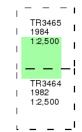




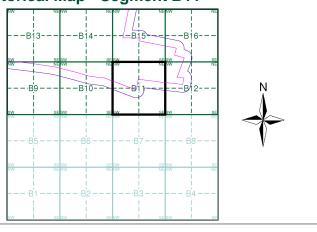
# Ordnance Survey Plan Published 1982 - 1984 Source map scale - 1:2,500

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 B11**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250

Slice:

Site Area (Ha): 306.39 Search Buffer (m): 100

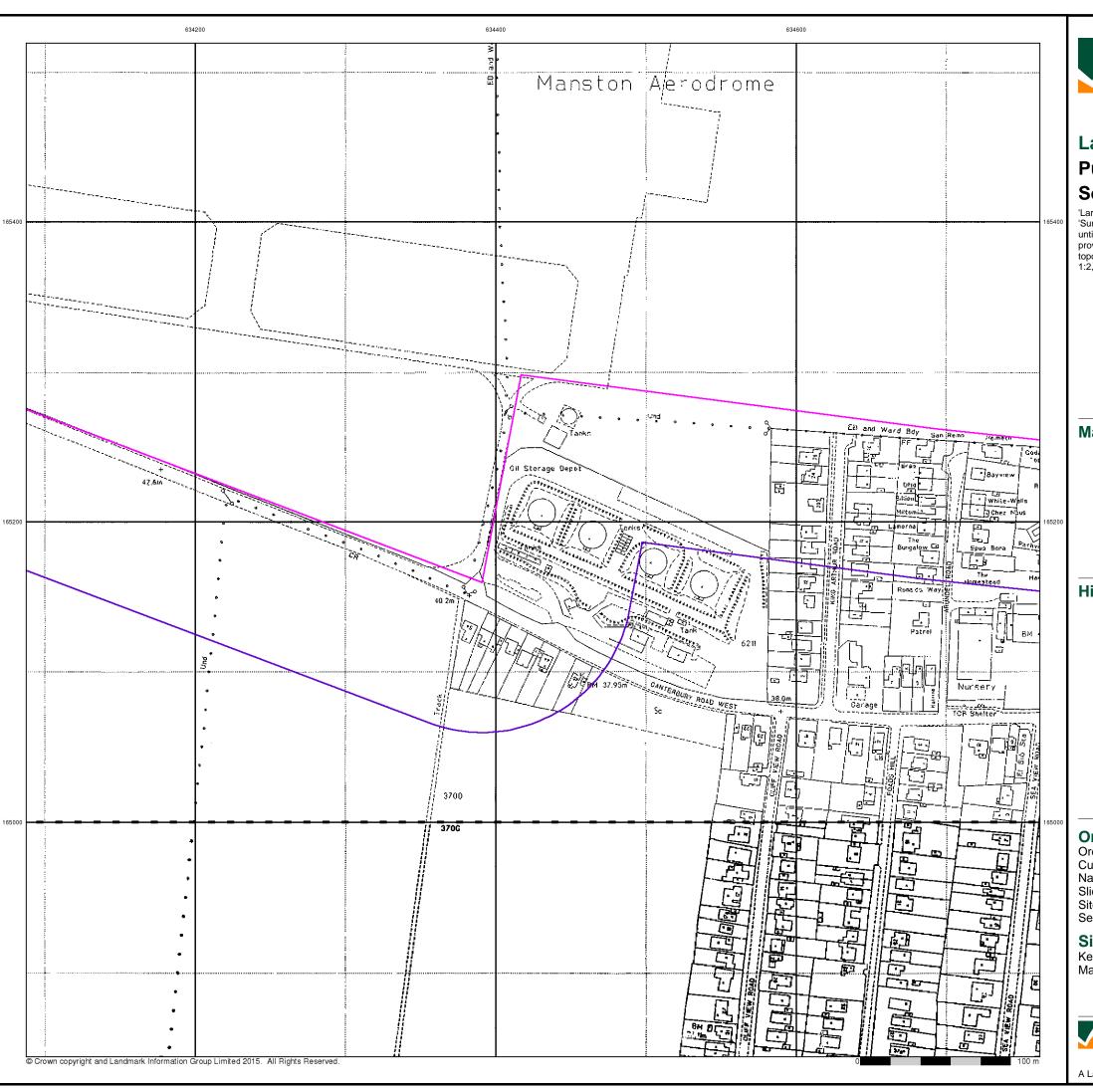
#### **Site Details**

Kent International Airport Ltd, Kent International Airport, Manston, RAMSGATE, Kent, CT12 5BL



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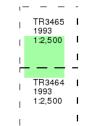
# **Large-Scale National Grid Data**

### **Published 1993**

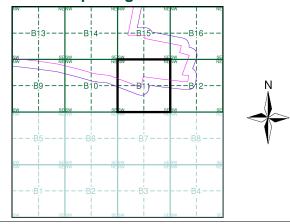
#### Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

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



#### **Historical Map - Segment B11**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250

Slice:

Site Area (Ha): 306.39 Search Buffer (m): 100

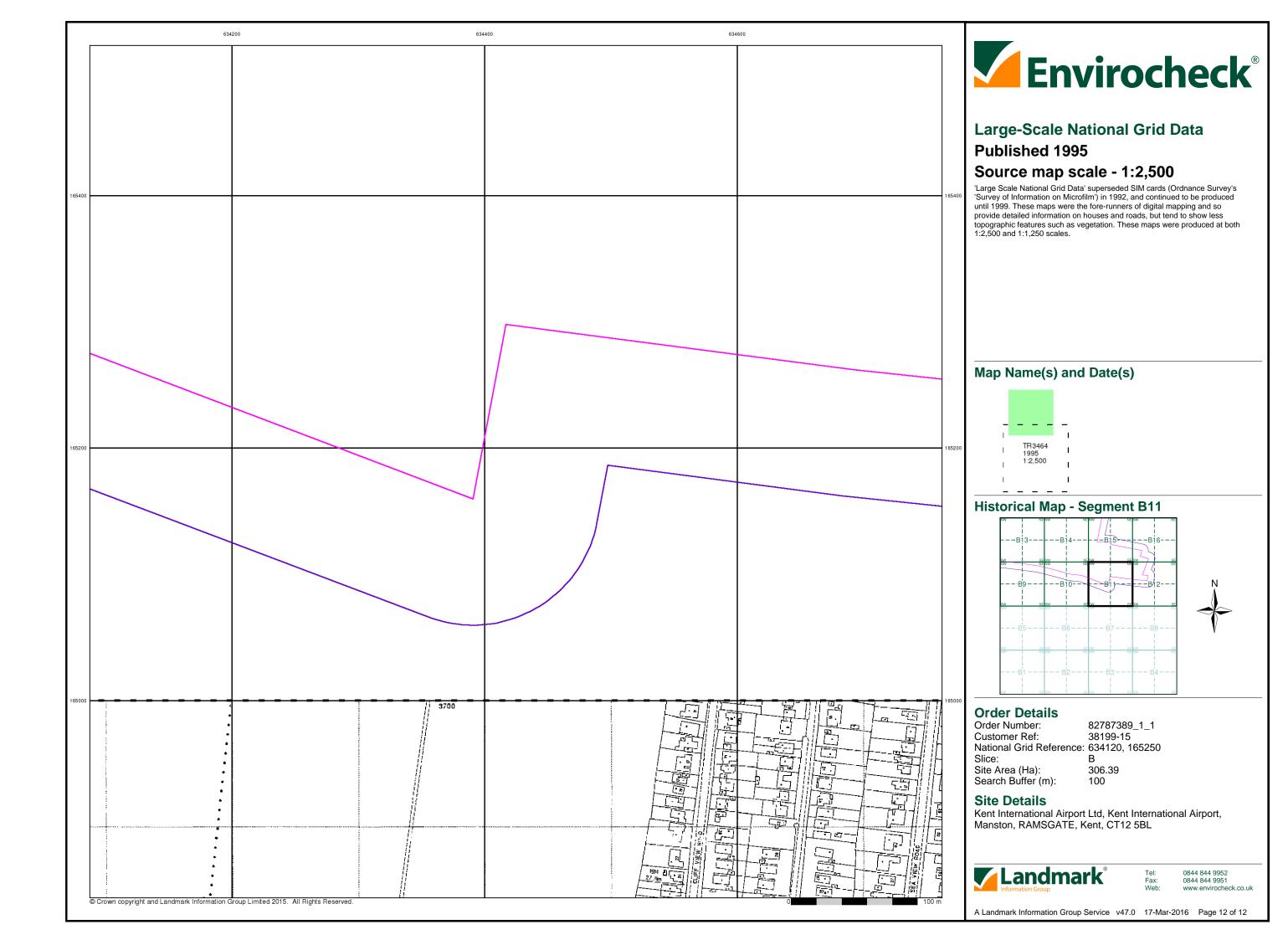
#### **Site Details**

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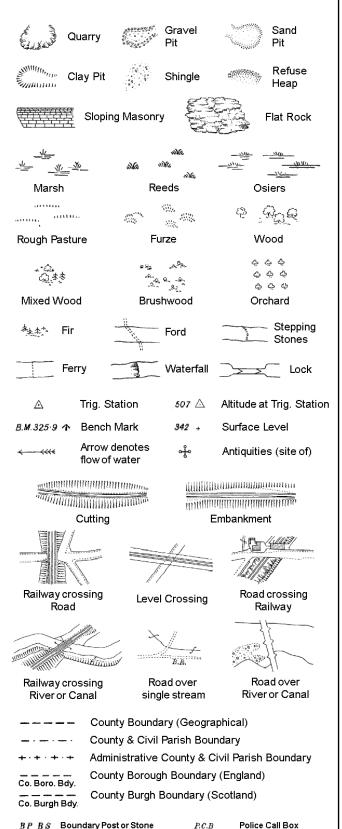
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# **Historical Mapping Legends**

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



Pump

Sluice

Spring

Trough Well

Signal Post

Telephone Call Box

S.P

Sl.

Tr:

B.R.

E.P

F.B.

Bridle Road

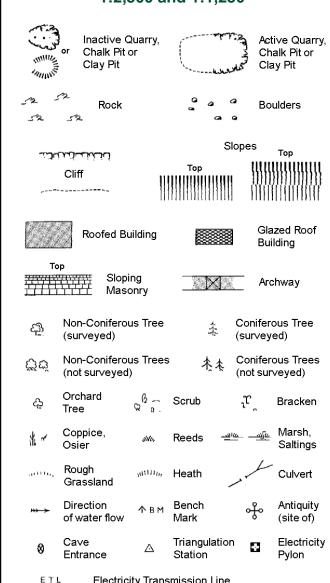
Foot Bridge

Mile Stone

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

Electricity Pylor

#### 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



ETL Elect	ricity Transmission Line
	County Boundary (Geographical)
	County & Ci∨il Parish Boundary
	Civil Parish Boundary
· <del></del> · ·	Admin. County or County Bor. Boundary
L B Bdy	London Borough Boundary
22	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

			Sle	opes	Тор
, נשנה	Clift	1111	Тор	!!!!!!!	!!!!!!!!!!
,				())()()	(((((((()
520	Rock		23	Rock (so	cattered)
$\triangle_{\alpha}$	Boulders		<u>a</u>	Boulders	s (scattered)
$\Box$	Positioned	Boulder		Scree	
<u>ක</u> ු	Non-Conifo (surveyed)	erous Tree )	李	Coniferd (surveye	ous Tree ed)
Çîçi	Non-Conife (not surve	erous Trees yed)	* **	Conifero	ous Trees /eyed)
ද	Orchard Tree	Q a.	Scrub	ູຕຸ	Bracken
北人	Coppice, Osier	siVtı,	Reeds -=	nc — <i>π</i> ∫c	Marsh, Saltings
attli,	Rough Grassland	1111111 ₁₁	Heath	1	Culvert
<b>››→</b>	Direction of water flo	Δ ow	Triangulation Station	, &	Antiquity (site of)
E <u>TL</u> _	_ Electric	ity Transmis	ssion Line	$\boxtimes$	Electricity Pylon
K BM	231.60m E	Bench Mark		Building Building	gs with g Seed
	Roofe	ed Building		251	azed Roof iilding
		Ci∨il parish	/community b	oundary	
		District bo	undary		
_ •		County box	undary		
		Boundary	ost/stone		
٨	>		mereing symb pear in oppose		
Bks	Barracks		Р	Pillar. Po	le or Post
Bty	Battery		PO	Post Offi	
Cemy	Cemetery		PC	Public C	onvenience
Chy	Chimney		Pp	Pump	
Cis	Cistern		Ppg Sta	Pumping	
Dismtd F	-	tled Railway	PW	Place of	•
El Gen S	Station	ity Generating	_	Pı	ewage umping Station
EIP		Pole, Pillar	SB, S Br	_	ox or Bridge
	ta Electricity	Sub Station	SP, SL	_	ost or Light
FB	Filter Bed	Baladda 51	Spr 	Spring	
Fn/DFr		Drinking Ftn.	Tk T-	Tank or 1	rack
Gas Gov	Gas Valve	Compound	Tr	Trough	

Gas Governer

Mile Post or Mile Stone

**Guide Post** 

Manhole

Wd Pp

Wks

Wind Pump

Wr Pt. Wr T Water Point, Water Tap

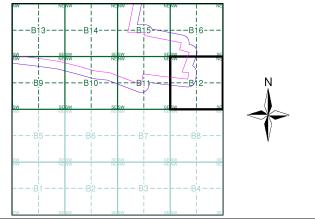
Works (building or area)



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

Mapping Type	Scale	Date	Pg
Kent	1:2,500	1873 - 1881	2
Kent	1:2,500	1896	3
Kent	1:2,500	1907	4
Kent	1:2,500	1938	5
Ordnance Survey Plan	1:2,500	1963	6
Additional SIMs	1:2,500	1963 - 1977	7
Ordnance Survey Plan	1:2,500	1973 - 1984	8
Supply of Unpublished Survey Information	1:2,500	1975	9
Additional SIMs	1:2,500	1979	10
Ordnance Survey Plan	1:2,500	1982 - 1984	11
Large-Scale National Grid Data	1:1,250	1993	12
Large-Scale National Grid Data	1:2,500	1993	13
Large-Scale National Grid Data	1:1,250	1994	14
Large-Scale National Grid Data	1:2.500	1995	15

#### **Historical Map - Segment B12**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 634120, 165250 Slice:

Site Area (Ha):

306.39 Search Buffer (m): 100

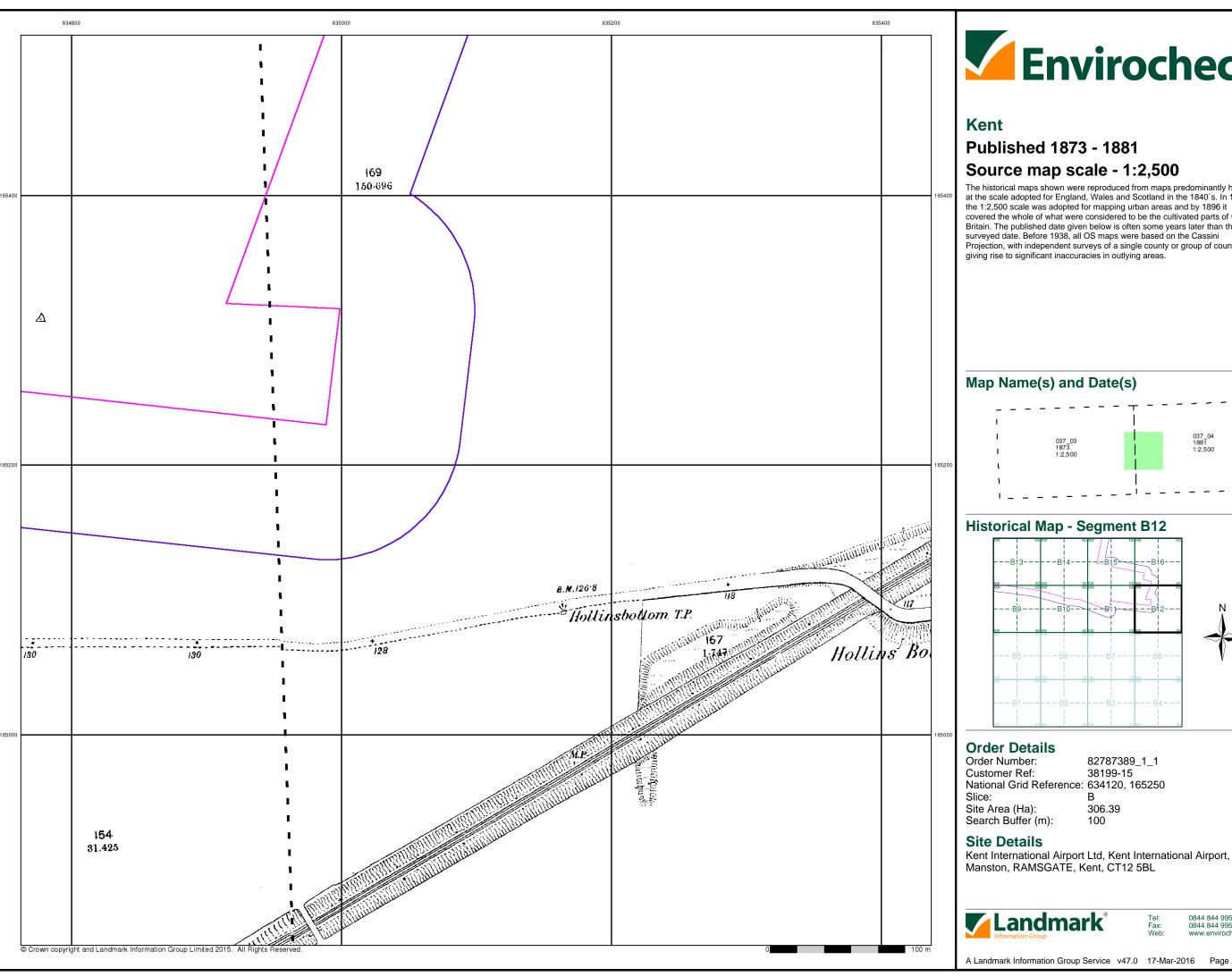
#### **Site Details**

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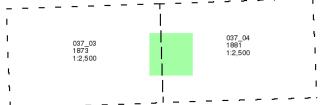
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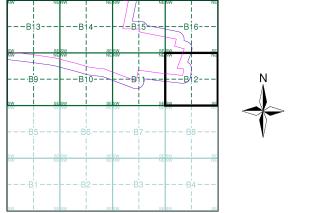


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# Source map scale - 1:2,500

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.

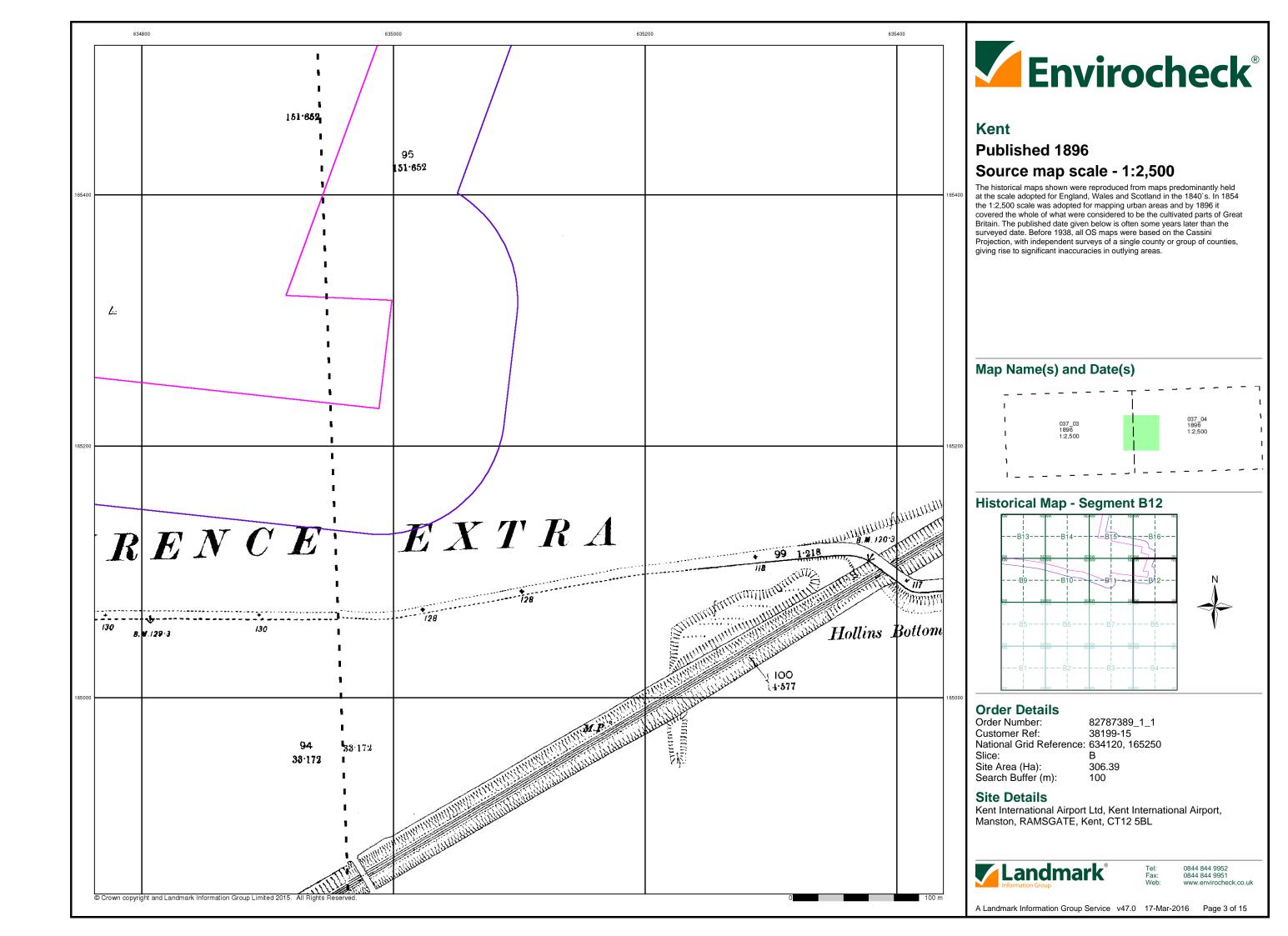


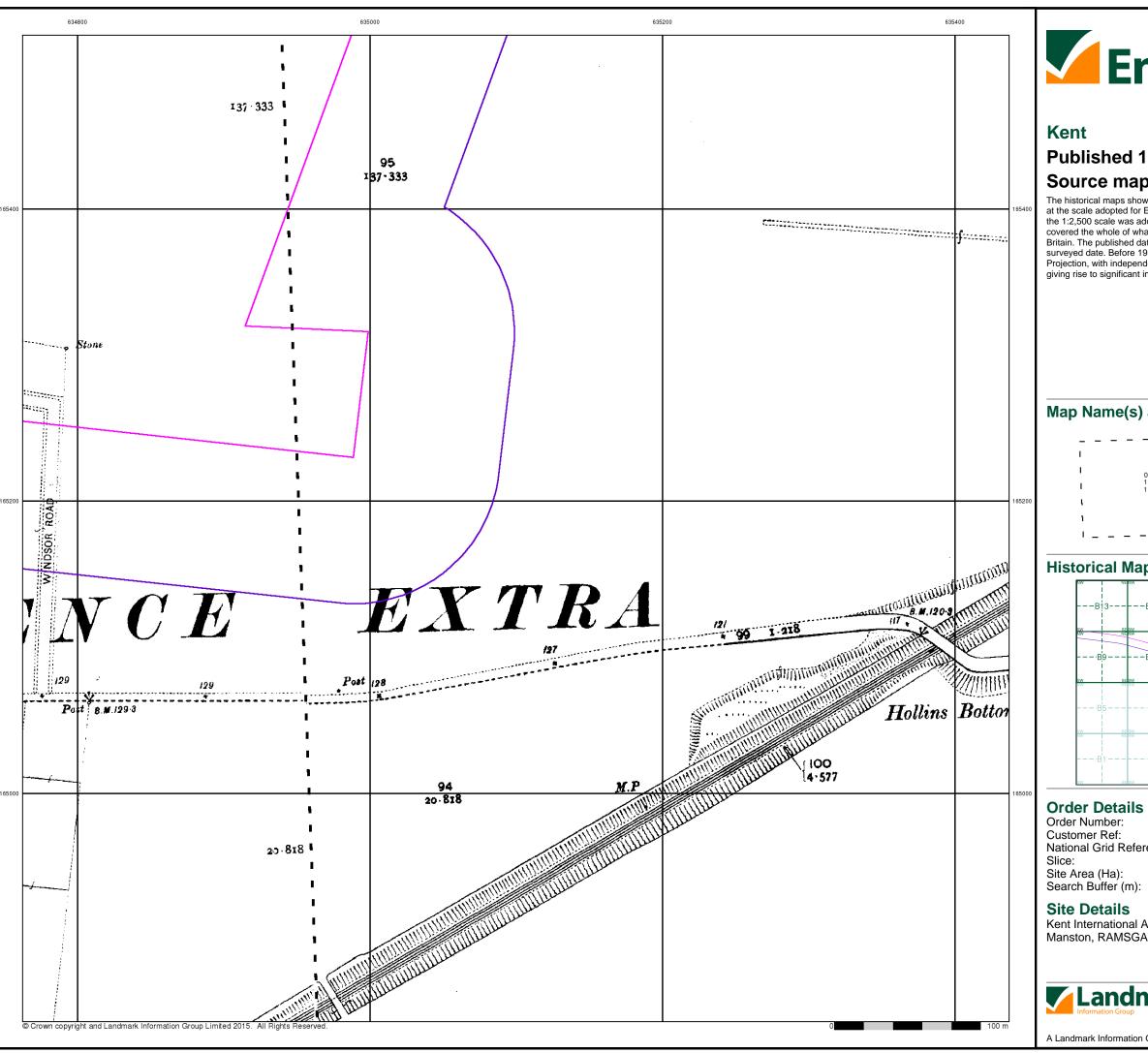


National Grid Reference: 634120, 165250

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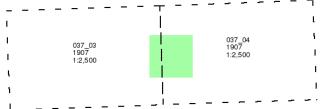




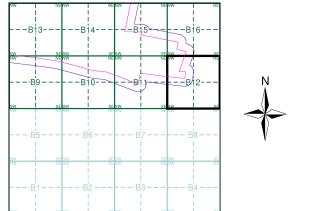
### **Published 1907** Source map scale - 1:2,500

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 B12**



82787389_1_1 38199-15 National Grid Reference: 634120, 165250

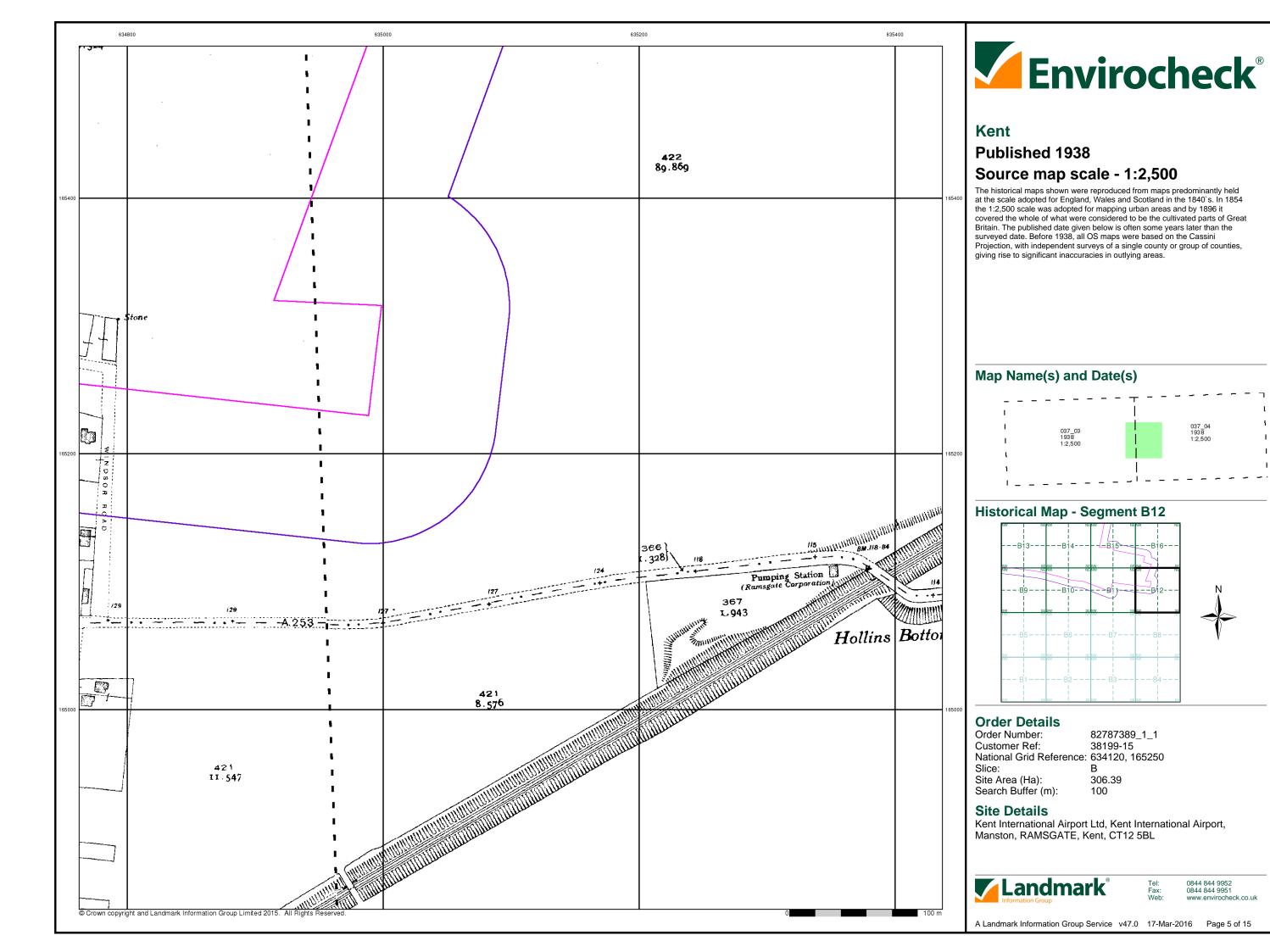
> 306.39 100

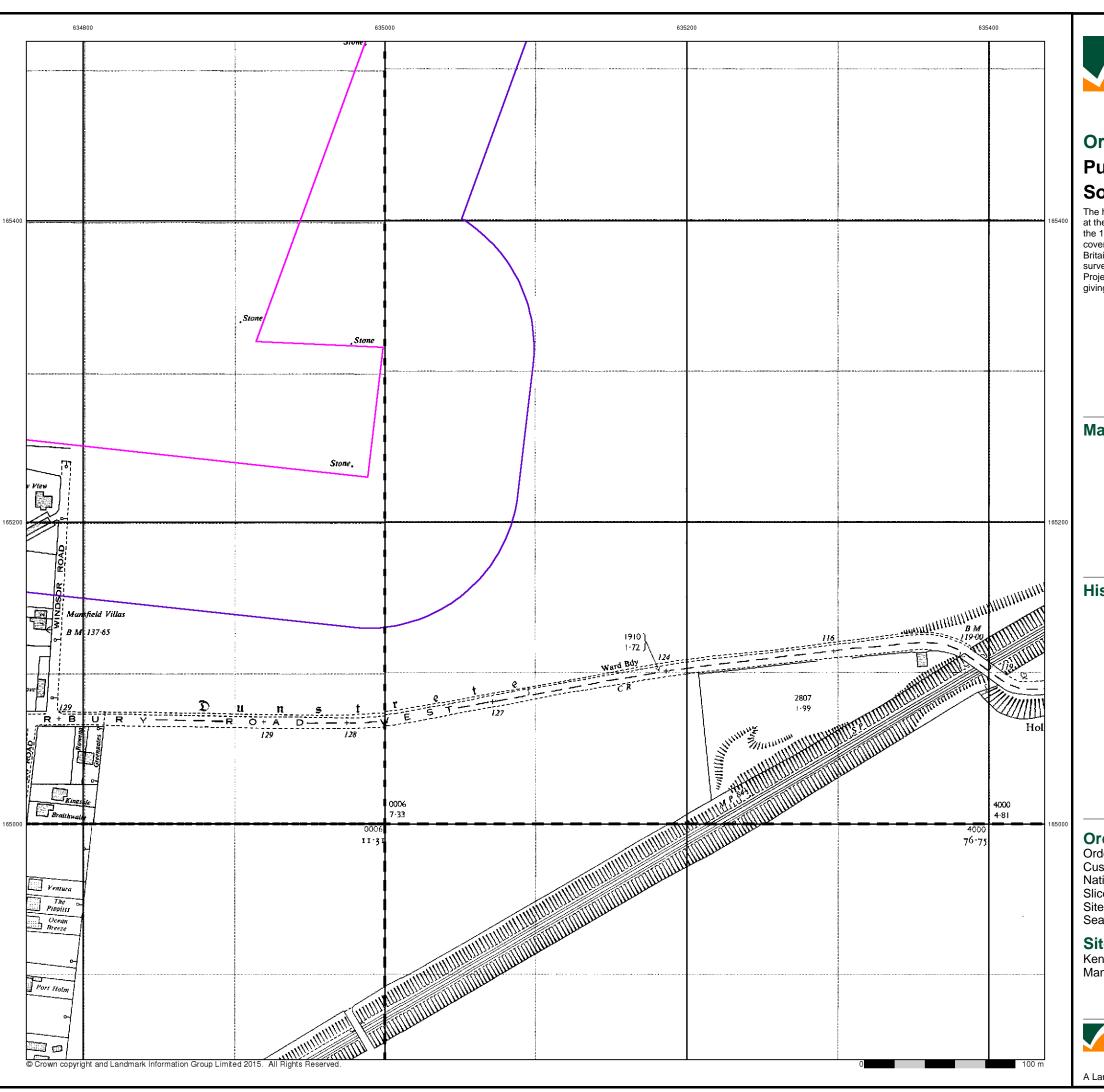
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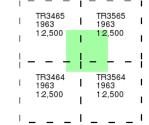




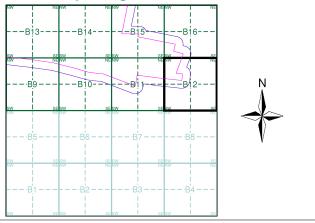
# Ordnance Survey Plan Published 1963 Source map scale - 1:2,500

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 B12**



#### **Order Details**

Order Number: 82787389_1_1
Customer Ref: 38199-15
National Grid Reference: 634120, 165250
Slice: B

Site Area (Ha): 306.39 Search Buffer (m): 100

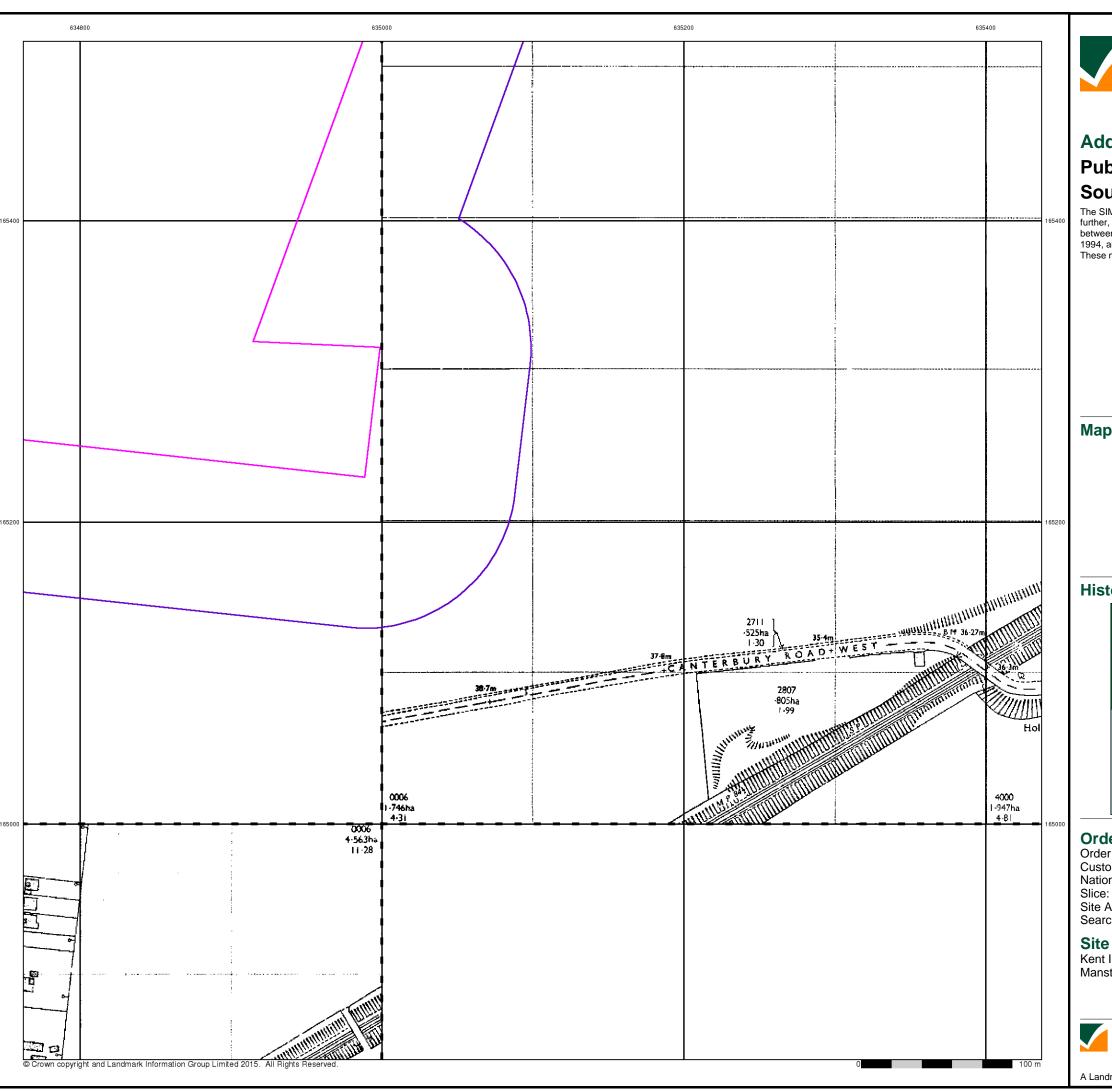
#### **Site Details**

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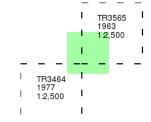


#### **Additional SIMs**

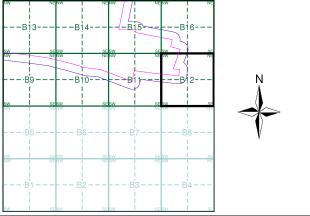
## **Published 1963 - 1977** Source map scale - 1:2,500

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

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



#### **Historical Map - Segment B12**



#### **Order Details**

Order Number: 82787389_1_1 38199-15 Customer Ref: National Grid Reference: 634120, 165250

Site Area (Ha): 306.39 Search Buffer (m): 100

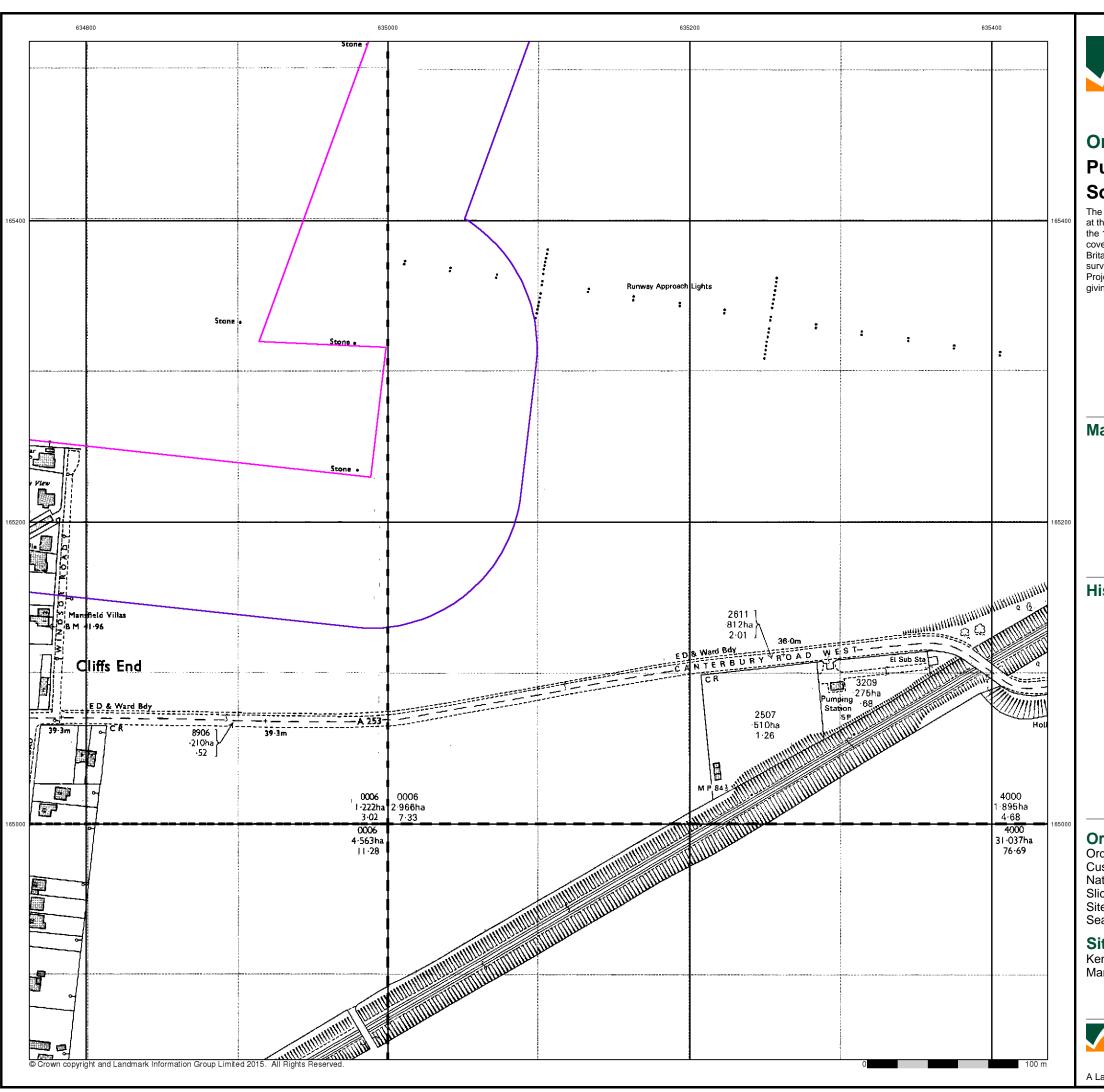
#### **Site Details**

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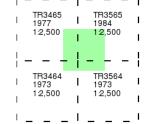




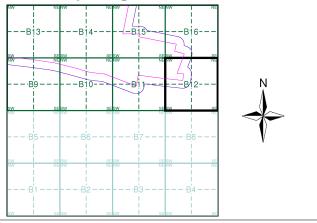
# **Ordnance Survey Plan** Published 1973 - 1984 Source map scale - 1:2,500

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 B12**



#### **Order Details**

Order Number: 82787389_1_1 Customer Ref: 38199-15 National Grid Reference: 634120, 165250 Slice:

Site Area (Ha):

306.39 Search Buffer (m): 100

#### **Site Details**

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