



# Envirocheck® Report:

### Datasheet

### **Order Details:**

Order Number: 218629437\_1\_1

Customer Reference: 60559231/Teesside Clean Gas

# National Grid Reference: 459210, 521540

Slice: E

Site Area (Ha):

1523.9 Search Buffer (m):

250

Site Details: Teesside Clean Gas Project 2 of 2

### **Client Details:**

Mr R Addison AECOM Ltd 1st Floor, One Trinty Gardens Broad Chare Newcastle Upon Tyne NE1 2HF



# Δ=CO

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	3
Hazardous Substances	-
Geological	4
Industrial Land Use	5
Sensitive Land Use	6
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#### 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 this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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#### Report Version v53.0

Data Type	Page Number	On Site	0 to 250m (*up to 500m)
Agency & Hydrological			
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes
Contaminated Land Register Entries and Notices			
Discharge Consents			
Prosecutions Relating to Controlled Waters			n/a
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			
Pollution Incidents to Controlled Waters			
Prosecutions Relating to Authorised Processes			
Registered Radioactive Substances			
River Quality			
River Quality Biology Sampling Points			
River Quality Chemistry Sampling Points			
Substantiated Pollution Incident Register			
Water Abstractions			
Water Industry Act Referrals			
Groundwater Vulnerability Map	pg 1	Yes	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a
Groundwater Vulnerability - Local Information			n/a
Bedrock Aquifer Designations	pg 2	Yes	n/a
Superficial Aquifer Designations	pg 2	Yes	n/a
Source Protection Zones			
Extreme Flooding from Rivers or Sea without Defences			
Flooding from Rivers or Sea without Defences			
Areas Benefiting from Flood Defences			
Flood Water Storage Areas			
Flood Defences			
OS Water Network Lines			



Data Type	Page Number	On Site	0 to 250m (*up to 500m)
Waste			
BGS Recorded Landfill Sites			
Historical Landfill Sites			
Integrated Pollution Control Registered Waste Sites			
Licensed Waste Management Facilities (Landfill Boundaries)			
Licensed Waste Management Facilities (Locations)			
Local Authority Landfill Coverage	pg 3	1	n/a
Local Authority Recorded Landfill Sites			
Potentially Infilled Land (Non-Water)			
Potentially Infilled Land (Water)			
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			



Data Type	Page Number	On Site	0 to 250m (*up to 500m)
Geological			
BGS 1:625,000 Solid Geology	pg 4	Yes	n/a
BGS Estimated Soil Chemistry	pg 4	Yes	
BGS Recorded Mineral Sites			
BGS Urban Soil Chemistry			
BGS Urban Soil Chemistry Averages			
CBSCB Compensation District			n/a
Coal Mining Affected Areas			n/a
Mining Instability	pg 4	Yes	n/a
Man-Made Mining Cavities			
Natural Cavities			
Non Coal Mining Areas of Great Britain			
Potential for Collapsible Ground Stability Hazards	pg 4	Yes	
Potential for Compressible Ground Stability Hazards			
Potential for Ground Dissolution Stability Hazards			
Potential for Landslide Ground Stability Hazards	pg 4	Yes	
Potential for Running Sand Ground Stability Hazards	pg 4	Yes	
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 4	Yes	
Radon Potential - Radon Affected Areas			n/a
Radon Potential - Radon Protection Measures			n/a
Industrial Land Use			
Contemporary Trade Directory Entries			
Fuel Station Entries			
Points of Interest - Commercial Services			
Points of Interest - Education and Health			
Points of Interest - Manufacturing and Production	pg 5		1
Points of Interest - Public Infrastructure			
Points of Interest - Recreational and Environmental			
Gas Pipelines			
Underground Electrical Cables			



Data Type	Page Number	On Site	0 to 250m (*up to 500m)
Sensitive Land Use			
Ancient Woodland			
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			
Ramsar Sites			
Sites of Special Scientific Interest	pg 6	1	
Special Areas of Conservation			
Special Protection Areas			
World Heritage Sites			



# Agency & Hydrological

	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	(NW)	0	1	458700
					522300
Flooding Type:	Potential for Groundwater Flooding to Occur at Surface	E1NW (S)	0	1	459210 521537
BGS Groundwater Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	(NW)	0	1	459050 521700
BGS Groundwater Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	3	1	458750
BGS Groundwater Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	(SW)	67	1	522750 458800
		(N)	96	1	520650 458700
		(14)			523050
BGS Groundwater Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	(S)	106	1	458900 520750
BGS Groundwater Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	(N)	139	1	459050 522450
BGS Groundwater Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	(S)	150	1	458850
BGS Groundwater	Flooding Susceptibility				520500
Flooding Type:	Potential for Groundwater Flooding of Property Situated Below Ground Level	(S)	178	1	458900 520600
BGS Groundwater Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	(S)	197	1	459000 520650
BGS Groundwater Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	E9SW	202	1	459200
	ater Feature	(N)			522500
	srahilifu Man				
Combined Classification: Combined Vulnerability:	Secondary Superficial Aquifer - Low Vulnerability Low	(NW)	0	2	459000 522000
Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial	Vell Connected Fractures 300-550 mm/year <40% >90%				
Superficial Recharge:	Low				
Combined Classification: Combined Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial Thickness:	Secondary Superficial Aquifer - Low Vulnerability Low Productive Bedrock Aquifer, Productive Superficial Aquifer Low Well Connected Fractures 300-550 mm/year <40% >90%	(W)	0	2	459000 521537
	Flooding Type: BGS Groundwater Flooding Type: BGS Groundwater	Bits         Groundwater Flooding Susceptibility           Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level           BGS Groundwater Flooding Susceptibility         Flooding Type:           Potential for Groundwater Flooding of Property Situated Below Ground Level           BGS Groundwater Flooding Susceptibility           Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level           BGS Groundwater Flooding Susceptibility           Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level           BGS Groundwater Flooding Susceptibility           Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level           BGS Groundwater Flooding Susceptibility           Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level           BGS Groundwater Flooding Susceptibility           Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level           BGS Groundwater Flooding Susceptibility           Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level           BGS Groundwater Flooding Susceptibility           Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level           BGS Groundwater Flooding Susceptib	Details         References Compase Direction)           BGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding to Occur at Surface         (NW)           BGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding to Occur at Surface         (NW)           BGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level (N)         (NW)           BGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level (N)         (N)           BGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level (N)         (N)           BGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level (S)         (N)           BGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level (S)         (S)           BGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level (S)         (S)           BGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level (S)         (S)           BGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Floodin	Details         Reference, Compassion, Direction         Petieritation           BSS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding to Occur at Surface         (WV)         0           BSS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (WV)         0           BSS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (WV)         0           BSS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (W)         67           BSS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (N)         98           BSS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (N)         139           BSS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (S)         116           BSS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (S)         1178           BSS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Sit	Details         Reference         Estimate Prom Sta         Contact           EGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (NW)         0         1           EGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding Susceptibility Flooding Type:         0         1           EGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (NW)         0         1           EGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (NW)         3         1           EGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (N)         36         1           EGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (N)         138         1           EGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (N)         139         1           EGS Groundwater Flooding Susceptibility Flooding Type:         Potential for Groundwater Flooding of Property Situated Below Ground Level         (S)         178         1



# Agency & Hydrological

Page 2 of 12

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map					
	Combined	Secondary Superficial Aquifer - Medium Vulnerability	E1NW	0	2	459210
	Classification: Combined Vulnerability:	Medium	(S)			521537
	Combined Aquifer:	Productive Bedrock Aquifer, Productive Superficial Aquifer				
	Pollutant Speed:	Low				
	Bedrock Flow: Dilution:	Well Connected Fractures <300 mm/year				
	Baseflow Index:	40-70%				
	Superficial Patchiness:	>90%				
	Superficial	3-10m				
	Thickness: Superficial	Low.				
	Recharge:	Low				
	Groundwater Vulne	erability Map				
	Combined	Secondary Superficial Aquifer - Medium Vulnerability	(S)	0	2	459000
	Classification: Combined	Medium				521000
	Vulnerability:					
	Combined Aquifer:	Productive Bedrock Aquifer, Productive Superficial Aquifer				
	Pollutant Speed: Bedrock Flow:	Low Well Connected Fractures				
	Dilution:	<300 mm/year				
	Baseflow Index: Superficial	<40% >90%				
	Patchiness:					
	Superficial Thickness:	>10m				
	Superficial	Low				
	Recharge:					
	Groundwater Vulne	erability Map				
	Combined	Secondary Superficial Aquifer - Medium Vulnerability	(N)	0	2	459000
	Classification: Combined	Medium				523000
	Vulnerability:					
	Combined Aquifer: Pollutant Speed:	Productive Bedrock Aquifer, Productive Superficial Aquifer Low				
	Bedrock Flow:	Well Connected Fractures				
	Dilution: Baseflow Index:	<300 mm/year 40-70%				
	Superficial	>90%				
	Patchiness: Superficial	3-10m				
	Thickness:	3-1011				
	Superficial	Low				
	Recharge:					
	Groundwater Vulne	erability - Soluble Rock Risk				
	Bedrock Aquifer De	scientions				
	-	Secondary Aquifer - Undifferentiated	E1NW	0	2	459210
		eccentury riquirer entimorentiated	(S)			521537
	Superficial Aquifer	-				
	Aquifer Designation:	Secondary Aquifer - A	(NW)	0	2	458068
	Superficial Aquifer	Designations				523720
		Secondary Aquifer - Undifferentiated	E1NW	0	2	459210
			(S)	-		521537
	-	rom Rivers or Sea without Defences				
	None					
	-	ers or Sea without Defences				
	None					
	Areas Benefiting from None	om Flood Defences				
	Flood Water Storag	ne Areas				
	None					
	Flood Defences					
	None					
	OS Water Network	Lines				
	None					
ι	1		I			



## Waste

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Lan	ndfill Coverage				
	Name:	Redcar and Cleveland Unitary Council - Has no landfill data to supply		0	3	459210 521537



# Geological

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid					
	Description:	Lias Group	E1NW (S)	0	1	459210 521537
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service Rural Soil and Sediment 15 - 25 mg/kg <1.8 mg/kg 60 - 90 mg/kg	E1SW (SE)	0	1	459491 521024
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service Rural Soil and Sediment <15 mg/kg <1.8 mg/kg 60 - 90 mg/kg	E1NW (S)	0	1	459210 521537
	BGS Measured Urba No data available	-				
	BGS Urban Soil Che No data available	emistry Averages				
	Coal Mining Affecte	d Areas not be affected by coal mining				
	Mining Instability Mining Evidence: Source: Boundary Quality:	Inconclusive Evaporites Mining Ove Arup & Partners As Supplied	E1NW (S)	0	-	459210 521500
	Non Coal Mining Ar	eas of Great Britain				
		<b>sible Ground Stability Hazards</b> Very Low British Geological Survey, National Geoscience Information Service	E1NW (S)	0	1	459210 521537
	Potential for Compr Hazard Potential: Source:	essible Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	E1NW (S)	0	1	459210 521537
	Potential for Ground Hazard Potential: Source:	<b>d Dissolution Stability Hazards</b> No Hazard British Geological Survey, National Geoscience Information Service	E1NW (S)	0	1	459210 521537
	Potential for Landsl Hazard Potential: Source:	<b>ide Ground Stability Hazards</b> Very Low British Geological Survey, National Geoscience Information Service	E1NW (S)	0	1	459210 521537
	Potential for Runnir Hazard Potential: Source:	ng Sand Ground Stability Hazards Very Low British Geological Survey, National Geoscience Information Service	E1NW (S)	0	1	459210 521537
	Potential for Shrink Hazard Potential: Source:	ing or Swelling Clay Ground Stability Hazards Low British Geological Survey, National Geoscience Information Service	E1NW (S)	0	1	459210 521537
	Radon Potential - R Affected Area: Source:	adon Affected Areas The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). British Geological Survey, National Geoscience Information Service	E1NW (S)	0	1	459210 521537
		adon Protection Measures No radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	E1NW (S)	0	1	459210 521537



## **Industrial Land Use**

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Points of Interest - Ma	anufacturing and Production				
1	Location: T Category: Ir Class Code: T	Tank TS10 ndustrial Features Tanks (Generic) Positioned to an adjacent address or location	E5SW (N)	186	4	459186 521812



## **Sensitive Land Use**

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Sites of Special Sci	entific Interest				
2	Designation Date: Date Type: Designation Details: Designation Date: Date Type: Designation Date: Designation Date: Date Type:	Teesmouth And Cleveland Coast Y 29770346.879999984 Natural England 1000263 Geological Conservation Review 1st November 1984 Notified Ramsar Site 1st November 1984 Notified Special Protection Area 1st November 1984 Notified Site Of Special Scientific Interest 1st November 1984 Notified	(N)	0	5	458890 525051

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Redcar and Cleveland Borough Council - Development Department	September 2014	Annual Rolling Update
Discharge Consents		
Environment Agency - North East Region	July 2019	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - North East Region	March 2013	Annual Rolling Update
Integrated Pollution Controls		
Environment Agency - North East Region	October 2008	Variable
Integrated Pollution Prevention And Control		
Environment Agency - North East Region	July 2019	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Redcar and Cleveland Borough Council - Environmental Health Department	December 2014	Variable
Local Authority Pollution Prevention and Controls		
Redcar and Cleveland Borough Council - Environmental Health Department	December 2014	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Redcar and Cleveland Borough Council - Environmental Health Department	December 2014	Variable
Nearest Surface Water Feature		
Ordnance Survey	January 2019	
Pollution Incidents to Controlled Waters		
Environment Agency - North East Region	December 1998	Not Applicable
Prosecutions Relating to Authorised Processes		
Environment Agency - North East Region	March 2013	Annual Rolling Update
Prosecutions Relating to Controlled Waters		
Environment Agency - North East Region	March 2013	Annual Rolling Update
Registered Radioactive Substances		
Environment Agency - North East Region	June 2016	
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	0019 2012	/ Infocury
Environment Agency - Head Office	July 2012	Annually
	5019 2012	Annually
Substantiated Pollution Incident Register Environment Agency - North East Region - Dales Area	July 2019	Quarterly
Environment Agency - North East Region - North East Area	July 2019	Quarterly
Water Abstractions		Quarterry
Environment Agency - North East Region	July 2019	Quarterly
	501y 2019	Quarterly
Water Industry Act Referrals Environment Agency - North East Region	October 2017	Quarterly
		Quarterly
Groundwater Vulnerability Map	June 2018	Appually
Environment Agency - Head Office	Julie 2018	Annually
Bedrock Aquifer Designations	lanuary 0040	A
Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations	L	A
Environment Agency - Head Office	January 2018	Annually
Source Protection Zones		
Environment Agency - Head Office	July 2019	Quarterly
Extreme Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	August 2019	Quarterly
Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	August 2019	Quarterly

Agency & Hydrological	Version	Update Cycle
Areas Benefiting from Flood Defences		
Environment Agency - Head Office	August 2019	Quarterly
Flood Water Storage Areas		
Environment Agency - Head Office	August 2019	Quarterly
Flood Defences		
Environment Agency - Head Office	August 2019	Quarterly
OS Water Network Lines		
Ordnance Survey	April 2019	Quarterly
Surface Water 1 in 30 year Flood Extent		
Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 100 year Flood Extent		
Environment Agency - Head Office	October 2013	Annually
Surface Water 1 in 1000 year Flood Extent		
Environment Agency - Head Office	October 2013	Annually
Surface Water Suitability		
Environment Agency - Head Office	October 2013	Annually
BGS Groundwater Flooding Susceptibility		
British Geological Survey - National Geoscience Information Service	May 2013	Annually
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	July 2019	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - North East Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - North East Region - Dales Area	July 2018	Quarterly
Environment Agency - North East Region - North East Area	July 2018	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - North East Region - Dales Area	July 2019	Quarterly
Environment Agency - North East Region - North East Area	July 2019	Quarterly
Local Authority Landfill Coverage		
Redcar and Cleveland Borough Council	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
Redcar and Cleveland Borough Council	May 2000	Not Applicable
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites		
Environment Agency - North East Region - Dales Area	March 2003	Not Applicable
Environment Agency - North East Region - North East Area	March 2003	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - North East Region - Dales Area	March 2003	Not Applicable
Environment Agency - North East Region - North East Area	March 2003	Not Applicable
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Registered Waste Treatment or Disposal Sites		
Registered Waste Treatment or Disposal Sites Environment Agency - North East Region - Dales Area	March 2003	Not Applicable

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
Redcar and Cleveland Borough Council - Planning Department	April 2016	Variable
Planning Hazardous Substance Consents		
Redcar and Cleveland Borough Council - Planning Department	April 2016	Variable
Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology		
British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry		
British Geological Survey - National Geoscience Information Service	October 2015	Annually
BGS Recorded Mineral Sites	1 1 22 42	
British Geological Survey - National Geoscience Information Service	April 2019	Bi-Annually
CBSCB Compensation District		
Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas	March 0011	
The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability	October 2000	Net Appliaghla
Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain	May 2015	Not Appliaghle
British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
	Sandary 2019	Ainidaliy
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards		, and any
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas		
British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures		
British Geological Survey - National Geoscience Information Service	July 2011	Annually

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries		
Thomson Directories	July 2019	Quarterly
Fuel Station Entries		
Catalist Ltd - Experian	September 2019	Quarterly
Gas Pipelines National Grid	July 2014	
Points of Interest - Commercial Services PointX	September 2019	Quarterly
Points of Interest - Education and Health PointX	September 2019	Quarterly
Points of Interest - Manufacturing and Production PointX	September 2019	Quarterly
Points of Interest - Public Infrastructure PointX	September 2019	Quarterly
Points of Interest - Recreational and Environmental PointX	September 2019	Quarterly
Underground Electrical Cables National Grid	December 2015	
Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	August 2018	Bi-Annually
Areas of Outstanding Natural Beauty Natural England	June 2019	Bi-Annually
Environmentally Sensitive Areas		
Natural England	January 2017	
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Natural England	March 2019	Bi-Annually
Marine Nature Reserves		
Natural England	July 2019	Bi-Annually
National Nature Reserves		
Natural England	July 2019	Bi-Annually
National Parks Natural England	April 2017	Bi-Annually
Nitrate Vulnerable Zones	יו סב וווקרי	
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	October 2015	
Ramsar Sites Natural England	April 2019	Bi-Annually
Sites of Special Scientific Interest Natural England	March 2019	Bi-Annually
Special Areas of Conservation Natural England	June 2019	Bi-Annually
Special Protection Areas Natural England	April 2019	Bi-Annually



A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
Environment Agency	Environment Agency
Scottish Environment Protection Agency	SEPÃO Scottish Environment Protection Agency
The Coal Authority	The Coal Authority
British Geological Survey	British Geological Survey
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
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: Website: www.bgs.ac.uk
2	Environment Agency - Head Office Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone:
3	Redcar and Cleveland Borough Council Town Hall, Fabian Road, South Bank, Middlesbrough, Cleveland, TS6 9AR	Telephone: Website: www.redcar-cleveland.gov.uk
4	PointX 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
5	Natural England County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: Email: enquines@naturalengland.org.uk Website: www.naturalengland.org.uk
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: Email: radon@phe.gov.uk Website: www.ukradon.org
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 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.

Geology	1:50,000	Maps	Legends
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#### Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	TFD	Tidal Flat Deposits	Sand and Silt	Not Supplied - Holocene
	TILLD	Till, Devensian	Diamicton	Not Supplied - Devensian
	GFDUD	Glaciofluvial Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	BSA	Blown Sand	Sand	Not Supplied - Quaternary
	BTFU	Beach and Tidal Flat Deposits (Undifferentiated)	Sand	Not Supplied - Quatemary

#### **Bedrock and Faults**

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WHM	Whitby Mudstone Formation	Mudstone	Not Supplied - Toarcian
	STA	Staithes Sandstone Formation	Sandstone	Not Supplied - Pliensbachian
	CDI	Cleveland Ironstone Formation	Mudstone, Sandstone and Ironstone	Not Supplied - Pliensbachian
	RMU	Redcar Mudstone Formation	Mudstone	Not Supplied - Hettangian
		Rock Segments		
/		Faults		

# AECOM

#### Geology 1:50,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 150,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps. The various geological layers - artificial and landslip deposits, superficial

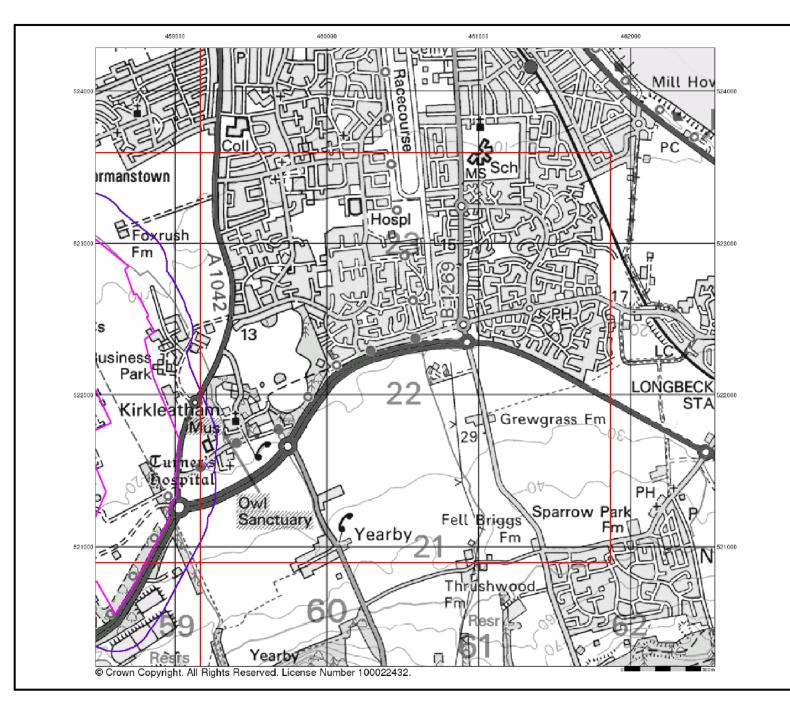
The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

### Geology 1:50,000 Maps Coverage

Map ID: Map Sheel No: Map Dates: Bedrock Geology: Superficial Geology: Artificial Geology: Faulta: Landelip: Rock Segmenta:	1 Guisborough 1998 Available Available Not Supplied Available Not Supplied Not Supplied			
Geology 1:50,0	00 Maps -	Slice E		
	E	E16		
= = = = = = = = = = = = = = = = = = =	ам ал	E 2	Ň	
- 65 E6	E7		$\Rightarrow$	
E1E2	E3	E4		
Order Details: Order Number: Customer Reference: National Grid Reference Slice: Site Area (Ha): Search Buffer (m):		1/Teesside (	Clean Gas	
Site Details: Teesside Clean Gas P	roject 2 of 2			
	<b>rk</b> <sup>®</sup>	Tel Fax Web w	witerwrocheck.co.uk	

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#### Artificial Ground and Landslip

Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

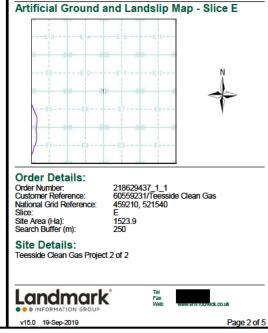
#### Artificial ground includes:

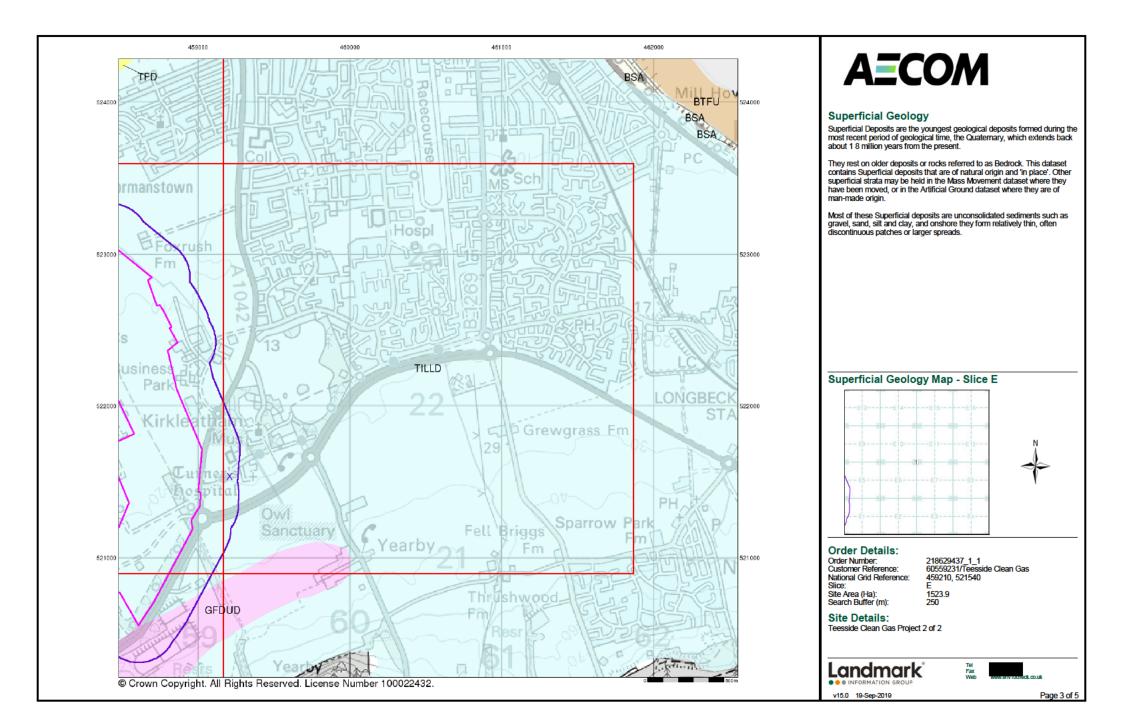
- Made ground man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground areas where the ground has been cut away such as quarries and road cuttings.

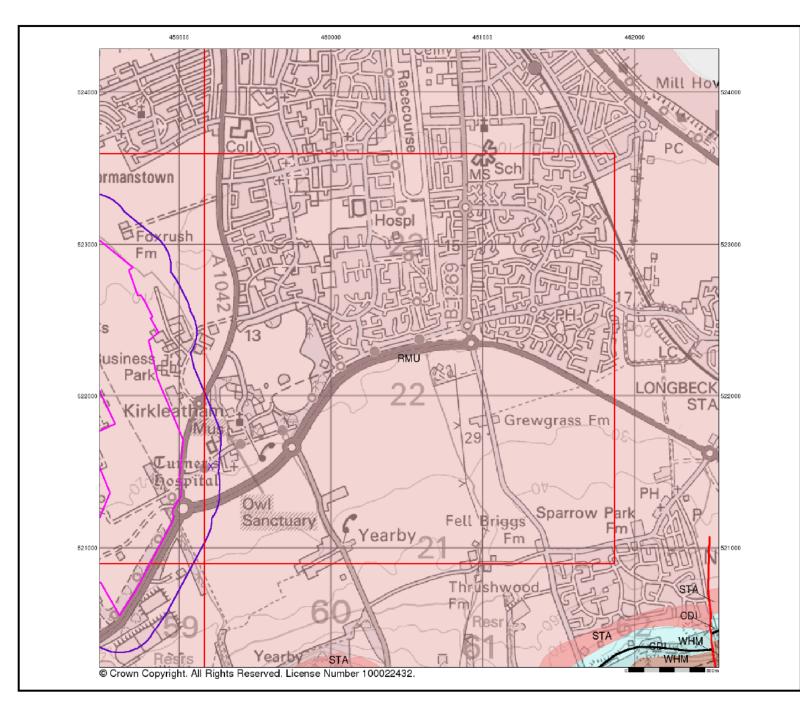
 Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.

 Landscaped ground - areas where the surface has been reshaped.
 Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.







#### **Bedrock and Faults**

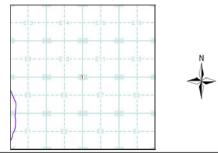
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

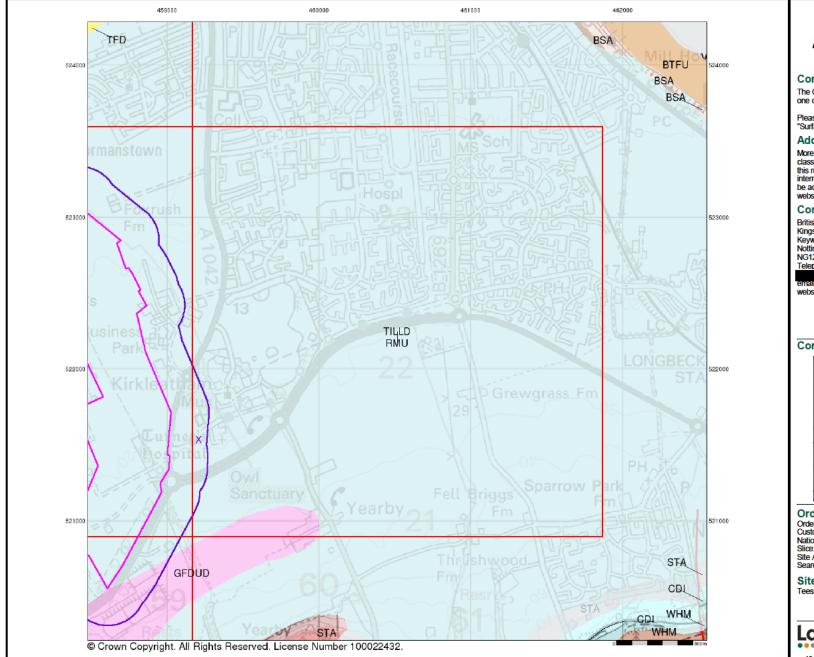
The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.









#### **Combined Surface Geology**

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

#### Additional Information

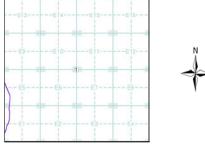
More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.





email: enquines@pgs ac.uk website: www.bgs ac.uk

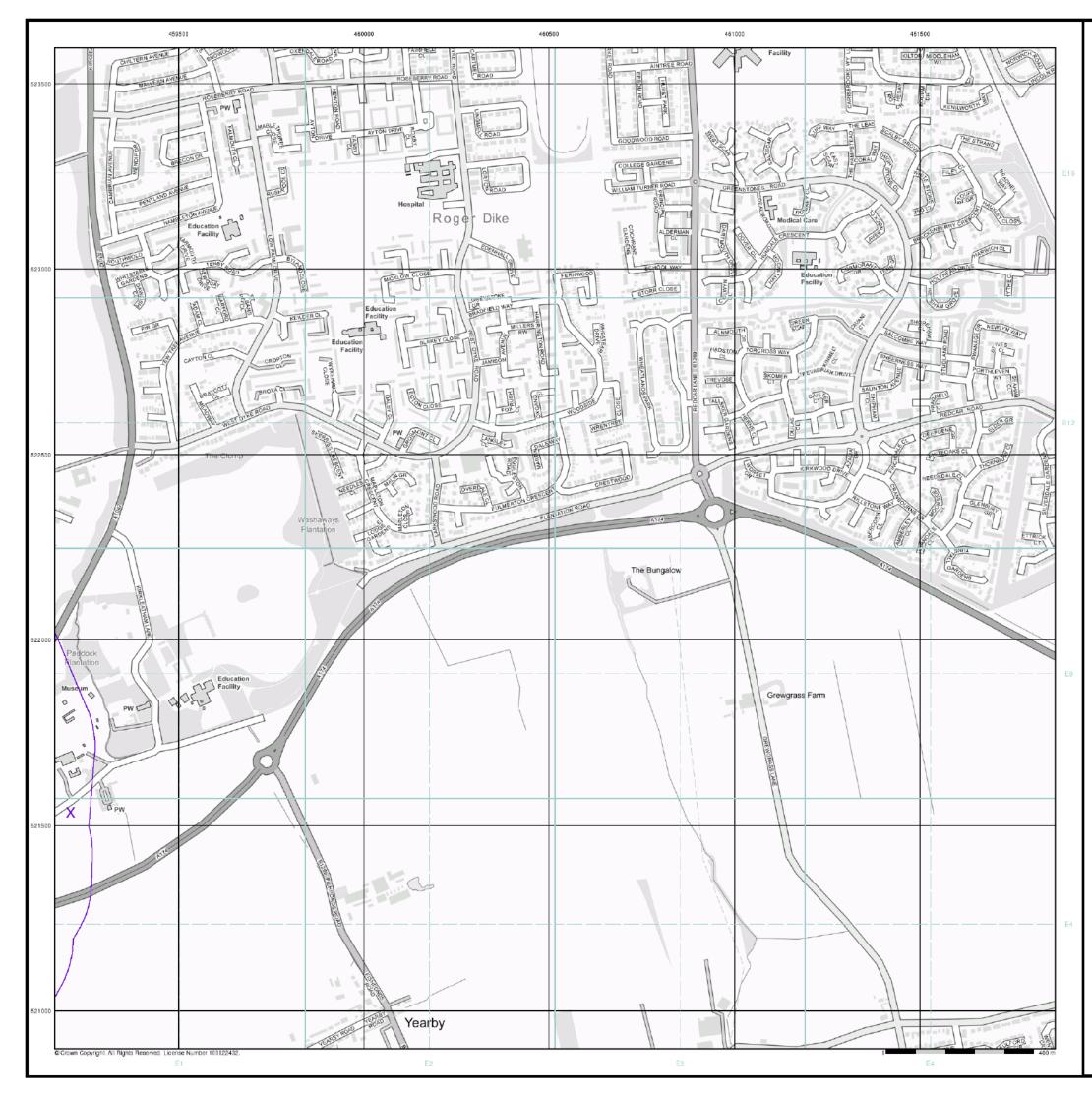
#### Combined Geology Map - Slice E



#### Order Details: Order Number: 218629437\_1\_1 Customer Reference: 60559231/Teesside Clean Gas National Grid Reference: 459210, 521540 F

#### Site Area (Ha): 1523.9 Search Buffer (m): 250 Site Details: Teesside Clean Gas Project 2 of 2

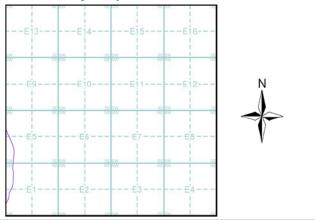
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### Site Sensitivity Map - Slice E

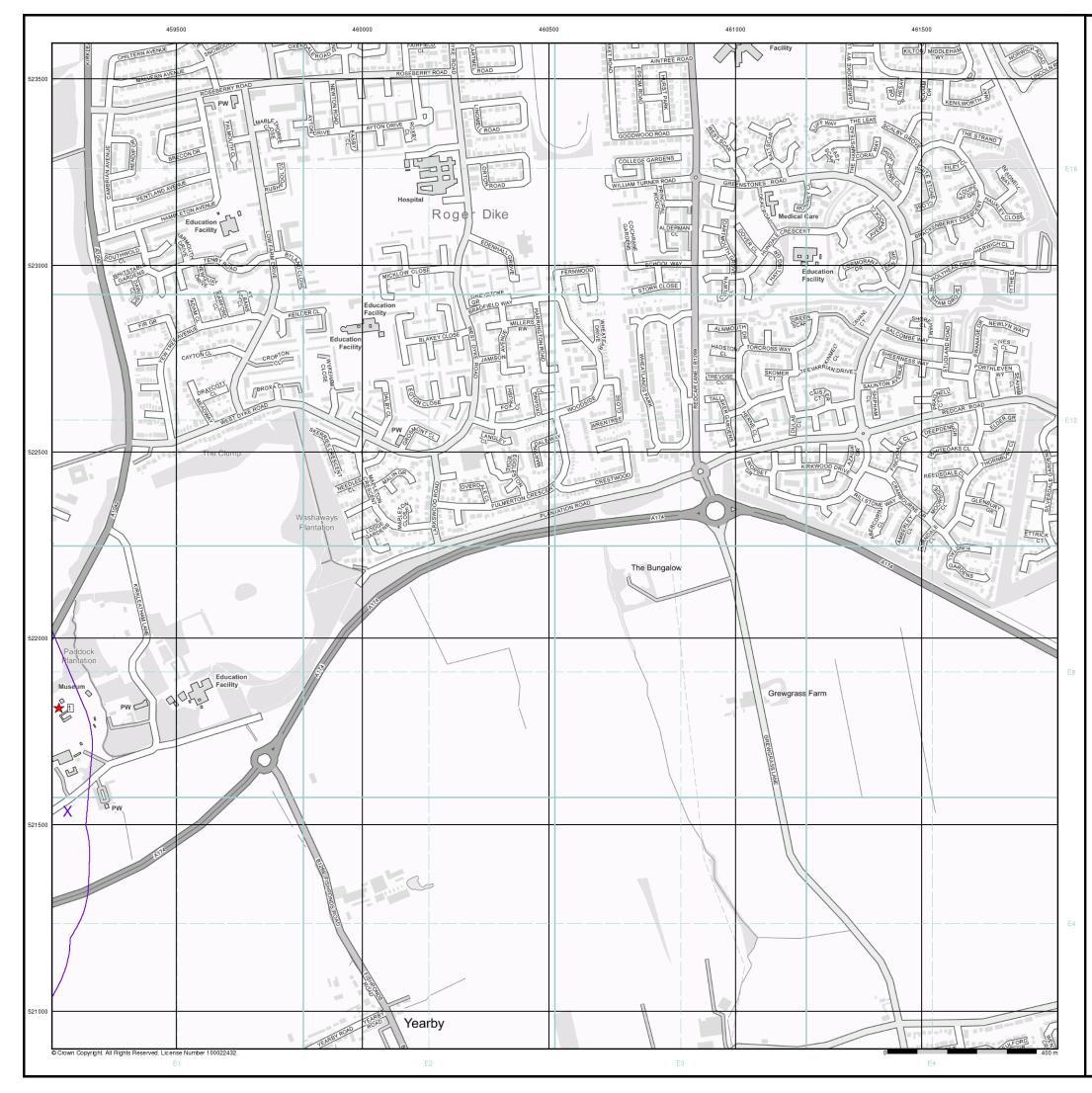


#### **Order Details**

Order Number:	218629437_1_1
Customer Ref:	60559231/Teesside Clean Gas
National Grid Reference:	459210, 521540
Slice:	E
Site Area (Ha):	1523.9
Search Buffer (m):	250
Cite Detaile	
Site Details	
Teesside Clean Gas Pro	ject 2 of 2



Tel: Fax: Web:





### **Industrial Land Use Map**

#### General

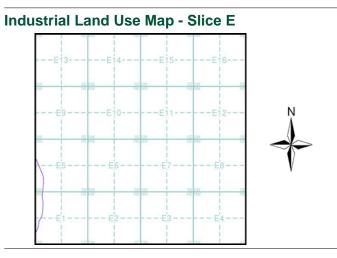


8 Map ID

Specified Site 
Specified Buffer(s) 
Specified Buffer(s)

#### Industrial Land Use

- ★ Contemporary Trade Directory Entry
- 🛧 Fuel Station Entry
- 📉 Gas Pipeline
- 🔆 Points of Interest Commercial Services
- 🔆 Points of Interest Education and Health
- ★ Points of Interest Manufacturing and Production
- 🚖 Points of Interest Public Infrastructure
- 🜟 Points of Interest Recreational and Environmental
- 🛰 Underground Electrical Cables



#### **Order Details**

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

Order Number: 218629437\_1\_1 Customer Ref: 60559231/Teesside Clean Gas National Grid Reference: 459210, 521540 Е 1523.9 250

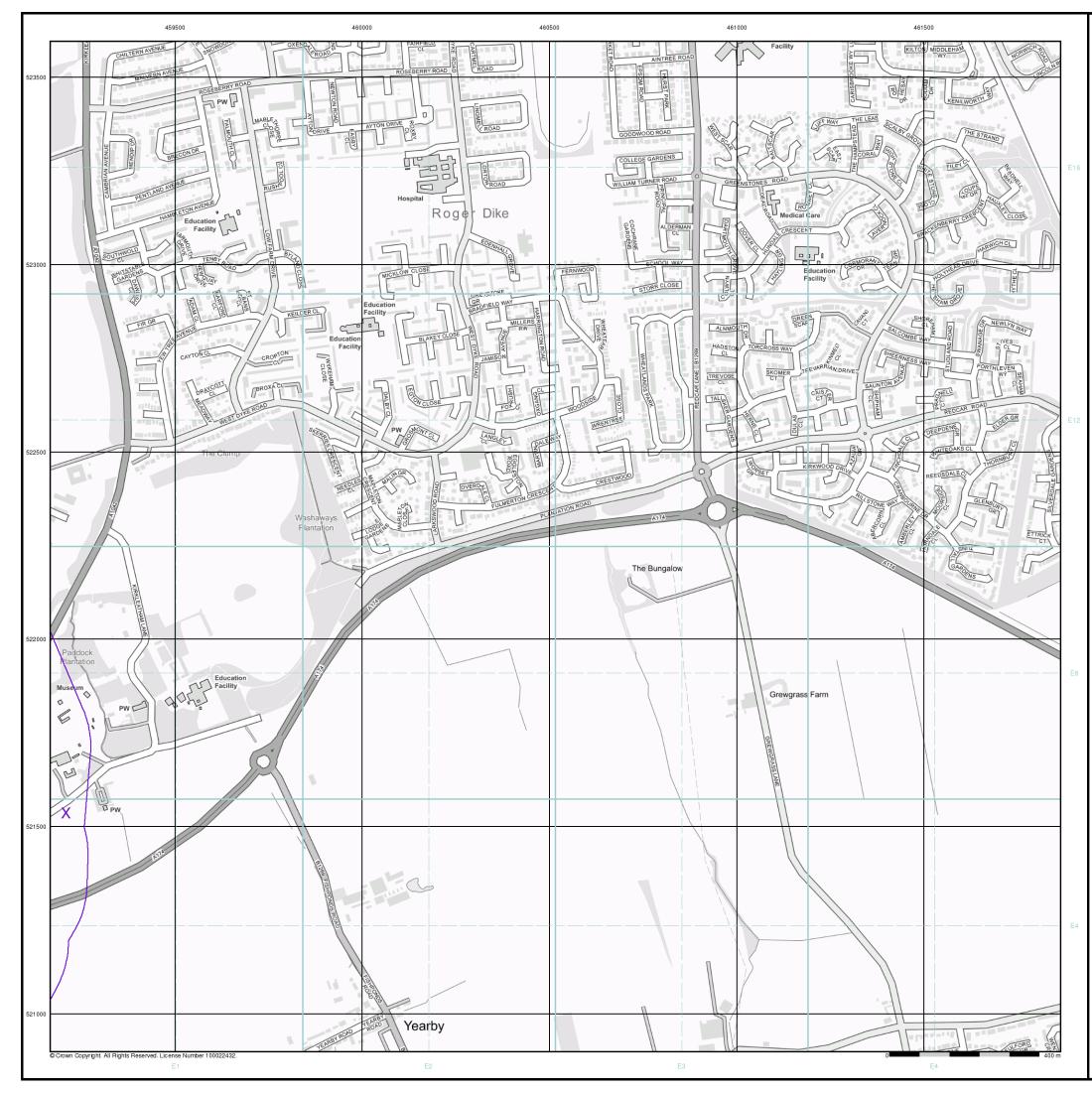
#### Site Details

Teesside Clean Gas Project 2 of 2



Tel: Fax: Web:

eck co uk





🔼 Specified Site C Specified Buffer(s)

X Bearing Reference Point

#### Agency and Hydrological (Flood)

Extreme Flooding from Rivers or Sea without Defences (Zone 2)

Flooding from Rivers or Sea without Defences (Zone 3)

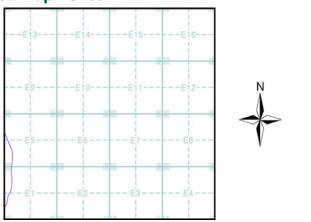
Area Benefiting from Flood Defence



Flood Water Storage Areas

--- Flood Defence

### Flood Map - Slice E



#### **Order Details**

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

Order Number: 218629437\_1\_1 Customer Ref: 60559231/Teesside Clean Gas National Grid Reference: 459210, 521540 Е 1523.9 250

#### Site Details

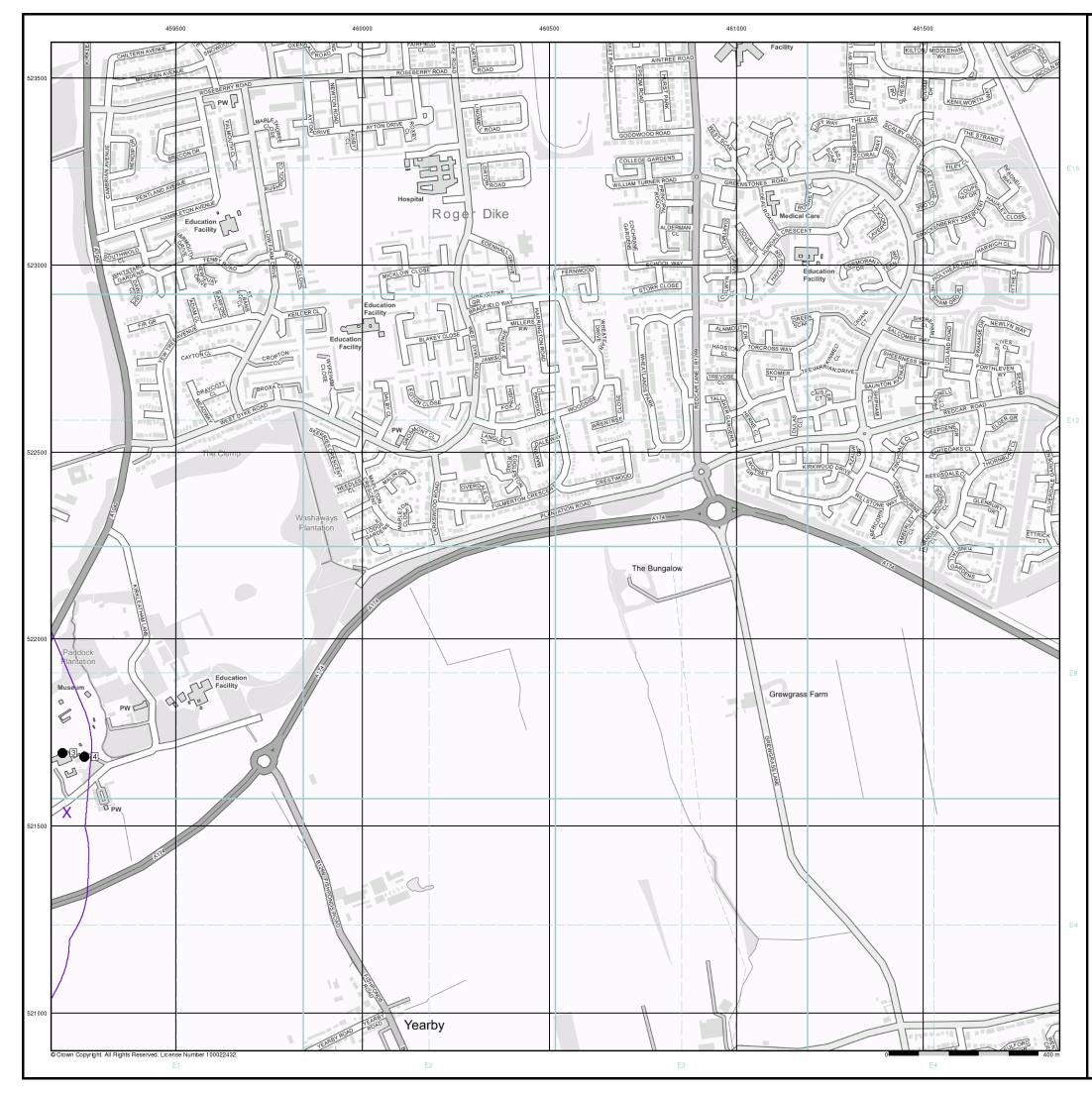
Teesside Clean Gas Project 2 of 2



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🔼 Specified Site C Specified Buffer(s) X Bearing Reference Point 8 Map ID Several of Type at Location

#### Agency and Hydrological (Boreholes)

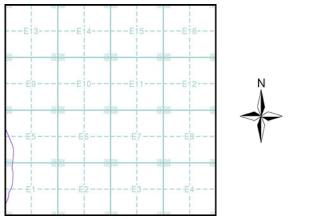
- 😑 BGS Borehole Depth 0 10m
- BGS Borehole Depth 10 30m
- 🔴 BGS Borehole Depth 30m +
- Confidential

⊖ 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 E**



### **Order Details**

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

Order Number: 218629437\_1\_1 Customer Ref: 60559231/Teesside Clean Gas National Grid Reference: 459210, 521540 Е 1523.9 250

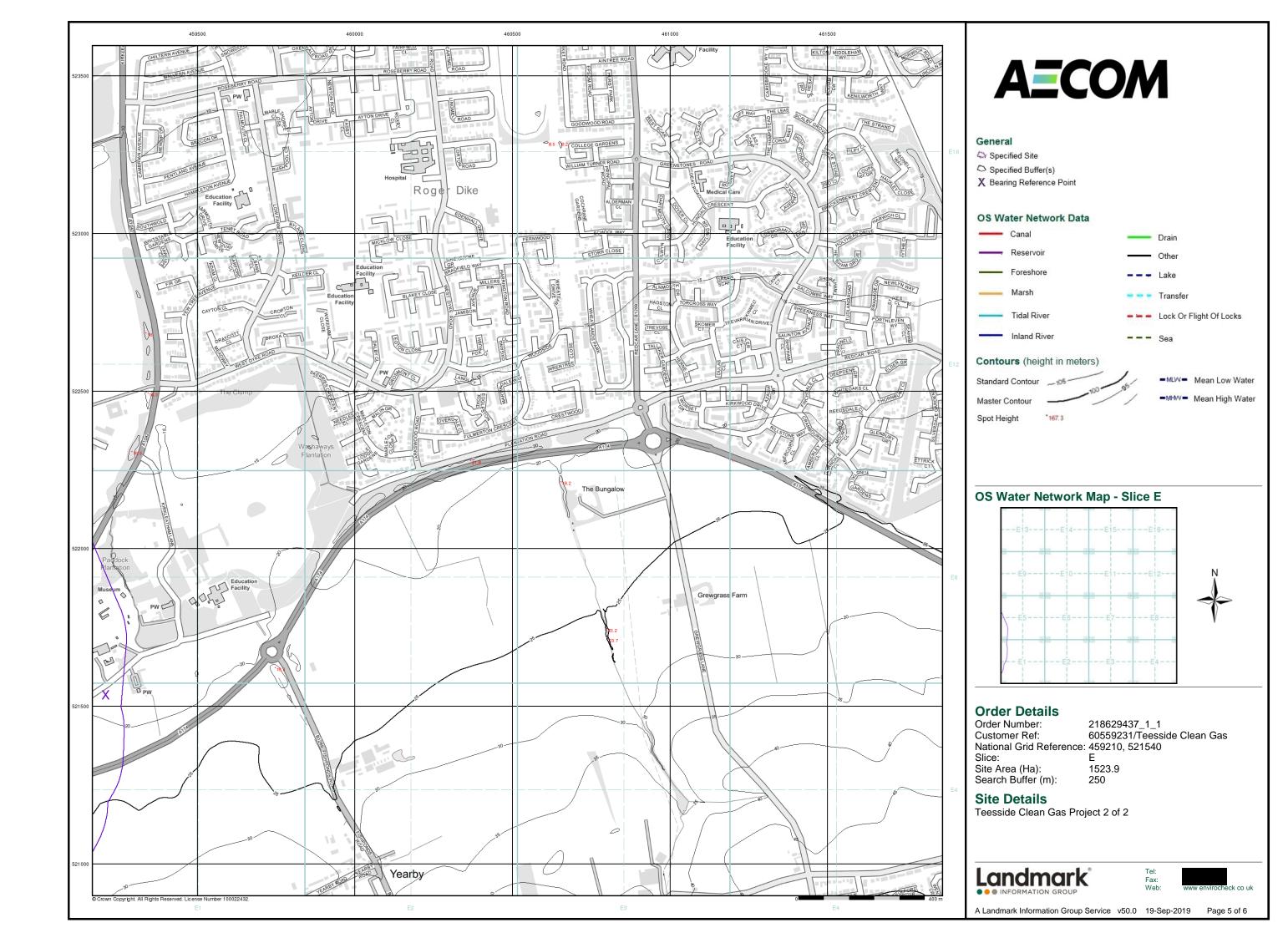
#### Site Details

Teesside Clean Gas Project 2 of 2



Tel: Fax: Web:









- 🔼 Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

#### **Risk of Flooding from Surface Water**

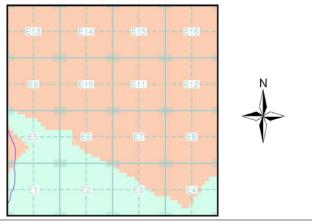
High - 30 Year Return
Medium - 100 Year Return

- Low 1000 Year Return

Suitability See the suitability map below National to county County to town Town to street Street to parcels of land

Property

### EA/NRW Suitability Map - Slice E



#### **Order Details**

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

Order Number: 218629437\_1\_1 Customer Ref: 60559231/Teesside Clean Gas National Grid Reference: 459210, 521540 Е 1523.9 250

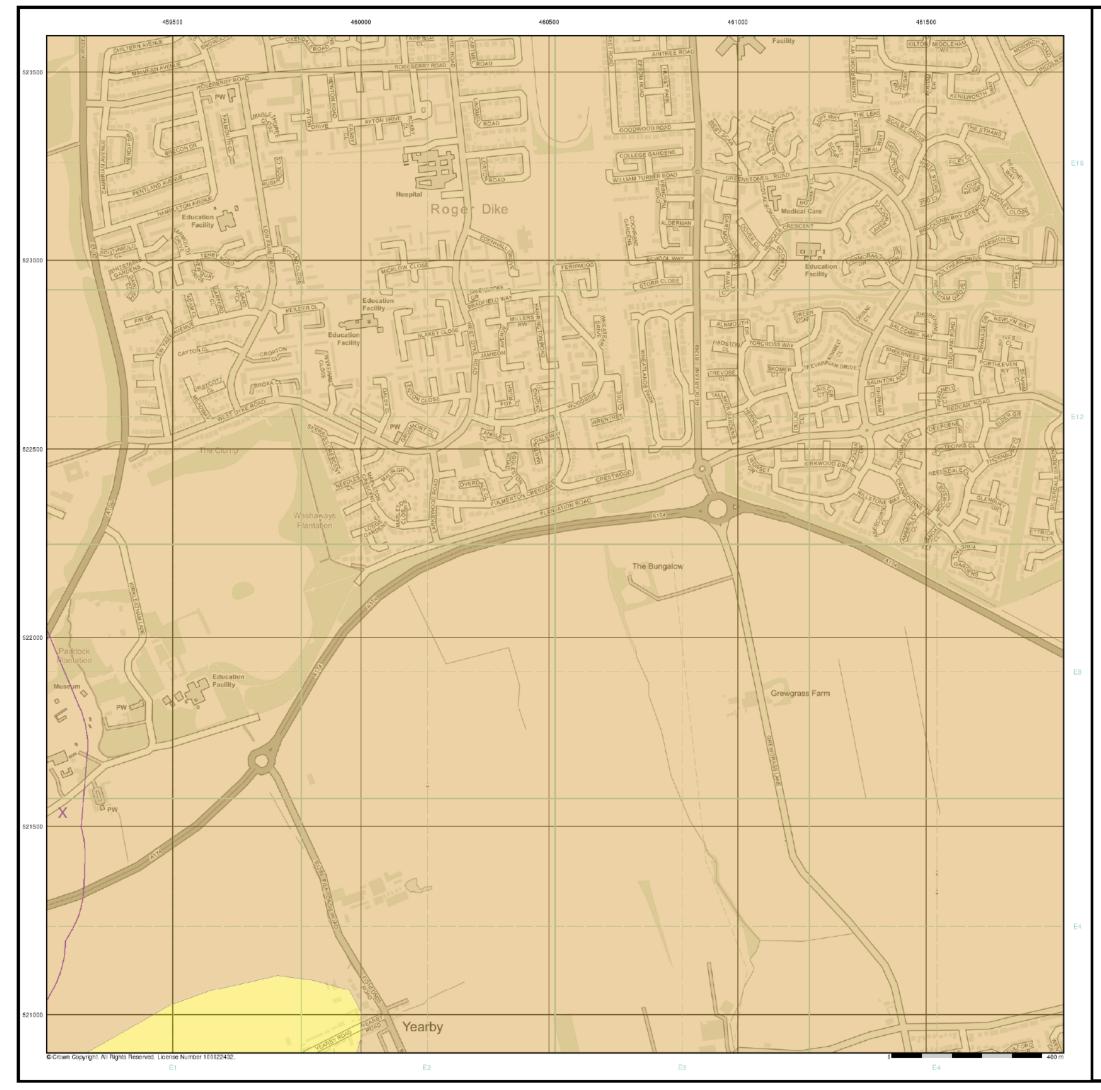
#### Site Details

Teesside Clean Gas Project 2 of 2



Tel: Fax: Web:







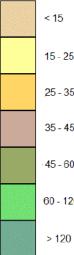
🔼 Specified Site

C Specified Buffer(s)

X Bearing Reference Point

### Estimated Soil Chemistry Arsenic

#### Arsenic Concentrations mg/kg





	1	ALSON I	North I	201
E13-	E4-	Е15	E16-	
	NE NW I	SE SW NEWW	SEISW NEINN	55 54
E9	E	E11	E12-	N
W.		SESW NEWW	SERW I	$\neg$
E5-	:E6-	·E7-	E8-	V
	SE ROW	SEGW 1 NENW 1	SEISW I NEWN I	<u>51</u> Na
	·E2-	E3-	E4-	
-	1000	arrest 1	ac mu	

### **Order Details**

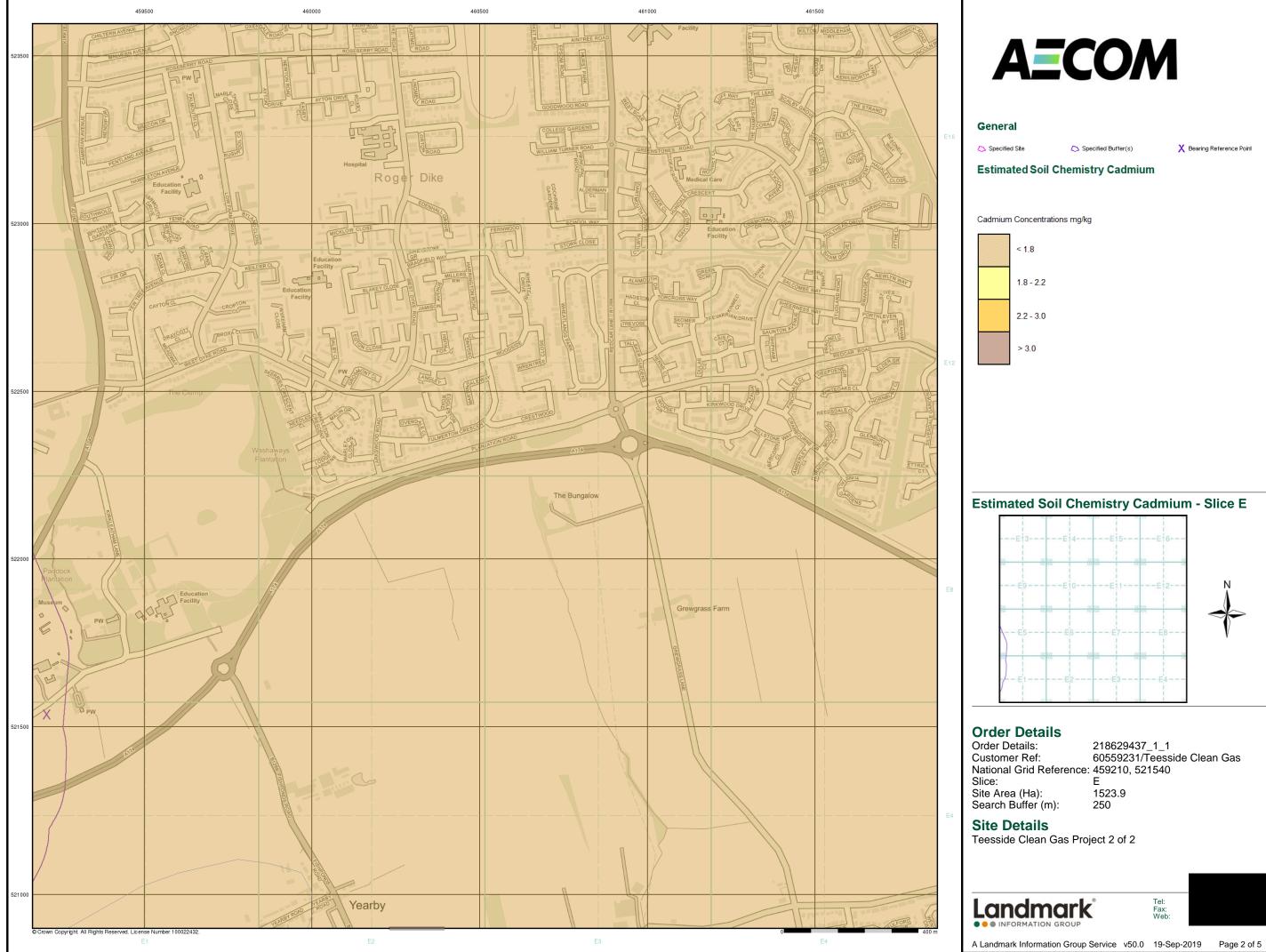
Order Details:	218629437_1_1
Customer Ref:	60559231/Teesside Clean Gas
National Grid Reference:	459210, 521540
Slice:	E
Site Area (Ha):	1523.9
Search Buffer (m):	250

#### Site Details

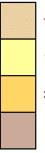
Teesside Clean Gas Project 2 of 2















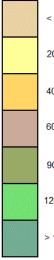
🔼 Specified Site

C Specified Buffer(s)

X Bearing Reference Point

#### **Estimated Soil Chemistry Chromium**

Chromium Concentrations mg/kg





mated	Soil C	hemist	ry Chron	nium	- Slice E
E13-	E12		2Eig		
	SEBW NERW I	SESW NERW	SEISW NEINW		
	E10	)E	1E12	2	N A
W 1	SE SW NE NW	SC SW NE WW	SERW I NERW I	53 NI	$\rightarrow$
E5-	E6	E	7 E8		V
swi i	SE SW	SE SW NENW 1	SE SW 1	SE NE	
E1-	E2	E	3E4		
	SE RW	at ow	1 1		

#### **Order Details**

Order Details: 218629437\_1\_1 Customer Ref: 60559231/Teesside Clean Gas National Grid Reference: 459210, 521540 Slice: Site Area (Ha): Search Buffer (m):

Е 1523.9 250

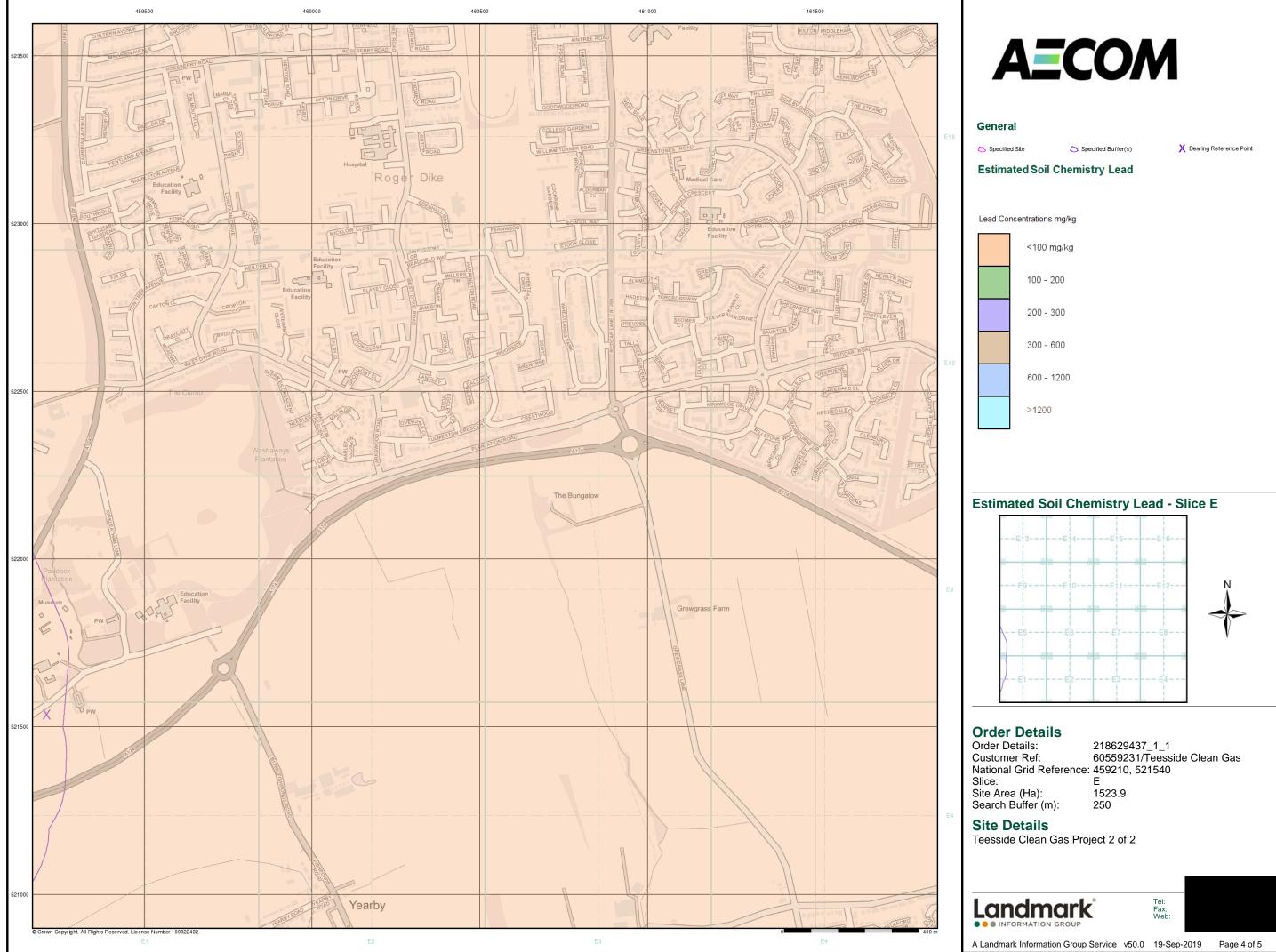
Tel: Fax: Web

#### Site Details

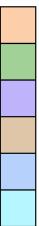
Teesside Clean Gas Project 2 of 2



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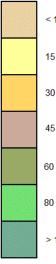
🔼 Specified Site

Specified Buffer(s)

X Bearing Reference Point

#### Estimated Soil Chemistry Nickel

#### Nickel Concentrations mg/kg





E13-	E14	E1	5E1	6
	SE SW NE NW	SE SW NE KW	SEISW I NEINW I	56 10
:E9-	Е 0	E	1E	2 N
	SE SW NE NW	SESW	SERW I NENW I	
E5-	E6-	E7	E8	8 V
	SEISW NEWW	SESW I	SEISW I NENW I	
E1-	E2-	E3	E4	4
E1-	E2-	E3	E4	4

#### **Order Details**

Order Details: 218629437\_1\_1 Customer Ref: 60559231/Teesside Clean Gas National Grid Reference: 459210, 521540 Slice: Site Area (Ha): Search Buffer (m): 250

Е 1523.9

#### Site Details

Teesside Clean Gas Project 2 of 2



Tel: Fax: Web:

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