NCC Children's Homes -Pegswood

Northumberland County Council

Geo-Environmental Desk Study

# January 2020



# **CONTROL SHEET**

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Principles of Environmental Risk Assessment

#### **EXECUTIVE SUMMARY**

#### Introduction and Purpose of Report

Fairhurst have been commissioned to undertake a Phase 1 Desk Study and Coal Mining Risk Assessment in support of a planning application to construct a two storey children's home in a currently vacant parcel of land at Pegswood First School, in Pegswood. The report details desk-based information with regards to the history of the site, potential geotechnical and geoenvironmental constraints to development and presents a formal mineral instability risk assessment.

#### Proposals and Current Site Use

Development proposals comprises construction of a two storey residential children's home with associated access car parking and private garden.

The site currently comprises a vacant parcel of land, with car parking and limited soft landscaping and vegetation to the boundaries.

#### **Site History**

Historic ordnance survey maps from 1866 to 2019 have been reviewed as part of the Desk Study. The site is shown to have remained as undeveloped land comprising open fields until the construction of the existing school building in 1999.

Historic industrial development within the vicinity of the site has been limited, however the contamination/pollution risk to the development from current and historical off site land uses cannot be discounted at this stage.

#### **Ground Conditions**

The site is anticipated to be underlain by made ground of variable thickness associated with the construction of the former school building. Natural superficial deposits are understood to comprise Glacial Till comprising interbedded boulder clay, underlain by bedrock geology comprising the Pennine Middle Coal Measures of Sandstone with coal seams.

#### Hydrogeology

The site is indicated to be underlain by a Secondary A Superficial Aquifer in the Glacial Till and Secondary Undifferentiated aquifer in the bedrock. Shallow groundwater may be present in the made ground and granular lenses within the Glacial Till.

#### Hydrology

The nearest surface water feature, beyond an unnamed small pond in the school grounds, is the River Wansbeck located approximately 2.15km south of the site.

#### Ground gas

The presence of elevated ground gas, mine gas and vapours on site cannot be discounted as a result of the underlying geology, potential for mine workings and historic adjacent land uses.

#### Mining

The development site is located within a Coal Authority reporting area and is considered to potentially be at risk of mineral instability associated with shallow recorded and unrecorded mine workings.

#### Geotechnical Constraints

The following geotechnical constraints are potentially present onsite:

- Made Ground with variable bearing capacity, compressibility and poor material properties.
- Soils containing elevated sulphates with potential for sulphate attack on buried concrete.

- Below ground relic structures and foundations associated with historic and existing development.
- Shallow perched groundwaters in the made ground and granular horizons within the Glacial Till potentially requiring dewatering of excavations.

Existing services potentially requiring diversion or decommissioning.

#### **Geo-Environmental Constraints**

Potential sources of on-site contamination and gas have been identified associated with the construction of the existing development, underlying shallow mine workings and limited offsite historic industrial land uses.

#### **Recommended Ground Investigation**

A site investigation is recommended to characterise the underlying ground conditions, establish the presence of onsite contamination and derive geotechnical design parameters. In-situ and laboratory testing will also be required along with a programme of gas and groundwater monitoring.

Site investigation works should also establish the presence of shallow unrecorded coal mine workings which could present a future surface instability risk.

The above provides only a brief summary of the works undertaken and the recommendations – the reader is directed to the main body of the text if further detail is required.

# 1.0 Introduction and Objectives

Northumberland County Council propose to construct a two storey children's home in Pegswood, Northumberland. The site, located at Longhirst Road, Pegswood currently comprises a small car park area and vacant land following the demolition of a former onsite school building with external car parking spaces and limited areas of soft landscaping.

The site location is shown on Northumberland County Council drawing IP191005-A(0)01, presented in Appendix 1.

Fairhurst have been commissioned to undertake a desk study and coal mining risk assessment in support of the planning application for the proposed redevelopment of the site.

The main objectives of the desk study are to:

- Review desk-based information on the site history, geology and hydrogeology;
- Identify potential contamination/pollution sources, pathways and receptors at the site and develop a preliminary Conceptual Site Model;
- Assess and evaluate the risk of significant harm/pollution occurring to the site receptors via a qualitative environmental risk assessment;
- Identify potential geotechnical constraints to the re-development of the site;
- Identify the risk to the proposed development from coal mining, and;
- Identify requirements for intrusive ground investigation to inform the design process.

#### 2.0 Limitations

This Report is for the private and confidential use of the Client(s) for whom the Report is undertaken and should not be reproduced in whole or in part, or relied upon by third parties for any use whatsoever. Fairhurst accepts no duty or responsibility (including negligence) to any party other than the stated Client(s) and disclaims all liability of any nature whatsoever to any such party in respect of this Report.

# 3.0 Sources of Information

The following sources were utilised in the production of this report:

#### 3.1 Envirocheck Report

An Envirocheck Report, reference report number 228936959\_1\_1, containing geological, environmental and flood information and historical maps was obtained for the site on 20<sup>th</sup> December 2019. The Envirocheck Report and historical maps are presented in Appendix 2.

#### 3.2 Coal Authority Report and Mining

A Coal Authority Report (report reference 51002213396001), was obtained for the site on the 20<sup>th</sup> December 2019. The Coal Authority Report has been included within Appendix 3.

# 3.3 British Geological Survey (BGS) Maps and Memoirs

Information relating to the geological conditions at the site was obtained from the 1:10,000 scale British Geological Survey geological maps (Sheet NE28NW Solid and Drift), held in-house by Fairhurst, as part of this desk study.

# 3.4 British Geological Survey (BGS) Historic Borehole Records

The following historic borehole records were obtained within the local vicinity of the site from the BGS online Geo-index and have been reviewed in preparation of this report. The records are included in Appendix 4.

#### Table 1: BGS Boreholes in the vicinity of the site

BGS Borehole Reference	Approximate Distance from Site	Direction	Depth	Date
NZ28NW370	60m	South East	20.00m	1992
NZ28NW116	80m	North East	193.70m	1868

In addition to the above historic borehole information, the following borehole information detailed as Note 116 on the British Geological Survey 1:10,000 Solid and Drift Geological Plan Sheet NZ28NW, were reviewed in preparation of this report:

#### Table 2: Mine shaft record in the vicinity of the site

BGS Borehole Reference	Distance from Site (m)	Direction	Depth	Date
Pegswood Colliery B Pit (2286 8778) Ref. NZ28NW116 above	80m	North East	182.80m	n/a

# 3.5 Site Walkover

A site walkover survey was undertaken on the 14<sup>th</sup> January 2020. The findings of the site walkover are presented in Section 4.2. Site photographs are also provided within Appendix 5.

# 3.6 Online Resources

The following internet sources were consulted for further information regarding the site:

- BGS online viewers (geology and hydrogeology) <u>www.bgs.ac.uk</u>
- Coal Authority Interactive Map <u>http://mapapps2.bgs.ac.uk/coalauthority/home.html</u>
- Magic Map <u>https://magic.defra.gov.uk/MagicMap.aspx</u>
- UK Radon http://www.ukradon.org/
- UXO <u>https://zeticauxo.com/downloads-and-resources/risk-maps/</u>
- Flood Risk For Planning https://flood-map-for-planning.service.gov.uk/

# 3.7 Online Resources

The following internet sources were consulted for further information regarding the site:

BGS online viewers (geology and hydrogeology) - <u>www.bgs.ac.uk</u>

- BGS, geological map series 1:50 000 Rothbury, Sheet 9) -<u>http://www.bgs.ac.uk/data/maps/</u>
- UK Radon <u>http://www.ukradon.org/</u>
- Zetica <u>https://zeticauxo.com/downloads-and-resources/risk-maps/</u>

### 3.8 Services

Services Information:

The following services information has been provided by the Client for the site;

• Water; foul and supply.

A copy of the above services information is available in Appendix 6.

# 4.0 Site Details

### 4.1 Site Location

The site, which comprises vacant land, and external car parking and limited area of soft landscaping, is located on Longhirst Road, Pegswood, as shown on Northumberland County Council drawing IP191005-A(0)01, Appendix 1. The Site has an approximate area of 0.14 hectares and the National Grid Reference for the approximate centre of the Site is NZ 22782 87737.

The former onsite school building has been demolished and the land now remains vacant. The building was located along the southern boundary of the site, with hardstanding for car parking to the north, and a small garden within the east.

#### 4.2 Site Walkover

A site walkover was undertaken on the 14<sup>th</sup> January 2020. A site photographic record is presented in Appendix 5.

#### 4.2.1 Site Access

Site vehicular and pedestrian access can be gained via the main school entrance on Longhirst Road (Photograph 1) and through the staff car park. There is vehicular access to the car park along the northern boundary of the site, which is still in use by the adjacent school (Photo. 2). Pedestrian access can be gains via two gates on the southern and western boundaries.

The main site area, and former building footprint has been fenced off from public access with Heras fencing between the car par k and the main site area and wood fence between the site and main school car park (Photograph 3).

#### 4.2.2 Boundaries and Surrounding Land uses

To the west of the site is a current staff car park for the existing Pegswood School. To the north and east of the site remains undeveloped playing and agricultural fields. To the south of the site is Longhirst Road and residential properties.

The boundaries of the site predominantly comprise fences and hedgerows with limited mature trees.

#### 4.2.3 Topography and Ground Surfacing

The car park within the north of the site boundary comprises tarmac hardstanding and associated pavements. The main site area and former building footprint comprises made ground / construction make up comprising gravels.

Within the east of the site there is a small grasses area, which continues along the norther, western and southern boundaries of the site.

Site levels are generally flat, with a small area of pavement raised above the former building footprint, assumed to have been a former accessible entrance to the building.

#### 4.2.4 Structures and Features

There are no remaining structures onsite. The former school building has been demolished and the

#### 4.2.5 Surface Water

No surface water features were encountered within or in close proximity to the development site.

#### 4.3 Historical Development of the Site

The development of the site, based on Groundsure historical maps, has been summarised in Table 3. Copies of the historical maps are provided within Appendix 2 of this report.

Table 3. Historical Ma	n Review of the S	ite and Surrounding Area
Table 5. HIStorical Ma	p neview of the S	and Surrounding Area

Date of OS Map Notable Features		Potential Contamination Sources (New sources are shown in bold)		
(Scale)		On Site	Off Site	
1866 (1:10,560) 1895 (1:2,500)	The site comprises undeveloped agricultural land. Adjacent to the southern boundary of the site a track is located (Longhirst Road), Pegswood is indicated to be located approximately 200m south west of the site. A Railway Line (North Eastern Railway) is located 380m south east of the site (at its nearest point) A Smithy Is located 420m south west of the site.	None	North Eastern Railway Smithy	
1897 (1:2,500) 1898 (1:10,560)	The site remains undeveloped greenfield land. The Railway Line is still present to the south east of the site, however the smithy 420m to the south west is no longer present. Pegswood Colliery is Located 345m south east of the site to the north of the railway. Another Smithy is now located 365m south west of the site. A reservoir is located 490m south west of the site.	Pegswood Colliery (mine gas)	North Eastern Railway <b>Pegswood Colliery</b> <b>Smithy</b>	

Date of OS		Potential Contamination Sources		
Мар	Notable Features	(New sources ar	re shown in bold)	
(Scale)		On Site	Off Site	
1922 & 1932	The site remains undeveloped greenfield land. Adjacent to the south west boundary of the		North Eastern	
(1:2,500)	site a school has been constructed.	Pegswood Colliery	Railway	
1924 & 1938	The smithy to the south west is no longer	(mine gas)	Pegswood Colliery	
	present.		Sewage Tank	
(1:10,560)	A sewage tank is present 340m north east			
1940 (1:10,000)	of the site. The site remains undeveloped greenfield land. The school building adjacent to the south west has been extended with a further building having been constructed to its north. The sewerage tank to the north east is no longer present, and the surrounding land is now used as allotment gardens. A sewage works has been constructed 500m south east of the site, to the south of the railway line.	Pegswood Colliery (mine gas)	North Eastern Railway Pegswood Colliery <b>Sewage works</b>	
1957 - 1959 (1:2,500)	The site comprises a small school building within the centre of the site area. The surrounding land is indicated to comprise grass with a footpath connecting the new school building to the existing school buildings located to the south west. Further extensions to the exiting school buildings have also been undertaken. An unknown works is now located 300m east of the site, with associated railway sidings.	Pegswood Colliery (mine gas)	North Eastern Railway Pegswood Colliery Sewage works <b>Works (Unknown)</b>	
1969 (1:10,000)	The site remains as previous. Pegswood Colliery is now listed as Mine, and the Sewage works is now listed as works.	Pegswood Colliery (mine gas)	North Eastern Railway Mine (Pegswood Colliery) Works (Sewage works) Works (Unknown)	

Date of OS		Potential Contan	Potential Contamination Sources		
Мар	Notable Features	(New sources ar	e shown in bold)		
(Scale)		On Site	Off Site		
1970 (1:2,500)	The site remains as previous. Pegswood Colliery (345m south east) is no longer indicated to be present, however two disused shafts are recorded. The wider colliery land is indicated to comprise a Brick works (370m south east). There is a depot located 85m east of the site. A Garage is located 150m south west of the site. A Council yard is located 450m south west of the site. There are two electricity substations located 155m south east and 300m south of the site.	Pegswood Colliery (mine gas)	North Eastern Railway Sewage works Depot Garage Electricity Substations Brick Works Council Yard Brick Works		
1982 – 1985 (1:2,500) 1984 (1:10,000)	The site remains as previous. A tank (with unknown contents) is located 10m north of the site. The area of land which previously comprised Pegswood colliery and the brick works is currently vacant, and the electricity substation (300m south) is no longer present. In addition two residential terraced streets have been demolished. Two disused mine shafted (375m and 400m south) are indicated to be located within the vacant land.	Pegswood Colliery (mine gas)	North Eastern Railway Sewage works Depot Garage Electricity Substation Council Yard <b>Tank</b>		
1985 (1:2,500)	The site remains as previous. Offsite land uses remain as previous. The electricity substation located 155m south east is no longer present. A new electricity substation is now present 300m south. In addition, a new residential development has been commenced in the area previously occupied by Pegswood Colliery. There are two new Factories located 315m and 330m south west of the site.	Pegswood Colliery (mine gas)	North Eastern Railway Sewage works Depot(s) Garage Council Yard Tank Electricity Substation Factory(s)		

Date of OS		Potential Contan	Potential Contamination Sources		
Мар	Notable Features	(New sources are shown in bold)			
(Scale)		On Site	Off Site		
1984 – 1992 & 1991 (1:2,500) 1992 (1:10,000)	The site remains as previous. All previous land uses remain as pervious. The residential development to the south has been extended to cover all vacant land north of the railway line, previously occupied by the colliery. An industrial estate has been constructed 100m south east of the site, comprising 9No. units.	Pegswood Colliery (mine gas)	North Eastern Railway Sewage works Depot <b>(s)</b> Garage Council Yard Tank Electricity Substation Factory(s) Industrial Estate		
1993 & 1996 (1:2,500)	The site remains as previous. All previous land uses remain as pervious. The Industrial estate (100m south east) has been extended to comprise 26 No. units, and is now listed as Pegswood Industrial Estate.	Pegswood Colliery (mine gas)	North Eastern Railway Sewage works Depot <b>(s)</b> Garage Council Yard Tank Electricity Substation Factory(s) Industrial Estate		
1999 (Aerial)	The site is shown to comprise a small building, surrounded by grass and trees along the boundary of the site. The school adjacent to the south western boundary comprises two main buildings, connected by a link corridor with areas of landscaping either side. The land to the north and east of the site comprises open agricultural land. To the south of Longhirst Road (southern boundary) the land predominantly comprises residential properties, with the industrial estate to the south east and allotments to the east of the site. A residential development is shown to be under construction approximately 200m west of the site.	Pegswood Colliery (mine gas)	-		

Date of OS Map	Notable Features		nination Sources e shown in bold)
(Scale)		On Site	Off Site
2000, 2006 & 2019 (1:10,000)	The site is shown to comprise a small building within the centre of the development footprint. Pegswood school is shown to still be present to the south west. Pegswood Industrial Estate and the Sewage works are still shown, however all other land uses are not indicated at this scale. A recycling site is located 500m south east of the site in 2019.	Pegswood Colliery (mine gas)	North Eastern Railway Sewage works Industrial Estate <b>Recycling Site</b>

# 5.0 Geology and Hydrogeology

# 5.1 Made Ground

The British Geological Survey (1:10,000) geological map sheet (Sheet NZ28NW) and the British Geological Survey (BGS) online viewer service do not record Made Ground across the site; however given that the site has been previously developed, the presence of shallow Made Ground underlying the site associated with the construction of the former school building and car park is anticipated.

The British Geological Survey (1:10,000) geological map indicates the presence of made ground to the east of the site and to the south of Pegswood.

# 5.2 Superficial Geology

The British Geological Survey (1:50,000) geological map sheet for Rothbury (Sheet 14, Drift) and the British Geological Survey (BGS) online viewer service indicates the site to be underlain by Devensian till (Glacial Till) comprising diamicton.

# 5.3 Solid Geology

The British Geological Survey (1:50,000) geological map sheet for Rothbury (Sheet 14, Drift) and the British Geological Survey (BGS) online viewer service indicates the superficial geology is underlain by solid geology of the Pennine Middle Coal Measures formation, comprising sandstone.

The Pennine Middle Coal Measures formation is recorded to be heavy faulted in the area surrounding the site.

# 5.4 Historical BGS Borehole Records

The following historic borehole records were obtained within the local vicinity of the site from the BGS online Geo-index and have been reviewed in preparation of this report. The records are included in Appendix 4.

BGS Borehole Reference	Approximate Distance from Site	Direction	Depth	Date
NZ28NW370	57m	South East	20.00m	1992
NZ28NW116	80m	North East	193.70m	1868
NZ28NW369	80m	South East	20.00m	1992
NZ28NW362	100m	South West	15.00m	1992
NZ28NW368	120m	South East	20.00m	1992
NZ28NW359	290m	South West	32.00m	1991

 Table 4: Summary of BGS boreholes in vicinity of the site

A summary of the ground conditions encountered within the historic BGS boreholes is present as follows;

#### NZ28NW370;

- Ground level to 2.40mbgl soft to firm sandy clay;
- 2.40mbgl to 3.00mbgl weathered sandstone;
- 3.00mbgl to 12.00mbgl sandstone;
- 12.00mgbl to 13.80mbgl shale;
- 13.80mbgl to 20.00mbgl sandstone.

#### NZ28NW116/Pegswood Colliery Pit B;

- Ground level to 17.22mbgl no record of strata;
- 17.22mbgl to 17.98mbgl coal 0.76m thick (Maudlin/Bensham);-
- 17.98mbgl to 23.72mbgl no record of strata;
- 23.72mbgl to 24.51mbgl coal 0.79m thick (Durham Low Main/Low Main);
- 24.51mbgl to 39.52mbgl no record of strata;

Summary of the deeper coal seams encountered;

- Northumberland Low Main (Brass Thill) 0.96m thick at 40.48mbgl;
- **Broomhill Main (Coal)** 0.36m thick at 60.80mbgl;
- Plessey (Hutton) 0.86m thick at 67.58mbgl;
- **Coal** 0.10m thick at 72.41mbgl;
- **Bottom Plessey** 0.46m thick at 78.43mbgl;
- **Coal** 0.08m thick at 92.40mbgl;
- Beaumont (Split);
  - Top Leaf (Top Harvey) 0.66m thick at 96.13mbgl;
  - Bottom Leaf (Bottom Harvey) 0.56m thick at 99.54mbgl;
- Hodge 0.87m thick at 109.32mbgl;
- **Coal** 0.16m thick at 111.86mbgl;
- **Tilley** (Split);
  - Top Leaf 0.43m thick at 116.10mbgl;
  - Bottom Leaf 0.96 thick at 122.47mbgl;

- **Top Busty** 0.86 thick at 139.95mbgl;
- **Bottom Busty** 0.56 thick at 147.62mbgl;
- Three-Quarter 2.13 thick at 159.08mbgl;
- **Coal** 0.18 thick at 159.08mbgl;
- **Coal** 0.41 thick at 162.28mbgl;
- Base of shaft 172.16mbgl.

#### NZ28NW369;

- Ground level to 2.20mbgl soft to firm sandy clay;
- 2.20mbgl to 2.60mbgl weathered sandstone;
- 2.60mbgl to 13.40mbgl sandstone;
- 13.40mgbl to 13.60mbgl shale;
- 13.60mbgl to 20.00mbgl sandstone.

#### NZ28NW368;

- Ground level to 2.20mbgl soft to firm sandy clay;
- 2.20mbgl to 3.25mbgl weathered sandstone;
- 3.25mbgl to 20.00mbgl -sandstone.

#### NZ28NW359

- Ground level to 2.00mbgl clays;
- 2.00mbgl to 4.50mbgl sandstone;
- 4.50mbgl to 4.75mbgl shale / Coal;
- 4.75mbgl to 11.00mbgl hard sandstone and sandy shale;
- 11.00mbgl to 11.50mbgl very dark shale;
- 11.50mbgl to 17.00mbgl sandstone/siltstone;
- 17.00mbgl to 29.75mbgl hard and soft grey shales and mudstone;
- 29.75mbgl to 30.00mbgl coal;
- 30.00mbgl to 32.00mbgl mudstone.

In addition, information provided by the Durham Mining Museum indicates that the Pegswood Colliery extracted coal from the Bensham, Low Main, Plessey, Beaumont, Brockwell, Five Quarter, Harvey, Yard, Brockwell, Busty, Harvey, and coal seams between 1890 and 1968, which are likely to underlie the site.

#### 5.5 Mineral Stability

The Envirocheck Report indicates that there are no recorded BGS Mineral Sites within 250m of the site. The nearest is located approximately 381m south, associated with Pegswood Colliery a deep coal mine, which has ceased operation.

The following ground stability hazards are present onsite as listed within the Envirocheck, Appendix 2;

- Low risk from shrinking or swelling clay ground stability hazards;
- Very Low risk of collapsible, landslide and running sand ground stability hazards; and,
- No hazards from ground dissolution and compressible ground stability hazards.

The site is located within a Coal Authority reporting area. A Coal Authority Report was obtained for the site on the 20<sup>th</sup> December 2019 and this has been provided within Appendix 3, a coal mining risk assessment is present in Section 6.

### 5.6 Hydrogeology

Information provided within the Envirocheck Report indicated that the superficial geology is classified as a Secondary A Aquifer and the bedrock geology is classified as a Secondary Undifferentiated Aquifer. The site is not located within a groundwater vulnerability area, or a source protection zone.

### 5.7 Hydrology and Flooding

The Envirocheck Report indicates that the nearest surface water features is located approximately 120m north of the site, associated with an unnamed drainage ditch within the agricultural land to the north of the school playing fields.

The nearest watercourse to the site is the Bothal Burn located 480m east a tributary of the River Wansbeck located 1.5km south of the site.

The Environment Agency online flood maps for planning indicate that the site is predominantly located within flood zone 1 and therefore not at risk from rivers or seas, surface water or reservoir flooding.

The maps indicate that there is a small area within the north west corner of the site boundary at low risk of surface water flooding. The site is not at risk of flooding from reservoirs.

# 6.0 Coal Mining Risk Assessment

This risk assessment reviews the available British Geological Survey (BGS) geological maps, historical borehole information relating to the site, as detailed in Section 3. Based on review of the information, an assessment is provided of the sites coal resources and potential risk for surface mineral instability due to shallow underlying coal mine workings and mine entries.

#### 6.1 Inferred Ground Conditions

The reviewed information indicates that the site is underlain by glacial superficial deposits comprising till (Boulder Clay and Drift) which in turn is underlain by the solid geology in the form of the Pennine Middle Coal Measures Formation (Upper Carboniferous) and comprising sandstone and coal seams.

The BGS geological map shows subcrops of the Bensham, Durham Low Main and Northumberland Low Main High Main coal seams between 600m and 800m to the south west of the site. These subcrops are shown to have a north west to south east orientation (strike) with a north eastern dip indicating that the seams extend beneath the site area.

Two faults are shown in the vicinity of the subcrops of the above coal seams to the south west of the site. With approximate north to south orientations and western/north western downthrows.

The Coal Authority Report indicates that the site lies within an area that could be affected by underground mining in 3No. coal seams beneath the site at depths between 20m and 139m. It is understood that the coal seams were last recorded to have been worked between 1875 and 1947 however the seams may have been works at a later date outside of the site boundary.

The Coal Authority Report indicates that no known coal mine entries are present on the site or lie within 100m of the site boundary.

The Coal Authority Mining Report provides dip angles as follows for the coal seams underlying the site;

Coal Seam	Dipping Rate	Dipped direction
Bottom Maudlin / Bensham	4.3	NE
Brass Thill	4.1	NE
Hutton	2.6	NE
Harvey	4.1	W
Top Busty	4.9	NE
Top Busty	4.6	E
Top Busty	3.6	NE

#### Table 5: Summary of Coal Seams underlying the site

The above Coal Authority information suggests dips to be around 5.0° towards the north east. However, based on information provided within the BGS 1:10,000 plan (Sheet NZ28NW) the angle of dip of the coal seams is calculated to be a shallower angle of approximately 3.8°.

The historic BGS boreholes recorded superficial glacial deposits comprising clays to depths of between 2.20mbgl and 2.40mbgl. Bedrock, comprising sandstone and coal seams was proven beneath the superficial deposits to depths of between 2.40mbgl and 173.00mbgl.

BGS borehole NZ28NW116 / Pegswood Colliery Shaft B, recorded approximately 80m to the north east, recorded coal seams between 17.22mbgl and 17.98mbgl, 23.72mbgl and 24.51mbgl, 40.48mbgl and 41.44mbgl, 60.80mbgl and 61.22mbgl, 67.58 and 68.44mbgl, 72.41mbgl and 72.51mbgl, 78.43mbgl and 78.89mbgl, 92.40mbgl and 92.48mbgl, 96.13mbgl and 96.79mbgl, 99.54mbgl and 100.10mbgl, 109.32mbgl and 110.19mbgl, 111.86mbgl and 112.02mbgl, 116.10mbgl and 116.53mbgl, 122.47mbgl and 123.43mbgl, 139.95mbgl and 140.81mbgl, 147.62mbgl and 148.18mbgl, 159.08mbgl and 161.21mbgl and 162.28mbgl and 162.69mbgl. These coal seams are inferred to represent coal seams between the Bensham and Three-Quarter seams as indicated on the BGS 1:10,000 Geological Plan. However, the location of the shaft is not shown on the historic maps or the Coal Authority records, and as such, it is considered that the location is likely to be a BGS error. Therefore, seam depths, as summarised below, have been estimated based on the location of the seam subcrops and a dip angle of 3.8°.

Based on the available BGS boreholes and the BGS geological map, it is considered likely that the following sequence of shallow coal seams which could potentially present a risk to the proposed development is present beneath the site area.

Coal Seam	BGS Recorded Thickness (m)*	Inferred Dips**	Inferred Shallowest Depth below Rockhead (m) <sup>#</sup>
Bensham	0.20m to 1.27m	1.4 - 4.3	23.20
Durham Low Main / Five Quarter	0.53m to 1.96m	-	36.20
Northumberland Low	Up to 2.13m	4.1	47.20

Table 6: Summary of shallow coal seams potentially present beneath the site

Coal Seam	BGS Recorded Thickness (m)*	Inferred Dips**	Inferred Shallowest Depth below Rockhead (m) <sup>#</sup>
Main / Brass Thill	Main / Brass Thill		
Broomhill Main	Up to 0.46m	-	60.70
Plessey / Hutton	0.05m to 1.83m	2.6°	69.70
Coal	Thin	-	57.70
Bottom Plessey	Up to 1.24m	-	79.70
Coal	Thin	-	98.70
Top Beaumont	0.17m to 0.31m	-	106.70
Beaumont / Harvey	0.04m to 1.83	4.1°	110.70
Hodge	0.14m to 0.87m	-	116.70
Coal / Top Tilley	Up to 0.50m	-	125.70
Tilley	Up to 1.53m	-	127.70
Bottom Tilley	Up to 0.40m	-	130.70
Top Busty	0.05m to 0.91m	3.6° to 4.9°	143.20
Bottom Busty	0.13m to 1.42m	-	154.20
Three-Quarter	0.10m to 1.50m	-	164.70
Coal	Thin	-	170.20
Coal Thin		-	173.20

\*Based on British Geological Survey Sheet NZ28NW.

\*\*Based on Coal Authority Consultants Report and calculated from BGS records.

<sup>#</sup>Based on a seam dip angle of 3.8 ° and a rockhead level of 2.40mbgl, and generalised vertical section presented within the BGS 1:10,000 geological plan (Sheet NZ28NW).

#### 6.2 Historical Mining and Mineral Extraction

Information obtained from the Coal Authority online interactive map viewer and the Coal Authority Consultants Mining Report indicates the site is located within a Coal Authority development high risk and reporting area, together with the following;

- No recorded mine entries were recorded within a 100m radius of the site.
- The site is within an area that could be affected by historic unrecorded shallow underground mining of 5 No. seams underlying the site.
- Past underground mining was recorded beneath the site for the Bottom Maudlin, Brass Thill, Hutton, Harvey and Top Busty coal seams. The shallowest recorded workings within these seams were at 20mbgl which is inferred as being approximately 17.60m below rockhead, with an extraction thickness of 0.70m.
- The site is not within an area in which spine roadways were recorded at a shallow depth.
- No outcrops, geological faults, fissures or breaklines were recorded within the site.
- There is a record of an unlicensed opencast mine located approximately 475m south west of the site.
- No Coal Authority managed tips were recorded within 500m of the site.

- The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres, since 31st October 1994.
- The Coal Authority has no record of a mine gas emission requiring action within 500m of the site.
- The property has not been subject to remedial works, by or on behalf of the Coal Authority, under its Emergency Surface Hazard Call Out procedures.

### 6.3 Mining Risk Assessment

The published BGS information indicates the site to be underlain by strata of the Pennine Middle Coal Measure Formation (Upper Carboniferous) which includes the presence of seven coal seams at shallow depth, comprising the Bensham, Durham Low Main (Five Quarter, Main), Northumberland Low Main (Brass Thill), Broomhill Main, Plessey (Hutton), Coal (thin) and Bottom Plessey. In addition the Harvey marine Band is recorded to be present underlying the Bottom Plessey coal seam.

The Coal Authority report indicates that the site is not within an area which may be affected by unrecorded shallow underground coal mining.

Guidance provided in CIRIA Report SP32 indicates that mineral instability at ground surface does not present a potential risk where the underlying coal seam thickness is less than ten times the overlying rock cover thickness. With regard to the coal seams assessed to underlie the site, it is considered that the following rock cover to seam thickness ratios are anticipated for each of the shallow coal seams which are expected to underlie the site:

Coal Seam	BGS Recorded Thickness (m)*	Inferred Shallowest Depth below Rockhead (m) <sup>#</sup>	Inferred Worst Case Rock Cover Ratio
Bensham	0.20m to 1.27m	23.20	18.27
Durham Low Main / Five Quarter	0.53m to 1.96m	36.20	18.47
Northumberland Low Main / Brass Thill	Up to 2.13m	47.20	22.16
Broomhill Main	Up to 0.46m	60.70	60.24
Plessey / Hutton	0.05m to 1.83m	69.70	38.10
Coal	Thin	57.70	>10
Bottom Plessey	Up to 1.24m	79.70	64.27

#### Table 7: Summary of anticipated rock cover ratios beneath the site;

\*Based upon British Geological Survey Sheet NZ28NW.

<sup>#</sup>Based upon utilising the Bensham at 25.60mbgl as a datum with a rockhead level of 2.40mbgl, and generalised vertical section presented within the BGS 1:10,000 geological plan (Sheet NZ28NW).

#### <u>Bensham</u>

The Bensham coal seam was identified as being between 0.20m and 1.27m thick on the BGS geological map for the site, and to subcrop approximately 500m to the south west of the site boundary and is therefore anticipated to be a maximum of 23.20m below rockhead.

Using a conservative thickness of 1.27m, the minimum rock cover ratio for the Bensham coal seam beneath the site is considered to be 18. Therefore, workings in this coal seam should not present a mineral instability risk to the proposed development.

However, the BGS Borehole NZ28NW116/Pegswood Colliery Pit B approximately 80m north east of the site identified the Bensham coal seam at 17.22mbgl with a thickness of 0.76m. In addition, as demonstrated by the Coal Authority Consultants report the Bensham coal seam has been recorded to have been worked extensively in the area and directly underlying the site last worked in 1944. The Bensham is reported to have an extraction thickness of 0.7m at 20mbgl (17.60m below rockhead). On this basis using a maximum seam thickness of 0.76m with a recorded rock cover of 17.60m the rock cover ratio is considered to be 23, and as such workings within this seam at shallow depth would not present a risk of mineral instability to the site. This should be confirmed through intrusive investigation.

#### Durham Low Main

The Durham Low Main coal seam was identified as being between 0.53m and 1.96m thick on the BGS geological plan for the site and 0.79m within the BGS Borehole NZ28NW116/Pegswood Colliery Pit B historical boreholes, and to subcrop approximately 530m to the south west of the site.

Using a conservative thickness of 1.96m from the BGS plan, the minimum rock cover ratio for the Durham Low Main coal seam beneath the site is considered to be 18. However based on the recorded seam thickness off 0.79m with a rock cover of 36.20m, the maximum rock cover ratio is more likely to be in the order of 45, and as such workings in the Durham Low Main would not present a risk of mineral instability. This should be confirmed through intrusive investigation.

In accordance with the Coal Authority Mining Report, the Durham Low Main is not recorded to have been works beneath or in the vicinity of the development site.

#### Northumberland Low Main / Brass Thill

The Northumberland Low Main / Brass Thill coal seam was identified as being up to 2.13m thick on the BGS geological plan for the site, and to subcrop approximately 750m to the south west of the site. Using a worst case thickness of 2.13m, the minimum rock cover ratio for the Northumberland Low Main coal seam beneath the site is considered to be 22. Therefore, workings in this coal seam, are unlikely to be present a mineral instability risk to the proposed development.

The Coal Authority Consultants report the Northumberland Low Main coal seam has been recorded to have been worked extensively in the area and directly underlying the site last worked in 1900. The Bensham is reported to have an extraction thickness of 0.8m at 45mbgl (42.60m below rockhead). On this basis the rock cover ratio is considered to be 53, confirming the above assessment that working the Northumberland Low Main would not present a mineral instability risk to the development.

#### Broomhill Main

The Broomhill Main coal seam was identified as being up to 0.46m thick on the BGS geological plan for the site and 0.36m recorded in BGS Borehole NZ28NW116/Pegswood Colliery Pit B historical borehole. Using a worst case thickness of 0.46m, the minimum rock cover ratio for the Broomhill Main coal seam beneath the site is considered to be 60. In addition, the Broomhill Main coal seam is not recorded to have been worked beneath the site. Therefore, workings in this coal seam are unlikely to present a mineral instability risk to the proposed development.

#### Plessey / Hutton

The Bensham coal seam was identified as being between 0.05m to 1.83m thick on the BGS geological plan for the site and 0.86m thick in in BGS Borehole NZ28NW116/Pegswood Colliery Pit B historical borehole. Using a conservative thickness of 1.83m, the minimum rock cover ratio for the Plessey/Hutton coal seam beneath the site is considered to be 38. Therefore, workings in this coal seam, are unlikely to present a mineral instability risk to the proposed development.

The Coal Authority consultant's report indicates the Plessey/Hutton coal seam has been worked beneath the site, with a recorded extraction thickness of 0.80m at 76mbgl (73.60m below rock head). This confirms the above assessment that workings in this coal seam, are unlikely to present a mineral instability risk to the proposed development.

#### Coal (Thin)

A thin unnamed coal seam is recorded to be present underlying the Plessey/Hutton coal seam. It is anticipated that this seam will have a maximum thickness of 0.1m with a rock cover of 57m, as such workings in this coal seam, if present, are unlikely to present a mineral instability risk to the proposed development.

#### Bottom Plessey

The Bottom Plessey coal seam was identified as being up to 1.24m thick on the BGS geological plan for the site. Using a conservative thickness of 1.24m, the minimum rock cover ratio for the Durham Low Main coal seam beneath the site is considered to be 64. In addition, the Bottom Plessey coal seam is not recorded to have been worked beneath the site. Therefore, workings in this coal seam, if present, are unlikely to present a mineral instability risk to the proposed development.

#### Unrecorded Workings

It should be noted that the Coal Mining Report included in Appendix 3 does not identify recorded shallow workings within the Durham Low Main, Broomhill Main or Bottom Plessey Metal, coal seams beneath the site and also states that it is unlikely that there will be unrecorded workings beneath the site.

In consideration of the above, and the fact that that the Durham Low Main coal seam is potentially present at a shallow depth and at an economically extractable thickness, it is considered that workings may have been undertaken within this coal seam beneath the site prior to the requirements for mine abandonment records to be kept in 1872. On this basis it is not possible to discount the risk of unrecorded workings within the Durham Low Main coal seam being present and the associated mineral instability risk.

Based on the anticipated thicknesses and depths of the underlying Broomhill Main and Bottom Plessey coal seams beneath the site and the calculated rock cover ratios of between 62 and 85, it is considered that should unrecorded workings be present within these coal seams, a mineral instability risk associated with these seams to the proposed development is unlikely to exist.

#### Recorded Workings

As reported above, past underground mining was recorded beneath the site within the Bensham, Brass Thill, Hutton, Harvey and Top Busty coal seams. The shallowest recorded workings are within the Bensham coal seam at 20mbgl which is inferred as being approximately 17.60m below

rockhead. The Bensham coal seam was identified as being between 0.20m and 1.27m thick on the BGS maps for the local area and 0.70 within historic borehole records in close proximity to the site. Therefore, workings in this coal seam or the underlying Durham Low Main coal seam, should be investigated for the potential to present a mineral instability risk to the development.

#### Mine Shafts

No mine entries were recorded within a 100m radius of the site. However, a mine entry (Pegswood Colliery Pitt B) is recorded to be present 80m north east of the site on the BGS 1:10,000 plan (NZ28NW) and on the BGS online viewer. As stated previously, it is considered that the location of this shaft on the BGS plan is an error, but given the recorded distance from the site it is not considered to present a mineral instability risk.

# 7.0 Environmental Information

### 7.1 Envirocheck Report

Table 8 summarises information provided within the Envirocheck Report relating to relevant environmental controls in place in the vicinity of the site.

Table 8: Summary of relevant controls
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Details	Location Relative to Site	Status
Licensed Waste Management Facility – Household, Commercial and Industrial transfer site.	70m E	Current
Historic Landfill – Pegswood Colliery – Inert Waste – last input 1980	150m E	Closed
Potentially Infilled Land (Non-water) – Unknown fill (1992)	150m E	-
Licensed Waste Management Facility – Other waste (Construction, demolition and dredging)	200m E	Surrendered
Pollution Incidents to Controlled waters – Category 3 – Minor Incident – sewage storm overflow into freshwater stream or river.	210m N	-
Pollution Incidents to Controlled waters – Category 3 – Minor Incident – sewage storm overflow into freshwater stream or river.	220m N	-
Potentially Infilled Land (water) – Unknown fill (1898)	220m NE	-
Discharge consent – CSO overflow into a tributary of the Bothal Burn	230m NW	Current
Pollution Incidents to Controlled waters – Category 3 – Minor Incident – organic wastes into freshwater stream or river.	250m NE	-

The Envirocheck Report lists current potentially contaminative land uses within 250m of the Site. Table 9 presents the information provided in the Envirocheck Report. The Envirocheck Report is included in Appendix 2.

#### Table 9: Summary of Contaminative Industrial Land Uses

Land Use Activity	Distance	Direction
Manufacturing and Production – Tank	10	NW

Land Use Activity	Distance	Direction
Contemporary Trade Directory – Printers	75m	E
Contemporary Trade Directory – Electrical Engineers	95m	SE
Commercial Services – Vehicle Cleaning Services	160m	E
Manufacturing and Production – Business Park and Industrial Estates	165m	SE
Commercial Services – Vehicle Repair, Testing and Servicing	170	SE
Contemporary Trade Directory – Tyre Dealers	230m	SW

# 7.2 Radon

The Health Protection Agency Centre for Radiation, Chemical and Environmental hazards (HPA CRCE) Report (report reference: HPA-RPD-05 published 2009) and the Public Health UK Radon Interactive Map indicates that the site is in a lower probability radon area with less than 1% of homes above the Action Level. As such, it is not considered that a site specific Radon report is required for the development and it is unlikely that radon protection measures will be needed for the development.

# 7.3 Unexploded Ordnance

The Zetica online Risk maps for Unexploded Bombs (UXO) has been reviewed for the site and indicates the site to be located within a Low Risk area.

# 7.4 Invasive Species

The presence of invasive species (including Japanese Knotweed) has not been assessed as part of this study. The presence of invasive species cannot be discounted until a botanical survey has been undertaken by a trained botanist.

# 7.5 Environmentally Sensitive Areas

The Envirocheck report, Appendix 2, indicates that the following sensitive land uses are present within the vicinity of the site;

- Ancient Woodland Bothal Banks (~850m south east);
- Adopted Greenbelt (455m east);
- Nitrate Vulnerable Zone Bothal Burn Catchment (site within catchment).

# 7.5 Ecology

It is understood that the site has not been assessed by an Ecologist to date and this is outside the scope of this geo-environmental report.

#### 7.6 Asbestos

Former buildings within the development area were constructed between 1957 and 1959. As such, it is considered that there is a risk of asbestos and asbestos containing materials (ACM)

being present within the surface topsoil/made ground and should be verified as part of any future ground investigation works.

If asbestos is identified within the topsoil, made ground or underlying superficial soils, this may result in the material being treated as hazardous waste and determining it to be unsuitable for reuse on site and requiring disposal to a suitably licensed facility incurring the higher rate of landfill tax.

# 8.0 Proposed Development Plans

The proposed development is to comprise the construction of a two storey children's residential property to comprise a living area, offices and garage on the ground floor and 5 No. bedrooms and bathrooms on the second floor, with associated access, car parking and areas of soft landscaping.

An initial proposed development plan is shown on Northumberland County Council drawing IP191005-A(0)01, provided within Appendix 1.

Proposed site levels are currently not available and are subject to confirmation following detailed drainage design, however they are anticipated to remain largely the same as the existing site levels in order to tie into existing access road and adjacent land.

Within the qualitative risk assessment included within Section 9.0, it has been assumed that areas of soft landscaping will be included within the development to allow for a conservative environmental risk assessment to be undertaken.

# 9.0 Environmental Assessment: Preliminary Conceptual Site Model and Qualitative Risk Assessment

A Preliminary Site Conceptual Model is formed by presenting all identified and suspected sources, pathways and receptors identified (or suspected) during the desk study, in relation to the proposed site development. The risk assessment has been carried out in line with the Principles of Environmental Risk Assessment which are summarised in Appendix 7.

# 9.1 Source Characterisation

Potential on-site and off-site sources of contamination identified through the historical development review and Envirocheck Report are detailed in Table 10.

Source	Distance (m)	Compass Direction	Identified by:
Pegswood Colliery	Onsite/offsite		Historical maps / Coal Authority Report
Tank	10	Ν	Historical maps
Depot	85	E	Historical maps
Garage	150	SW	Historical maps
Electricity Substation	155	SE	Historical maps
Pegswood Industrial Estate	100	SE	Historical maps

#### Table 10: Identified Potential Sources of Contamination

\* On-site and off-site sources have been combined as it is unlikely to that off site sources can be discerned from on Site sources.

The main source of contamination/pollution is considered to be the Made Ground which is anticipated to underlie the site associated with the former site building. Where present, the source and nature of the Made Ground is unknown, therefore, these materials may potentially contain harmful contaminants/pollutants.

Sources discounted from further consideration, along with the reasons for these sources being discounted are detailed in Table 11.

Source	Distance (m)	Compass Direction	Reason for being discounted:
Works	300	E	Distance from site
Electricity Sub-station(s)	300	S	Distance from site
Factory	315	SW	Distance from site
Factory	330	SW	Distance from site
Sewage Tank	340	NE	Distance from site
Smithy	365	SW	Distance from site
Brick Works	370	SE	Distance from site
North Eastern Railway	380	SE	Distance from site
Smithy	420	SW	Distance from site
Council Yard	450	SW	Distance from site
Sewage Works	500	SE	Distance from site
Recycling Site	500	SE	Distance from site

Table 11: Sources discounted from further consideration

The 'Contaminants of Concern' for those sources which cannot be discounted are listed in Table 12 and are carried forward to the Qualitative Risk Assessment in Table 13.

The potential contaminants associated with the land uses have been established through reference to the appropriate Department of Environment Industry Profiles.

The profiles reviewed comprise:

- Road Vehicle, Fuelling, Service and Repair
- Profile of miscellaneous industries.



#### Table 11: Contaminants of Concern for Sources Identified

	CONTAMINANTS OF CONCERN										
Source	Metals	ТРН	PAH VOCs SVOCs	PCBs	Asbestos	SO4, SO3	рН	Solvents	Ash	Cyanide	Ground Gas/Volatiles
ON SITE											
Mine Gas											х
OFF SITE											
Tank	х	х	х		Х		х	Х			X
Depot	х	х	х			х	х	х			X
Garage	х	х	х	х		х	х	х			X
Electricity Substation				х			Х				
Industrial Estate	х	х	х			х	х	х			

List of abbreviations:

TPH Total Petroleum Hydrocarbons (fuels and oils)

PAH Polycyclic Aromatic Hydrocarbons

PCB Poly-Chlorinated Biphenyls

(S)VOCs (Semi) Volatile Organic Compounds

# 9.2 Receptor Characterisation

Potential receptors at the site are related to the proposed development and the ground and groundwater conditions below the site. The desk study has identified the following potential receptors:

#### Part IIA Receptors

Human Health:	Site end users
Property:	Buildings and services
The Water Environment:	Superficial groundwater
	Bedrock aquifer
	Surface Water
Vegetation:	Plant Growth

#### Non Part IIA Receptors

Human Health: Construction and maintenance workers.

#### 9.3 Pathway Characterisation

The potential pathways by which receptors may be exposed to contaminants (sources) at the site can vary depending on the proposed land use scenario and the receptor themselves.

#### <u>Human Health</u>

For humans, the four possible routes of exposure to contaminants are:

- Inhalation of dusts or gas/vapours;
- Ingestion of dusts or soil by hand-to-mouth activity or by consumption of vegetables grown in contaminated soils;
- Dermal (skin) contact with contaminated soils and waters and transfer of contaminants through the skin into the body; and
- Ingestion of contaminated pipe supplied water.

#### Buildings, Property and Services

The main pathways by which buildings can be affected are through:

- Contact with aggressive or acidic soils; and
- Service trenches acting as preferential migration pathways.

#### The Water Environment

The primary routes by which the Water Environment can be affected are:

- Leaching of contaminants from the soil migrating vertically and/or laterally to superficial groundwater and bedrock aquifer beneath the site;
- Movement of dissolved contaminants in soil pore water; and
- Movement of contaminants via groundwater to surface water bodies.

#### Plant/Root Uptake

Plants in contact with Made Ground have the potential to absorb contaminants, which may be present, through their roots.

#### Ecology

An ecology survey has not been undertaken for the site. An ecological survey should be undertaken as part of the future planning process.

#### 9.4 Pollutant Linkages

This section discusses the effectiveness of the potential pollutant linkages for each receptor identified above.

#### Part IIA Receptors

#### Human Health - Future Site Users

- Site end users could come into contact with contaminated soil through dermal contact and ingestion pathways in any proposed areas of soft landscaping / residential gardens. There is a potential for the soil underlying the site to be contaminated from both on site and off site sources.
- Potential build-up of soil/mine gas and volatile vapours within confined spaces could pose a health risk to site end users via explosion or inhalation and asphyxiation.
- Chemical attack of water supply pipes may also indirectly lead to harm to human health from subsequent contamination of the water supply. Various water pipe materials are differentially affected by various organic or corrosive contaminants and this risk should be assessed in detail. Pipes may be affected by contaminants in ground containing any chemical residues from past land uses on site and off site which may remain in the soil.

#### **Property**

- The integrity of hardstanding and buried concrete may be at risk from direct contact with aggressive contaminants where these are present beneath the site. Aggressive contaminants include sulphates and sulphides, and acidic conditions. These cause cementitious bonds to break down effectively causing concrete to disintegrate. Aggressive levels of pH and SO4 may be present in Made Ground on site but can also be present in natural soils.
- The potential build-up of soil gas in confined spaces could pose an explosion risk to buildings.

#### The Water Environment

- There is the potential for contaminated surface water run-off from the site entering surface water courses near the site resulting in their contamination.
- There is the potential for groundwater to become contaminated as a result of the leaching of contaminants from the soil to on-site groundwater bodies.
- There is a potential for the migration of contaminated on-site groundwater to off-site groundwater and/or surface water bodies.

#### <u>Plants</u>

• Plants have the potential to be effected by contaminants within the Made Ground through plant uptake. High levels of copper and zinc within the soil can effect plant growth.

#### Non Part IIA Receptors

#### Construction and Maintenance Workers

- During construction work, there is a risk that workers may come into direct contact with potentially contaminated soils in areas of Made Ground or gross contamination. The ingestion and inhalation pathways will also be viable in these areas of the site.
- During construction and maintenance work there is the potential for the build-up of ground gas within confined spaces including excavations and service trenches, which could present an asphyxiation or explosion risk.
- There is a risk that workers may also come into contact with superficial groundwaters contaminated by on site and off site sources.

### 9.5 Qualitative Environmental Risk Assessment

The preliminary conceptual model outlined above has been used to undertake an initial qualitative risk assessment for the site to determine the possibility of significant risks that may exist following development of the site. The qualitative risk assessment will also investigate the risks to the wider environment as a result of contamination from on-site sources. The principles of environmental risk assessment are presented as Appendix 7.

#### Table 12: Preliminary qualitative risk assessment

Source	Contaminants of Concern	Pathway	Receptor	Assessment	Likelihood of Occurrence	Severity of Consequences	Risk Rating	Investigation Required
		Ingestion and dermal contact	Human Health: End Users	There is the potential that end users may come into direct contact with contaminated soils and groundwater in gardens and landscaped areas. A suitable clean cover solution would mitigate this risk should contamination be present.	Low	High	Moderate	Yes
			Human Health Adjacent Users	There is the potential for onsite dissolved or leachable contaminants to migrate offsite and impact on adjacent site users by ingestion or direct contact.	Very Low	High	Moderate       Low       Moderate       Low       Moderate       Low       Moderate       Low       Low	Yes
		Accumulation of gas / vapours and inhalation	Human Health: End Users	There is the potential for asphyxiation by end users from the migration, accumulation and inhalation of gases and vapours within buildings.	Moderate	High	Moderate	Yes
	Metals, TPH, PAH, VOCs, SVOCs,		Human Health Adjacent Users	There is the potential for asphyxiation by adjacent users from the migration off site, and accumulation and inhalation of gases and vapours in confined spaces within adjacent properties.	Very Low	High	Low	Yes
associated with former school	Asbestos, Sulphates, pH, Solvents, Ash, and	Inhalation of wind- blown dusts during construction	Human Health Adjacent Users	There is the short term potential for the inhalation of windblown dusts and fibres by adjacent users during construction phase.	Moderate	High	Moderate	Yes
building	Ground Gas	Migration of contaminants and direct contact	Built Property and Services	There is the potential for chemical attack on below ground concrete, and services from direct contact with contaminants.	Moderate	Moderate	Moderate	Yes
		Accumulation of gas / vapours, direct contact, preferential pathways, ingress		In view of the historical development on and adjacent to the site, there is the potential for the migration of potentially explosive gas and vapours and their accumulation in confined spaces within the proposed development.	High	Moderate	Moderate	Yes
		Leaching, migration	Controlled Waters; Superficial & Bedrock Aquifers	Soft landscaped areas within the proposed development are likely to be limited in size. As such, there is a very low potential for infiltration of rainfall into made ground, with subsequent mobilisation of contaminants and generation of leachates and migration into the underlying groundwater bodies.	Low	Moderate	Moderate	Yes
		Direct contact and uptake of contaminants	Landscaping	There is the risk that each of the pathways is realised in relation to soft landscaped areas.	Low	Low	Low	Yes

Source	Contaminants of Concern	Pathway	Receptor	Assessment	Likelihood of Occurrence	Severity of Consequences	Risk Rating	Investigation Required
Mine Gas	Ground Gas	Accumulation of vapours and inhalation	Human Health: End Users	There is the potential for asphyxiation by end users from the migration, accumulation and inhalation of gas from shallow mine workings in confined spaces within buildings.	High	High	High	Yes
Mine Gas	Ground Gas	Accumulation of vapours, direct contact, preferential pathways, ingress	Built Property and Services	Based on the presence of recorded mine workings and potential for mine gas generation, there is the potential for each of the pathways to be realised in relation to the proposed development.	High	High	High	Yes
Offsite potentially contaminative land uses Offsite PCBs, A Sulpha Solven Cyani		Migration, ingestion and dermal contact	Human Health: End Users	There is the potential that end users may come into direct contact with migrating contaminated leachates and groundwater from off-site sources in on site landscaped and garden areas. A suitable clean cover solution would mitigate this risk should contamination be encountered.	Low	High	Moderate	Yes
	Metals, TPH, PAH, VOCs, SVOCs, PCBs, Asbestos, Sulphates, pH, Solvents, Ash, Cyanide and Ground Gas	Migration and accumulation of gases and vapours and inhalation		There is the potential for asphyxiation by end users from the migration, accumulation and inhalation of gases and vapours from offsite historic land uses in confined spaces within g buildings.	High	Moderate	Moderate	Yes
		Migration of contaminants and direct contact	Built Property and Services	There is the potential for chemical attack on below ground concrete and services from direct contact with offsite contaminants.	Moderate	Low	Moderate	Yes
		Migration and accumulation of gases and vapours, direct contact, preferential pathways, ingress		There is the potential for each of the pathways to be realised in relation to the proposed development.	High	Moderate	Moderate	Yes
		Migration, direct contact and uptake of contaminants	Landscaping and gardens	There is the risk that each of the pathways is realised in relation to soft landscaped areas.	Low	Low	Low	Yes

\*On-site and off-site sources have been combined as it is unlikely to that off site sources can be discerned from onsite sources.

Risk Ratings:

- High The available information indicates a significant possibility of harm to a receptor requiring further investigation, assessment or treatment.
- Moderate The available information indicates a potential for significant harm to a receptor requiring further investigation and assessment.
- Low The available information does not indicate a significant potential for harm to a receptor requiring further investigation. This does not indicate zero risk.

The preliminary quantitative risk assessment confirms the majority of potential source-pathwayreceptors are considered to be of **moderate** risk. This is with the exception of mine gas which is considered to be **high** risk. It is therefore considered that intrusive ground investigation is required to confirm the anticipated ground model, the concentrations of contaminants/pollutants in the soil and groundwater and the presence of ground gases or volatile vapours.

# **10.0** Identified Potential Constraints to Development

### **10.1** Potential Geotechnical Constraints

Based on a review of the available information, the following potential geotechnical constraints may be encountered on-site.

- The presence of variable thicknesses of Made Ground with variable bearing capacity, compressibility and poor material properties, associated with current and historic onsite development.
- Below ground relic structures, foundations or services associated with historic and existing development.
- A potential mineral instability risk due to the presence of shallow mine workings requiring treatment and consolidation, as discussed in section 10.2.
- Potential for shallow perched groundwater within the Made Ground, below ground structures or granular lenses in the Glacial Till, which may require dewatering in excavations during construction.
- Soils containing elevated sulphates with the potential for sulphate attack on buried concrete and requiring concrete design in accordance with BRE Special Digest 1:2005 Concrete in aggressive ground.
- The presence of existing services potentially requiring either diversion or decommissioning. The impact on potential on and off-site assets may restrict proposed developments, require additional geotechnical assessment to confirm potential risks and will have to be taken into account for future intrusive investigations and below ground works;

#### **10.2 Potential Mineral Instability Constraints**

The coal mining risk assessment presented in Section 6.0 identified the potential presence of worked coal seams to underlie the site at shallow depth. However, rock cover between rockhead and the top of workings is provisionally estimated to be greater than 10 times the seam thickness and therefore the mineral instability risk associated with shallow underground coal mine workings beneath the site are estimated to be low.

It is recommended that an intrusive ground investigation is undertaken for the site to further investigate the potential mineral instability risk and the following works should be considered:

#### Shallow Underground Mine Workings

Undertake intrusive investigation in the form of rotary drilling to investigate the presence of recorded workings in the Bensham and Durham Low Main coal seams beneath the proposed development.

#### Mine Shafts

There were no recorded mine entries within a 100m radius of the site, however, the presence of unrecorded mine shafts within the site area, whilst considered to be a low risk, cannot be fully

discounted. In addition, the BGS 1:10,000 plan indicates the presents of Pegswood Colliery Pitt B located 85m north east of the site.

On this basis no specific intrusive investigation works, beyond those detailed above, are considered necessary for the site. However, if abnormal ground conditions such as localised deep made ground or relic structures such as potential shaft caps are identified during the proposed intrusive investigation works, or site redevelopment, then the Engineer shall be notified immediately and specific requirements for further investigation and mitigation confirmed with the Coal Authority.

#### <u>Summary</u>

The proposed investigation works should be agreed with the Coal Authority and a licence for Coal Authority permission to enter/disturb workings obtained. The site investigation should be designed and undertaken in accordance with BS 5930, BS 10175 and Eurocode 7, and based on the proposed development layout targeting the underlying Bensham and Durham Low Main coal seams, identifying the presence of workings and confirming rock cover ratios beneath the site and specific areas of structural and non-structural development.

Once the investigation works are complete, and as required, remedial proposals should be discussed with the Coal Authority and their specific requirements for further investigation and mitigation confirmed.

#### **10.3 Potential Geo-Environmental Constraints**

The qualitative environmental risk assessment undertaken as part of this desk study has identified limited potential sources of contamination on-site and off-site.

#### On Site

- Made ground associated with historic development of the site.
- Asbestos Contaminated Materials in the made ground or superficial soils associated with former buildings.
- Soil/ mine gas and volatile vapours

#### Off Site

- Garage
- Electricity Sub-station
- Soil/ mine gas and vapours

The potential geo-environmental constraints identified through the qualitative risk assessment as requiring investigation are as follows:

- On-site and off-site sources → dermal contact, inhalation, and ingestion → Human health: future site users, adjacent site users and construction and maintenance personnel.
- On-site and off-site sources → ingress, preferential pathways, migration and accumulation of gas/ vapours → Human Health: future site users, adjacent users and Property; built fabric and services.
- On-site and off-site sources  $\rightarrow$  direct contact  $\rightarrow$  buried concrete, water supply pipes
- On-site sources → run-off, leaching and groundwater migration → Human Health: adjacent site users and Controlled Waters.
- On-site and off-site sources  $\rightarrow$  Plant/root uptake  $\rightarrow$  Plants/Vegetation.

The pollutant linkages will require further investigation to allow a quantitative risk assessment to be undertaken. The ground investigation should, therefore, allow for chemical testing of soils and groundwater and leachate testing of soils for the identified Contaminants of Concern. Soil testing in accordance with UKWIR may also be required prior to construction and once proposals with regards to water supply pipelines are confirmed.

# **11.0** Recommendations for Ground Investigation

Following the desk study review and environmental assessment it is recommended that an intrusive ground investigation is undertaken for the site.

The ground investigation should include the following works:

- Mini-bore boreholes (with in-situ testing) to investigate and characterise the shallow ground conditions underlying site.
- Rotary boreholes, in order to investigate the depth to rockhead and the presence of shallow mine workings which may present a mineral instability risk to the proposed development.
- •
- Geo-environmental laboratory testing of soils, waters and leachates for the identified Contaminants of Concern.
- Geotechnical laboratory testing comprising classification, shear strength and compressibility to allow derivation of parameters for the design of foundations and pavements.
- Chemical laboratory testing of soil comprising UKWIR testing for assessment of water supply pipes and material specification of same if new water main pipes are to be laid.
- A programme of groundwater and gas monitoring should be undertaken, with at least two rounds at low atmospheric pressure (<1,000MB).

In addition to the recommended ground investigation the following surveys, enquiries and assessments may be required depending on the nature of the final development:

- Botanical and ecological surveys to confirm the absence of invasive species and other sensitive ecology within and adjacent to the site.
- Existing site services should be traced. Requirements and proposals with regard to decommissioning or diverting existing site services should be confirmed. Where pipelines are to be diverted, confirmation should be obtained as to the required easements for access and maintenance.

# 12.0 References

BS10175:2011 - Investigation of potentially contaminated site, Code of Practice

BS5930:2015 – Code of Practice for Ground Investigation

CIRIA C665 - Assessing risks posed by hazardous ground gases to buildings

CIRIA 773 - Asbestos in Soils and Made Ground

Health Protection Agency: Radon in Dwellings in Scotland: 2009 Review and Atlas, Document Reference HAD-RPD-051

#### Internet based references:

British Geological Survey (BGS) online viewers (geology and hydrogeology) - http://www.bgs.ac.uk/data/maps/

British Geological Survey (BGS), Geology of Britain - www.bgs.ac.uk

British Geological Survey (BGS) of Scotland, geological map series 1:50 000 (Airdrie, Sheet 32W)

Coal Authority (Interactive map viewer) - www.mapapps2.bgs.ac.uk/coalauthority/home

Environment Agency, Department of Environment Industry Profiles – http://webarchive.nationalarchives.gov.uk/20140328084622/http://www.environment-agency.gov.uk/research/planning/33708.aspx

Scottish Environment Protection Agency (SEPA) – www.sepa.org.uk

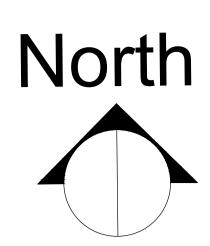
UK Radon - http://www.ukradon.org

### **Appendix 1**

Drawings



### DESIGN STAGE



REV A 00/00/00 ADD NOTES



Property Services, County Hall, Morpeth, NE61 2EF

**Childrens Homes** 

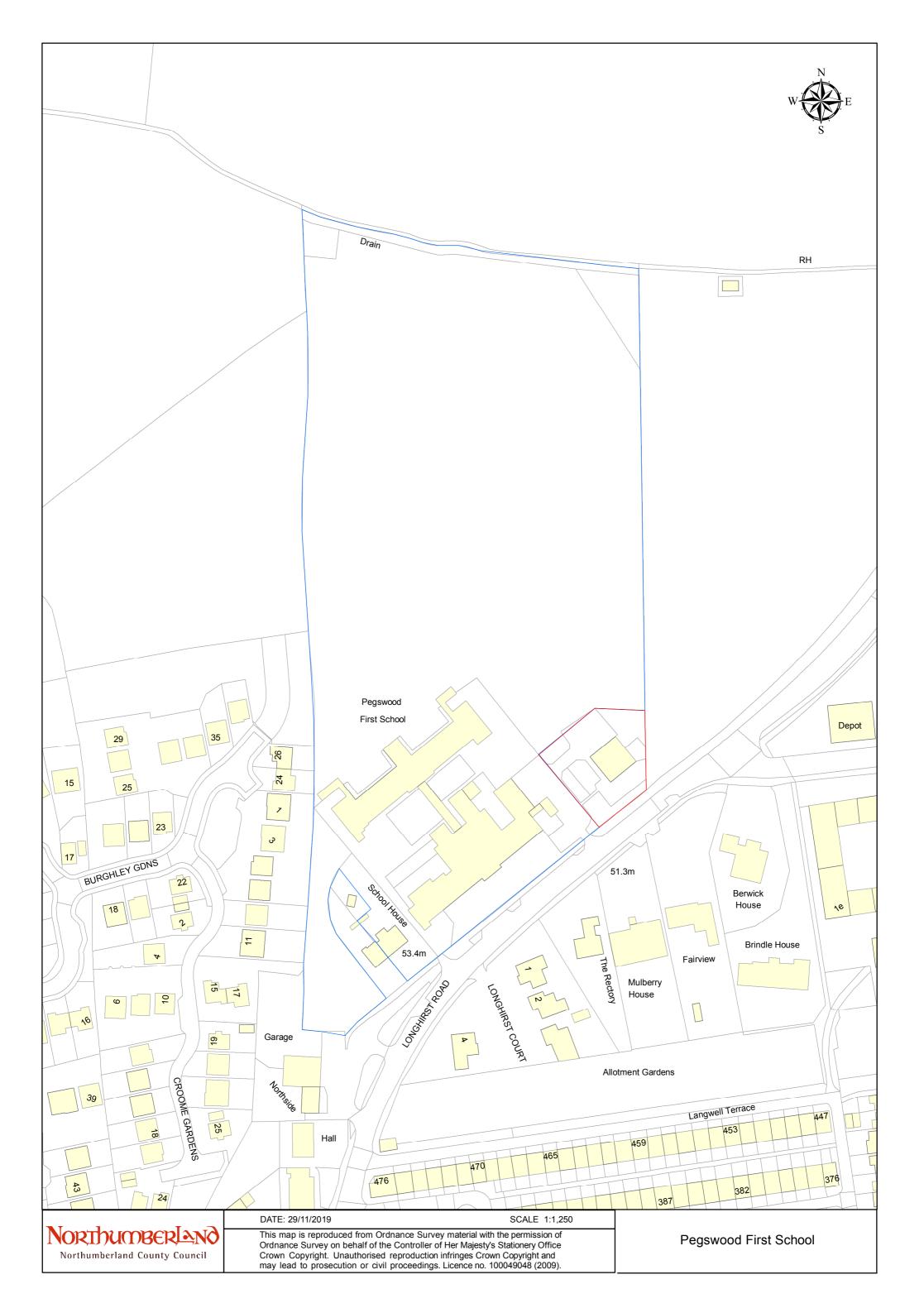
Site Plan

drawn LLA SCALE 1:200 CHECK LG DWG LOCATION

Sept 2019

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A(0)01



### Appendix 2

**Envirocheck Report** 



### **Envirocheck® Report:**

#### Datasheet

#### **Order Details:**

Order Number: 228936959\_1\_1

### Customer Reference: 136018

National Grid Reference: 422780, 587730

Slice:

**Site Area (Ha):** 0.14

Search Buffer (m): 1000

#### Site Details:

Children's Centre Longhirst Road Pegswood NE61 6XG

#### **Client Details:**

Miss R Tweddle Fairhurst 1 Arngrove Court Barrack Road Newcastle Upon Tyne NE4 6DB



# RHUR

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	20
Hazardous Substances	-
Geological	22
Industrial Land Use	28
Sensitive Land Use	33
Data Currency	34
Data Suppliers	40
Useful Contacts	41

#### 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.

Tor 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	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1		Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1		1	2	35
Prosecutions Relating to Controlled Waters			n/a	n/a	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	pg 11		Yes		
Pollution Incidents to Controlled Waters	pg 11		3		2
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 12			1	1
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points	pg 13				1
Substantiated Pollution Incident Register					
Water Abstractions	pg 13				(*8)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 15	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 15	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 15	Yes	n/a	n/a	n/a
Source Protection Zones					
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
OS Water Network Lines	pg 16		4	13	16

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 20		1		
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 20		2		1
Local Authority Landfill Coverage	pg 20	2	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 21		1	1	6
Potentially Infilled Land (Water)	pg 21		1	1	2
Registered Landfill Sites	pg 21		1		
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	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 22	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 22	Yes	Yes		Yes
BGS Recorded Mineral Sites	pg 23			6	14
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 26	Yes	n/a	n/a	n/a
Mining Instability	pg 26	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 26	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 26		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 27	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 27	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 27	Yes		n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 28		15	2	7
Fuel Station Entries	pg 30		1		1
Points of Interest - Commercial Services	pg 30		2		
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 30		2	4	1
Points of Interest - Public Infrastructure	pg 31				8
Points of Interest - Recreational and Environmental	pg 31			2	5
Gas Pipelines					
Underground Electrical Cables					

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 33				1
Areas of Adopted Green Belt	pg 33			1	
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 33	1			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater I	Flooding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	249	1	423000 587900
	BGS Groundwater F	Flooding Susceptibility				
	Flooding Type:	Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	250	1	422950 587950
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	292	1	422950 588000
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	320	1	423000 588000
	BGS Groundwater I	Flooding Susceptibility				
	Flooding Type:	Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	360	1	423100 587950
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Limited Potential for Groundwater Flooding to Occur	A14NW (E)	411	1	423200 587850
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Limited Potential for Groundwater Flooding to Occur	A14NW (E)	426	1	423200 587900
	BGS Groundwater I Flooding Type:	Flooding Susceptibility Limited Potential for Groundwater Flooding to Occur	A14NW (E)	448	1	423250 587750
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Limited Potential for Groundwater Flooding to Occur	A14NW (E)	448	1	423250 587729
	BGS Groundwater I Flooding Type:	Flooding Susceptibility Limited Potential for Groundwater Flooding to Occur	A8NW (SW)	453	1	422500 587350
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Limited Potential for Groundwater Flooding to Occur	A14SW (E)	463	1	423250 587600
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding to Occur at Surface	A14NW (NE)	471	1	423200 588000
	BGS Groundwater I Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (E)	473	1	423250 587900
	BGS Groundwater I Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (NE)	491	1	423250 587950
	BGS Groundwater I Flooding Type:	Flooding Susceptibility Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (SW)	493	1	422500 587300
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Limited Potential for Groundwater Flooding to Occur	A14SW (E)	498	1	423300 587700
1	Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date:	s Northumbrian Water Limited STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Pegswood Csocounty First School 11 Croome Gardens, Pegswood, Morpeth, Northumberland, Ne61 6tp Environment Agency, North East Region Not Supplied Eprcb3192aa 1 22nd January 2015 22nd January 2015 Not Supplied	A13NW (NW)	232	2	422665 587950
	Discharge Type: Discharge Environment: Receiving Water: Status:	Rev gep Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Tributary Of The Bothal Burn New issued under EPR 2010 Located by supplier to within 10m				

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent	S				
2	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b> Positional Accuracy:	Northumbrian Water Limited STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Bothal Cso The Tunnels Cm036 65 Beaumont Court, Pegswood, Morpeth, Northumberland, Ne61 6bf Environment Agency, North East Region Not Supplied 225/1068 2 1st April 2010 23rd March 2010 31st January 2019 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Bothal Burn Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m	A14SW (SE)	454	2	423200 587500
	Discharge Consent	Ş				
2	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b> Positional Accuracy:	Northumbrian Water Limited STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Bothal Cso The Tunnels Cm036 65 Beaumont Court, Pegswood, Morpeth, Northumberland, Ne61 6bf Environment Agency, North East Region Not Supplied 225/1068 1 7th January 2005 7th January 2005 31st March 2010 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Bothal Burn New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 100m	A14SW (SE)	454	2	423200 587500
	Discharge Consent	S				
3	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b>	Northumbrian Water Limited STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Tunnels, The Sso, Pegswood, Northumberland Environment Agency, North East Region Not Given 225/0981 1 6th May 1996 6th February 1996 7th January 2005 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Bothal Burn Authorisation revoked Located by supplier to within 10m	A14SW (E)	529	2	423310 587570
	Discharge Consent	S				
3	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b> Positional Accuracy:	Redundant - Northumbrian Water Ltd STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Tunnels, The Sso, Pegswood, Northumberland Environment Agency, North East Region Wansbeck 225/0883 1 21st September 1989 21st September 1989 21st September 1989 6th February 1996 Unspecified Freshwater Stream/River Bothal Burn Authorisation revoked Located by supplier to within 100m	A14SW (E)	529	2	423310 587570

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consents	S				
3	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status:	Northumbrian Water Limited STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Bothal Cso The Tunnels Cm036 65 Beaumont Court, Pegswood, Morpeth, Northumberland, Ne61 6bf Environment Agency, North East Region Not Supplied 225/1068 3 1st February 2019 1st February 2019 Not Supplied Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Bothal Burn Varied under EPR 2010 Located by supplier to within 10m	A14SW (E)	531	2	423313 587574
	F USILIUIIAI ACCUIACY.					
3	Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Type: Discharge Type: Status: Positional Accuracy:	s Northumbrian Water Ltd Undefined Or Other The Tunnels Cso, PEGSWOOD Environment Agency, North East Region Not Given 225/0981 Not Supplied Not Supplied Not Supplied Not Supplied Storm sewage overflow discharge Freshwater Stream/River Bothal Burn Not Supplied Located by supplier to within 100m	A14SW (E)	535	2	423315 587565
	Discharge Consents	S				
4	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b> Positional Accuracy:	Redundant - Northumbrian Water Ltd WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Sewage Disposal Works, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/G/0225 1 6th November 1961 6th November 1961 15th September 1982 Unspecified Freshwater Stream/River Bothal Burn Authorisation revoked Located by supplier to within 10m	A14SW (SE)	543	2	423300 587500
	Discharge Consents					
5	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:	British Railways Board Undefined Or Other 7 Railway Board Houses And Station, Pegswood Environment Agency, North East Region Wansbeck 225/F/0541 1 13th April 1964 13th April 1964 7th November 2003 Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Bothal Burn Authorisation revoked Located by supplier to within 10m	A8NE (S)	573	2	422816 587131

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent	S				
5	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b> Positional Accuracy:	Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Tank Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1038 1 1st August 2002 1st August 2002 28th March 2016 Sewage Discharges - Final/Treated Effluent - Water Company Land/Soakaway Groundwater New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	A8NE (S)	574	2	422820 587130
	-					
5	-	Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Tank Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1038 2 29th March 2016 29th March 2016 29th March 2016 Sewage Discharges - Final/Treated Effluent - Water Company Land/Soakaway Groundwater Varied under EPR 2010 Located by supplier to within 10m	A8NE (S)	593	2	422843 587113
	Discharge Consent	S				
6	,	Redundant - Northumbrian Water Ltd WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Bothal Sewage Disposal Works, Bothal, Northumberland Environment Agency, North East Region Not Supplied 225/G/0076 1 19th May 1955 19th May 1955 17th March 1967 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River Bothal Burn Authorisation revoked Located by supplier to within 10m	A14SW (SE)	591	2	423300 587400
	Discharge Consent	S				
7	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b> Positional Accuracy:	Redundant - Northumbrian Water Ltd WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Sewage Disposal Works, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/G/0224 1 6th November 1961 6th November 1961 15th September 1982 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River Bothal Burn Authorisation revoked Located by supplier to within 10m	A14SW (E)	609	2	423400 587600

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 5 31st March 2018 26th October 2017 30th March 2020 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Bothal Burn Varied under EPR 2010 Located by supplier to within 10m	A14SW (SE)	628	2	423371 587452
8	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 6 31st March 2020 26th October 2017 Not Supplied Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River Bothal Burn Varied under EPR 2010 Located by supplier to within 10m	A14SW (SE)	628	2	423371 587452
8	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 6 31st March 2020 26th October 2017 Not Supplied Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Bothal Burn Varied under EPR 2010 Located by supplier to within 10m	A14SW (SE)	628	2	423371 587452
8	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 4 26th October 2017 26th October 2017 26th October 2017 30th March 2018 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River Bothal Burn Varied under EPR 2010 Located by supplier to within 10m	A14SW (SE)	628	2	423371 587452

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 4 26th October 2017 26th October 2017 26th October 2017 30th March 2018 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Bothal Burn Varied under EPR 2010 Located by supplier to within 10m	A14SW (SE)	628	2	423371 587452
8	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Issued Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 5 31st March 2018 26th October 2017 30th March 2020 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River Bothal Burn Varied under EPR 2010 Located by supplier to within 10m	A14SW (SE)	628	2	423371 587452
8	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 3 28th September 2017 28th September 2017 28th September 2017 28th September 2017 28th October 2017 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River Bothal Burn Varied under EPR 2010 Located by supplier to within 10m	A14SW (SE)	628	2	423370 587450
8	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 3 28th September 2017 28th September 2017 28th September 2017 28th September 2017 28th October 2017 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Bothal Burn Varied under EPR 2010 Located by supplier to within 10m	A14SW (SE)	628	2	423370 587450

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent	S				
8	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b> Positional Accuracy:	Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 2 1st April 2009 14th October 2008 27th September 2017 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River Bothal Burn Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	A14SW (SE)	628	2	423370 587450
_	Discharge Consent	S				7
8	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b>	Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 2 1st April 2009 14th October 2008 27th September 2017 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Bothal Burn Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)	A14SW (SE)	628	2	423370 587450
	Positional Accuracy:	Located by supplier to within 10m				
	Discharge Consent	S				
8	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b>	Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 2 1st April 2009 14th October 2008 27th September 2017 Sewage Discharges - Pumping Station - Water Company Freshwater Stream/River Bothal Burn Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	A14SW (SE)	628	2	423370 587450
8	Operator:	s Northumbrian Water Limited	A14SW	628	2	423370
0	Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b>	WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 1 1 1 1 1 1 1 1 1 225/1079 1 1 1 1 1 1 1 1 1 1 1 1 1	(SE)	020	2	587450

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent	S				
8	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b> Positional Accuracy:	Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 1 1st April 2005 8th March 2009 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Bothal Burn New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	A14SW (SE)	628	2	423370 587450
	Discharge Consent	ş				
8	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: <b>Status:</b> Positional Accuracy:	Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Stw, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/1079 1 1st April 2005 8th March 2005 31st March 2009 Sewage Discharges - Pumping Station - Water Company Freshwater Stream/River Bothal Burn New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995) Located by supplier to within 10m	A14SW (SE)	628	2	423370 587450
	Discharge Consent	S				
8		Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Sewage Treatment Works, Pegswood, Northumberland Environment Agency, North East Region Wansbeck 225/A/0866 1 15th September 1982 15th September 1982 31st March 2005 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River Bothal Burn Authorisation revoked Located by supplier to within 10m	A14SW (SE)	637	2	423380 587450
	Discharge Consent					
8	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Issued Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Northumbrian Water Limited WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Sewage Treatment Works, Pegswood, Northumberland Environment Agency, North East Region Wansbeck 225/A/0867 1 15th September 1982 15th September 1982 31st March 2005 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Bothal Burn Authorisation revoked Located by supplier to within 10m	A14SW (SE)	637	2	423380 587450

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	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:	s Northumbrian Water Ltd Not Given Pegswood (Patten Way) Pumping Station, PEGSWOOD Environment Agency, North East Region Wansbeck 225/0899/0913 Not Supplied Not Supplied 21st September 1989 Not Supplied Storm Sewage Freshwater Stream/River Bothal Burn; Tributary Of Not Supplied Located by supplier to within 100m	A7NE (SW)	721	2	422440 587070
9	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Redundant - Northumbrian Water Ltd PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Pegswood (Patten Way) Ps, Pegswood, Ashington, Northumberland Environment Agency, North East Region Wansbeck 225/0899 1 21st September 1989 21st September 1989 21st September 1989 4th November 1996 Unspecified Freshwater Stream/River Wansbeck Tributary Authorisation revoked Located by supplier to within 10m	A7NE (SW)	721	2	422440 587070
10	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:	s Redundant - Northumbrian Water Ltd WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Pegswood Sewage Treatment Works, Pegswood, Northumberland Environment Agency, North East Region Not Supplied 225/G/0098 1 6th February 1956 6th February 1956 6th February 1956 6th November 1961 Sewage Discharges - Final/Treated Effluent - Water Company Freshwater Stream/River Bothal Burn Authorisation revoked Located by supplier to within 10m	A14SE (E)	731	2	423500 587500
10	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:	s Northumbrian Water Ltd Undefined Or Other Pegswood Stw, PEGSWOOD Environment Agency, North East Region Not Given 225/A/0866/0933 Not Supplied Not Supplied Not Supplied Not Supplied Unknown Freshwater Stream/River Bothal Burn Not Supplied Located by supplier to within 100m	A14SE (E)	733	2	423500 587495

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	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:	s Northumbrian Water Ltd Undefined Or Other Pegswood Stw, PEGSWOOD Environment Agency, North East Region Not Given 225/A/0867 Not Supplied Not Supplied Not Supplied Not Supplied Settled storm discharge - storm tank discharges Freshwater Stream/River Bothal Burn Not Supplied Located by supplier to within 100m	A14SE (E)	737	2	423505 587495
11	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Mr P L H Dobson Undefined Or Other Fawdon House Development, LONGHIRST Environment Agency, North East Region Not Given 225/0997 Not Supplied Not Supplied Not Supplied Not Supplied Septic tank Freshwater Stream/River Longhirst Burn Tributary Not Supplied Located by supplier to within 100m	A18NW (N)	786	2	422505 588485
11	-	Mr P L H Dobson DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Fawdon House Development, Longhirst Environment Agency, North East Region Not Given 225/0997 1 18th February 1997 18th February 1997 Not Supplied Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Longhirst Burn Trib <b>Post National Rivers Authority Legislation where issue date &gt; 31/08/1989</b> Located by supplier to within 10m	A18NW (N)	792	2	422500 588490
11	Discharge Consent Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	s Mr P L H Dobson DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Fawdon House Development, Longhirst Environment Agency, North East Region Wansbeck 225/0919 1 17th December 1991 17th December 1991 30th September 1996 Sewage Discharges - Final/Treated Effluent - Not Water Company Freshwater Stream/River Longhirst Burn Tributary Lapsed (under Environment Act 1995, Schedule 23) Located by supplier to within 100m	A18NW (N)	792	2	422500 588490

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Discharge Consent	S				
12	Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	Redundant - Northumbrian Water Ltd WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Longhirst Sewage Disposal Works, Longhirst, Northumberland Environment Agency, North East Region Not Supplied 225/G/0078 1 6th June 1955 5 15th September 1982 Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Freshwater Stream/River Longhirst Burn Authorisation revoked Located by supplier to within 10m	A18NW (N)	968	2	422600 588700
	Nearest Surface Wa	ater Feature	A13NE (N)	177	-	422797 587926
	Pollution Incidents	to Controlled Waters				
13	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Water Company Sewage: Storm Overflow PEGSWOOD Environment Agency, North East Region Sewage - Storm Overflow Pollution Found; No Fish Killed 8th May 1996 NN960065 Wansbeck Freshwater Stream/River Unknown Category 3 - Minor Incident Located by supplier to within 100m	A13NW (N)	212	2	422700 587945
	Pollution Incidents	to Controlled Waters				
13	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Water Company Sewage: Storm Overflow PEGSWOOD Environment Agency, North East Region Sewage - Storm Overflow No Fish Killed 8th May 1996 NN960065 Wansbeck Freshwater Stream/River Not Given Category 3 - Minor Incident Located by supplier to within 100m	A13NW (N)	217	2	422700 587950
	Pollution Incidents	to Controlled Waters				
14	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Arable PEGSWOOD Environment Agency, North East Region Organic Wastes: Pig Slurry No Fish Killed 4th February 1995 NN950110 Wansbeck Freshwater Stream/River Not Given Category 3 - Minor Incident Located by supplier to within 100m	A13NE (NE)	249	2	423000 587900
	Pollution Incidents	to Controlled Waters				
15	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Other General Premises Near Pegswood Environment Agency, North East Region Not Given Bothal Burn 26th February 1991 225/000489 Not Given Freshwater Stream/River Other Cause Category 2 - Significant Incident Located by supplier to within 100m	A14NW (NE)	558	2	423300 588000



Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters Water Company Sewage: Sewage Treatment Works PEGSWOOD Environment Agency, North East Region Not Given Brocks Burn 18th November 1992 225/001612 Not Given Freshwater Stream/River Other Cause Category 3 - Minor Incident Located by supplier to within 100m	A14SW (SE)	591	2	423300 587400
	River Quality Name: GQA Grade: Reach: Estimated Distance (km): Flow Rate: Flow Type: Year:	Bothal_Burn Not Supplied Source_Pegswood_St 2.3 Flow less than 0.31 cumecs River 2000	A14NW (E)	418	2	423212 587829
	River Quality Name: GQA Grade: Reach: Estimated Distance (km): Flow Rate: Flow Type: Year:	Bothal_Burn River Quality D Pegswood_Stw_Wansbec 1.6 Flow less than 0.31 cumecs River 2000	A14SW (SE)	574	2	423321 587472

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	River Quality Chemi	istry Sampling Points				
17	Name:	Bothal Burn	A9NW	729	2	423400
	Reach:	Pegswood Sewage Treatment Works Wansbeck	(SE)	123	2	587300
	Estimated Distance:		(02)			001000
	Objective:	Not Supplied				
	Positional Accuracy:	Located by supplier to within 100m				
	Year:	1990				
	GQA Grade:	River Quality Chemistry GQA Grade B - Good				
	Compliance: Year:	Not Supplied 1993				
	GQA Grade:	River Quality Chemistry GQA Grade D - Fair				
	Compliance:	Not Supplied				
	Year:	1994				
	GQA Grade:	River Quality Chemistry GQA Grade D - Fair				
	Compliance:	Not Supplied				
	Year: GQA Grade:	1995 River Quality Chemistry GQA Grade E - Poor				
	Compliance:	Not Supplied				
	Year:	1996				
	GQA Grade:	River Quality Chemistry GQA Grade E - Poor				
	Compliance:	Not Supplied				
	Year:	1997 Diver Quelity Chamister COA Crade D. Feir				
	GQA Grade:	River Quality Chemistry GQA Grade D - Fair				
	Compliance: Year:	Not Supplied 1998				
	GQA Grade:	River Quality Chemistry GQA Grade C - Fairly Good				
	Compliance:	Not Supplied				
	Year:	1999				
	GQA Grade:	River Quality Chemistry GQA Grade D - Fair				
	Compliance:	Not Supplied				
	Year: GQA Grade:	2000 Biver Quality Chamietry GOA Grade D. Fair				
	Compliance:	River Quality Chemistry GQA Grade D - Fair Not Supplied				
	Year:	2001				
	GQA Grade:	River Quality Chemistry GQA Grade D - Fair				
	Compliance:	Not Supplied				
	Year:					
	GQA Grade: Compliance:	River Quality Chemistry GQA Grade C - Fairly Good				
	Year:	Not Supplied 2003				
	GQA Grade:	River Quality Chemistry GQA Grade D - Fair				
	Compliance:	Not Supplied				
	Year:	2004				
	GQA Grade:	River Quality Chemistry GQA Grade C - Fairly Good				
	Compliance:	Not Supplied				
	Year: GQA Grade:	2005 River Quality Chemistry GQA Grade C - Fairly Good				
	Compliance:	Not Supplied				
	Year:	2006				
	GQA Grade:	River Quality Chemistry GQA Grade B - Good				
	Compliance:	Not Supplied				
	Year:	2007 Biver Quality Chamietry COA Crede B. Cood				
	GQA Grade: Compliance:	River Quality Chemistry GQA Grade B - Good Not Supplied				
	Year:	2008				
	GQA Grade:	River Quality Chemistry GQA Grade B - Good				
	Compliance:	Not Supplied				
	Year:					
	GQA Grade:	River Quality Chemistry GQA Grade B - Good				
	Compliance:	Not Supplied				
	Water Abstractions					
	Operator:	V-Fuels Ltd	A6SW	1767	2	421180
	Licence Number:	1/22/05/065	(SW)			586940
	Permit Version:	103 Barahala Na2, Caal Magauraa, Barauraad				
	Location: Authority:	Borehole No3 - Coal Measures - Pegswood Environment Agency, North East Region				
	Abstraction:	Other Industrial/Commercial/Public Services: General Use (Medium Loss)				
	Abstraction Type:	Water may be abstracted from a single point				
	Source:	Groundwater				
	Daily Rate (m3):	Not Supplied				
	Yearly Rate (m3):	Not Supplied				
	Details:	V-Fuels,Cambois				
	Authorised Start: Authorised End:	01 April 31 March				
	Permit Start Date:	2nd June 2006				
	Permit End Date:	Not Supplied				
		Located by supplier to within 10m				
	· · · · · · · · · · · · · · · · · · ·		1			

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 Start: Permit Start Date: Permit End Date: Positional Accuracy:	Acs Dobfar Uk Ltd 1/22/05/065 102 Borehole No3 - Coal Measures - Pegswood Environment Agency, North East Region Other Industrial/Commercial/Public Services: General Use (Medium Loss) Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Synpac Pharmaceuticals Factory Site, Cambois. 01 April 31 March 30th December 2000 Not Supplied Located by supplier to within 10m	A6SW (SW)	1767	2	421180 586940
	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:	Synpac Pharmaceuticals Limited 1/22/05/065 101 Borehole No3 - Coal Measures - Pegswood Environment Agency, North East Region Other Industrial/Commercial/Public Services: General Use (Medium Loss) Water may be abstracted from a single point Groundwater 2880 829546 Synpac Pharmaceuticals Factory Site, Cambois. 01 April 31 March 14th June 2000 Not Supplied Located by supplier to within 10m	A6SW (SW)	1767	2	421180 586940
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised Start: Permit Start Date: Permit Start Date: Permit End Date: Positional Accuracy:	Levington Resources Ltd Ne/022/0005/007 1 Borehole 3 - Coal Measures - Pegswood Environment Agency, North East Region Private Water Undertaking: Raw Water Supply Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Carboniferous Coal Measures In Morpeth, Northumberland. 01 April 31 March 11th December 2017 Not Supplied Located by supplier to within 10m	A6SW (SW)	1800	2	421150 586928
	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 Start: Permit Start Date: Permit Start Date: Permit End Date: Positional Accuracy:	Levington Resources Ltd Ne/022/0005/007 1 Borehole 2 - North - Coal Measures - Shadfen Park Environment Agency, North East Region Private Water Undertaking: Raw Water Supply Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Carboniferous Coal Measures In Morpeth, Northumberland. 01 April 31 March 11th December 2017 Not Supplied Located by supplier to within 10m	(S)	1904	2	422414 585835

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Licence Number:	V-Fuels Ltd 1/22/05/065	(S)	1926	2	422380 585820
	Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit End Date: Positional Accuracy:	103 Borehole No2 North - Coal Measures - Shadfen Park Environment Agency, North East Region Other Industrial/Commercial/Public Services: General Use (Medium Loss) Water may be abstracted from a single point Groundwater Not Supplied V-Fuels, Cambois 01 April 31 March 2nd June 2006 Not Supplied Located by supplier to within 10m				
	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:	Acs Dobfar Uk Ltd 1/22/05/065 102 Borehole No2 North - Coal Measures - Shadfen Park Environment Agency, North East Region Other Industrial/Commercial/Public Services: General Use (Medium Loss) Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Synpac Pharmaceuticals Factory Site, Cambois. 01 April 31 March 30th December 2000 Not Supplied Located by supplier to within 10m	(S)	1926	2	422380 585820
	Water Abstractions					
		Synpac Pharmaceuticals Limited 1/22/05/065 101 No2 Borehole (North) (Coal Measures) Environment Agency, North East Region Other Industrial/Commercial/Public Services: General Use (Medium Loss) Water may be abstracted from a single point Groundwater 2880 829546 Synpac Pharmaceuticals Factory Site, Cambois. 01 April 31 March 14th June 2000 Not Supplied Located by supplier to within 10m	(S)	1926	2	422380 585820
	Groundwater Vulne		A13NE	0	2	400705
	Combined Classification: Combined Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial Thickness: Superficial Recharge:	Secondary Superficial Aquifer - Low Vulnerability Low Productive Bedrock Aquifer, Productive Superficial Aquifer Low Well Connected Fractures 300-550 mm/year <40% <90% 3-10m Low	(NE)	0	3	422785 587729
		rability - Soluble Rock Risk				
	None					
	Bedrock Aquifer De Aquifer Designation:	signations Secondary Aquifer - A	A13NE (NE)	0	3	422785 587729
	Superficial Aquifer Aquifer Designation:	Designations Secondary Aquifer - Undifferentiated	A13NE (NE)	0	3	422785 587729
	Extreme Flooding for None	rom Rivers or Sea without Defences				



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
18	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 137.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A13NE (N)	177	4	422797 587926
19	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 128.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A13NE (N)	177	4	422800 587926
20	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 286.8 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A13NE (NE)	211	4	422927 587919
21	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 291.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A13NW (NW)	232	4	422665 587950
22	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 227.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A18SE (NE)	362	4	422963 588073
23	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 57.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A14SW (E)	370	4	423162 587631
24	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A14SW (E)	413	4	423209 587646
25	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A14SW (E)	416	4	423213 587655

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
26	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 70.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A14NW (NE)	417	4	423154 587973
27	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A12NE (NW)	444	4	422386 587970
28	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       35.9         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Wansbeck         Primacy:       1	A14NW (NE)	452	4	423213 587935
29	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       151.5         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Bothal Burn         Catchment Name:       Wansbeck         Primacy:       1	A14NW (E)	468	4	423267 587810
30	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 130.0 Watercourse Level: Underground Permanent: True Watercourse Name: Bothal Burn Catchment Name: Wansbeck Primacy: 1	A14NW (E)	469	4	423267 587810
31	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 53.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A14NW (E)	469	4	423267 587810
32	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       173.5         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Bothal Burn         Catchment Name:       Wansbeck         Primacy:       1	A14NW (NE)	483	4	423240 587952
33	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       49.6         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Wansbeck         Primacy:       2	A14NW (E)	491	4	423292 587771
34	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       1.7         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Wansbeck         Primacy:       1	A14NW (E)	491	4	423292 587771



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
35	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 150.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Bothal Burn Catchment Name: Wansbeck Primacy: 1	A14SW (E)	505	4	423306 587686
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 2	A14NW (E)	519	4	423317 587814
37	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       8.9         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Wansbeck         Primacy:       1	A14NW (E)	520	4	423317 587815
38	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       1.5         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Wansbeck         Primacy:       1	A14SW (E)	534	4	423308 587545
39	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       283.3         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Bothal Burn         Catchment Name:       Wansbeck         Primacy:       1	A14SW (E)	536	4	423309 587545
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 323.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Bothal Burn Catchment Name: Wansbeck Primacy: 1	A19SW (NE)	552	4	423219 588109
41	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       43.9         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Wansbeck         Primacy:       1	A19SW (NE)	552	4	423219 588109
42	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       126.8         Watercourse Level:       Not Supplied         Permanent:       True         Watercourse Name:       Bothal Burn         Catchment Name:       Wansbeck         Primacy:       1	A9NW (SE)	735	4	423404 587294
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 169.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A18NW (N)	753	4	422653 588492



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
44	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 171.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Wansbeck Primacy: 1	A18NW (N)	753	4	422658 588492
45	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 411.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Longhirst Burn Catchment Name: Wansbeck Primacy: 1	A19NW (NE)	763	4	423133 588436
46	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       80.2         Watercourse Level:       Not Supplied         Permanent:       True         Watercourse Name:       Not Supplied         Catchment Name:       Wansbeck         Primacy:       1	A18NE (N)	780	4	422817 588529
47	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 150.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Brocks Burn Catchment Name: Wansbeck Primacy: 1	A19SW (NE)	786	4	423249 588395
48	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 521.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Longhirst Burn Catchment Name: Wansbeck Primacy: 1	A18NE (N)	812	4	422893 588556
49	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       905.1         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Bothal Burn         Catchment Name:       Wansbeck         Primacy:       1	A9NE (SE)	860	4	423519 587242
50	OS Water Network Lines         Watercourse Form:       Inland river         Watercourse Length:       224.6         Watercourse Level:       On ground surface         Permanent:       True         Watercourse Name:       Brocks Burn         Catchment Name:       Wansbeck         Primacy:       1	A19NW (NE)	885	4	423233 588522

#### Waste

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Historical Landfill S	ites				
51	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:	William Leech Builders Limited Pegswood Pit Heap, Morpeth, Northumberland Pegswood Colliery Not Supplied As Supplied	A13NE (E)	150	2	422952 587743
	Licensed Waste Ma	nagement Facilities (Locations)				
52	Licence Number: Location: Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Burrendered: IPPC Reference: Positional Accuracy:	64128 The Garage, Butchers Lane, Pegswood, Morpeth, Northumberland, NE61 6RF Sanders Carl Not Supplied Environment Agency - North East Region, North East Area Household, Commercial And Industrial Transfer Stations <b>Issued</b> 1st September 2004 Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Located by supplier to within 10m	A13NE (E)	68	2	422870 587750
	Licensed Waste Ma	nagement Facilities (Locations)				
53	Licence Number: Location: Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference: Positional Accuracy:	67283 Morpeth, Northumberland William Leech (Builders ) Ltd Not Supplied Environment Agency - North East Region, North East Area Landfills Taking Other Wastes (Construction, Demolition, Dredgings) <b>Surrendered</b> 19th January 1978 Not Supplied Not Supplied Not Supplied Not Supplied 27th March 1980 Not Supplied Located by supplier to within 100m	A13NE (E)	205	2	423000 587800
		nagement Facilities (Locations)				
54	Licence Number: Location: Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: Surrendered: IPPC Reference: Positional Accuracy:	100050 Park View Holdings, Off Front Street, Pegswood, Morpeth, Northumberland, NE61 6UU Sanders Plant & Waste Management Ltd Not Supplied Environment Agency - North East Region, North East Area Household, Commercial And Industrial Transfer Stations <b>Modified</b> 28th August 2007 25th March 2014 Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied	A14SW (E)	557	2	423347 587602
	Local Authority Lan Name:	dfill Coverage Castle Morpeth Borough Council - Has supplied landfill data		0	6	422785 587729
	Local Authority Lan Name:	dfill Coverage Northumberland County Council - Has supplied landfill data		0	5	422785 587729
	Local Authority Lan Name:	dfill Coverage Wansbeck District Council - Has supplied landfill data		458	7	423255 587815

#### Waste

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potentially Infilled L	and (Non-Water)				
55	Bearing Ref: Use: Date of Mapping:	E Unknown Filled Ground (Pit, quarry etc) 1992	A13NE (E)	148	-	422950 587739
56	Potentially Infilled L Bearing Ref: Use: Date of Mapping:	a <b>nd (Non-Water)</b> E Unknown Filled Ground (Pit, quarry etc) 1992	A14NW (E)	483	-	423274 587851
57	Potentially Infilled L Bearing Ref: Use: Date of Mapping:	<b>and (Non-Water)</b> SW Unknown Filled Ground (Pit, quarry etc) 1992	A12SE (SW)	557	-	422306 587409
58	Potentially Infilled L Bearing Ref: Use: Date of Mapping:	<b>and (Non-Water)</b> W Unknown Filled Ground (Pit, quarry etc) 1992	A12NW (W)	782	-	421978 587743
59	Potentially Infilled L Bearing Ref: Use: Date of Mapping:	<b>and (Non-Water)</b> E Unknown Filled Ground (Pit, quarry etc) 1992	A14SE (E)	849	-	423647 587631
60	Potentially Infilled L Bearing Ref: Use: Date of Mapping:	<b>and (Non-Water)</b> SE Unknown Filled Ground (Pit, quarry etc) 1992	A9SW (SE)	900	-	423320 586981
61	Potentially Infilled L Bearing Ref: Use: Date of Mapping:	<b>and (Non-Water)</b> W Unknown Filled Ground (Pit, quarry etc) 1992	A12SW (W)	956	-	421849 587443
62	Potentially Infilled L Bearing Ref: Use: Date of Mapping:	<b>and (Non-Water)</b> W Unknown Filled Ground (Pit, quarry etc) 1992	A12NW (W)	969	-	421800 587862
63	Potentially Infilled L Use: Date of Mapping:	<b>and (Water)</b> Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1949	A13NE (NE)	222	-	422941 587922
64	Potentially Infilled L Use: Date of Mapping:	<b>and (Water)</b> Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1898	A12SE (SW)	489	-	422384 587419
65	Potentially Infilled L Use: Date of Mapping:	<b>and (Water)</b> Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1866	A8SE (S)	829	-	422896 586882
66	Potentially Infilled L Use: Date of Mapping:	<b>and (Water)</b> Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1949	A9SW (SE)	871	-	423273 586982
67	Registered Landfill Licence Holder: Licence Reference: Site Location: Licence Northing: Operator Location: Authority: Site Category: Max Input Rate: Waste Source Restrictions: Status: Dated: Preceded By Licence: Superseded By Licence: Positional Accuracy: Boundary Accuracy: Authorised Waste	<ul> <li>William Leech (Builders) Ltd</li> <li>Nbl 019 (N 19)</li> <li>Pegswood Colliery Pit Heap, Pegswood, Morpeth, Northumberland</li> <li>423000</li> <li>587800</li> <li>City House, 1-3 City Road, NEWCASTLE UPON TYNE, Tyne and Wear,</li> <li>NE99 1PG</li> <li>Environment Agency - North East Region, Northumbria Area</li> <li>Landfill</li> <li>Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year)</li> <li>No known restriction on source of waste</li> <li>Licence known to be surrenderedSurrendered</li> <li>19th January 1978</li> <li>Not Given</li> <li>Manually positioned to the address or location</li> </ul>	A13NE (E)	205	2	423000 587800

Map ID	Details		Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Description:	d Geology Pennine Middle Coal Measures Formation And South Wales Middle Coal Measures Formation (Undifferentiated)	A13NE (NE)	0	1	422785 587729
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg <1.8 mg/kg 90 - 120 mg/kg	A13NE (NE)	0	1	422785 587729
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg <1.8 mg/kg 60 - 90 mg/kg	A13SW (SW)	233	1	422664 587503
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg <1.8 mg/kg 60 - 90 mg/kg	A14SW (E)	511	1	423311 587672
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg <1.8 mg/kg 60 - 90 mg/kg	A14SW (E)	579	1	423381 587706
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg <1.8 mg/kg 90 - 120 mg/kg	A14SW (E)	622	1	423417 587627
	BGS Estimated Soil Source: Soil Sample Type: Arsenic Concentration: Cadmium Concentration: Chromium Concentration: Lead Concentration: Nickel Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg <1.8 mg/kg 90 - 120 mg/kg	A9NE (SE)	783	1	423472 587312



Map ID	Details			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	A17SW (NW)	845	1	422012 588125
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	<100 mg/kg 30 - 45 mg/kg				
	BGS Estimated Soil	Chemistry				
	Source: Soil Sample Type: Arsenic Concentration:	British Geological Survey, National Geoscience Information Service Sediment <15 mg/kg	A18NE (N)	952	1	422909 588695
	Cadmium Concentration:	<1.8 mg/kg				
	Chromium Concentration:	60 - 90 mg/kg				
	Lead Concentration: Nickel Concentration:	< 100 mg/kg 15 - 30 mg/kg				
	BGS Recorded Mine	eral Sites				
68	Site Name: Location: Source: Reference:	Pegswood Colliery Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 250570	A8NE (S)	381	1	422886 587336
	Type: Status: Operator: Operator Location:	Underground Ceased Individual'S Name Withheld Not Supplied				
	Periodic Type: Geology: Commodity:	Carboniferous Pennine Middle Coal Measures Formation Coal - Deep Located by supplier to within 10m				
	BGS Recorded Mine					
68	Site Name: Location: Source: Reference:	Pegswood Colliery Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 5161	A8NE (S)	403	1	422896 587316
	Type: Status: Operator: Operator Location: Periodic Type:	Underground Ceased Individual'S Name Withheld Not Supplied Carboniferous				
	Geology: Commodity: Positional Accuracy:	Pennine Middle Coal Measures Formation Coal - Deep Located by supplier to within 10m				
	BGS Recorded Mine					10000-
68	Site Name: Location: Source: Reference: Type: Status:	Pegswood Colliery Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 250569 Underground Ceased	A8NE (S)	418	1	422869 587294
	Operator: Operator Location: Periodic Type: Geology: Commodity:	Individual'S Name Withheld Not Supplied Carboniferous Pennine Middle Coal Measures Formation Coal - Deep				
		Located by supplier to within 10m				
69	BGS Recorded Mine Site Name:		A8NW	485	1	422480
09	Location: Source: Reference:	Pegswood Moor Occs Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 250574	(SW)	400	1	422480 587325
	Type: Status: Operator:	Opencast Ceased Unknown Operator				
	Operator Location: Periodic Type:	Not Supplied Carboniferous				
	Geology: Commodity:	Bensham Coal (Northumberland) Coal - Opencast				
	Positional Accuracy:	Located by supplier to within 10m				

Map ID		Details			Contact	NGR
	BGS Recorded Mine	eral Sites				
70	Site Name: Location: Source: Reference: Type: <b>Status:</b> Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Bothal Park Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 115527 Opencast <b>Ceased</b> Unknown Operator Not Supplied Carboniferous Pennine Middle Coal Measures Formation Sandstone Located by supplier to within 10m	A14NW (E)	487	1	423274 587868
	BGS Recorded Mine	eral Sites				
70	Site Name: Location: Source: Reference: Type: <b>Status:</b> Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Bothal Park Drift Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 19609 Underground <b>Ceased</b> Individual'S Name Withheld Not Supplied Carboniferous Pennine Middle Coal Measures Formation Coal - Deep Located by supplier to within 10m	A14NW (E)	493	1	423289 587823
	BGS Recorded Mine	eral Sites				
70	Site Name: Location: Source: Reference: Type: <b>Status:</b> Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Bothal Park Drift Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 250571 Underground <b>Ceased</b> Individual'S Name Withheld Not Supplied Carboniferous Pennine Middle Coal Measures Formation Coal - Deep Located by supplier to within 10m	A14NW (E)	524	1	423319 587833
	BGS Recorded Mine	eral Sites				
71	Site Name: Location: Source: Reference: Type: <b>Status:</b> Operator: Operator Location: Periodic Type: Geology: Commodity:	Pegswood Moor Occs Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 18898 Opencast <b>Ceased</b> Unknown Operator Not Supplied Carboniferous Durham Low Main Coal (Northumberland And Durham) Coal - Opencast Located by supplier to within 10m	A8NW (SW)	558	1	422480 587235
	BGS Recorded Mine	eral Sites				
72		Pegswood Moor Occs Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 250573 Opencast <b>Ceased</b> Unknown Operator Not Supplied Carboniferous Northumberland Low Main Coal (Northumberland) Coal - Opencast Located by supplier to within 10m	A7NE (SW)	787	1	422245 587130
	BGS Recorded Mine					
73	Site Name: Location: Source: Reference: Type: <b>Status:</b> Operator: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	Climbing Tree Occs Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 5203 Opencast <b>Ceased</b> Unknown Operator Not Supplied Carboniferous Pennine Middle Coal Measures Formation Coal - Opencast Located by supplier to within 10m	A8SW (S)	840	1	422615 586880

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
74	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	eral Sites Pegswood Quarry Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 115523 Opencast Ceased Unknown Operator Not Supplied Carboniferous Pennine Middle Coal Measures Formation Sandstone Located by supplier to within 10m	A12SW (W)	845	1	421916 587697
74	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	eral Sites Pegswood Quarry Pit Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 250715 Underground Ceased Unknown Operator Not Supplied Carboniferous Pennine Middle Coal Measures Formation Coal - Deep Located by supplier to within 10m	A12SW (W)	877	1	421885 587671
75	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	eral Sites Bothal Park Brick & Tile Works Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 115522 Opencast Ceased Unknown Operator Not Supplied Quaternary Till, Devensian Common Clay and Shale Located by supplier to within 10m	A14SE (E)	874	1	423671 587619
76	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	eral Sites Pegswood Moor Occs Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 18834 Opencast Ceased Unknown Operator Not Supplied Carboniferous Durham Low Main Coal (Northumberland And Durham) Coal - Opencast Located by supplier to within 10m	A7NW (SW)	916	1	422000 587220
77	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	eral Sites Climbing Tree Occs Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 250575 Opencast Ceased Unknown Operator Not Supplied Carboniferous Northumberland Low Main Coal (Northumberland) Coal - Opencast Located by supplier to within 10m	A7SE (SW)	917	1	422400 586870
78	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	eral Sites Banks Colliery Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 250708 Underground Ceased Unknown Operator Not Supplied Carboniferous Pennine Middle Coal Measures Formation Coal - Deep Located by supplier to within 10m	A12SW (W)	932	1	421871 587452

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
78	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	eral Sites Banks Colliery Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 250707 Underground Ceased Unknown Operator Not Supplied Carboniferous Pennine Middle Coal Measures Formation Coal - Deep Located by supplier to within 10m	A12SW (W)	969	1	421831 587456
79		Quarry Houses Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 115740 Opencast <b>Ceased</b> Unknown Operator Not Supplied Carboniferous Pennine Middle Coal Measures Formation Sandstone Located by supplier to within 10m	A12NW (W)	960	1	421809 587864
80	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	eral Sites Bothal Park Brick & Tile Works Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 250572 Opencast Ceased Unknown Operator Not Supplied Quaternary Till, Devensian Common Clay and Shale Located by supplier to within 10m	A14SE (E)	962	1	423742 587512
81	-	Whitefield Sand Pit Pegswood, Morpeth, Northumberland British Geological Survey, National Geoscience Information Service 115741 Opencast <b>Ceased</b> Unknown Operator Not Supplied Quaternary Glaciofluvial Deposits, Devensian Sand Located by supplier to within 10m	A9SW (SE)	962	1	423332 586913
	BGS Measured Urb No data available BGS Urban Soil Ch					
	No data available Coal Mining Affecte Description:	ed Areas In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13NE (NE)	0	8	422785 587729
	Mining Instability Mining Evidence: Source: Boundary Quality:	Inconclusive Coal Mining Ove Arup & Partners As Supplied	A13NE (NE)	0	-	422785 587729
	No Hazard	reas of Great Britain sible Ground Stability Hazards				
	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	422785 587729
	Potential for Comp Hazard Potential: Source:	ressible Ground Stability Hazards No Hazard British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	422785 587729

### Geological

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Comp	ressible Ground Stability Hazards				
	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13SE (E)	56	1	422858 587720
	Potential for Groun	d Dissolution Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	422785 587729
	Potential for Lands	lide Ground Stability Hazards				
	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	422785 587729
	Potential for Runni	ng Sand Ground Stability Hazards				
	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	422785 587729
	Potential for Shrink	ring or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Source:	Low British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	422785 587729
	Radon Potential - R	adon Affected Areas				
	Affected Area: Source:	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	A13NE (NE)	0	1	422785 587729
	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	A13NE (NE)	0	1	422785 587729

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Contemporary Trad	e Directory Entries				
82	Name: Location: Classification: <b>Status:</b> Positional Accuracy:	Azure Printing Unit 1f, Pegswood Industrial Estate, Pegswood, Morpeth, NE61 6HZ Printers Active Automatically positioned to the address	A13SE (E)	74	-	422874 587700
	Contemporary Trad					
82	Name: Location: Classification: Status:	Active Composites Unit 1d-1e, Pegswood Industrial Estate, Pegswood, Morpeth, Northumberland, NE61 6HZ Plastics - Machinery & Equipment Manufacturers Inactive Manually positioned to the address or location	A13SE (SE)	84	-	422877 587680
	Contemporary Trad					
82	Name: Location: Classification: <b>Status:</b>	R W L Products Unit 1h Pegswood Ind Est, Pegswood, Morpeth, Northumberland, NE61 6HZ Lift Manufacturers Inactive Manually positioned to the address or location	A13SE (E)	92	-	422894 587714
	Contemporary Trad	e Directory Entries				
82	Name: Location: Classification: <b>Status:</b> Positional Accuracy:	L M B Newcastle Ltd Unit 1d, Pegswood Industrial Estate, Pegswood, Morpeth, NE61 6HZ Electrical Engineers Active Automatically positioned to the address	A13SE (SE)	96	-	422888 587674
	Contemporary Trad	e Directory Entries				
83	Name: Location: Classification: <b>Status:</b> Positional Accuracy:	Pegswood Petfood Wholesalers Unit 5,Pegswood Ind Est, Pegswood, Morpeth, Northumberland, NE61 6HZ Pet Foods & Animal Feeds Inactive Manually positioned to the address or location	A13SE (SE)	115	-	422895 587650
	Contemporary Trad					
84	Name: Location: Classification: Status:	Pegswood Pet Food Wholesaler Unit 2A, Pegswood Industrial Estate, Pegswood, Morpeth, Northumberland, NE61 6HZ Pet Foods & Animal Feeds Inactive	A13SE (E)	140	-	422942 587722
	-	Automatically positioned to the address				
84	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	Rainbow International Unit 2b, Pegswood Industrial Estate, Pegswood, Morpeth, Northumberland, NE61 6HZ Carpet, Curtain & Upholstery Cleaners Inactive Automatically positioned to the address	A13SE (E)	147	-	422949 587723
	Contemporary Trad					
85	Name: Location: Classification: <b>Status:</b>	Equestrian Persuits Unit 3E,Pegswood Ind Est, Pegswood, Morpeth, Northumberland, NE61 6HZ Pet Foods & Animal Feeds Inactive Manually positioned to the address or location	A13SE (E)	150	-	422948 587682
	Contemporary Trad	e Directory Entries				
85	Name: Location: Classification: <b>Status:</b> Positional Accuracy:	Owens Dental Laboratory Unit 3F,Pegswood Ind Est, Pegswood, Morpeth, Northumberland, NE61 6HZ Medical & Dental Laboratories Inactive Manually positioned to the address or location	A13SE (E)	154	-	422952 587682
	Contemporary Trad	e Directory Entries				
85	Name: Location: Classification:	Elite Conveyor Services (Uk) Ltd Unit 4c Pegswood Indust Est, Pegswood, Morpeth, Northumberland, NE61 6HZ Conveyors & Conveyor Belts	A13SE (SE)	158	-	422946 587652
	Status:	Inactive Manually positioned to the address or location				
	Contemporary Trad					
85	Name: Location: Classification: <b>Status:</b>	Ian Scott Unit 3H,Pegswood Ind Est, Pegswood, Morpeth, Northumberland, NE61 6HZ Joinery Manufacturers Inactive	A13SE (E)	167	-	422966 587684
	Positional Accuracy:	Manually positioned to the address or location				

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
86	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Joblings Longhirst Road Garage Longhirst Rd, Pegswood, Morpeth, Northumberland, NE61 6XF Garage Services Inactive Manually positioned to the address or location	A13SW (SW)	153	-	422666 587606
86	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Longhirst Road Garage Longhirst Rd, Pegswood, Morpeth, Northumberland, NE61 6XF Garage Services Inactive Manually positioned to the road within the address or location	A13SW (SW)	163	-	422688 587572
87	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Wastego 20, Burghley Gardens, Pegswood, Morpeth, Northumberland, NE61 6TN Waste Disposal Services Inactive Automatically positioned to the address	A13SW (W)	172	-	422600 587668
88	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Lane End Garage Lane End Garage, Longhirst Road, Pegswood, MORPETH, Northumberland, NE61 6XF Tyre Dealers Active Automatically positioned to the address	A13SW (SW)	232	-	422634 587527
89	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Matthew Boutflour 35, Kirkharle Drive, Pegswood, Morpeth, NE61 6TE Boilers - Servicing, Replacements & Repairs Active Automatically positioned to the address	A13SW (SW)	255	-	422545 587595
90	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries A B Designs Pegswood Village, Pegswood, Morpeth, Northumberland, NE61 6RG Printers Inactive Manually positioned to the address or location	A8NW (SW)	437	-	422482 587388
91	Contemporary Trad Name: Location: Classification: Status:		A9NW (SE)	551	-	423192 587329
91	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Sanders Plant & Waste Management Ltd Park View Holden,(Off) Front Street, Pegswood, Morpeth, Northumberland, NE61 6UU Reclaiming - Waste Products Inactive Manually positioned to the address or location	A9NW (SE)	551	-	423192 587329
92	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Cookswell Garage Pegswood Village, Pegswood, Morpeth, NE61 6RF Car Dealers Inactive Automatically positioned to the address	A12SE (SW)	558	-	422286 587437
92	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Cookswell Garage Pegswood Village, Pegswood, Morpeth, NE61 6RF Car Dealers - Used Active Automatically positioned to the address	A12SE (SW)	558	-	422286 587437
93	Contemporary Trad Name: Location: Classification: Status:		A12SW (W)	695	-	422092 587538

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Contemporary Trad	le Directory Entries				
94	Name: Location: Classification: <b>Status:</b> Positional Accuracy:	Johnsons Chopwell Site Office Widdrington Screens, Morpeth, Northumberland, NE61 6PD Coal Mining Inactive Manually positioned within the geographical locality	A7NE (SW)	707	-	422282 587205
	Contemporary Trad	e Directory Entries				
95	Name: Location: Classification: <b>Status:</b> Positional Accuracy:	Saunders Plant & Waste Managment 40, Butterwell Drive, Pegswood, Morpeth, Northumberland, NE61 6YE Waste Disposal Services Inactive Automatically positioned to the address	A7NW (SW)	841	-	422013 587347
	Fuel Station Entries	3				
96	Name: Location: Brand: Premises Type: <b>Status:</b> Positional Accuracy:	Longhirst Road Garage , Pegswood , Morpeth, Northumberland, NE61 3LL Obsolete Not Applicable <b>Obsolete</b> Manually positioned to the address or location	A13SW (SW)	154	-	422665 587606
	Fuel Station Entries	3				
97	Name: Location: Brand: Premises Type: <b>Status:</b> Positional Accuracy:	Cookswell Garage Ashington Road , Pegswood , Morpeth, Northumberland, NE61 6RF Obsolete Not Applicable <b>Obsolete</b> Automatically positioned to the address	A12SE (SW)	558	-	422286 587437
	Points of Interest -	Commercial Services				
98	Name: Location: Category: Class Code: Positional Accuracy:	Elite Valeting Services Unit 3b, Pegswood Industrial Estate, Pegswood, Morpeth, NE61 6HZ Personal, Consumer and other Services Vehicle Cleaning Services Positioned to address or location	A13SE (E)	161	9	422960 587684
	Points of Interest -	Commercial Services				
98	Name: Location: Category: Class Code: Positional Accuracy:	Enginize Diagnostic & Repair Centre Unit 4b, Pegswood Industrial Estate, Pegswood, Morpeth, NE61 6HZ Repair and Servicing Vehicle Repair, Testing and Servicing Positioned to address or location	A13SE (SE)	170	9	422959 587653
	Points of Interest -	Manufacturing and Production				
99	Name: Location: Category: Class Code: Positional Accuracy:	Tank NE61 Industrial Features Tanks (Generic) Positioned to an adjacent address or location	A13NW (NW)	9	9	422765 587747
	Points of Interest -	Manufacturing and Production				
100	Name: Location: Category: Class Code: Positional Accuracy:	Pegswood Industrial Estate NE61 Industrial Features Business Parks and Industrial Estates Positioned to an adjacent address or location	A13SE (SE)	165	9	422946 587636
	Points of Interest -	Manufacturing and Production				
101	Name: Location: Category: Class Code: Positional Accuracy:	Factory Not Supplied Industrial Features Unspecified Works Or Factories Positioned to an adjacent address or location	A13SW (SW)	297	9	422559 587509
	Points of Interest -	Manufacturing and Production				
101	Name: Location: Category: Class Code: Positional Accuracy:	Factory NE61 Industrial Features Unspecified Works Or Factories Positioned to address or location	A13SW (SW)	315	9	422532 587514
	Points of Interest -	Manufacturing and Production				
102	Name: Location: Category: Class Code:	Factory NE61 Industrial Features Unspecified Works Or Factories Positioned to address or location	A13SW (SW)	338	9	422601 587419

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
103	Name: Location: Category: Class Code:	lanufacturing and Production Shaft (Disused) NE61 Extractive Industries Unspecified Quarries Or Mines Positioned to an adjacent address or location	A8NE (S)	390	9	422896 587330
104	Name: Location: Category: Class Code:	lanufacturing and Production Works NE61 Industrial Features Unspecified Works Or Factories Positioned to an adjacent address or location	A14SW (SE)	592	9	423314 587421
105	Location: Category: Class Code:	<b>ublic Infrastructure</b> Sewage Works NE61 Infrastructure and Facilities Waste Storage, Processing and Disposal Positioned to address or location	A14SW (SE)	515	9	423246 587457
105	Location: Category: Class Code:	ublic Infrastructure Sewage Works NE61 Infrastructure and Facilities Waste Storage, Processing and Disposal Positioned to an adjacent address or location	A14SW (SE)	561	9	423304 587466
106	Location: Category: Class Code:	Tublic Infrastructure Pegswood Rail Station NE61 Public Transport, Stations and Infrastructure Railway Stations, Junctions and Halts Positioned to address or location	A8NE (S)	551	9	422792 587152
106	Location: Category: Class Code:	ublic Infrastructure Pegswood Station Nr Edward Street, NE61 Public Transport, Stations and Infrastructure Railway Stations, Junctions and Halts Positioned to address or location	A8NE (S)	551	9	422792 587152
107	Location: Category: Class Code:	<b>ublic Infrastructure</b> Sanders Plant & Waste Management Ltd Park View Holdings, Pegswood, Morpeth, NE61 6UU Infrastructure and Facilities Waste Storage, Processing and Disposal Positioned to address or location	A9NW (SE)	551	9	423192 587329
108	Location: Category: Class Code:	<b>Public Infrastructure</b> Burial Ground NE61 Infrastructure and Facilities Cemeteries and Crematoria Positioned to an adjacent address or location	A8NE (S)	686	9	423017 587058
108	Location: Category: Class Code:	ublic Infrastructure Burial Ground Not Supplied Infrastructure and Facilities Cemeteries and Crematoria Positioned to an adjacent address or location	A8NE (S)	689	9	423017 587055
109	Location: Category: Class Code:	ublic Infrastructure Pegswood Community Fire Station Pegswood, NE61 6SJ Central and Local Government Fire Brigade Stations Positioned to address or location	A8SE (S)	805	9	422827 586899
110	Name: Location: Category: Class Code:	ecreational and Environmental Play Area Not Supplied Recreational Playgrounds Positioned to an adjacent address or location	A12SE (SW)	360	9	422443 587562
110	Name: Location: Category: Class Code:	Recreational and Environmental Play Area Petworth Gardens, NE61 Recreational Playgrounds Positioned to an adjacent address or location	A12SE (SW)	364	9	422438 587562



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
111	Points of Interest - Recreational and Environmental         Name:       Play Area         Location:       NE61         Category:       Recreational         Class Code:       Playgrounds         Positional Accuracy:       Positioned to an adjacent address or location	A8NE (S)	581	9	422787 587122
112	Points of Interest - Recreational and Environmental         Name:       Skatepark         Location:       NE61         Category:       Recreational         Class Code:       Playgrounds         Positional Accuracy:       Positioned to an adjacent address or location	A8SE (S)	694	9	422895 587018
113	Points of Interest - Recreational and Environmental         Name:       Play Area         Location:       South View, NE61         Category:       Recreational         Class Code:       Playgrounds         Positional Accuracy:       Positioned to address or location	A7SE (SW)	768	9	422416 587029
114	Points of Interest - Recreational and Environmental         Name:       Play Area         Location:       Not Supplied         Category:       Recreational         Class Code:       Playgrounds         Positional Accuracy:       Positioned to an adjacent address or location	A7SE (SW)	865	9	422249 587023
114	Points of Interest - Recreational and Environmental         Name:       Play Area         Location:       NE61         Category:       Recreational         Class Code:       Playgrounds         Positional Accuracy:       Positioned to an adjacent address or location	A7SE (SW)	868	9	422246 587022



### **Sensitive Land Use**

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
115	Ancient Woodlan Name: Reference: Area(m <sup>2</sup> ): Type:	nd Park Wood/Bothal Banks 1101598 384629.31 Plantation on Ancient Woodland	A9NE (SE)	858	10	423515 587240
116	Areas of Adopted Authority: Plan Name: Status: Plan Date:	d Green Belt Wansbeck District Council (now part of Northumberland Council) Wansbeck District Local Plan Replacement Adopted 3rd July 2007	A14NW (E)	455	11	423248 587837
117	Nitrate Vulnerabl Name: Description: Source:	e Zones Bothal Burn Catchment (Trib Of Wansbeck) Nvz Surface Water Environment Agency, Head Office	A13NE (NE)	0	3	422785 587729

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices Northumberland Council - Environmental Health Department Castle Morpeth Borough Council (now part of Northumberland Council) - Environmental Health Department	March 2015 October 2009	Annually Not Applicable
Wansbeck District Council (now part of Northumberland Council) - Environmental Health Department	October 2009	Not Applicable
Discharge Consents Environment Agency - North East Region	October 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	October 2019	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Wansbeck District Council (now part of Northumberland Council) - Economic and Environment Services	May 2009	Not Applicable
Northumberland Council - Environmental Health Department Castle Morpeth Borough Council (now part of Northumberland Council) - Environmental Health Department	May 2014 September 2008	Variable Not Applicable
Local Authority Pollution Prevention and Controls		
Wansbeck District Council (now part of Northumberland Council) - Economic and Environment Services	May 2009	Not Applicable
Northumberland Council - Environmental Health Department	May 2014	Annually
Castle Morpeth Borough Council (now part of Northumberland Council) - Environmental Health Department	September 2008	Not Applicable
Local Authority Pollution Prevention and Control Enforcements		
Wansbeck District Council (now part of Northumberland Council) - Economic and Environment Services	May 2009	Not Applicable
Northumberland Council - Environmental Health Department	May 2014	Variable
Castle Morpeth Borough Council (now part of Northumberland Council) - Environmental Health Department	September 2008	Not Applicable
Nearest Surface Water Feature		
Ordnance Survey	October 2019	
Pollution Incidents to Controlled Waters	<b>D</b>	
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 Environment Agency - Head Office	July 2012	Appually
	July 2012	Annually
Substantiated Pollution Incident Register Environment Agency - North East Region - North East Area	October 2019	Quarterly
Environment Agency - North East Region - Northumbria Area	October 2019	Quarterly
Water Abstractions Environment Agency - North East Region	October 2019	Quarterly
	1	, ,

Agency & Hydrological	Version	Update Cycle
Water Industry Act Referrals		
Environment Agency - North East Region	October 2017	Quarterly
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified
Bedrock Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Source Protection Zones		
Environment Agency - Head Office	October 2019	Quarterly
Extreme Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	November 2019	Quarterly
Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	November 2019	Quarterly
Areas Benefiting from Flood Defences		
Environment Agency - Head Office	November 2019	Quarterly
Flood Water Storage Areas		
Environment Agency - Head Office	November 2019	Quarterly
Flood Defences		
Environment Agency - Head Office	November 2019	Quarterly
OS Water Network Lines		
Ordnance Survey	October 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	October 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 - North East Area	July 2018	Quarterly
Environment Agency - North East Region - Northumbria Area	July 2018	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - North East Region - North East Area	October 2019	Quarterly
Environment Agency - North East Region - Northumbria Area	October 2019	Quarterly
Local Authority Landfill Coverage		
Castle Morpeth Borough Council (now part of Northumberland Council) - Environmental Health Department	May 2000	Not Applicable
Northumberland County Council (now part of Northumberland Council)	May 2000	Not Applicable
Wansbeck District Council (now part of Northumberland Council) - Economic and Environment Services	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
Castle Morpeth Borough Council (now part of Northumberland Council) - Environmental Health Department	May 2000	Not Applicable
Northumberland County Council (now part of Northumberland Council)	May 2000	Not Applicable
Wansbeck District Council (now part of Northumberland Council) - Economic and Environment Services	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 - North East Area	March 2003	Not Applicable
Environment Agency - North East Region - Northumbria Area	March 2003	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - North East Region - North East Area	March 2003	Not Applicable
Environment Agency - North East Region - Northumbria Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites		
Environment Agency - North East Region - North East Area	March 2003	Not Applicable
Environment Agency - North East Region - Northumbria 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)	Neuramber 2000	Net Applicable
Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements Castle Morpeth Borough Council (now part of Northumberland Council) - Planning Department	August 2009	Not Applicable
Wansbeck District Council (now part of Northumberland Council) Northumberland County Council (now part of Northumberland Council) - Minerals Waste and	February 2009 October 2008	Not Applicable Annual Rolling Update
Development Control		
Northumberland Council - Planning Department	October 2015	Variable
Planning Hazardous Substance Consents Castle Morpeth Borough Council (now part of Northumberland Council) - Planning Department	August 2009	Not Applicable
Wansbeck District Council (now part of Northumberland Council)	February 2009	Not Applicable
Northumberland County Council (now part of Northumberland Council) - Minerals Waste and Development Control	October 2008	Annual Rolling Update
Northumberland Council - Planning Department	October 2015	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		
British Geological Survey - National Geoscience Information Service	October 2019	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas		
The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain		
British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Compressible Ground Stability Hazards	,	
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards		-
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
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Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries		
Thomson Directories	October 2019	Quarterly
Fuel Station Entries		
Catalist Ltd - Experian	December 2019	Quarterly
Gas Pipelines		
National Grid	July 2014	
Points of Interest - Commercial Services		
PointX	December 2019	Quarterly
Points of Interest - Education and Health		
PointX	December 2019	Quarterly
Points of Interest - Manufacturing and Production		
PointX	December 2019	Quarterly
Points of Interest - Public Infrastructure		
PointX	December 2019	Quarterly
Points of Interest - Recreational and Environmental		
PointX	December 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 Adopted Green Belt		
Castle Morpeth Borough Council (now part of Northumberland Council) - Planning Department	November 2019	As notified
Northumberland Council - Planning Department	November 2019	As notified
Wansbeck District Council (now part of Northumberland Council)	November 2019	As notified
Areas of Unadopted Green Belt		
Castle Morpeth Borough Council (now part of Northumberland Council) - Planning Department	November 2019	As notified
Northumberland Council - Planning Department	November 2019	As notified
Wansbeck District Council (now part of Northumberland Council)	November 2019	As notified
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		
Environment Agency - Head Office	December 2017	Bi-Annually
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



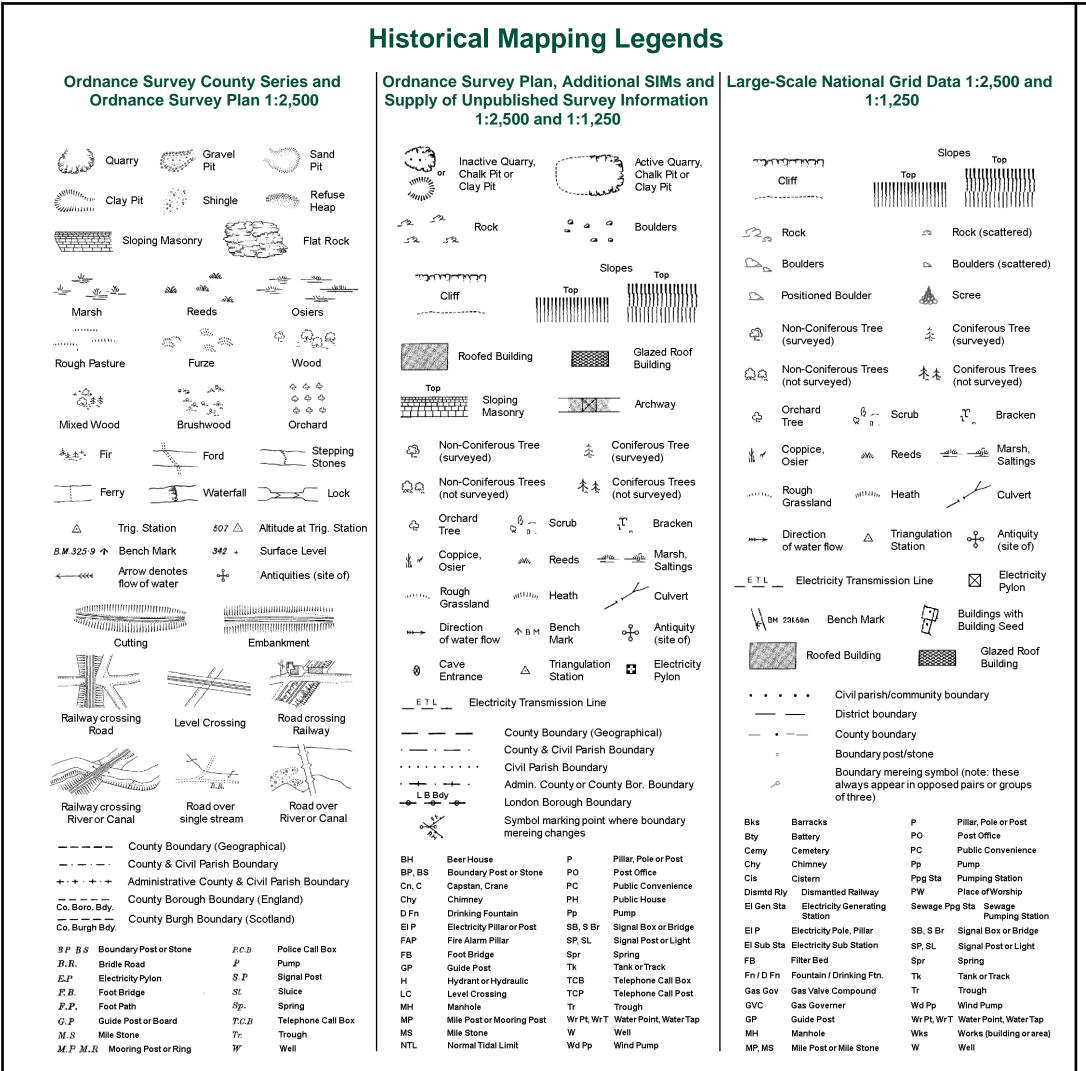
A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
Environment Agency	Environment Agency
Scottish Environment Protection Agency	Sectish 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 迎公ご河
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: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	Environment Agency - Head Office Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
4	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	Northumberland County Council (now part of Northumberland Council) County Hall, Morpeth, Northumberland, NE61 2EF	Telephone: 01670 533000 Fax: 01670 534160 Website: www.northumberland.gov.uk
6	Castle Morpeth Borough Council (now part of Northumberland Council) - Environmental Health Department	Telephone: 0845 600 6400 Website: www.northumberland.gov.uk
7	County Hall, Morpeth, Northumberland, NE61 2EF Wansbeck District Council (now part of Northumberland Council) - Economic and Environment Services County Hall, Morpeth, Northumberland, NE61 2EF	Telephone: 0846 600 6400 Website: www.northumberland.gov.uk
8	The Coal Authority - Property Searches 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
9	<b>PointX</b> 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
10	Natural England County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
11	Wansbeck District Council (now part of Northumberland Council) County Hall, Morpeth, Northumberland, NE61 2EF	Telephone: 0845 600 6400 Website: www.northumberland.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

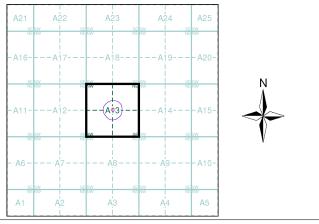
Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.



#### Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Northumberland	1:2,500	1895	2
Northumberland	1:2,500	1897	3
Northumberland	1:2,500	1922	4
Northumberland	1:2,500	1932	5
Ordnance Survey Plan	1:2,500	1957 - 1959	6
Ordnance Survey Plan	1:2,500	1970	7
Ordnance Survey Plan	1:2,500	1982 - 1985	8
Additional SIMs	1:2,500	1984 - 1992	9
Ordnance Survey Plan	1:2,500	1985	10
Additional SIMs	1:2,500	1991	11
Large-Scale National Grid Data	1:2,500	1993	12
Large-Scale National Grid Data	1:2,500	1995	13
Large-Scale National Grid Data	1:2,500	1996	14
Historical Aerial Photography	1:2,500	1999	15

#### **Historical Map - Segment A13**



#### **Order Details**

Order Number: 228936959\_1\_1 136018 Customer Ref: National Grid Reference: 422780, 587730 Slice: Α Site Area (Ha): 0.14 Search Buffer (m): 100

#### Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG

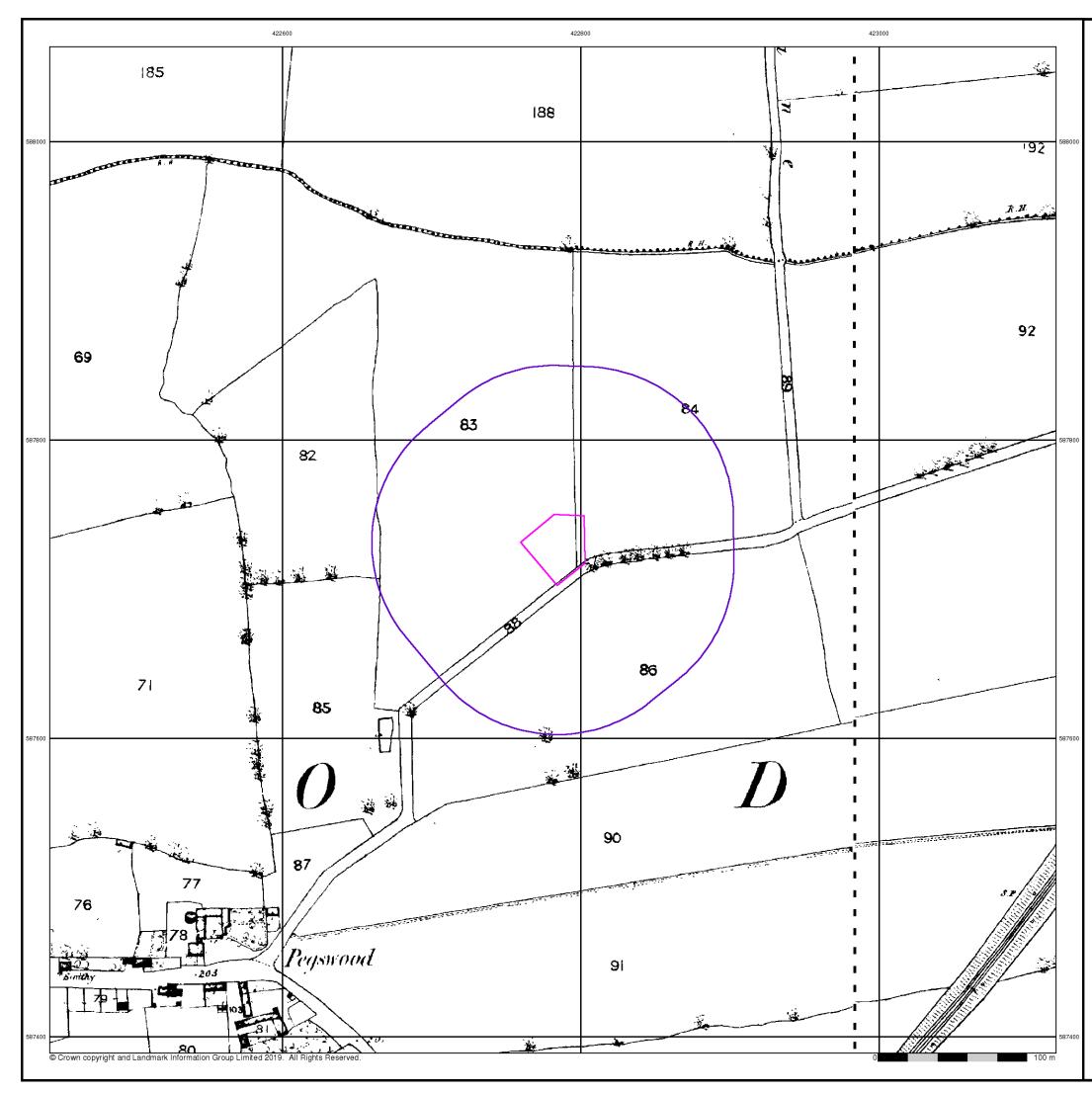




Tel

Fax: Web

0844 844 9951 virocheck.co.uk



#### Northumberland

#### Published 1895

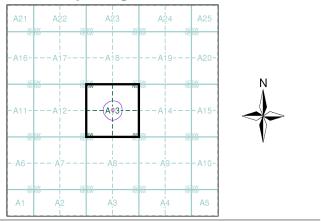
#### Source map scale - 1:2,500

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)

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#### Historical Map - Segment A13



#### **Order Details**

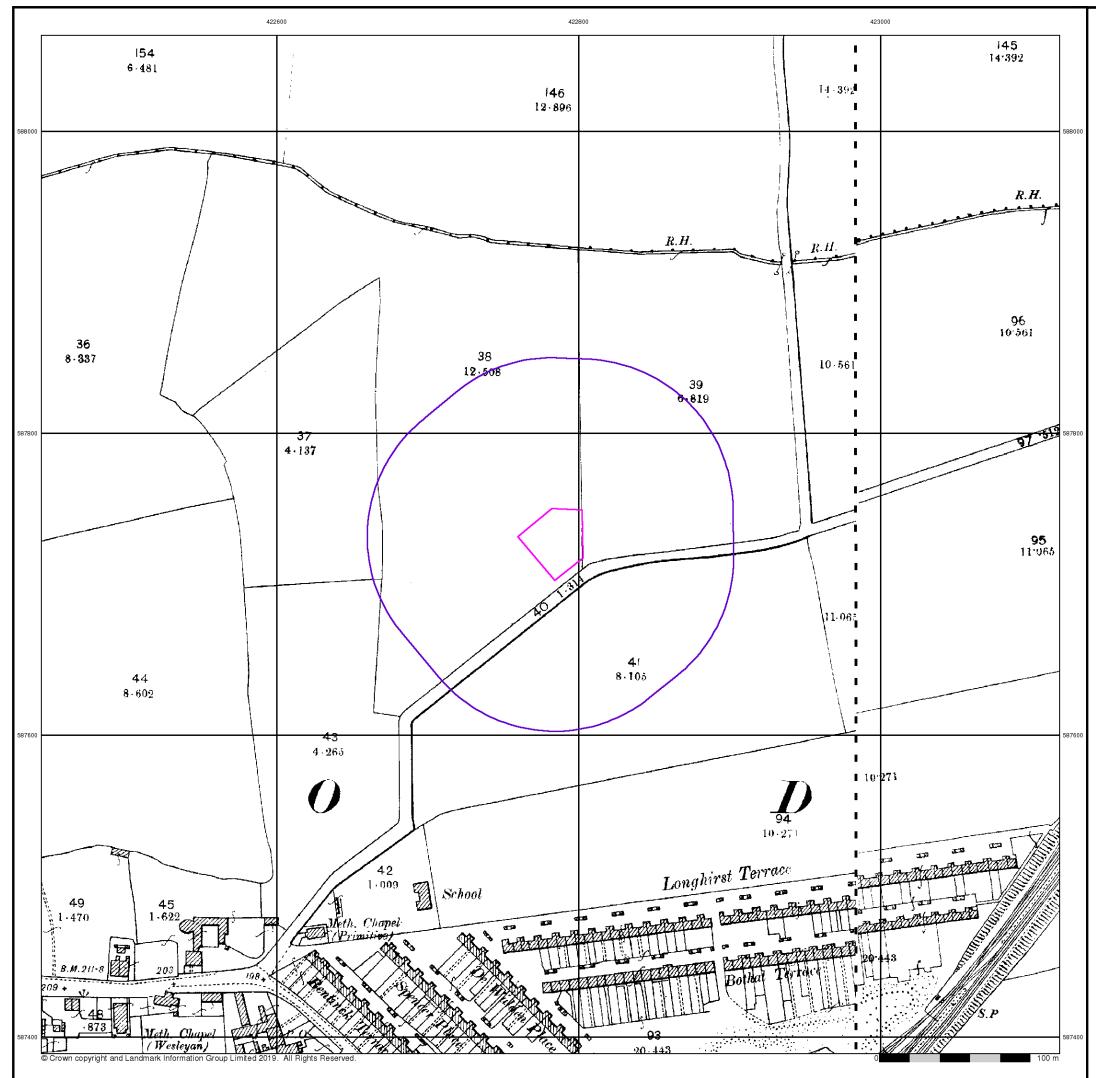
Order Number:	228936959_1_1
Customer Ref:	136018
National Grid Reference:	422780, 587730
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Site Area (Ha):	0.14
Search Buffer (m):	100

#### Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG







#### Northumberland

#### Published 1897

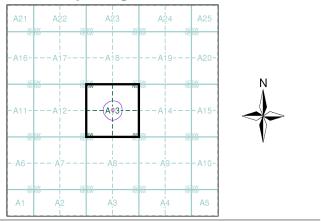
#### Source map scale - 1:2,500

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)

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#### **Historical Map - Segment A13**



#### **Order Details**

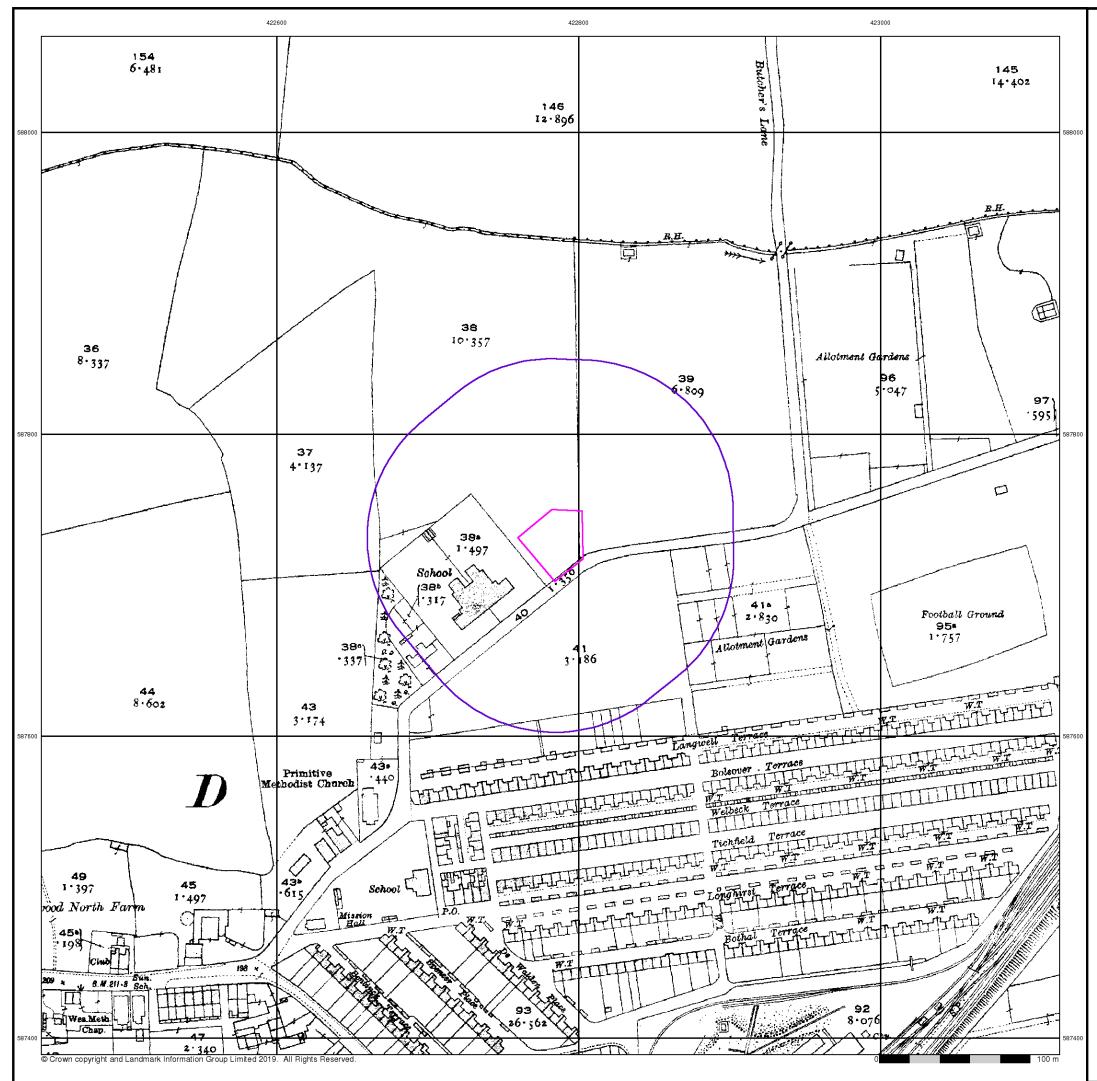
Order Number:	228936959_1_1
Customer Ref:	136018
National Grid Reference:	422780, 587730
Slice:	Α
Site Area (Ha):	0.14
Search Buffer (m):	100

#### Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG







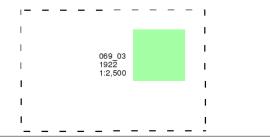
#### Northumberland

#### Published 1922

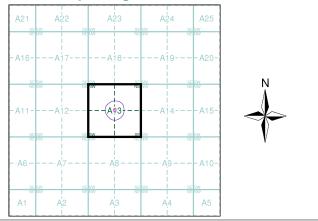
#### Source map scale - 1:2,500

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

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



#### **Historical Map - Segment A13**



#### **Order Details**

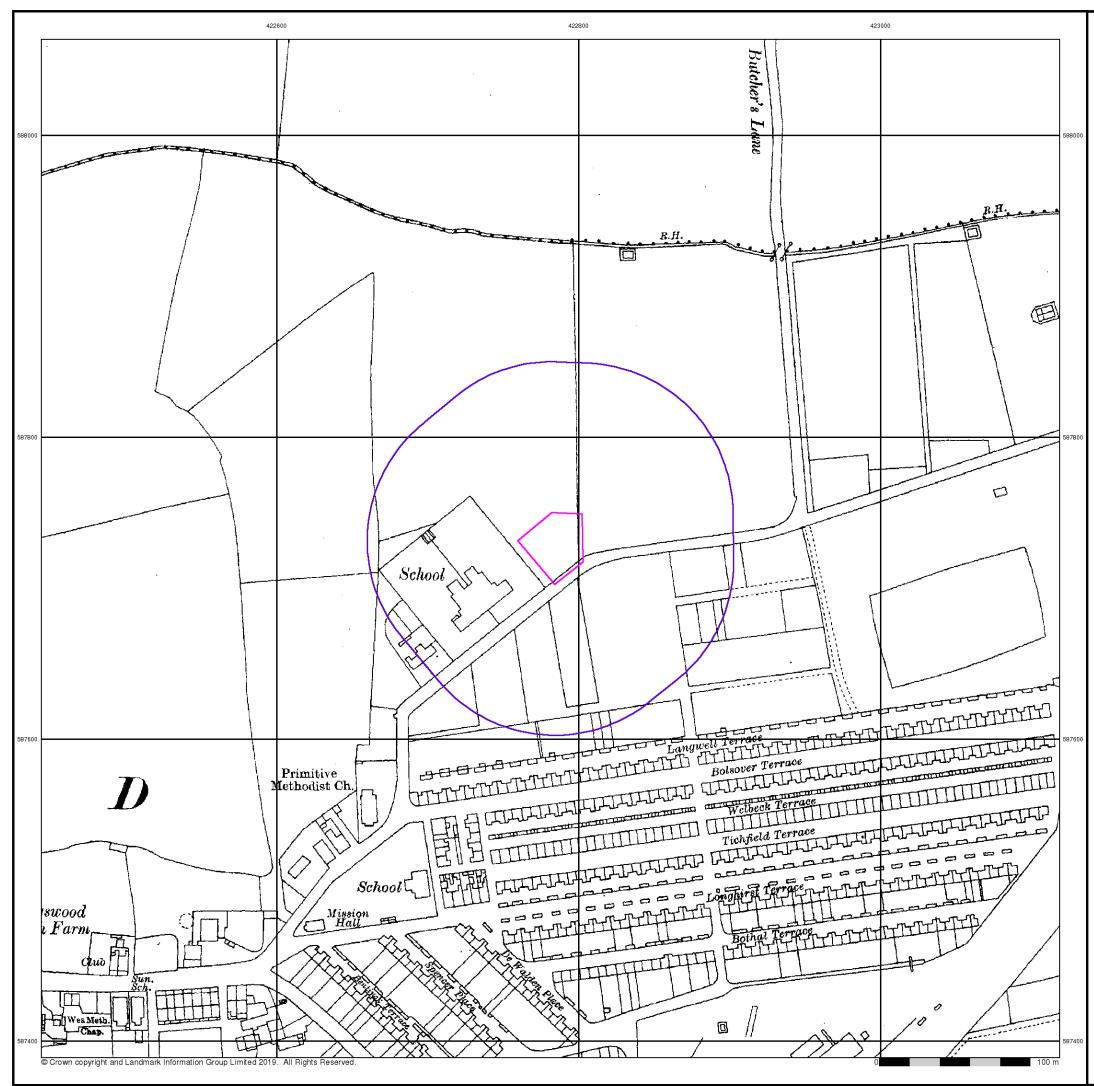
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Customer Ref:	136018
National Grid Reference:	422780, 587730
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Site Area (Ha):	0.14
Search Buffer (m):	100

#### Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG







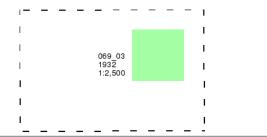
#### Northumberland

#### Published 1932

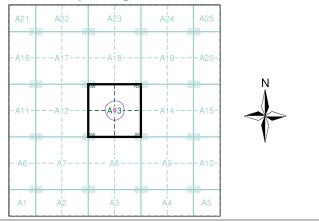
#### Source map scale - 1:2,500

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

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



#### **Historical Map - Segment A13**



#### **Order Details**

Order Number:	228936959_1_1
Customer Ref:	136018
National Grid Reference:	422780, 587730
Slice:	A
Site Area (Ha):	0.14
Search Buffer (m):	100

#### Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG

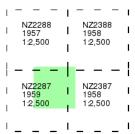




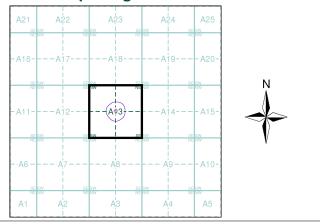
#### Ordnance Survey Plan Published 1957 - 1959 Source map scale - 1:2,500

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

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



#### Historical Map - Segment A13



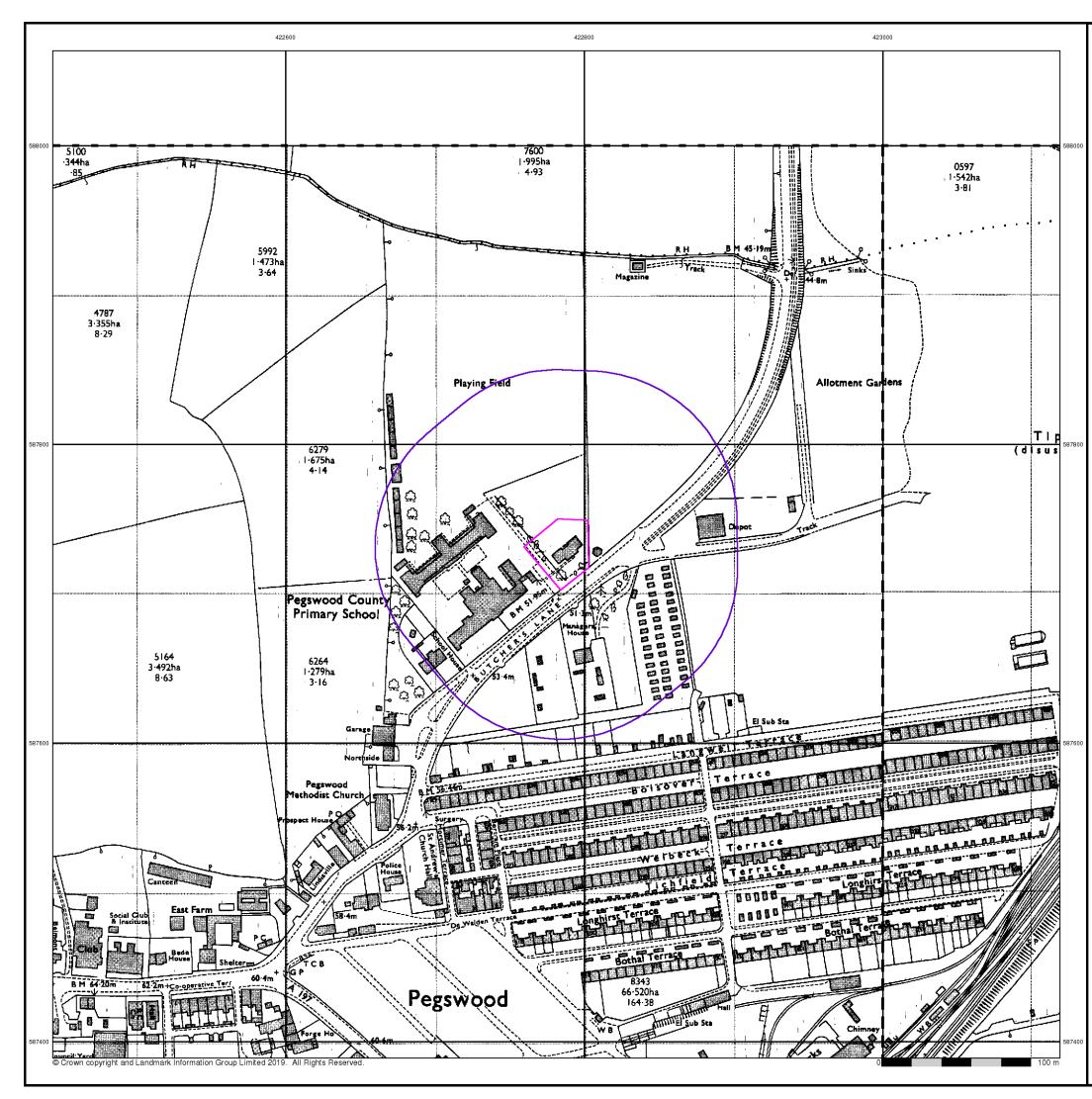
#### **Order Details**

Order Number:	228936959_1_1
Customer Ref:	136018
National Grid Reference:	422780, 587730
Slice:	A
Site Area (Ha):	0.14
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#### Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG



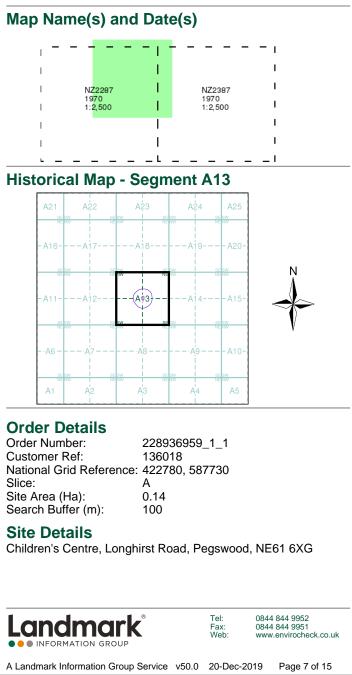


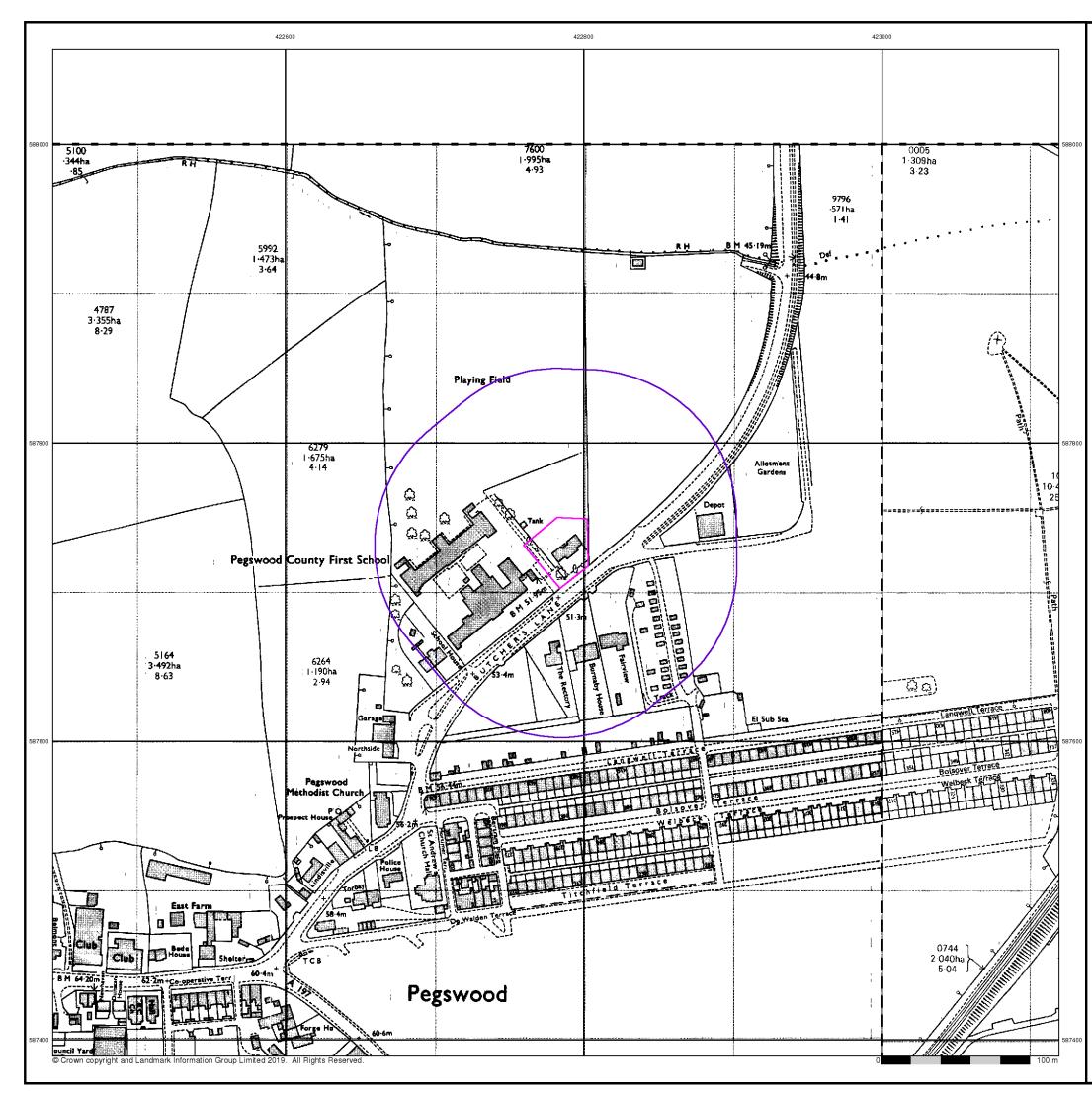
#### **Ordnance Survey Plan**

#### Published 1970

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

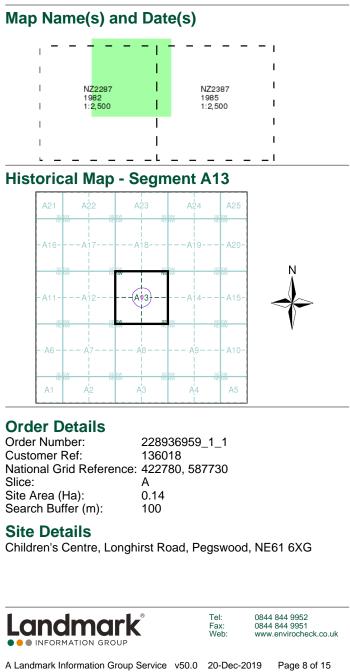
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain.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

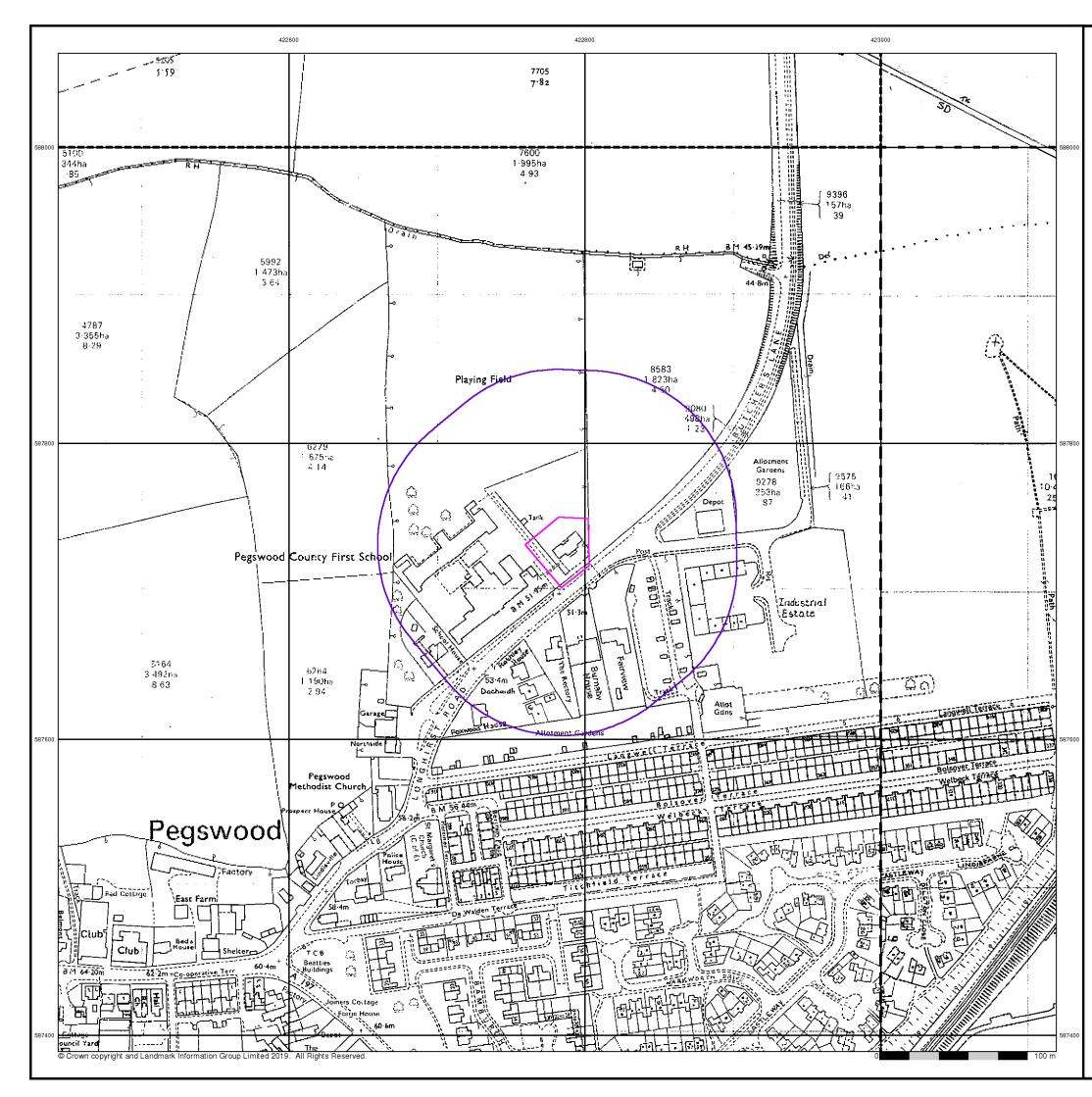




#### Ordnance Survey Plan Published 1982 - 1985 Source map scale - 1:2,500

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.





#### **Additional SIMs**

#### Published 1984 - 1992

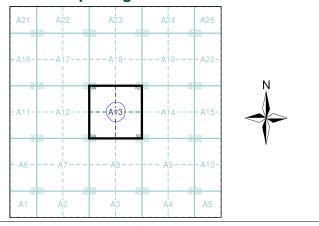
#### Source map scale - 1:2,500

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)

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#### **Historical Map - Segment A13**



#### **Order Details**

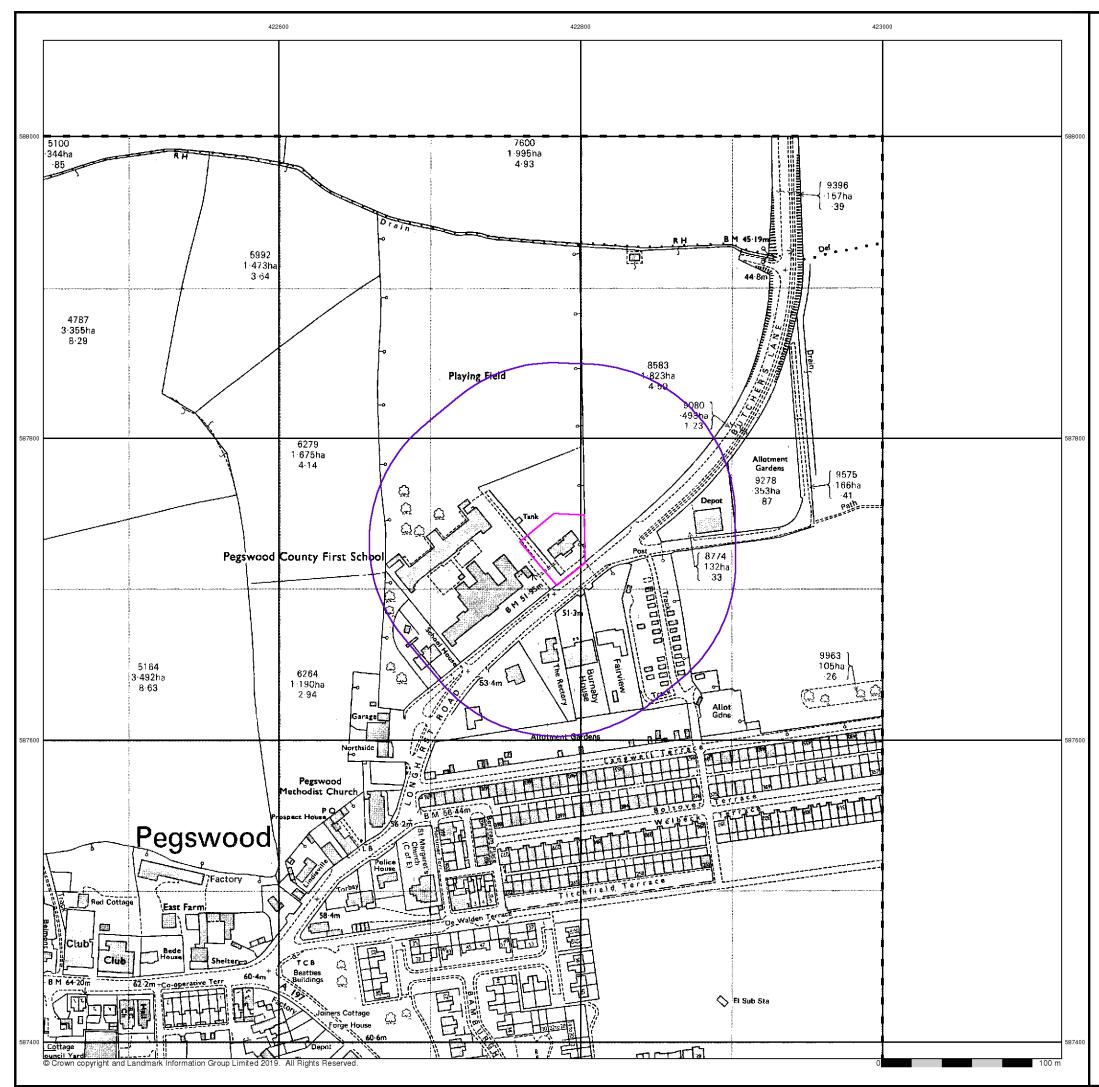
Order Number:	228936959_1_1
Customer Ref:	136018
National Grid Reference:	422780, 587730
Slice:	A
Site Area (Ha):	0.14
Search Buffer (m):	100

#### Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG







#### **Ordnance Survey Plan**

#### **Published 1985**

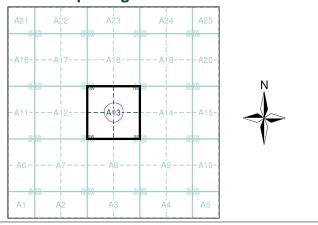
#### Source map scale - 1:2,500

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)

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#### **Historical Map - Segment A13**



#### **Order Details**

Order Number:	228936959_1_1
Customer Ref:	136018
National Grid Reference:	422780, 587730
Slice:	A
Site Area (Ha):	0.14
Search Buffer (m):	100

#### Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG

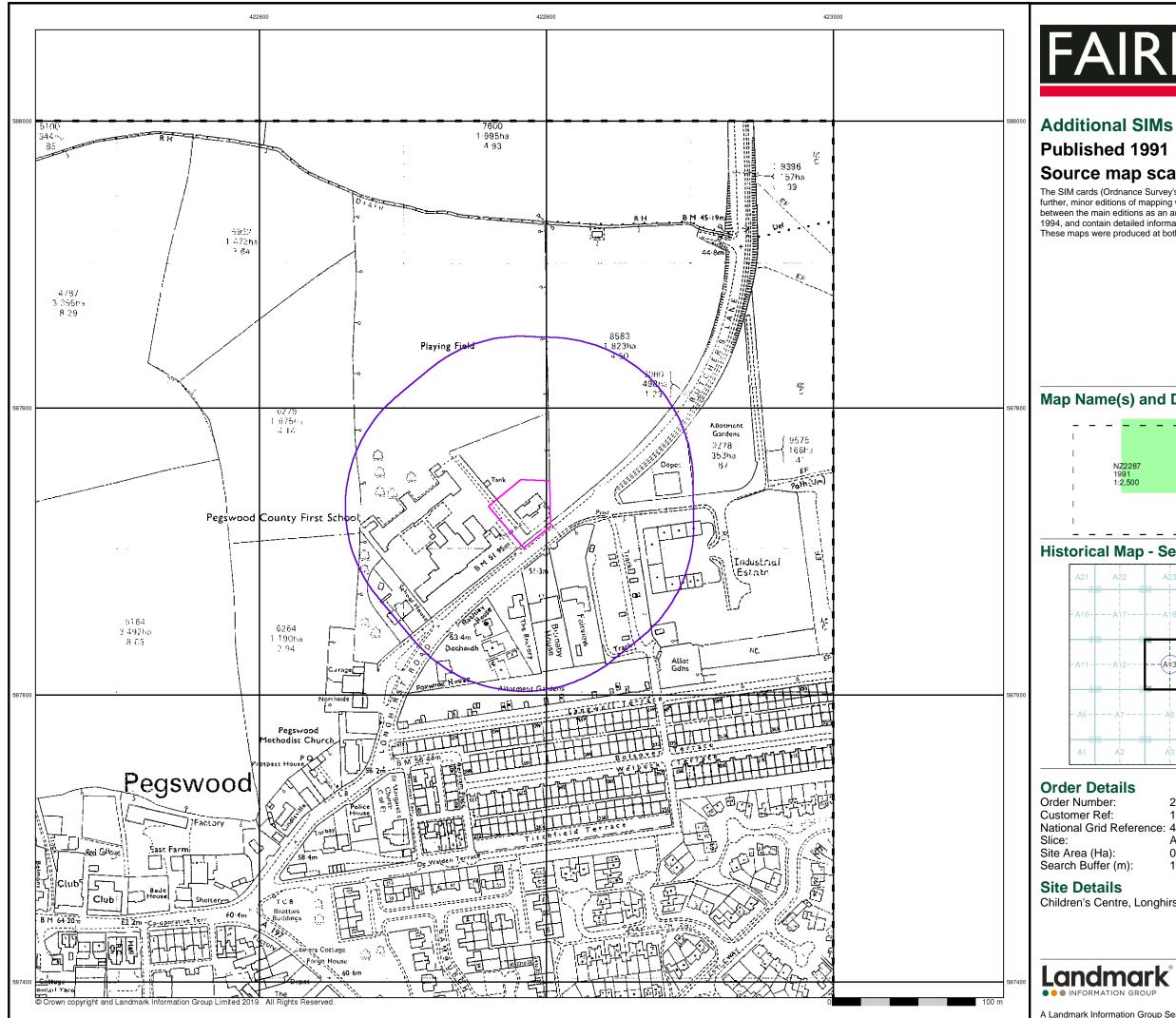


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0844 844 9951 www.envirocheck.co.uk

Tel:

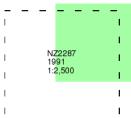
Fax: Web



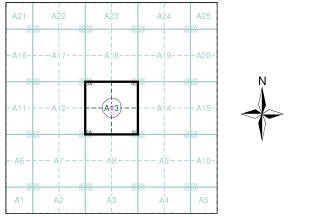
#### Source map scale - 1:2,500

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 A13**

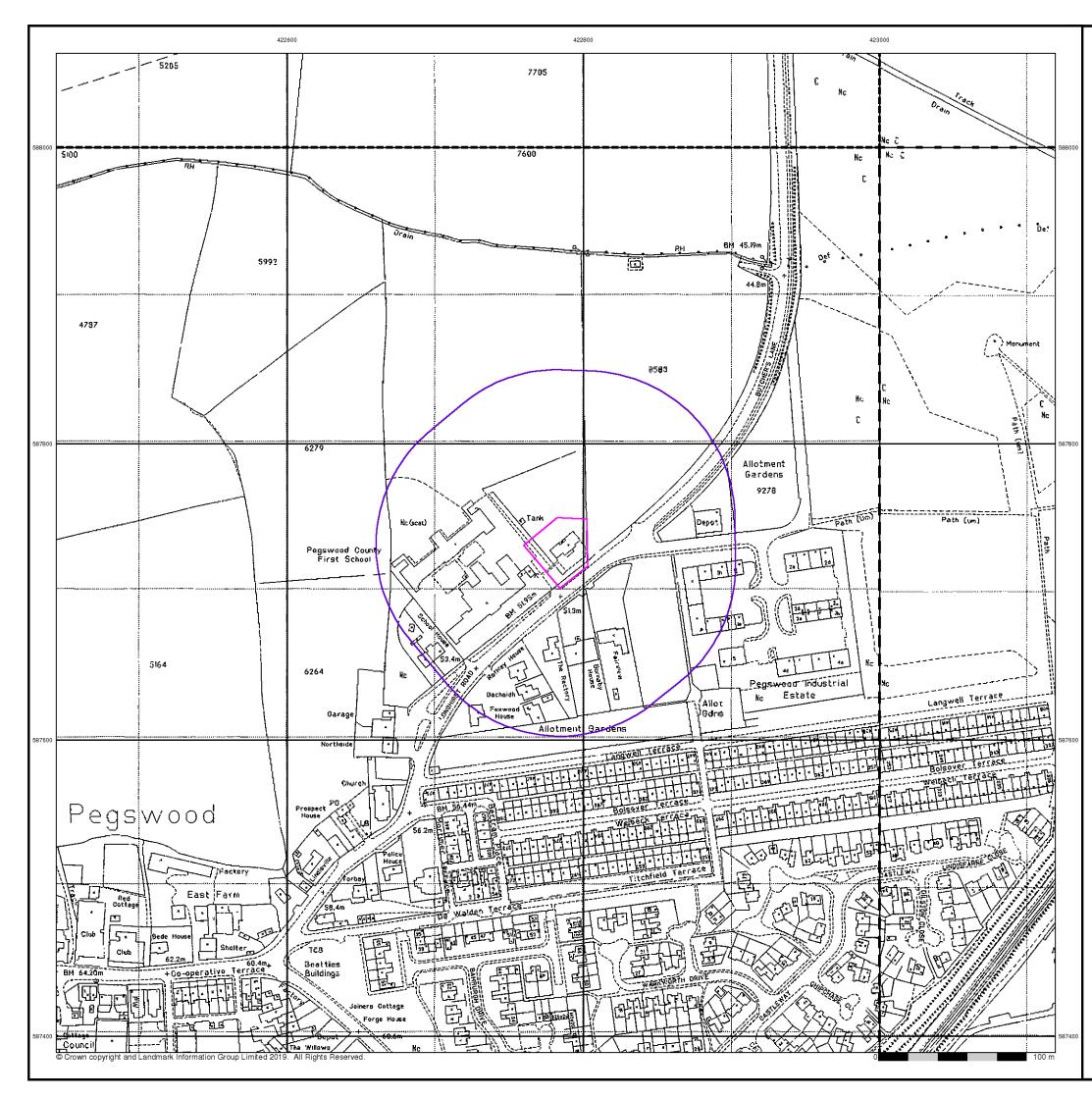


Order Number:	228936959_1_1
Customer Ref:	136018
National Grid Reference:	422780, 587730
Slice:	Α
Site Area (Ha):	0.14
Search Buffer (m):	100

Children's Centre, Longhirst Road, Pegswood, NE61 6XG



Tel:



### Large-Scale National Grid Data

#### Published 1993

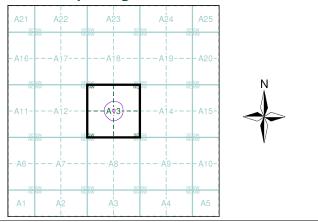
#### Source map scale - 1:2,500

'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)

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#### **Historical Map - Segment A13**



#### **Order Details**

Order Number:	228936959_1_1
Customer Ref:	136018
National Grid Reference:	422780, 587730
Slice:	A
Site Area (Ha):	0.14
Search Buffer (m):	100

#### Site Details

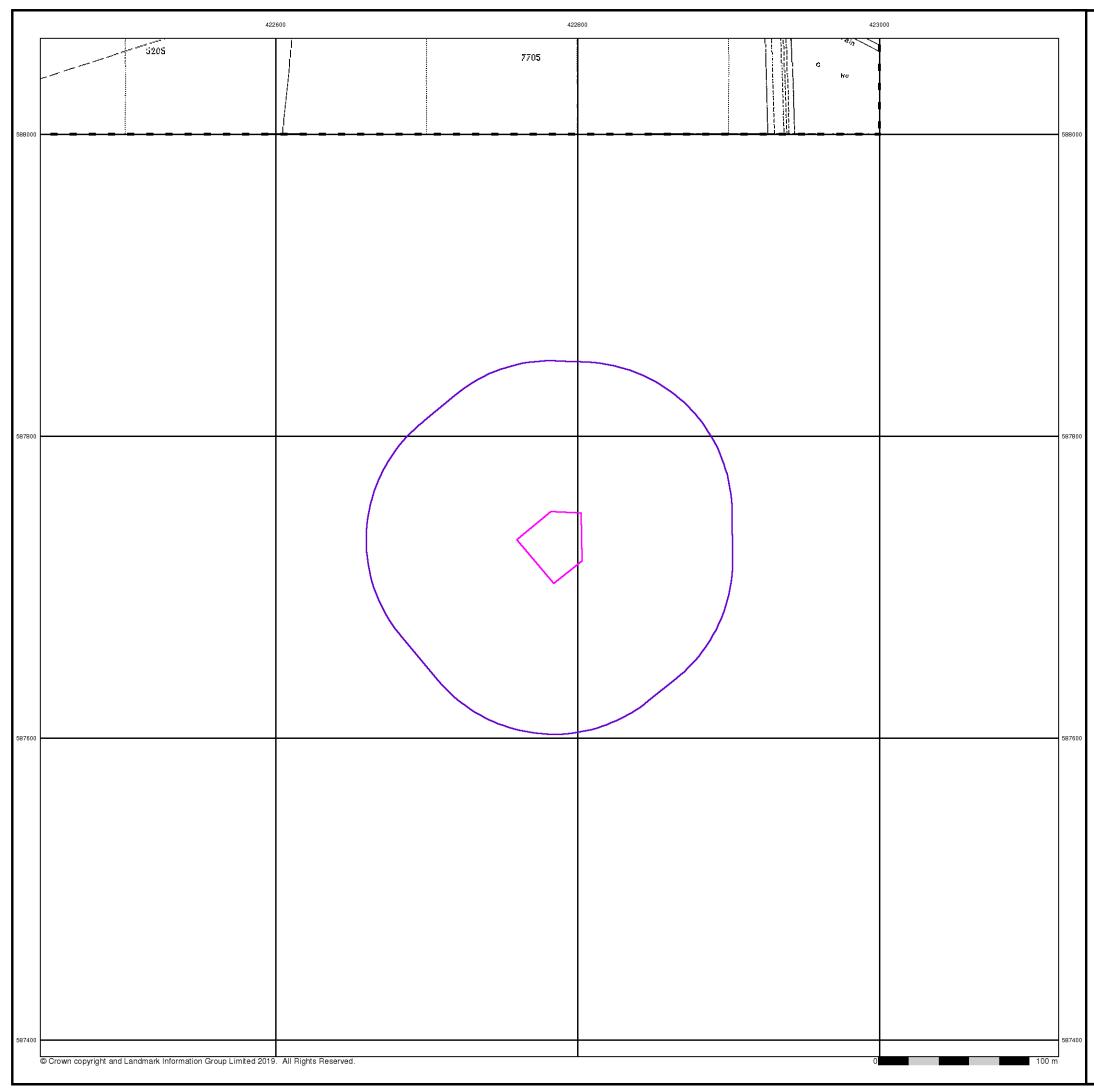
Children's Centre, Longhirst Road, Pegswood, NE61 6XG





Tel:

Fax: Web



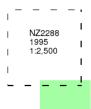
### Large-Scale National Grid Data

#### 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 A13

21 A22	2 A23	B A	24 A25	
16A17	7A1	3- <b></b> -A	19 A20-	
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#### **Order Details**

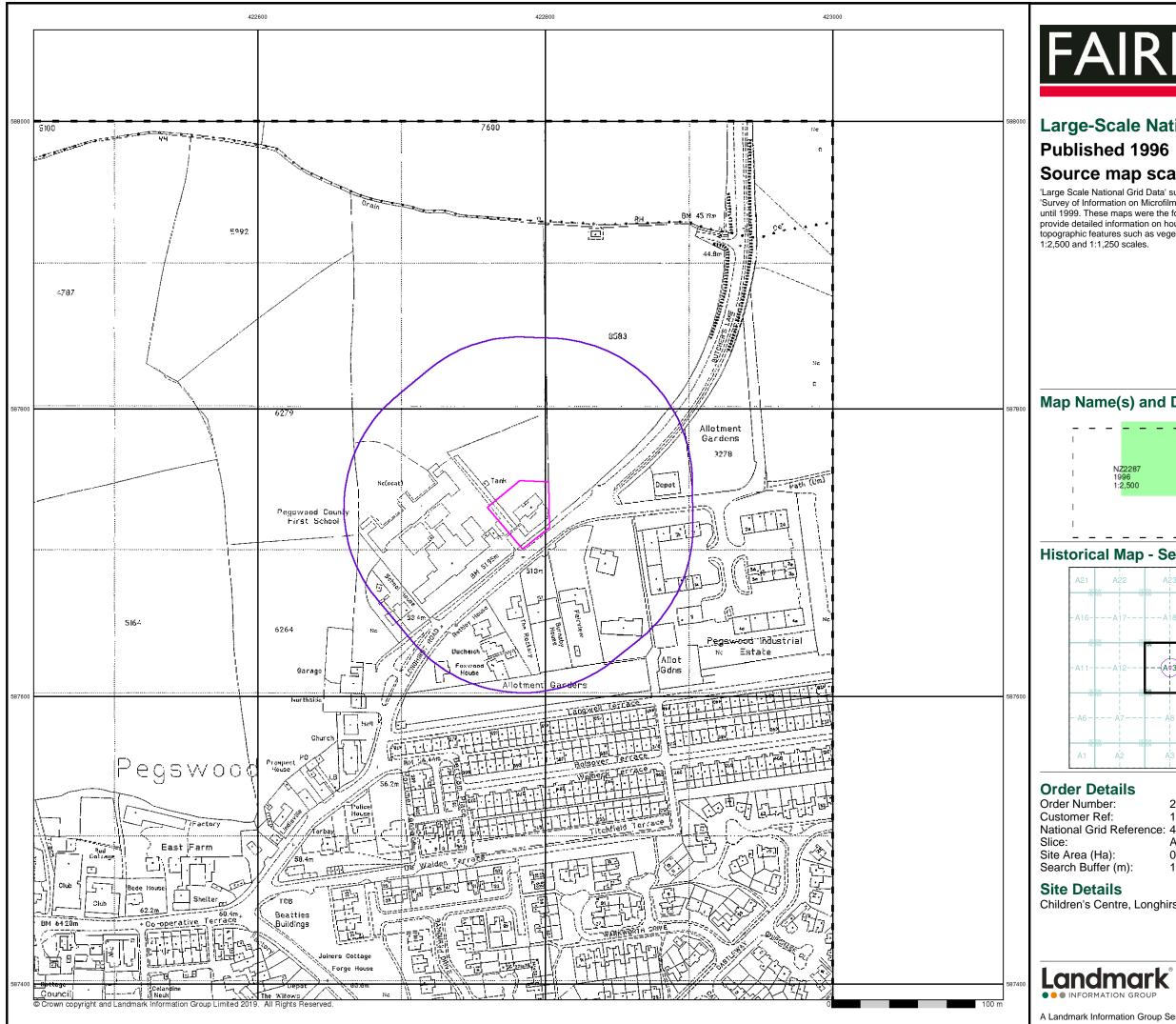
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Customer Ref:	136018
National Grid Reference:	422780, 587730
Slice:	A
Site Area (Ha):	0.14
Search Buffer (m):	100

#### Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG







### Large-Scale National Grid Data

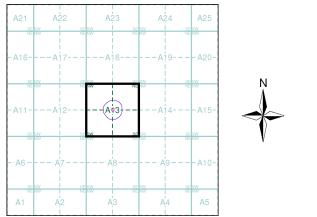
#### Source map scale - 1:2,500

'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)

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L						I.

#### **Historical Map - Segment A13**



Order Number:	228936959_1_1
Customer Ref:	136018
National Grid Reference:	422780, 587730
Slice:	Α
Site Area (Ha):	0.14
Search Buffer (m):	100

Children's Centre, Longhirst Road, Pegswood, NE61 6XG





### **Historical Aerial Photography**

#### Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

#### Historical Aerial Photography - Segment A13

A21	A22	SE SW NE NW	A23	SEISW NE NW	A24	A25	
-A16	-A17-		-A18-		-A19-	A20-	
SE SW NE NW		SEISW NE NW	_	SEISW NENW		SESW NENW	N
-A11	-A12-		A\$3		-A14-	A15-	
SE SW NE NW		SE SW NE NW		SESW		SESW NENW	V
- · A6	- A7-		- A8-		- · A9 -	A10-	
se sw Ne NW A1	A2	SE SW NE NW	Å3	SE SW NE NW	A4	se sw Ne NW A5	

#### **Order Details**

 
 Order Number:
 228936959\_1\_1

 Customer Ref:
 136018

 National Grid Reference:
 422780, 587730
 Slice: А Site Area (Ha): Search Buffer (m): 0.14 100

#### Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG



Tel: Fax: Web:

## **Historical Mapping Legends**

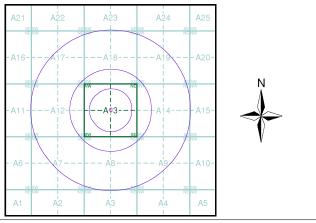
Ordnance	ance Survey County Series 1:10,560 Ordnance Survey Plan 1:10,000					1:10,000 Raster Mapping				
Grav Pit	vel Sand Pit	Other	Contraction of the second	Chalk Pit, Clay Pit	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	°₀ Gravel Pit		Gra∨el Pit		Refuse tip or slag heap
C Quar	rry Shingle	•••••• •••••••• Orchard		Sand Pit	,	<ul> <li>Disused Pit</li> <li>or Quarry</li> </ul>		Rock		Rock (scattered)
<sup>**</sup> ***** ******** ********************	ers	Marsh	0.000	Refuse or Slag Heap		Lake, Loch or Pond		Boulders	00 000	Boulders (scattered)
		207 209 x07 227 207 209 x07 227		. Dunes	° 2 0 0 1 0 0 1	p Boulders		Shingle	Mud	Mud
Mixed Woo	d Deciduous	Brushwood	* * *	Coniferous Trees	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Non-Coniferous Trees	Sand	Sand		Sand Pit
			<b>φ</b>	Orchard ∩ ₀_	Scrub	עזיע Coppice	1111111	Slopes	٢٢٢٢٢٢٢	Top of cliff Underground
Fir	Furze	Rough Pasture	ា ា ក	Bracken SMUU	Heath '	、,,,,Rough Grassland		General detail - O∨erhead detail		detail Narrow gauge railway
	rrow denotes 🔉 🔺	Trigonometrical Station	<u>، د</u>	Marsh	Reeds	<u>→_</u> Saltings		Multi-track railway		Single track railway
	ite of Antiquities 🔹 🛧	Bench Mark		Direc	tion of Flow of	Water	_•_•	County boundary (England only)	••••	Ci∨il, parish or community boundary
• Si	ump, Guide Post, ignal Post urface Level	Well, Spring, Boundary Post		Glasshouse	**	Sand		District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
Sketched	Instrum Contou	200		Sloping Masonry	Pylon — — 🗆 — Pole	Electricity Transmission Line	۵ <sup>۵</sup> **	Area of wooded vegetation	۵۵ ۵۵	Non-coniferous trees
Main Roads	Fenced Minor F	Roads Un-Fenced	Cutting	Embankm		— Standard Gauge	Ω	Non-coniferous trees (scattered) Coniferous	** **	Coniferous trees Positioned
	Sunken Road	Raised Road	 Road'''	J //	·····	Multiple Track ⊢ Standard Gauge Single Track	* 4 4	trees (scattered) Orchard		tree Coppice
and the state of t	Road over Railway	Railway over River	Under	Over Cross			் க வர் காட	Rough Grassland		or Osiers Heath
	Railway o∨er Road //	Level Crossing			unty		00_ 00_	Scrub	⊐⊻⁄≀∟	Marsh, Salt Marsh or Reed
	Road over River or Canal	Road over		Administrative Co or County of City Municipal Boroug		_	S	Water feature	← ←	Flow arrows
	Road o∨er Stream			Burgh or District	Council or County Con	stituency	MHW(S)	Mean high water (springs)	MLW(S)	Mean low water (springs
	County Boundary (Geogra County & Ci∨il Parish Bou	• •		Civil Parish Shown alternately w	/hen coincidence	of boundaries occurs	+-	Telephone line (where shown)	- <b>• •</b> -	Electricity transmission li (with poles)
<b>+·</b> +· <b>+</b> · <del>+</del>	Administrati∨e County & 0	_	Ch	Boundary Post or Stone Church	PO	Police Station Post Office	← BM 123.45 m	Bench mark (where shown)	Δ	Triangulation station
Co. Boro. Bdy.	County Borough Boundary		F E Sta	Club House Fire Engine Station Foot Bridge	РН	Public Convenience Public House Signal Box		Point feature (e.g. Guide Post or Mile Stone)	$\boxtimes$	Pylon, flare st or lighting tow
Co. Burgh Bdy.	County Burgh Boundary (	Scollanu)		Fountain Guide Post		Spring Telephone Call Box	•[•	Site of (antiquity)		Glasshouse
⊻	Rural District Boundary		MP	Mile Post	TCP	Telephone Call Post				

# FAIRHURST

#### Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Northumberland	1:10,560	1866	2
Northumberland	1:10,560	1898	3
Northumberland	1:10,560	1924	4
Northumberland	1:10,560	1938	5
Ordnance Survey Plan	1:10,000	1940	6
Ordnance Survey Plan	1:10,000	1969	7
Ordnance Survey Plan	1:10,000	1984	8
Ordnance Survey Plan	1:10,000	1992	9
10K Raster Mapping	1:10,000	2000	10
10K Raster Mapping	1:10,000	2006	11
VectorMap Local	1:10,000	2019	12

#### Historical Map - Slice A



#### **Order Details**

 Order Number:
 228936959\_1\_1

 Customer Ref:
 136018

 National Grid Reference:
 422780, 587730

 Slice:
 A

 Site Area (Ha):
 0.14

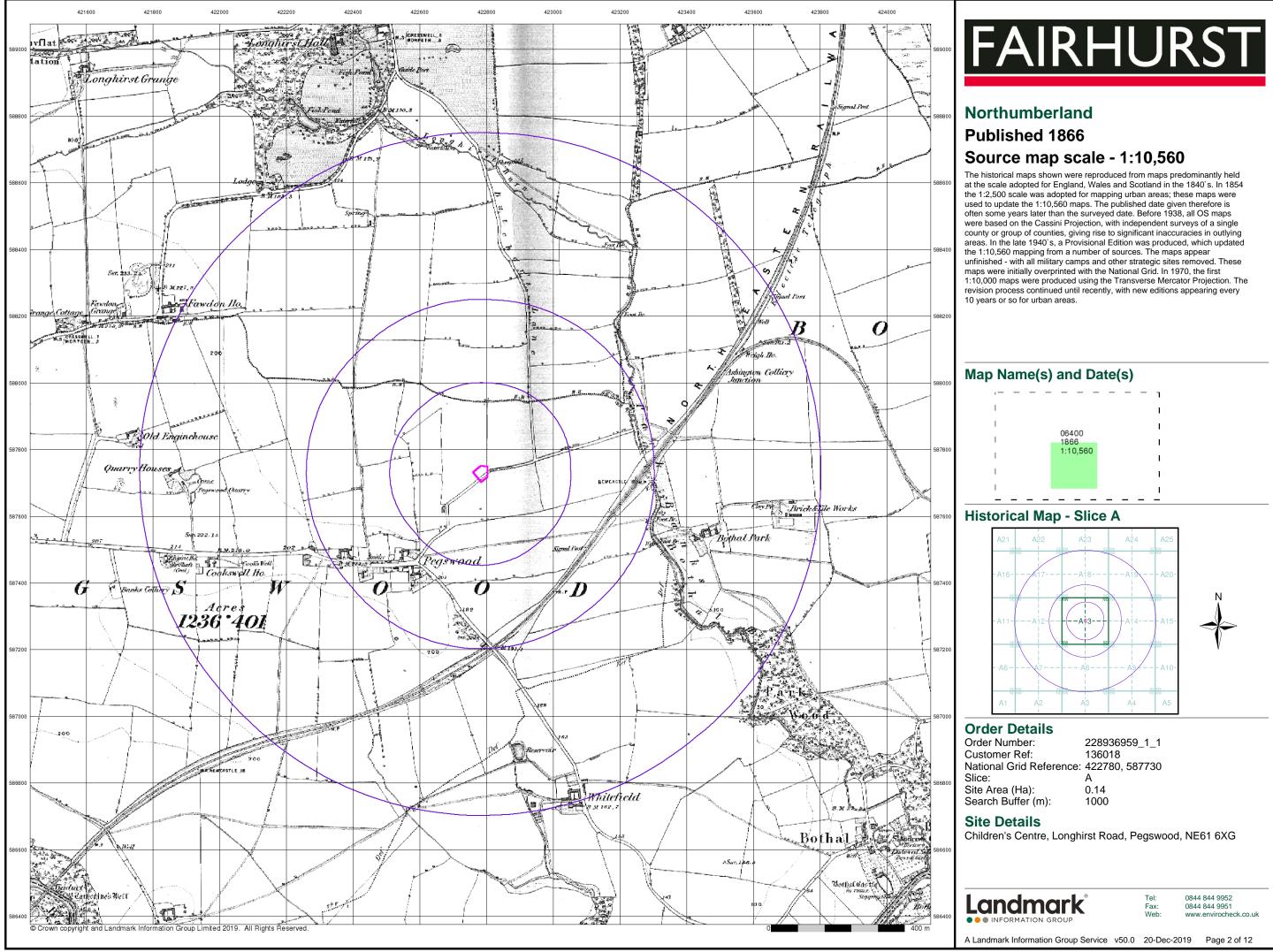
 Search Buffer (m):
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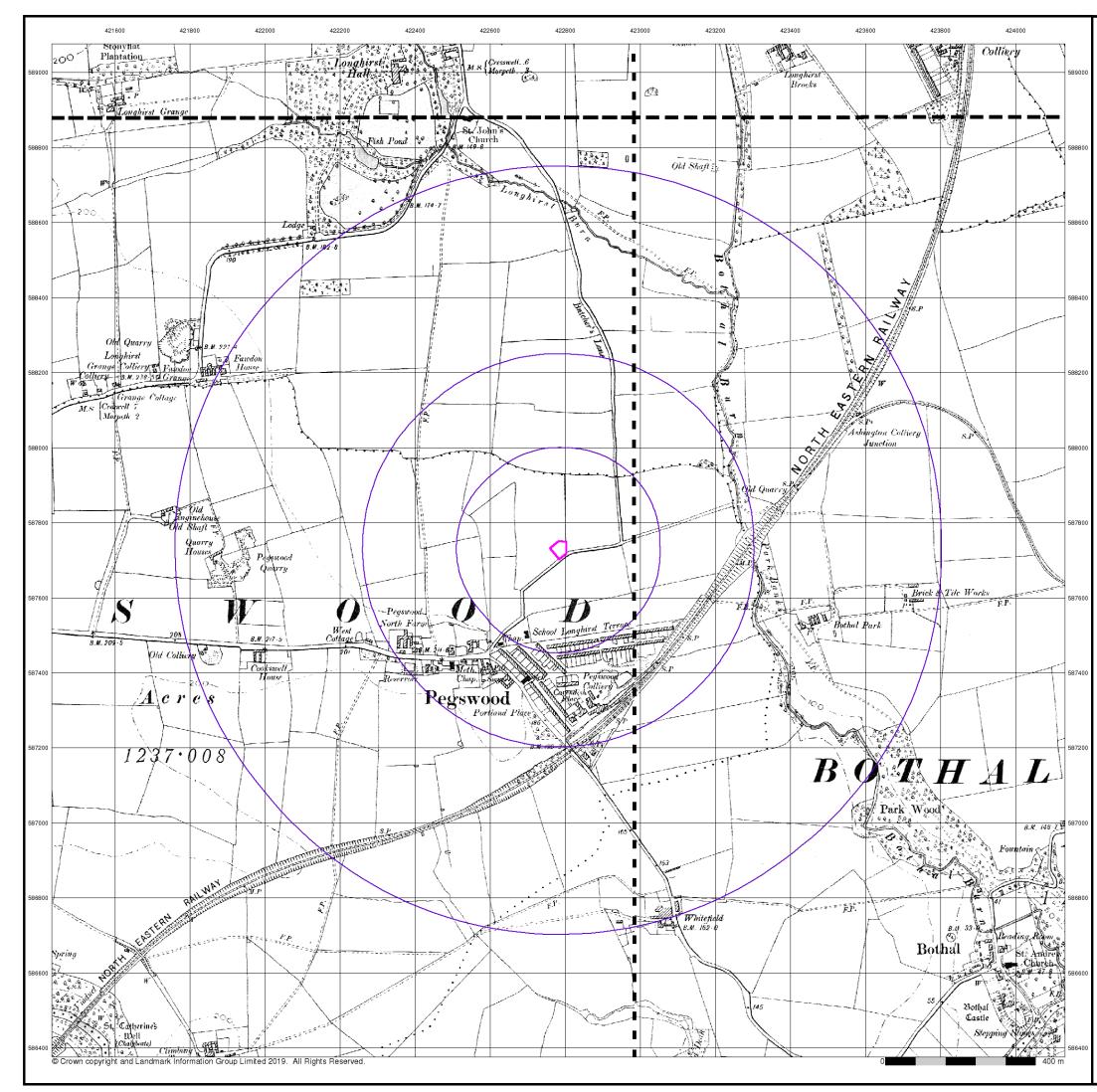
#### Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG







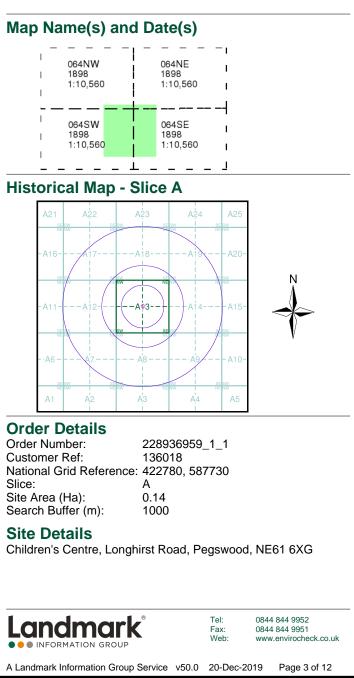


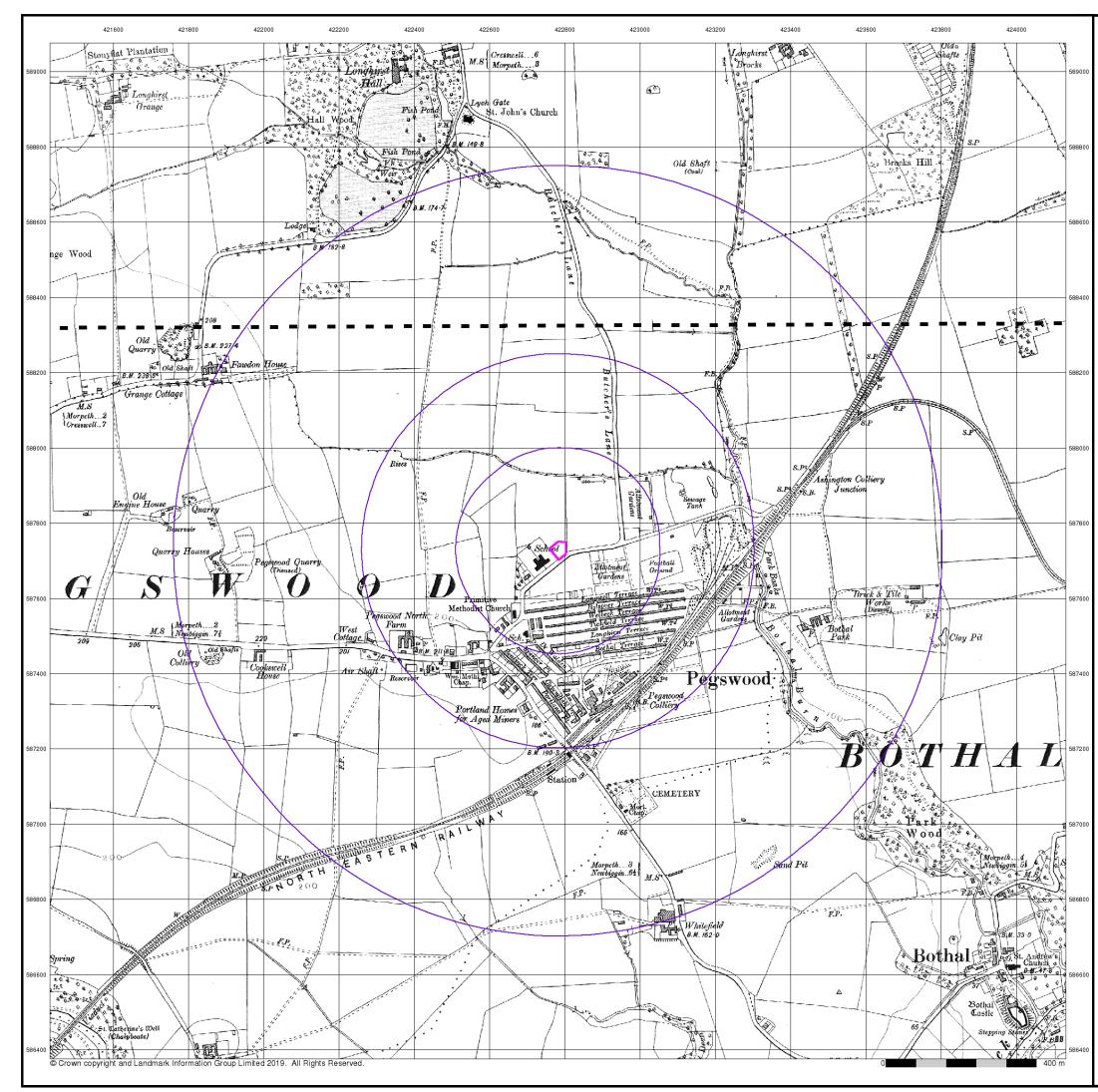
#### Northumberland

#### Published 1898

#### 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.



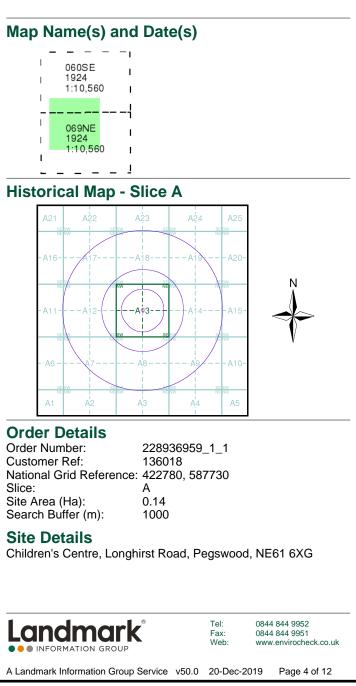


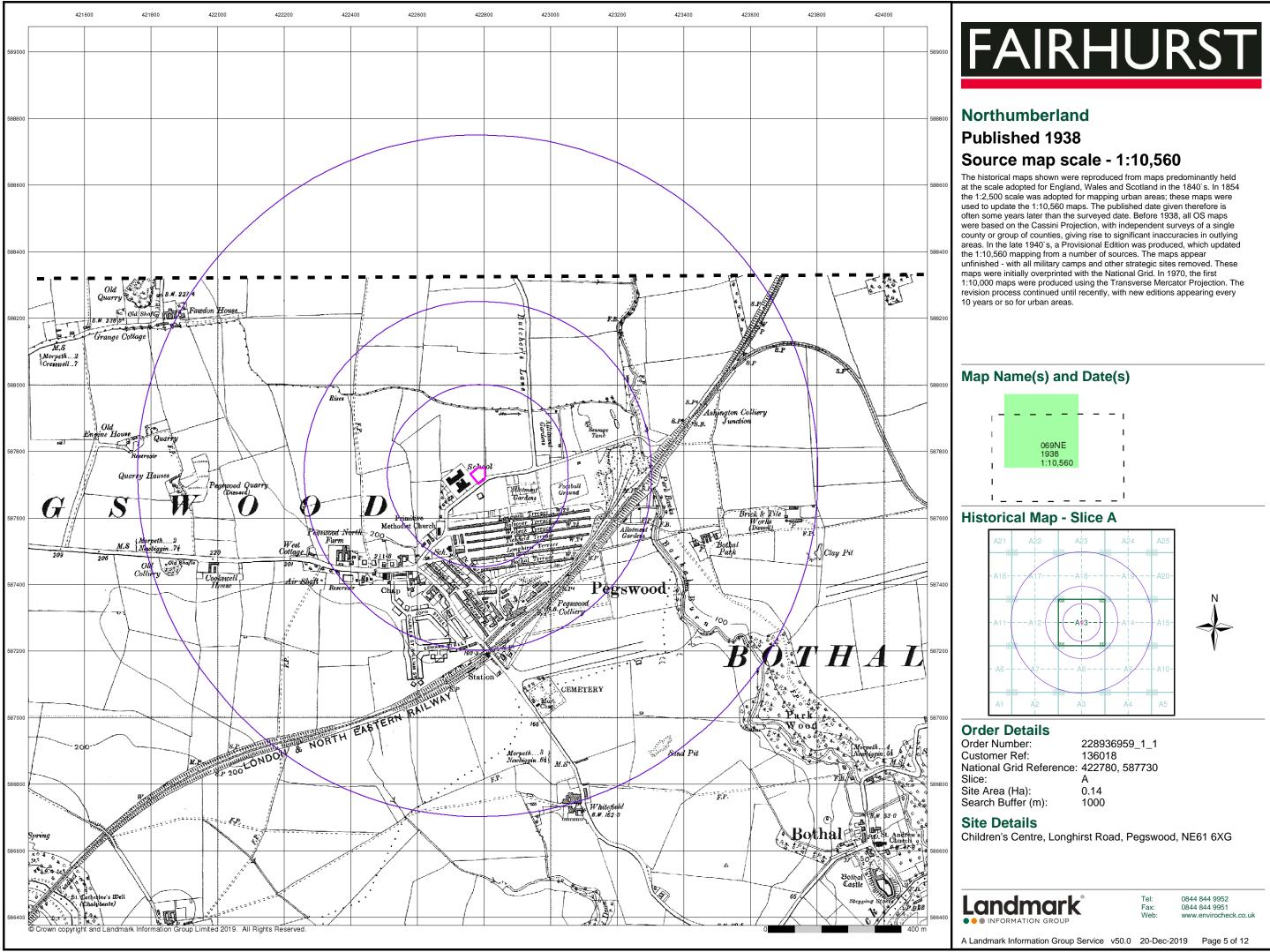
#### Northumberland

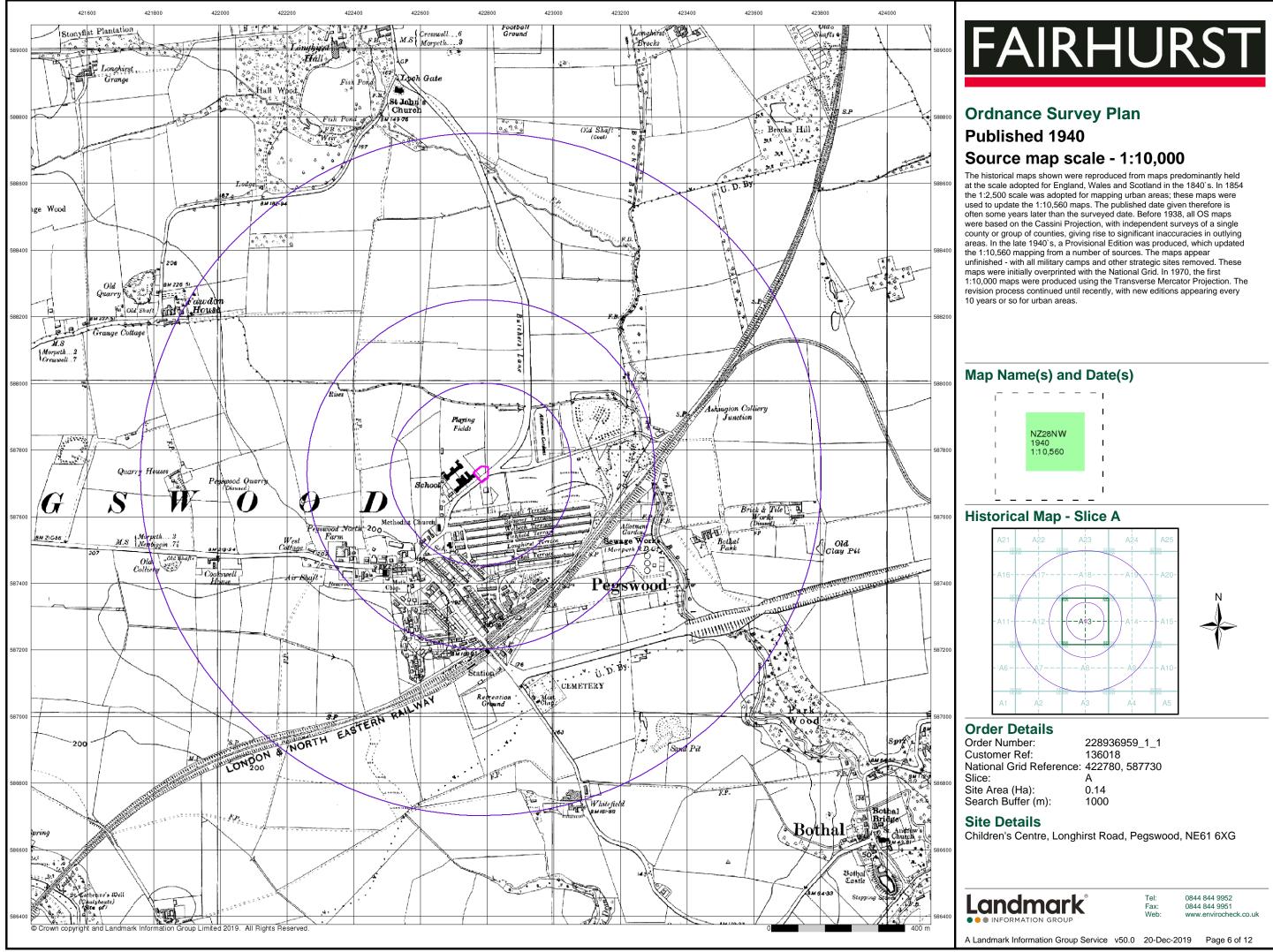
Published 1924

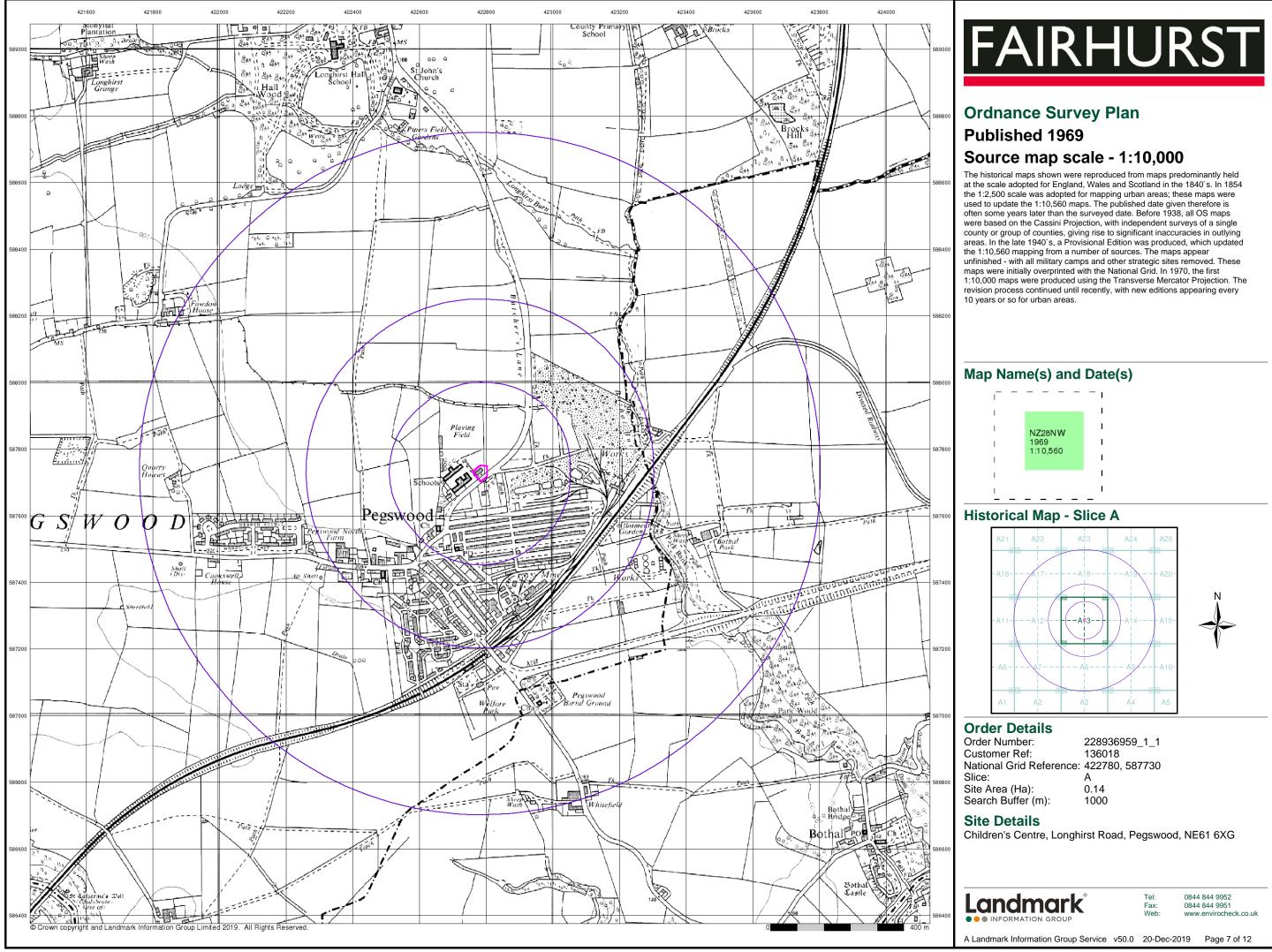
#### Source map scale - 1:10,560

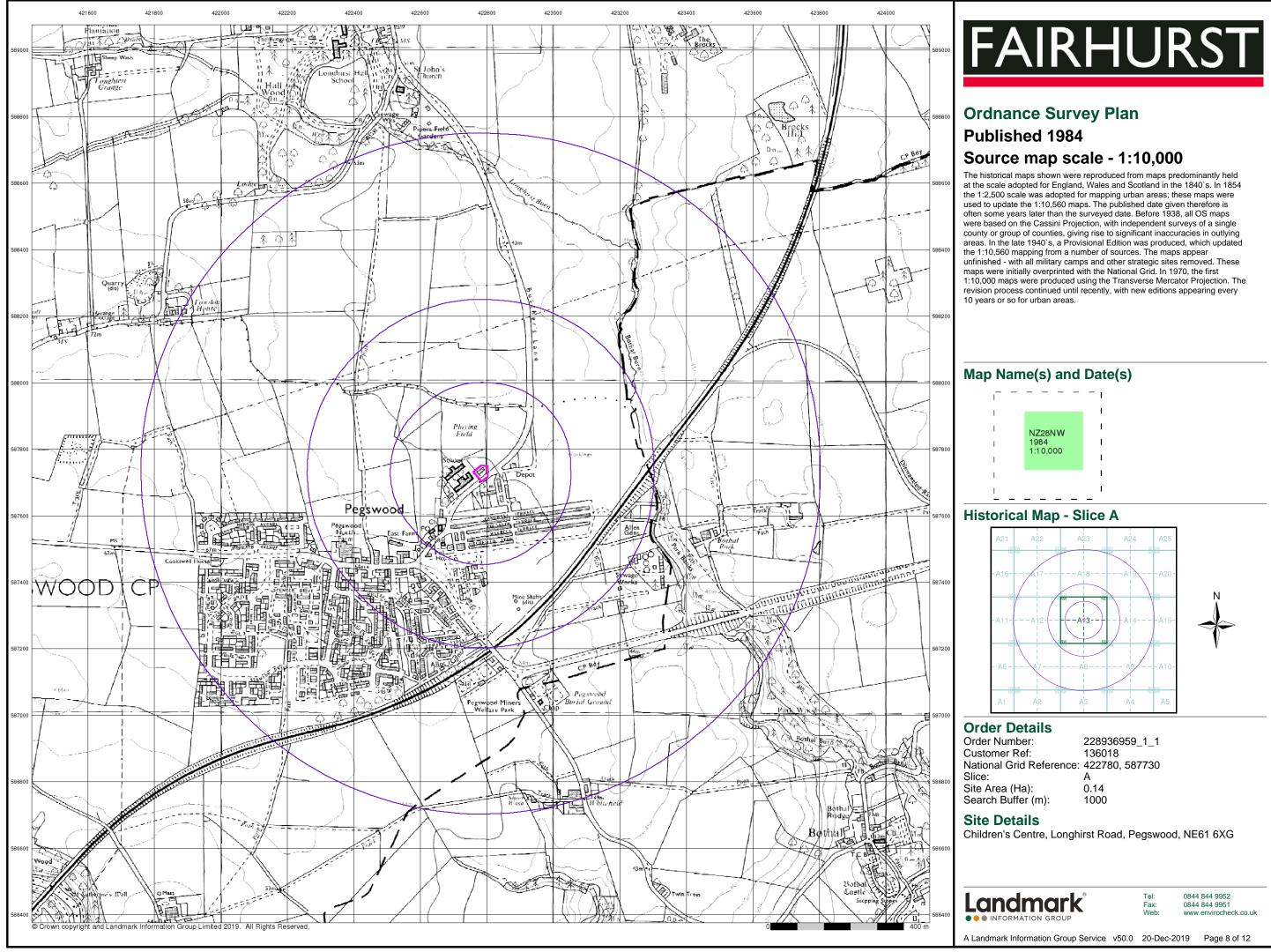
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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.

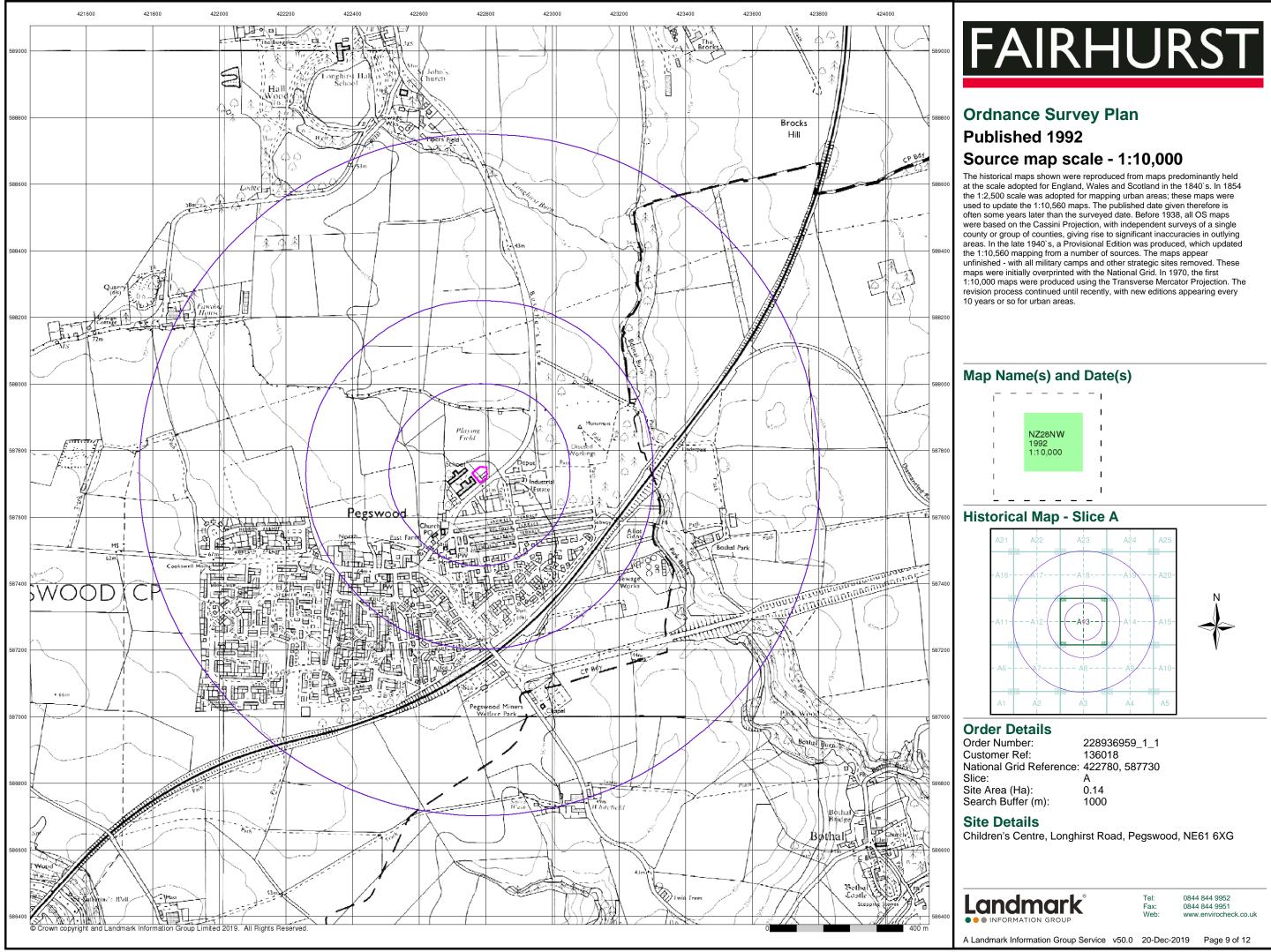


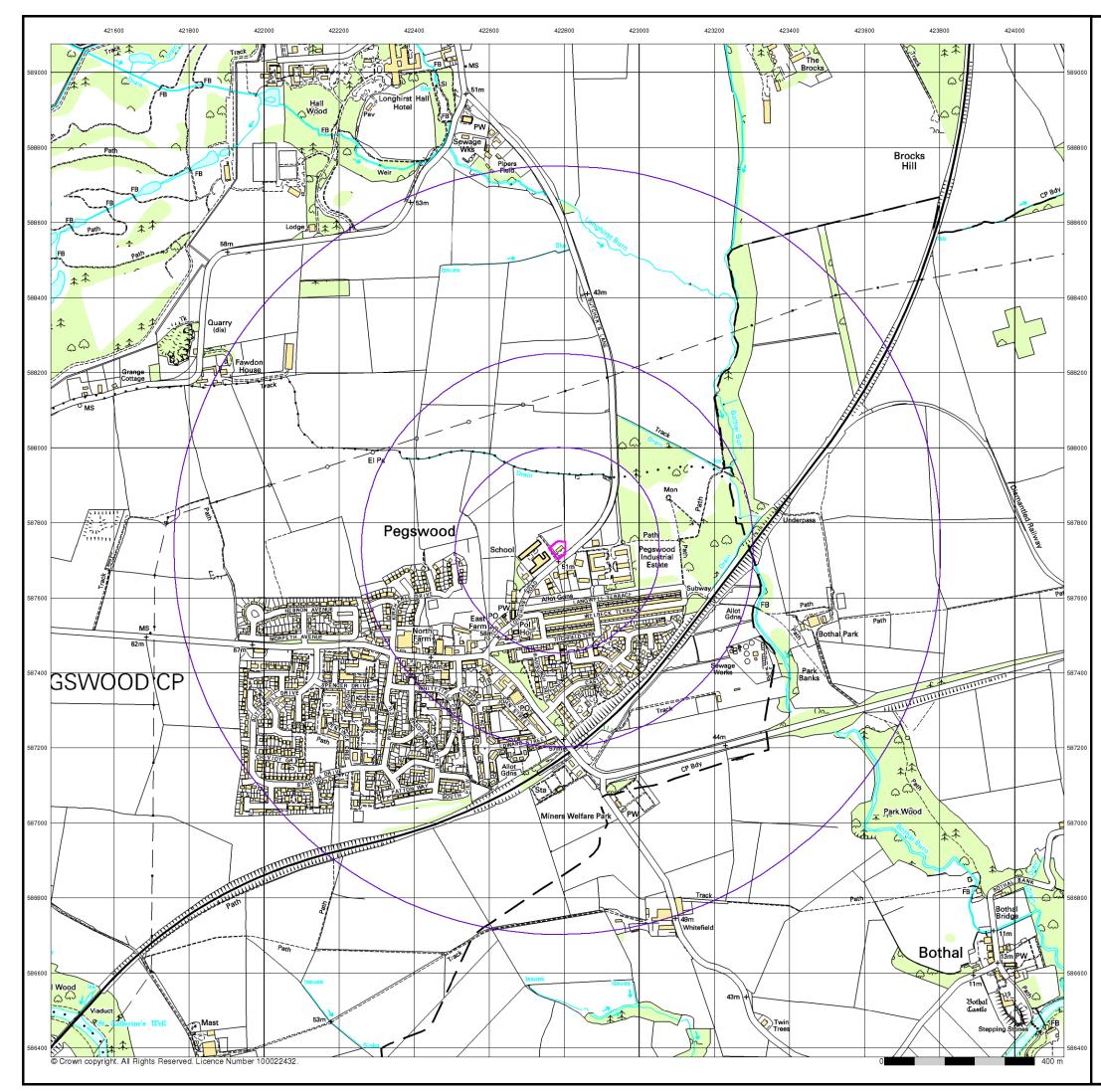












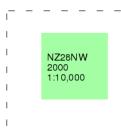
# 10k Raster Mapping

# Published 2000

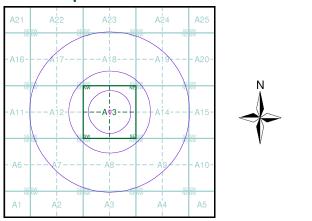
# Source map scale - 1:10,000

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.

# Map Name(s) and Date(s)



# **Historical Map - Slice A**



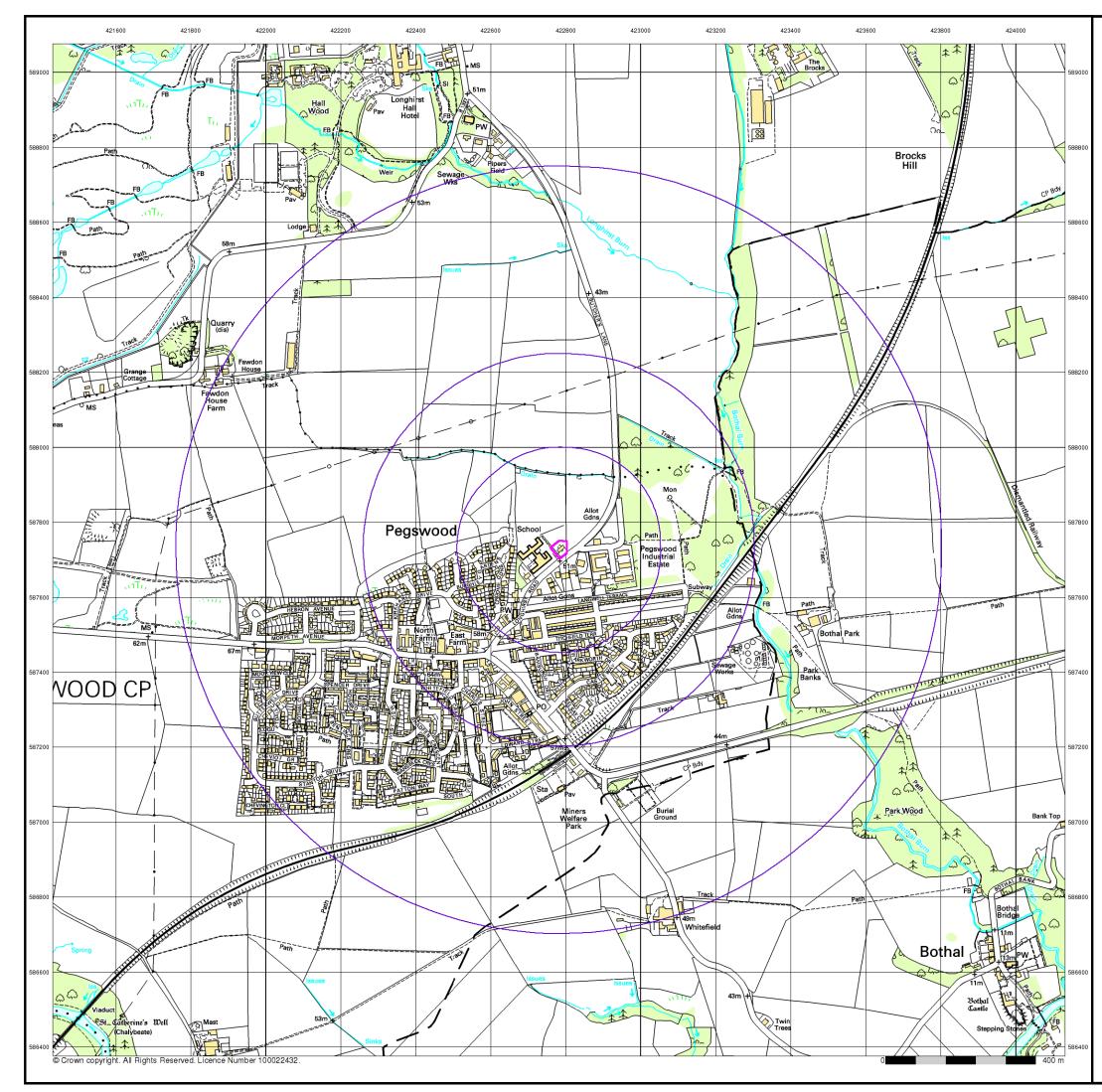
# **Order Details**

Order Number:	228936959_1_1
Customer Ref:	136018
National Grid Reference:	422780, 587730
Slice:	A
Site Area (Ha):	0.14
Search Buffer (m):	1000

# Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG





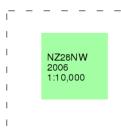
# **10k Raster Mapping**

# Published 2006

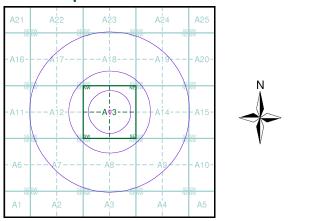
# Source map scale - 1:10,000

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.

# Map Name(s) and Date(s)



# **Historical Map - Slice A**



# **Order Details**

Order Number:	228936959_1_1
Customer Ref:	136018
National Grid Reference:	422780, 587730
Slice:	Α
Site Area (Ha):	0.14
Search Buffer (m):	1000

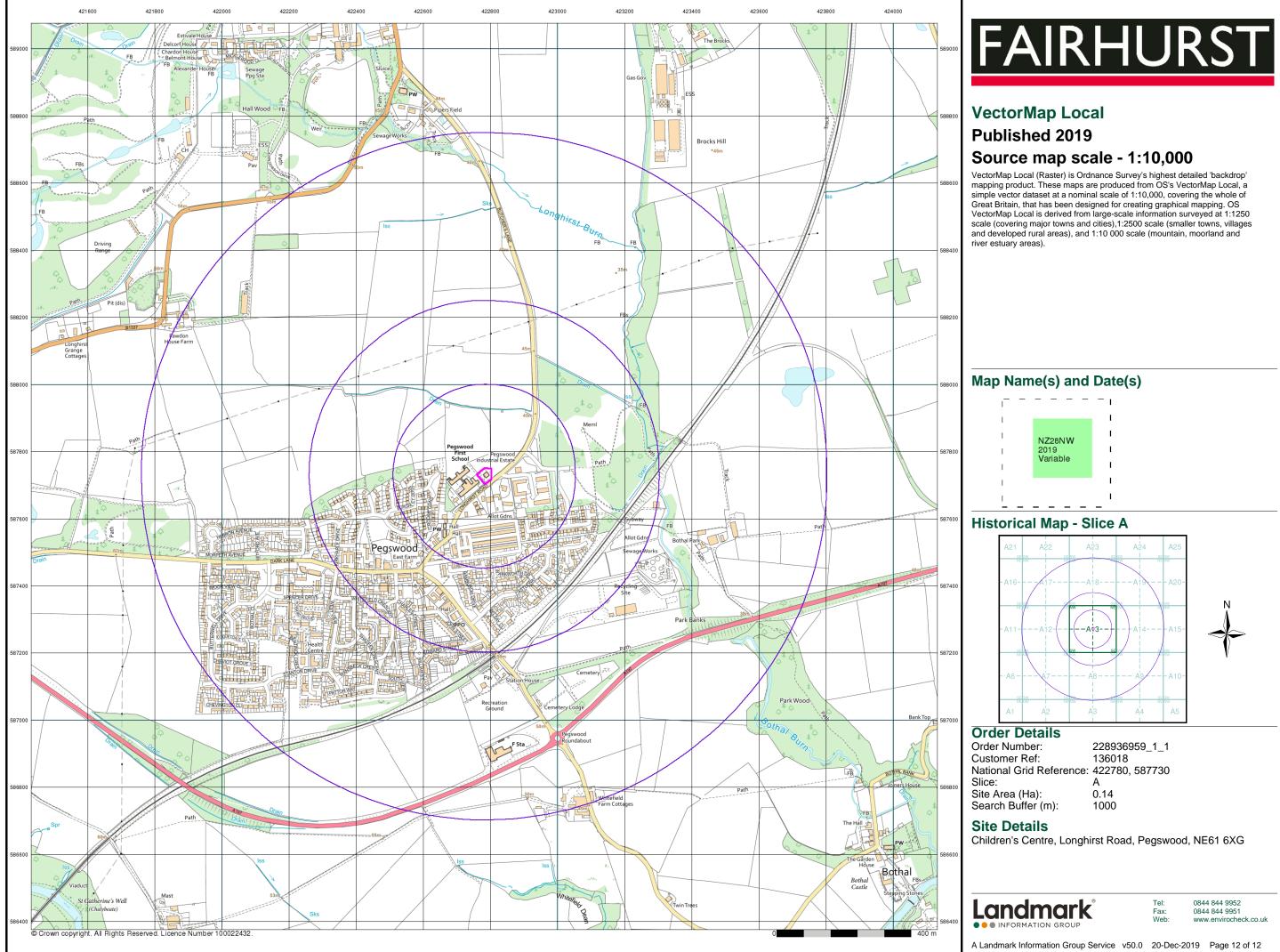
# Site Details

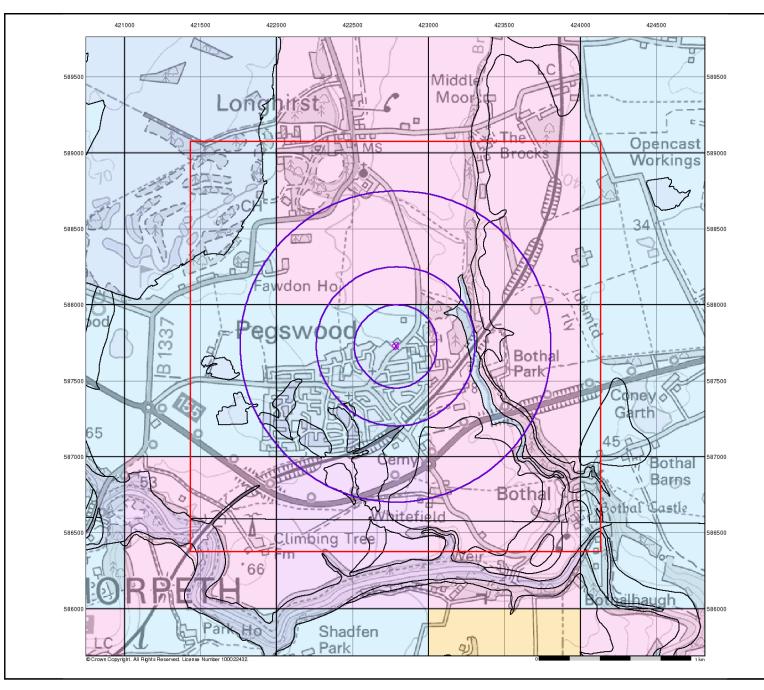
Children's Centre, Longhirst Road, Pegswood, NE61 6XG

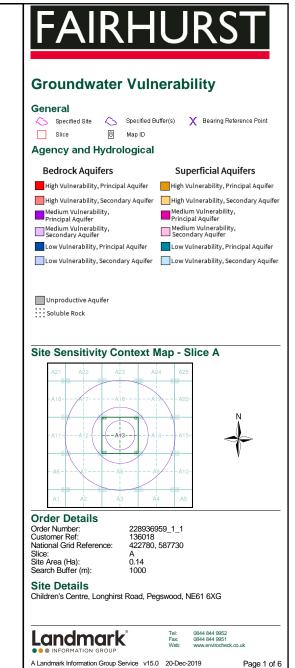


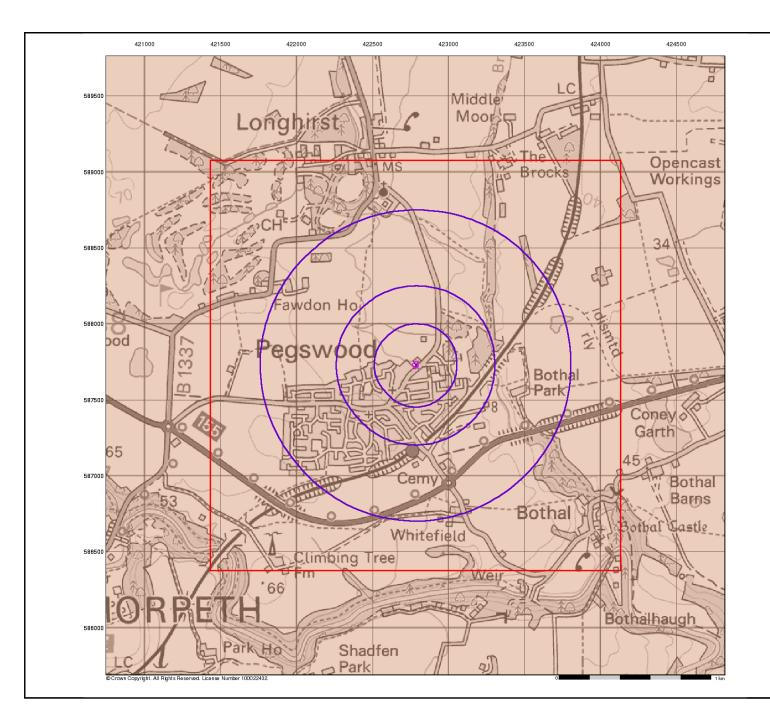
Tel: Fax:

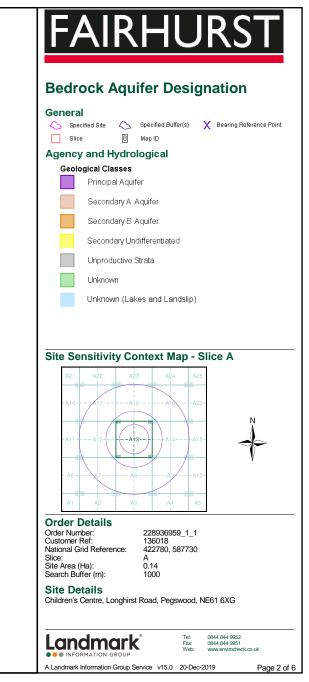
Web:

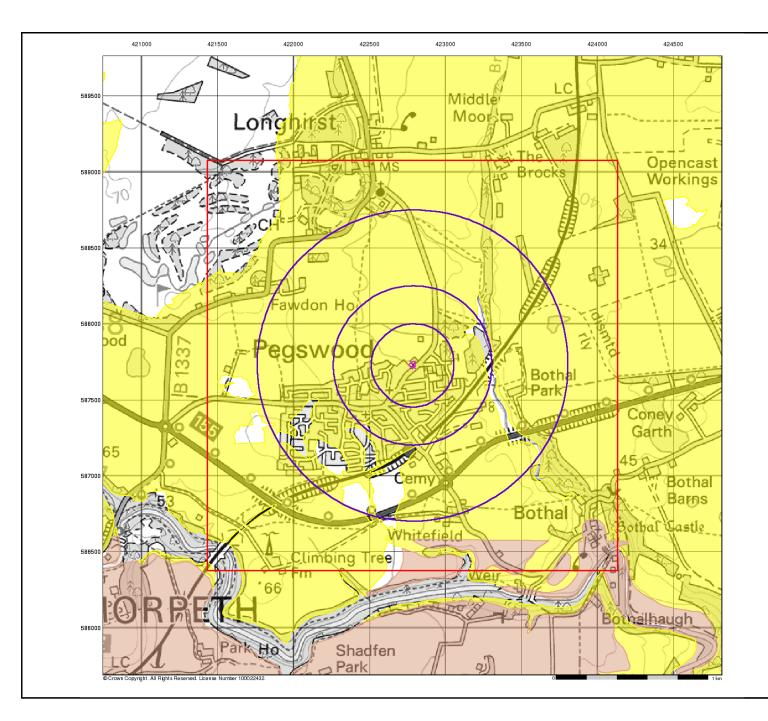


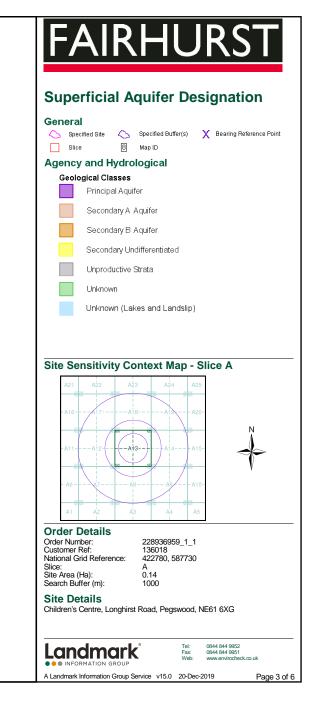


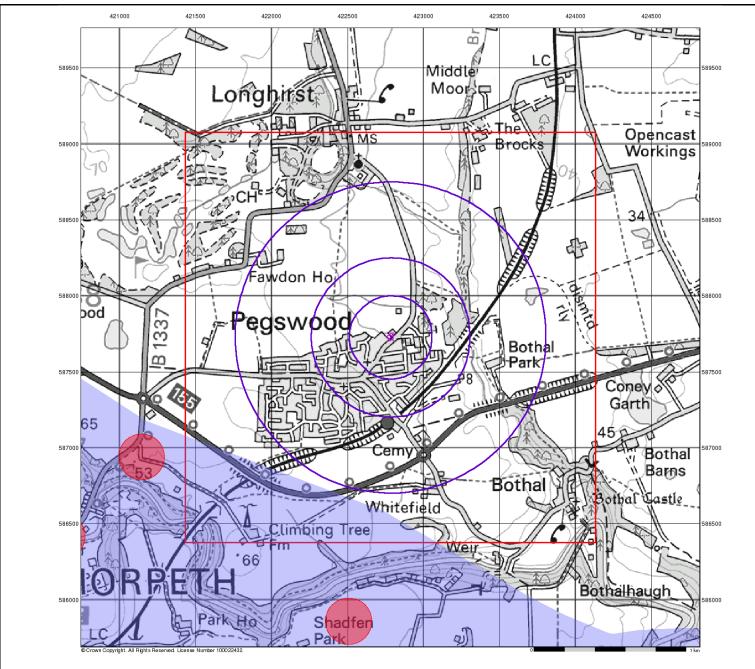


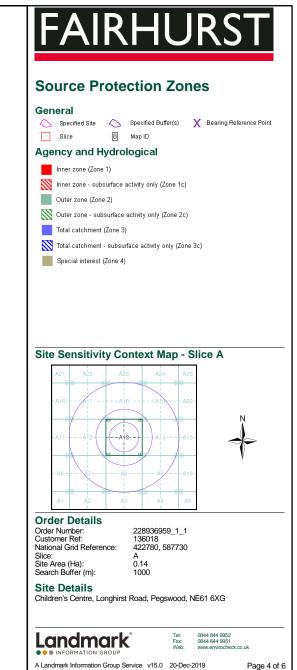


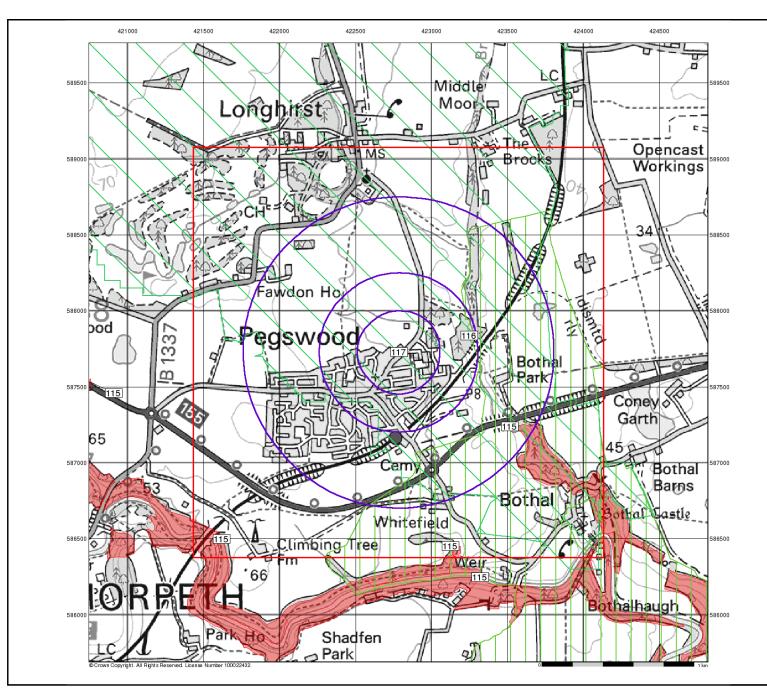


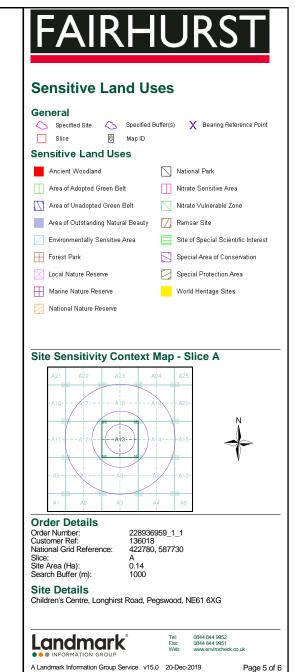


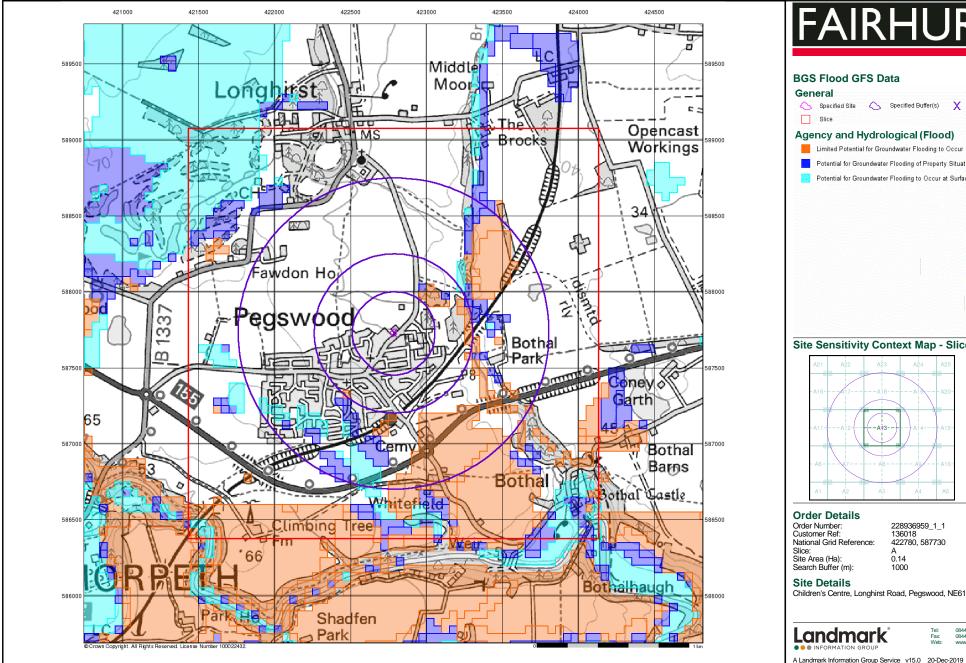


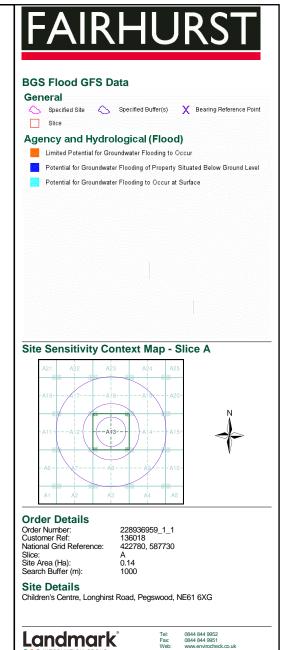




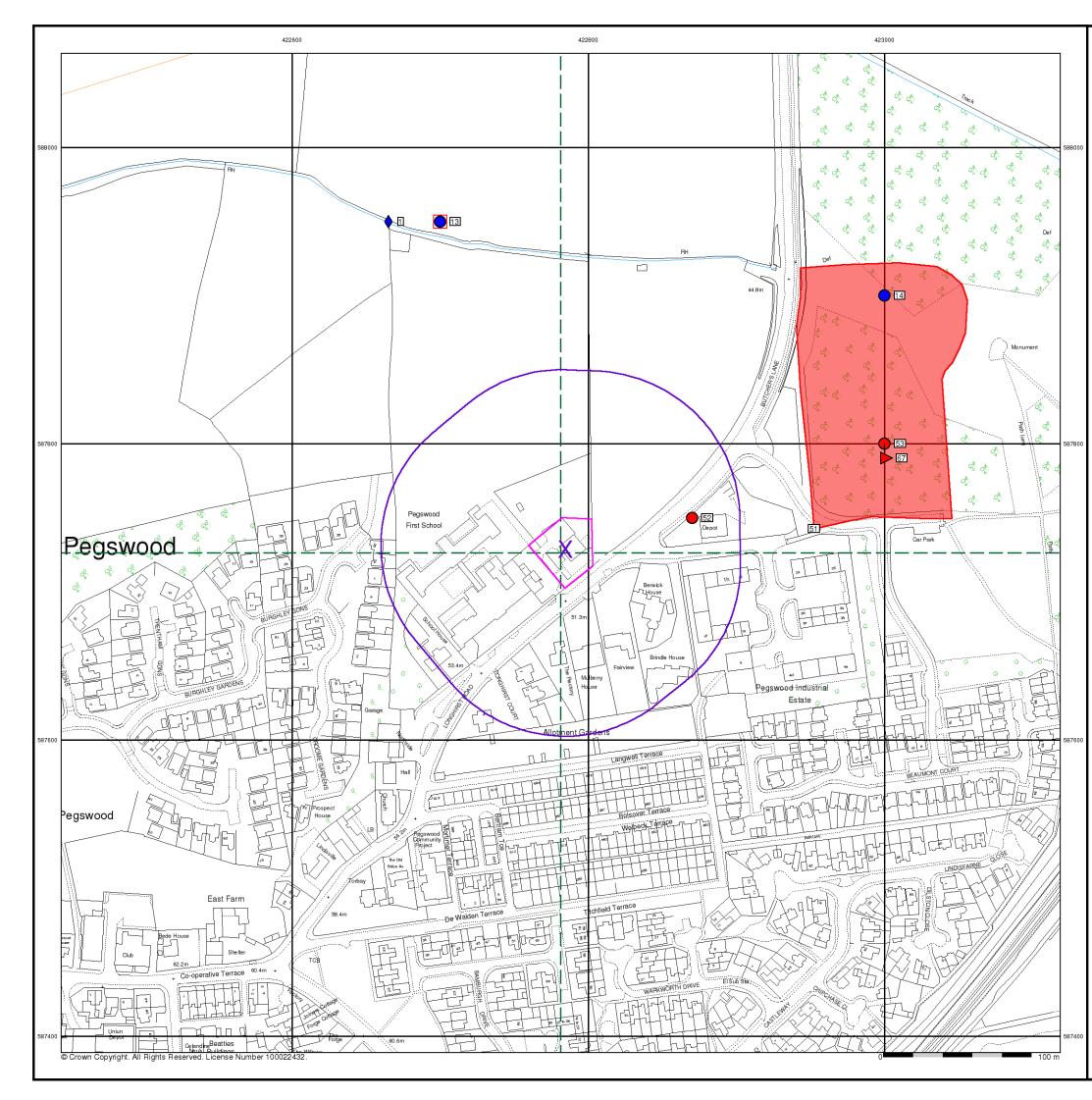








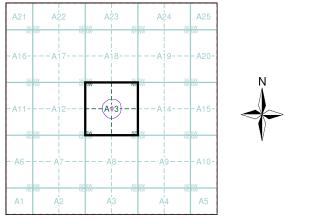
Page 6 of 6



## General



# Site Sensitivity Map - Segment A13



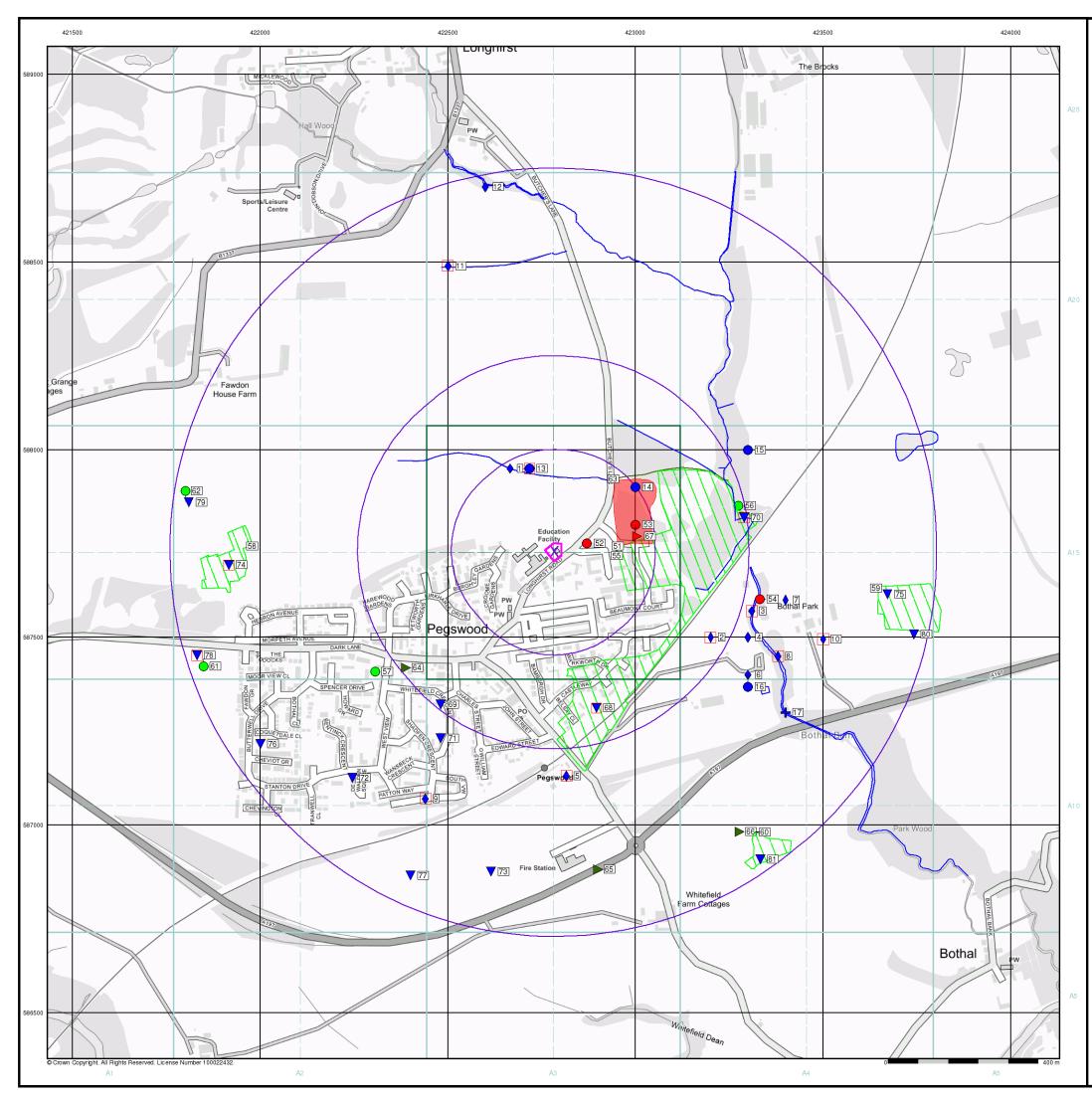
## **Order Details**

Order Number:	228936959_1_1
Customer Ref:	136018
National Grid Reference:	422780, 587730
Slice:	A
Site Area (Ha):	0.14
Plot Buffer (m):	100

# Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG

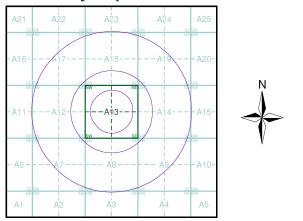




## General



# Site Sensitivity Map - Slice A



# **Order Details**

Order Number:
Customer Ref:
National Grid Reference
Slice:
Site Area (Ha):
Search Buffer (m):

228936959\_1\_1 136018 e: 422780, 587730 A 0.14 1000

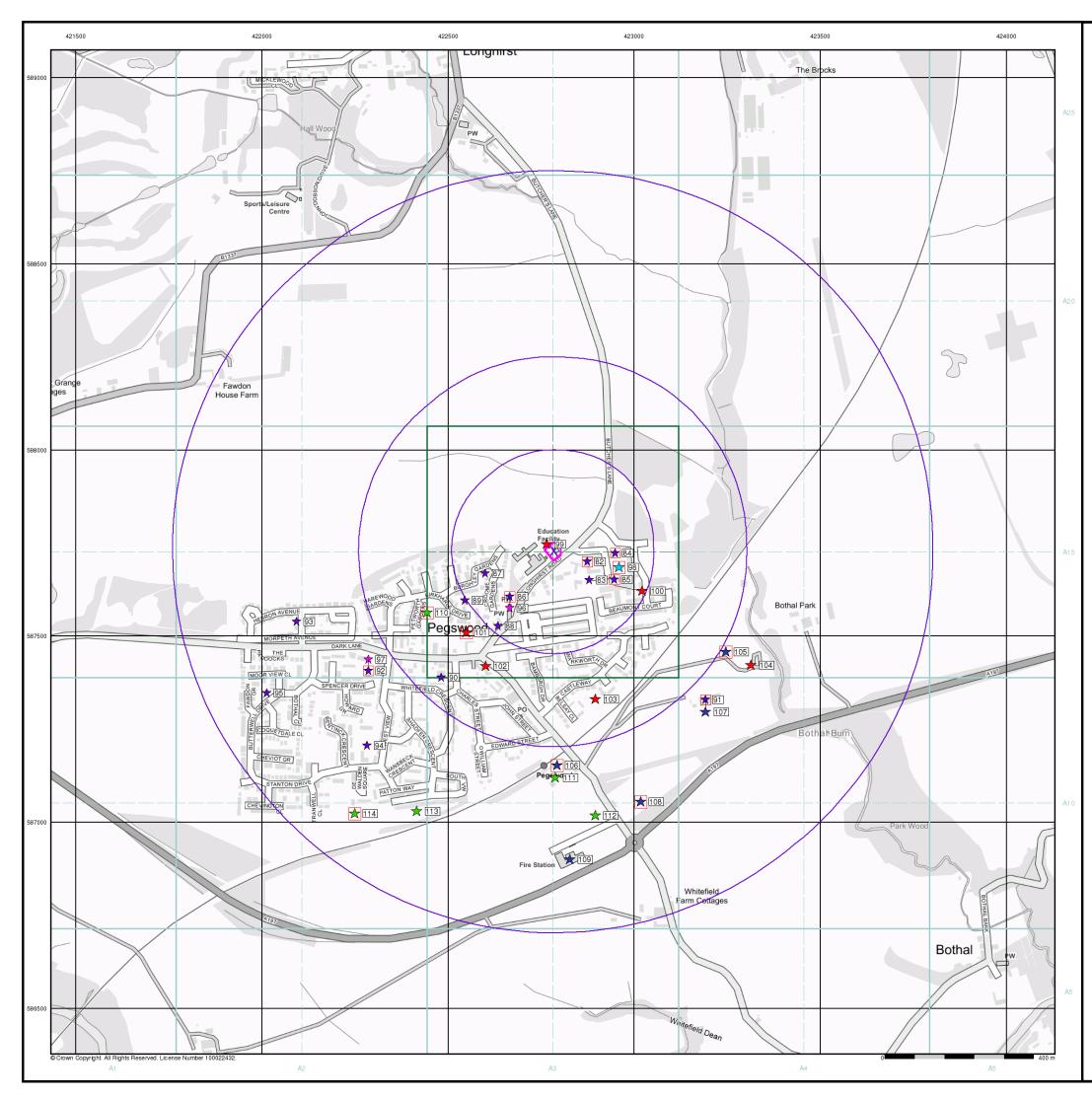
# **Site Details**

Children's Centre, Longhirst Road, Pegswood, NE61 6XG



0844 0844 www.

Tel: Fax: Web



# Industrial Land Use Map

# General



8 Map ID

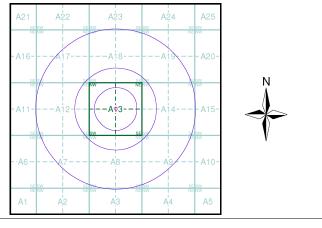
cified Buffer(s

Specified Site 
Specified Buffer(s) 
Specified Site

# 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

# Industrial Land Use Map - Slice A



# **Order Details**

 Order Number:
 228936959\_1\_1

 Customer Ref:
 136018

 National Grid Reference:
 422780, 587730

 Slice:
 A

 Site Area (Ha):
 0.14

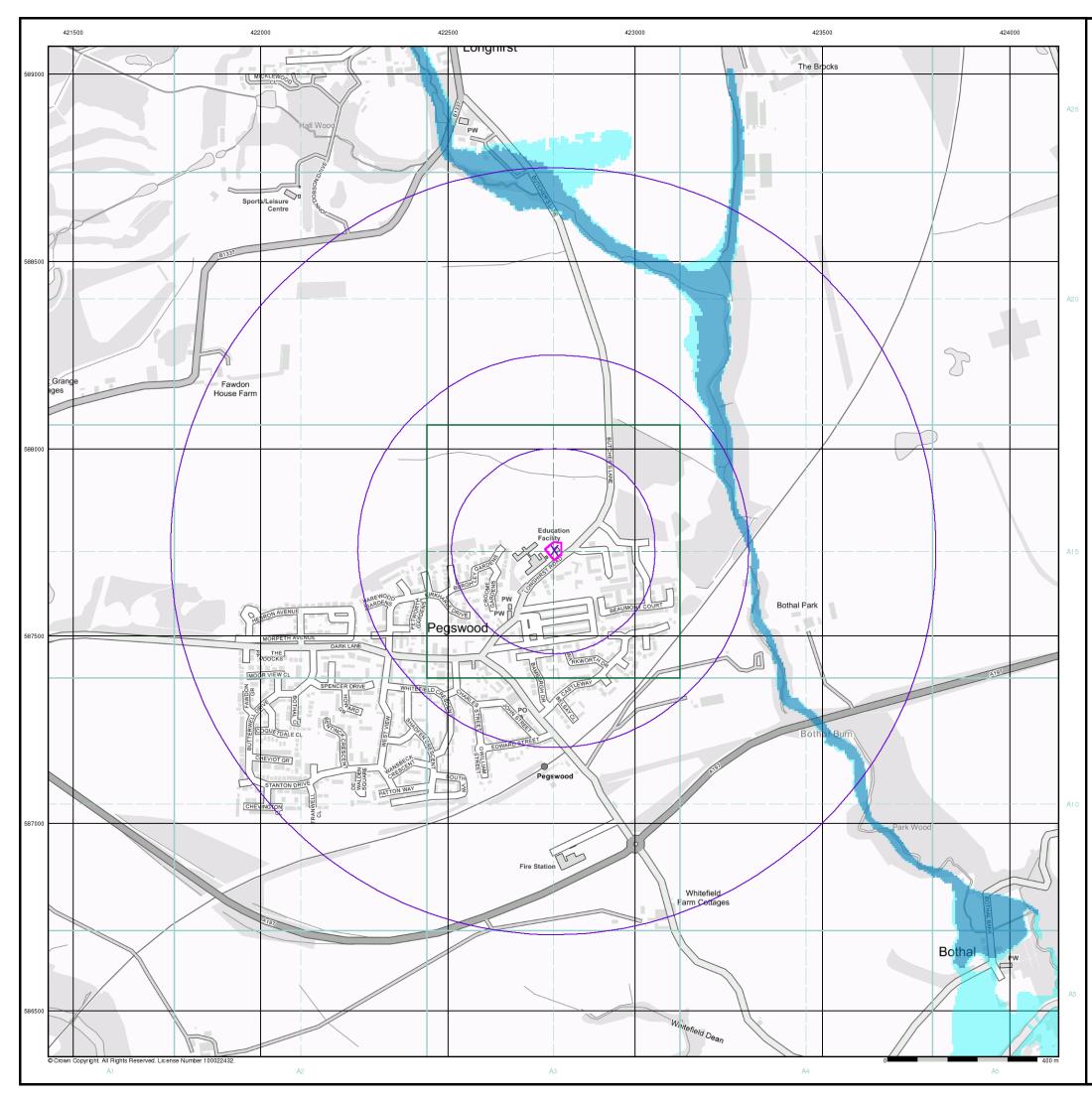
 Search Buffer (m):
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# Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG

Tel: Fax: Web:







## General

🔼 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)

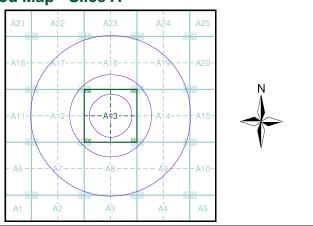
Area Benefiting from Flood Defence



Flood Water Storage Areas

--- Flood Defence

# Flood Map - Slice A



# **Order Details**

Order Number: Customer Ref: National Grid Reference: 422780, 587730 Slice: Site Area (Ha): Search Buffer (m):

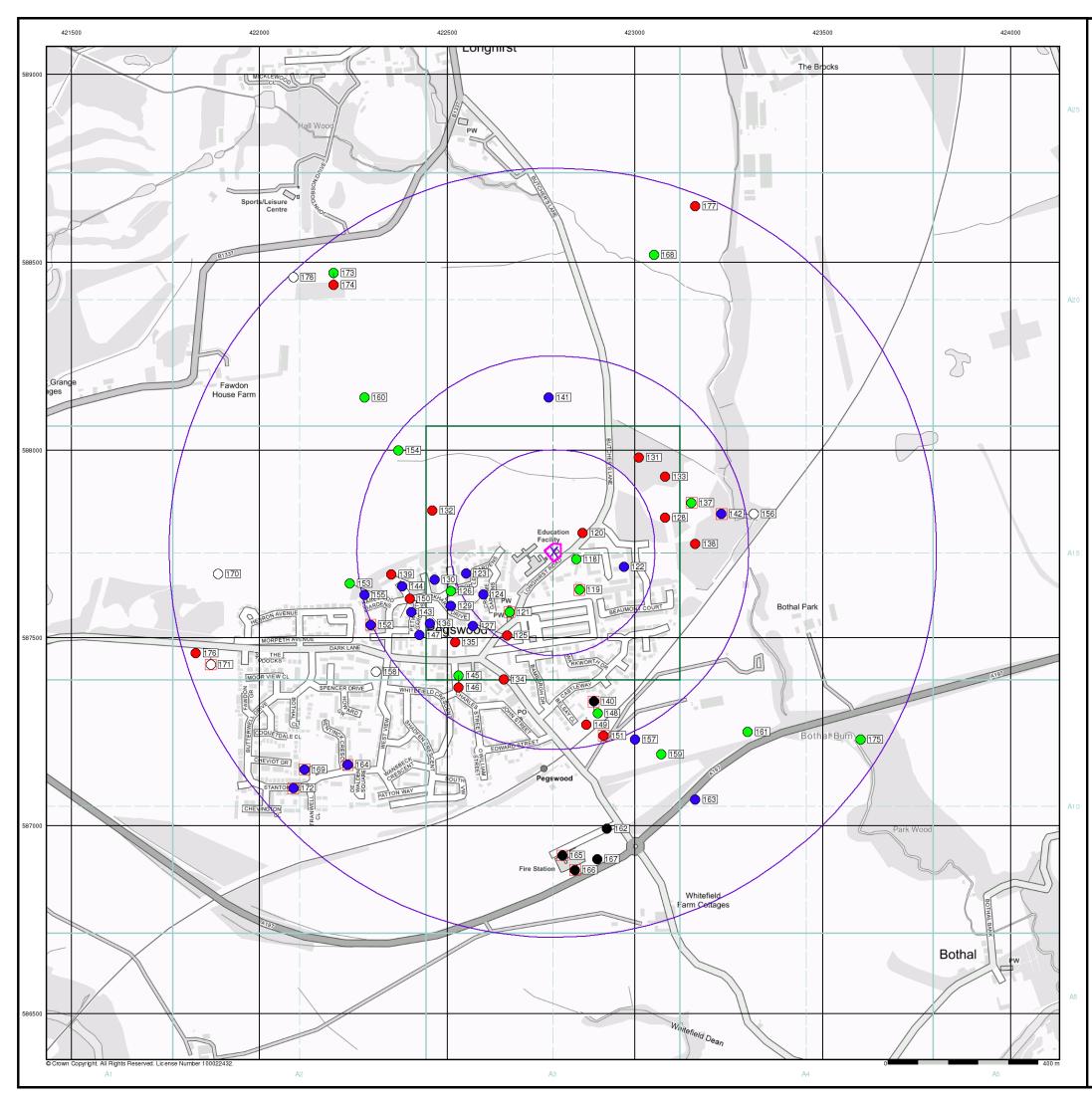
228936959\_1\_1 136018 А 0.14 1000

# Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG







## General

Specified Site
 Specified Buffer(s)
 Bearing Reference Point
 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 A

# **Order Details**

 Order Number:
 228936959\_1\_1

 Customer Ref:
 136018

 National Grid Reference:
 422780, 587730

 Slice:
 A

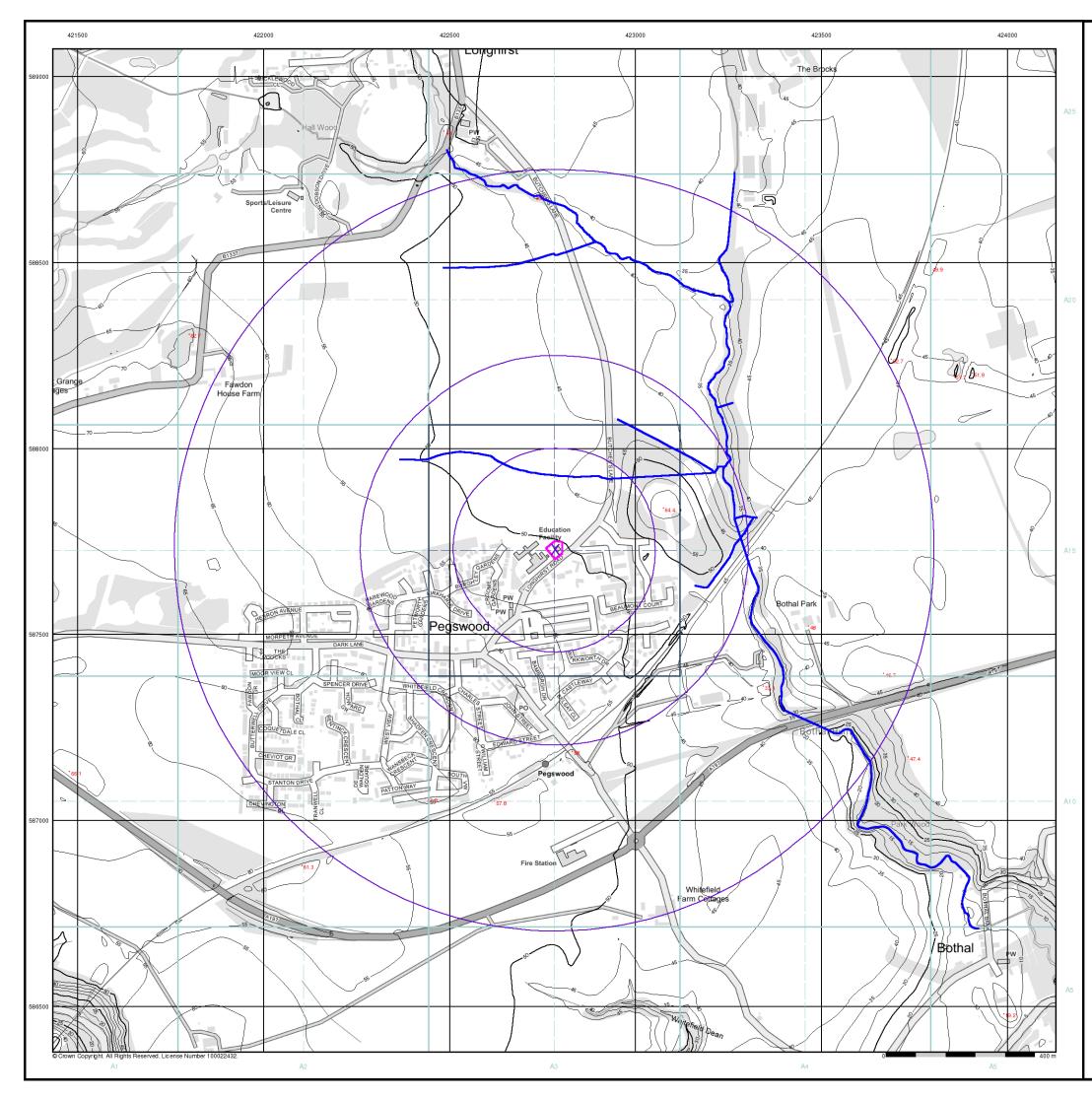
 Site Area (Ha):
 0.14

 Search Buffer (m):
 1000

# Site Details

Children's Centre, Longhirst Road, Pegswood, NE61 6XG





## General

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

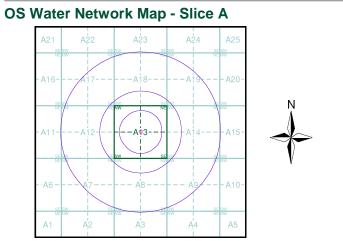
## **OS Water Network Data**



Master Contour Spot Height

167.3





# **Order Details**

Order Number: 228936959\_1\_1 Customer Ref: 136018 National Grid Reference: 422780, 587730 Slice: Α Site Area (Ha): Search Buffer (m): 0.14 1000

# Site Details

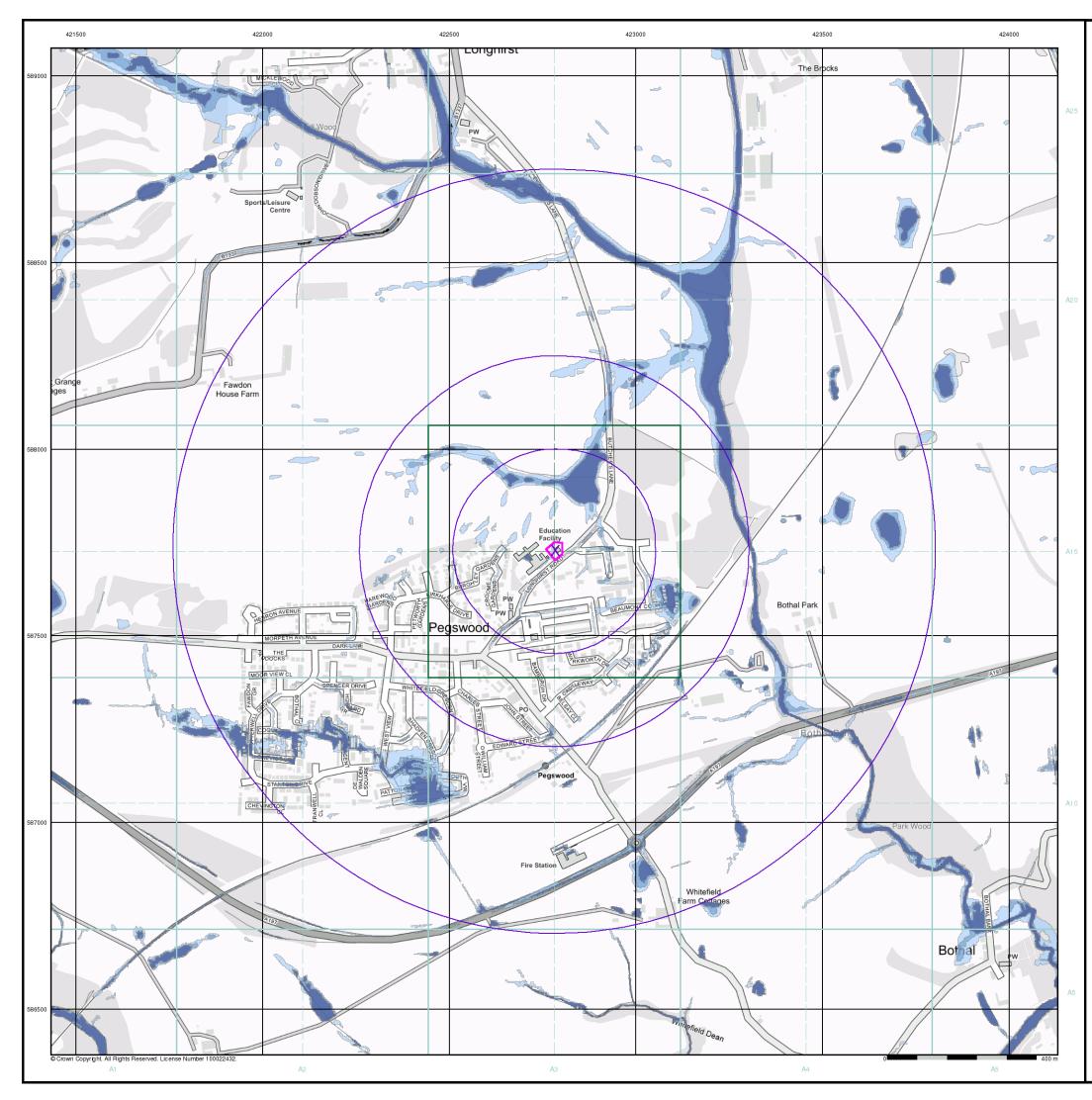
Children's Centre, Longhirst Road, Pegswood, NE61 6XG



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

Tel: Fax: Web:

A Landmark Information Group Service v50.0 20-Dec-2019 Page 5 of 6





## General

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

# **Risk of Flooding from Surface Water**

High - 30 Year Return	
	High - 30 Year Return

- Medium 100 Year Return
- Low 1000 Year Return

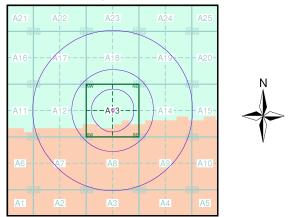
Suitability See the suitability map below

National to county County to town Town to street

Street to parcels of land

Property

# EA/NRW Suitability Map - Slice A



# **Order Details**

Order Number: Customer Ref: National Grid Reference: 422780, 587730 Slice: Site Area (Ha): Search Buffer (m):

228936959\_1\_1 136018 А 0.14 1000

# Site Details

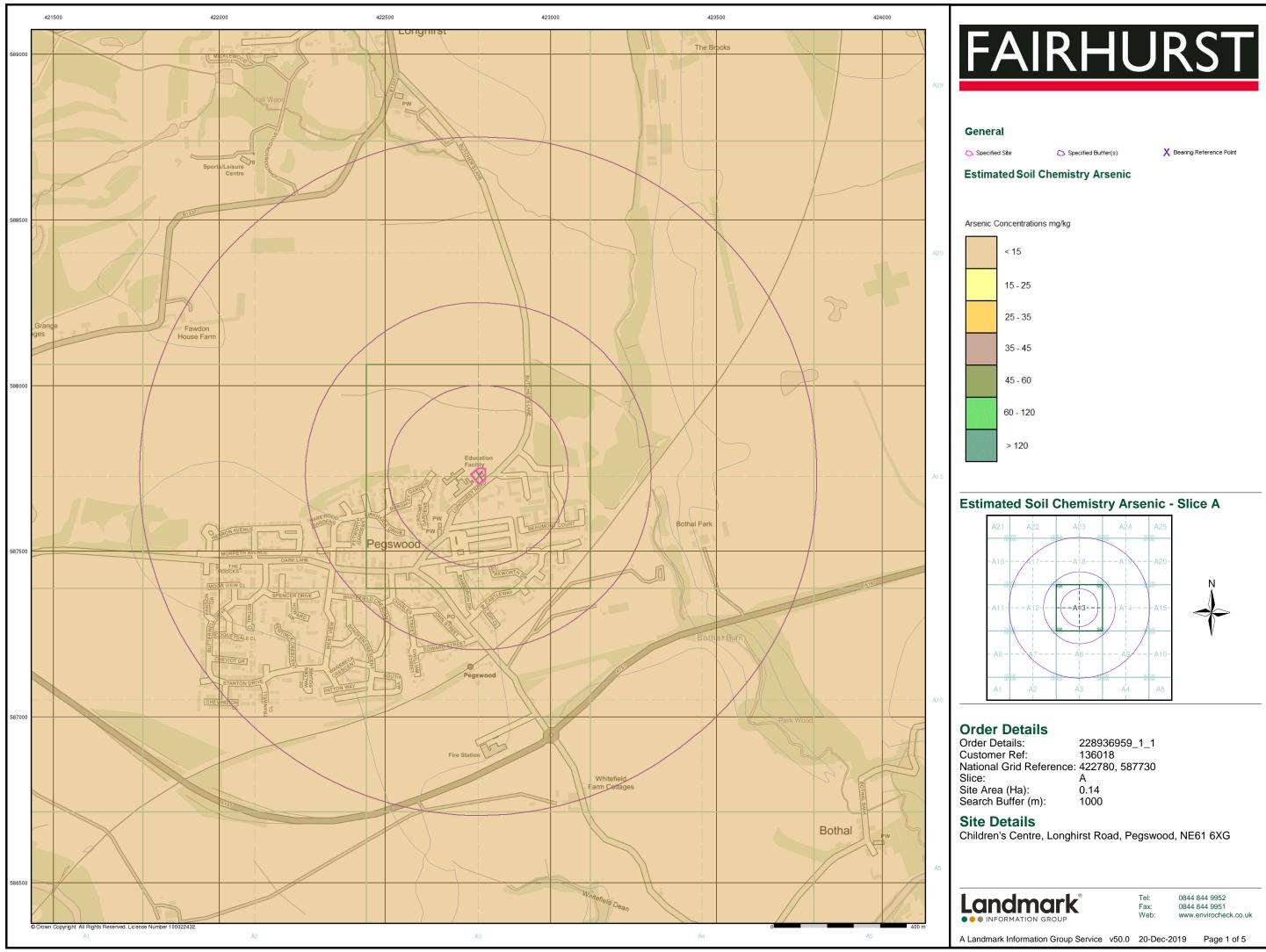
Children's Centre, Longhirst Road, Pegswood, NE61 6XG



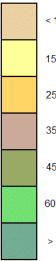
Tel: Fax: Web:

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

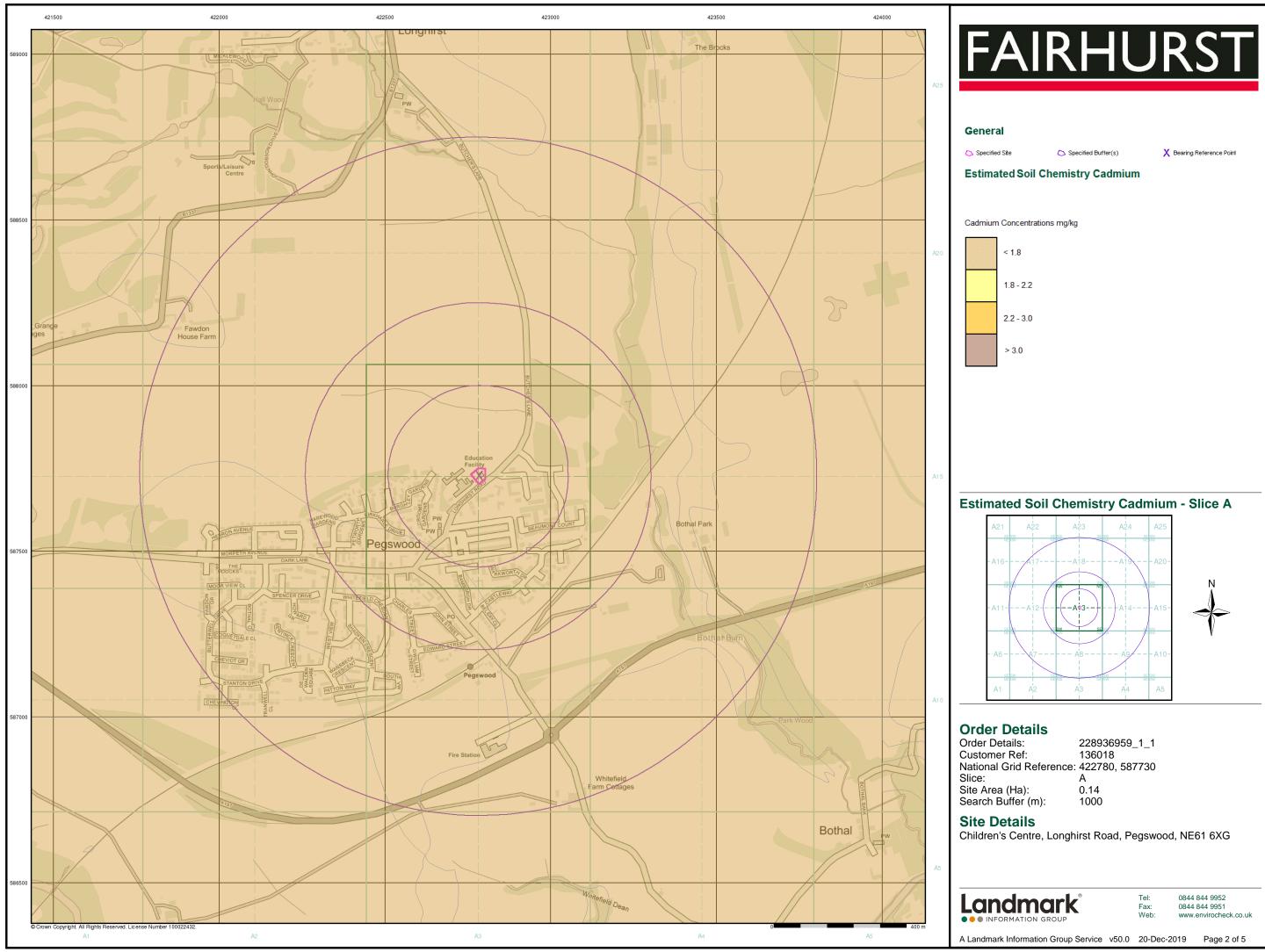
A Landmark Information Group Service v50.0 20-Dec-2019 Page 6 of 6



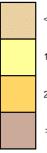


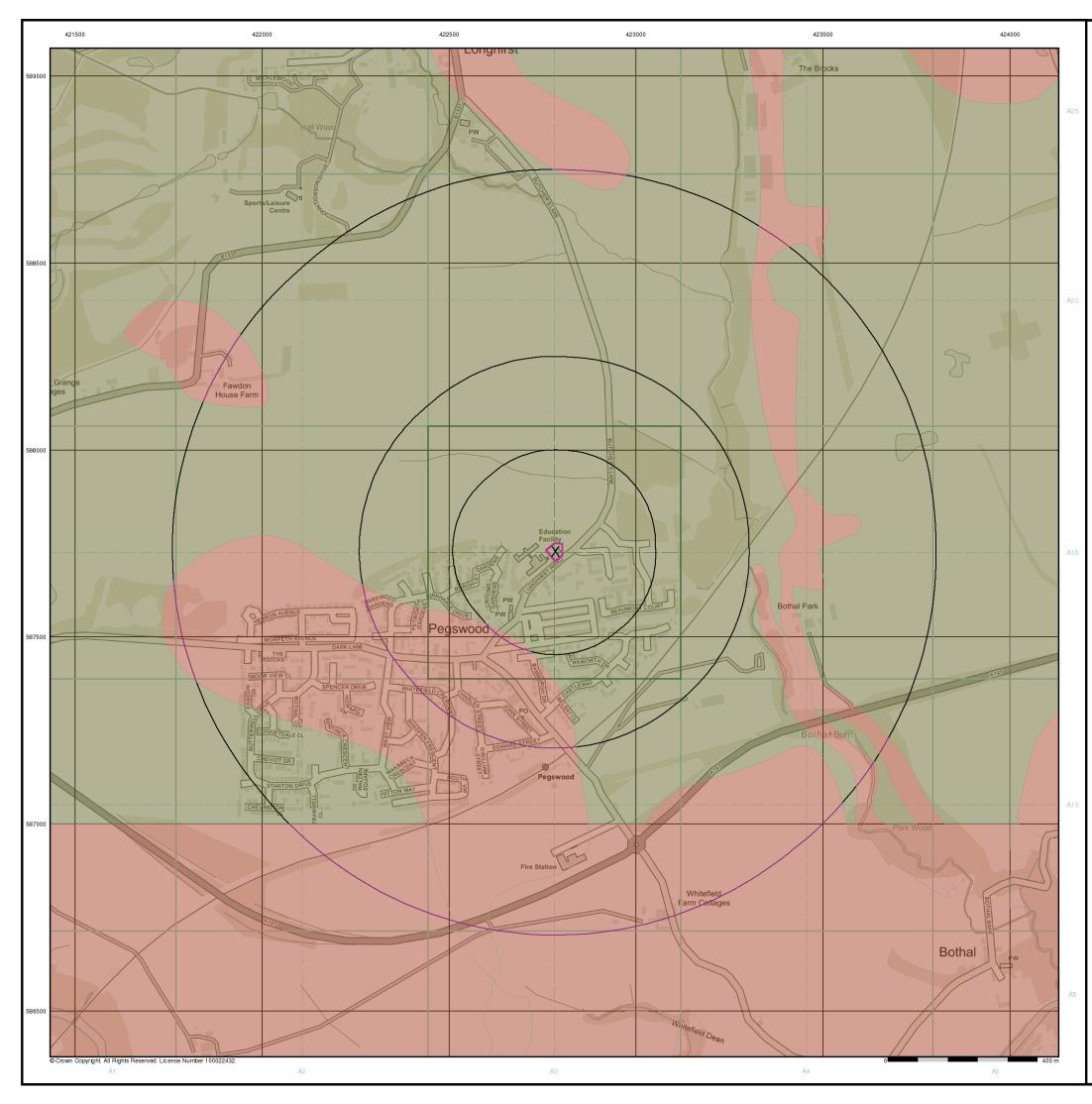














## General

🔼 Specified Site

Specified Buffer(s)

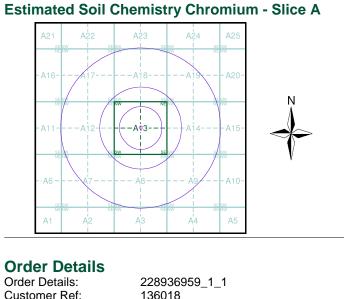
X Bearing Reference Point

# **Estimated Soil Chemistry Chromium**

Chromium Concentrations mg/kg







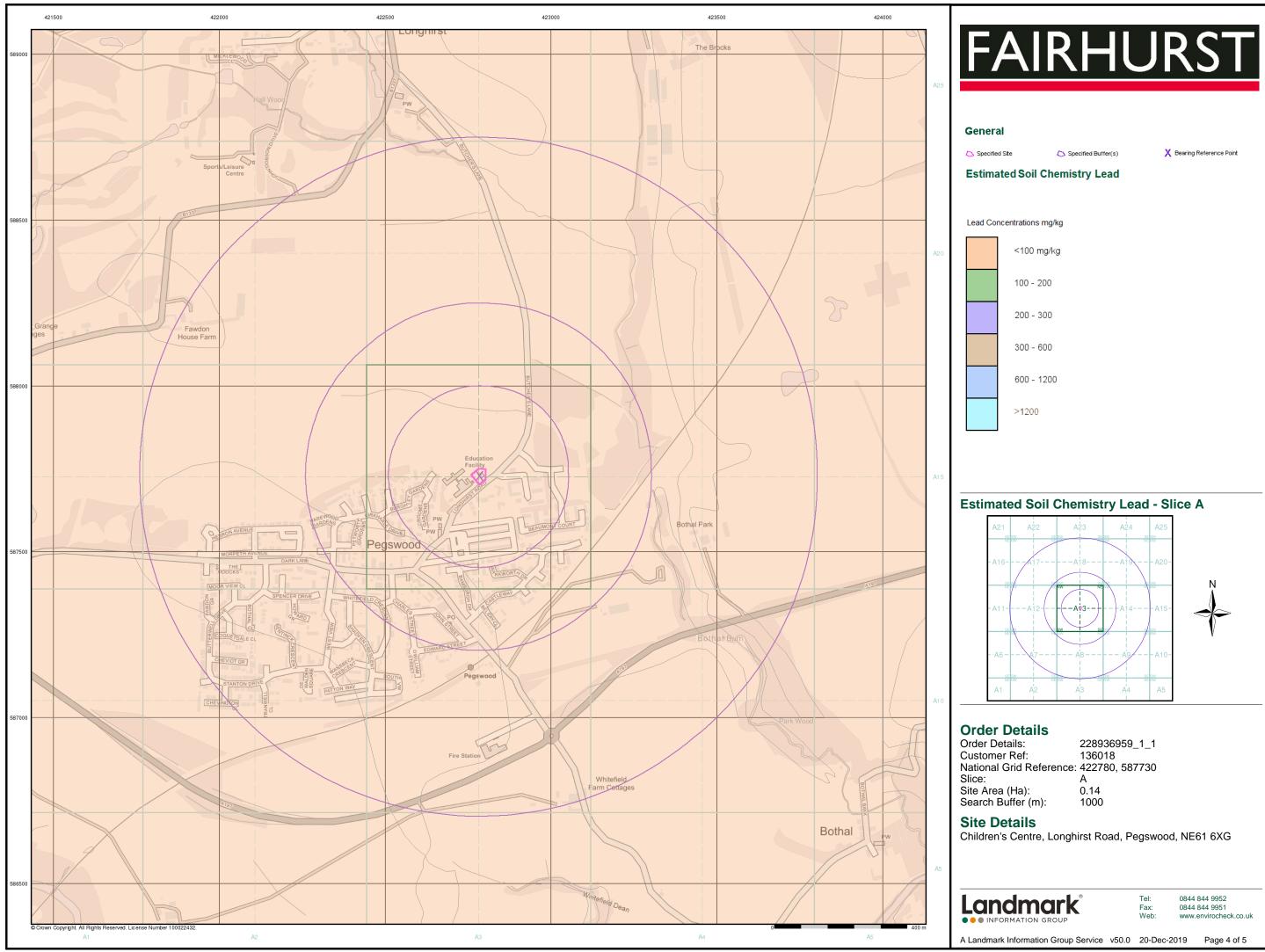
Customer Ref:136018National Grid Reference:422780, 587730Slice:ASite Area (Ha):0.14Search Buffer (m):1000

# Site Details

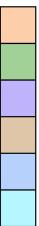
Children's Centre, Longhirst Road, Pegswood, NE61 6XG

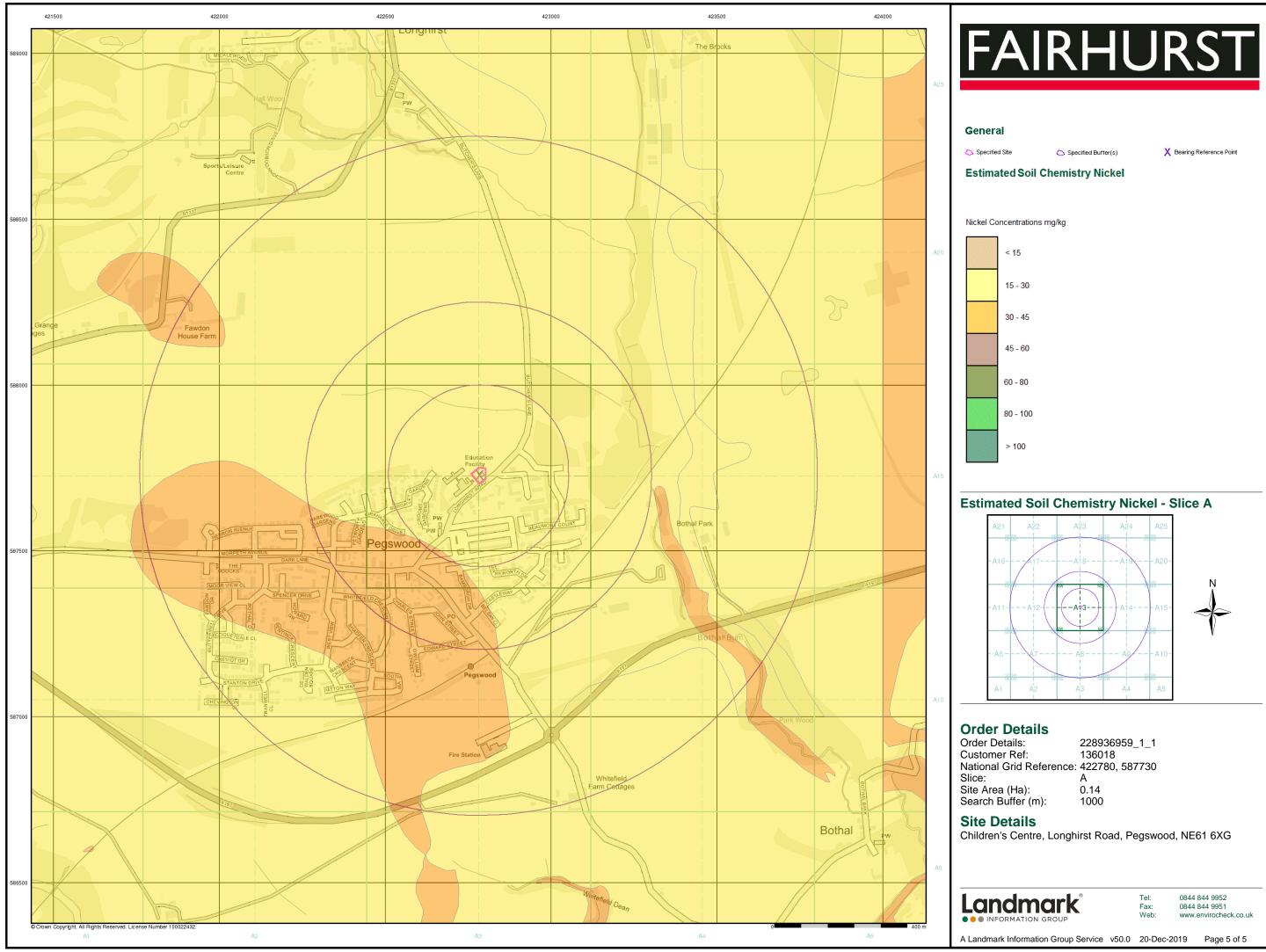


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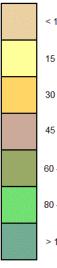














# **Appendix 3**

**Coal Authority Consultants Mining Report** 



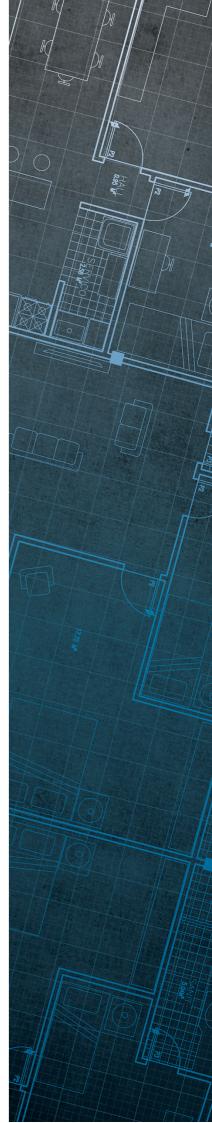
# Consultants Coal Mining Report

Longhirst Road Pegswood Northumberland NE61 6XG

Date of enquiry: Date enquiry received: Issue date: 20 December 2019 20 December 2019 20 December 2019

Our reference: Your reference:

51002213396001 136018



# Consultants Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

# **Client name**

FAIRHURST AND PARTNERS

# **Enquiry address**

Longhirst Road Pegswood Northumberland NE61 6XG



# How to contact us

0345 762 6848 (UK) +44 (0)1623 637 000 (International)

200 Lichfield Lane Mansfield Nottinghamshire NG18 4RG

www.groundstability.com

@coalauthority
 in /company/the-coal-authority
 f /thecoalauthority
 /thecoalauthority

# Approximate position of property



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# Section 1 – Mining activity and geology

# Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
ASHINGTON	BTM. MAUDLIN	Coal	5VJI	20	Beneath Property	4.3	North-East	70	1944
ASHINGTON	BTM. MAUDLIN	Coal	5VJJ	23	East	4.3	North-East	70	1950
unnamed	BRASS THILL	Coal	5PD5	43	West	5.5	North	80	1900
unnamed	BRASS THILL	Coal	5PL4	45	Beneath Property	4.1	North-East	80	1900
PEGSWOOD	HUTTON	Coal	584Z	76	Beneath Property	2.6	North-East	80	1875
PEGSWOOD	HUTTON	Coal	588Y	76	East	3.4	East	80	1941
PEGSWOOD	HUTTON	Coal	58BY	76	West	2.5	North-East	80	1929
PEGSWOOD	HARVEY	Coal	5F2L	105	Beneath Property	4.1	West	50	1932
PEGSWOOD	HARVEY	Coal	5F2M	108	North-West	4.2	West	50	1932
PEGSWOOD	TOP BUSTY	Coal	583T	138	Beneath Property	4.9	North-East	80	1917
PEGSWOOD	TOP BUSTY	Coal	582T	138	Beneath Property	4.6	East	80	1916
PEGSWOOD	TOP BUSTY	Coal	580T	139	Beneath Property	3.6	North-East	80	1919
PEGSWOOD	TOP BUSTY	Coal	581T	142	East	3.9	North	80	1919
PEGSWOOD	BTM. BUSTY	Coal	589V	153	North	4.4	North-East	70	1938

# Probable unrecorded shallow workings

None.

# Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

# **Mine entries**

None recorded within 100 metres of the enquiry boundary.

# Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

NC537	10272	NC618
13766	13121	NC584
NC619	NC92	NC604

Our records show we have more plans than those shown above which could affect the enquiry boundary.

**Please contact us on 0345 762 6848** to determine the exact abandoned mine plans you require based on your needs.

# **Outcrops**

No outcrops recorded.

# **Geological faults, fissures and breaklines**

No faults, fissures or breaklines recorded.

# **Opencast mines**

Please refer to the "Summary of findings" map (on separate sheet) for details of any opencast areas within 500 metres of the enquiry boundary.

# **Coal Authority managed tips**

None recorded within 500 metres of the enquiry boundary.

# **Section 2 – Investigative or remedial activity**

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

# Site investigations

None recorded within 50 metres of the enquiry boundary.

# **Remediated sites**

None recorded within 50 metres of the enquiry boundary.

# **Coal mining subsidence**

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

# Mine gas

None recorded within 500 metres of the enquiry boundary.

# Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

# Section 3 – Licensing and future mining activity

# Future underground mining

None recorded.

# **Coal mining licensing**

None recorded within 200 metres of the enquiry boundary.

# **Court orders**

None recorded.

# **Section 46 notices**

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

# Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

# Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

# **Section 4 – Further information**

The following potential risks have been identified and as part of your risk assessment should be investigated further.

# **Development advice**

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at groundstability@coal.gov.uk.

# Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at groundstability@coal.gov.uk.** 

# Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

# Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

# Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

# **Mine entries**

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

# Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

# Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

# **Geological faults, fissures and breaklines**

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

# **Opencast mines**

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

# **Coal Authority managed tips**

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

# Site investigations

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

# **Remediated sites**

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

# **Coal mining subsidence**

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

# **Mine gas**

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission.

# Mine water treatment schemes

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

# Future underground mining

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

# **Coal mining licensing**

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

# **Court orders**

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

# **Section 46 notices**

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

# Withdrawal of support notices

Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

# Payment to owners of former copyhold land

Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

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# Summary of findings

The map highlights any specific surface or subsurface features within or near to the boundary of the site. Key Irack Approximate position of the enquiry boundary shown Unlicensed opencast site House Track ETL Track El Ps ETL Drai Monument path (um) 王明 First School Depd Paun Car Park Pegswood atta 10 The Estate Ð 1000hh Allotment Gardens Subwa 3 ĩ B 10 -8 Pegswood 🖂 F Fast Farm LB F- Ga 11 Of Posts arm Shelte 0p Cookswell perative Co Quer 11 0.5 Çott idge Buildings Gard ELSUD Sta 0 D - BC Shelte aon Ē tation Cottage El Sub Sta CCCCCC Path (um) the the How to contact us Dry 0345 762 6848 (UK) Geologicado P Station MP 0 +44 (0)1623 637 000 (International) Ch Telecommunication) www.groundstability.com 422500 422600 422100 422200 422300 422400 422700 423000 422000 Sp422800 vilion 422900 423100





## Appendix 4

**BGS Historic Boreholes** 

## DUNELM DRILLING CO.

sh Geological	ouncj	Groun	id Leve			e, pe	ics wo	DD.		
		Date	4	IN192 BOREHOLE No.	3				·····;	*****
	Depth	Thick- ness	Legend	Description of Strata	Type of Sample	c kN/m²	M %	ø	<b>Density</b> Kg/m <sup>3</sup>	
		2.40		SOFT TO FIRM BROWN SANDY CLAY WITH SANDSTOME FRAGMENTS.						
	2.40	0.60		WEATHERED DK. BROWN SANDSTONE						
sh Geologica		1.75	· · · · · · · · · · · · · · · · · · ·	HARD LIGHT BROWN SANDSTONE	-		ogical Surve			
	6.50	1.75		HARD GREY SANDSTONE						
		4.50	· · · · · · · · · · · · · · · · · · ·	HARD LIGHT BROWN SANDSTONE						
sh Geologica	slivey	1.00	·····	HARD GREY SANDSTONE		Brilish Geo	logical Survi			
	12.00	1.80		hard grey snale						
	13.80	2.70	· · · · · · · · · · · · · · · · · · ·	HADD WEEY SANDSTONE						
sh Geologica	12.35	1.25 0.25	· · · · · · · · · · · · · · · · · · ·	HARD LIGHT BRUN SMOSTONE HARD GREY SANDSTONE		British Gei	logical Sune			
-	20.00	2.00	• • • • • •	ALTERNATE MEDIUM BEDDED LAYERS OF MARD GREY AND BROWN SANDSTONE			-			
				NO LATTER, NO GAVITTES, NO COAL .						

Page 1 | Borehole NZ28NW116 | Borehole Logs



Version 2.0.6 BGS ID: 805718 : BGS Reference: NZ28NW116 British National Grid (27700) : 422860,587780

Report an issue with this borehole

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< **Prev** Page 1 of 10 • Next > >>

	NZ 28NW 116	6-in	ch Map		B∕H Regd.No
SECTION OF Pegewo British Geological Survey boreho PURPOSE	ood Colliery, 'B' Pit Shaft and Die. British Geological Survey	(County, Sh Britis <b>NZ</b> (Nat. Grid, Si	28 NW	AN S	151/ 151d
	¢ 2884. 87802.	Attach	tracin	g from a possibl	mapor e
DATE OF SINKING OR	t commenced relative to 0.d. 174.98* 4.0.D. E Boring c. 1868	NZ	EGIS 28 N NO.		
Brite Bart bore	hole record incorporated into Shaft recor	đ. <sub>British Cooli</sub>	gical City	bruar	y 1970.
GEOLOGICAL CLASSIFICATION	NATURE OF STRATA		ESS	D FEET	EPTH
· · ·	No record of Strata			56	6
Maudlin (H)	ÇOAL	2	6	59	0
	No record of Strata				10
Low Main (J)	COAL	2	7.	80	5
	No record of Strata			129	8
Brass Thill (K)	COAL		2	132	10
British Geological Survey	Seatearth, hard	British Geol	gical Surv	134	0
	Grey metal			149	0
	Sandstone, grey			151	6
	Grey metal			156	3 .
	Sandstone, white, strong	* * * ****		197	8
	COAL	1		198	10
	Seatearth			200	2
	Black metal with ironstone girdles			208	2
British Geological Survey	Blue/Grey metaleological Suivey	British Geol	gical Surv	212	10
	Black metal with Lussel Bed			216	. 5
	Blue metal soft to 217'5", hard to buse			218	11
Hutton (L)	COAL	2	10	221	9
				222	7
	Grey metal			224	8

1

## Page 1 | Borehole NZ28NW116 | Borehole Logs

	Sandstone,	crey, soft				234	2
	Blue metal		 ····· ·			237	3
British Geological Survey	COAL	British Geological Survey	 	📙 Brit <b>o</b> n Geolo	ica <b>4</b> 5urve	237	7
			 				· · · · · ·

1/6/2020

### Page 2 | Borehole NZ28NW116 | Borehole Logs

Version 2.0.6 BGS ID: 805718 : BGS Reference: NZ28NW116 British National Grid (27700) : 422860,587780 Report an issue with this borehole

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Geological Survey

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لا Form P.71 (Series 610)	- 2 -	8-in	ch Map		B/H
SECTION OF Pegs	wood Colliery, '3' Pit Shaft and borehole.	NZ 2	8 NW	/116	121
GEOLOGICAL tish Geological CLASS I FICATION		THICKN	IESS	DEP	тн
	union occurginario annoj	FEET	JN.	FEET	IN.
	Seateath BGS REGISTRATION			239	3
	Grey metal NZ 28 NW /			241	0
	Blue metal PAGE NO. )			243	0
	Sandstone, grey, hard	n dat in hit hit taan af a sak d		248	7
х 	Blue metal			249	9
	Sandstone, grey to 252'-1", white to base			255	8
			· · · · · · · ·	255	10
	Blue metal				
tish Geologic <b>Plessey (M)</b>	COAL British Geological Survey	Brit <b>û</b> n Geol	igic <b>ió</b> Sur	257	4
	Crey metal			260	7
	Blue metal			267	0
	Sandstone, white			269	10
	Blue metal			272	0
	Sandstone, white, hard			272	9
	Blue metal		, .	278	8
	Sandstone, grey			279	1
	Blue metal			285	5
	British Geological Survey	British Geol	ogical Sur	5)	11
	Whin or Ironstone band	· · · · · · · · · · · · · ·		285	
	Sandstone, grey			293	0
	Blue metal	· · · · · · · · · · · · · · · · · · ·		300	9
	Sandstone, grey			<b>30</b> 2	11
	COAL	0	3	303	2
	Sandstone, grey			309	11
	Blue metal			313	3
Top Harvey(N1)	COAL	2	2	315	5
tish Geologica Survey rs to thin	- Drillevier Dontlonie of Consort	Bhilish Geol		316	
at the about	Sandstone			324	9
<pre>/ 'to the // (rth)</pre>				········	
Bottom Barvey	COAL with Bands	1	10	326	7
(N2)	Seatearth			327	1
	Sandstone, grey			355	10

Page 3 | Borehole NZ28NW116 | Borehole Logs

British **Geological Survey** 

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Version 2.0.6 BGS ID: 805718 : BGS Reference: NZ28NW116 British National Grid (27700) : 422860,587780 Report an issue with this borehole NATURAL ENVIRONMENT RESEARCH COUNCIL

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Form P.71 (Series 610)	<b>- 3 -</b>	8-in	ch Nap		B/H
SECTION OF	wood Colliery 'S' Pit Shaft and Borehole	NZ 26	3 NW	/116	12t
		L	=/		
British Geological SuGEOLOGICAL CLASSIFICATION	NATURE OF STRATA	FEET	ESS/	DEP FEET	TH IN.
. (	COAL	2	0		
}	BOS REGISTRATION NO		8		•
iodge (0)	Seatearth NZ 28 NW / 116	0			
	COAL PAGE NO. 3	0	2	358	8
	Seatearth	· · · ·		359	11
	Sandstone			361	0
	Seateath, dark			362	0
	Sandstone, white, hard			364	0
	Crey metal British Geological Survey	- British Geol	ogical Son	366	6
	COAL	0	6	367	0
	Seatearth			369	4
	Sandstone	14 at a a a a a		375	6
	Blue metal	× 11 102 103 10 11 1 10		377	0
	Grey metal			379	
Top Tilley (P1				380	
Top Tilley (1)		••••			
	Sandstone, white to 391'7", grey to base			398	
British Geological Survey	Blue metal	· British Geol	ogical-Sue	398	8
Bottom Tilley ( (P2)	COAL	<b>1</b>	1		
(The band of this seam	Band	0	10		
thickens up to ( 4'6" within 100	COAL	1		401	10
yards to the	Seatearth	······		403	4
North of the Shaft.)	Sandstone			405	0
	Blue metal			409	4
	Sandstone, grey			423	6
	Blue metal			430	
British Geological Survey	Grey netal		agical Su	431	
``````````````````````````````````````	Sandstone, grey to 455'3", white to				
- +	455'5", grey to base			456	4
\$	COAL	2	5		
Top Busty (1)	Band.	0	1		
9					

COAL

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## Page 3 | Borehole NZ28NW116 | Borehole Logs

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British Geological Survey .

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Form P.71 (Series 610)	- 4 -	6-in	ch Map		B/H
SECTION OF Pegawo	od Colliery 'B' Pit Shaft and Borehole	NZ 2	9 NW	/116	18g
tish Geological SuGEOLOGICAL	BUNATURE OF STRATA	THICKN	ESS	DEP	TH
		FEET	IN.	FEET	IN.
	Sandstone, white to 465'1", grey and hard to base			469	7
1	Blue metal BGS REGISTRATION NO			470	7
	Dark metal NZ 28 NH / 1/6			470	11
	Seatearth PAGE NO. 4			47.3	2
	Sandstone, grey, hard			482	6
Botton Busty (Q2)	COAL	1	10	484	4
(This seam thins out about 1'5"	Seatearth			485	0
boundary)	Sandstone, crey	DHIISH GEU	oğıcal au	506	3
	Crey metal			507	4
d	COAL	3	7		
Threequarter(h)		0	2		+
(This seam splits into 2 going to (	Dark band	, v			
East and West ( from Shaft)	COAL	3	3	514	4
	Seatearth	a1		520	10
	Blue metal			521	4
	Brat and COAL	0	7.	521	11
ish Geological Survey	Blue metal <sup>stlich</sup> Geological Suney	"British Geo	ogical Su	530	4
	Shale, dark			531	1
(	COAL	0	.3		
{	Band	0	2		
<b>}</b>	COAL				
C .		<b>O</b>	11	532	5
	Seateath			533	7
	Sandstone, white			536	1
	Iron panel			536	7.
ish Geological Survey	Blue, strong Geological Survey	British Geo	legical Su	538	5
	Seatearth, sandy	· · ···· · ·		547	9
· · ·	Sandstone, rooty in top 7", grey to base			555	7
:	Iron panel			556	2
:	Sandstone, grey to 557'9", white to base			561	6
	Blue			562	9
ŀ		t		202	7

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Report an issue with this borehole

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Form P.71 (Series 610)	- 5 -	6-in	ch Map		8/H
SECTION OF Pegs	wood Colliery'B' Shaft and Borehole	NZ 2	8 NW	/116	Ú.
British Geological Sugeological CLASSIFICATION	BITINATURE OF STRATA	THICK	IESS /	DEPT	ſH IN,
<sup>b</sup> <sup>3</sup> rockwell (S)	COAL BGS REGISTRATION NO Band NZ 28 NW 1/C COAL PAGE NO. 5	0	11 1 1	564	10
0 , • - 3	Note The above seam section is taken from a colliery officials strata book.				
	<u>Mote</u> A borehole was sunk from the Top Busty (Q1) to the Victoria (T) prior to the Shaft being deepened to the Brockwell (S)	- British Geo	uicai Sur		
	The borehole record to the Brockwell (S) proved totally unreliable when compared with the shift deepening record. Therefore the lower pertion of the borehole record (shown below) should be considered a doubtful record.		· · · · · ·		
NZ 28 NW 151d	Sandstone			569 571	7
Brockwell (S)	Blue metal COAL Band	1	2		
British Geological Survey	COAL	British Geo	<b>4</b> 180	574	2
	Seatearth		· · · · · · · · · · · · · · · · · · ·	574 583	
	Sandstone Blue metal			583	2
	Grey metal			584	9
	. Seatceth.			587	5
-	Sandstone grey			594 595	9
	Sandstone, White mak Sume	- British Geo	nginal-Sur	608	
see al.	Ironstone			-615	
- Victoria (T)	Sandstone, white COAL	2	2	627 629	
VIGNERA (1)	Seateath			632	1
	Sandstone, grey		•	635	5

÷.			
	DHUSH		

States and the second second

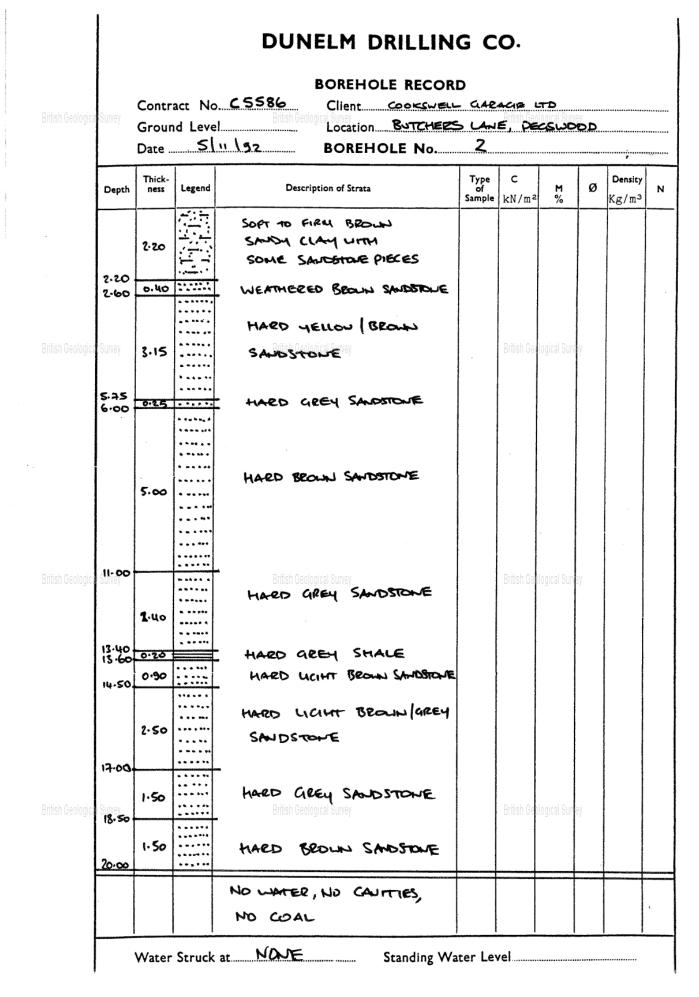
Page 5   E	Borehole NZ28NW116   Borehole	Logs
BASE OF BOREHOLE		
		ALTERNATION AND A
en en en en en en en British-Geologic		- Unitsh Geol/gical Sunky



Version 2.0.6

BGS ID: 18405817 : BGS Reference: NZ28NW369 British National Grid (27700) : 422844,587672

Report an issue with this borehole





Version 2.0.6

BGS ID: 18405816 : BGS Reference: NZ28NW368 British National Grid (27700) : 422852,587628

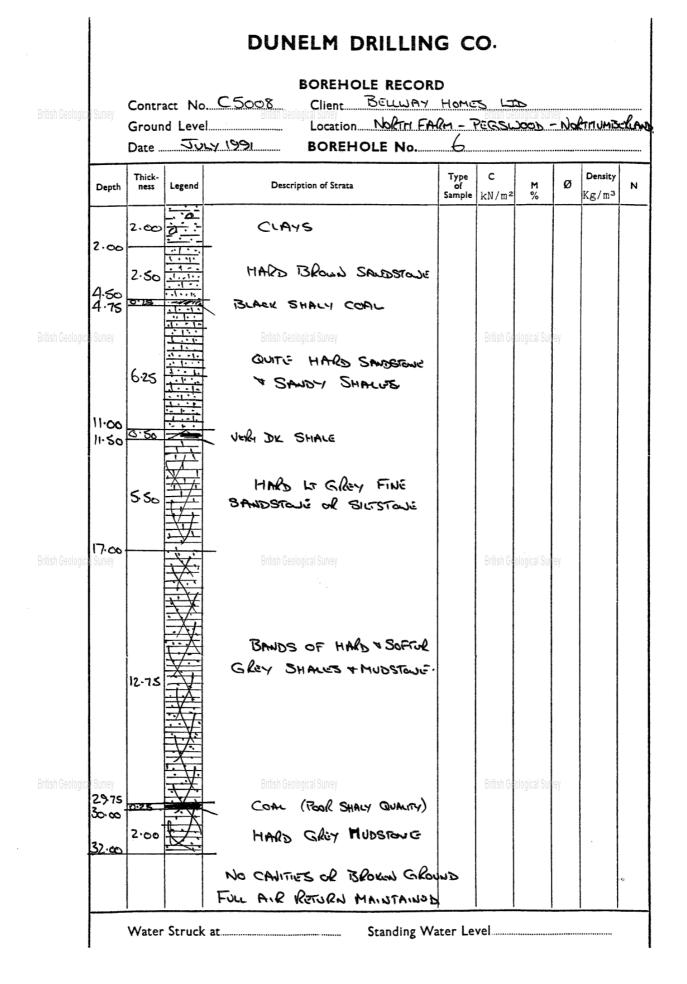
Report an issue with this borehole

< < Prev Page 1 of 2 
 Next > >>

## DUNELM DRILLING CO.

sh Geologica	JUITE			Location BUTCHER				DD.		•••••
		Date		U 92 BOREHOLE No.	······			********	·····	
	Depth	Thick- ness	Legend	Description of Strata	Type of Sample	C kN/m²	M %	ø	Density Kg/m <sup>3</sup>	ľ
			÷. ÷.	SOFT TO FIEM WOIST						
		2.20								
				BROWN SANDY CLAY						
	2.20									
		1.05		WEATHERED BROUN GREY						
	3.25			SANDETONE						
sh Geologic	Suvej					British Ge	ological Surv			
			••••							
				hard light brown						
		7.75		AND YELLOW SANDSTONE						
		7.43		The Acres Starslove						
			•••••							
sh Geologic	11-00	0.60	::::::	HARD GREY SANDSTONE		British Geo	ological Surre			
	11.60	0.50		HARD LIGHT BROWN SAMDSTOME						
	12.40	0.60	÷	HARD GREY SANDETONE HARD BROWN SANDSTONE						
	13.00	0.60		HALL GROUP STARS (DE						
		1.40	••••	hard grey sandstone						
	14.40									
	14.40		• • • • • •							
				FIRM GREY SANDSTONE						
		3.20								
		2.50	• • • • • •							
	17.60									
h Geologic	Suivey			British Geological Survey HARD GREY SANDSTONE		British Gro	ological Supe			
		2.40		hard cikey sandstone						
	20.00									
				NO WATER, NO CAVITIES						
				NO COAL,						•
				,						

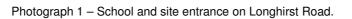
1/13/2020	Page 1   Borehole NZ28NW359   Borehole Logs
	British Geological Survey       BGS ID: 18293076 : BGS Reference: NZ28NW359         Natural Environment Research Council       British National Grid (27700) : 422580,587535         Report an issue with this borehole
	< < Prev Page 1 of 2 ▼ Next > >>



# Appendix 5

**Site Photographs** 







Photograph 2 – Vehicle access to existing onsite car park



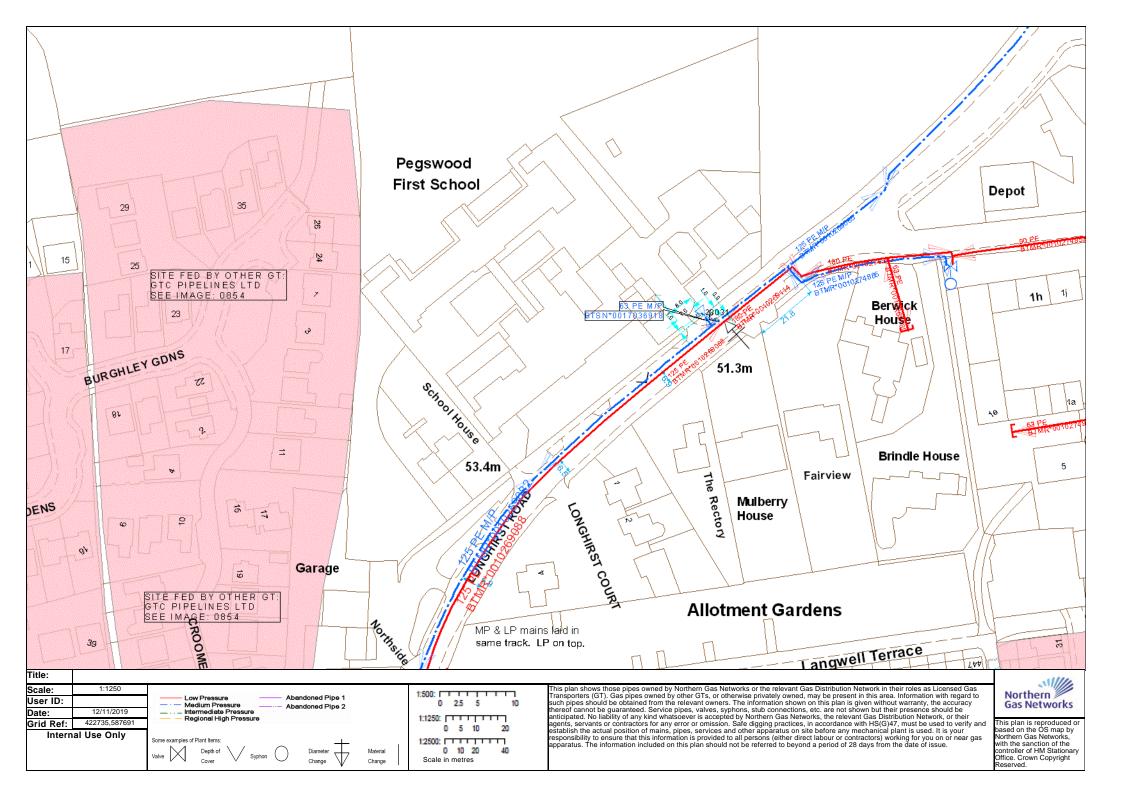
Photograph 3 – Heras fencing between car park and main site area.

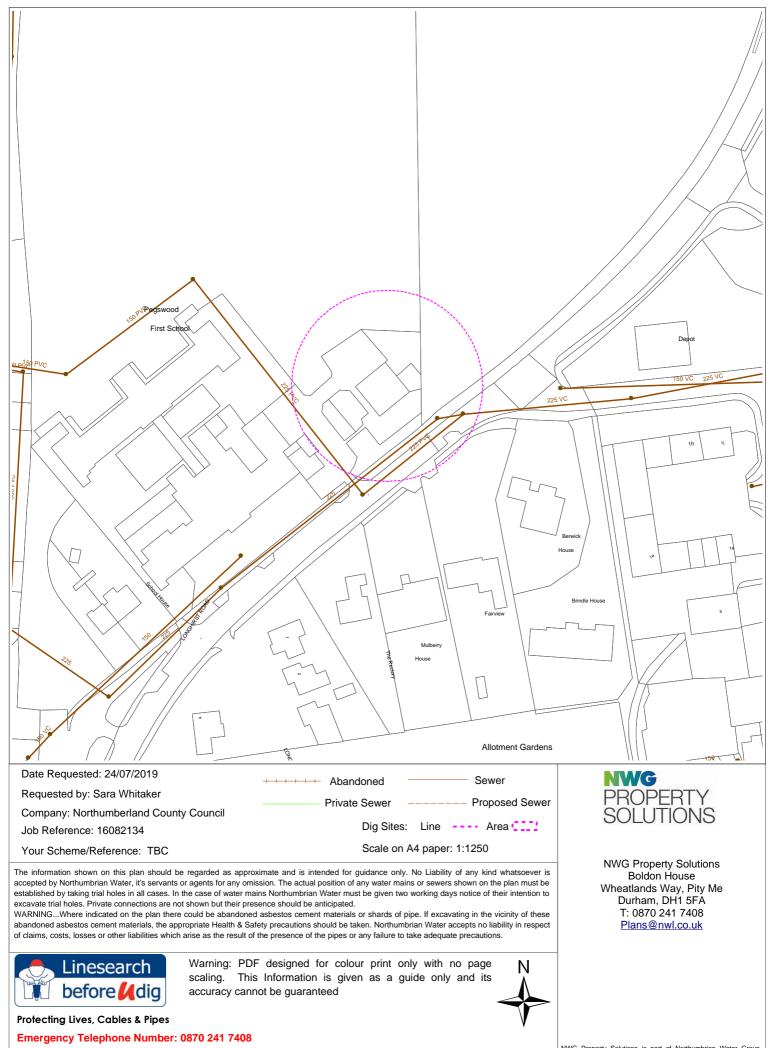


Photograph 4 – Min site area

# Appendix 6

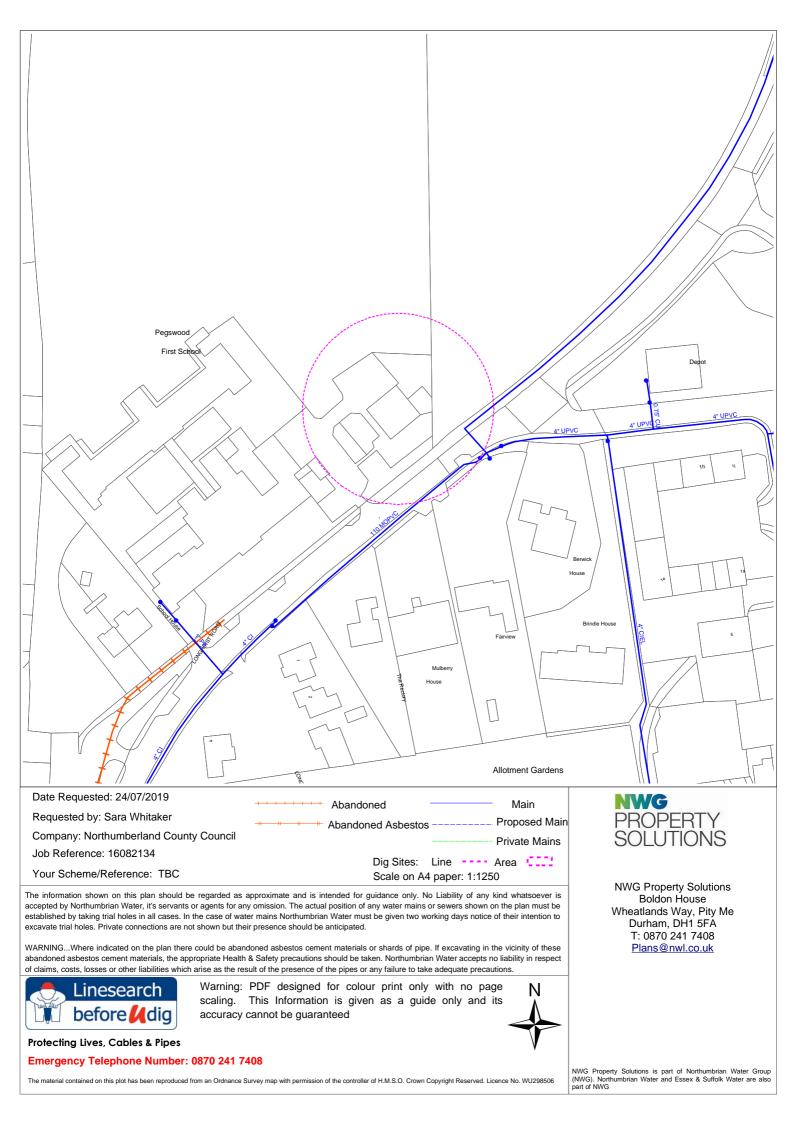
## **Available Services Information**





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NWG Property Solutions is part of Northumbrian Water Group (NWG). Northumbrian Water and Essex & Suffolk Water are also part of NWG



# Appendix 7

**Principles of Environmental Risk Assessment** 

The Environmental Protection Act 1990, Part II A Contaminated Land (Section 57 of the Environment Act 1995) and the Contaminated Land (Scotland) Regulations 2005 provide a basis on which to determine the risks and liabilities presented by a contaminated Site. Contaminated Land is defined within Annex 3, Chapter A Part 1- Scope of Chapter and in all those Sections mentioned as:

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"Any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that-

- (a) Significant harm is being caused or there is significant possibility of such harm being caused; or
- (b) Significant pollution of the water environment is being caused or there is a significant possibility of such pollution being caused."

Section 57 of the Environment Act 1995 requires that any Site identified as being "contaminated" by the Local Authority will be registered by them and remediation will be required to render the Site fit for use.

The presence of contamination is not the sole factor for deciding whether a Site is contaminated. Relevant parties should identify Site-specific risks and provide objective, cost-effective methods to manage the contamination in a manner which satisfies the proposed end-use.

A risk-based approach, which takes both technical and non-technical aspects into consideration when making decisions on contamination resulting from past, present or future human activities, is advocated. The assessment of environmental risks generally relies on the identification of three principal elements forming a 'pollutant linkage':

- Source: the contaminant
- Pathway: the route through which the contaminant can migrate, and
- Receptor: any human, animal, plant, water environment or property that may be adversely affected (harmed) by the contaminant

In the absence of any one of these elements, on any given Site, there is no risk. Where all three elements are present, risk assessment is required to determine the significance of the harm or pollution that is being or may be caused. As outlined above, the terms of the Contaminated Land regime specify that remediation need only be implemented where a Site is causing, or there is a significant possibility that it will cause, significant harm, or that significant pollution of the water environment is being, or there is a significant possibility of such pollution being caused.

Development of contaminated land is usually addressed through the application of planning and development legislation and guidance (i.e. Planning Guidance Note PPG23 in England and Advice Note 33 in Scotland). The suitable for use approach is seen as the most appropriate basis to deal with contaminated land, taking account of environmental, social and economic objectives. The assessment is made in the context of the proposed land use (e.g. residential, commercial, industrial and public open-space).

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