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PHASE I ENVIRONMENTAL ASSESSMENT, HALESFIELD 18, TELFORD, UK

Moneta Packaging Ltd

December 2014

Quality Management

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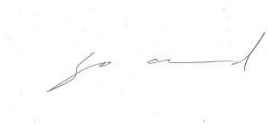
Signature				
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- Renewable energy
- Low carbon buildings
- Energy & emissions management (Energy Performance Certificates (EPCs) and Energy Audits)
- Online analysis, compliance and training solutions

PHASE I ENVIRONMENTAL ASSESSMENT, HALESFIELD 18, TELFORD, UK

December 2014

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Executive Summary

WSP UK Ltd. (WSP) was instructed by Moneta Packaging Ltd ("the Client") to undertake a Phase I Environmental Assessment of Halesfield 18, Telford, TF7 4JS, UK. The report highlights environmental considerations, predominantly with respect to ground conditions, and is required as part of the proposed purchase of the freehold interest in the site. Please refer to Appendix E for WSP's Methodology and Report Limitations.

KEY FINDINGS

The subject site supports a three bay industrial unit (currently vacant), office accommodation, and associated car parking spaces, service yard and waste storage facilities. An above ground diesel storage tank (AST) for powering the site's heating system and fuelling the forklift trucks is located externally on concrete hardstanding without the provision of secondary containment, which represents a potential source of contamination.

The subject site is located within the Halesfield Industrial Estate approximately 4.5km to the southeast of Telford railway station in a predominantly industrial area.

Historically, the site comprised undeveloped land from at least 1882 until pre-1967 when the site was marked as a slag heap which extended off-site to the north. A drain was marked on-site from at least 1882 to 1981 when it is assumed to have been infilled. By 1981 an unnamed works was developed in the south of the site and by 1993 the current site layout was present.

Potentially contaminative land uses in the surrounding area (within 250 metres (m)) have included a colliery, a tramway and an industrial estate including numerous works (engineering works and a concrete works) which represent potential sources of contamination.

A former colliery was present from adjacent to the west of the site which is assumed to have been infilled by the early 1980s representing a potential source of ground gas and mobile contamination.

Regulatory consultations with the Contaminated Land Officer (CLO) at Telford and Wrekin Council have confirmed that the site has been identified as potentially contaminated land under their contaminated land assessment strategy but is a low priority for further investigation under Part IIA of the Environmental Protection Act 1990.

The site setting is considered to be of low sensitivity, taking into account the presence of a Secondary A Aquifer directly underlying the east of the site, Unproductive Strata in the west and underlying Secondary A Aquifer at depth; the presence of a drain located 175m south; and the absence of sensitive land uses within the surrounding area.

CONTAMINATED LAND LIABILITY

An above ground diesel storage tank (AST) for powering the site's heating system and fuelling the forklift trucks is located externally on concrete hardstanding without the provision of secondary containment, which represents a potential source of contamination.

Given the historical use of the site as an unnamed works and slag heap the potential for a degree of residual contamination to remain beneath the site cannot be wholly discounted. However, the risk of significant contaminated land liability is considered reduced given the site's proposed future industrial use and the presence of hardstanding and building cover across the site which is likely to prevent site user exposure to any subsurface contamination, if present. Furthermore, the hardstanding and building cover is likely to reduce the infiltration of precipitation and limit the off-site migration of any mobile contaminants, if present. In addition, any contamination, if present, is likely to be characteristic of the surrounding area.

Based on the information contained within this report and with due regard to the future industrial land use, it is the opinion of WSP that the site represents a **low/medium** risk with respect to potential contaminated land liability issues.

Other environmental considerations include ACM, tenant/ housekeeping issues and Energy Performance Certificates. Further detail is provided within Section 6.3.

RECOMMENDATIONS

No further contaminated land assessment works are considered necessary for the continued existing industrial use of the site.

Further contaminated land assessment may be required in the event of future redevelopment in order to satisfy standard planning requirements.

In the event of future redevelopment, it is recommended that consultation is sought with the Health and Safety Executive under PADHI (Planning Advice for Developments near Hazardous Installations).

Please note: This summary forms part of WSP's Phase I Environmental Assessment (ref.: 70008292). Under no circumstances is it to be used as an independent document.

WSP UK Ltd.

1. Site Information

1.1 Site Details

Site Address	Halesfield 18, Telford, TF7 4JS, UK
National Grid Reference	370930, 305010
Size	2.55 hectares
Tenure	Freehold
Site Location	The site is located to the southeast of Telford within the Halesfield Industrial Estate, approximately 4.5km to the southeast of Telford railway station in a predominantly industrial area. A site location plan is included as Appendix A.
Current Site Use	The subject site is utilised as an industrial warehouse (currently vacant) and ancillary office accommodation.

1.2 Site Reconnaissance

A walk over survey of the site was carried out on 24th October 2014, including an inspection of the interior and exterior of the building on-site and the external areas. Access was made available to all areas of the site with the exception of a diesel tank, which was enclosed in a locked metal cage, due to the absence of keys. A site boundary plan is included in Appendix A and photographs of the site are presented in Appendix B.

The following key observations were made during the site reconnaissance:

Site Description

The subject site comprises a three bay industrial unit (currently vacant) with two storey office accommodation attached to the southwest corner of the unit. Car parking is provided to the south and west of the unit. A service yard extends around the unit from west to east. The site is raised above road level to the south and east and demonstrates a generally flat topography.

Although the majority of the site is currently vacant we understand that the site will be utilised for industrial purposes.

Specific On-Site Activities

- The warehouse area is currently vacant, with offices occupied by Redman Fisher Ltd. The warehouse unit was formerly also occupied by Redman Fisher Ltd and was utilised for the manufacture of steel flooring and railing.
- The unit comprises three industrial bays, of which Bay 1 and Bay 2 are adjoined (see Plate 1 Appendix B). Two storey office accommodation with two small staff kitchens is attached to the south-western corner of Bay 1.
- The unit is supplied with mains gas, electricity and water. The office area is heated by gas fired central heating, and the industrial bays are heated by oil fired air blown heaters powered by an above ground storage tank of oil (see Bulk Hazardous Materials Storage section below).
- A substation is located within Bay 2 and was reportedly installed to supply additional electrical power for the former steel forging activities.

- Seven diesel powered fork lift trucks (FLTs) are present on-site. The diesel oil tank used to power the trucks is located externally to the rear of the industrial unit (see Bulk Hazardous Materials Storage section below).

External Areas

- Approximately 80 car parking spaces are provided externally laid to concrete hardstanding. A service yard is located to the west of the unit extending round to the north and east laid to concrete hardstanding. Cracks and pitting of hardstanding in these areas was observed during site reconnaissance.
- A border of vegetation runs alongside the north of the service yard with a gravel area beyond, which is connected to the service yard in the northeast of the site. Localised rust staining was noted on the gravel area but this was not observed to be significant.
- A diesel tank is located in the east of the site (see Bulk Hazardous Materials Storage section below).
- Empty storage cages for acetylene, argo-sheild and propane and an empty porta cabin are located in the south-east of the site (see Plate 2 Appendix B).
- A waste storage area is located to the west of the building.
- No areas of hydrocarbon staining were noted in external areas of the site.

Bulk Hazardous Materials Storage

- The site representative stated that there are no underground storage tanks (USTs) and no evidence of such tanks was noted during the site reconnaissance.
- An approximately 6,000 litre above ground diesel oil storage tank (AST) for powering the site's heating system and fuelling the forklift trucks is located in the east of the site (see Plate 3 Appendix B). The AST was raised on bricks approximately 0.5 metres above ground level and enclosed within a metal cage. Although no access was provided inside the cage area, no evidence of hydrocarbon staining was observed on the good condition concrete hardstanding beneath the AST. The tanks is assumed to be single skinned, and was not provided with any secondary containment. A pitched metal roof was observed above the tank to reduce rainwater ingress. A dispensing point was observed to extend from the tank to the front of the cage with a metal drum located below it containing stained spill rags (see Plate 4 Appendix B). Below ground pipework connects the tank to the industrial unit.

Other Hazardous Materials

- A 25 litre drum and 5 litre container containing unknown liquids were observed in Bay 2 within the substation room. No evidence of any spills or leaks was observed on the surrounding concrete hardstanding.

Polychlorinated Biphenyls (PCBs) in electrical plant

- An electricity substation is located internally within Bay 2. The substation was reportedly installed to provide additional electrical power for former on-site forging processes. The substation was observed to be in good condition with no visible staining in surrounding areas.
- Site representatives were unable to provide confirmation as to the ownership or maintenance responsibilities for the substation.

Ozone Depleting Substances (ODS)

- A number of air conditioning units service the building; however due to height restrictions the refrigerant sources used could not be observed.

- The use of virgin HCFCs when servicing air conditioning systems is now banned and the use of all HCFCs (including recycled/recovered/reclaimed) when servicing systems is banned from January 2015 under the Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2002. All ODS used in refrigeration and air conditioning equipment must be recovered prior to dismantling or disposal of equipment (if not already replaced). This is typically a tenant issue, although it would be prudent to clarify.

Waste Storage

- No potentially contaminative waste streams are routinely produced on the site.

Drainage Issues

- No drainage survey or drainage plans were available for review during the site visit. Additionally, drainage covers were not lifted as part of the assessment.

  - *Surface water*

- The site representative was not aware of the details of the site drainage arrangements. It is considered likely that stormwater run-off generated from the service yard and from the car park drains into a surface water drainage system and enters the municipal system.
- No evidence of oil interceptors was observed or reported during site reconnaissance.

  - *Foul Water*

- Foul water on-site is limited to sewage and domestic waste water. The site representative did not report any issues associated with on-site foul water, and none were observed.

  - *Trade Effluent*

- No trade effluent discharges that would require the freeholder to obtain consent to discharge were identified during the site visit.

Asbestos Containing Materials (ACMs)

- No asbestos report or asbestos management plan (AMP) was available for inspection on-site.
- Based on information provided by the client and historical mapping information, it is understood that the property was constructed pre-1993. ACMs were not entirely banned in the UK until 24th November 1999 under the asbestos (Prohibitions) (Amendment) Regulations 1999 (although very limited exclusions still applied). Therefore there is a potential for ACMs present in the building.
- It should be noted that, under Regulation 4 of the Control of Asbestos Regulations 2012, the duty holder must not only establish whether ACMs are present and what condition they are in, but also manage the ACMs on an on-going basis (using a suitable asbestos management plan (AMP)). It should also be noted that the presence of asbestos may lead to increased asset management costs.

Energy Performance Certificates (EPCs)

- The Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2012 requires that non-domestic buildings are supported by an EPC document when constructed, sold or let.
- An EPC has been sourced from the UK Non-Domestic Energy Performance Certificate National Register. The report was prepared by Ian Broadbent (Clarius Eco) in February 2014. No critical review of the competency or technical quality of the above report has been undertaken. The site has been given an energy efficiency rating of 101 (E). The EPC states that typical existing stock would be expected to achieve a rating of 64 (C).

- The EPC Recommendation Reports for Halesfield 18 was reviewed. None of the recommendations were stated to have a high potential impact on the energy performance of the building and therefore the EPC rating.
- The Energy Act 2011 states that for commercial properties from April 2018, it will be unlawful to let properties which have a poor energy rating, generally considered to be F or G, and landlords will need to assess the energy efficiency of their properties and consider carrying out improvements. In addition, the EPC benchmarks and National Calculation Methodology (NCM) are regularly updated in line with changes to the Building Regulations, this in effect means that EPC ratings change over time and if no improvement works are undertaken the EPC rating will drop when compared to the latest EPC benchmarks e.g. an E rated property from 2008 - 2010, may be rated as an F today, and a G by 2018.
- Given the EPC rating of this property falls within the band D – G, we would recommend that you consider undertaking a more detailed review of the EPC model, assumptions and recommendations to identify cost effective areas for improvement. Please contact WSP if further assistance regarding this matter is required.

1.3 Surrounding Land Use

The site is located within Halesfield Industrial Estate to the southeast of Telford, approximately 4.5km to the southeast of Telford railway station. Industrial properties are located from adjacent to the north and east of the site. The site is bound to the west by Halesfield 19 road and to the south by Halesfield 18 road, beyond which are further industrial properties to the east, and undeveloped land to the south.

2. Historical Land Use

2.1 Site History

Map Information

A study of historical Ordnance Survey maps has been undertaken to identify significant potentially contaminative former land uses. Historical maps indicate that the site comprised undeveloped land with a drain running through the centre of the site from at least 1882 until 1967 when the west of the site was marked as a slag heap which extended off-site to the north (associated with the former Halesfield Colliery). By 1974 the slag heap was marked as a disused tip. By 1981 the tip and stream (assumed infilled) were no longer labelled and an unnamed works had been developed in the south of the site. The current site layout was mapped by 1993.

A selection of historical map extracts is included as Appendix C.

Planning

An inspection of the available online planning record held at Telford & Wrekin Council was carried out on 23rd October 2014. The following environmentally pertinent information was reviewed.

- A planning application was approved in October 2007 for the erection of a single storey store building (ref.W2007/1484). No associated documents or decision notice were available for review.
- A planning application was granted in May 2001 for the erection of a crane gantry to the west elevation of bay one and cladding to north elevation to match other existing elevations (ref. W2001/0286). No associated documents or decision notice were available for review.
- A planning application was granted April 1983 for the erection of an extension to existing factory (ref. W830200). No associated documents or decision notice were available for review.

2.2 Surrounding Area

A study of historical Ordnance Survey maps has been undertaken to identify significant potentially contaminative former land uses within a 250m radius of the site. Historical maps indicate that surrounding land uses from at least 1882 were predominantly agricultural with the exception of Halesfield Colliery 240m northwest of the site and the associated tramway 225m northwest of the site. By 1957 slag heaps associated with the colliery had expanded to within 30m north of the site, with an associated slag heap encroaching onto the western area of the site.

By 1973 Halesfield Industrial Estate was developed to the east and south of the site including a concrete works 100m northeast, numerous engineering works from 120m east and a large substation 60m west. The tramway was no longer marked by 1973 and is assumed to have been dismantled. The colliery had been labelled as a disused tip by 1975 and redeveloped as part of Halesfield Industrial Estate by the early 1980s.

A number of small ponds were present within a 250m radius of the site from c.1882 until c.1974 when they are assumed to have been infilled.

A selection of relevant historical map extracts is included as Appendix C.

3. Regulatory Information & Consultation

3.1 Regulatory Database

The following data has been obtained from a summary of information databases.

	0-249m	250-500m	Details (all distances are approximate)
Contaminated Land register and notices	0	0	Not applicable (N/A)
Registered landfills	0	0	N/A
Closed Landfill facilities	0	3	Three former landfills are recorded to have been located on land at Tweedale Caravan Park located 325m west (Caravan Park 1), 430 west (Caravan Park 2) and 470m west (Caravan Park 3) of the subject site. No information is provided on accepted waste types or dates of operation.
Registered transfer stations/ treatment facilities	1	2	The closest site relates to a Special Waste Transfer Station located 195m east of the site. The site's license was issued in 2005 but no further information is provided on accepted special waste types.
Closed transfer stations/ treatment facilities	0	0	N/A
Authorised industrial processes	6	6	The nearest Local Authority Pollution Prevention and Control (LAPPC) authorisation is for general coating processes located 90m to the northwest of the site.
Fuel Station entries	0	2	Two open petrol filling stations are located 250m southeast and 275m northwest of the site respectively.
Licensed radioactive substances	0	0	N/A
Enforcements, prohibitions or prosecutions	1	0	A prosecution for failure to comply with packaging waste regulations occurred 130m east of the subject site in 2006. A guilty verdict was passed in September 2006.
Discharge Consents	0	0	N/A
Pollution incidents	2	1	The nearest pollution incident occurred 185m to the east of the site in 1995. The incident comprised the release of chemicals to groundwater and was classified by the Environment Agency as a Category 3

			(Minor) incident. None of the incidents listed have been attributed to the subject site.
Consents issued under the Planning (Hazardous Substances) Act 1990	1	0	A consent for liquefied petroleum gas is held 155m east of the site by Budget Gas Ltd.
Control of Major Accident Hazards (COMAH)	0	1	A lower tier active COMAH site is located 315m northeast of the site relating to Budget Gas Ltd.

3.2 Consultees

Local Authority Contaminated Land Officer (CLO)

The CLO at Telford and Wrekin Council was contacted for environmentally pertinent information relating to the site. The CLO provided a written response indicating the following (please refer to Appendix D):

- Given the historical and neighbouring land uses, the CLO stated that the site has been identified as potentially contaminated land. However, the site is a low priority for further investigation under the Councils Contaminated Land Inspection Strategy.
- The CLO reported that the Council does not have any information that would indicated that the site is not suitable for its current use.

Local Authority Building Control Officer (BCO)

The BCO at Telford and Wrekin Council was contacted with regard to ground conditions beneath the subject site. The BCO reported that the Council's Building Control department do no hold any records regarding ground conditions at the site. The BCO reported that the site does not lie within 250m of a landfill site and that the radon level is less than 1%.

Petroleum Officer

No issues have been identified that warrant further consultation with the Petroleum Officer.

Environment Agency (EA) Flooding Data

Risk of flooding from rivers and sea

According to the EA website the site is located within a very low risk area where the risk of flooding each year is less than 1 in 1000 (0.1%).

This takes into account the effect of any flood defences that may be in this area. Flood defences reduce, but do not completely stop the chance of flooding as they can be overtopped or fail.

Risk of flooding from surface waters

Surface water flooding occurs when rainwater does not drain away through the normal drainage systems or soak into the ground, but lies on or flows over the ground instead.

According to the EA website the majority of the site is located within an area at a very low risk of surface water flooding where the risk of flooding each year is less than 1 in 1000 (0.1%). The west of the site is located within

an area at a low risk of surface water flooding each year where the risk of flooding is between 1 in 1000 (0.1%) and 1 in 100 (1%). The estimated water depth where there is a low chance of flooding is below 300mm.

Environment Agency (EA)

No issues have been identified that warrant further consultation with the EA.

Health Protection Agency

The site is located within a Lower Probability radon area where less than 1% of homes are above the Action Level of radon gas. Therefore, no radon protection measures are considered necessary.

Coal Authority & Brine Report

A Coal Authority Mining Report, dated 23 October 2014, (see Appendix D) has been obtained and indicates the following.

- The property is located within the likely zone of influence from workings in four seams of coal at 240m to 300m depth, the last date of working being 1944. Ground movement from these past coal workings should by now have ceased.
- The property is located within the likely zone of influence from workings in one seam of ironstone at 210m to 230m depth, the last date of working being 1896.
- The Coal Authority have no knowledge of any mine entries on site or within 20m radius of the boundary of the property.
- In addition, the property does not lie within the boundary, or in the vicinity of an opencast site where coal has historically, or is currently being extracted by opencast methods.

4. Other Relevant Information

4.1 Previous Reports

No previous reports have been provided for review.

5. Environmental Setting

5.1 Geology and Hydrogeology

Geological Map Sheet 153, Wolverhampton, scale 1:50,000, Solid & Drift edition (2001), and online BGS (British Geological Survey) published geological data www.bgs.ac.uk shows the following geological sequence (please refer to Appendix F Report References for EA aquifer classification system):

Geological Unit	Estimated Thickness	Description	Aquifer Status
Made Ground	Not recorded	Not recorded	N/A
Alluvium *(east of site)*	Not Recorded	Clay, Silt, Sand and Gravel	Secondary A Aquifer
Till *(west of site)*	Not Recorded	Red brown silty Clay-sand	Unproductive Strata
Halesowen Formation	110m	Mudstone, Siltstone and Sandstone	Secondary A Aquifer

According to British Geological Survey (BGS) borehole logs (BGS website; www.bgs.ac.uk/data/boreholescans), the following information has been identified and the Borehole log(s) is included in Appendix D:

Geological Unit	Top of Strata (m bgl)	Bottom of Strata (m bgl)	Stratum description
Made Ground	0.00	3.00	Sandy, compact clay, shale and coal fill
Made Ground	3.00	6.90	Gravelly shale and pit waste fill
Made Ground	6.90	7.40	Brown sandy silty clay fill
Sand and Gravel	7.40	10.00	Silty sand and medium to large gravel
Red sandstone	10.00	10.45	Red sandstone fill

No current EA licensed groundwater abstractions have been identified within a 1km radius of the subject site.

The site is not located within an EA designated groundwater Source Protection Zone

5.2 Hydrology

Surface water features in the vicinity of the subject site are as follows:

Surface Water Feature	Quality*	Distance (approximate)	Direction
Drain	Not Recorded	175m	South

*Chemical water quality under the EA's General Quality Assessment (GQA) Scheme.

No current EA licensed surface water abstractions have been identified within a 250m radius of the subject site.

5.3 Surrounding Features

No sensitive surrounding land uses have been identified within a 250m radius of the site.

5.4 Environmental Sensitivity

Overall, the site setting is considered to be of low sensitivity, due to the following reasons:

- The presence of a secondary A Aquifer underlying the west of the site with Unproductive Strata in the east with a Secondary A Aquifer at depth;
- The presence of a drain 175m south; and
- The absence of sensitive land uses within the surrounding area.

6. Preliminary Risk Assessment

6.1 Outline Conceptual Model

The methods used within this preliminary risk assessment follow a risk-based approach, with the potential environmental risk assessed qualitatively using the 'contaminant-pathway-receptor pollutant linkage' concept introduced in the Environmental Protection Act 1990. For a site to be designated as Contaminated Land a plausible linkage between the identified Contaminants, Pathways and Receptors must be demonstrated. The technical basis for this assessment is further discussed within Methodology and Report Limitations in Appendix E.

Potential Contaminants	On-Site Contaminants	■ An above ground diesel storage tank (AST) for powering the site's heating system and fuelling the forklift trucks is located externally on concrete hardstanding without the provision of secondary containment, which represents a potential source of contamination. ■ Potentially contaminative activities on site have included a former works and a slag heap which represent potential sources of contamination.
	Off-Site Contaminants	■ Surrounding sites (within 250 metres) currently and historically have comprised an industrial estate including a number of works (concrete works, engineering works) and a large substation which represent potential sources of contamination. ■ Three historical landfills have been identified from 325m west of the site representing potential sources of landfill gas and mobile contamination. However, the risk of ground gas impacting on the study site is considered limited given the distance of the landfills from site. ■ A former colliery was present 240m west of the site which is assumed to have been infilled and redeveloped by the early 1980s representing a potential source of ground gas and mobile contamination. However, the risk of ground gas impacting on the study site is considered limited given the distance of the colliery from site and the recorded geology.

Potential Receptors	Controlled Waters	■ Groundwater in the underlying Secondary A Aquifer ■ Drain located 175m south
	Human Health Risks	■ Site Occupiers ■ Third Party neighbours ■ Site workers in the event of below ground works
	Other	■ Buildings and Underground services

Potential Contaminant Pathways &	On-Site Contaminants	■ Given the presence of the permeable geology directly underlying the east of the site, there is the potential for any mobile contaminants within soils to impact groundwater.

Pollutant Linkages		However, the presence of hardstanding and building cover over the site is likely to limit the infiltration of precipitation and thus reduce the horizontal and vertical migration of any subsurface contamination, if present. ■ Shallow groundwater within the alluvial deposits underlying the east of the site is likely to be in hydraulic continuity with the local drain. There is therefore the potential for any shallow groundwater contamination on the site to migrate through the sand and gravel deposits and impact on the surface watercourses. However, the presence of hardstanding and building cover over the site is likely to limit the infiltration of precipitation and reduce the horizontal and vertical migration of any subsurface contamination, if present. ■ Human exposure to any contaminated soils and groundwater via direct contact (ingestion, dermal contact and inhalation of dust) would be limited as current site conditions comprise concrete hardstanding, reducing the likelihood that site occupiers would be exposed to subsurface contaminants under normal working conditions. ■ In the event of below ground works, site workers may be exposed to any subsurface contamination. It should be ensured that future construction workers adopt appropriate procedures to manage health and safety risks associated with any contamination.
	Off-Site Contaminants	■ Given the presence of the underlying permeable geology beneath the east of the site, there is the potential for contaminated groundwater from the off-site contaminants identified to migrate onto the subject site. However, this is considered unlikely to significantly impact the current industrial use of the site given the comments on the potential exposure pathways made above.

6.2 Contaminated Land Risk Assessment for On-Going Industrial Use

Having evaluated the information gathered during this study and described in the previous sections, WSP has produced the following assessment of risk primarily focussed on contaminated land issues; assuming an on-going use;

	Assessment	Risk Category
Potential for statutory liability and designation as Contaminated Land	Potential pollutant linkages have been identified. However, the site is located within a wider area of similar land uses and the site is not considered a priority for investigation by the Local Authority under their Contaminated Land Inspection Strategy.	Low/Medium
Potential for third party liability	There is considered to be a potential for a degree of contamination to be present on the subject site as a result of its historical land use. However, the risk of a third party liability is considered reduced given the presence of hardstanding and building cover across the site which will reduce the infiltration of precipitation and therefore restrict the migration of contaminants, if present, both off-site and into controlled waters. Furthermore any contamination, if present, is likely to be characteristic of the surrounding area.	Low
Risk of commercial liability on resale	In the absence of any current ground investigation data, there is some potential for an impact on saleability with circa 7m of made ground recorded on site – albeit this appears to be reworked natural materials. A more risk averse purchaser may require an up to date ground investigation to confirm site conditions.	Low/Medium
Risk of contaminated land liability for owner	An above ground diesel storage tank (AST) for powering the site's heating system and fuelling the forklift trucks is located externally on concrete hardstanding without the provision of secondary containment, which represents a potential source of contamination Furthermore, based on historical land uses, the potential for contamination to be present on-site cannot be fully discounted. However, the risk of contaminated land liability is considered reduced given the current industrial use, and the presence of widespread hardstanding and building cover across the site which is likely to prevent site user exposure to subsurface contamination, if present. Furthermore, the presence of hardstanding and building cover is also likely to reduce the potential leaching and off-site migration of mobile concentrations, if present.	Low/Medium
	CONTAMINATED LAND LIABILITY RISK FOR ON-GOING USE	**LOW/MEDIUM**

6.3 Other Environmental Considerations

These matters could also require further assessment. This may be during a continuation of the current site use, or in the event of any proposed redevelopment of the site. It should be noted that a detailed assessment of compliance with environmental law lies outside the scope of this assessment.

Other Considerations

Asbestos Containing Materials	No asbestos report or asbestos management plan (AMP) was available for inspection on-site. It should be noted that, under Regulation 4 of the Control of Asbestos Regulations 2012, the duty holder must not only establish whether ACMs are present and what condition they are in, but also manage the ACMs on an on-going basis (using a suitable asbestos management plan (AMP)). It should also be noted that the presence of asbestos may lead to increased asset management costs.
Tenant / Housekeeping Issues	All oil storage containers with a capacity 200-litre or more should be provided with appropriate secondary containment (bund, drip tray or similar) to minimise the risk of spills and leaks to ground, and ensure compliance with the Control of Pollution (Oil Storage) Regulations 2001. The use of ODSs is being phased out and replacement HCFCs will not be available from 2015. There may be costs associated with upgrade or replacement of cooling equipment that contains HCFCs.
Energy Performance Certificates (EPCs)	The site has been given an energy efficiency rating of 101 (E). The EPC states that typical existing stock would be expected to achieve a rating of 64 (C). Given the EPC rating of this property falls within the band D – G, we would recommend that you consider undertaking a more detailed review of the EPC model, assumptions and recommendations to identify cost effective areas for improvement. Please contact WSP if further assistance regarding this matter is required.

7. Conclusions & Recommendations

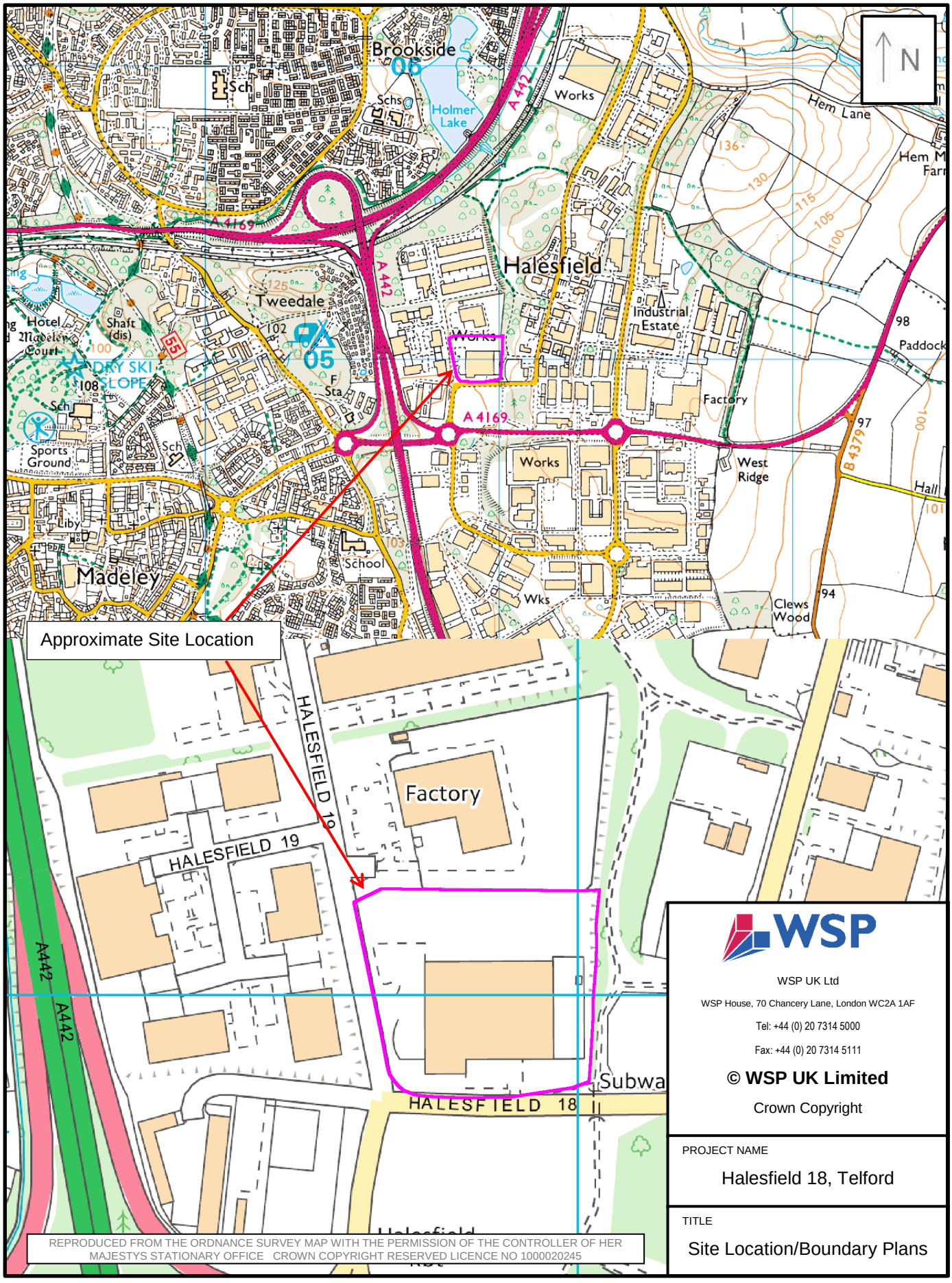
Conclusions	An above ground diesel storage tank (AST) for powering the site's heating system and fuelling the forklift trucks is located externally on concrete hardstanding without the provision of secondary containment, which represents a potential source of contamination. Given the historical use of the site as an unnamed works and slag heap the potential for a degree of residual contamination to remain beneath the site cannot be wholly discounted. However, the risk of significant contaminated land liability is considered reduced given the site's proposed future industrial use and the presence of hardstanding and building cover across the site which is likely to prevent site user exposure to any subsurface contamination, if present. Furthermore, the hardstanding and building cover is likely to reduce the infiltration of precipitation and limit the off-site migration of any mobile contaminants, if present. In addition, any contamination, if present, is likely to be characteristic of the surrounding area. Based on the information contained within this report and with due regard to the future industrial land use, it is the opinion of WSP that the site represents a **low/medium** risk with respect to potential contaminated land liability issues. Other environmental considerations include ACM, tenant/ housekeeping issues and Energy Performance Certificates. Further detail is provided within Section 6.3.
Recommendations	No further contaminated land assessment work is considered necessary for the future industrial use of the site. It should be noted that further contaminated land assessment may be required in the event of redevelopment. In the event of future redevelopment, it is recommended that consultation is sought with the Health and Safety Executive under PADHI (Planning Advice for Developments near Hazardous Installations).

Please note: this summary forms part of WSP's Phase I Environmental Assessment (ref.: 70008292). Under no circumstances is it to be used as an independent document.

WSP UK Ltd.

Appendices

Appendix A Site Location & Site Boundary Plan



REPRODUCED FROM THE ORDNANCE SURVEY MAP WITH THE PERMISSION OF THE CONTROLLER OF HER MAJESTYS STATIONARY OFFICE CROWN COPYRIGHT RESERVED LICENCE NO 1000020245

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Fax: +44 (0) 20 7314 5111

PROJECT NAME

Halesfield 18, Telford

TITLE

Site Location/Boundary Plans

Appendix B Photographic Record

PLATE 1: BAY 1 AND BAY 2.

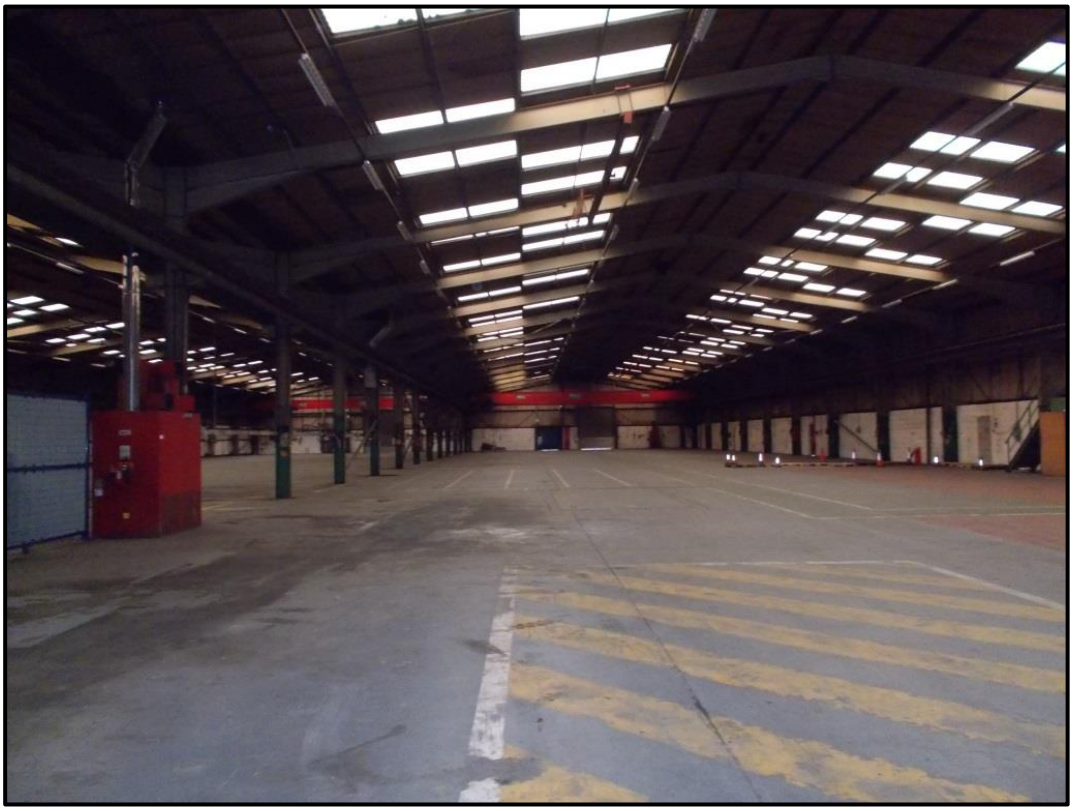
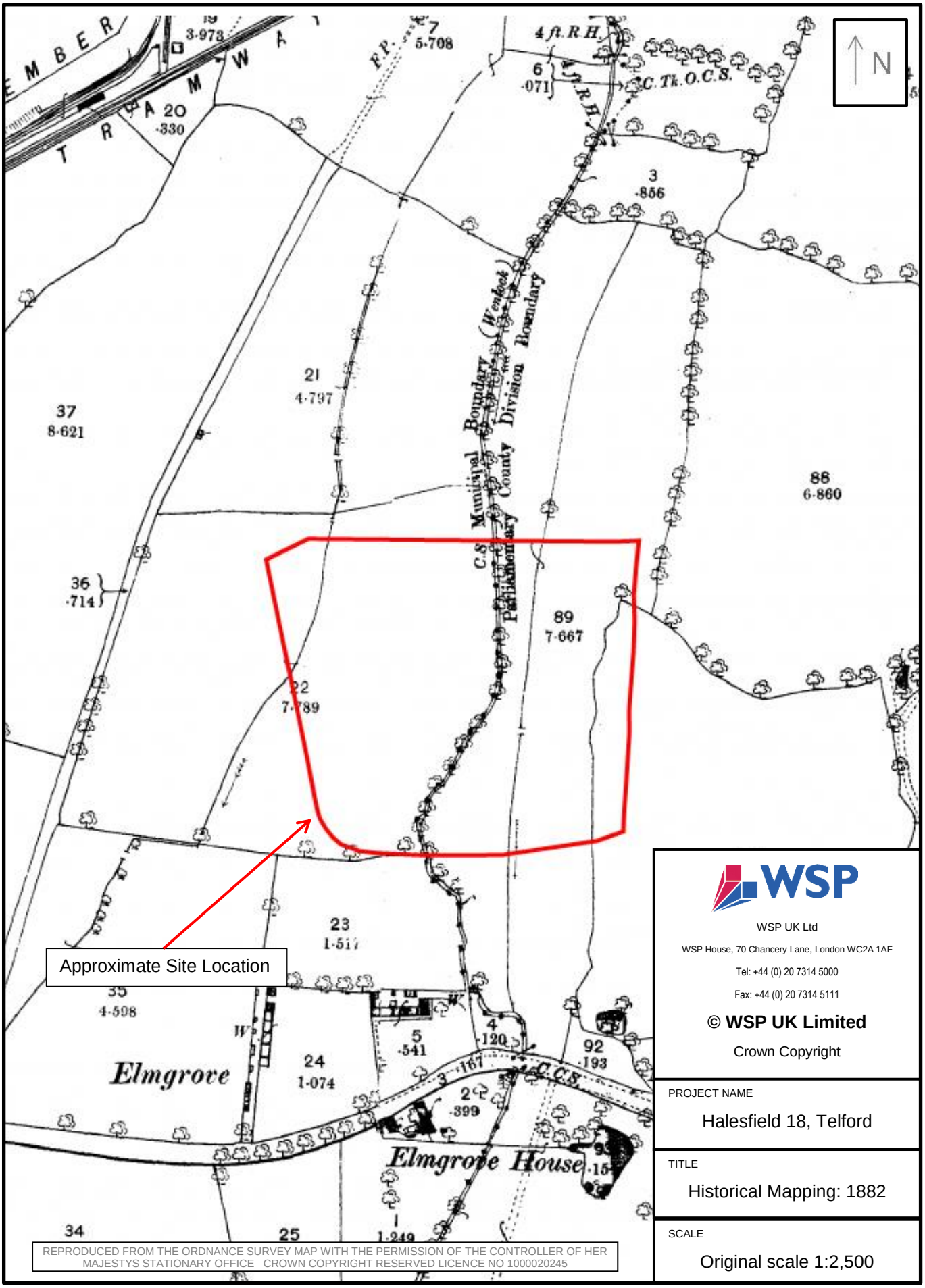


PLATE 2: EMPTY STORAGE CAGES FOR ACETYLENE, ARGOSHEILD AND PROPANE.

PLATE 3: ABOVE GROUND DIESEL OIL STORAGE TANK

PLATE 4: STAINED SPILL RAGS LOCATED BELOW DISPNESING POINT.

Appendix C Selection of Historical Map Extracts



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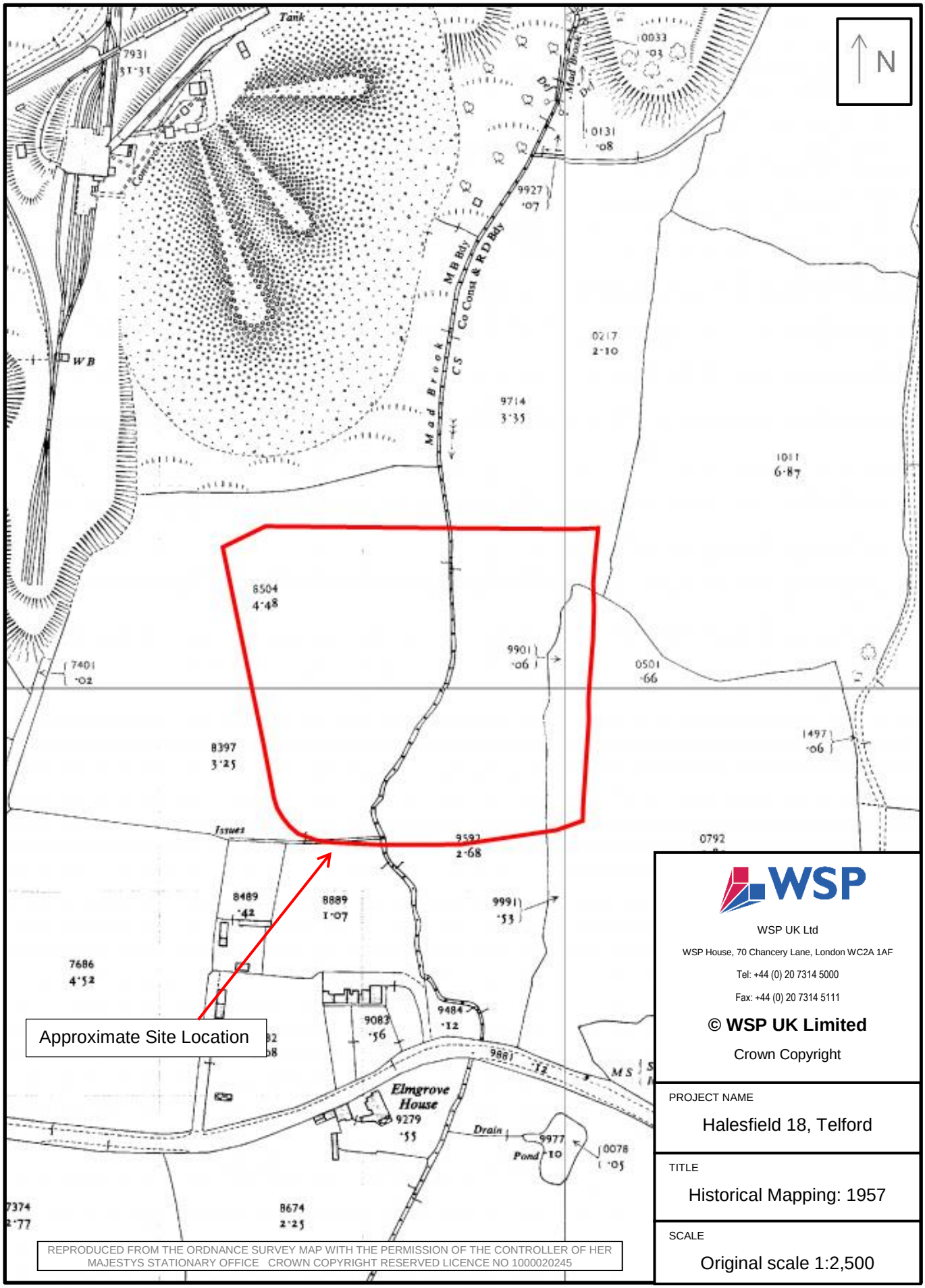
PROJECT NAME
Halesfield 18, Telford

TITLE
Historical Mapping: 1882

SCALE
Original scale 1:2,500



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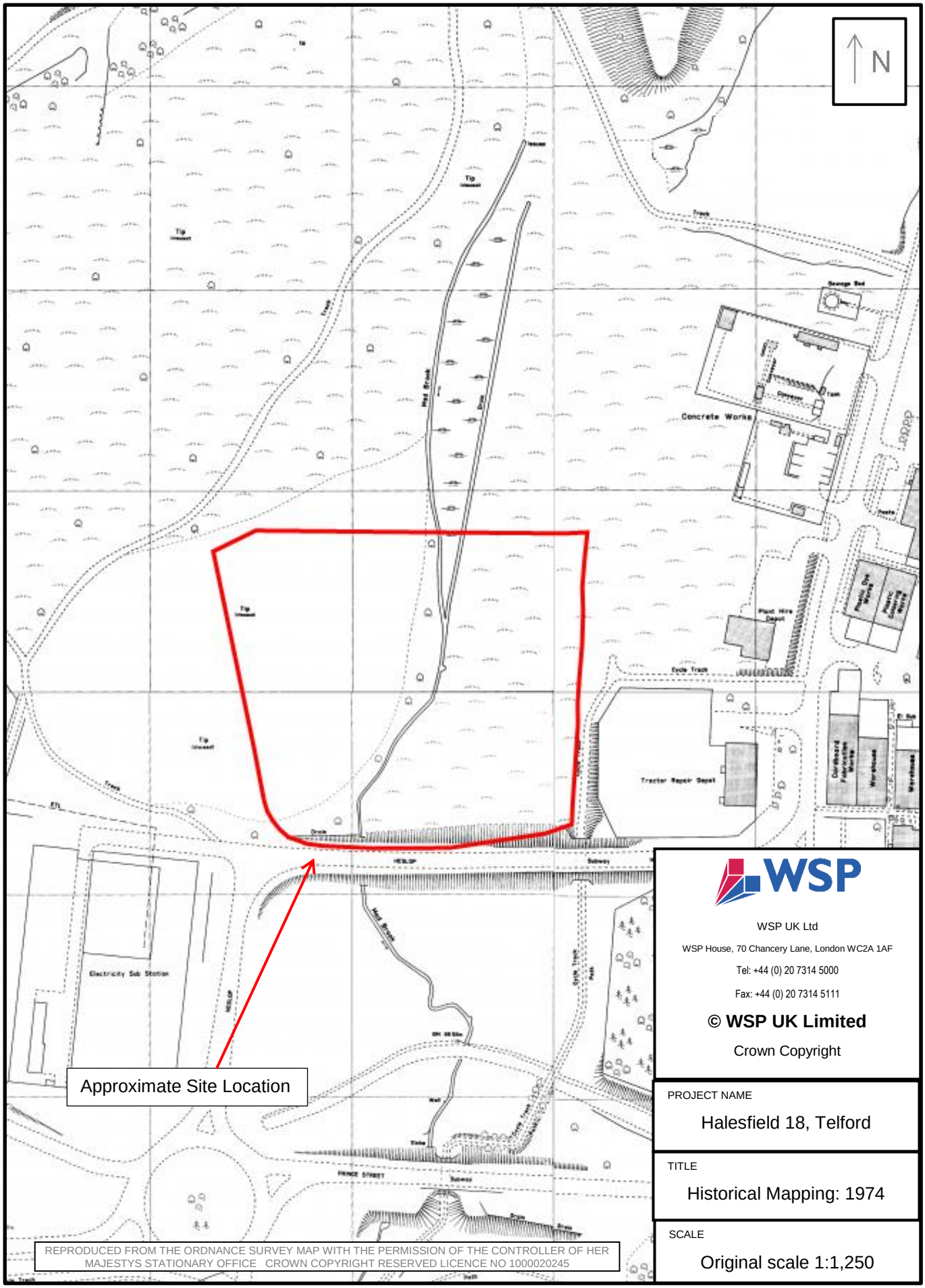
PROJECT NAME
Halesfield 18, Telford

TITLE
Historical Mapping: 1957

SCALE
Original scale 1:2,500



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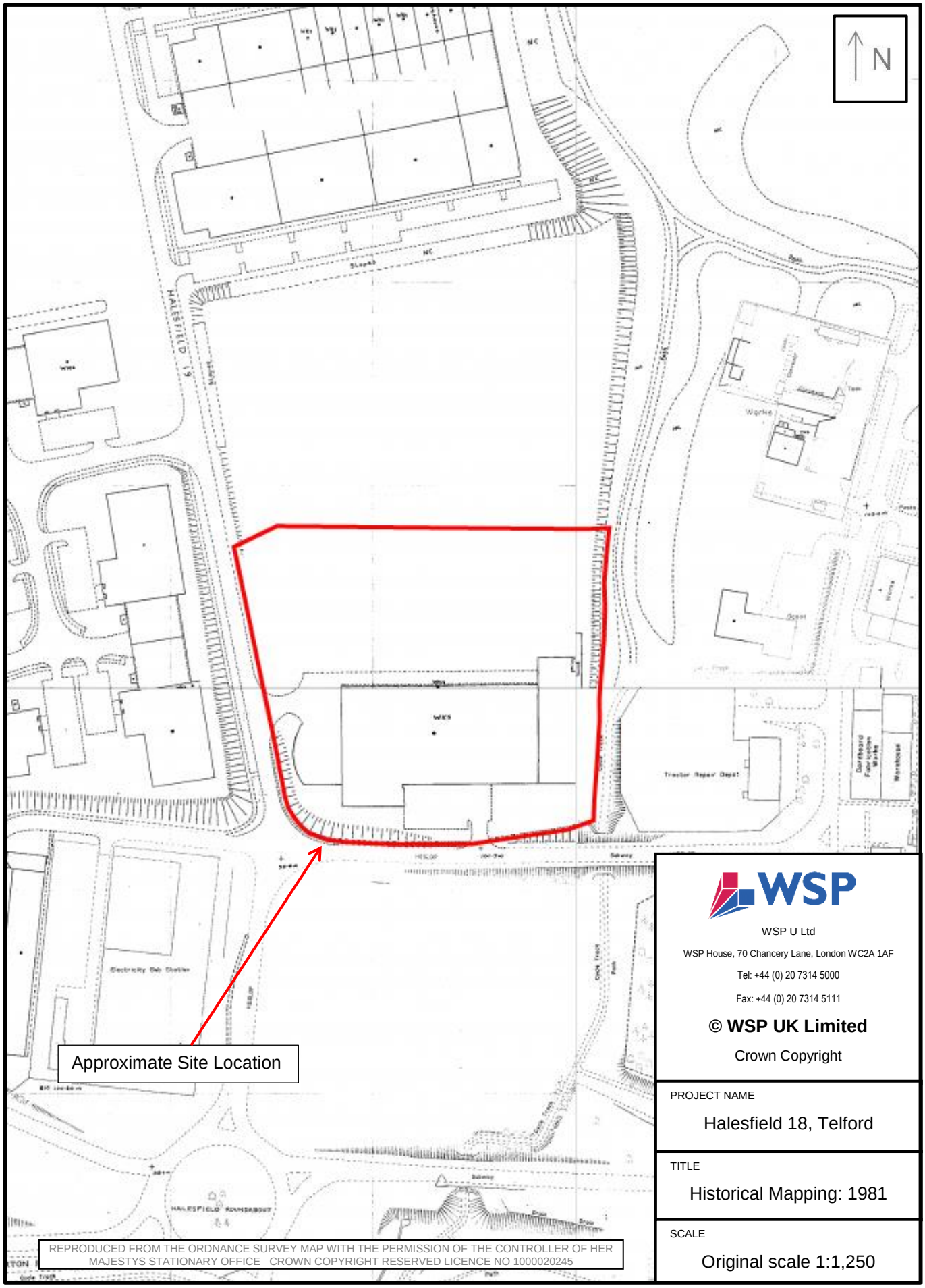
PROJECT NAME
Halesfield 18, Telford

TITLE
Historical Mapping: 1974

SCALE
Original scale 1:1,250



WSP U Ltd
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Fax: +44 (0) 20 7314 5111

PROJECT NAME
Halesfield 18, Telford

TITLE
Historical Mapping: 1981

SCALE
Original scale 1:1,250

Appendix D Coal Authority / Additional Relevant Information

Coal Authority Report Enclosed (4 pages)

Additional Relevant Information Enclosed (3 pages)

- Local Authority Enquiry Response (2 pages)
- BGS Borehole Log (1 page)

The Coal Authority

Issued by:
The Coal Authority, Property Search Services, 200 Lichfield Lane, Berry Hill, Mansfield, Nottinghamshire, NG18 4RG
Website: www.groundstability.com Phone: 0845 762 6848 DX 716176 MANSFIELD 5

LANDMARK INFORMATION GROUP LIMITED
SOWTON INDUSTRIAL ESTATE
ABBEY COURT
UNIT 5/7 EAGLE WAY
EXETER
DEVON
EX2 7HY

Our reference:	**51000655474001**
Your reference:	**61418716_2|**
Date of your enquiry:	**23 October 2014**
Date we received your enquiry:	**23 October 2014**
Date of issue:	**23 October 2014**

This report is for the property described in the address below and the attached plan.

Non-Residential Coal Authority Mining Report

HALESFIELD 18, TELFORD, SHROPSHIRE,

This report is based on and limited to the records held by, the Coal Authority, and the Cheshire Brine Subsidence Compensation Board's records, at the time we answer the search.

Coal mining	See comments below
Brine Compensation District	No

Information from the Coal Authority

Underground coal mining

Past

The property is in the likely zone of influence from workings in 4 seams of coal at 240m to 300m depth, and last worked in 1944.
Any ground movement from these coal workings should have stopped by now.

The property is in the likely zone of influence from workings in 1 seam of ironstone at 210m to 230m depth, and last worked in 1896.

Present

The property is not in the likely zone of influence of any present underground coal workings.

Future

The property is not in an area for which the Coal Authority is determining whether to grant a licence to remove coal using underground methods.
The property is not in an area for which a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area that is likely to be affected at the surface from any planned future workings.

However, reserves of coal exist in the local area which could be worked at some time in the future.

No notice of the risk of the land being affected by subsidence has been given under section 46 of the Coal Mining Subsidence Act 1991.

Mine entries

There are no known coal mine entries within, or within 20 metres of, the boundary of the property.

Coal mining geology

The Authority is not aware of any evidence of damage arising due to geological faults or other lines of weakness that have been affected by coal mining.

Opencast coal mining

Past

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

Present

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

Future

The property is not within 800 metres of the boundary of an opencast site for which the Coal Authority is determining whether to grant a licence to remove coal by opencast methods.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

Coal mining subsidence

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.

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

The 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

There is no record of a mine gas emission requiring action by the Coal Authority within the boundary of the property.

Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Authority, under its Emergency Surface Hazard Call Out procedures.

Withdrawal of support

The property is in an area for which notices of entitlement to withdraw support were published in 1945.

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

Working facilities orders

The property is not in an area for which an Order has been made under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

Payments to owners of former copyhold land

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

Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

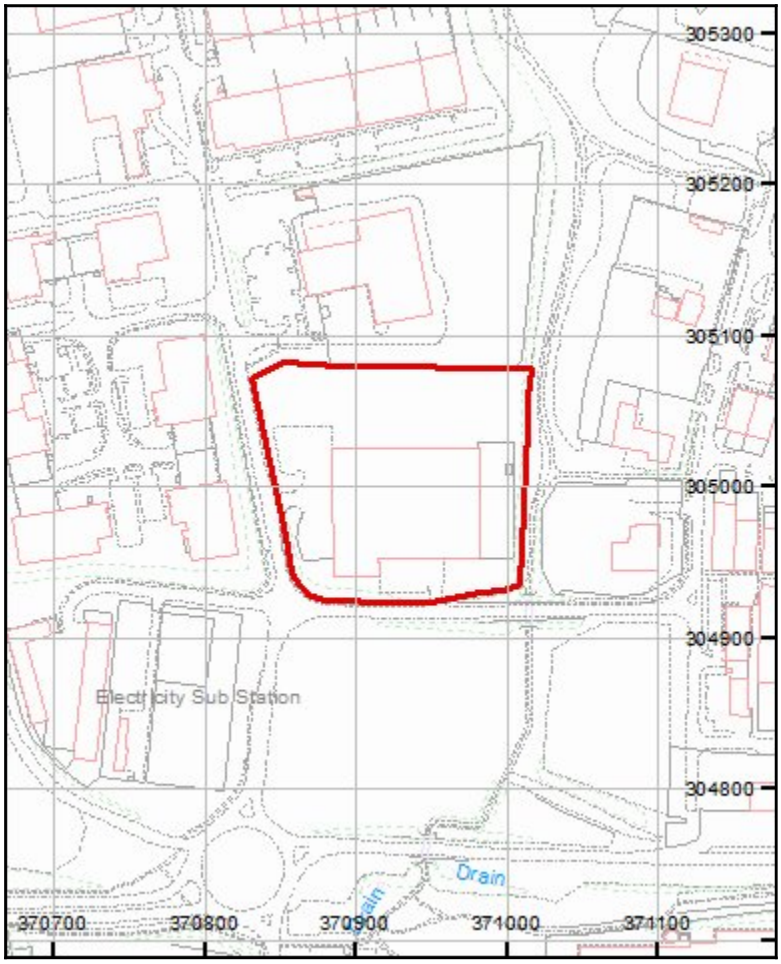
Additional Remarks

This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority and Cheshire Brine Board's Terms and Conditions 2006.

Location map

Approximate position of property

Enquiry boundary



Key

Approximate position of enquiry boundary shown

a co-operative council

Telford & Wrekin COUNCIL

FAO Jo Osmond
WSP
Three White Rose Park
Millshaw Park Lane
Leeds
LS11 0DL

Liz Noakes Assistant Director, Health, Wellbeing and Public Protection. (Sta DPH)

Public Protection (Environmental Health, Licensing & Trading Standards)
Darby House
Telford
TF3 4JA

Tel: +44 (0)1952 381818

Contact: Chris Last **Telephone:** 01952 381830 **Fax:** 01952 381993

Your Ref: **Our Ref:** **Date:** 3rd December 2014

Dear Mr Osmond

Re: Halesfield 18, Telford, TF7 4JS

With reference to the above property, I can provide the following information in answer to your queries

The site is situated on an industrial estate. The 1879 to 1884 historical maps series shows the area being fields with Halesfield Colliery and Ironstone, Kemberton sidings and tramway to the North that connected to the Kemberton and Halesfield Collieries (both of which mined coal and ironstone). In 1957 colliery extended in the area of Halesfield 19. it appears that some material was being deposited to the south of the colliery (probably colliery spoil). It is likely that this material was regraded in the 1970's when the Industrial Estate was constructed after the colliery closed in 1967.

As part of the Councils Part 2A work a GIS-based risk assessment has identified this site as being of "potential concern" based upon previous land use. All potentially contaminated/brownfield sites have now been prioritised in order of signifance and risk, and this site does feature on the list and the industrial estate has been prioritised due to site activites and is rated as Low.

The site has not been determined as Contaminated Land under the provisions of s.57 of the Environmental Protection Act 1990, and there are currently no plans to inspect the site or otherwise at this time.

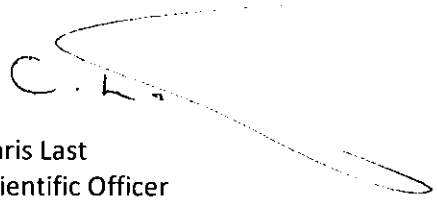
There is limited information relating to planning history for the site. It doesn't appear that any investigations of land quality have been completed and no reports for the site are held on file. However a geoenvironmental site assessment is held for the site behind the search site on Halesfiled 19, this was completed in January 2001 and has been enclosed for your information.

There are no recorded landfill sites within 250m of the search site and therefore other than the enclosed report we are not aware of any ground gas issues onsite or within the area.

As stated above we have no information on the site to raise the priority of the search site and no information to indicate that the site is not currently suitable for use.

Please feel free to contact me if I can be of further assistance.

Yours sincerely



Chris Last
Scientific Officer

BGS ID: 991984 : BGS Reference: SJ70NW1741
British National Grid (27700) : 370950,305033
Report an issue with this borehole

<< < Prev Page 1 of 1 Next > >>

E291-13 SJ70NW 1741 70950 05033

DRILLING METHOD: SHELL and AUGER
INVESTIGATION: HALESFIELD 7805/198 E291/13
BOREHOLE NO.: HE 4
PLANT: DANDO
DIAMETER OR SIZE: 150mm
SURFACE LEVEL 101.89 m. TELFORD GRID REFS E 10950 N 5033
DATES DRILLED 25-7-78
DATES BACKFILLED
ORIENTATION °AZIMUTH

DEPARTMENT OF THE DIRECTOR OF ENGINEERING SERVICES
BOREHOLE LOG PRODUCED BY : FAIRCLOUGH CIVIL ENGINEERING LTD.

STRATA AND WATER AT A VERTICAL SCALE OF 1 : 50

SAMPLE OR TEST TYPE (SEE KEY)	REF	DEPTH m.	RESULT (e.g. BLOWS)	DESCRIPTION	SECTION STRATA	SECTION WATER	DEPTH m.	THICKNESS m.	O LEVEL m
U 4	21611	1.00		Sandy, Compact clay, shale and coal FILL.				3.00	
D	HF4	1.45							
U 4	21612	2.50							
D	HF5	2.95					3.00		98.89
S.P.T.	H/1	4.00	29	Gravelly shale and pit waste: FILL.				3.90	
B	21702	5.55							
D	H/2	6.00							
B	21703	6.50					6.90		94.9
				Brown Sandy silty clay FILL.				0.50	
W	H/3	7.40				▽ R 7.40 31-7-78	7.40		94.4
S.P.T.	21704	7.40	33						
D	H/4	7.85		Silty sand and medium to large gravel.				2.60	
S.P.T.	21705	8.50	33						
S.P.T.	HF100	10.00	63				10.00		91.89
S.P.T.	HF101	10.46	63	Red sandstone FILL. END OF BOREHOLE.			10.46	0.46	91.43

KEY
DISTURBED SAMPLE D
BULK SAMPLE B
UNDISTURBED SAMPLE U
WATER SAMPLE W
CORE SAMPLE C
STANDARD PENETRATION TEST S.P.T.
CONE PENETRATION TEST C.P.T.
PERMEABILITY TEST RISING/FALLING ▽/△
WATER FOUND ▽ F
WATER REST LEVEL ▽ R

REMARKS

31

Appendix E Methodology and Report Limitations

Methodology

This Environmental Assessment has been designed to provide information relating to:

- the current and former land uses on and surrounding the site;
- the environmental sensitivity of the site location as determined by factors including geology, hydrogeology, surface watercourses and neighbouring land uses; and,
- relevant records held by the environmental regulators.

Any relevant information provided by the Client has been reviewed, with action taken to ensure this information is taken into account and/or verified where necessary. All information is then assessed to define the potential for the site to give rise to environmental liabilities for the freehold/leasehold owner (as appropriate). Recommendations are made for additional work where this is necessary to fully define the site's environmental liabilities, and cost estimates of the financial implications of the findings can be provided under separate cover, where appropriate.

Risk Classification

This assessment has been undertaken with due regard to Contaminated Land Guidance documents issued by the Department for Environment, Food and Rural Affairs (and its Predecessors), the British Standards Institute (the BSi), the Royal Institution of Chartered Surveyors (RICS) and the American Society for Testing and Materials (ASTM) Standard E 1527-13. The methods used follow a risk-based approach, with the potential environmental risk assessed qualitatively using the 'contaminant-pathway-receptor pollutant linkage' concept introduced in the Environmental Protection Act 1990.

Specific comment is made regarding the site's status under the Contaminated Land Regime implemented on the 1st April 2000 as Part IIA of the Environmental Protection Act 1990, and the actual or potential designation of the site as 'Contaminated Land' as defined in Section 78A(2). Unless specifically stated as relating to this definition, references to 'contamination' and 'contaminants' relate in general terms to the presence of potentially hazardous substances in, on or under the site.

In addition, consideration has been given to a wide range of related topics including (where appropriate): environmental processes; current and foreseeable environmental legislation; the practices and duties of environmental regulators; the health and safety of occupiers and neighbours as affected by contamination; effects on the structure of buildings; and financial implications. References to risk classifications are made according to the following definitions:

Low Risk

It is unlikely that the issue will arise as a liability/cost for the freehold/leasehold owner (as appropriate) of the site.

Low/Medium Risk

It is unlikely that the issue will arise as a liability/cost for the freehold/leasehold owner (as appropriate) of the site, whilst the site retains its current use. However, in the event of development, further assessment and costs may be incurred as a result of the development/change of use.

Medium Risk

It is possible that the issue could arise as a liability/cost for the freehold/leasehold owner (as appropriate) of the site. Further work is usually required to clarify the risk.

High Risk

It is likely that the issue will arise as a liability/cost for the site freehold/leasehold (as appropriate) owner of the site.

Environmental Risk Assessment

The presence of contaminated materials on a site is generally only of concern if an actual or potentially unacceptable risk exists. Within the context of current UK Legislation, the interpretation of a "significant risk" is termed to be one where:

- Significant harm is being caused or there is a significant possibility of such harm being caused, (where harm is defined as harm to health of living organisms or other interference with the ecological systems of which they form a part and, in the case of man, includes harm to his property); and / or, pollution of Controlled Waters is being caused.

The potential for harm to occur requires three conditions to be satisfied:

- Presence of substances (potential contaminants/pollutants) that may cause harm (Source of Pollution).
- The presence of a receptor which may be harmed, e.g. the water environment or humans, buildings, fauna and flora (The Receptor).
- The existence of a linkage between the source and the receptor (The Migration Pathway).

Therefore, the presence of measurable concentrations of contaminants within the ground and subsurface environment does not automatically imply that a contamination problem exists, since contamination must be defined in terms of pollutant linkages and unacceptable risk of harm.

The nature and importance of both pathways and receptors, which are relevant to a particular site, will vary according to the intended use of the site, its characteristics and its surroundings.

In order to assess the contamination risk at the subject site the above rational has been applied and is discussed within Section 6 in the context of Contamination Sources and Potential Pollutant Linkages (contaminant – pathway – receptor).

Limitations

WSP UK Limited has prepared this report solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from WSP UK Limited; a charge may be levied against such approval.

WSP UK Limited accepts no responsibility or liability for:

a) the consequences of this document being used for any purpose or project other than for which it was commissioned, and

b) this document to any third party with whom an agreement has not been executed.

The work undertaken to provide the basis of this report comprised a study of available documented information from a variety of sources (including the Client) and discussions with relevant authorities and other interested parties. The opinions given in this report have been dictated by the finite data on which they are based and are relevant only to the purpose for which the report was commissioned. The information reviewed should not be considered exhaustive and has been accepted in good faith as providing true and representative data pertaining to site conditions. Should additional information become available which may affect the opinions expressed in this report, WSP UK Limited reserves the right to review such information and, if warranted, to modify the opinions accordingly.

Where no site inspection is undertaken (for example a Desk Study Assessment or due to restricted site access), WSP cannot comment on the potential for environmental concerns associated with the current use or structure including the presence of asbestos.

It should be noted that any risks identified in this report are perceived risks based on the information reviewed; actual risks can only be assessed following a physical investigation of the site.

WSP are unaware of any proposed redevelopment plans and any reference made to actions that might be required in the event of redevelopment are made for information only.

Appendix F Report References

Environment Agency Aquifer Classifications

The Environment Agency (EA) divide the underlying strata in England and Wales into Principal Aquifer, Secondary Aquifer and Unproductive Strata in line with the updated Groundwater Protection Policy (GP3) and the Water Framework Directive (WFD). This replaces the former designation of Major, Minor and Non Aquifers. The following is derived from the main policy document.

Principal Aquifers

These are geological strata that exhibit high intergranular and/or fracture permeability. They usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. Principal Aquifers equate in most cases to aquifers previously designated as Major Aquifer.

Secondary Aquifers

These include a wide range of geological strata with a correspondingly wide range of permeability and storage. Secondary aquifers are subdivided into two types:

Secondary A - permeable strata capable of supporting water supplies at a local rather than strategic scale and in some cases forming an important source of base flow to rivers. These generally equate to aquifers formerly classified as 'Minor Aquifers'

Secondary B - predominantly lower permeability strata which may in part have the ability to store and yield limited amounts of groundwater by virtue of localised features such as fissures, thin permeable horizons and weathering. These are generally the water bearing parts of the former 'Non-Aquifers'

In cases where it has not been possible to attribute either category A or B to a rock type, a designation of Secondary Undifferentiated has been assigned. In most cases, this means that the stratum in question has previously been designated as both Minor and Non-Aquifer in different locations due to the variable characteristics of the rock type.

Unproductive Strata

These are geological strata with low permeability that have negligible significance for water supply or river base flow.

Regulatory Information Sources

Reference has been made to the Landmark Information Group data provision service. This includes information and data collated from several organisations, including the Environment Agency (EA), Department for Environment, Food & Rural Affairs (DEFRA), Health & Safety Executive (HSE), the Health Protection Agency (HPA), and the Coal Authority.

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