
PHASE I CONTAMINATION AUDIT

**THE WHITCLIFFE HOTEL
PROSPECT ROAD
CLECKHEATON
WEST YORKSHIRE
BD19 3HD**

**ON BEHALF OF
LAKELAND PROPERTIES LIMITED**

PREPARED BY



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**PHASE I CONTAMINATION AUDIT FOR THE REDEVELOPMENT OF
THE WHITCLIFFE HOTEL, PROSPECT ROAD, CLECKHEATON, BD19 3HD**

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1.0 EXECUTIVE SUMMARY

- 1.1 This report has been prepared by A.L.H Environmental Services in response to instruction from Lakeland Properties Limited (the owner). The report contains results of a Phase I Contamination Audit related to the proposed redevelopment of The Whitcliffe Hotel, Prospect Hotel, Cleckheaton, West Yorkshire, BD19 3HD.
- 1.2 This assessment has involved a site walkover, an inspection of historical maps, a review of environmental data held on publicly available registers and other sources as indicated within the report.
- 1.3 The documents submitted for the Planning Application may be approved by Kirklees Council. Planning Permission has not yet been granted for the proposed development.
- 1.4 The proposed Planning Application will relate to the construction of 23 No. residential dwellings which will also have associated soft landscaping and hardstanding areas which will be used for the pathways surrounding the dwellings and the main access road / turning area.
- 1.5 At present, the application site consists of the former Whitcliffe Hotel, areas of hardstanding and overgrown vegetation (various grasses, brambles and mature trees). In addition, there is 1 No. existing residential dwelling within the site's boundaries, however, this is to remain and will not impede on the proposed redevelopment of the site.
- 1.6 The immediate surrounding area has generally supported residential housing. Within the wider environs, a railway network, numerous mills, iron works, schools, playing fields and industrial estates have been present.
- 1.7 Obtained geological information has indicated that the application site is underlain by the Pennine Lower Coal Measures Formation (sandstone) of the Carboniferous period.
- 1.8 Based upon the information available, the site is considered to be stable in respect of mining.

- 1.9 There are no major watercourses near to the application site or within the wider environs. The nearest watercourse is Blacup Beck which is located to the south east. The underlying soils are classified as a minor aquifer and there are no surface or groundwater abstractions within 500.0m of the application site. The site is not located within any known flood risk zones.
- 1.10 The site does not lie in an area affected by radon; therefore no radon protection measures are required.
- 1.11 Given the historical and present site use, there is no perceived risk to potential receptors. This site can be considered as **low** risk to future site users, construction workers and the underlying minor aquifer and no further site investigation works are recommended.
- 1.12 The conclusions reached in this report are necessarily restricted to those which can be determined from available information and may be subject to amendment in the light of additional information becoming available or to changes in relevant legislation.
- 1.13 The writer knows of no conflicts of interest in the production of this report.

2.0 INTRODUCTION

- 2.1 This Phase I Contamination Audit of the site referred to as The Whitcliffe Hotel, Prospect Road, Cleckheaton, West Yorkshire, has been undertaken on behalf of Lakeland Properties. Initial development proposals for the site include the construction of 23 No. residential dwellings.
- 2.2 The area that is to be redeveloped currently consists of the former Whitcliffe Hotel, a large hardstanding area (former car parking facilities) and overgrown vegetation adjacent to the boundary walls. The application site is bound by a steel palisade fencing, timber fencing and overgrown vegetation.
- 2.3 The proposed development will comprise the clearance of all existing features currently on site to allow the proposed construction of 23 No. residential dwellings to take place throughout the site, which will be within the central vicinity of the site.
- 2.4 The proposed residential dwellings will be of semi-detached construction and each have car parking facilities and soft landscaped areas which will be used for recreation / leisure purposes.
- 2.5 The application is to the west of the most southern part of Prospect Road. This particular highway is the existing vehicular access point to the application site and will remain as part of the proposed development.
- 2.6 This report highlights ground related environmental and geotechnical considerations in relation to the proposed residential development.
- 2.7 The purpose of this assessment was to assess the site's geo-environmental setting by considering:
- Former, current and proposed land uses on and surrounding the site;
 - The sensitivity of the site's location as influenced by factors including geology, hydrogeology, surface watercourses and neighbouring land uses;
 - Relevant records held by environmental regulators.
- 2.8 To this end, the study has included an inspection of historical maps, a review of environmental data held on publicly available registers and other sources included within this report.

2.9 In addition, a site walkover was carried out across the site on Sunday 17 August 2014 by Mrs. Abbie Hopkins of A.L.H Environmental Services. The purpose of the walkover was to record details of the current land use, topography and principal physical features, and to identify where possible visual and olfactory indicators of contamination.

3.0 SITE LOCATION

- 3.1 The proposed development area is centred on National Grid Reference (NGR) 418650, 425410 within the central vicinity of the residential district known locally as Cleckheaton, Bradford.
- 3.2 The application site is of a relatively large size at approximately 8,200m² (0.82Ha) and sited west of Prospect Road.
- 3.3 The subject site is predominantly flat; however, it does a slight inclination from the south to the north. The central vicinity of the application site stands at approximately 113.60m Above Ordnance Datum (AOD). The northern section of the site lies at 116.0m AOD whereas the southern region lies at 112.60m AOD.
- 3.4 At present, the subject site currently comprises the former Whitcliffe Hotel, hardstanding and areas of overgrown vegetation in the form of various grasses, brambles and mature trees.
- 3.5 The proposed development will consist of the clearance of any existing features to allow the proposed residential development to take place within the application site's boundaries.
- 3.6 As previously stated, the application site is located within the central vicinity of Cleckheaton. This particular town comprises primarily residential properties. In addition, there are a number of commercial properties within close proximity which consist of textile manufacturers, garage services, car brakers and dismantlers, digital printers, commercial cleaning services, dry cleaners, tyre dealers, general engineers, precision engineers, electrical goods sales, car dealers, gate manufacturers and builder's merchants.
- 3.7 Within the site's proximity are a number of outer city suburbs; these being Gomersal (NE), Liversedge (SE) and Scholes (NW) and these are within 5.0km of Cleckheaton. In addition, Bradford City Centre is located 10.56km to the north.
- 3.8 A site location plan and an aerial photograph (obtained from Google Earth) can be found in Appendix A. In addition, a plan detailing the proposed site layout is presented within Appendix B of this report.

4.0 SITE WALKOVER

- 4.1 An initial site inspection was undertaken by A. Hopkins of A.L.H Environmental Services on Sunday 17 August 2014. The walkover was to assess the potential contamination on site and the immediate surrounding area. The weather at the time of the visit was dry and sunny with a light wind. Photographs of the current state of the subject site are presented within Appendix E of this report.
- 4.2 The application site can be accessed by a 1.50m high steel palisade gate via the northern boundary which leads from Prospect Road. Prospect Road is to the north east of the application site and runs in a north to south direction.
- 4.3 The application site consists of the brick built former Whitcliffe Hotel which is now in a disused state. The building is surrounded by hardstanding and overgrown vegetation adjacent to the site's boundaries. The site is bound by a mix of steel palisade fencing, timber fencing and vegetation.
- 4.4 As previously stated, the site is accessed via a 1.50m gate. Upon entering the site from this point, it is clear to see that the entire northern vicinity (with the exception of the boundary walls) is covered entirely with tarmac hardstanding. This area was a car parking area when the Hotel was in use. The hardstanding was in a relatively sound condition throughout.
- 4.5 Part of the northern, the eastern, southern and part of the western boundary walls consisted of overgrown vegetation which comprises various grasses, weeds, brambles and tall mature trees.
- 4.6 The Whitcliffe Hotel itself is of brick built construction and is painted cream in most places. The building was not inspected internally as the owner's want to restrict unwanted accessibility. In addition, each window and door was securely boarded up for security purposes.
- 4.7 Affixed to the front elevation of the existing building was an external seating area which is constructed of timber decking and located near an entrance which lead to an internal sports bar within the property, when it was in use.
- 4.8 Upon walking around the eastern area of the site (which leads to the south), the tarmac surfacing continued and was in a sound condition. Within the north eastern corner of the site was a parked, disused static caravan which was parked upon the hardstanding surface.

- 4.9 When entering the southern area of the site it was clear to see that the majority of this area was covered with tarmacadam surfacing as this area was an additional car parking area when the Hotel was in use. The surfacing was of a sound condition throughout.
- 4.10 Within this area of the car parking was a parked up touring caravan and a 4 x 4 vehicle near the southern edge and within the eastern part of the site was a parked crane. These vehicles had not leaked any oils / hydrocarbons onto the surfacing at the time of the walkover.
- 4.11 Within the western vicinity of the application site, adjacent to the Hotel's side (western) elevation was a small footpath which leads to the northern area of the site. Adjacent to the footpath was the location of the aforementioned stone built residential dwelling. The existing residential dwelling will remain as it is when the proposed development takes place as this is a privately owned property.
- 4.12 The existing residential dwelling falls within the application site's boundaries as it has to be accessed via a small ramp within the north western area of the site. As the existing dwelling is privately owned, this was not inspected for the purpose of this assessment.
- 4.13 It should be noted that there was no surface water present on site and there was no evidence of *fallopia japonica* (Japanese Knotweed).
- 4.14 No visual or olfactory indicators of contamination were observed during this site walkover.
- 4.15 Based upon the findings at the time of the site reconnaissance, there is no reason to believe that the site is contaminated at the present day, therefore, it is of the opinion the site can be redeveloped for the proposed residential scheme.

5.0 HISTORICAL DEVELOPMENT OF THE SUBJECT SITE & SURROUNDINGS

5.1 In order to establish the site and surrounding areas history an inspection of historical maps, dating between 1854 and 2014 and obtained as part of an Envirocheck report (Ref: 59287419_1_1) has been made. The following represents a summary of the map information with the historical maps presented in Appendix C of this report.

On site History

DATES	SITE FEATURES
1854 – 1894	The application site consists of open ground / agricultural land.
1894 – 1938	The site consists of a residential property known as 'Gladstone House' which has associated open space and woodland. The building is located within the central vicinity of the site. In addition, in the south eastern corner of the site are 2 No. unnamed outbuildings.
1938 – 1958	The existing residential building is now known as 'Trades Hall'. The remainder of the site remains as previously described.
1958 – 1964	The existing residential building is now known as 'Prospect Hall' and has expanded in a western direction.
1964 – 1992	The site now comprises 'Propsect Hall' and the aforementioned outbuildings to the south east, no longer exist. There are now 2 No. smaller outbuildings adjacent to the eastern site boundary.
1992 – 2014	The application site remains as previously described with the exception of the 2 No. aforementioned outbuildings. In addition, within the north western corner of the site is 1 No. residential dwelling. The use of the main property (central location) on site which was 'Propsect Hall' is now labelled as a hotel and has been known in recent years as the 'Whitcliffe Hotel'.

Off site History

DATES	SURROUNDING FEATURES	DISTANCE	DIRECTION
1854 – 1894	Open ground / agricultural land.	Adjacent	North
1894 – 1938	A mix of open ground and residential dwellings with Prospect Mills evident. Propsect Mills made card and wire on site.	Adjacent	North
1938 – 1958	As previously described with a water cooling tower now present.	Adjacent	North
1958 – 2014	Additional residential dwellings have been constructed. Propsect Mills are still present	Adjacent	North

	whereas the water cooling tower is no longer present.		
1854 – 1938	Open ground with 1 No. residential dwelling evident.	Adjacent	East
1938 – 1958	Open ground, the aforementioned residential dwelling and some terraced style residential dwellings have been built.	Adjacent	East
1958 – 1964	As previously described with an area of open ground now known as allotment gardens.	Adjacent	East
1964 – 1971	An area of the aforementioned allotment gardens are no longer evident as they have been built on. A rectangular building listed as 'works' is evident. In addition, a small cluster of residential dwellings have been built.	Adjacent	East
1971 – 2014	As previously described.	Adjacent	East
1854 – 1894	Open ground / agricultural land.	Adjacent	South
1894 – 1958	The area consists of open ground, residential dwellings and a public baths.	Adjacent	South
1958 – 1985	A mix of open ground, the newly constructed Butts Mill (unknown industry) and additional residential dwellings have been built. The public baths are no longer evident	Adjacent	South
1985 – 1988	As previously described. Butts Mill is no longer present and has been replaced with open land.	Adjacent	South
1988 – 2014	A large cluster of semi-detached residential dwellings have been constructed and occupy the area.	Adjacent	South
1854 – 1938	Open ground / agricultural land.	Adjacent	West
1938 – 2014	A residential housing estate has been built alongside a cemetery.	Adjacent	West
1854 – 1894	The majority of the area is open ground / agricultural land. In addition, the Cleckheaton Branch of the London, Midland and Scottish Railway (L.M.S.R) is evident and runs from the south east through to the north west.	250m – 1,000m	North
1894 – 1931	The area consists of open ground, newly constructed residential housing and a number of unnamed mills.	250m – 1,000m	North

1931 – 1966	As previously described with additional small schools and some more residential dwellings.	250m 1,000m	–	North
1966 – 2006	The area consists of additional residential dwellings, 'works' buildings, the aforementioned mills, the railway, schools and recreation grounds.	250m 1,000m	–	North
2006 - 2014	As previously described. The aforementioned railway is no longer evident.	250m 1,000m	–	North
1854 – 1894	The area consists of open ground, small clusters of residential dwellings, the aforementioned L.M.S.R and a Methodist Chapel.	250m 1,000m	–	East
1894 – 1931	As previously described with additional dwellings, mill buildings (unknown industries), a school and a mill pond. In addition, there is now a rail station associated to the L.M.S.R branch.	250m 1,000m	–	East
1931 – 1966	As previously described. An iron works is now evident, a newly constructed church and a park / recreation area. The railway has reduced in size, to one line.	250m 1,000m	–	East
1966 – 1974	Additional dwellings have been built which have replaced the iron works and some of the mill buildings. The railway station is no longer evident and is replaced by open land.	250m 1,000m	–	East
1974 – 2006	The area consists of residential dwellings, 'works' buildings, some unnamed mill buildings, a school, a bus station, allotment gardens and the dismantled railway line.	250m 1,000m	–	East
2006 – 2014	As previously described. The aforementioned railway is no longer evident.	250m 1,000m	–	East
1854 – 1894	Open ground / agricultural land with small clusters of residential dwellings.	250m 1,000m	–	South
1894 – 1966	The area consists of open ground to the south. Additional residential dwellings have been built to the south of Cleckheaton with woollen mills, a number of malt houses and a cricket ground.	250m 1,000m	–	South
1966 – 1974	As previously described with additional residential dwellings built and a Post Office (P.O).	250m 1,000m	–	South
1974 – 2006	As previously described. However, a large housing estate has also been constructed as has a fire	250m 1,000m	–	South

	station.		
2006 – 2014	The area consists of residential dwellings, the fire station, 'works' buildings, an unnamed industrial estate and some open ground / agricultural land.	250m 1,000m	– South
1854 – 1894	Open ground / agricultural land.	250m 1,000m	– West
1894 – 1931	Open ground, small clusters of residential dwellings have been built and some small unnamed mills.	250m 1,000m	– West
1931 – 1983	The area consists of residential dwellings, playing fields, 2 No. small unnamed schools, West End Park, general 'works' buildings and open ground.	250m 1,000m	– West
1983 – 2014	As previously described with the newly constructed Whitecliffe Mount School and playing fields.	250m 1,000m	– West

- 5.2 In summary, the application site was agricultural land from the 1850's until the mid 1890's. Since that time, the site was the location of Gladstone House which was a residential building which had a number of associated outbuildings evident. From the late 1930's, the existing building was known locally as Trades Hall and the entire state remained unchanged. In the 1950's, the existing building on site was then known as Prospect Hall and had expanded slightly in size and no outbuildings were evident.
- 5.3 By 1992, the existing building on site was labelled as a Hotel and an additional residential dwelling was constructed and located within the north western corner of the site. The main building on site (the hotel) has been known as the Whitcliffe Hotel since this time. The hotel (although now disused) and the existing dwelling are still evident to the present day.
- 5.4 The immediate surrounding area has generally supported open ground and residential housing, over the years. Within the wider environs, a railway network, numerous mills, iron works, schools, playing fields and industrial estates have been present.
- 5.5 From reviewing historical plans from 1854 – 2014, there is no reason to believe the application site has potentially been contaminated in the past years from a historical point of view.

6.0 ENVIRONMENTAL SETTING

6.1 This section is based principally upon a search of information available on public registers through the Envirocheck search (Ref: 59287419_1_1), included as Appendix D, together with other sources as indicated.

Geology

6.2 The following geological information has been obtained from information presented within the Envirocheck report.

6.3 The site itself is not directly affected by an area of known made ground, infilled ground or landslips. The nearest area of made ground is identified as being located adjacent to a local industrial estate which is to the south west of the site, approximately 500.0m away.

6.4 The underlying solid geology of the application site consists of the Pennine Lower Coal Measures which is of the Langsettian age. The Langsettian age is a stratigraphic stage name for European strata of the Carboniferous period.

6.5 The Pennine Lower Coal Measures comprises mudstone, siltstone and sandstone. The mudstone and siltstone have impermeable characteristics. However the geological information indicates a strong sandstone presence, which has permeable characteristics.

6.6 The area has been subjected to much faulting in the Carboniferous Period, all apparently from one period of tectonic activity, the Pennine Uplift some 230 million years ago.

6.7 Due to this extensive tectonic movement, there is faulting within Cleckheaton and the surrounding areas. The obtained geological information illustrates that there is a fault which runs in a south west to north eastern direction through the central vicinity of the site.

6.8 In geology, a fault is a planar fracture or discontinuity in a volume of rock, across which there has been significant displacement.

6.9 However, the obtained Coal Mining Report from the Coal Authority states '*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*'.

- 6.10 In addition, the datasheet from the Envirocheck report states that the site has:
- A very low chance of collapsible ground stability hazards.
 - No hazard in relation to compressible ground stability hazards.
 - No hazard for ground dissolution stability hazards.
 - A very low chance landslide ground stability hazards.
 - No hazard for running sand ground stability hazards.
 - No hazard for shrinking or swelling clay ground stability hazards.
- 6.11 Therefore, according to the obtained information, the underlying fault line does not appear to be affecting the application site.

Coal Mining

- 6.12 In view of mining potential within close proximity of the site, a mining report (Ref: 51000607279001) was requested from the Coal Authority for the purpose of this assessment and is presented within Appendix E.
- 6.13 The report identifies that the application site is not within a likely zone of influence of from past underground coal workings.
- 6.14 The application site is not in the likely zone of influence of any present or future underground coal workings.
- 6.15 The site is not within an area the Coal Authority is determining to grant a licence to remove coal using underground methods.
- 6.16 There are 2 No. known coal mine entries within 20.0m of the application site.
- 6.17 There are no coal mine entries within, or within 20.0m of the boundary of the site. Both of the mine entries are located to the north east of the site and not within the application site boundary. They are adjacent to Prospect Road and can be seen on the plan within the Coal Mining Report. At present, there is no record of what steps can be taken to treat mine entries.

- 6.18 However, many mine shafts throughout the UK have been treated and filled when the mines closed and problems with mine shafts and mine entries are very rare.
- 6.19 The site is not within 800.0m of the boundary of an opencast site for which the Coal Authority is determining to grant a licence to remove coal by opencast methods.
- 6.20 The Coal Authority have not received a damage notice of claim to the since 31 October 1994. There is no current Stop Notice delaying the start of remedial works or repairs to the site.
- 6.21 The report states that there is no record of mine gas emission action within the boundary of the site.

Hydrology

- 6.22 From observing the Agency and Hydrological Flood Plan within the Envirocheck, it is clear to see that there are no major watercourses within close proximity of the subject site.
- 6.23 The nearest recorded surface water within 1,000.0m of the application site is Blacup Beck which is sited 290.0m to the south east. Blacup Beck is located to the south east of the site and flows in an east to western direction through existing residential dwellings and industrial estate where it abruptly comes to an end.
- 6.24 In addition, 750.0m to the east of the site is Spen River. This particular watercourse flows from the north east of Cleckheaton and continues in a southern path through existing agricultural land prior to adjoining the River Calder at Ravensthorpe.
- 6.25 It should be made apparent that neither Blacup Beck nor the Spen River poses a flood risk to the application site due to both watercourses being a distance away.
- 6.26 In addition, there are a number of surface water features are evident such small issues and ponds. However, it should be noted that these surface water features bear no significance in relation to flooding issues at or near to the application site.

Water Quality

- 6.27 As the Spen River is located within a relatively close proximity of the site, an assessment of the water quality has been made available.

- 6.28 The Spen River was tested 488.0m to north east of the site over an estimated distance of 1,500.0m in the year 2000. At this point, the watercourse had a River Quality E, which is 'poor'.

Flooding

- 6.29 The Environment Agency website (<http://www.environment-agency.gov.uk>) and the obtained Envirocheck Report indicate that the application site is designated within the low probability Flood Zone 1. Based on the information from the Environment Agency Flood Risk Plan, the application site has a one in 1,000 (0.1%) chance of flooding from rivers or seas. Please refer to Plan No: LP /003 within Appendix A of this report.

Surface Water Abstractions

- 6.30 There are no surface water abstractions within 1,000.0m of the application site.

Discharge Consents

- 6.31 There are 10 No. recorded discharge consents within 1,000.0m of the application site; however there are only two within 500.0m.
- 6.32 The nearest discharge consent is located 296.0m to the south east at Hightown Road, Cleckheaton. The current status of the licence is 'New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)'. The discharge type is sewage discharges – storm overflow / storm tank. The receiving water is Syke Beck.
- 6.33 The other nearby recorded discharge consent is located 300.0m to the south east at Hightown Road, Cleckheaton. The current status of the licence is 'Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995). The discharge type was sewage discharges – storm overflow / storm tank and the receiving water was Blacup Beck.

Nitrate Vulnerable Zone

- 6.34 The site lies within a Nitrate Vulnerable Zone (NVZ); surface water being designated by DEFRA in 2002. NVZ's are designated areas of land that drain into water that are polluted by nitrates from agriculture.

Pollution Incidents to Controlled Waters

- 6.35 There have been 39 No. pollution incidents to controlled waters in the past within 1,000.0m of the application site. Four of which are within 500.0m of the application site.
- 6.36 The nearest pollution incident was located 199.0m to the south east. The pollutant was 'sewage – treated effluent'. The date which the incident occurred was 19 October 1992. The cause of the incident is not given. The incident severity was Category 2 – Significant Incident and it is believed the receiving water was a freshwater stream / river. The catchment area is not given.
- 6.37 The second nearest pollution incident was located 287.0m to the south east. The pollutant was 'rubbish'. The date which the incident occurred was 13 April 1994; the cause is not given. The incident severity was Category 3 – Minor Incident and the receiving was a freshwater stream / river. The catchment area is not given.
- 6.38 The third nearest pollution incident was located 380.0m to the south. The pollutant was 'other sewage'. The date which the incident occurred was 15 August 1995 however, the cause is not given but it is known that fish were killed. The incident severity was Category 3 – Minor Incident and the receiving water was a freshwater stream / river. The catchment area was the Calder Tributaries.
- 6.39 The fourth nearest pollution incident was located 484.0m to the north east. The pollutant was 'unknown'. The date the incident occurred on was 15 September 1989; however the cause was not given. The incident severity was Category 2 – Significant Incident and the receiving water was a freshwater stream / river. The catchment area is not given.

Groundwater Vulnerability

- 6.40 The Groundwater Vulnerability plan, which can be found within the Envirocheck report (Appendix D), indicates the underlying solid geology can be classified as a Minor Aquifer (Variably Permeable) with the site underlain by soils of high leaching potential.
- 6.41 Soils of a High Leaching Potential are usually coarse textured or moderately shallow which transmit non-absorbed pollutants and liquid discharges but the soils have the ability to attenuate absorbed pollutants because of their large clay or organic matter contents (OMC).

Groundwater Abstractions

- 6.42 There are 2 No. groundwater abstractions within 1,000.0m of the application site.
- 6.43 The nearest groundwater abstraction point is located 818.0m to the north west at a borehole. The abstraction is operated by Metrotect Limited. The groundwater abstraction can be used for industrial / commercial or public services – general use. There is no permit end date at this given time.
- 6.44 The other notable groundwater abstraction point is located 818.0m to the north west at a borehole – coal measures. The abstraction is operated by Metrotect Limited. The groundwater abstraction can be used for chemicals – general use. There is no permit end date at this given time.

Radon Gas

- 6.45 The subject site is not within a radon-affected area, as less than 1.0% of buildings are above the action level. Therefore, according to the UK Radon Council, the Building Research Establishment (BRE) and with reference to BR211 (Guidance on Protective Measures for New Buildings), it is stated that no radon protective measures are necessary with the construction of new builds. Please refer to www.ukradon.org.

Landfill Sites

- 6.46 There are 4 No. registered landfill sites within 1,000.0m of the application site. However, the nearest is over 300.0m away.
- 6.47 The nearest registered landfill site is located 333.0m to the south east. The licence holder was Francis W Birkett & Sons Limited and sited at Hightown Road, Cleckheaton. The landfill accepted excavation natural materials and foundry sand. It should be made apparent that the site is no longer active as the licence lapsed / was cancelled on 01 February 1984.
- 6.48 There are 10 No. historical landfill sites within 1,000.0m of the application. However, the nearest one is over 250.0m from the site's proximity.
- 6.49 The nearest and most significant historical landfill site was located 310.0m to the south east. The licence holder Francis W Birkett & Sons Limited and sited at Hightown Road, Cleckheaton. The landfill accepted inert and commercial waste. The last input was 31 December 1990.

- 6.50 There are 5 No. BGS Recorded Landfill Sites within 1,000.0m of the application site. However none are within close proximity of the application site.
- 6.51 The nearest BGS landfill site was located 786.0m to the east at Spen Lane, Gomersal. The name of the landfill site was Mann Dam. There is no other information available for this assessment.

Waste Management, Treatment and Disposal Sites

- 6.52 Within 1,000.0m of the application site there are 3 No. registered waste transfer sites. Only two are within 500.0m of the application site.
- 6.53 The nearest waste transfer site is located 313.0m to the south west at Robert Street, Cleckheaton. The waste transfer site is operational to the present day and the licence is dated from 20 July 1999. The transfer site accepts uncontaminated waste (earth, excavation, construction and demolition).
- 6.54 The other nearby registered waste transfer site is located 317.0m to the south west. The waste transfer site is no longer operational as it was superseded on 01 August 1993. When it was active, it accepted inert construction and demolition waste.
- 6.55 There 5 No. registered waste treatment / disposal sites within 1,000.0m of the application site. Two of which are within 500.0m of site's proximity.
- 6.56 The nearest is located 259.0m to the south west of the site at Robert Street, Cleckheaton. The site category is a scrap yard and accepts scrap metal. The site is currently operational and the licence is dated from 01 November 1990.
- 6.57 The other nearby registered waste treatment / disposal site is located 482.0m to the south west. The site category is a scrap yard and accepts scrap metal. The site is currently operational and the licence is dated 01 November 1995.
- 6.58 There are 3 No. active licenced waste management facility sites (locations) within 1,000.0m of the site. Three of which are within 500.0m of the application site.
- 6.59 The nearest is located 313.0m to the south west at Robert Street, Cleckheaton. The site category is transfer stations taking non-biodegradable wastes. The licence is active and was issued on 11 August 1993.

- 6.60 The other active licenced waste management facility site (location) is located 313.0m to the south west at Robert Street, Cleckheaton. The site category is metal recycling sites (mixed). The licence is active and was issued on 13 November 1990.
- 6.61 The third nearest licenced waste management facility site (location) and is located 451.0m to the south west at Unit 10, West End Mills, Brick Street, Cleckheaton. The site category is household, commercial and industrial transfer stations. The licence is active and was issued on 30 November 1995.
- 6.62 There are no active licenced waste management facility sites (boundaries) within 1,000.0m.

Regulatory Permits and Registers

- 6.63 There are no Local Authority Integrated Pollution Prevention and Control sites within 1,000.0m of the site.
- 6.64 There are 18 No. Local Authority Pollution Prevention Control sites within 1,000.0m of the application site. Four of which are within 250.0m of the site's proximity.
- 6.65 The nearest is located 196.0m to the east at James Burnhill & Sons Limited, Northgate Mills, Serpentine Road, Cleckheaton. The current description is PG6/26 Animal feed compounding. At this time, the licence is authorised.
- 6.66 The second location is 197.0m to the east at James Burnhill & Sons Limited, Northgate Mills, Serpentine Road, Cleckheaton. The current description is PG6/26 Animal feed compounding. At this time, the licence is authorised.
- 6.67 The third location is 199.0m to the east at Tesco, No. 49 Northgate, Cleckheaton. The current description is PG1/14 Petrol filling station. At this time, the licence is permitted.
- 6.68 The fourth nearest location is 241.0m to the east at Lockwoods Textile Care, No. 33 Northgate, Cleckheaton. The current description is PG6/46 Dry Cleaning. At this time, the licence is 'application not yet authorised'.
- 6.69 There are no Integrated Pollution Prevention and Control sites within 500.0m of the site. The nearest one is located 971.0m to the north at TMD Friction UK Limited, Hunsworth Lane, Cleckheaton. The description of the works undertaken is Inorganic Chemical processes.

- 6.70 There are no recorded explosive sites within 1,000.0m of the application site.
- 6.71 There is no Control of Major Accidents Hazards Sites (COMAH) within 1,000.0m of the application site.
- 6.72 There is 1 No. Notification of Installations Handling Hazardous Substances (NIHHS) sites within 1,000.0m of the application site. The name of the site is Transco at Whitechapel Road, Cleckheaton and located 664.0 to the north. The current status is active.
- 6.73 There are 2 No. Planning Hazardous Substance Consents listed within 1,000.0m of the application site.
- 6.74 The nearest one known as British Gas at North Eastern, Whitechapel Road, Cleckheaton, which is 664.0m to the north. The hazardous substance is Liquefied extremely flammable gas and natural gas.
- 6.75 The other Planning Hazardous Substance Consent is known as BG Transco Plc at Cleckheaton Holder Station, Whitechapel Road, Cleckheaton which is 665.0m to the north. The hazardous substance is Liquefied extremely flammable gas and natural gas.

Contemporary Trade Directory Entries

- 6.76 Within 1,000.0m of the application site, there are 248 No. contemporary trade directories. Two active trade directories are near adjacent to the site's boundaries.
- 6.77 The nearest trade directory is located 5.0m to the north east and is Trendy Tuft, Crownham House, Gladstone Street, Cleckheaton. The trade directory is classified as being textile manufacturing.
- 6.78 The other trade directory within close proximity of the site is located 19.0m to the south west at Calder Valley Blinds, No. 5 Blacup Moor View, Cleckheaton. The trade directory is classified as being blinds, awnings and canopies.
- 6.79 Throughout Cleckheaton itself are a number of various industries. Other active trade directories within close proximity of the application site are garage services, car brakers and dismantlers, digital printers, commercial cleaning services, dry cleaners, tyre dealers, general engineers, precision engineers, electrical goods sales, car dealers, gate manufacturers and builder's merchants.

Fuel Station Entries

- 6.80 Within 1,000.0m of the site there are 2 No. recorded fuel station entries.
- 6.81 The nearest fuel station is located 115.0m to the north east at No. 49 Northgate, Cleckheaton. The fuel station is known as Tesco, Cleckheaton. The premises type is a hypermarket and currently has an 'open' classification.
- 6.82 The second nearest fuel station is located 257.0m to the east at Bradford Road, Cleckheaton. The fuel station is known as Cleckheaton Motor Company Limited. The premises type is not applicable and the fuel station is currently classified as being 'obsolete' i.e. closed.

7.0 QUALITATIVE RISK ASSESSMENT

- 7.1 The information presented in the earlier section of this report has been collated and evaluated to establish a qualitative risk assessment for the site for the proposed end use. The risk assessment identifies both current and potential future hazards associated with the site based upon the proposed residential end use.
- 7.2 The site has been considered with regard to current UK legislation and guidance, namely Part II A of the Environmental Protection Act 1990 and Water Act 2003, in accordance with current UK good practice guidelines (e.g. BS 10175:2001 and CIRIA C552 (2001) Contaminated Land Risk Assessment: A guide to good practice).
- 7.3 For a risk of pollution or environmental harm to occur as a result of ground contamination requires three conditions to be satisfied:
- Source of Pollution: presence of substance (potential contaminants/pollutants) that may cause harm when exposed to a receptor;
 - Pathway: the existence of a route/mechanism by which a receptor is exposed to a contamination source; and
 - Receptor: something that may be adversely affected when exposed to a contamination source, such as humans, buildings, controlled waters or an ecological system.
- 7.4 Each element can exist in isolation without posing a significant risk, and it is only when the three elements are linked that a potential risk can exist and a potential pollutant be created, whereby contamination can travel from a source via an identified pathway to a receptor.

Potential Sources of Contamination

- 7.5 This assessment of the application site has indicated that the site was agricultural land prior to being the location of residential properties. Since the 1890's, located within the central vicinity of the site was Gladstone House which over time remained as a residential dwelling (although at times known as Trades Hall or Prospect Hall). In the 1950's, the building expanded slightly in size and from 1992 to the present day the main building on site has been known as the Whitcliffe Hotel.

- 7.6 In addition, adjacent to the site's boundary overgrown vegetation is evident. The existing vegetation around the site shows no stress or signs of the presence of phytotoxic chemicals such as copper, nickel and zinc. Therefore, this leads A.L.H Environmental Services to believe the vegetated areas are not contaminated.
- 7.7 A large area of the application site is hardstanding which is of a sound condition throughout and there were no signs of any oils or hydrocarbons upon the surface. Therefore there is no reason to believe that these areas are contaminated.
- 7.8 From a historical point of view and the current state of the application site, there are no potential sources of contamination which may be present or have previously been present.
- 7.9 Within the wider environs, the area has supported a number of industries which given the distance to the site are not considered to pose a potential source of contamination. The majority of the nearest active trade directories are over 50.0m away and do not cause potential contamination issues to the site. The nearest active trade directory is to the east of the site and are textile manufacturers, which introduces no contaminative sources to the application site.

Potential Pathways

- Humans – dermal contact, soil ingestion, dust inhalation and possible vapour inhalation;
- Groundwater – leaching and vertical migration.

Potential Receptors

- 7.10 Potential receptors that may be affected by potential contamination and given the proposed redevelopment of the site as a residential end use include:
- Construction workers
 - Site end users
 - Buildings.

Risk Assessment

- 7.11 By considering the sources, pathways and receptors, an assessment of the environmental risks is made with reference to the significance and degree of the risk. This assessment is based on the consideration of whether the source of contamination can reach a receptor and hence whether it is of major or minor significance. References to risk classifications are made according to the following definitions:
- Low risk – it is unlikely that an issue will arise with respect to causing significant harm to human health or controlled waters.
 - Medium risk – it is possible that an issue could arise with respect to causing significant harm to human health or controlled waters.
 - High risk – it is likely that an issue will arise with respect to causing significant harm to human health or controlled waters.
- 7.12 Given the absence of one of the main elements required in order to carry out a risk assessment and the no sources of contamination, there is no perceived risk to potential receptors. Therefore, this site can be considered as **low** risk.
- 7.13 As there is no potential contamination on site at the present day and historically, it is considered **low** with regards to the future users of the site. The future users of the site when complete will be the occupants of the residential dwellings. Once the hardstanding car parking facilities and driveways have been complete, this will reduce the risk further and mitigate the potential for downward migration.
- 7.14 The risk to the construction workers is considered to be a **low** risk due to presence of materials which may be potentially contaminated. The risk can be reduced further by the appropriate use of Personal Protective Equipment (P.P.E) and a diligent approach to health and safety on site.
- 7.15 There is no risk of potential contamination affecting watercourses by surface water run-off, therefore, given the distance of the nearest watercourses from the application site, the risk is considered **low**. With regard to the underlying minor aquifer, if the car parking facilities comprised hardstanding surface this will mitigate the potential for downward migration, the risk to the aquifer is considered **low**.

8.0 GEOTECHNICAL CONSIDERATIONS

- 8.1 The following geotechnical considerations are given as preliminary guidelines only based on the available data on the ground conditions. Consequently, the following should not be taken as design criteria without further geotechnical data obtained from a suitably designed ground investigation.

Mining

- 8.2 The site is considered to be stable in respect of mining according to the information provided in the obtained Coal Authority Mining Report and from reviewing the geological information.
- 8.3 However, 2 No. mine entries are within 20.0m to the north east of the application site. Although mine entries and mine shafts have usually been treated in the past, A Coal Mining Risk Assessment can be submitted to the Local Authority and the Coal Authority by a third party, if requested.

Foundations

- 8.4 The geological information indicates that the site is underlain by mudstone, siltstone and sandstone. Therefore, across the site it is anticipated that the use of traditional strip foundations are considered feasible.

Gas Protection Measures

- 8.5 There are no landfill sites, either open or closed within a close vicinity of the site; therefore there is no perceived risk for ground gas migration.
- 8.6 The site lies in an area where no radon protection measures are required.

Site Drainage

- 8.7 The site is underlain by the Pennine Lower Coal Measures geology and notably sandstone is evident, subject to an appropriately designed geotechnical site investigation; soakaway drainage may be feasible at this site or other attenuation methods can be designed should soakaways not be deemed appropriate. This would have to be concluded by undertaking the appropriate soakaway testing as per BRE 365 Soakaway Design.

9.0 REPORT SUMMARY & RECOMMENDATIONS

- 9.1 This assessment has concluded that the proposed future use of the site is unlikely to introduce contamination to the site or its immediate surroundings.
- 9.2 As a result of the findings on site, no samples were taken as no contaminants were found that could cause harm to human health or the groundwater.
- 9.3 The risk of contamination on site is low due the past and present use of the site (as agricultural land, a residential property which was then made into the Whitcliffe Hotel, after a slight expansion).
- 9.4 There are no reasons why the site cannot be used for residential development on grounds of contamination as the site is unlikely to be a cause for concern when compared with other sites in the district.
- 9.5 A.L.H Environmental Services recommend that no site investigation works are required.

10.0 REPORT LIMITATIONS

- 10.1 This report has been produced by A.L.H Environmental Services for the site referred to as **The Whitcliffe Hotel, Prospect Road, Cleckheaton. West Yorkshire, BD19 3HD** on behalf of Lakeland Properties Limited, solely for the use of the client and their professional advisors with whom the assignment has been agreed.
- 10.2 Both the findings and opinions expressed within the report are relevant to the period of the site visit and data supplied; they therefore should not be relied on at a later date. No part of the report may be reproduced or relied upon by any third party who may wish to use or reply upon its contents without the prior written consent of A.L.H Environmental Services.
- 10.3 That work that has been undertaken to provide the basis of this report comprised a limited site investigation report concentrating on the key issues identified within the Phase I Contamination Audit dated August 2014. The opinions expressed in the report have been dictated by the data on which they are based and are relevant only for the purpose for which the report was commissioned.
- 10.4 Should additional information become available which may affect the opinions expressed in this report, A.L.H Environmental Services retain the right to review such information and to modify opinions accordingly. It should be noted that the risks identified in this report are 'perceived risks' based upon the information reviewed.

Main Author:

A L Hopkins
Environmental Engineer

Date: August 2014 Job Number: 2014/095

APPENDIX A

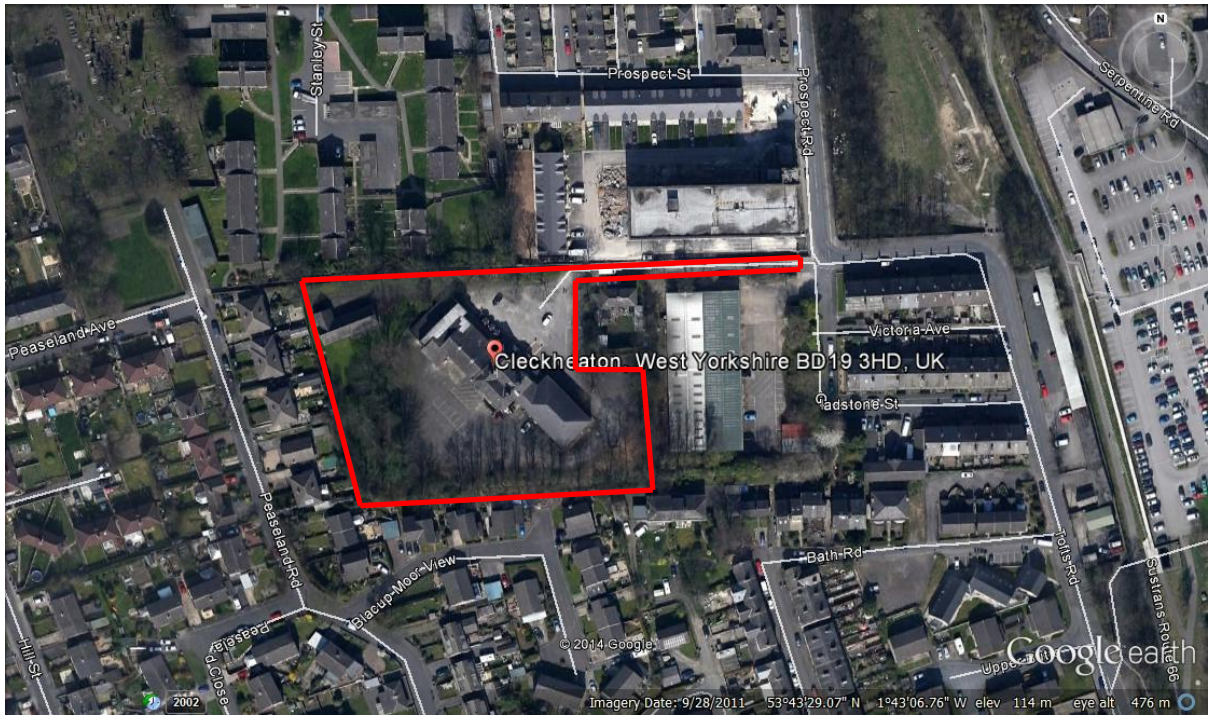
Plans of the Site



SITE LOCATION PLAN (Obtained from www.streetmap.co.uk)

Scale 1: 25,000

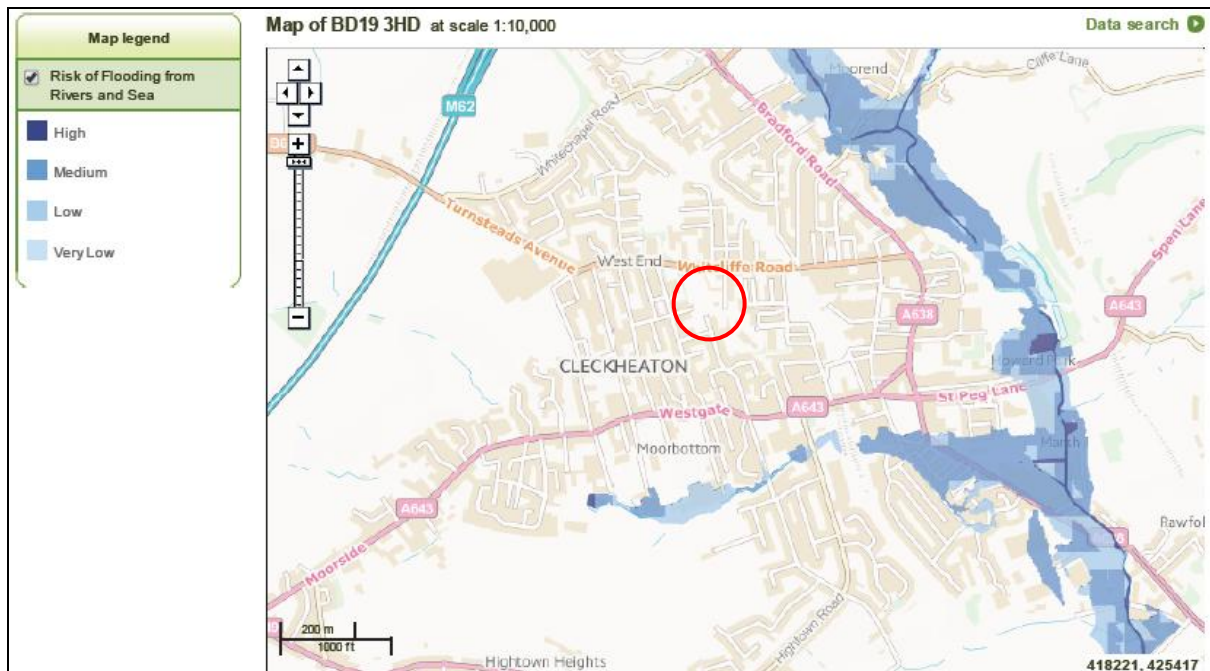
Plan No: LP/001



AERIAL VIEW OF THE SITE (Obtained from Google Earth)

Scale NTS

Plan No: LP/002



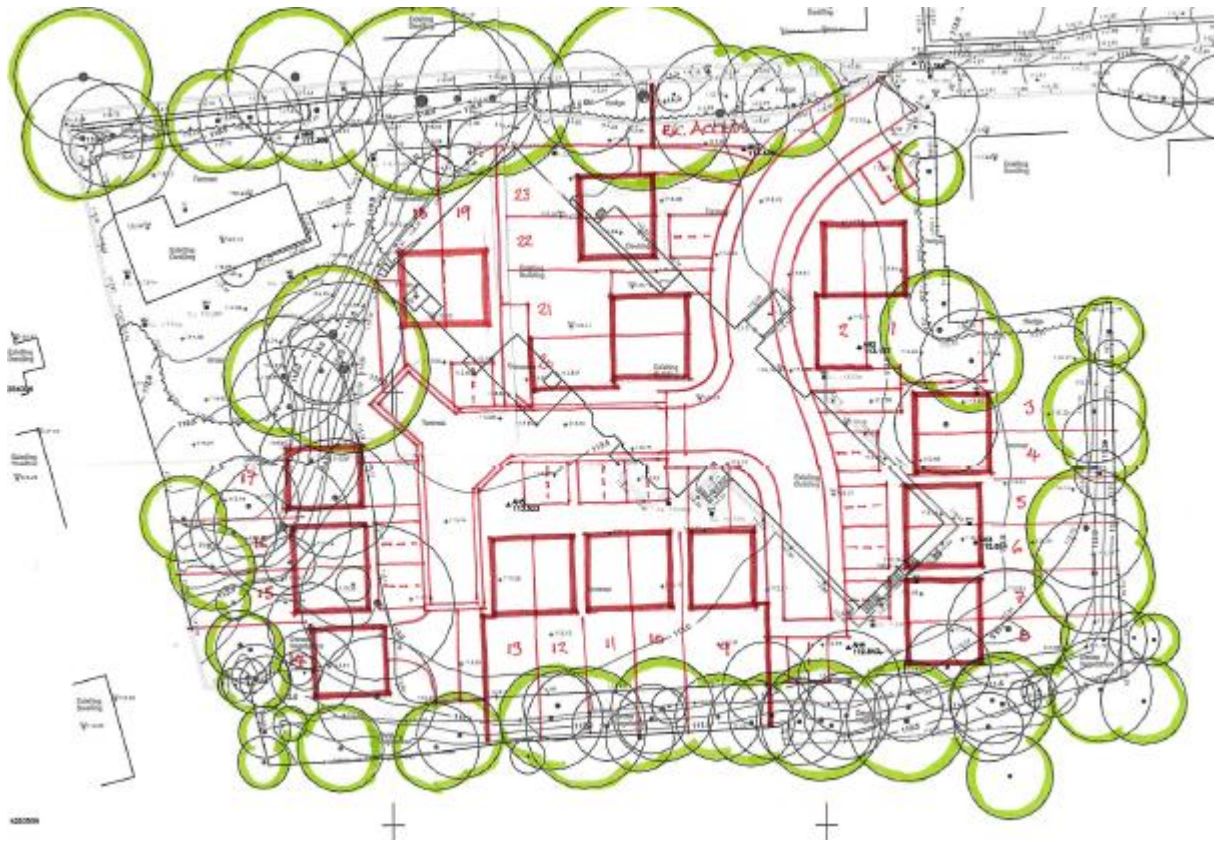
ENVIRONMENT AGENCY FLOOD RISK PLAN (Obtained from www.environment-agency.gov.uk)

Scale 1:10,000

Plan No: LP/003

APPENDIX B

Proposed Site Layout Plan



APPENDIX C

Envirocheck Historical Plans

APPENDIX D

Envirocheck Report

APPENDIX E

Coal Authority Mining Report

APPENDIX F

Site Photographs

**PROPOSED RESIDENTIAL DEVELOPMENT AT THE FORMER WHITCLIFFE HOTEL,
PROSPECT ROAD, CLECKHEATON, BD19 3HD**

SITE PHOTOGRAPHS 17 AUGUST 2014



Photograph 1 – The above photograph shows the entrance to the site from Prospect Road.



Photograph 2 – Showing the road to the site, looking towards Prospect Road.



Photograph 3 – Showing the existing and proposed access road into the site.



Photograph 4 – The above shows the former Whitcliffe Hotel, which is located in the central vicinity of the site.



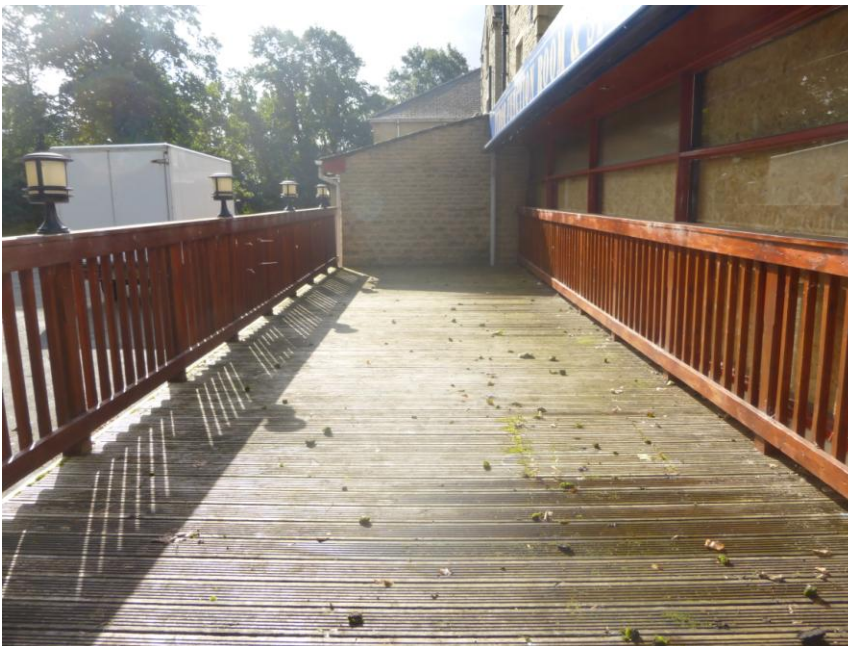
Photograph 5 – The area to the left land side of the existing access comprises hardstanding and overgrown vegetation adjacent to the boundary wall.



Photograph 6 – Showing the front elevation of the Hotel, looking in an eastern direction.



Photograph 7 – Showing the front elevation of the Hotel.



Photograph 8 – Affixed to the front elevation is an existing timber decking area which will have been used for an external sitting area when the Hotel was in use.



Photograph 9 – Showing the front elevation of the Hotel. The block paved ramp will have been used as an access point to the Hotel for residents.



Photograph 10 – Showing the front elevation of the Hotel, within the eastern part of the site.



Photograph 11 – Car parking facilities are evident within the northern section of the site which consists of tarmacadam surfacing throughout. There were no signs of hydrocarbon contamination at the surface.



Photograph 12 – Showing a parked, disused static caravan within the north eastern corner of the site.



Photograph 13 – Showing the front elevation of the Hotel, looking in a south western direction.



Photograph 14 – The eastern boundary comprises overgrown vegetation and mature trees.



Photograph 15 – Showing the rear elevation of the Hotel, looking in a north western direction from the eastern site boundary.



Photograph 16 – At the rear elevation of the property is a staircase leading to a cellar.



Photograph 17 – Showing the external staircase leading to a cellar.



Photograph 18 – The above shows the eastern site boundary, looking in a northern direction.



Photograph 19 – Parked within the southern area of the site was 1 No. car and 1 No. disused touring caravan.



Photograph 20 – Showing the rear elevation of the Hotel, looking in a western direction.



Photograph 21 – Showing the rear elevation of the property with a small pathway leading to the north of the site.



Photograph 22 – Showing the existing residential dwelling which is within the application site's boundaries. This is a private property and will remain once the redevelopment of the site has occurred. The dwelling is located within the western area of the site.



Photograph 22 – Showing the extent of the car parking facilities to the south of the Hotel. This photograph is looking in an eastern direction from the western site boundary.



Photograph 23 – The main access point to the existing residential dwelling is located within the western area of the site. This will remain as it is as part of the proposed development.