13.0 GROUND CONDITIONS

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13.1 INTRODUCTION

13.1.1 This Chapter has been prepared by Brookbanks Consulting Ltd and considers the effects of the Project on ground conditions and contamination, drawing on the findings of the site Geo-Environmental Phase 1 Desk Study contained as **Appendix 13.1** of this Environmental Statement. This Chapter describes the policy context and baseline site situation with regards to geology, hydrogeology and contamination at the Site prior to development contained within Chapter 13.1.

13.1.2 The assessment considers the potential effects of both the construction and operational spans of the development and identifies both the risks and associated mitigation requirements.

13.1.3 The following sections will outline the baseline and proposed site conditions and seeks to provide confirmation of the appropriateness of the Site for the nature of development proposed in accordance with local and national guidance.

13.2 METHODOLOGY

Scope

13.2.1 Baseline conditions at the site relating to ground conditions, hydrology, hydrogeology, flood risk and drainage have been established using published information and within the Landmark Envirocheck Report.

Data Sources

13.2.2 Published information has been obtained in the form of:

- BGS Published geology
- Environment Agency Data
- Landmark Envirocheck Site Investigation Reports

13.2.3 Additional guidance documents which are applicable to this assessment include:

- Planning Practice Guidance (2014)
- National Planning Policy Framework (2019)
- Technical Guide to the National Planning Policy Framework (2012)
- CIRIA SP156 - Control of Water Pollution from Construction Sites (2002)
- Environmental Protection Act 1990: Part 2A: Contaminated Land, (2012)
- CIRIA C552 Contaminated Land Risk Assessment, A Guide to Good Practice, (2001)
- CIRIA C665 Assessing risks posed by hazardous ground gases to buildings, (2007)
- CLR 11: Model Procedures for the Management of Contaminated Land.

13.2.4 Whilst now archived, in the absence of alternative 'good practice' guidance, it is recognised that the Environment Agency Pollution Prevention Guidance (PPG) notes still provide up to date and appropriate guidance for assessing contamination from Proposed Development.

13.2.5 The guidance documents used in the production of this ES Chapter include:

- PPG1: General Guidance to the Prevention of Pollution
- PPG6: Working at Construction and Demolition Sites

13.2.6 During the development of this Chapter, the following statutory bodies and interested parties have been consulted regarding the proposals:

- Environment Agency

Assessment approach

13.2.7 The format of this section of the ES sets out an appraisal of the baseline conditions, followed by a description of the relevant policy context and an identification of potential environmental effects due to the application proposals. The importance of each mechanism and an assessment of each potential effect are then considered along with any mitigation measures and recommendations.

13.2.8 Methods of assessment have been employed that are consistent with current guidance and recommendations in the form of statutory documents and recognised publications to ensure that the findings represent a robust approach to the assessment.

Significance criteria

13.2.9 The following scale of significance is used where an impact is identified:

- Major - Loss of resource and/or quality and integrity of resource; severe damage to key characteristics or elements, for example injuries to people or damage to buildings through flooding.

- Moderate - Loss of integrity or partial loss of attribute, for example damage or loss of access through flooding
- Minor - Minor impact / minor loss of attribute, temporary loss of access through flooding.
- Negligible - Insignificant impact to water quality or flood risk

13.2.10 The following Tables outline the criteria for determining the magnitude and significance of the identified impacts.

Table 13.1: Sensitivity of Environmental Receptor

Sensitivity	Receptor
High	Internationally / Nationally Important
Medium	Regionally Important
Low	Locally Importance

Table 13.2: Magnitude of Change to Environmental Receptor

Extent of Change	Magnitude
High	Entire loss / gain or major variation to key elements / features of the baseline conditions so that the post-development character / configuration of the baseline condition would be fundamentally changed.

Medium	Loss / gain or variation to one or more key elements / features of the baseline conditions so that the post-development character / configuration of the baseline condition would be materially changed.
Low	Minor change from the baseline conditions. The changes are measureable, but not material in the sense that the changes are similar to those pre-development.
Negligible / None	Inconsequential or no change from baseline conditions

Table 13.3: Matrix of Significance of Impacts

Sensitivity of Receptor	**Magnitude of Change**			
	High	**Medium**	**Low**	**Negligible/None**
High	Major	Major	Moderate	Not Significant
Medium	Major	Moderate	Minor	Not Significant
Low	Moderate	Minor	Minor	Not Significant

Table 13.4: Definition of Significance of Environmental Impacts

Significance of Impacts	**Definition**
Major	An effect which in isolation could have a material influence on the decision making process.

Moderate	An effect which on its own could have moderate influence on decision making, particularly when combined with other similar effects.
Minor	An effect which on its own is likely to have a minor influence on decision making, but when combined with other effects could have a more material influence.
Negligible	An effect which on its own or in combination with other effects will not have an influence on decision making.

Uncertainties and limitations

13.2.11 Third party information has been used in the preparation of this report, which Brookbanks Consulting Ltd, by necessity assumes is correct at the time of writing. While all reasonable checks have been made on data sources and the accuracy of data, Brookbanks Consulting Ltd accepts no liability for same.

13.3 BASELINE CONDITIONS

Geology

13.3.1 With reference to the British Geological Survey map, the majority of the site is shown to be underlain by ferruginous limestone and ironstone belonging to the Marlstone Rock Formation. A small area in the north of the site is shown to be underlain by mudstone belonging to the Whitby Mudstone Formation.

13.3.2 There is no Artificial Ground/ Made Ground or Landslip areas reported on Site.

Radon

13.3.3 A range of radon affected probability areas are found across the site. It includes the following: high probability areas, where over 30% of homes are estimated to be above the action level, reported in the east and west of the site and a low probability area, where less than 10% of homes are estimated to be above the action level, reported in the north. There is also higher probability area, where 10-30% of homes are estimated to be above the action level, reported in the north also and the south-west. An intermediate area where 5-10% of homes are estimated to be above the action level, reported in the south.

13.3.4 As parts of the site are situated within a high probability area it is reported that full radon protection measures are necessary for the construction of new developments within the site.

Mining

13.3.5 The site is not reported to be in an area affected by coal mining.

13.3.6 It is reported that the Site is in a 'Rare risk of Non Coal Mining Area of Great Britain'.

13.3.7 The Site is not reported to have any Mining Instability.

13.3.8 There are three BGS Recorded Mineral Sites recorded within 1,000m of the Site boundary. These are further outlined in Table 13.5.

Table 13.5: BGS Recorded Mineral Sites

Site Name - Location	Commodity	Status	Distance (m)	Direction
Manor Farm – Manor Farm, Bodicote	Iron Ore –Ironstone	Ceased	321	East
Manor Farm – Twyford Road, Bodicote	Iron Ore – Ironstone	Ceased	467	South West
Twyford Wharf – Bodicote	Common Clay and Shale	Ceased	826	South East

Hydrology & Hydrogeology

13.3.9 The Environment Agency's (EA) National Generalised Modelling (NGM) Flood Zones Plan indicates predicted flood envelopes of Main Rivers across the UK. In many circumstances, the NGM is based on basic catchment characteristic data and modelling techniques. Where appropriate, more accurate Section 105 / SFRM models are produced using more robust analysis techniques.

13.3.10 Further details on hydrology and flooding are outlined within the Flood Risk Assessment (**Appendix 12.1** and within the Hydrology & Drainage chapter (Chapter 12) in the Environmental Statement.

13.3.11 The underlying ferruginous limestone and ironstone belonging to the Marlstone Rock Formation forms a Secondary A Aquifer, with the mudstone of the Whitby Mudstone Formation forming Unproductive Strata.

Historic Land Uses

13.3.12 In appraising the site history, published Ordnance Survey maps have been reviewed dating from the late 19th Century up to the present day. A selection of large scale maps used in this report are contained within **Appendix 13.01**.

13.3.13 Inspection of the Ordnance Survey maps has revealed that since 1883, the Site has largely remained undeveloped and in agricultural use, with the exception of two tracks which are shown across the centre and west of the Site.

13.3.14 A Track and Banbury Road are shown to bound the south and west of the Site respectively since 1885. The residential areas of Bodicote and Twyford have expanded approximately 15m west and 500m south since 1948. Along with the residential expansions, the M40 is shown approximately 250m east of the Site since 1993, sewage works, factories and works are identified within 1000m of the Site boundary.

13.3.15 Having reviewed the historical site mapping there are no potentially significant contaminative land uses identified within the site boundary apart from agricultural.

13.3.16 The following potentially contaminative land uses are on or within close proximity of the site, as outlined in Table 3a and will be further assessed within Section 10: Agricultural, adjacent roads/track (including the M40), Former Sewage and Water Works, Former Works, Former quarries/pits and a Railway Line.

Contamination

13.3.17 There are eight Pollution Incidents to Controlled Waters reported within 1,000m of the site's boundary, these are detailed further in Table 13.6:

Table 13.6: Pollution Incidents to Controlled Waters

Incident Date	Pollutant	Receiving Water	Incident Severity	Distance (m)	Direction
Not Supplied	Chemicals - Unknown	Not Given	Category 3 - Minor Incident	12	East
Feb 1998	General	Not Given	Category 2 - Significant Incident	394	North West
Dec 1994	Oils - Unknown	Not Given	Category 3 - Minor Incident	525	West
June 1996	Unknown	Not Given	Category 3 - Minor Incident	544	North
Jan 1993	Agricultural - General	Not Given	Category 3 - Minor Incident	740	South West
Feb 1993	Miscellaneous - Unknown	Not Given	Category 3 - Minor Incident	803	East
Sept 1994	Miscellaneous - Unknown	Not Given	Category 3 - Minor Incident	893	South East
July 1996	Oils - Unknown	Not Given	Category 3 - Minor Incident	1000	West

13.3.18 There are two Local Authority Pollution Prevention and Controls recorded within 1,000m of the site's boundary, these are detailed further in Table 13.7:

Table 13.7: Local Authority Pollution Prevention and Controls

Name	Permit Date	Status	Process Type	Description	Distance (m)	Direction
Banbury Service Station (Roc UK Ltd)	May 1998	Authorised	Local Authority Air Pollution Control	Petrol Filling Station	756	West
Jay Bee Motors	Feb 1993	Revoked	Local Authority Air Pollution Control	Waste Oil Burners, Less than 0.4MW net rated thermal input	811	West

13.3.19 None of the following have been recorded within 1,000m of the site boundary:

- Contaminated Land Register Entries and Notices
- Enforcement and Prohibition Notices
- Integrated Pollution Controls
- Integrated Pollution Prevention And Control
- Local Authority Integrated Pollution Prevention And Control
- Local Authority Pollution Prevention and Control Enforcements

- Prosecutions Relating to Authorised Processes
- Prosecutions Relating to Controlled Waters
- Registered Radioactive Substances
- Substantiated Pollution Incident Register
- Water Industry Act Referrals

Hazardous Substances

13.3.20 There are no records of the following on or within a 1,000m radius of the site boundary:

- Control of Major Accident Hazards Substances (COMAH)
- Explosive Sites
- Notification of Installations Handling Hazardous Substances (NIHHS)
- Planning Hazardous Substance Consents.
- Planning Hazardous Substance Enforcements.

13.3.21 There are twenty-two Contemporary Trade Directory Entries recorded within 1,000m of the site boundary, of which seven are listed as 'Active'.

13.3.22 There are eleven Contemporary Trade Directories identified within 500m from the Site boundary, three of which are listed as 'Active'. These are further detailed in Table 13.8.

Table 13.8: Contemporary Trade Directories 0-500m

Name - Location	Classification	Status	Distance (m)	Direction
Carebrick Uk Ltd – 107 Hobby Road, Bodicote	**Damp & Dry Rot Control**	**Active**	**34**	**North**
Bridge Motorsport Ltd – 9 Blackwood Place, Bodicote	**Gearboxes**	**Active**	**132**	**North West**
Rotatec – Flat 4, Woodlands, Weeping Cross, Bodicote	Woodworking Machinery	Inactive	139	North West
Electrocdomestic – Molyneux Drive, Bodicote	Domestic Appliances – Servicing, Repairs & Parts	Inactive	243	North West
Uforia Heating – 34 Rookery Close, Bodicote	Boilers – Servicing, Replacements & Repairs	Inactive	282	North West
Connect Business Systems – 40 Rookery Close, Bodicote	Boilers – Servicing, Replacements & Repairs	Inactive	342	North West
A1 Egg Packers Ltd – 34The Rydes, Bodicote	Packaging & Wrapping Equipment & Supplies	Inactive	443	North West
Furniture Doc Ltd – 4 Broad End, Bodicote	**Furniture – Repairing & Restoring**	**Active**	**444**	**North West**

Furniture Doc Ltd – 4 Broad End, Bodicote	Furniture – Repairing & Restoring	Inactive	444	North West
Kestrel Warranty Services – 9 Park End, Bodicote	Refrigerators & Freezers – Servicing & Repairs	Inactive	483	North West
Radiant Installs – St. Tropez, East Street, Bodicote	Under Floor Heating	Inactive	489	North West

13.3.23 There remaining eleven Trade Directory Entries between 501m and 1000m of the Site boundary are further detailed in Table 13.9.

Table 13.9: Contemporary Trade Directories 501-1,000m

Active	Inactive
Cleaning Services –Domestic	Crane Hire, Sales & Service
Garage Services	Garage Services
Carpet, Curtain & Upholstery Cleaners	Antiques – Repairing & Restoring
Petrol Filling Stations	Petrol Filling Stations – 24 Hour
-	Car Dealers
-	Air Conditioning Equipment & Systems
-	Copying & Duplicating Services

13.3.24 A Fuel Station Entry is recorded 756m west of the site boundary on Oxford Road in Bodicote. The Esso Petrol Station at Banbury Service Station is reported to be open.

Waste

13.3.25 The site falls within the Local Authority Landfill Coverage of Cherwell District Council and Oxfordshire County Council. In addition, South Northamptonshire District Council and Northamptonshire County Council are situated within proximity of the Site. All respective Councils have supplied landfill data.

13.3.26 There are three records of Potentially Infilled Land (Non-Water) within 500m of the Site boundary; these are detailed in Table 13.10.

Table 13.10: Potentially Infilled Land (Non Water)

Date of Mapping	Use	Distance (m)	Direction
1993	Unknown Filled Ground (Pit, quarry, etc.)	337	West
1993	Unknown Filled Ground (Pit, quarry, etc.)	722	South
1993	Unknown Filled Ground (Pit, quarry, etc.)	982	North East

13.3.27 There are no provided reports of the following within 1,000m of the site boundary:

- BGS Recorded Landfill Sites
- Historical Landfill Sites
- Integrated Pollution Control Registered Waste Sites
- Licensed Waste Management Facilities (Landfill Boundaries)
- Licensed Waste Management Facilities (Locations)

- Local Authority Recorded Landfill Sites
- Potentially Infilled Land (Water)
- Registered Landfill Sites
- Registered Waste Transfer Sites
- Registered Waste Treatment or Disposal Sites

Unexploded Ordnance (UXO)

13.3.28 The Zetica Regional Unexploded Bomb Risk Map for Banbury has outlined the Proposed Development is potentially located within a Low Bomb Risk area.

13.3.29 A Pre-Desk Study Assessment Bomb Search was carried out by Zetica UXO for the Site. It was concluded that a detailed desk study, whilst always prudent, is not considered essential in this instance for the site.

Environmental Setting

13.3.30 The site is shown to lie within a Surface Water Nitrate Vulnerable Zone.

13.3.31 The River Cherwell situated approximately 530m east of the site is included within the Upper Thames Tributaries Environmentally Sensitive Areas. These areas require special protection due to their landscape, wildlife or historical value.

13.3.32 None of the following are reported within 1,000m of the site boundary:

- Areas of Adopted / Unadopted Green Belt

- Areas of Outstanding Natural Beauty
- Forest Parks
- Local Nature Reserves
- Marine Nature Reserves
- National Nature Reserves
- National Parks
- Nitrate Sensitive Areas
- Ramsar Sites
- Sites of Special Scientific Interest
- Special Areas of Conservation
- Special Protection Areas

13.4 IMPACTS

Construction Stage - Contamination affecting humans

13.4.1 During the construction phase of the Proposed Development, the soil may be disturbed by the use of heavy machinery, excavation, stockpiling and filling which may affect sensitive receptors via pathways such as inhalation, ingestion and direct contact. The sensitivity of the receptors (residents in adjacent areas, and construction workers) is high and the magnitude of change prior to mitigation is high. There could be direct, long term, permanent effects of major adverse significance if control and mitigation measures are not employed.

Construction Stage - Contamination to surface water conveyance

13.4.2 During the construction phase, there is a risk that the surface water features in the surrounding area may become contaminated; there is also a risk that any standing water within the Site may become contaminated.

13.4.3 Sources of contamination could be from on-site activities such as fuel / oil, chemical and waste storage. After disturbing the soil, leaching of contaminants as well as spillages of hazardous contaminants will be exposed to surface run-off which could transport them into nearby surface water features. As there are no on-site or immediate watercourses around the vicinity of the site, the significance impact has been judged to be moderate adverse and the magnitude of change without mitigation is high.

Construction Stage - Contamination of Groundwater

13.4.4 During the construction phase, there is a risk that the concentrations of contaminants in the groundwater in the minor aquifer below the Site could increase. Disturbing the soil and piling the Site could open pollutant pathways which could leave the aquifers at risk from contamination. The sensitivity of the minor aquifers is medium and the magnitude of change prior to mitigation is high. There could be permanent effects of moderate to major adverse significance without the implementation of mitigation measures.

Post Completion - Risk to Below Ground Structures from Contaminated Soil

13.4.5 The construction of the Proposed Development will involve the use of buried concrete, plastic and possibly metals. Poor design and choice of materials could result in ground contamination having significant impact on the structures, due to potential deterioration as a result of continual direct contact with any contaminants. The magnitude of change prior to mitigation is high. There could be direct, permanent effects of moderate to major adverse significance without the implementation of mitigation measures.

Post Completion - Risk to Proposed Soft Landscaping

13.4.6 There may be potentially contaminated ground on-site which could otherwise be adversely used for landscaping purposes or planting, should intrusive investigations not be undertaken and appropriate mitigation not be implemented. The sensitivity of the vegetation in landscaped areas is low to medium and the magnitude of change, prior to mitigation, is high. Therefore, there is likely to be a permanent effect on the vegetation in landscaped areas of minor to moderate adverse significance prior to the implementation of mitigation measures. The use of a cover system for all potentially contaminated areas proposed for landscaping will ensure that there is a negligible impact on the vegetation.

13.5 MITIGATION & MONITORING

During Construction

13.5.1 The potential environmental effect of suspended solids discharges to watercourses and ground waters will be mitigated by adequate site controls developed by way of a Construction and Environmental Management Plan (CEMP), agreed with the regulatory authorities prior to implementation. All contractors working on Site will be required to adopt the procedures and proposed means of mitigation outlined in the document.

13.5.2 In order to minimise the impacts in relation to ground conditions and contamination during development, the CEMP will include the following procedures:

- Prohibition of any temporary construction discharges without approval of the Environment Agency;
- Earthworks to be completed in a manner that protects the water quality environment and ecological interest of the area. The nature of the works and the proposed implementation methods will be agreed with the Environment Agency in advance and all works will accord with the recommendations of EA Pollution Prevention Guidance for Works in, Near or Liable to Affect Watercourses;
- Discharges of waters resulting from construction activities will generally be directed to foul sewers, subject to approval of the drainage authority;
- All fuels oils and potentially contaminating substances to be stored in bunded tanks or suitable hard pave and protected areas as are appropriate;

- All works will be completed in accordance with the Environment Agency documents, PPG 6 Working at Construction and Demolition Sites and PPG21 Pollution Incident Response Planning together with current best practice measures for the management of construction activities; and
- All surplus construction and demolition materials to be removed from site and reused, recycled, or disposed, in respective order of preference.

13.5.3 It will be incumbent on the selected contractor to assess working practice related risks and impacts before implementation and control such by employing industry good practice techniques. Furthermore, the contractor will be required to develop emergency spillage, flood, fire and contamination control procedures such that any inadvertent incidents are immediately controlled to minimise the potential impact.

13.5.4 Site topography is such that limited, if any, earthworks will be required to provide gravity surface water drainage. Filling of the Site where necessary will be by way of 'cut and fill' earthworks and imported inert material to trim building levels and highway infrastructure to provide gravity drainage across the Site.

13.5.5 Other potential effects relate to the contractor's working practices. For example, there is the potential for fuel oil spillage from stored materials supplying site plant. This potential impact will be controlled by storing such materials within bunded tanks. The works will be completed in a manner that is consistent with the need to protect the surface and ground water quality environment.

13.5.6 The following general mitigation measures will also be adopted as part of the site construction phase to minimise the potential impacts arising from the Proposed Development:

Material Storage

- Storage compounds will be located away from any identified water features
- Designated bunded "safe" areas will be provided within the compound for storage of oils and other such potentially contaminative materials

Silt and Earthworking

- Soil mounding to be kept to a minimum to reduce run-off
- Haul roads to receive regular cleaning to prevent mud build up
- Careful regulation of wash down processes to avoid washing significant quantities of silt into drains.

Accidental Spillage

- Emergency response requirements to be included in the construction contract requirements
- Spill kits to be located in all site compounds and near any identified water feature.

13.5.7 All construction phase operations will be carried out in accordance with guidance contained within the Environment Agency Pollution Prevention Guidelines.

Post Construction - Exposure of Residential End-Users to Contamination

13.5.8 A cover system should be applied across all proposed areas of soft landscaping in accordance with the BRE document entitled Cover Systems for Land Regeneration, Thickness Design of Cover Systems for Contaminated Land (2004). Such would be

sufficient to protect contamination risks to human health. The minimum thickness of clean cover in landscaped areas is 600mm.

Post Construction - Risk to Below Ground Structures from Contaminated Soil

13.5.9 Concrete will be designed and placed in accordance with normal good practice taking account of pH and sulphate concentrations in the ground. Plastic pipes will not be used where the ground or groundwater contains significant levels of light hydrocarbons or phenol.

13.5.10 Results presented in the WRC Investigation indicate that buried concrete in the WRC could be designed for Sulphate Class DS-2 and Aggressive Chemical Environment of Concrete (ACEC) Class AC-2, in accordance with BRE Special Digest 1 (2005). However, testing of soil samples from across the rest of the Site, as part of an intrusive geotechnical investigation, should be carried out to allow the correct concrete classification to be recommended.

Post Construction - Risk of Residential and Other End-Users to Ground Gas

13.5.11 Gas monitoring wells should be sunk across the Site prior to construction to allow levels of hazardous ground gas to be monitored in accordance with current best practice. Gas control measures should be implemented if any hazardous gas is encountered.

Post Construction - Risk to Proposed Soft Landscaping

13.5.12 The use of a cover system, as described above, would not only protect human health but also any proposed planting in areas designated for soft landscaping / gardens / vegetation cover. Intrusive investigations would be needed to determine which areas on-site would require these cover systems.

Post Construction - Additional Mitigation

13.5.13 Additional mitigation methods may be required dependent upon the assessments undertaken as part of the future geotechnical and contamination intrusive investigation across the Site, which should conform to BS5930:1999 Code of Practice of Site Investigation (British Standards Institute (BSi), 1999). Additional mitigation methods may also need to be employed should the development plans change in the future.

13.6 CUMULATIVE IMPACTS

13.6.1 Professional judgement of review of the available data and nearby environment has determined that there are no cumulative impacts are present.

13.6.2 It is anticipated that all on-site ground works to facilitate the Proposed Development will be strictly controlled to within the confines of the development boundary. It is not expected that any off-site mitigation will be required.

13.6.3 Further detailed ground investigation will be required at the detailed design stage to confirm baseline conditions.

13.6.4 It is anticipated that regulatory control will ensure that any other developments completed elsewhere in the area will be required to implement measures similar to those outlined above that at least meet current standards. In such circumstances, the environmental effects resulting from cumulative development will be negligible.

13.7 RESIDUAL IMPACTS

Construction stage - Disturbance of Contamination in the Soil and Groundwater

13.7.1 The sensitivity of the residents in adjacent areas and construction workers is high and the magnitude of change, following mitigation, is low. Therefore, there is likely to be a long-term effect of negligible significance following the implementation of mitigation measures.

Construction stage - Contamination to Surface Water Conveyance

13.7.2 The sensitivity of any nearby watercourses is low and the magnitude of change, following mitigation, is low. Therefore, there is likely to be a long term, permanent effect of negligible significance following the implementation of mitigation measures.

Construction stage - Contamination of Groundwater

13.7.3 The sensitivity of the groundwater is medium and the magnitude of change, following mitigation, is low. Therefore, there is likely to be a direct, long term permanent effect of negligible significance following the implementation of mitigation measures.

Post Construction - Exposure of Residential End-Users to Contamination

13.7.4 The sensitivity of the end users is high and the magnitude of change, following mitigation, is high. There is likely to be a permanent effect on the Proposed Development of negligible significance following the implementation of mitigation measures.

Post Construction - Risk to Below Ground Structures from Contaminated Soil

13.7.5 The sensitivity of the Proposed Development is high and the magnitude of change, following mitigation, is low. There is likely to be a permanent effect on the Proposed Development of negligible significance following the implementation of mitigation measures.

Post Construction - Risk of Residential and Other End-Users to Ground Gas

13.7.6 The sensitivity of the end users is high and the magnitude of change, following mitigation, is negligible. There is likely to be a permanent effect of the Proposed Development of negligible significance following the implementation of mitigation measures.

Post Construction - Risk to Proposed Soft Landscaping

13.7.7 The use of a cover system for all potentially contaminated areas proposed for landscaping will ensure that there is a negligible impact on the vegetation.

13.8 CONCLUSIONS

13.8.1 The implementation of appropriate and sustainable development proposals coupled with appropriate mitigation will result in a negligible impact on Soil and Ground Conditions and ensure that the Project does not result in a major adverse environmental effect during either the operational or the construction phases.

13.8.2 The potential significance of the impacts assumes that the mitigation measures outlined above have been implemented and are fully in accordance with current guidance and the requirements of the regulating authorities.