

## Glossary of Terms and Abbreviations

Term	Definition
Above Ordnance Datum (AOD)	Ordnance Datum is the vertical datum used by Ordnance Survey as the basis for deriving altitudes on maps. Topography may be described using the level in comparison or 'above' ordnance datum.
ADMS Dispersion model	Atmospheric Dispersion Modelling System used in the modelling of air quality data
Air pollutants	Amounts of foreign and / or natural substances occurring in the atmosphere that may result in adverse effects on humans, animals, vegetation and / or materials.
Air Quality Management Area (AQMA)	A defined area by virtue of Section 82(3) of the Environment Act 1995, where it appears that the air quality objectives prescribed under the UK Air Quality Strategy will not be achieved. In these areas, a Local Authority must designate Air Quality Management Areas, within which an Action Plan can be proposed to secure improvements in air quality so that prescribed air quality objectives can be achieved.
Air Quality Objectives (AQO)	Criteria for the assessment of local air quality expressed in terms of a concentration threshold to be achieved by a certain date. The thresholds are established at concentrations considered acceptable in the light of what is known about the effects of each pollutant on health or ecosystems.
Air quality sensitive receptors	People, property or designated sites for nature conservation that may be at risk from exposure to air pollutants that could potentially arise as a result of the Proposed Development.
Ambient air	Outdoor air in the troposphere, excluding workplace air.
AW	Ancient Woodland
Annual average daily total (AADT) flows	A daily traffic flow (24 hours), expressed as a mean daily flow across all 365 days of the year (AADT) in units of vehicles per hour.
Annual mean concentration	The average (mean) of the hourly pollutant concentrations measured or predicted for a one year period.
APP	Approach Surface
AQAP	Air Quality Action Plan.
ATC	Automatic Traffic Counts
Baseline	Environmental conditions at specific periods of time, present on, or near a site, against which future changes may be measured or predicted.
BEIS	(Department for) Business, Energy and Industrial Strategy
BGS	British Geological Society
CCRA	Climate Change Risk Assessment
CEMP	Construction Environmental Management Plan
CH <sub>4</sub>	Methane
Climate change	A long term change in weather patterns, in the context of flood risk, climate change will produce more frequent severe rainfall.
CIL	Community Infrastructure Levy

Term	Definition
CoCP	Code of Construction Practice
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide equivalent
COMAH	Control of Major Accident Hazards
Concentration (air quality)	The amount of a (polluting) substance in a volume (of air), typically expressed as a mass of pollutant per unit volume of air (for example, micrograms per cubic metre, µg/m <sup>3</sup> ) or a volume of gaseous pollutant per unit volume of air (parts per million, ppm).
Committed / Schemes	Planning application of development schemes which have been approved by the relevant local authority.
Conservation Area	An area of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance. Designation by the local authority often includes controls over the demolition of buildings; strengthened controls over minor development; and special provision for the protection of trees.
Conservative	Tending to over-predict an impact rather than under-predict.
Construction	Within the ES this phrase refers to all construction works associated with the Proposed Development.
CREAM	Calculator for Road Emissions of Ammonia. Toolkit developed by Air Quality Consultants Ltd to enable estimation of ammonia emissions from road traffic based on location, year, traffic volume and composition.
CRMP	Construction Resource Management Plan
Cumulative effects	The summation of effects that result from changes caused by a development in conjunction with other reasonably foreseeable development that is either consented but not yet constructed or is in the process of seeking consent.
DEFRA	Department for Environment, Food and Rural Affairs
Demolition	Within the ES this phrase refers to all demolition activities associated with the Proposed Development.
Design Manual for Roads and Bridges (DMRB)	A widely used methodology for Environmental Impact Assessment (Volume 11) which was used to assess some impacts of the Proposed Development with appropriate modifications.
Designated Heritage Asset	A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated as such under the relevant legislation.
Desk Based Assessment (DBA)	Research based primarily on database and internet data gathering methods.
DfT	Department for Transport
Direct effect	An effect that is directly attributable to the Proposed Development.
Dust	Fine particles of solid materials in the size fraction 1µm – 75µm in diameter, as defined in BS 6069:1994 capable of being re-suspended in air and settling only slowly under the influence of gravity where it may cause nuisance.
EFT	Emissions Factor Toolkit. An excel based tool published by Defra and the devolved administrations that allows calculation of vehicle emission factors for nitrogen

Term	Definition
	oxides, particulate matter, and carbon dioxide for a specified year, road type, traffic fleet composition, and vehicle speed.
EIA Regulations	The Town and Country Planning (Environmental Impact Assessment) Regulations 2017.
EiP	Examination in Public.
Emission	A material that is expelled or released to the environment. Usually applied to gaseous or odorous discharges to the atmosphere.
Emission rate	The quantity of a pollutant released from a source over a given period of time.
Enhancement	Landscape improvement through restoration, reconstruction or creation.
Environment Agency (EA)	The Environment Agency is an executive non-departmental public body, sponsored by the Department for Environment, Food and Rural Affairs which was established in 1996 to protect and improve the environment.
Environmental effect	The consequence of an impact on the environment.
Environmental impact	A physical or measurable change to the environment attributable to the Proposed Development.
Environmental Impact Assessment (EIA)	A systematic means of assessing a development project's likely significant environmental effects undertaken in accordance with EIA Regulations.
EIA Development	A development constitutes 'EIA Development' when it is determined that the Proposed Development requires EIA, or an ES is submitted to accompany the application.
Environmental Statement (ES)	A statement that includes the information that is reasonably required to assess the environmental effects of the development and which the applicant can, having regard to current knowledge and methods of assessment, reasonably be required to compile, but that includes at least the information referred to in the EIA Regulations.
EPUK	Environmental Protection UK
Exceedance	A period of time where the concentrations of a pollutant is greater than, or equal to, the appropriate Air Quality Objective.
Field drainage	Limiting the effect of flooding by maintaining surface water and land drainage systems.
Flood Risk Assessment (FRA)	A Flood Risk Assessment is an assessment of the risk of flooding from all flood mechanisms, including the identification of flood mitigation measures, in order to satisfy the requirements of the NPPF and PPG ID7.
Flood Zone	There are four classifications for flood zones as defined in the National Planning Policy Framework (NPPF): <ul style="list-style-type: none"> <li>• Zone 1: Low probability (less than 1 in 1000 annual probability of river or sea flooding in any year);</li> <li>• Zone 2: Medium probability (between 1 in 100 and 1 in 1000 annual probability of river flooding or between 1 in 200 and 1 in 1000 annual probability of sea flooding in any year);</li> <li>• Zone 3a: High probability (1 in 100 or greater annual probability of river flooding in any year or 1 in 200 or greater annual probability of sea flooding in any given year); and</li> </ul>

Term	Definition
	<ul style="list-style-type: none"> <li>Zone 3b: High probability (functional flood plain. Essentially the 1 in 20 or greater annual probability of flooding in any given year).</li> </ul>
Flood Zone 1	Low Probability Land having a less than 1 in 1,000 annual probability of river or sea flooding.
Flood Zone 2	Medium Probability Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding.
Flood Zone 3	High Probability Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding.
Flood Zone 3b	The Functional Floodplain. This zone comprises land where water has to flow or be stored in times of flood. Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency.
Fluvial flooding	Fluvial flooding occurs when rivers burst their banks as a result of sustained or intense rainfall.
Fugitive emissions	Emissions arising from the passage of vehicles that do not arise from the exhaust system.
GEA	Gross External Area
Geology	The scientific study of the origin, history and structure of the earth.
GHG	Greenhouse Gas(es)
GIA	Gross Internal Area
Greenfield runoff rate	Rates of surface water runoff from a site that is undeveloped (greenfield).
Ground conditions	The chemical and physical characteristics of the soil at a particular location and how it has been affected by historical land uses. .
Groundwater	All water which is below the surface of the ground in the saturated zone and in direct contact with the ground or subsoil.
HBC	Hertsmere Borough Council, the determining authority for the planning application.
HDV/HGV	Heavy duty vehicle/heavy goods vehicle
Hectare (ha)	A unit of area (10,000 m <sup>2</sup> / 2.471 acres).
Heritage	Historical or cultural associations.
Heritage Asset	A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage assets include designated heritage and assets identified by the local planning authority (including local listing).
Historic England (HE)	A public body which looks after England's historic environments
Historic Environment	All aspects of the environment resulting from the interaction between people and places through time including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora. Those elements of the historic environment that hold significance are called heritage assets.
HFC	Hydrofluorocarbon

Term	Definition
HSE	Health and Safety Executive
HV	High Voltage
Hydrological catchment	An area that serves a watercourse with rainwater. Every part of land where the rainfall drains to a single watercourse is in the same catchment.
IAQM	Institute for Air Quality Management
IEMA	Institute of Environmental Management and Assessment
Impact	A physical or measurable change to the environment attributable to the Proposed Development.
Indirect effects	Effects that result indirectly from the proposed project as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or time from the source of the effects.
Kilometre (km)	Measurement of distance (1000 metres)
Land Use	The primary use of land, including both rural and urban activities.
LAQM	Local Air Quality Management.
Lead Local Flood Authority	Lead Local Flood Authorities have responsibility for developing a Local Flood Risk Management Strategy for their area identifying local sources of flooding. The local strategy produced must be consistent with the national strategy. It will set out the local organisations with responsibility for flood risk in the area, partnership arrangements to ensure co-ordination between these organisations, an assessment of the flood risk, and plans and actions for managing the risk.
Light Duty Vehicle (LDV)	A vehicle type classification, including motorcycles, cars and light goods vehicles that is used by air dispersion models.
Line source	Emission source considered to be mobile and to follow a well-defined path (e.g., road transport).
Listed Building	A building entered on a list of buildings of special architectural or historic interest compiled by the Secretary of State for the guidance of local planning authorities in the exercise of their planning functions under the Planning (Listed Buildings and Conservation Areas) Act 1990 and the Town and Country Planning Act 1990. Buildings are graded as follows: <ul style="list-style-type: none"> <li>• Grade I – Buildings of exceptional interest,</li> <li>• Grade II* - Particularly important buildings of more than special interest; and</li> <li>• Grade II – Buildings of special interest.</li> </ul>
Lmax	'Maximum Sound Level' – Maximum Sound Level during a measurement period or a noise event
Local Authority	An administrative body in local government.
Local Nature Reserve (LNR)	A statutory designation made under Section 21 of the National Parks and Access to the Countryside Act 1949, and amended by Schedule 11 of the natural Environment and Rural Communities Act 2006, by principal local authorities.
Local Plan	A detailed district or borough-wide land-use plan, prepared and adopted by a district planning authority, which is part of the statutory development plan. Consists of a written statement which sets out the district planning authority's development

Term	Definition
	control policies and proposals for land use and transport over a period of about 10 years and an Ordnance Survey-based proposals map.
LVIA	Landscape and Visual Impact Assessment.
L <sub>10</sub>	The noise level just exceeded for 10% of the measurement period
L <sub>90</sub>	The noise level exceeded for 90% of the measurement period
L <sub>eq</sub>	'Equivalent Continuous Sound Level': The sound level in decibels equivalent to the total sound energy measured over a stated period of time
Magnitude	A combination of the scale, extent and duration of an effect.
Main Rivers	The term used to describe a watercourse designated as a Main river under the Water Resources Act 1991 and shown on the Main river Map. These are usually larger rivers or streams and are managed by the Environment Agency.
Maximum design scenario	The scenario within the design envelope with the potential to result in the greatest impact on a particular topic receptor, and therefore the one that should be assessed for that topic receptor.
Methodology	The scientific approach and techniques used for the study
Minor roads	Non-A roads of Motorways.
Mitigation Measures	Actions proposed to avoid, prevent, reduce and where possible offset significant adverse environmental effects arising from the whole or specific elements of a development.
Model adjustment	Following verification of the air quality model against local monitoring data, the process by which the modelled outputs are amended to more closely reflect actual conditions. This corrects for systematic error in the model.
NE	Natural England
NGR	National Grid Reference
NHS	National Health Service
NH <sub>3</sub>	Ammonia
Nitrogen Oxides (NO <sub>x</sub> )	Nitric oxide (NO) is mainly derived from road transport emissions and other combustion processes such as the electricity supply industry. NO is not considered to be harmful to health. However, once released to the atmosphere, NO is usually very rapidly oxidised to nitrogen dioxide (NO <sub>2</sub> ), which is harmful to health. NO <sub>2</sub> and NO are both oxides of nitrogen and together are referred to as nitrogen oxides.
NO <sub>2</sub>	Nitrogen dioxide.
NPPF	National Planning Policy Framework
NSL	No Sky Line
N <sub>2</sub> O	Nitrous Oxide
Operational	When the Proposed Development is constructed on the Site and is in or ready for use
Ordinary watercourses	A river, stream, ditch, cut, sluice, dyke or non-public sewer that is not a designated Main river, and for which the local authority has flood risk management responsibilities and powers.
OS	Ordnance Survey

Term	Definition
Particulate Matter	Fine particles are composed of a wide range of materials arising from a variety of sources including combustion sources (mainly road traffic), and coarse particles, suspended soils and dust from construction work. Particles are measured in a number of different size fractions according to their mean aero-dynamic diameter. Most monitoring is currently focussed on PM <sub>10</sub> (less than 10 microns in aero-dynamic diameter), but the finer fractions such as PM <sub>2.5</sub> (less than 2.5 microns in aero-dynamic diameter) is becoming of increasing interest in terms of health effects.
PEA	Preliminary Ecological Assessment
PERS/CERS audit	Pedestrian Environment Review System/Cyclist Environment Review System
PFC	Perfluorocarbon
Phase 1 Habitat Survey	An ecological survey technique that provides a standardised system to record vegetation and wildlife habitats. It enables a basic assessment of habitat type and its potential importance for nature conservation.
Planning Practice Guidance (PPG)	There are a series of PPGs covering various aspects of the planning system prepared by Central Government and due weight must be given to them when considering individual planning applications as they are material factors in their determination. They are listed on the Department for Communities and Local Government website. These have mainly been superseded by the National Planning Policy Framework (March 2012) and the accompanying Planning Practice Guidance.
PM <sub>2.5</sub>	Particulate matter with an aerodynamic diameter of less than 2.5 micrometres.
PM <sub>10</sub>	Particulate matter with a mean aerodynamic diameter of less than 10µm.
Post-medieval	AD 1500 – present.
Pre-Historic	The period of human history preceding written records.
Ramsar	A wetland site designated of international importance under the Ramsar Convention.
RCP	Representative Concentration Pathway
Receptor	A component of the natural, created or built environment such as humans, water, air, a building, or a plant that has the potential to be affected by the Proposed Development.
Registered Historic Parks and Gardens	Parks and Gardens of special historic interest in England. Registered parks and gardens are designated heritage assets and subject to the planning policies within the NPPF.
Residual	When used to describe archaeological artefacts, this means not in-situ, i.e. Found outside the context in which it was originally deposited.
Residual Effects	Those effects of a development that cannot be mitigated following implementation of mitigation proposals.
RIBA	Royal institute of British Architects
River Basin Management Plan	River Basin Management Plans describe the current state of the water environment in the river basin district. It sets out what improvements are possible by 2015 and how the actions will make a difference to the local environment - the catchments, estuaries, the coast and groundwater.



Term	Definition
Road link	A length of road which is considered to have the same flow of traffic along it. Usually, a link is the road from one junction to the next.
Scheduled Monument	An ancient monument or archaeological deposits designated by the Secretary of State as a 'Scheduled Ancient Monument' and protected under the Ancient Monuments Act.
Scoping	An exercise undertaken to determine the topics to be addressed within the Environmental Statement.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor.
Setting of a heritage asset	The surroundings in which (the asset) is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
SFRA (or FRA)	Strategic Flood Risk Assessment
SF <sub>6</sub>	Sulphur Hexafluoride
Significance (effect)	A measure of the importance or gravity of the environmental effect defined by significance criteria specific to the environmental topic.
Site	The site for which the planning application is submitted (the redline boundary).
Site of Special Scientific Interest (SSSI)	A site statutorily designated under the Wildlife and Countryside Act 1981 (as amended) as being of special nature conservation or geological interest. SSSIs include wildlife habitats, geological features and landforms.
Special Area of Conservation (SAC)	A site designated under the EU's Habitats Directive which is transposed into UK law by the Conservation of Habitats and Species Regulations 2017.
Special Protection Area (SPA)	A designation under the European Union Directive on the Conservation of Wild Birds. Under the Directive, Member States of the European Union (EU) have a duty to safeguard the habitats of migratory birds and certain particularly threatened birds.
SPG	Supplementary Planning Guidance
Study area	Defined area surrounding the proposed development in which archaeological data is collected and analysed in order to set the site into its archaeological and historical context.
Surface water resources	Water on the surface of the land such as in a river, lake, wetland, or ocean.
Surface water runoff	Surface water runoff is flow of water that occurs when excess stormwater, meltwater, or other sources of water flows over a surface.
Susceptibility	The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.
Sustainable Drainage System (SuDS)	Sustainable management practices designed to control the rate and quality of surface water runoff into receiving waters, for example the use of swales and wetlands as buffers, as opposed to conventional drainage practices.
Temporary or permanent effects	Environmental effects may be considered as temporary (limited duration and reversible) or permanent (irreversible). Some development may also be reversible.



Term	Definition
Trackout	The transport of dust and dirt from the construction / demolition site onto the public road network, where it may be deposited and then re-suspended by vehicles using the network. This arises when heavy duty vehicles (HDVs) leave the construction / demolition site with dusty materials, which may then spill onto the road, and/or when HDVs transfer dust and dirt onto the road having travelled over muddy ground on site.
Transport Assessment (TA)	A quantitative assessment of transport effects of construction and completed development phases of the proposed development.
Travel Plan (TP)	A travel plan is a package of measures produced by employers to encourage staff to use alternatives to single-occupancy car use.
Type or Nature of Effect	Whether an effect is direct or indirect, temporary or permanent, positive (beneficial), neutral or negative (adverse) or cumulative.
UKCIP	United Kingdom Climate Impacts Programme
UKCP18	United Kingdom Climate Change Projections 2018
UKPN	United Kingdom Power Network
Uncertainty	A measure, associated with the result of a measurement, which characterizes the range of values within which the true value is expected to lie. Uncertainty is usually expressed as the range within which the true value is expected to lie with a 95% probability, where standard statistical and other procedures have been used to evaluate this figure. Uncertainty is more clearly defined than the closely related parameter 'accuracy', and has replaced it on recent European legislation.
Validation (air quality modelling)	Refers to the general comparison of modelled results against monitoring data carried out by model developers.
Verification (air quality modelling)	Comparison of modelled results versus any local monitoring data at relevant locations.
Visual receptors	Individuals and/or defined groups of people who have the potential to be affected by a proposal.
Visualisation	A computer simulation, photomontage or other technique to illustrate the appearance of a proposed development.
Water Framework Directive	<p>Poor WFD Status</p> <p>Major change from natural conditions as a result of human activity. Some restrictions on the beneficial uses of the water body. Some impact on amenity. Moderate impact on wildlife and fisheries.</p> <p>Moderate WFD Status</p> <p>Moderate changes from natural conditions as a result of human activity. Some restrictions on the beneficial uses of the water body. No impact on amenity. Some impact on wildlife and fisheries.</p> <p>Good WFD Status</p> <p>Slight change from natural conditions as a result of human activity. No restriction on the beneficial uses of the water body. No impact on amenity or fisheries. Protects all but the most sensitive wildlife.</p>
Water Quality	The physical, chemical and biological characteristics of water.
WHS	World Heritage Site

Term	Definition
Worst-case situation/scenario	Principle applied where the environmental effects may vary, for example, seasonably to ensure that the most sever potential effect is assessed.
WRAP	Waste and Resources Action Programme
µg/m <sup>3</sup>	Micrograms per cubic metre of air: A measure of concentration in terms of mass per unit volume. A concentration of 1 µg/m <sup>3</sup> means that one cubic metre of air contains one microgram (millionth of a gram) of pollutant).