

A12 Chelmsford to A120 widening scheme TR010060

6.1 ENVIRONMENTAL STATEMENT CHAPTER 18 GLOSSARY AND ACRONYMS

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

Volume 6

August 2022

Infrastructure Planning

Planning Act 2008

A12 Chelmsford to A120 widening scheme

Development Consent Order 202[]

ENVIRONMENTAL STATEMENT

CHAPTER 18 GLOSSARY AND ACRONYMS

Regulation Reference	Regulation 5(2)(a)
Planning Inspectorate Scheme Reference	TR010060
Application Document Reference	TR010060/APP/6.1
Author	A12 Project Team & National Highways

Version	Date	Status of Version
Rev 1	August 2022	DCO Application

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18 Glossary and acronyms

18.1 Abbreviations and acronyms

Abbreviation	Term
µg	Microgram
AADT	Annual average daily traffic
AAWT	Annual average weekday traffic
ACM	Asbestos-containing material
ADMS	Atmospheric dispersion modelling
AEP	Annual exceedance probability
AIM	Aerial investigation and mapping
ALC	Agricultural Land Classification
AM	AM peak time period
AMI	Acute myocardial infarction (heart attack)
AMS	Additional mitigation surfacing
APIS	Air Pollution Information System
AQMA	Air quality management area
AQO	Air quality objective
ARN	Affected road network
AURN	Automatic urban and rural network
AWP	Aggregates Working Party
BAP	Biodiversity Action Plan
BCT	Bat Conservation Trust
BEIS	Department for Business, Energy and Industrial Strategy
bgl	Below ground level
BGS	British Geological Survey
BH	Borehole
BMV	Best and most versatile
BNG	Biodiversity net gain
BNL	Basic noise level

Abbreviation	Term
BPM	Best practicable means
BoCC	Birds of conservation concern
BOD	Biological oxygen demand
BoQ	Bill of Quantities
BRE	Building Research Establishment
BS	British Standard
BSc	Bachelor of Science
BTEX	Benzene, toluene, ethylbenzene and xylene
BTO	British Trust for Ornithology
CBBGC	Colchester Braintree Borders Garden Community
CC	Correlation coefficient
CCRA	Climate Change Risk Assessment
CCTV	Closed-circuit television
C&D	Construction and demolition
CEA	Cumulative effects assessment
CEnv	Chartered Environmentalist
CGC	Chelmsford Garden Community
CH ₄	Methane
CIEEM	Chartered Institute of Ecology and Environmental Management
CIRIA	Construction Industry Research and Information Association
CIWEM	Chartered Institute of Water and Environmental Management
CL:AIRE	Contaminated Land: Applications in Real Environments
CLR11	Model Procedures for Management of Land Contamination
CNEB	Chelmsford North East Bypass
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
CoPA	Control of Pollution Act 1974
COPD	Chronic obstructive pulmonary disease
CPRE	Campaign to Protect Rural England

Abbreviation	Term
CRTN	Calculation of Road Traffic Noise
CSM	Conceptual site model
CTMP	Construction Traffic Management Plan
DALY	Disability adjusted life year
dB	Decibel
dB(A)	An A-weighted decibel
DBA	Desk-based assessment
DCO	Development Consent Order
DDMS	Drainage Data Management System
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DLL	District level licence
DM	Do minimum
DMRB	Design Manual for Roads and Bridges
DoW CoP	CL:AIRE Definition of Waste, Development Industry Code of Practice
DQRA	Detailed Quantitative Risk Assessment
DS	Do something
DWS	Drinking Water Standards
EC	European Community
ECC	Essex County Council
eDNA	Environmental DNA
EEAWP	East of England Aggregates Working Party
EFC	Essex Field Club
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EN-1	Overarching National Policy Statement for Energy
EN-4	National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines
ENB	Existing noise barrier
ENG	Environmental Noise Guidelines for the European Region

Abbreviation	Term
EPSM	European protected species mitigation
EQS	Environmental quality standards
ERL	Essex Red Data List
ESA	Employment and support allowance
ESR	Environmental Scoping Report
EU	European Union
EWTBRC	Essex Wildlife Trust Biological Records Centre
FB	Fractional bias
FRA	Flood Risk Assessment
FRC	Formwork reinforcement and concreting
GCN	Great crested newt
GDG	Guideline Development Group
GEML	Great Eastern Main Line
GHG	Greenhouse gas
GI	Ground investigation
GLVIA3	Guidelines for Landscape and Visual Impact Assessment, Third Edition
GWDTE	Groundwater dependent terrestrial ecosystems
GWP	Global-warming potential
ha	Hectare
HADDMS	Highway Agency Drainage Data Management System
HADECS	Highways Agency Detection Enforcement Camera System
HAPAS	Highway Authorities Product Approval Scheme
HDV	Heavy duty vehicle
HER	Historic Environment Record
HEWRAT	Highways England Water Risk Assessment Tool
HFC	Hydrofluorocarbon
HGV	Heavy goods vehicle
HLT	Historic landscape type
HRA	Habitats Regulations Assessment

Abbreviation	Term
HSI	Habitat suitability index
IAIA	International Association for Impact Assessment
IEMA	Institute of Environmental Management and Assessment
IGCB(N)	Interdepartmental Group on Costs and Benefits - Noise subgroup
IHD	Ischaemic heart disease
IMD	Indices of multiple deprivation
INNS	Invasive non-native plant and animal species
IP	Inter-peak time period
ISMP	Invasive Species Management Plan
IUCN	International Union for Conservation of Nature
KSI	Killed or seriously injured
kt	Kilotonne
LAA	Local Aggregate Assessment
LAQM	Local Air Quality Management
LBAP	Local Biodiversity Action Plan
LCA	Landscape character area
LCRM	Land Contamination: Risk Management
LDV	Light duty vehicle
LED	Light-emitting diode
LEL	Lower explosive limit
LEMP	Landscape and Ecological Management Plan
LGA	Licensed groundwater abstraction
LiDAR	Light detection and ranging
LLFA	Lead Local Flood Authority
LLP	Limited liability partnership
LNCS	Local nature conservation site
LNR	Local nature reserve
LOAEL	Lowest observed adverse effect level
LPA	Local planning authority

Abbreviation	Term
LRV	Local road verge
LVIA	Landscape and visual impact assessment
LWS	Local wildlife site
MAGIC	Multi-Agency Geographic Information for the Countryside
M-BAT	Metal bioavailability assessment tool
MCA	Mineral consultation area
MCHW	Manual of Contract Documents for Highways Works
MCIfA	Member of the Chartered Institute for Archaeologists
MDPE	Medium density polyethylene
MHCLG	Ministry of Housing, Communities and Local Government
MMP	Materials Management Plan
MPA	Mineral planning authority
MSA	Mineral safeguarding area
MSc	Master of Science
Mt	Million tonnes
Mtpa	Million tonnes per annum
MWIA	Mental Wellbeing Impact Assessment
N ₂ O	Nitrous oxide
NaCl	Sodium chloride
NAQS	National Air Quality Strategy
NBN	National Biodiversity Network
NCA	National character area
NEET	Not in education, employment or training
NERC	The Natural Environment and Rural Communities Act 2006
NERC S41	Section 41 of the Natural Environment and Rural Communities Act 2006
NGR	National grid reference
NF ₃	Nitrogen trifluoride
NH ₃	Ammonia
N/ha/yr	Nitrogen per hectare per year

Abbreviation	Term
NIA	Noise important area
NNNPS	National Networks National Policy Statement
NNR	National nature reserve
NO ₂	Nitrogen dioxide
NO _x	Nitrogen oxides
NOEL	No observed effect level
NPPF	National Planning Policy Framework
NPPG	National Planning Policy Guidance
NPS	National Policy Statement
NPSE	Noise Policy Statement for England
NRR	National Risk Register (of Civil Emergencies)
NSIP	Nationally Significant Infrastructure Project
NTS	Non-Technical Summary
NVC	National vegetation classification
NVZ	Nitrate vulnerable zone
OHID	Office for Health Improvement and Disparities
ORVal	Outdoor Recreation Valuation tool
OS	Ordnance Survey
PAH	Polycyclic aromatic hydrocarbons
PAN	Peroxyacetyl nitrate
PAQAP	Project Air Quality Action Plan
PAS	Publicly Available Specification
PCF	Project Control Framework
PCM	Pollution climate mapping (model)
PEIR	Preliminary Environmental Information Report
PFC	Perfluorocarbon
PFOS	Perfluorooctane sulphonate
PGA	Private groundwater abstraction
PHE	Public Health England

Abbreviation	Term
PM	PM peak time period
PM _{2.5}	Particulate matter 2.5 micrometres or less in diameter
PM ₁₀	Particulate matter 10 micrometres or less in diameter
PMA	Private means of access
PNB	Potential noise barrier
PPG	Planning Practice Guidance
PPV	Peak particle velocity
PRA	Preferred Route Announcement
PRoW	Public right of way
PSSR	Preliminary Sources Study Report
PSV	Polished stone value
PSYM	Predictive system for multimetrics
Q ₉₅	The flow equalled or exceeded in a watercourse 95% of the time
QOF	Quality Outcomes Framework
RBMP	River Basin Management Plan
RCP	Receptor concentration pathway
RDB3	Red data book 3
RDWE	Road drainage and the water environment
REAC	Register of Environmental Actions and Commitments
RIGS	Regionally important geological or geomorphological sites
RIS	Road Investment Strategy
RMSE	Root mean square error
RoFSW	Risk of flooding from surface water
RSI	Road surface influence
RST	Runoff specific threshold
SAC	Special area of conservation
SAR	Standardised age ratio
SELEP	South East Local Enterprise Partnership
SEPA	Scottish Environment Protection Agency

Abbreviation	Term
SF ₆	Sulfur hexafluoride
SFRA	Strategic Flood Risk Assessment
SINC	Site of importance for nature conservation
SIR	Standardised incidence ratio
SLM	Sound level meter
SMR	Standardised mortality ratio
SNCI	Sites of nature conservation importance
SNRHW	Stable non-reactive hazardous waste
SOAEL	Significant observed adverse effect level
SPA	Special protection area
SPD	Supplementary planning documents
SPP	Sustainable Procurement Plan
SPZ	Source protection zone
SRN	Strategic road network
SSSI	Site of special scientific interest
STEM	Science, technology, engineering and mathematics
SuDS	Sustainable drainage system
SVOC	Semi-volatile organic compounds
SWMP	Site Waste Management Plan
TAG	Transport Analysis Guidance
tCO ₂ e	Tonnes of carbon dioxide equivalent
TDP	Transport Decarbonisation Plan
TEA	Triethanolamine
tpa	Tonnes per annum
TPH	Total petroleum hydrocarbons
TPO	Tree preservation order
TRA	Traffic reliability area
TSCS	Thin surface course system
UAEL	Unacceptable adverse effect level

Abbreviation	Term
UK	United Kingdom
UKCP	UK climate projections
UKHSA	UK Health Security Agency
UK TAG	United Kingdom Technical Advisory Group
UNESCO	United Nations Educational, Scientific and Cultural Organization
UXO	Unexploded ordnance
VDV	Vibration dose value
VOC	Volatile organic compounds
VRS	Vehicle restraint system
WCA	Waste consultation area
WCH	Walker, cyclist and horse rider
WEEE	Waste from Electrical and Electronic Equipment
WFD	Water Framework Directive
WHIASU	Welsh Health Impact Assessment Support Unit
WHO	World Health Organisation
WQAR	Water Quality Assessment Report
WRAP	Waste and Resources Action Programme
ZOI	Zone of influence
ZTV	Zone of theoretical visibility

18.2 Glossary

Term	Definition
Accessibility	The ability of users to access land, property, infrastructure, businesses and community facilities.
Acute impact	Occurs as a result of a severe, usually transient, event. For road runoff, acute pollution is usually the result from a spillage of pollutants, but can result from routine runoff.
Additional mitigation	Requires further activity (after consideration of embedded and standard mitigation) in order to achieve the anticipated outcome. It is described in the aspect chapters of the Environmental Statement and secured through the Register of Environmental Actions and Commitments and the Development Consent Order (DCO).
Additive	Where similar types of impact from a scheme or different developments affect a receptor at the same time and in a similar way, e.g. loss of two pieces of woodland of 1ha, resulting in 2ha cumulative woodland loss overall.
Advanced works	Advanced works would be undertaken prior to consent for the DCO application being granted, which would be secured through separate planning permissions and landowner agreements outside of the powers contained in the DCO.
Affected road network (ARN)	All roads that trigger the traffic screening criteria and adjoining roads within 200m.
Aggregates	Granular or particulate material which is suitable for use (on its own or with the addition of cement, lime or bituminous binder) in construction as concrete, mortar, roadstone, asphalt or drainage courses, or for use as constructional fill or railway ballast (also referred to as 'construction aggregates').
Aggregate apportionment	The National and Regional Guidelines for Aggregates Provision in England 2005-2020 (Department for Communities and Local Government, 2009) set out how much aggregate should be provided for in each of the English sub-national areas. The apportionment targets set out in the Essex Minerals Local Plan (ECC, 2014) ensure that district, borough, and city planning authorities with mineral resources, plan for and protect identified mineral resources.
Agricultural landholdings	Land and associated infrastructure for the purpose of agricultural production, e.g. arable farming, dairy farming etc.
Amino acid racemisation	A scientific dating technique which relates changes in amino acid molecules in organic matter to the time elapsed since they were formed.
Ancient Woodland Inventory site	The Ancient Woodland Inventory identifies over 52,000 ancient woodland sites in the UK. Ancient woodland in England is defined as woodland that has existed since 1600 or before.

Term	Definition
Annual exceedance probability (AEP)	Refers to the probability of a flood event occurring in any year. The probability is expressed as a percentage. For example, a large flood which may be calculated to have a 1% chance to occur in any one year, is described as a 1% AEP event.
Agricultural Land Classification (ALC)	The Agricultural Land Classification system forms part of the planning system in England and Wales. It classifies agricultural land into five categories according to versatility and suitability for growing crops.
Air quality management area (AQMA)	An area declared by a local authority which has been determined will exceed the relevant air quality strategy objective.
Air quality objective (AQO)	The threshold below which harmful effects from pollutant exposure are not expected, set out within the Air Quality Standards Regulations 2010.
Air quality threshold	Generic term to represent the relevant pollutant averaging period and concentration value described by the air quality strategy objectives or EU limit values.
Appropriate assessment	The assessment of the impact on the integrity of a European site of a project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives.
Arboriculturist	Person who has, through relevant education, training and experience, gained expertise in the field of trees in relation to construction (BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations).
Arboricultural impact assessment	An assessment of the effect of the proposed scheme on existing trees.
Archaeological geophysical survey	Non-intrusive and non-destructive techniques used to determine the presence or absence of anomalies likely to be caused by archaeological features, structures or deposits, as far as reasonably possible, within a specified area or site on land, in the inter-tidal zone or underwater. Geophysical survey determines the presence of anomalies of archaeological potential through measurement of one or more physical properties of the subsurface.
Archaeological watching brief	A formal programme of archaeological observation and investigation conducted during any operation carried out for non-archaeological reasons.
Areas susceptible to groundwater flooding	Areas susceptible to groundwater flooding is a strategic scale map showing groundwater flood areas on a 1km square grid. It was developed specifically by the Environment Agency for use by Lead Local Flood Authorities for use in Preliminary Flood Risk Assessment as required under the Flood Risk Regulations.
Aspect	This refers to an environmental topic (e.g. air quality, biodiversity, noise).

Term	Definition
At grade	On the same level. For example, when a road is on the current ground level.
Atmospheric dispersion modelling	The mathematical computation of the dispersal of emissions as they travel through the ambient atmosphere.
Attenuation pond	Part of a drainage system that is used for temporarily storing and attenuating surface water.
A-weighting	This is a measure of the overall level of sound across the audible spectrum with a frequency weighting (i.e. 'A' weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies.
Backfilling	Backfilling means a recovery operation where waste is used in excavated areas (such as underground mines, gravel pits) for the purpose of slope reclamation or safety or for engineering purposes in landscaping and where the waste is substituting other non-waste materials which would have had to be used for the purpose.
Background concentration	The ambient pollutant concentration from multiple sources.
Barn owl nest	A site used by barn owls for nesting and raising of young, legally protected when in use for nesting.
Barn owl roost	A site used by a barn owl to roost/rest but not nest.
Baseflow Index	The proportion of the flow in a watercourse made up of groundwater and discharges. Base flow sustains the watercourse in dry weather.
Baseline	In EIA, 'baseline conditions' are the environmental conditions in existence before the occurrence of an impact from a development, i.e. they are the existing conditions that would be affected.
Baseline (in context of landscape and visual)	Work to provide an outline understanding of landscape and visual conditions before or without implementation of the project, requiring a mix of desk study consultation and field work. (DMRB LA 107)
Base year (traffic model)	The outputs of the traffic model coinciding with the year the traffic data was collected.
Basic noise level (BNL)	The BNL is a measure of source noise at 10m before any corrections, for example for distance, are applied.
Bat roost	A bat's home.
Bed substrate	The material that rests at the bottom of a stream and along the channel margins.
Best and most versatile (BMV)	This is the land which is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non-food uses such as biomass, fibres and pharmaceuticals.

Term	Definition
Best overall environmental outcome	A departure from the waste hierarchy which delivers better overall environmental outcomes.
Best practicable means (BPM)	Measured to reduce noise and vibration from construction activities that are reasonably practicable having regard among other things to local conditions and circumstances, to the current state of technical knowledge and to the financial implications.
Bill of Quantities (BoQ)	A document containing details on the volumes of excavated arisings from, and materials required for, a development.
Borrow pit	A temporary mineral working to supply material for a specific construction project.
Bridleway	A highway over which the public have a right of way on foot and a right of way on horseback or leading a horse. In some cases it may include a right to drive animals of any description along the highway. Statute has added the right to ride a bicycle (not a mechanically propelled vehicle), although cyclists must give way to pedestrians and persons on horseback.
Bund	An embankment which acts as a visual or noise screen, or acts as a barrier to control the spillage of fluids.
Businesses	Land and buildings for the purpose of commercial/ industrial enterprise.
Carbon budgets	A carbon budget, defined in accordance with the Climate Change Act 2008, places a restriction on the total amount of greenhouse gases the UK can emit over a defined five-year period.
Carbon dioxide equivalent (CO ₂ e)	Carbon dioxide equivalent (abbreviated as CO ₂ e) is a metric used to compare the emissions of various greenhouse gases, based on their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of CO ₂ with the same GWP. For example, the GWP for methane (CH ₄) is 25, and for nitrous oxide (N ₂ O) it is 298. This means that an emission of 1 tonne of CH ₄ is equivalent to an emission of 25 tonnes of CO ₂ and an emission of 1 tonne of N ₂ O is equivalent to 298 tonnes of CO ₂ .
Carbon emissions	Shorthand for emissions of any of the seven GHGs that contribute to climate change.
Carriageway	The width of a highway that can be used by motorised vehicles and non-motorised users, formed by a number of lanes. Dual two-lane means two lanes in each direction, and dual three-lane means three lanes in each direction (dual two-lane and three-lane carriageways have a central reserve to separate the traffic travelling in each direction).

Term	Definition
Category 1, 2, and 3 changes	<p>For the supplementary consultation, design changes were split into three categories:</p> <ul style="list-style-type: none"> Category 1 changes: the main changes proposed as a result of the updated design which were likely to result in a change to the environmental information presented at statutory consultation. Category 2 changes: further changes as a result of the updated design. These were changes that also involved an environmental change but those that were considered less significant in environmental terms and which were potentially more localised. Category 3 changes: minor changes as a result of the updated design. The majority of these involved a change to the environmental information presented at statutory consultation and which were generally more localised in nature.
Category 4 Screening Levels	The Category 4 Screening Levels represent the concentration of a contaminant in the soil below which a site is definitely not classed as 'Contaminated Land' as defined by Part 2A of the Environmental Protection Act.
Characteristics (in context of landscape and visual)	Elements or combination of elements, which make a particular contribution to distinctive character. (DMRB LA 107)
Chartered Environmentalist (CEnv)	Chartered Environmentalists come from a broad range of professions across industry, government, education and the public sector. The CEnv qualification denotes sound knowledge, proven experience and a profound commitment to sustainable best practice within their particular profession and field of expertise.
Chronic impact	The result of ongoing low levels of pollution which can result in the transport and accumulation of sediment-bound pollutants over a longer period of time (months/years).
Cill	An underwater ledge.
Circular economy	A circular economy is an alternative to a traditional linear economy (of make, use, dispose) in which resources are kept in use for as long as possible; extracting the maximum value from resources while in use; recovering and regenerating products and materials at the end of life; and keeping products, components and materials at their highest utility and value at all times.
Climate change	Long-term variations in global temperature and weather patterns caused by natural and human actions.

Term	Definition
Climate extreme indices	With regard to climate change, extreme weather events and climate events are often referred to collectively as climate extremes. The World Climate Research Programme and World Meteorological Organization expert team on climate change detection and indices (ETCCDI) coordinate, organise and collaborate on climate extremes, indices and climate change detection. This team have defined a set of 27 core indices (the 'ETCCDI' indices) which can be derived from land surface observations of daily temperature and precipitation.
Climate scenario	UKCP18 uses emissions scenarios, called Representative Concentration Pathways (RCPs). RCPs specify the concentrations of greenhouse gases that would result in target amounts of radiative forcing at the top of the atmosphere by 2100, relative to pre-industrial levels. Four forcing levels have been set: 2.6, 4.5, 6.0 and 8.5W/m ² . These create four RCPs that are used in UKCP18: RCP2.6, RCP4.5, RCP6.0 and RCP8.5.
Clinical health	Having to do with the examination and treatment of patients. Health status of individual patients.
Colchester Braintree Borders Garden Community (CBBGC)	Cross boundary garden community that was proposed near Marks Tey. Proposals for this garden community were dropped from the North Essex Authorities' Shared Strategic Section 1 Plan.
Cold spell duration index	Count of days with at least six consecutive days when daily minimum temperature is below the 10 th percentile.
Community	A group of people living in the same place or having a particular characteristic in common.
Community land and assets	Land, buildings and infrastructure providing a service/resource to a community, e.g. open spaces, village greens, village halls, healthcare and education facilities.
Compensation code	The national compensation code (the compensation code or the land compensation code) is the collective term for the principles derived from statute and case law, relating to compensation for compulsory acquisition, which ensures that when land is needed for an infrastructure project, the owners receive compensation to help them relocate. The code also ensures that those who experience real, physical events, for example vibration or noise, from a scheme once it is in operation, are entitled to compensation.
Conservation area	An area designated under Section 69 of the Planning (Listed Buildings and Conservation Areas) Act 1990 as being an area of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance.

Term	Definition
Consignment note	A legally required document that details the transfer of hazardous waste from one party to another. The note must be prepared before any hazardous waste is moved and is required for all movements of hazardous waste. The format of the consignment note must meet the requirements set out in Schedule 1 of The Hazardous Waste (England and Wales) (Amendment) Regulations 2016 (as amended).
Construction compound	Construction compounds generally act as the points of entry to the worksites from the public highway. They may also be used for major stockpiling of materials such as topsoil, be used to facilitate transfer of materials, and accommodate offices and welfare facilities.
Construction, demolition and excavation waste	Arisings and waste from the demolition of buildings and structures, site preparation and clearance, remediation, excavation and construction activities.
Construction materials	Primary, recycled or secondary, and renewable sources of materials required for constructing a project.
Consultation Report	Applicants have a duty to take into account all responses to their statutory consultation at the pre-application stage. The Consultation Report summarises all responses and is submitted with the DCO application. The Consultation Report explains how the Applicant has had regard to consultation responses.
Correlation coefficient	The linear relationship between predicted and observed data. A value of zero means no relationship and a value of 1 means absolute relationship.
Couch	With regard to otters, a couch is a daytime resting location. They are usually above ground and often consist of a roughly circular area of flattened vegetation.
Cropmark	An effect expressed in the differential growth or ripening of crops caused by sub-surface archaeological features. Differential drying of exposed earth can reveal similar features and these effects are sometimes referred to as soilmarks. Such marks can reveal buried archaeological sites that are not visible from the ground.
Culvert	A tunnel (pipe or box shaped) that carries a stream or open drain under a road or railway.
Cumulative effects	Effects upon the environment that result from the incremental impact of an action when added to other past, present or reasonably foreseeable actions. Each impact by itself may not be significant but can become a significant effect when combined with other impacts.

Term	Definition
Curtilage	<p>Legally defined as the enclosed space of ground and buildings immediately surrounding a dwelling-house, or the open space situated within a common enclosure belonging to a dwelling-house.</p> <p>Used in relation to listed buildings. As defined in Section 1(5) of the Planning (Listed Buildings and Conservation Areas) Act 1990, curtilage of a listed building is <i>'any object or structure within the curtilage of the building which, although not fixed to the building, forms part of the land and has done so since before 1st July 1948 shall be treated as part of the building.'</i></p>
Cut-fill balance	Where the amount of material obtained from earthwork cuttings broadly matches the amount of fill material required to form embankments, thereby minimising the amount of material needed to be imported into, or exported from, a construction site.
Cutting (earthwork)	Excavation of earth material to lower the ground level on which a road would be positioned, in order to help reduce noise and/or visual impacts.
Cycle track	A way constituting or comprised in a highway, being a way over which the public have the following rights of way - a right of way on pedal cycles (other than pedal cycles which are motor vehicles within the meaning of the Road Traffic Act 1988) with or without a right of way on foot. For the purpose of the proposed scheme, all the cycle tracks created under the scheme include a right of way on foot.
Dead hedging	Retained cut shrubby vegetation (often used to temporarily infill gaps in hedgerows whilst new planting matures).
Decibel	The scale on which sound pressure level is expressed. In air it is defined as 20 times the logarithm of the ratio between the root-mean-square pressure of the sound field and a reference pressure ($2 \times 10^{-5} \text{Pa}$).
De-mountability	Means structures and assets are designed to allow destruction-free disassembly and reassembly responding to changing structural demands, refurbishment or removal (e.g. through modular, flexible, adaptable and upgradable components with detachable connections).
Department for Transport (DfT)	The Government department responsible for the English transport network.
Deposit model	A method of identifying the character and degree of survival of buried archaeological remains over a specified area using the results of previous excavations and other intrusive archaeological investigations to estimate the nature of the archaeology over a wider area.
Design for resource efficiency	Making the best use of materials, water and energy over the lifecycle of built assets to minimise embodied and operational carbon.
Design Manual for Roads and Bridges (DMRB)	Provides standards relating to the design, assessment and operation of trunk roads, including motorways, in the United Kingdom.
Design year	Term used to describe the situation 15 years after scheme opening.

Term	Definition
Desire line	Line likely to be taken by walkers, cyclists or horse riders finding the shortest route between two points.
Desk-based assessment (DBA)	A document produced to assess the overall heritage resources of a defined area. This is primarily performed without the aid of archaeological field investigations, through the use of Historic Environment Records and archive materials.
Detailed Quantitative Risk Assessment (in relation to geology and soils)	A Detailed Quantitative Risk Assessment involves detailed or supplementary investigation to confirm contaminant linkages and to identify or develop site-specific assessment criteria.
De-trunk	The transfer of trunk roads from National Highways' responsibility to the local highway authority.
Development Consent Order (DCO)	Introduced by the Planning Act 2008, a DCO is the means of obtaining permission for developments categorised as Nationally Significant Infrastructure Projects.
Development land	Land identified in national or local plans, policies or strategies for development (including intensification of existing uses) and land subject to planning permission.
Dewatering	Dewatering refers to the removal of groundwater and/or surface water from a location to facilitate construction.
Diffusion tube	A passive pollution monitoring device.
Discharge	The volume of flow passing a point in a given time period.
Disposal	Any operation which is not recovery, even where the operation reclaims substances or energy as a secondary consequence.
District level licence (DLL)	District level licences are granted and authorised by Natural England to permit developments that affect great crested newt <i>Triturus cristatus</i> and involve habitat creation and mitigation being carried out at the local authority level, providing an alternative to the standard European protected species mitigation licensing process.
Do-minimum (DM)	The scenario that represents the situation that would occur without the project in operation, which includes permitted developments.
Do-something (DS)	The scenario that represents the situation that would occur with the project in operation, which includes permitted developments.
Duty of care	The duty of care is a legal requirement for those dealing with certain kinds of waste to take all reasonable steps to keep it safe and is set out in the Environmental Protection Act 1990 (as amended). It applies to anyone who is a holder of household, industrial and commercial waste, known as controlled waste.
Earthworks	Engineering works created through the processing of parts of the earth's surface involving quantities of soil or unformed rock.

Term	Definition
Effect	Term used to express the consequence of an impact. The significance of effect is determined by correlating the magnitude of the impact with the importance, or sensitivity, of the receptor or resource in accordance with defined significance criteria.
Ellenberg N value	An indication of soil fertility based on nitrogen preference, on a scale of 1 to 9, where a value of 1 indicates extremely infertile soil and a value of 9 indicates extremely rich soil.
Embankment	Artificially raised ground, commonly made of earth material, on which the carriageway is laid.
Embedded mitigation	Intrinsic part of design evolution (e.g. reducing height of an embankment to reduce visual impact), taking into account guidance provided in DMRB GG 103 and LD 117–119. This forms part of the proposed scheme description in the Environmental Statement.
Emission factors	The emission rate of a pollutant attributable to a specific activity.
Employment and support allowance (ESA)	Money for people who have limited capability for work because of their sickness or disability but do not get Statutory Sick Pay.
Enclosure	An area of land enclosed by a boundary ditch, bank, wall, palisade or other similar barrier.
End of first life	The point at which an asset is no longer useful in the capacity for which it was originally intended.
Enhancement	A beneficial measure that is over and above what is required to mitigate the adverse effects of a scheme. Enhancements do not factor into the assessment of effects.
Environment Agency	Established under the Environment Act 1995, it is a non-departmental public body of Defra. The Environment Agency is the leading public body for protecting and improving the environment in England and Wales. It is responsible for wide-ranging matters, including the management of all forms of flood risk, water resources, water quality, waste regulation, pollution control, inland fisheries, recreation, conservation and navigation of inland waterways.
Environmental Impact Assessment (EIA)	A process by which information about environmental effects of a proposed development is collected, assessed and used to inform decision making. For certain projects, EIA is a statutory requirement.
Environmental Management Plan (EMP)	A site-specific plan (or set of plans) developed to ensure that appropriate environmental management practices are followed during the construction and operational phases of a scheme. A first iteration EMP has been included in the DCO application. This will then be updated before construction starts (second iteration), and again after completion of works before the proposed scheme becomes operational (third iteration).

Term	Definition
Environmental Masterplan	Plan which illustrates the mitigation measures integrated into the design of the proposed scheme.
Environmental quality standard (EQS)	The maximum permissible concentration of a potentially hazardous chemical. The EQS is used to assess the risk to the health of aquatic flora and fauna.
Environmental Statement	A statutory document produced in accordance with the EIA Regulations, to report the EIA process.
Equivalent continuous sound pressure level (L_{eq})	The equivalent continuous sound pressure level is the notional steady sound level which, over a stated period of time, would contain the same amount of acoustical energy as the A-weighted fluctuating sound measured over that period.
Essential mitigation	Mitigation critical for the delivery of a scheme which can be acquired through statutory powers. For the purpose of the proposed scheme, both standard and additional mitigation are considered essential mitigation.
EU Limit Value	Legally binding threshold for individual pollutants, as prescribed in the European Commission Ambient Air Quality Directive (2008/50/EC).
European protected species mitigation (EPSM) licence	The licence issued that permits an activity affecting a European protected species, that would otherwise constitute an offence under the relevant legislation.
European sites	Habitats Directive or Birds Directive sites including: <ul style="list-style-type: none"> • Special Protection Areas (SPAs), and potential SPAs (pSPAs) • Special Areas of Conservation (SACs), and candidate or possible SACs (cSACs or pSACs) • Ramsar sites See also 'National Site Network'.
Evaluation (in relation to cultural heritage)	A limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present, field evaluation defines their character, extent, quality and preservation, and enables an assessment of their significance in a local, regional, national or international context as appropriate.
Examining Authority	The person(s) appointed by the Secretary of State to assess the application for development consent and make a recommendation to the Secretary of State.
Features (in context of landscape and visual)	Particularly prominent, 'eye-catching' elements or characteristic components (i.e. tree clumps, church towers, or wooded skylines). (DMRB LA 107)
Findspot	The approximate location at which stray finds of artefacts were found.

Term	Definition
First study area (in relation to material assets and waste)	Project footprint (including temporary land-take) for which consent is being sought. The area within which construction materials would be consumed (used or deployed), and waste generated (including temporary compounds and storage areas).
Flood defence	Infrastructure used to protect an area against floods, such as floodwalls and embankments; they are designed to a specific standard of protection (design standard).
Floodplain	A floodplain is flat or nearly flat land adjacent to a stream or river, stretching from the banks of its channel to the base of the enclosing valley walls and (under natural conditions) experiences periods of flooding.
Flood risk	The exposure, vulnerability and hazard associated with flooding.
Flow dynamics	The manner in which flow behaves, i.e., turbulent flows, non-energetic and laminar flows.
Fluvial flooding	Flooding resulting from water levels exceeding the bank level of a Main River
Footpath	A highway over which the public have a right of way on foot only, not being a footway. A footpath is essentially a freestanding right of way (i.e. not alongside a carriageway).
Footway	A way comprised in a highway which also comprises a carriageway, being a way over which the public have a right of way on foot only. A footway is essentially a pavement alongside a carriageway – it is the part of a carriageway highway set aside for pedestrians.
Geoarchaeology	The application of earth science principles and techniques to the understanding of the archaeological record.
Geology	The physical structure, substance and history of the earth (rocks and minerals).
Grade separation	A type of junction where the major route (or routes) through the junction do not stop and do not cross any other road on the level. Movements to other roads are made using slip roads and bridges.
Gravity retaining wall	Gravity retaining walls are the walls which use their own weight to resist the lateral earth pressures.
Greater Essex	Greater Essex comprises Essex County Council, Southend-on-Sea Borough Council and Thurrock Council areas.
Greenfield (land)	Undeveloped parcel of land.
Greenhouse gases (GHGs)	A gaseous compound that absorbs infrared radiation and traps heat in the atmosphere. Greenhouse gases are usually expressed in terms of carbon dioxide equivalent (CO ₂ e).
Green infrastructure	Networks of green spaces and watercourses and water bodies that connect rural areas, villages, towns and cities. (GLVIA3)

Term	Definition
Ground gas	Gases such as carbon dioxide and methane, which are generated within the ground and/or within landfills, commonly from the breakdown of vegetative matter.
Ground investigation (GI)	Ground investigations are a means of determining the condition of the ground, ideally before beginning construction works.
Ground Investigation Report	A Ground Investigation Report gives the designer's interpretation or judgement of the ground conditions as they pertain to the planned works and an assessment of the ground risks.
Groundwater dependent terrestrial ecosystem (GWDTE)	GWDTEs are wetlands which critically depend on groundwater flows and chemistries.
Guide planting	Placement of seeds, bulbs and/or plants in such an arrangement that it encourages movement of animals in a certain direction, e.g. by creating planted corridors that encourage movement along them or planted barriers that may deter species in a certain direction.
H++	Defined as plausible 'high-end' climate change scenarios, which are typically extreme climate change scenarios on the margins or outside of the 10 th to 90 th percentile range presented in the 2009 UK climate change projections (also known as 'UKCP09').
Habitats Regulations Assessment (HRA)	A HRA refers to the several distinct stages of assessment which must be undertaken in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended) if a plan or project may affect the protected features of a habitats site, before a decision can be made on whether to authorise it.
Hardstrip	A hardstrip provides a surfaced strip that abuts the carriageway (between the carriageway and verge). Reasons for providing a hardstrip include, but are not limited to, providing drainage surface area, preventing vegetation from encroaching on the carriageway, and allowing for vehicle overrun (e.g. due to driver error or evasive maneuverers).
Haul road	Temporary roads used during the construction phase to transport materials, equipment and the workforce within the Order Limits.
Haven Ports	The ports located at Felixstowe, Ipswich, Mistley and Harwich.
Hazardous waste	Defined in line with Article 3(2) of the Waste Framework Directive (Council Directive 2008/98/EC) as waste which displays one or more of the hazardous properties listed in Annex III of the Directive ¹ .

¹ The UK left the European Union on 31 December 2020. The UK government is committed to maintaining environmental standards and international obligations from 1 January 2021, and existing EU environmental laws will continue to operate in UK law.

Term	Definition
Health inequalities	The unfair and avoidable differences in exposure to health risk factors and to health status, health across the population, and between different groups within society. Note that where these are unfair and avoidable differences, these are also known as health inequities.
Heavy goods vehicle (HGV)	A commercial carrier vehicle with a gross vehicle weight of more than 3.5 tonnes.
Heritage assets	The historic environment assets such as archaeological remains, historic buildings and historic landscapes which have archaeological, architectural, artistic or historic value.
Hibernacula	A habitat feature where reptiles and amphibians may hibernate.
Historic England	A public body responsible for ensuring that England's historic environment is protected and improved.
Historic Environment Record (HER)	Information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.
Historic landscape characterisation	A formal process of the study of the historic landscape, using an array of sources including historic maps, archaeological data and aerial photographs. Historic Landscape Characterisation identifies and describes the essential characteristics of the land being studied. The studied areas are recorded chiefly in GIS format as polygons.
Holocene	The name given to the current geological epoch which began approximately 11,650 years ago.
Holt	With regard to otters, a holt is a hole in the ground used as a sleeping and resting place. The most common type is a hole leading to a cavity beneath the roots of a bankside tree, although can take a variety of other forms.
Hulk	With regard to trees, a 'hulk' refers to the large, ruined remains of a standing dead tree, sometimes retained for its historical importance or for the benefit of wildlife.
Hydromorphology	The scientific study of the form and function of rivers and the interaction between streams and the landscape around them.
Illustrative viewpoint	Chosen specifically to demonstrate a particular effect or specific issues, which might, for example, be the restricted visibility at certain locations. (GLVIA3)
In-combination effects (in relation to climate)	When a projected future climate impact (e.g. increase in temperatures) interacts with an effect identified by another aspect and exacerbates its impact.

Term	Definition
Inert waste	<p>Waste which meets one or more of the following criteria:</p> <ul style="list-style-type: none"> • It does not undergo any significant physical, chemical or biological transformations • It does not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm to human health • Its total leachability and pollutant content and the ecotoxicity of its leachate are insignificant and, in particular, do not endanger the quality of any surface water or groundwater <p>See Directive 1999/31/EC and Council Decision 2003/33/EC.</p>
Institute of Environmental Management and Assessment (IEMA)	A professional body for environmental managers and EIA professionals.
Interchange	A term used to describe a grade separated junction that provides free flow from one mainline to another.
Interfluves	The higher area of terrain between watercourses.
Intra-project effects (interrelationship of effects)	The combined action of a number of different environmental aspect-specific effects upon a single resource/receptor. Also referred to as interrelationship of effects.
Inter-project cumulative effects	The combined action of a number of different projects, in combination with the project being assessed, on a single resource/receptor.
Interactive	Where different types of impact affect a receptor and interact to increase their combined significance, e.g. two discharges combine to have an effect on a species not affected by discharges in isolation.
Invasive non-native species (INNS)	Species that have been released either deliberately or accidentally outside their natural range, where they have become established and cause adverse ecological, environmental, or economic impacts.
Jowel	The end of a timber post made wider than the rest of its length on one face to accommodate tie-beams, wall-plates, etc.
Junction	A place where two or more roads meet.
Key construction material	Construction materials which, by weight, constitute the majority of material required to deliver the proposed scheme.
L ₁₀ or L _{A10}	Acoustic nomenclature indicating that the value is exceeded for 10% of the period of interest. This index, evaluated over the period 06:00 to 24:00, is commonly used to describe road traffic noise.
L _{A10,18h}	The noise level, in dB, that is exceeded 10% of the time between 06:00 and 24:00.

Term	Definition
L ₉₀ or L _{A90}	Acoustic nomenclature indicating that the value is exceeded for 90% of the period of interest. This index is taken to be a good indicator of the background noise level remaining at a location in the absence of any easily identifiable sources.
L _{eq} or L _{Aeq}	Acoustic nomenclature indicating that a value is expressed in terms of the equivalent continuous sound pressure level.
L _{den}	The L _{den} is a noise index that is mainly used by the World Health Organisation and health professionals. It provides a single weight noise level taking into account the commonly used three periods of day (07:00 to 19:00), evening (19:00 to 23:00) and night (23:00 to 07:00). Before the noise levels from these three periods are added together, the evening period has a +5dB(A) correction applied and the night period a +10dB(A) correction applied.
L _{night}	The free-field noise level in the L _{Aeq} index from 23:00 to 07:00.
Landbank	A stock of land with planning permissions but where minerals development has yet to take place.
Landfill capacity	The known, forecast or estimated remaining landfill void space, either regionally or nationally. Landfill capacity is generally measured in cubic metres.
Landscape	An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors. (GLVIA3)
Landscape and visual impact assessment (LVIA)	A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity.' (GLVIA3)
Landscape architect	Competent expert to mean: 1) Chartered Member of the Landscape Institute; or 2) member of a recognised equivalent landscape professional body. (DMRB LA 107)
Landscape character	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse. (GLVIA3)
Landscape character area	These are single unique areas which are the discrete geographical areas of a particular landscape type. (GLVIA3)
Landscape character assessment	The process of identifying and describing variation in character of the landscape, and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscapes distinctive. (GLVIA3)

Term	Definition
Landscape character type	These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes. (GLVIA3)
Landscape component	Interplay of physical, natural and cultural factors of our surroundings. (DMRB LA 107)
Landscape effects	Effects on the landscape as a resource in its own right. (GLVIA3)
Landscape elements	Individual parts which make up the landscape, such as, for example, trees, hedges and buildings. (GLVIA3)
Landscape quality (or condition)	A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements. (GLVIA3)
Landscape receptors	Defined aspects of the landscape resource that have the potential to be affected by a proposal. (GLVIA3)
Landscape resource	Natural and physical attribute (i.e. soils, vegetation). (DMRB LA 107)
Landscape value	The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons. (GLVIA3)
Latrine	A term used to describe the small pits or holes in the ground in which badgers deposit their faeces. Generally a latrine will consist of several of these pits, although one or two is not uncommon. Latrines are frequently used as territorial markers of boundaries between social groups and are often located at prominent landscape features such as fences, hedges or trees.
Laydown area	An area used for the temporary storage of construction equipment and supplies.
Leaching	When soil loses water-soluble nutrients due to excessive rain or irrigation.
Lead Local Flood Authority (LLFA)	Local Authority responsible for taking the lead on local flood risk management. The duties of LLFAs are set out in the Flood and Water Management Act 2010.
Life cycle stage	PAS 2080:2016 proposes a modular approach for the quantification of infrastructure related GHG emissions over a number of stages over the 'life cycle' of a project, namely 'before use (A)', 'use (B)' and 'end of life (C)'. These stages are further disaggregated into modules (e.g. product stage (A1–A3) and construction process stage (A4–A5)).
Light goods vehicle	A motor vehicle used to carry goods with a total mass of up to 3.5 tonnes.

Term	Definition
Limits of deviation	Limits of deviation provide an envelope of development, as opposed to specific dimensions, and are used to allow design flexibility. These are defined in the DCO and set the maximum extents of elements of the proposed scheme.
Listed building	A building or structure designated under Section 1 of the Planning (Listed Building and Conservation Areas) Act 1990 as being of special architectural or historic interest.
Local authority (also local planning authority)	The body officially responsible for all the public services and facilities in a particular area, and which is empowered by law to exercise planning functions.
Local Biodiversity Action Plan (LBAP)	Local Biodiversity Action Plans set the focus for conservation of locally valued species and habitats.
Local nature reserves (LNRs)	Sites that are designated by the local authority under Section 21 of the National Parks and Access to the Countryside Act 1949 for nature conservation which have wildlife or geological features that are of special interest locally.
Local Plan	The plan for the future development of the local area, drawn up by the local planning authority in consultation with the community. They define the priorities for an area, strategic policies, the framework for neighbourhood plans, land allocations, infrastructure requirements, housing needs, requirements for safeguarding the environment, measures for adapting to climate change, among others.
Local planning authority (LPA)	The local authority or council that is empowered by law to exercise planning functions for a particular area.
Local wildlife site (LWS)	LWS are wildlife-rich sites selected for their local nature conservation value. They are identified and selected at a local level, often through a combination of local authorities, nature conservation charities and a variety of other experts. In many parts of the UK, they are the principal wildlife resource but their designation is non-statutory and their protection comes via the planning system.
Longest dry spell	Highest number of consecutive days with <1mm rainfall.
Long term trend (LTT) adjustment factor	Adjustment factor applied to raw modelled nitrogen oxides (NO _x) concentrations to account for over-optimism by Defra tools regarding the future uptake of low-polluting vehicles.
Lower critical load	A quantitative estimate of exposure to a pollutant, below which significant harmful effects on specified sensitive elements of the environment are not expected to occur.
Lowest observed adverse effect level (LOAEL)	The level above which adverse effects on health and quality of life can be detected.
Lux	A standardised unit of measurement of light level intensity.

Term	Definition
Macrophyte	An aquatic plant large enough to be seen with the naked eye.
Magnitude	The scale, size or degree of change (impact) to the environment from an action upon it.
Main construction compounds	Construction compounds that contain features, apparatus and provisions including office and welfare facilities, batching plants, waste management facilities, materials testing laboratory facilities, and CCTV traffic control facilities.
Mainline	The carriageway carrying the main flow of traffic, generally traffic passing straight through a junction or interchange
Main River	A watercourse shown as such on the Main River Map, and for which the Environment Agency has responsibilities and powers. N.B. Main River designation is not an indication of size, although it is often the case that they are larger than Ordinary Watercourses.
Material impact	An event/outcome that is a key decision-making consideration.
Matter	This relates to sub-topics of an environmental aspect (e.g. designated sites, protected species).
Maximum five-day precipitation	Highest value of rainfall accumulated over five days.
Meandering channel	A single channel that follows a winding course, with a sinuosity ratio typically over 1.5.
Mental health	A state of wellbeing in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.
Metapopulation	A metapopulation is a term used to refer to a regional/local group of connected populations of a single species. A common example in UK ecology is that of great crested newts which breed in, and live around, a cluster of ponds. Even though most adults consistently return to the same pond to breed, there will be some interchange of individuals between ponds.
Mineral area of search	A broad area within which mineral sites are sought for development.
Mineral consultation area (MCA)	Geographical area, based on a mineral safeguarding area, where the district or borough council should consult the mineral planning authority for any proposals for non-minerals development.
Mineral planning authority (MPA)	The mineral planning authority is the county council in two-tier parts of the country, the unitary authority or the national park authority responsible for minerals development planning and control.
Mineral preferred area	Areas of known resources where planning permission might reasonably be anticipated providing the proposals are environmentally acceptable, or appropriate conditions can be applied to mitigate adverse impacts.

Term	Definition
Mineral resource	Natural concentrations of minerals in or on Earth's crust that are or may become of economic interest because they are present in such form, quality and quantity that there is the potential for eventual economic extraction. Generally, a mineral resource is known to exist within the boundaries outlined by British Geological Survey geological mapping.
Mineral safeguarding area (MSA)	An area designated by a mineral planning authority which covers known deposits of minerals which are desired to be safeguarded from unnecessary sterilisation by non-mineral development. MSAs are different from mineral safeguarding sites, defined below, as Government guidance is clear that there is no presumption that resources defined in MSA would be worked.
Mineral safeguarding sites	Operational extraction sites or mineral sites specifically identified and allocated in strategic planning documents as those that would be mined or extracted.
Mineral specific sites	Areas with viable mineral resources where the landowners are willing to allow mineral development, and where granting of planning permission may be more likely than in a preferred area.
Mitigation	The action of reducing the severity and magnitude of change (impact) to the environment. Measures to avoid, reduce, remedy or compensate for significant adverse effects.
Modular block retaining wall	Pre-cast blocks that are fit together to create a retaining structure.
Municipal waste	Municipal waste covers household waste and waste similar in nature and composition to household waste.
Narrow lane working	Width of the standard carriageway reduced to allow safe construction works on the adjacent lane.
National Highways	National Highways is the public body that operates, maintains and improves England's motorways and major A-roads.
National nature reserve (NNR)	NNRs in England are sites designated by Natural England to protect some of the most important habitats, species and geology. A NNR is declared under the National Parks and Access to the Countryside Act 1949 or the Wildlife and Countryside Act 1981 (as amended).
National Networks National Policy Statement (NNNPS)	The NNNPS sets out ' <i>the need for, and the Government's policies to deliver, development of nationally significant infrastructure projects on the national road and rail networks</i> '.
National Planning Policy Framework (NPPF)	The National Planning Policy Framework was published in March 2012 by the UK's Department of Communities and Local Government, consolidating over two dozen previously issued documents called Planning Policy Statements and Planning Policy Guidance Notes for use in England. The NPPF was updated in February 2019, and again in July 2021, by the Ministry of Housing, Communities and Local Government.

Term	Definition
National Planning Practice Guidance (NPPG)	Supporting guidance to the NPPF, published by the Government in March 2014 as an online resource, available at: http://planningguidance.planningportal.gov.uk/ . It replaces previously published Government guidance, including that regarding flood risk.
National Policy Statement (NPS)	NPS are produced by Government. They give reasons for the policy set out in the statement and must include an explanation of how the policy takes account of Government policy relating to the mitigation of, and adaptation to, climate change.
National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)	EN-4 covers impacts and other matters which are specific to gas supply infrastructure and oil and gas pipelines or where, although the impact is generic and covered in EN-1, there are further specific considerations arising from the relevant technologies.
National Sites Network	Special protection areas (SPA), special areas of conservation (SAC), and Ramsar sites which were formerly collectively known as Natura 2000 sites but are now known as the National Sites Network since the UK's exit from the European Union.
Nationally Significant Infrastructure Project (NSIP)	Major infrastructure developments in England and Wales, such as proposals for power plants, large renewable energy projects, new airports and airport extensions, and major road projects, as set out in the Planning Act 2008. See entry for Development Consent Order.
Natural England	A public body responsible for ensuring that England's natural environment is protected and improved.
Natural resources	Any physical, tangible and valued element of the natural environment (such as soil, land, water and biodiversity).
Net zero	Net zero means any emissions would be balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere, such as planting trees or using technology like carbon capture and storage.
Nitrogen (N) deposition	The transfer of reactive nitrogen from the atmosphere to the biosphere.
Noise important area (NIA)	Areas identified with respect to noise from major roads and from roads within agglomerations where the 1% of the population that are affected by the highest noise levels from major roads are located according to the results of the strategic noise mapping.
Noise sensitive receptor	Receptors which are potentially sensitive to noise, for example dwellings, hospitals, healthcare facilities, education facilities.
Non-designated heritage asset	Known archaeological sites, built heritage assets or historic landscape types which are not protected or designated under heritage legislation.
Non-hazardous waste	Waste that is classified as neither inert nor hazardous.

Term	Definition
Non-statutory consultation	A period to seek comments from the local community and statutory consultees on the proposed scheme prior to a decision being made on the preferred option.
No observed effect level (NOEL)	The noise level below which no effect can be detected.
North Essex Authorities	The North Essex Authorities consist of the Braintree, Colchester and Tendring local authorities.
Offline	Highway development on land under non-highway use, for example a new dual carriageway constructed on agricultural land.
Online	Highway development proposed along, or on the line of, an existing road, for example road widening.
Opening year	The first year of operation.
Order Limits	The spatial boundaries of the proposed scheme.
Ordinary Watercourse	All watercourses that are not designated Main River, and which are the responsibility of Local Authorities or, where they exist, Internal Drainage Boards. Note that Ordinary Watercourse does not imply a 'small' river, although it is often the case that Ordinary Watercourses are smaller than Main Rivers.
Other sensitive receptors (in relation to noise assessment)	A receptor other than a dwelling that is potentially sensitive to noise.
Outfall	Point of discharge into a water body.
Outline Construction Traffic Management Plan (Outline CTMP)	A plan which identifies clear controls on routes, vehicle types, vehicle frequency, vehicle quality and hours of site operation.
Overarching National Policy Statement for Energy (EN-1)	EN-1 sets out the general principles that should be applied in the assessment of applications for development consent across the range of energy technologies. EN-1 also sets out policy on the assessment of impacts which are common across a range of these technologies (generic impacts).
Overbridge	A bridge crossing over a transport corridor (for example a highway).
PAS 2080	PAS 2080:2016 Carbon Management in Infrastructure specifies requirements for the management of whole-life carbon in infrastructure.
Palaeochannel	The course or channel of a river or stream preserved as a geological feature.
Peak particle velocity (PPV)	PPV is defined as the maximum instantaneous positive or negative peak of the vibration signal. It is specified in millimetres per second (mm/sec). It should be noted that the PPV refers to the movement within the ground of molecular particles and not surface movement.

Term	Definition
Peat resource	Existing or potential peat extraction sites.
Permitted reserves	Sites where planning permission has been granted for development but where extraction has still to take place or is not yet completed. It may cover the whole or part of a site.
Photomontage	A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs. (GLVIA3)
Planform	The birds-eye view of the channel and the form of the channel from that perspective.
Planning Inspectorate	The Planning Inspectorate for England and Wales is an executive agency of the Department for Levelling Up, Housing and Communities with responsibility to make decisions and provide recommendations and advice on a range of land use planning-related issues, including operating the planning process for Nationally Significant Infrastructure Projects.
Pollution climate mapping (PCM) model	Government's national air quality modelling used to assess and report on compliance with the Ambient Air Quality Directive to the European Commission.
Pools and riffles	Periodic undulations in bed elevation where relatively shallow, coarse grained riffles are separated by deeper pools.
Population health	The health outcomes of a group of individuals, including the distribution of those outcomes within the group.
Pore water pressure	The pressure exerted on its surroundings by water held in pore spaces in rock or soil, an increase in which can result in a decrease in the shear strength of a slope material, reducing slope stability.
Pre-commencement works	Pre-commencement works are preparations to make a building site ready for construction. It covers activities from site preparation, creation of access routes, and the installation of facilities like security fencing, ramps, and placing of signs.
Preferred Route Announcement (PRA)	A public announcement by National Highways to announce the decision on which design option to progress to preliminary design. This follows PCF Stage 2 design development, traffic modelling, economic appraisal, environmental assessments, and feedback from non-statutory public consultation.
Preliminary Environmental Information Report (PEIR)	Report produced for statutory consultation for schemes consented through the Planning Act 2008. The purpose of the PEIR is to provide environmental information to enable consultees to understand the likely significant environmental effects of the proposed scheme, and measures proposed to mitigate such effects, to help inform their consultation responses.
Preliminary Sources Study Report (PSSR)	A combination of desk study and site reconnaissance, the purpose of which is to develop an initial conceptual site model.

Term	Definition
Preparing for reuse	Checking, cleaning or repairing operations, by which products or components of products that have become waste are prepared so that they can be reused without any other pre-processing.
Prevention (in relation to material assets and waste)	<p>Measures taken before a substance, material or product has become waste, that reduce:</p> <ul style="list-style-type: none"> the quantity of waste, including through the reuse of products or the extension of the life span of products the adverse impacts of the generated waste on the environment and human health the content of harmful substances in materials and products
Primary materials	Physical substances from non-renewables sources, that is those that cannot or will not be replaced in short (non-geological) periods of time. Also referred to as 'virgin' materials.
Principal aquifer	Deposits that have high intergranular and/or fracture permeability, meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale.
Principal Contractor	Contractor appointed to coordinate the construction phase of a project where it involves more than one contractor.
Principles of net self-sufficiency and proximity	<p>The principles of self-sufficiency and proximity (commonly referred to as the 'proximity principle') are set out in the Waste Framework Directive. Local planning authorities are required, under Regulation 18 of the Waste (England and Wales) Regulations 2011 which transposed the Directive, to have regard to these requirements when exercising their planning functions relating to waste management.</p> <p>The self-sufficiency principle requires local planning authorities to move towards developing their own waste disposal facilities wherever practical to become self-sufficient in waste management capacity.</p> <p>The proximity principle requires wastes to be disposed of as close to the source of waste as possible. Materials that can be reclaimed or recycled are not included under this principle.</p> <p>Though this should be the aim, there is no expectation that each local planning authority should deal solely with its own waste to meet the requirements of the proximity and self-sufficiency principles. Nor does the proximity principle require using the absolute closest facility to the exclusion of all other considerations.</p>

Term	Definition
Prior extraction	<p>There are varying degrees of prior extraction, including the following:</p> <ul style="list-style-type: none"> • Large-scale extraction: Where the full mineral resource, or a significant proportion of it, is extracted. Large-scale extraction would typically occur as a separate activity to the non-minerals development and would include restoration of the land to make it suitable for future non-minerals development. However, in line with national policy there would be no presumption that the mineral would be worked in full. • Medium to smaller-scale extraction: Where there is no opportunity for a more comprehensive extraction of the mineral resources present, prior extraction would be undertaken as an integral part of the non-minerals development (such as during site preparation). The material would then either be processed and used onsite or exported to a suitable minerals operator for processing so that it can be used to supply other development projects. • Incidental extraction: Where any minerals that are incidentally extracted during site preparation would be processed and used onsite (such as from excavating the road box, foundations, drainage works). This is typically the minimum level of prior extraction that the MPA would seek as part of any non-minerals development in an MSA.
Priority habitats	Priority habitats are the habitats of conservation priority which are listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.
Priority species	Priority species are species of conservation priority which are listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.
Private property and housing	Land, buildings and infrastructure for the purpose of residential use.
Project Control Framework (PCF)	A joint Department for Transport and National Highways approach to developing, delivering and managing major road projects.
Protected and notable species	Species of plant and animal protected by legislation, and species of conservation importance such as priority species or species of principal importance.
Public right of way (PRoW)	A right to cross land owned by another person is known as a 'right of way'. If this is a right exercisable by the public at large, it is a 'public right of way'.
Q ₉₅	The flow rate of the watercourse that is exceeded for 95% of the time.
Qualifying feature (in relation to air quality)	In the PCM compliance risk assessment, qualifying features include public access (e.g. footpaths) and sensitive receptors (e.g. residential properties, schools etc) within 15m of the running lane / kerbside, but which are not within 25m of a junction.

Term	Definition
Quality Outcomes Framework (QOF)	An NHS system designed to remunerate general practices for providing good quality care to their patients, and to help fund work to further improve the quality of health care delivered.
Quaternary	The geological period spanning between approximately 2.5 million years ago to the present.
Quiet areas	An area which is identified as a quiet area in an agglomeration in accordance with the regulation 13 of the Environmental Noise Directive.
Rainfall from extremely wet days	Total rainfall falling on days with daily rainfall total in excess of the 99 th percentile of daily rainfall.
Ramsar site	A wetland of international importance designated under the Ramsar Convention.
RCP8.5	RCP8.5 refers to the concentration of carbon that delivers global warming at an average of 8.5W/m ² across the planet. The RCP8.5 pathway delivers a temperature increase of about 4.3°C by 2100, relative to pre-industrial temperatures.
Reach	A length of river along which the channel controls are sufficiently uniform to allow a fairly consistent morphological structure to be maintained.
Realignment (in relation to rivers)	The artificial relocation, or straightening, of a river channel to accommodate structures, flood control, or navigation.
Receptor	A defined individual environmental feature usually associated with people, fauna and flora that could be impacted by a development.
Recovery	Any operation, the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the study areas or wider economy.
Re-cutting	Evidence of the periodic cleaning or re-excavation of archaeological features preserved in the layers of material filling them.
Recycling	Any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. Recycling includes the reprocessing of organic material but does not include energy recovery and reprocessing into materials that are to be used as fuels or for backfilling operations.
Recycled aggregates	Aggregates that are typically derived from reprocessing materials previously used in construction, such as road planings, railway ballast, crushed concrete or masonry from construction and demolition activities.
Region (in relation to material assets and waste)	The defined geographical areas or physical extents of the second study area. For the purposes of the material assets and waste aspect, the physical extent is the former East of England Planning Region.
Regionally important geological sites (RIGS)	Regionally important geological or geomorphological sites that are of regional and local importance for their geology that have not been designated as sites of special scientific interest.

Term	Definition
Registered parks and gardens	Gardens, grounds and other planned open spaces which have been assessed by Historic England to be of special historic interest and included on the register established under the Historic Buildings and Ancient Monuments Act 1953 (as amended). Registration is a 'material consideration' in the planning process.
Register of Environmental Actions and Commitments (REAC)	Itemised schedule of environmental mitigation. Sets out the intended purpose of the mitigation, as well as how it will be delivered, who is responsible for implementing it, when it will be implemented, and success criteria (including monitoring requirements). The REAC forms part of the Environmental Management Plan.
Representative viewpoint	Selected to represent the experience of different types of visual receptor, where large numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ. (GLVIA3)
Representative worst-case receptor (in relation to air quality)	A sensitive receptor location that is considered to show the largest increase in pollutant concentration as a result of the proposed scheme, compared to other sensitive locations in the vicinity.
Residual effect	The predicted consequential change on the environment from the impacts of a development after mitigation.
Residual risk (in relation to flood risk)	A measure of the outstanding flood risks and uncertainties that have not been explicitly quantified and/or accounted for as part of the design process.
Reuse (in relation to material assets and waste)	Any operation by which products or components that are not waste are used again for the same purpose for which they were conceived.
Ring-ditch	Circular or near-circular ditches, usually seen as cropmarks. Ring ditches may be the remains of ploughed-out round barrows, round houses, or even of modern features such as searchlight emplacements.
Riparian zone	The corridor of land which runs along the banks of a river channel. If vegetated, it is known as the vegetated riparian zone.
Risk factor (in relation to population and health)	Social, economic or biological status, behaviours or environments which are associated with, or cause, increased susceptibility to a specific disease, ill health or injury.
Roads Investment Strategy (RIS)	A document which sets out a long-term vision for England's motorways and major roads, outlining how smooth, smart and sustainable roads will be achieved through investment over a five year period (2015 - 2020).
Roads Investment Strategy 2 (RIS2)	A document which sets a long-term strategic vision for the network. With that vision in mind, it then: specifies the performance standards National Highways must meet; lists planned enhancement schemes expected to be built; and states the funding that will be made available during the second Road Period (RP2), covering the financial years 2020/21 to 2024/25.

Term	Definition
Road surface influence (RSI)	A parameter used for quantifying road surfacing noise performance.
Rochdale envelope	An approach to consenting and EIA, named after a UK planning law case, which allows the promoters of projects to broadly define their schemes within agreed parameters to retain flexibility of design.
Root mean square error (RMSE)	RMSE is used to define the average error or uncertainty of the model. The units of RMSE are the same as the quantities compared.
Root protection area (RPA)	The minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.
Routine runoff	The normal runoff from roads including any contaminants washed off the surface in rainfall events which can result in either acute or chronic impacts. Routine runoff excludes the effect of spillages and major leaks which usually result in acute impacts.
Runoff	The movement of water above and below the surface.
Runoff specific threshold	Time-dependent (24-hour or six-hour) soluble pollutant concentration above which adverse effects may be observed in aquatic fauna.
Satellite construction compound	Construction compounds that would generally be strategically located near to specific works, for example bridge structures or junction works.
Scheduled monument	An archaeological site, built heritage asset or combination of the two which has been assessed to be of national importance under the Ancient Monuments and Archaeological Areas Act 1979.
Scoping	The process of identifying the issues to be addressed in the EIA process. It is a method of ensuring that an assessment focuses on the important issues and avoids those that are considered unlikely to be significant.
Secondary A aquifer	Deposits that comprise permeable layers that can support local water supplies and may form an important source of base flow to rivers or wetland ecosystems.
Secondary B aquifer	Deposits with mainly lower permeability layers that may store and yield limited amounts of groundwater.
Secondary undifferentiated aquifer	Deposits where it is not possible to apply either a secondary A or B definition because of the variable characteristics of the rock type.
Secondary materials and aggregates	Secondary aggregates are typically by-products of industrial and other processes. These can be subdivided into manufactured and natural aggregates, depending on their source, and can include materials such as pulverised fuel ash, ground granulated blast-furnace slag, furnace bottom ash, incinerator bottom ash and recycled glass. Both secondary and recycled aggregates offer appropriate engineering specifications to allow them to replace primary aggregates.

Term	Definition
Second study area (in relation to material assets and waste)	<ul style="list-style-type: none"> Feasible sources and availability of construction materials required to construct the main elements of the proposed scheme. Suitable recovery and waste management infrastructure that could accept arisings and waste generated by the proposed scheme.
Sector-removal (background concentrations)	The removal of major road contributions to the Defra background mapping data concentrations.
Sense of place	The essential character and spirit of an area (<i>genius loci</i> – spirit of the place). (DMRB LA 107)
Sensitivity	Receptor or resource environmental value.
Sensitivity (in relation to landscape and visual)	Term applied to specific receptors, combining judgements of the susceptibility of the receptor to specific type of change proposed and the value related to that receptor. (GLVIA3)
Sequestration	Carbon sequestration is the process of capturing and storing atmospheric carbon dioxide (e.g. by trees and vegetation).
Sett	A sett is a system of burrows in which a badger lives. Typically, a badger social group will have a single main sett towards the centre of their territory and several smaller subsidiary or outlier setts. They are typically located on well-drained slopes or verges, often found along woodland edges and field margins.
Setting (in relation to cultural heritage)	The surroundings in which a heritage 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.
Setting (in relation to landscape and visual)	Contribution of the surroundings to the appearance of an area or feature and the interrelationship of the area or feature to the wider context and sense of place. (DMRB LA 107)
Sewer flooding	Flooding caused by a blockage or overflowing in a sewer or urban drainage system.
Sheet pile retaining walls	Sheet piling is used to provide temporary and permanent walls. Sheet piles are designed to interlock with each other. They are installed in sequence along the planned excavation perimeter. When arranged together, they form a wall for permanent or temporary earth support, along with anchors to provide extra lateral support.
Side road	The network of local roads which connect to a busier or more important road.
Significance	A measure of the importance, or gravity, of the environmental effect, defined by significance criteria specific to the environmental aspect.

Term	Definition
Significance (in relation to cultural heritage)	The value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting. For the purposes of the cultural heritage assessment, 'value' has been used as if synonymous with 'significance' to avoid confusion with 'significance of effect' as commonly used in Environmental Impact Assessment.
Significant observed adverse effect level (SOAEL)	The level of noise exposure above which significant adverse effects on health and quality of life occur.
Sinuosity	The degree to which a channel meanders. A sinuous channel generally has a sinuosity ratio between 0 and 1.5.
Site arisings	Construction, demolition, excavation and other arisings generated from within a project boundary, during both construction, and operational and maintenance phases.
Site of special scientific interest (SSSI)	A SSSI is one that has been designated for its particular value to science, often due to the presence of rare species, rare habitats or important geological or physiological features within its boundary. Such sites are designated and protected under the Wildlife and Countryside Act 1981 (as amended).
Slip road	A connector road within a junction between a mainline carriageway and the local highway network, or vice versa, which meets the local highway network at-grade.
Snuffle hole	A snuffle hole is a small pit created by a badger digging for earthworms and other small invertebrates. Often several will be present in the same area where badgers have been foraging for food.
Soilscapes	Soilscapes is a web application which conveys a summary of the broad regional differences in the soil landscapes of England and Wales.
Soil Resource Plan	A Soil Resource Plan shows the areas and type of topsoil and subsoil to be stripped, haul routes, the methods to be used, and the location, type and management of each soil stockpile.
Source-pathway-receptor	The 'source-pathway-receptor' model defines those receptors considered to be at risk. The term 'source' describes the origin of potential effects (e.g. construction activities) and the term 'pathway' describes the means (e.g. through air, water or ground) by which the effect reaches the receiving sensitive 'receptor' (e.g. terrestrial habitats/species, human receptors). If the source, pathway or receptor is absent, no link exists and thus there will be no potential for an impact to occur.
Source protection zone (SPZ)	Zones around groundwater sources used for potable supply or food processing, including wells, boreholes and springs, which show the level of risk to the source from contamination.

Term	Definition
Special area of conservation (SAC)	A SAC is the land designated under Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora for the protection of habitats and/or species considered to be of European interest. In England, special areas of conservation are protected under the Conservation of Habitats and Species Regulations 2017 (as amended).
Special protection area (SPA)	A SPA is a designation under the European Union Directive on the Conservation of Wild Birds to ensure the protection of habitats used by migratory birds and certain particularly threatened species.
Species of principal importance	Species of principal importance are species protected under section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.
Speed band	A range of categories into which outputs from the traffic model are grouped to describe their emissions.
Spraint	A term used to describe the dung of otters. Typically it is deposited in prominent locations along watercourses (e.g. on top of a rock protruding from the middle of a river) and will have visual evidence of scales and other prey remains such as invertebrate exoskeletons. Fresh spraint has a distinctive smell that has a variety of descriptions from fresh fish to jasmine tea.
Stable non-reactive hazardous waste (SNRHW)	<p>Hazardous waste, the leaching behaviour of which will not change adversely in the long term, under landfill design conditions or foreseeable accidents:</p> <ul style="list-style-type: none"> • in the waste alone (for example, by biodegradation) • under the impact of long-term ambient conditions (for example, water, air, temperature or mechanical constraints) • by the impact of other wastes (including waste products such as leachate and gas)
Standardised admissions ratio (SAR)	The SAR is a health measure that allows a comparison of hospital admissions data between areas, while accounting for differences in population structures (i.e. age profile) between those areas. It is calculated by using admissions data from a standard population to estimate the number of admissions expected in the study population. The estimate is then compared with the actual (observed) number of admissions and multiplied by 100 to yield the SAR. If the observed admissions are the same as the expected admissions the SAR will be 100. An SAR greater than 100 indicates that admissions are higher than would be expected for the age structure in the study population. An SAR less than 100 indicates it is lower than expected.
Standardised incidence ratio (SIR)	The SIR is a health measure that allows a comparison of incidence of diseases between areas, while accounting for differences in population structures (i.e. age profile) between those areas. It is calculated from mortality data using the same approach as for the SAR.

Term	Definition
Standardised mortality ratio (SMR)	The SMR is a health measure that allows a comparison of mortality data between areas, while accounting for differences in population structures (i.e. age profile) between those areas. It is calculated from mortality data using the same approach as for the SAR.
Standard mitigation	Mitigation required regardless of the EIA because it is generally imposed through legislative requirements or standard sector practices (e.g. implementing considerate contractor practices to reduce nuisance from site work). These measures have been captured in an Environmental Management Plan.
Strategic Flood Risk Assessment (SFRA)	Considers local flood risk and informs the planning process information on the future risk over a wide spatial area.
Strategic road network (SRN)	The network of motorways and trunk roads in England.
Statutory consultation	A formal period of consultation required by Section 42 and Section 47 of the Planning Act 2008. During this period, prescribed consultees such as planning authorities, regulators, land holders, and the wider public are consulted on the development proposals. Materials such as preliminary design drawings, a PEIR, preliminary land use plans, and preliminary traffic modelling data are made available to inform stakeholders' responses.
Statutory environmental bodies	Government agencies and statutory nature conservation organisations. In England, these are the Environment Agency, Natural England, Historic England, and the Forestry Commission.
Statutory undertaker	Companies and agencies with legal rights to carry out certain types of development and/or highways works.
Sterilise (in relation to material assets and waste)	Substantially constrain or prevent existing and potential future use and extraction of mineral resources, typically by constructing infrastructure over or adjacent to a deposit. In the absence of any further guidance, this has been interpreted to mean that the proposed scheme would need to sterilise an entire minerals site, placing its future use at risk or rendering it inaccessible for current or future use. This approach is considered consistent with Materials and Waste in Environmental Impact Assessment - Guidance for a Proportionate Approach (Institute of Environmental Management and Assessment, 2020) that also focuses on impacts to allocated minerals sites in their entirety.
Stratigraphy	The arrangement and succession of layers of material, as well as their origin, composition and distribution in the context of archaeological excavation.
Strip, map and sample excavation	Stripping the full depth of topsoil in a specifically defined area of archaeological potential, to maximise visibility of potential archaeological remains. Following topsoil removal, any archaeological features identified are recorded in plan, and this is then used to agree a programme of sample excavation and recording in consultation with the relevant archaeological regulator.

Term	Definition
Sub-region (in relation to material assets and waste)	The defined geographical areas or physical extents of the county of Essex and the unitary authorities of Southend-on-Sea and Thurrock.
Suitable 4 Use Levels	Soil assessment criteria using similar methodology to Category 4 Screening Levels but covering a larger range of contaminants.
Superficial deposits	Superficial deposits (previously called 'drift') are the youngest geological deposits formed during the most recent period of geological time. Most of these superficial deposits are unconsolidated sediments, such as gravel, sand, silt and clay
Supplementary consultation	A period to seek comments from the local community and statutory consultees on design changes that have occurred after the statutory consultation.
Susceptibility (in context of landscape and visual)	The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences. (GLVIA3)
Sustainable drainage system (SuDS)	Methods of management practices and control structures that are designed to drain surface water in a more sustainable manner than some conventional techniques.
Surface water flooding	Flooding as a result of surface water runoff after high intensity rainfall when water is ponding or flowing over the ground surface before it enters the underground drainage network or watercourse, or cannot enter it because the network is full to capacity, thus causing what is known as surface water or pluvial flooding.
Surface water runoff	Rainwater (including snow and other precipitation) which is on the surface of the ground (whether or not it is moving), and has not entered a watercourse, drainage system or public sewer.
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.
Traffic model peak hours	The proposed scheme traffic model represents peak hours, the times of which were derived from analysis of traffic count data. The three modelled hours are: <ul style="list-style-type: none"> • AM peak hour (07:30-08:30) • Average weekday inter-peak hour (10:00-16:00) • PM peak hour (17:00-18:00)
Traffic reliability area (TRA)	Defined in DMRB LA 105 Air Quality as the ' <i>area covered by the traffic model, that the competent expert for traffic has identified as reliable for inclusion in an environmental assessment</i> '.
Tranquillity	A state of calm and quietude associated with peace, considered to be a significant asset of landscape. (GLVIA3)

Term	Definition
Transboundary effects	Environmental effects on other European Economic Area states are referred to as transboundary effects, as defined by Regulation 32 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
Treatment train	Where multiple sustainable drainage system measures treat runoff to a single outfall.
Tree preservation order (TPO)	A TPO is an order made by a local planning authority in England to protect specific trees, groups of trees or woodlands in the interests of amenity.
Trial trenching	<p>The excavation of a pattern of linear trenches to determine the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts and their research potential, within a specified area. If such archaeological remains are present, trial trenching aims to define their character, extent, quality and state of preservation reports on them and enables an assessment of their significance in a local, regional, national or international context as appropriate.</p> <p>Trial trenching may be conducted 'blind' or to test the results of non-intrusive investigations like geophysical surveys.</p>
UKCP18	<p>The UK Climate Projections 2018 (UKCP18) are a set of UK climate projection tools designed to help decision-makers assess their risk exposure to climate change. The UKCP18 project uses cutting-edge climate science to provide climate change projections out to 2100.</p> <p>UKCP18 provides probabilistic projections over land and a set of high-resolution, spatially coherent future climate projections for the UK at 12km scale. The 12km climate model has been further downscaled to 2.2km scale – a level previously only used for short-term weather forecasts, allowing realistic simulation of high impact events such as localised heavy rainfall in summer.</p>
Underbridge	A bridge crossing under a transport corridor (for example a highway).
Unproductive strata	Deposits which are largely unable to provide usable water supplies and are unlikely to have surface water and wetland ecosystems dependent on them.
Utilities	Refers to the set of services provided by organisations and consumed by the public: electricity, natural gas, water, sewage, and telephone. Broadband internet services (both fixed line and mobile) are included within the definition.
Value engineering	Value engineering is used to solve problems and identify and eliminate unwanted and unnecessary costs, while improving function and quality. The aim is to increase the value of products, satisfying the product's performance requirements at the lowest possible cost.

Term	Definition
Verification (including adjustment factor)	A comparison of the modelled results versus monitoring results at relevant locations to enable the adjustment of model outputs (by applying an adjustment factor), minimising the inherent uncertainties associated with dispersion modelling.
Veteran tree	A tree that by recognised criteria shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.
Visual receptors	Individuals and/or defined groups of people who have the potential to be affected by a proposal. (GLVIA3)
Volume by volume	A measure of the concentration of a substance in a solution. It is expressed as the ratio of the volume of the solute to the total volume of the solution multiplied by 100.
Vulnerability (in relation to climate)	The degree to which a system/asset is exposed and resilient to adverse effects of climate change.
Walkers, cyclists and horse riders (WCH)	<p>Users that include:</p> <ul style="list-style-type: none"> • pedestrians – including mobility impaired and vulnerable pedestrians • cyclists – including mobility impaired and vulnerable cyclists • equestrians – including mobility impaired and vulnerable equestrians <p>Other users considered as part of this group include (but are not limited to):</p> <ul style="list-style-type: none"> • scooter riders (non-motorised) • cyclists with electrically assisted pedal cycles (where these conform to Department for Transport or other relevant regional regulations and where they can legally be used) • users of powered wheelchairs (where these conform to Department for Transport regulations and where they can legally be used)
Warm spell duration index	Count of days with at least six consecutive days when daily maximum temperature is above the 90 th percentile.
Waste	Defined in line with Article 3(1) of the Waste Framework Directive (Council Directive 2008/98/EC) as ' <i>any substance or object which the holder discards or intends or is required to discard</i> '. Waste is commonly split into the following classifications: inert, hazardous and non-hazardous (the latter being waste classified as neither inert nor hazardous).

Term	Definition
Waste classification	As part of waste Duty of Care, waste holders must classify their waste: before it is collected, disposed of or recovered; to identify the controls that apply to the movement of the waste; to complete waste documents and records; to identify suitably authorised waste management options; and to prevent harm to people and the environment. Technical Guidance WM3 'Waste Classification - Guidance on the classification and assessment of waste' provides guidance on waste classification in the UK. It is a comprehensive reference manual for anyone involved in producing, managing and regulating waste. Appendix A of WM3 includes the waste classification codes, also referred to as LoW (List of Waste) or EWC (European Waste Catalogue) codes.
Waste consultation area (WCA)	Geographical area, based on existing waste infrastructure sites, where the district or borough council should consult the mineral planning authority for any proposals for non-minerals development.
Waste hierarchy	The waste hierarchy ranks waste management options according to what is best for the environment. It gives top priority to preventing waste in the first place. When waste is created, it gives priority to preparing it for re-use, then recycling, then recovery, and last of all disposal (e.g. landfill).
Waste holder	<p>The duty of care applies to anyone who imports, produces, carries, keeps, treats, disposes of, or is a dealer or broker that has control of, controlled waste (commonly referred to as a 'waste holder'). Waste holders include the following:</p> <ul style="list-style-type: none"> • Waste producer – any person whose activities produce waste. It also includes permitted operations or exempt facilities that produce waste as part of their activities. If you carry out a waste operation that changes the nature or composition of the waste, you are regarded as a producer of the waste. Waste producers play a key role under the duty of care requirements as they are in the best position to identify the nature and characteristics of the waste. • Waste carrier – any person who normally and regularly collects, carries or transports waste in the course of any business or with a view to profit, including those that produce and transport their own waste. • Waste dealer – any person, business or organisation that buys waste with the aim of subsequently selling it, including in circumstances where the dealer does not take physical possession of the waste. • Waste broker – any person, business or organisation that arranges waste transportation and management of waste on behalf of another party, such as organisations contracting out waste collection services. • Waste manager – any person involved in the collection, transport, recovery or disposal of controlled waste, including the supervision of these operations, the aftercare of disposal sites and actions taken as a dealer or broker.

Term	Definition
Waste infrastructure	Facilities that handle, treat or prepare for reuse, recycle and dispose (landfill) of waste.
Waste planning authority	The waste planning authority is the county council in two-tier parts of the country, the unitary authority or the national park authority responsible for waste development planning and control.
Waste transfer note	A waste transfer note is a legally required document which must be completed for all transfers of non-hazardous waste to another party. The format of the waste transfer note must conform to the requirements laid out in Part 9 of The Waste (England and Wales) Regulations 2011 (as amended).
Water Framework Directive (WFD)	The Water Framework Directive (Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy) is an EU directive which commits EU member states to achieve good qualitative and quantitative status of all water bodies (including marine waters up to one nautical mile from shore). The Directive has been transposed into UK legislation via the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, which is now the retained legislation following Brexit.
Wider determinants of health	Personal, social, economic and environmental factors which determine the health status of individuals and communities.
Zone of influence (ZOI)	This is established for each environmental aspect considered within the Environmental Statement in order to establish the relevant 'other existing development and/or approved development' to be considered within the cumulative effects assessment.
Zone of theoretical visibility (ZTV)	A map, usually digitally produced, showing areas of land within which a development is theoretically visible. (GLVIA3)