

Scottish Executive Development Department

Eastern Link Road – Kincardine

Environmental Statement

Glossary

1,3-butadiene	a gaseous hydrocarbon found in vehicle exhaust, classified as a known carcinogen (C ₄ H ₆).
at grade	at existing ground level.
ambient	surrounding.
amphibians	amphibian species include frogs <i>Rana temporaria</i> , toads <i>Bufo bufo</i> , palmate newts <i>Triturus helveticus</i> and great crested newts <i>Triturus cristatus</i> . This latter species is also listed on Schedule 5 of the Wildlife and Countryside Act 1981 and annexes II and IV of the Habitats Directive 1992.
ancient woodland inventories	the Ancient woodland inventory project aims to list all probable ancient semi-natural woodlands on a county basis together with those woodlands in other ancient categories of lesser woodland nature conservation interest.
assessment	an umbrella term for description, analysis and evaluation.
badger (<i>Meles meles</i>)	badgers and their setts are protected under a series of Acts, the most important being the Protection of Badgers Act 1992 which provides protection for badgers and their setts.
baseline studies	studies of existing environmental conditions and trends which are designed to establish the baseline conditions against which any future changes can be measured or predicted.
bats	all species of British bat are listed on Schedule 5 of the Wildlife and Countryside Act 1981 which protects the bats themselves and their roost sites. In addition, all are listed on Annex IV of the Habitats Directive 1992.
benzene	a colourless, liquid aromatic hydrocarbon, classified as known carcinogen (C ₆ H ₆).
biodiversity	biological diversity, or richness of living organisms present in representative populations.
Biodiversity Action Plans	In 1992, the leaders from 153 countries met in Rio de Janeiro to discuss environmental concerns. The Convention on Biological Diversity was signed at the Rio Summit. The UK Government published a report 'Biodiversity, the UK Action Plan' in 1994 that set out 59 steps to be taken to secure biodiversity in the UK, including the setting up of a Steering Group to write a national action plan. 'Biodiversity, the UK Steering Group's Report: Meeting the Rio Challenge' was published in 1995 and was endorsed by the Government in May 1996. The report, with its targets and actions, forms the basis for the Local BIODIVERSITY action Plans, including one for Fife.
birds	all species of birds, their nests and eggs, are protected by the Wildlife and Countryside Act 1981.

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boulder clay	deposits lain down after the retreat of glaciers and ice sheets. Consists of an unstratified heterogeneous mixture of rock fragments, ranging in size from clay particles to boulders, and varying in composition according to the nature of the bedrock.
cairn	a mound of stones.
calcareous	calcium or calcite bearing, for example, calcareous mudstone.
carbon dioxide	a colourless gas (CO ₂). Produce of the combustion of fossil fuels. A greenhouse gas. Approximately 20% of UK emissions result from road traffic.
carbon monoxide	a colourless gas (CO). Product of incomplete combustion of carbon containing substances. Relatively unreactive, although it is a greenhouse gas and a potential ozone precursor. Approximately 90% of UK emissions result from road transport.
carboniferous	producing coal. Of the palaozaic period, above Devonian and below Permian.
Compulsory Purchase Order	an Order made by The Scottish Ministers under sections 103 to 108 inclusive as read with section 110 (2) of the Roads (Scotland) Act 1984, enabling them to purchase compulsorily, or by agreement, any land required for the construction of the scheme.
Contractor	the successful tenderer in the construction process.
cropmark	a mark visible on aerial photographs caused by differential growth and coloration of field of crops over the archaeological features.
cundie	a culvert.
cyprinid fishery	a reach (i.e. section) of a watercourse which supports coarse fish species such as perch, roach and dace.
decibel (dB)	the term used to express a level of sound.
dB_{L_{A10}(18hr)}	Noise exceeded for 10% of the time over a period of one hour. The arithmetic average of the values of L ₁₀ hourly dB for each of the 18 one-hour periods between 0600 and 2400.
dB_{L_{A90}(18hr)}	A-weighted noise level exceeded for 90% of a given time period usually taken to be the background noise level.
Design Year	year to which a proposed scheme is designed, normally 15 years after the year of opening.
Do-minimum	the base situation where there are no modifications to the existing road network.
drey	a squirrel's nest.
Duty of Care	a duty placed on those with responsibility for controlled waste to ensure that it is managed properly and recovered or disposed of safely.

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ecosystem	a community of interdependent plants and animals together with the environment which they inhabit and with which they interact.
EIA Directive	Directive 85/33/EEC on the assessment of the effects of certain public and private projects on the environment, as amended by DIRECTIVE 97/11/EEC and applied by the Environmental Impact Assessment (Scotland) Regulations.
emulsified	formed into an emulsion – a mixture of two liquids. The mixture has properties between those of a fine suspension and a solution.
Environmental Impact Assessment	in this context, the process by which information about the environmental effects of a project is evaluated and mitigation measures are identified
Environmental Impact	a change, brought about in the existing environment, which results in an effect, adverse, beneficial, or both.
Environmental Quality Objectives	The concentration of a substance in the receiving water which must not be exceeded if the water is to be suitable for a particular purpose or achieve a certain level of protection for aquatic life. The term used in the European Community Framework Directive on discharges of dangerous substances 76/464/EEC.
Environmental Quality Standards	The concentration of a substance in the receiving water which must not be exceeded if the water is to be suitable for a particular purpose or achieve a certain level of protection for aquatic life. The term used in the UK.
Environmentally Sensitive Area	an area designated under the Agriculture Act 1986 designed to promote agricultural practices which have helped create distinctive landscapes and have contributed to the maintenance of wildlife habitats or historic features.
fauna	all members of the animal kingdom: vertebrates (eg birds, mammals and fish) and invertebrates (eg insects).
ferruginous	containing elevated concentrations of iron. Ferruginous water tends to leave orange deposits of iron compounds on the bed of watercourses.
flora	all members of the plant kingdom: higher ferns, ferns and fern allies, mosses and liverworts, algae and phytoplankton, fungi and lichens.
habitat	term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities, as used, for example in a Phase 1 Habitat Survey.
Habitats Directive 1992	EC Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. Annexes of particular relevance to the present environmental statement are, Annex I, natural habitat types whose conservation requires the designation of Special Areas of Conservation, Annex II, animal and plant species whose conservation requires the designation of Special Areas of Conservation, and Annex IV, animal and plant species in need of strict protection. In Britain, the Habitats Directive is implemented by The Conservation (Natural Habitats, &c) Regulations 1994 and the Wildlife and Countryside Act 1981.

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hardness	a measure of natural mineral content in water usually expressed as mg/l of calcium carbonate.
Heavy Goods Vehicle	vehicles with 3 axles (articulated) or 4 or more axles (rigid and articulated).
hydrocarbons	chemical compounds that contain only carbon and hydrogen. Many hundreds of these compounds exist. Approximately 30% of UK emissions result from road transport. Frequently the term is used to include other organic compounds that are not strictly hydrocarbons because they contain other elements.
invertebrates	animals without backbones, such as species of snail, spider and insect.
L₁₀	Traffic noise varies in intensity with time. It has been found that dissatisfaction varies with the peak noise levels. Hence, the index known as the '10% level' (L ₁₀) is used. L ₁₀ is the level of noise in dB(A) exceeded for 10% of a given period of time.
L₁₀ (18 hour)	The Noise Insulation (Scotland) Regulations 1975 define the L ₁₀ (18 hour) level as the arithmetic average of all hourly L ₁₀ values during the period of 6.00 am to midnight on a normal working day.
L₉₀	The background noise level, defined as L ₉₀ , represents the noise level that is exceeded for 90% of any measurement period. It generally ignores short term high noise levels.
L_{Aeq}	A-weighted equivalent continuous sound level that has the same energy content as the varying sound level.
landform	combination of slope and elevation producing the shape and form of the land surface.
landscape character	a distinct pattern or combination of elements that occurs consistently in the landscape.
landscape character zone/area	a geographic area with a distinctive landscape character.
landscape impacts	change in the fabric, character and quality of the landscape as a result of development. These can be positive or negative.
landscape quality	term used to indicate value based on character, condition and aesthetic appeal.
listed building	building included on a list of buildings of special architectural or historic interest, classified Categories A-C.
made ground	material deposited by man.
magnitude	size, extent, scale and duration of an impact.
micro	10 ⁻⁶
midden	a deposit of domestic refuse accumulated over time.

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mitigation	term used to indicate avoidance, remediation or alleviation of adverse impacts.
Non Less Favoured Area	all farmland is categorised as either Less Favoured Area or Non Less Favoured Area under EC Directive 75/268. The categorisation determines the level of agricultural support that farmers receive in terms of subsidies.
National Vegetation Classification	this is a classification system used throughout the UK for defining and understanding vegetation communities on the basis of the plants present.
neap tide	a tide just after the first and third quarters of a moon when there is least difference between high and low water.
nitric oxide	a colourless gas (NO). Rapidly converts to NO ₂ .
nitrogen dioxide	a secondary pollutant largely formed through atmospheric chemical reactions between NO and O ₃ .
oil interceptor	a structure designed to retain a certain amount of oil on the surface of drainage water in a chamber, whilst allowing water to pass through.
Opening Year	year in which a proposed scheme is to open.
otter (<i>Lutra lutra</i>)	terrestrial mammals of the weasel family living close to water, in Scotland mainly in coastal areas. This species is listed on Schedule 5 of the Wildlife and Countryside Act 1981 and is also listed on Annexes II and IV of the Habitats Directive 1992.
outcrop	emergence of stratum, vein, or rock, at the surface of the ground.
oxides of nitrogen	a term used to describe a combination of nitric oxide and nitrogen dioxide, (NO _x). Approximately 50% of the UK emissions of NO _x is produced by road transport.
palaeoenvironmental	concerned with the study of past environmental changes.
particulates	carbon nuclei onto which a vast range of compounds may be absorbed. Road transport contributes approximately 30% of the total UK emissions.
Ramsar site	site designated under the Ramsar Convention on wetlands of international importance especially wildfowl habitats.
receptor	a component of the natural, created or built environment such as a human being, water, air, a building or a plant that is affected by an impact.
Red Data Book (RDB)	Red Data Book species are defined by the International Union for the Conservation of Nature and are used primarily as a method of establishing priorities in the conservation of individual species. All RDB species are considered to be nationally rare, ie found in less than 15 of the 10km squares in Britain.
reptiles	reptile species include lizard <i>Lacerta vivipara</i> and slow-worm <i>Anguis fragilis</i> , adder <i>Vipera berus</i> and grass snake <i>Natrix natrix</i> .

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salmonids	salmon or trout (brown trout, migratory salmon or sea trout)
sandstone	a sedimentary rock formed by the compaction and cementation of sand grains, accumulated by wind action or deposited by water action.
scoping	an initial stage in determining the nature and potential scale of the environmental impacts arising from the proposed development, and assessing what further studies are required to establish their significance.
semi-natural	vegetation that has been modified by humans but is still of significant nature conservation interest because it is composed of native plant species, is similar in structure to natural types and supports native animal species.
siltstones	rock produced by compacted fine-grained mineral material formed from the erosion of rock fragments and deposited by rivers and lakes.
Site of Special Scientific Interest (SSSI)	areas of national importance. The aim behind the SSSI network is to maintain an adequate representation of all natural and semi-natural habitats and native species across Britain. The site network is protected under the provisions of Sections 28 and 19 of the Wildlife and Countryside Act 1981 as well as the Amendment Act 1985 and the Environmental Protection Act 1990.
shell midden	dump of food waste, mainly composed of sea shells which is usually derived from the exploitation of marine resources
Special Protection Area (SPA)	sites of European importance for birds, designated under the European “Birds Directive” .
store cattle	beef cattle from 12 months of age kept until ready for slaughter.
sub-formation	the formation level of the subgrade before any capping (if used) or sub-base material has been placed.
super-elevation	the crossfall slope whose gradient has been calculated to counteract the centrifugal force on a vehicle as it travels around a curve.
sustainable urban drainage systems (SUDS)	a sequence of management practices and control structures designed to drain surface water in a more sustainable fashion than some conventional techniques. SUDS tend to attenuate drainage flows and often provide some treatment (such as filtration) of drainage waters.
translocation	the removal and relocation of an individual, a population, a community, or a habitat from one location to another.
visual amenity	the value of a particular area or view in terms of what is seen.
visual impact	change in the appearance of the landscape as a result of development. This can be positive (improvement) or negative (detraction).
visual intrusion	degree to which a development intrudes upon the field of view.

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Wildlife and Countryside Act 1981

this act, the Amendment Act of 1985, and the Environmental Protection Act 1990 provides protection for areas designated as SSSIs. It also provides protection for species on various schedules. The schedules that are relevant to this environmental statement are Schedule 1, which gives special protection to certain birds, and Schedule 5, which gives special protection to certain animals.

worst case scenario

principle applied where the environment may vary, e.g., seasonally, to ensure that the most severe impact is assessed.

WS2

10-metre wide single carriageway road lined as two 5-metre lanes (one in each direction).

WS2+1

11-metre wide single carriageway road lined as 1x3.2-metre and 1x 3.4-metre lanes in one direction and a 1x3.4-metre lane in the opposite direction, with a 1-metre wide hatched strip separating the opposite lanes.