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Contents

1.	Assessment Criteria	1
1.1	Value and Sensitivity	1
1.2	Magnitude	13

1. Assessment Criteria

1.1 Value and Sensitivity

Table 1.1 – Value and Sensitivity for Each Topic

Value/Sensitivity	Descriptor
Landscape and Visual	
	<p><i>Landscape Criteria</i></p>
	<p><i>Visual Criteria</i></p>
Very high	<p>The key characteristics and qualities of the landscape are very highly susceptible to change from the type and scale of the project being assessed; and/or the value of the landscape is notably high. Key landscape characteristics are very highly vulnerable and unable to accommodate the project without significant consequences for character.</p>
High	<p>The key characteristics and qualities of the landscape are highly susceptible to change from the type and scale of the project being assessed; and/or the value of the landscape is medium-high to high. Key landscape characteristics are highly vulnerable and unable to accommodate the project without significant consequences for character.</p>

Value/Sensitivity	Descriptor	
Medium-High	The key characteristics and qualities of the landscape are very susceptible to change from the type and scale of the project being assessed; and/or the value of the landscape is medium to medium-high. Key landscape characteristics are vulnerable and unable to accommodate the project without some significant consequences for character. Parts of the landscape may be able to accommodate the project but only in limited situations without significant character change or adverse effects.	<ul style="list-style-type: none"> • Tourist, visitor or heritage destinations where views of the surroundings are fundamental to the experience (note: the visual assessment will consider people as receptors and not the heritage asset itself. Impacts on heritage assets and their setting will be considered in Chapter 8: Historic Environment); • Viewpoints marked on road atlases, or referred to in guidebooks, and which have brown road signage and/or interpretation boards; and • Nationally/regionally promoted walks and cycle routes.
Medium	Some of the key characteristics and qualities of the landscape are susceptible to change from the type and scale of the project being assessed; and/or the value of the landscape is medium-low to medium. Although the landscape may be able to absorb some development if sensitively sited and designed, it may introduce new inappropriate characteristics or result in a change in character. Parts of the landscape may have potential to accommodate the project in some defined situations without significant character change or adverse effects.	<p>Not applicable for visual.</p> <p>People with a general interest in their surroundings or with transient viewing opportunities combined with a view of average scenic quality, including:</p> <ul style="list-style-type: none"> • People using incidental footpaths and local Public Rights of Way (PRoW); • People travelling on residential distributor routes and the local road network; • People using general public open spaces, greenspace, recreation grounds and play areas; • People in rural offices and business parks; and • Rural outdoor workers and those engaged in marine surface-based activities such as fishing.

Value/Sensitivity	Descriptor	
Medium-Low	Few of the key characteristics and qualities of the landscape are susceptible to change from the type and scale of the project being assessed; and/or the value of the landscape is medium-low to medium-high.	Not applicable for visual.
Low	Key characteristics and qualities of the landscape are robust or degraded and are not susceptible to change; and/or the value of the landscape is low. The landscape is unlikely to be adversely affected by the type and scale of the project being assessed.	<p>People with limited opportunity to enjoy the view due either to the speed of travel or because their attention is elsewhere, combined with a view of limited scenic quality, including:</p> <ul style="list-style-type: none"> • Workers in industrial and commercial buildings; • People in schools; • People travelling on main roads (although susceptibility may be higher in scenic locations); • People in indoor facilities; • Commuters; and • People engaged in outdoor sport or recreation which does not depend on an appreciation of views of their surroundings.
Biodiversity		
Very high	<p>Very high importance and rarity, international scale and very limited potential for substitution. European and international designated sites for example:</p> <ul style="list-style-type: none"> • Special Protection Areas (SPA) and potential SPA; • Special Areas of Conservation (SAC) and candidate or possible SAC; and • Wetland of International Importance (Ramsar sites). 	
High	<p>High importance and rarity, national scale, and limited potential for substitution, for example:</p> <ul style="list-style-type: none"> • statutory designated sites comprising Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR); • 'Irreplaceable natural habitat', e.g. ancient woodland, veteran trees, blanket bog, limestone pavement, sand dunes, saltmarsh and lowland fen; 	

Value/Sensitivity	Descriptor
	<ul style="list-style-type: none"> species recorded as 'critically endangered' under the International Union for Conservation of Nature Red List of Threatened Species; resident or regularly occurring populations of species which may be considered at an international or national level where either of the following criteria is met: the loss of these populations would adversely affect the conservation status or distribution of the species at this geographic scale; or the population forms a critical part of a wider population at this scale; and Nationally Rare or Scarce taxa: Nationally Rare taxa are those occurring in 15 or fewer 10x10km OS grid-squares in the UK; Nationally Scarce species are those occurring in 16-99 10x10km squares.
Medium	<p>Medium or high importance and rarity, regional scale, and limited potential for substitution, for example:</p> <ul style="list-style-type: none"> Statutory designated sites, e.g. Local Nature Reserves (LNR); Non-statutory designated sites; (i.e. Essex Local Wildlife Sites (LoWS), Suffolk County Wildlife Sites (CWS) and Roadside Nature Reserves (RNR); Species or habitats listed in accordance with the requirements of Section 41 of the Natural Environment and Rural Communities Act 2006; and Resident or regularly occurring populations of species which may be considered at a regional or county level where either of the following criteria is met: the loss of these populations would adversely affect the conservation status or distribution of the species at this scale; or the population forms a critical part of a wider population at this scale.
Low	Receptor is relatively common and widespread (e.g. it is listed in accordance with the requirements of Section 41 of the Natural Environment and Rural Communities Act 2006, Birds of Conservation Concern Red or Amber listed, Red Data Book listed and/or is legally protected).
Negligible	Receptor is abundant and widespread, receives no legal protection and is not of elevated conservation concern status.
Historic Environment	
Very high	<p>Very high importance and rarity, international scale and very limited potential for substitution, for example:</p> <ul style="list-style-type: none"> World Heritage Sites (including nominated sites); Heritage assets of acknowledged international importance; Heritage assets that can contribute significantly to acknowledged international research objectives; Historic landscapes of international value, whether designated or not; or Extremely well-preserved historic landscapes with exceptional coherence, time-depth or other critical factors.

Value/Sensitivity	Descriptor
High	<p data-bbox="365 228 1444 252">High importance and rarity, national scale, and limited potential for substitution, for example:</p> <ul data-bbox="365 276 2011 619" style="list-style-type: none"> <li data-bbox="365 276 992 300">• Scheduled monuments (including proposed sites); <li data-bbox="365 323 2011 347">• Designated historic landscapes of outstanding interest (including registered parks and gardens and Area of Outstanding Natural Beauty); <li data-bbox="365 371 913 395">• Designated structures (i.e. listed buildings); <li data-bbox="365 419 1921 443">• Non-designated heritage assets of schedulable quality and importance or non-designated structures of clear national importance; <li data-bbox="365 467 1507 491">• Heritage assets that can contribute significantly to acknowledged national research objectives; <li data-bbox="365 515 1059 539">• Conservation areas containing very important buildings; <li data-bbox="365 563 1877 587">• Non-designated historic landscapes of outstanding interest, high quality or importance and of demonstrable national value; or <li data-bbox="365 611 1653 635">• Well-preserved historic landscapes, exhibiting considerable coherence, time-depth or other critical factors.
Medium	<p data-bbox="365 651 1579 675">Medium or high importance and rarity, regional scale, and limited potential for substitution, for example:</p> <ul data-bbox="365 699 1977 906" style="list-style-type: none"> <li data-bbox="365 699 1496 722">• Designated or non-designated heritage assets that contribute to regional research objectives; <li data-bbox="365 746 1977 770">• Non-designated historic landscapes that would justify special historic landscape designations, or historic landscapes of regional value; <li data-bbox="365 794 1664 818">• Averagely well-preserved historic landscapes with reasonable coherence, time-depth or other critical factor; <li data-bbox="365 842 1529 866">• Conservation areas containing buildings that contribute significantly to their historic character; or <li data-bbox="365 890 1529 914">• Historic built-up areas with important historic integrity in their buildings, settings or built settings.
Low	<p data-bbox="365 938 1104 962">Low or medium importance and rarity, local scale, for example:</p> <ul data-bbox="365 986 1709 1329" style="list-style-type: none"> <li data-bbox="365 986 1205 1010">• Designated and non-designated heritage assets of local importance; <li data-bbox="365 1034 1686 1058">• Robust non-designated historic landscapes; and historic landscapes with importance to local interest groups; <li data-bbox="365 1082 1709 1106">• Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations; <li data-bbox="365 1129 1563 1153">• Heritage assets compromised by poor preservation and/or poor survival of contextual associations; <li data-bbox="365 1177 1473 1201">• Heritage assets of limited value, but with potential to contribute to local research objectives; <li data-bbox="365 1225 689 1249">• ‘Locally listed’ buildings; <li data-bbox="365 1273 1417 1297">• Historic (unlisted) buildings of modest quality in their fabric or historical association; or <li data-bbox="365 1321 1529 1345">• Historic townscapes or built-up areas of limited historic integrity in their buildings or built settings.

Value/Sensitivity	Descriptor
Negligible	<p>Very low importance and rarity, local scale, for example:</p> <ul style="list-style-type: none"> • Heritage assets with very little or no surviving archaeological interest; • Buildings of no archaeological or historical note, or buildings of an intrusive character; or • Landscapes with little or no significant historical interest.
Water Environment	
Very high	<p>Nationally significant attribute of high importance, for example:</p> <ul style="list-style-type: none"> • Watercourse having a Water Framework Directive (WFD) classification shown in a River Basin Management Plan (RBMP) and $Q95 \geq 1.0\text{m}^3/\text{s}$; • Site protected under European legislation for example, SPA, SAC and Ramsar site with designated interest features dependent on the hydrological/surface water regime; • Land uses defined as 'essential infrastructure' or 'highly vulnerable' development under the National Planning Policy Framework (NPPF); or • River supporting a regionally important abstraction for potable water supply.
High	<p>Regionally significant attribute of high importance, for example:</p> <ul style="list-style-type: none"> • Watercourse having a WFD classification shown in a RBMP and $Q95 < 1.0\text{m}^3/\text{s}$; • Land uses defined as 'more vulnerable' under the NPPF; or • River supporting a locally important abstraction for potable water supply.
Medium	<p>Locally significant, of moderate quality and rarity, for example:</p> <ul style="list-style-type: none"> • Watercourses not having a WFD classification shown in a RBMP and having a $Q95 > 0.001\text{m}^3/\text{s}$; • Site protected under UK legislation whose designated interest is dependent on the hydrological/surface water regime, e.g. salmonid waters; • Land uses defined as 'less vulnerable' under the NPPF; or • River supporting abstraction for non-potable water supply at the local scale.
Low	<p>Lower quality, for example:</p> <ul style="list-style-type: none"> • Watercourses not having a WFD classification shown in a RBMP and $Q95 \leq 0.001\text{m}^3/\text{s}$; or • Land uses defined as 'water compatible' under the NPPF.

Value/Sensitivity	Descriptor
Geology and Hydrogeology	
	<i>Geology</i>
	<i>Hydrogeology</i>
Very High	<p>Geology: Very rare and of international importance with no potential for replacement (e.g. SSSI where citations indicate features of international importance). Geology meeting international designation citation criteria which is not designated as such.</p> <p>Minerals: Existing Mineral sites</p> <p>Contamination (where not noted under other receptor headings):</p> <ul style="list-style-type: none"> • Human health: very high sensitivity land use such as residential or allotments; or • Groundwater: Principal aquifer providing a regionally important resource and regionally important public water supplies, Source Protection Zone (SPZ) 1
High	<p>Geology: Rare and of national importance with little potential for replacement (e.g. geological SSSI, NNR). Geology meeting national designation citation criteria which is not designated as such.</p> <p>Minerals: Mineral preferred areas</p> <p>Contamination (where not noted under other receptor headings):</p> <p>Human health: high sensitivity land use such as public open space;</p> <p>Groundwater: Principal aquifer providing locally important resource or supporting a river ecosystem, SPZ 2.</p>
	<p>Hydrogeology: Principal aquifer providing a locally important source and locally important public water supplies, SPZ 1/ SPZ 2.</p>

Value/Sensitivity	Descriptor	
Medium	<p>Geology: Regional importance with limited potential for replacement. Geology meeting regional designation criteria which is not designated as such.</p> <p>Minerals: Mineral Safeguarded Area and Mineral Consultation Area.</p> <p>Contamination (where not noted under other receptor headings):</p> <ul style="list-style-type: none"> • Human health: medium sensitivity land use such as commercial or industrial; or • Groundwater: Secondary A Aquifers. Extensive non-licensed private water abstractions (i.e. feeding ten or more properties or supplying large farming / animal estates). SPZ 2/SPZ 3 (Outer Protection Zone/Total Catchment) associated with licenced abstractions. 	<p>Hydrogeology: Secondary A aquifer. Groundwater flow and yield and quality associated with extensive non-licensed private water abstractions (i.e. feeding ten or more properties or supplying large farming / animal estates). Groundwater quality associated with SPZ 2 (Outer Protection Zone) or SPZ 3 (Total Catchment) associated with licensed abstractions. Residential and commercial properties.</p>
Low	<p>Geology: Local importance / interest with potential for replacement (e.g. non designated geological exposures, former quarry's / mining sites).</p> <p>Minerals: Mineral present but outside of any MPS/MSA/MCA</p> <p>Contamination (where not noted under other receptor headings):</p> <ul style="list-style-type: none"> • Human health: low sensitivity land use e.g highways and rail; or • Groundwater: Secondary B or Secondary Undifferentiated aquifer. Small scale private water abstractions (i.e. feeding fewer than ten properties). SPZ 3. 	<p>Hydrogeology: Secondary B or Secondary Undifferentiated aquifer. Groundwater flow and yield and quality associated with small scale private water abstractions (i.e. feeding fewer than ten properties). Groundwater quality associated with SPZ3 (Source Catchment Protection Zone) associated with licensed abstractions and with licensed abstractions for which no SPZ is defined.</p>
Negligible	<p>Geology: No geological exposures, little / no local interest.</p> <p>Mineral: No mineral identified.</p>	<p>Hydrogeology: Very poor groundwater quality and/or very low permeability make exploitation of groundwater unfeasible. No active groundwater supply.</p>

Value/Sensitivity	Descriptor
	<p>Contamination (where not noted under other receptor headings):</p> <ul style="list-style-type: none"> • Human health: undeveloped surplus land / no sensitive land use proposed; or • Groundwater: Unproductive strata
Agriculture and Soil	
Very high	<p>Very high importance and rarity, international scale and very limited potential for substitution, for example:</p> <ul style="list-style-type: none"> • Soil directly supporting an EU designated site, e.g. SPA, SAC or Ramsar; or • Particularly sensitive land uses which have taken time to be established, such as orchards or land under long-term management principally for conservation purposes.
High	<p>High importance and rarity, national scale, and limited potential for substitution, for example:</p> <ul style="list-style-type: none"> • Soil supporting nationally designated sites like NNR/SSSI; • Agricultural Land Classification (ALC) grade 1 (excellent), 2 (very good) and 3a (good) land (i.e. best and most versatile land); • Soil with low or no wetness limitation affecting workability (wetness class I or II), where drought is not also a limitation; • Soil with a high susceptibility to structural damage and soil erosion throughout the year, including heavily textured, poorly structured soils; or • Higher level agri-environment schemes;
Medium	<p>Medium or high importance and rarity, regional scale, and limited potential for substitution, for example:</p> <ul style="list-style-type: none"> • Soil supporting LNR or non-statutory designated sites (CWS/LWS/RNR); • ALC Grade 3b (moderate) land; • Soil with low wetness limitation affecting workability (wetness class II), where drought is not also a limitation; • Soil with some seasonal susceptibility to structural damage and soil erosion; or • Entry-level agri-environment and Woodland Grant schemes.

Value/Sensitivity	Descriptor
Low	<p>Low or medium importance and rarity, local scale, for example:</p> <ul style="list-style-type: none"> • Soil supporting non-designated notable or priority habitats; • ALC grade 4 (poor) land; • Soil with moderate wetness limitation affecting workability (wetness class III or IV); • Soil with medium to coarse textures and some resistance to structural damage for most of the year; or • Arable or grassland (ungrazed) areas.
Negligible	<p>The receptor is resistant to change or is of little environmental value, for example:</p> <ul style="list-style-type: none"> • ALC grade 5 (very poor) land; • Soil with high wetness limitation affecting workability (wetness class V or VI); • Soil in which susceptibility to drought is a limitation to crop growth; • Coarse textured and stony soil with little potential for structural damage; or • Limited agricultural use.

Traffic and Transport

	<i>PRoW</i>	<i>Construction Routes</i>
Very high	<ul style="list-style-type: none"> • National trails likely to be used for recreation and to a lesser extent commuting, that record frequent (daily) use. • Routes immediately adjacent to amenities that are regularly used by vulnerable travellers such as the elderly, school children and people with disabilities. Routes that directly link key facilities. 	<ul style="list-style-type: none"> • Routes that have very high sensitivity to traffic flow increases and receptors are located adjacent to the construction route including; schools, colleges, playgrounds, collision hotspots, retirement homes and urban/residential roads without footways that are used by pedestrians. • Routes that directly link key facilities.
High	<ul style="list-style-type: none"> • Regional trails and routes (e.g. promoted circular walks) likely to be used for recreation and to a lesser extent commuting, that record frequent (daily) use. 	<ul style="list-style-type: none"> • Routes that have high sensitivity to traffic flow increases and receptors are located in proximity to amenities the construction route including; schools, colleges, playgrounds, collision hotspots, retirement homes and urban/residential roads without footways that are used by pedestrians. • These routes may be used to access key amenities on an adjacent route.

Value/Sensitivity	Descriptor
	<ul style="list-style-type: none"> Routes in proximity to amenities that may generate some use by vulnerable travellers such as the elderly, school children and people with disabilities.
Medium	<ul style="list-style-type: none"> PRoWs and other routes close to communities which are used for recreational purposes (e.g. dog walking), but for which alternative routes can be taken. These routes are likely to link to a wider network of routes to provide options for longer, recreational journeys. <ul style="list-style-type: none"> Routes that have medium sensitivity to traffic flow increases and receptors are located some distance from the construction route including; congested junctions, doctors' surgeries, hospitals, shopping areas with roadside frontage, roads with narrow footways, unsegregated cycleways, community centres, and parks and recreation facilities. These routes are likely to link to a wider network of routes to provide access to amenities.
Low	<ul style="list-style-type: none"> Routes which have fallen into disuse through past severance or which are scarcely used because they do not currently offer a meaningful route for either utility or recreational purposes. <ul style="list-style-type: none"> Routes that have low sensitivity to traffic flow increases and receptors are located a long distance from the route including; places of worship, public open space, nature conservation areas, listed buildings, tourist attractions and residential areas with adequate footway provision.
Negligible	<ul style="list-style-type: none"> N/A <ul style="list-style-type: none"> Routes that have negligible sensitivity to traffic flow increases and no receptors are located anywhere near the construction route.

Air Quality

Notes	<p>Sensitive receptors include locations where people are likely to be exposed to air pollutants for an averaging time commensurate with the pollutant objective or limit value being assessed against. Receptors include:</p> <ul style="list-style-type: none"> Residential receptors; Commercial receptors, e.g. places of work; Community receptors, e.g. churches, community centres; and Ecological Receptors (statutory and non-statutory sites). <p>All receptors are treated equally, with sensitivity being identified as locations representative of exposure to the averaging periods of relevant air quality objectives / critical loads (e.g. annual, daily and hourly exposure).</p>
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Value/Sensitivity	Descriptor
Noise and Vibration	
High	Schools and education premises, hospitals, clinics, care homes, places of worship, community centres, libraries.
Medium	Areas primarily used for leisure activities including PRow, sports facilities, campsites, hotels, gardens, parks.
Low	Offices, cafes/bars with external areas.
Negligible	Industrial or retail premises

1.2 Magnitude

Table 1.2 – Magnitude For Each Topic

Magnitude	Descriptor	
Landscape and Visual		
	<i>Landscape criteria</i>	<i>Visual criteria</i>
Large	<p>Adverse or beneficial: Considerable change to the landscape over a wide area or intensive change over a limited area with dramatic consequences for the elements, character and quality of the baseline landscape.</p> <p>The project will form a dominant landscape element and post development the baseline situation will be fundamentally changed, potentially creating a different landscape character.</p>	<p>Adverse or beneficial: The project would form a dominant element in the view and result in a dramatic change to the character and quality of the existing view and how it is perceived.</p> <p>Typically, this would be where a project would be seen in very close proximity with a large proportion of the view affected by no or minimal screening/filtering or backgrounding of views.</p> <p>The project would dominate the view and may also be long-term and seen by many people.</p>
Medium-large	<p>Adverse or beneficial: Substantial change to the landscape over a wide area or considerable change over a limited area, with consequences for the elements, character and quality of the baseline landscape.</p> <p>The project will form a prominent landscape element and post development the baseline situation will be substantially changed.</p>	<p>Adverse or beneficial: The project would be a prominent feature and result in a substantial change to the character and quality of the existing view and how it is perceived.</p> <p>Typically, this would be where a project would be seen in close proximity with a large proportion of the view affected by little filtering or backgrounding.</p> <p>The project would affect the main focus of the view and may also be long-term and seen by many people.</p>

Magnitude	Descriptor	
Medium	<p>Adverse or beneficial: Noticeable change to the landscape over a wide area or conspicuous change over a limited area, with some consequences for the elements, character and quality of the baseline landscape.</p> <p>The project will form a conspicuous landscape element and post development the baseline situation may be noticeably changed.</p>	<p>Adverse or beneficial: The project would be a conspicuous element in the view and result in a noticeable change to the character and quality of the existing view and how it is perceived.</p> <p>Typically, this would be where a project would be seen in views where a moderate proportion of the view is affected, although there may be some screening or backgrounding.</p> <p>The project would be clearly visible and well-defined. It may be also medium-term and seen by a number of people.</p>
Medium-small	<p>Adverse or beneficial: Slight change to the landscape over a wide area or noticeable change over a limited area, with few consequences for the elements, character and quality of the baseline landscape.</p> <p>The project will be perceptible but post development, the baseline landscape may exhibit some differences, but will be largely unchanged.</p>	<p>Adverse or beneficial: The project would form a small part of the view and result in a slight change to the character and quality of the existing view and how it is perceived.</p> <p>Typically, this would be where a project would be seen in distant views, where only a small proportion of the view is affected, where the magnitude is reduced due to a high degree of filtering of backgrounding or where there is a low scale of change from the existing view.</p> <p>The project would be visible but indistinct and/or partially obscured. It would be seen only briefly and by few people.</p>
Small	<p>Adverse or beneficial: Inconspicuous change to the landscape over a wide area or slight change over a limited area, with very limited consequences for elements, character and quality of the baseline landscape.</p> <p>The project will be just perceptible and post development, the baseline landscape will appear largely unchanged.</p>	<p>Adverse or beneficial: The project would be perceptible but result in an inconspicuous change to the character and quality of the existing view and how it is perceived.</p> <p>Typically, this would be where a project would form a barely perceptible part of a long-distance panoramic view and/or where a very small proportion of the view was affected.</p> <p>The project would be barely discernible and likely to be visible only under certain weather or lighting conditions.</p>

Magnitude	Descriptor	
Negligible	<p>Adverse or beneficial: Almost indiscernible change to the landscape, with no consequences for elements, character and quality of the baseline landscape.</p> <p>The project will be barely perceptible and post development, the baseline landscape will appear unchanged.</p>	<p>Adverse or beneficial: Almost indiscernible change to the view, with no consequences for the character and quality of the view.</p> <p>The project would be barely perceptible and post development, the baseline view would appear unchanged.</p>
No change	<p>The assessment also identifies areas where no landscape change is anticipated. In these instances, 'no change' is inserted into the appropriate magnitude of change column.</p>	<p>The assessment also identifies areas where no visual change is anticipated. In these instances, 'no change' is inserted into the appropriate magnitude of change column.</p>
Biodiversity		
Large	<p>Adverse: Total loss or major alteration to key elements or features of the baseline conditions to the extent that post-development character composition of baseline conditions will be fundamentally changed</p> <p>Beneficial: Large-scale or major improvement of quality; extensive restoration or enhancement; major improvement in attribute quality.</p>	
Medium	<p>Adverse: Loss or alteration to one or more key elements or features of the baseline conditions to the extent that post-development character or composition of the baseline conditions will be materially changed.</p> <p>Beneficial: benefit to, or addition of key characteristics, features or elements; improvements of attribute quality</p>	
Small	<p>Adverse or beneficial: Changes arising will be detectable but not material; the underlying character or composition of the baseline conditions will be similar to the pre-development situation.</p>	
Negligible	<p>Adverse or beneficial: No change from baseline conditions</p>	
Historic Environment		
Large	<p>Adverse: Loss of resource/receptor and/or its quality and integrity; severe damage to key characteristics, features, or elements.</p> <p>Beneficial: Large scale or major improvement of resource or receptor quality; extensive restoration; major improvement of attribute quality.</p>	
Medium	<p>Adverse: Loss of resource/receptor but not adversely affecting its integrity; partial loss or damage to key characteristics, features, or elements.</p> <p>Beneficial: Benefit to or addition of key characteristics, features, or elements; improvement of attribute quality.</p>	

Magnitude	Descriptor
Small	<p>Adverse: Some measurable change in attributes, quality, or vulnerability; minor loss or alteration to one or more key characteristics, features, or elements.</p> <p>Beneficial: Minor benefit or positive addition to one or more key characteristics, features, or elements; some beneficial impacts on attribute or a reduced risk of negative impact occurring.</p>
Negligible	<p>Adverse: Very minor loss or detrimental alterations to one or more characteristics, features, or elements.</p> <p>Beneficial: Very minor benefit or positive addition to one or more characteristics, features, or elements.</p>
Water Environment	
Large	<ul style="list-style-type: none"> • Loss or extensive change to a fishery; • Loss of regionally important public water supply; • Reduction in water body WFD classification; or • Increase in peak flood level (>100mm).
Medium	<ul style="list-style-type: none"> • Partial loss in productivity of a fishery; • Degradation of regionally important public water supply or loss of major commercial/ industrial/agricultural supplies; • Contribution to reduction in water body WFD classification; or • Increase in peak flood level (>50mm).
Small	<ul style="list-style-type: none"> • Potential for a low risk of pollution. • Increase in peak flood level (>10mm).
Negligible	<ul style="list-style-type: none"> • No measurable change to baseline surface water quality or WFD water body status. • Negligible change to peak flood level ($\leq \pm 10\text{mm}$).

Magnitude	Descriptor
Geology and Hydrogeology	
	<i>Geology</i>
	<i>Hydrogeology</i>
Large	<p>Geology Adverse: Permanent loss of geological feature / designation and/or quality and integrity, severe damage to key characteristics, features or elements.</p> <p>Contamination Adverse: Significant contamination identified, and contamination level significantly exceed human health and environmental assessment criteria with the potential for significant harm to be caused. Contamination heavily restricts future use of land</p> <p>Contamination Beneficial: Substantial betterment of ground or groundwater quality/contamination conditions through remediation and/or mitigation.</p>
Medium	<p>Geology Adverse: partial loss of geological feature / designation, potentially adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements.</p> <p>Contamination Adverse: Contamination levels marginally exceed human health and environment assessment criteria. Control / remediation measures are required to reduce risks to human health / make land suitable for intended use.</p> <p>Contamination Beneficial: Moderate Betterment of ground or groundwater quality/contamination conditions through remediation and/or mitigation.</p>
	<p>Hydrogeology Adverse: Major or irreversible change to groundwater aquifer(s) flow, water level, quality or available yield which endangers the resources currently available. Groundwater resource use / abstraction is irreparably impacted upon, with a major or total loss of an existing supply or supplies. Changes to water table level or quality would result in a major or total change in, or loss of, a groundwater dependent area, where the value of a site would be severely affected. Changes to groundwater aquifer(s) flow, water level and quality would result in major changes to groundwater baseflow contributions to surface water and/ or alterations in surface water quality.</p> <p>Hydrogeology Beneficial: Major increase in groundwater resource availability. Results in the achievement of Good Status for a WFD groundwater body or GWDTE which is currently failing its WFD objectives. Removal of existing or potential polluting discharge to groundwater</p>
	<p>Hydrogeology Adverse: Moderate long term or temporary significant changes to groundwater aquifer(s) flow, water level, quality or available yield which results in moderate long term or temporarily significant decrease in resource availability. Groundwater resource use / abstraction is impacted slightly, but existing supplies remain sustainable. Changes to water table level or groundwater quality would result in partial change in or loss of a groundwater dependent area, where the value of the site would be affected, but not to a major degree. Changes to groundwater aquifer(s) flow, water level and quality would result in moderate changes to groundwater baseflow contributions to surface water and/ or alterations in surface water quality, resulting in a moderate shift from baseline conditions</p>

Magnitude	Descriptor	
Small	<p>Geology Adverse: minor measurable change in geological feature / designation attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.</p> <p>Contamination Adverse: Contamination levels below human health and environment assessment criteria and remediation is not required. Significant contamination is unlikely. Best practice measures can be required to minimise risks to human health.</p> <p>Contamination Beneficial: Slight betterment of ground or groundwater quality/contamination conditions through remediation and/or mitigation.</p>	<p>Hydrogeology Beneficial: Moderate increase in groundwater resource availability. Contributes, in combination with other effects, to the achievement of Good Status for a WFD groundwater body or GWDTE which is currently failing its WFD objectives. Significant reduction of existing or potential polluting discharge to groundwater.</p> <p>Hydrogeology Adverse: Minor changes to groundwater aquifer(s) flow, water level, quality or available yield leading to a noticeable change, confined largely to the Project area. Changes to water table level, groundwater quality and yield result in little discernible change to existing resource use. Changes to water table level or groundwater quality would result in minor change to groundwater dependent areas, but where the value of the site would not be affected. Changes to groundwater aquifer(s) flow, water level and quality would result in minor changes to groundwater baseflow contributions to surface water and / or alterations in surface water quality, resulting in a minor shift from baseline conditions.</p> <p>Hydrogeology Beneficial: Minor increase in groundwater resource availability. Leads to improvement of a WFD groundwater body which is currently failing its WFD objectives but insufficient effect to achieve Good Status. Minor reduction of existing or potential polluting discharge to groundwater.</p>
Negligible	<p>Geology Adverse: Very minor loss or detrimental alteration to one or more characteristics, features or elements of geological feature / designation. Overall integrity of resource not affected.</p> <p>Contamination: Contamination levels substantially below human health and environment assessment criteria and remediation is not required. No requirement for control measures to reduce risks to human health / make land suitable for intended use.</p>	<p>Hydrogeology Adverse: Very slight change from groundwater baseline conditions, approximating to 'no change' conditions.</p>

Magnitude	Descriptor	
Agriculture and Soil		
	Agriculture	Soil
Large	<p>Adverse:</p> <ul style="list-style-type: none"> Loss of more than 20% of farmed land associated with an agricultural farm holding. Permanent loss of entire area of land under agri-environment or Woodland Grant scheme. No access possible to severed land. Existing land-use across land holding would not be able to continue. 	<p>Adverse: Permanent, irreversible loss of one or more soil functions or soil volumes (including permanent sealing of land quality downgrading) over an area of more than 20ha or loss of soil-related features.</p> <p>Beneficial: Potential for permanent improvement in one or more soil functions or soil volumes due to remediation or restoration over an area of more than 20ha, or gain in soil-related features.</p>
Medium	<p>Adverse:</p> <ul style="list-style-type: none"> Loss of more than 10–20% of farmed land associated with an agricultural farm holding. Long-term, reversible, loss of entire area or majority of land under agri-environment or Woodland Grant scheme. Access possible to severed land via the public highway. Existing land-use across land holding would be able to continue but with major changes such as loss of yield, additional land management or increased use of fertilisers and herbicides. 	<p>Adverse: Permanent, irreversible loss of one or more soil functions or soil volumes over an area of between 5 and 20ha or loss of soil-related features.</p> <p>Beneficial: Potential for permanent improvement in one or more soil functions or soil volumes due to remediation or restoration over an area of between 5 and 20ha, or gain in soil-related features.</p>
Small	<p>Adverse:</p> <ul style="list-style-type: none"> Loss of more than 5–10% of farmed land associated with an agricultural farm holding. Short- to medium-term reversible loss, or permanent loss of small areas, of land area under agri-environment or Woodland Grant scheme. Access possible to severed land via private ways. 	<p>Adverse: Permanent, irreversible loss over less than 5ha or a temporary, reversible loss of one or more soil functions or soil volumes, or temporary loss of soil-related features.</p>

Magnitude	Descriptor
	<ul style="list-style-type: none"> Existing land-use across land holding would be able to continue but with some changes such as loss of yield, additional land management or increased use of fertilisers and herbicides.
	<p>Beneficial: Potential for permanent improvement in one or more soil functions or soil volumes due to remediation or restoration over an area of less than 5ha or a temporary improvement in one or more soil functions due to remediation or restoration of off-site improvement, or temporary gain in soil-related features.</p>
Negligible	<p>Adverse:</p> <ul style="list-style-type: none"> Loss of less than 5% of farmed land associated with an agricultural farm holding. No severance. Short-term impacts to receptors with no impact on integrity. No material changes to existing land-use.
	<p>Adverse or beneficial: No discernible loss or reduction or improvement of soil functions or soil volumes that restrict current or proposed land use.</p>

Traffic and Transport

	<i>Change in WCH Journey Length</i>	<i>Change in Severance</i>	<i>Change in Pedestrian Amenity, Fear and Intimidation</i>
Large	Adverse or beneficial: Increase or decrease of more than 500m. Where closure is less than four weeks impacts downgraded to medium.	Adverse or beneficial: Introduction of complete severance with no accessibility provision.	Adverse or beneficial: 100% or more change in traffic flows or heavy goods vehicle (HGV) flows.
Medium	Adverse or beneficial: Increase or decrease of more than 250m and less than 500m	Adverse or beneficial: Introduction of severe severance with limited or moderate accessibility provision.	Adverse or beneficial: 50-99% change in traffic flows or HGV flows.
Small	Adverse or beneficial: Increase or decrease of more than 50m and less than 250m	Adverse or beneficial: Introduction of severance with adequate accessibility provision.	Adverse or beneficial: 30-49% change in traffic flows or HGV flows.
Negligible	Adverse or beneficial: Increase or decrease of less than 50m	Adverse or beneficial: Very minor introduction or removal of severance with ample accessibility provision.	Adverse or beneficial: Less than 30 % change in traffic flows or HGV flows.

Magnitude	Descriptor	Adverse or beneficial: No change from baseline conditions	Adverse or beneficial: No change from baseline conditions.
No change	Adverse or beneficial: No change from baseline conditions	Adverse or beneficial: No change from baseline conditions	Adverse or beneficial: No change from baseline conditions.
Air Quality			
Medium	Adverse or beneficial: <ul style="list-style-type: none"> • 110% or more of AQAL and a 1% change in concentration relative to the AQAL; • 103% to 109% of AQAL and a 1% to 5% change in concentration relative to the AQAL; • 95% to 102% of AQAL and a 2% to 10% change in concentration relative to the AQAL; • 76% to 94% of AQAL and a 6% to >10% change in concentration relative to the AQAL; or • 75% or less of AQAL and a >10% change in concentration relative to the AQAL. • Short term effects from diesel generators between 21% and 50% of the AQAL. 		
Small	Adverse or beneficial: <ul style="list-style-type: none"> • 95% to 102% of AQAL and a 1% change in concentration relative to the AQAL; • 76% to 94% of AQAL and a 2% to 5% change in concentration relative to the AQAL; or • 75% or less of AQAL and a 6% to 10% change in concentration relative to the AQAL. • Short term effects from diesel generators between 11% and 20% of the AQAL. 		
Negligible	Adverse or beneficial: <ul style="list-style-type: none"> • 76% to 94% of AQAL and a 1% change in concentration relative to the AQAL; • 75% or less of AQAL and a 1% to 5% change in concentration relative to the AQAL; or • Any change in concentration that is less than 0.5% of the AQAL is considered negligible regardless of the long-term average concentration. • Short term effects from diesel generators below 10% of the AQAL. 		
Note for dust	Construction Air Quality dust magnitude tables can be found in <i>Guidance on the assessment of dust from demolition and construction</i> (Institute of Air Quality Management, 2014; 2016).		

Magnitude	Descriptor		
Noise and Vibration			
	Construction Noise	Construction Traffic	Construction Vibration
Large	Adverse: Above or equal to the significant observed adverse effect level (SOAEL) +5dB	Adverse: Greater than or equal to 5.0 dB change	Adverse: Above or equal to 10mm/s Peak Particle Velocity (PPV)
Medium	Adverse: Above or equal to SOAEL and below SOAEL +5dB	Adverse: Greater than or equal to 3.0 dB and less than 5.0 dB change	Adverse: Above or equal to SOAEL and below 10mm/s PPV
Small	Adverse: Above or equal to the lowest observed adverse effect level (LOAEL) and below SOAEL	Adverse: Greater than or equal to 1.0 dB and less than 3.0 dB change	Adverse: Above or equal to LOAEL and below SOAEL
Negligible	Adverse: Below LOAEL	Adverse: Less than 1.0 dB change	Adverse: Below LOAEL

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