

Appendix 9A

ZOI Informing the Assessment

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APPENDIX 9A: ZOI INFORMING THE ASSESSMENT

Table 1: Zones of Influence Informing the Assessment.

ECOLOGICAL FEATURE	TYPE OF POTENTIAL IMPACT	ADOPTED ZONE OF INFLUENCE	RATIONALE
International nature conservation designations (e.g. European sites)	Direct and/or indirect habitat loss or disturbance to qualifying features.	15 km and/or where a 'source-pathway-receptor' exists.	The Office of the Planning Regulator (OPR, 2021) states that "the zone of influence of a proposed development (in this case the Proposed Development) is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European Site. This should be established on a case-by-case basis using the Source-Pathway-Receptor framework".
National statutory nature conservation designations	Direct and/or indirect habitat loss or disturbance to nature conservation designations.	2 km and/or where a 'source-pathway-receptor' exists.	Given the relatively minor nature of the Proposed Development, there are unlikely to be any impact pathways which could adversely affect sites more than 2 km distant.
Habitats and plants	Direct habitat loss or indirect impacts to groundwater supply, yield or pollution impacts.	Site boundary or hydrologically connected.	Direct impacts on habitats and plants are restricted to within the Site boundary only. Indirect pollution impacts and/or ground water supply impacts could occur on habitats and plant species with relatively high surface-water dependency relative to terrestrial habitats (e.g. watercourses, mudflats, saltmarsh, reefs) or relatively high ground-water dependency relative to terrestrial habitats (e.g. turloughs and petrifying springs).
Bats and their roosts	Direct (e.g. noise, lighting) and indirect (e.g. fragmentation) disturbance of roost sites and on foraging/	For direct impacts, typically estimated as 50 m from potential or confirmed roost sites but informed by light modelling	Distances are subject to case-by-case assessment however for direct impacts, it is generally accepted that disturbance of most roosting bats from typical construction activities is unlikely to occur beyond 50 m from a source

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	commuting bats.	on a case-by-case basis. For indirect fragmentation impacts, the Zol varies by bat species; at least 13 km in the case of long-distance foraging of Irish Leisler's bats.	and that this can be considerably lower for minor works. For indirect fragmentation impacts, Leisler bats have been radio-tracked to demonstrate movements of at least 13 km from nursery roost to feeding site (Shiels <i>et al.</i> , 2006).
Otter	Direct physical disturbance to breeding or resting sites or fragmentation or commuting and/or foraging habitat.	Disturbance of otter from construction works is only likely to extend up to a distance of 150 m for any holts at which breeding females or cubs are present, and 20 m for active non-breeding otter holts (NRA, 2008).	Distances are subject to case-by-case assessment of local ground conditions (e.g. holes in unstable clay substrates are more sensitive than those protected from vibration from sheet rock).
Badger	Direct physical disturbance to breeding or resting sites or fragmentation or commuting and/or foraging habitat.	Disturbance of any badger setts during the breeding season (December to June inclusive) from construction works is only likely to extend up to a distance of 150 m where pile driving will occur or up to 50 m where other works will occur. Furthermore, disturbance to setts during the non-breeding season is only likely to extend up to a distance of 30 m (NRA, 2006).	Distances are subject to case-by-case assessment of local ground conditions (e.g. holes in unstable clay substrates are more sensitive than those protected from vibration from sheet rock).
Other mammals	Direct physical disturbance to breeding or resting sites or	Within the Site boundary.	Other mammals could be impacted by habitat loss and susceptible to mortality during construction and/or operation

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	fragmentation or commuting and/or foraging habitat.		of the Proposed Development. Significant disturbance effects are assumed to be unlikely beyond the Site boundary.
Amphibians	Direct mortality and/or indirect pollution impacts to breeding, foraging habitat.	Waterbodies suitable for amphibians adjoining the Site boundary and waterbodies hydrologically connected to the Proposed Development.	Amphibians could be impacted in suitable waterbodies within the Site. Furthermore, any pollutants from the Proposed Development could impact watercourses and thus impact amphibians present within or downstream of the Site.
Birds	Nesting birds including any singing males potentially affected by noise.	Adjoining the Site boundary.	Nesting birds including any singing males could potentially be affected by habitat loss or noise from the Proposed Development. Non-breeding birds could also be impacted by construction and/or operation-related disturbance. Significant disturbance effects in this case are assumed to be unlikely beyond the Site boundary.
Invertebrates	Direct loss of habitat or injury.	Adjoining the Site boundary.	Terrestrial invertebrates, such as butterflies, could be impacted by direct habitat loss or injury. However, no habitat loss or direct injury is predicted beyond the Site boundary.
Invasive non-native species	Spread of invasive non-native species.	50 m	The Proposed Development could cause the spread of invasive non-native species within the Site boundary or immediate vicinity of the Site. The zone of influence is unlikely to be greater than 50 m from the Site boundary.