ST PAUL'S SCHOOL REDEVELOPMENT

SECTION 73 ES SCOPING – ECOLOGICAL SURVEYS: CONSULTATION DRAFT

23 April 2017

Rev 4.0

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on behalf of

St Paul's School

Taxa /	Protection and Policy status	Previous Surveys	Summary of previous survey findings	Proposed approach and methods for S73 ES	Timing of
feature					proposed surveys
					for S73 Application
All fauna and habitats	Various (see below those relevant).	 2004: An extensive desk study, including consultation with of the Greater London Authority, English Nature, The London Wildlife Trust, The London Mammal Group, The London Essex and Hertfordshire Amphibian and Reptile Group, the Middlesex Bat Recorder, The London Bat Group and the Environment Agency, was undertaken in 2004. 2011: Desk study repeated, the main source of data then having become Greenspace Information for Greater London. 	No records of particular interest for The School Site itself were obtained. Records of protected, London BAP or NERC S41 species of relevance to the site included (distance to closest record in brackets): Stag Beetle <i>Lucanus cervus</i> (ca. 400m) Common Toad <i>Bufo bufo</i> ,(>1km) Common Lizard Zootoca vivipara (ca. 500m) Grass Snake Natrix natrix (c.900m) Hedgehog <i>Erinaceus europeaeus</i> (ca. 400m) Bats: Daubenton's Bat Myotis daubentonii, Natterer's Bat Myotis nattereri, Noctule Nyctalus noctula, Leisler's Bat Nyctalus leisleri, Common Pipistrelle <i>Pipistrellus</i> <i>pipistrellus</i> , Soprano Pipistrelle <i>Pipistrellus</i> , Soprano Pipistrelle <i>Pipistrellus</i> pygmaeus, Nathusius's Pipistrelle <i>Pipistrellus nathusii</i> , and Serotine <i>Eptesicus serotinus</i> (majority >1km). Numerous birds – predominantly wetland species associated with the Barn Elms wetland. In the wider context Barn Elms wetlands, the Leg-'O-Mutton Reservoir LNR and the banks of the Thames (Site of Metropolitan Importance) are all important bat foraging and commuting areas.	Update Desk Study requesting records from Greenspace Information for Greater London (GIGL) and other records holders as indicated by GIGL.	late April 2017

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Habitats	 Private Gardens, Parks and Greenspaces and Woodland are listed as a Priority Habitats in the London BAP and Built Structures and Meadows amongst the 'Other Important habitats'. Broadleaved Woodland and hedges are listed as Priority Habitats under the London Borough of Richmond BAP. All of these habitats occur on the School site. 	 Nicholas Pearson Associates (2004). St Paul's School Existing Ecological Conditions: Preliminary Assessment. NPA Bath. Grant Associates. (2009). St Paul's School Tree Report. GA, Bath. Biodiversity by Design (June 2012). Botanical Survey of Playing Field Margins. BbD, Bath. Biodiversity by Design. (April 2014). General Teaching Building and Associated Buildings and Works: Extended Phase 1 Habitat Survey and Net Ecological Effects. BbD, Bath. Biodiversity by Design. (June 2014). General Teaching Building and Associated Buildings and Works: Extended Phase 1 Habitat Survey and Net Ecological Effects. BbD, Bath. Biodiversity by Design. (June 2014). General Teaching Building and Associated Buildings and Works: BREEAM Baseline Botanical Survey. BbD, Bath. 	The habitats were unexceptional and in the main very poor (high nutrient- enriched and herbicide-treated playing fields), though small patches of grassland particularly at the site fringes had greater diversity and the northern fringe woodland belt (and the adjacent towpath) which includes some significant trees, particularly hybrid poplars with general faunal value, including deadwood. In March 2017 various deadwood piles were noted around the northern and western fringes developing fungal and faunal value. The original tree survey was from 2009 and repeat surveys of selections of trees have been undertaken since in relation to site management.	An update Extended Phase 1 Habitat Survey would be undertaken to identify and map habitats present within the planning redline boundary and the ecologically relevant surroundings, and to provide an updated assessment of the potential for the Site to support protected or notable species. The ecologically relevant surroundings include the Thames towpath margin habitats next to the northern boundary of the Site and River Thames. This would follow standard methodology as set out in Joint Nature Conservation Committee (2010). <i>Handbook for Phase 1 habitat survey – a technique for environmental audit.</i> JNCC, as extended to cover protected or notable species by Institute of Environmental Assessment (1995) <i>Guidelines for Baseline Ecological Assessment.</i> E & FN Spon. London. Data from previous tree surveys would be used in creation of the habitat (and botanical, see below) survey base map.	April 2017
Flora	None of the species of plant known to be or likely to be present on site is legally protected. Some less common species in a London context that have potentially present. Black Poplar specimens of which along the towpath have branches overlapping the School Site are a London BAP Priority Species.	 All surveys listed under habitat surveys (above). 	No plant species of conservation importance have been recorded to date. The only reasonable floristic diversity was along the northern boundary where Meadow Clary <i>Salvia</i> <i>verbenacea</i> was noted in abundance in 2006 in long grass by the peripheral fence. Many basal rosettes of this species were also visible in the nearby short grass. Since the original surveys there have been successful attempts at floristic enhancement along the Lonsdale Road boundary and with the creation of the New Science Building biodiverse Roof. Certain trees have been felled in keeping with consented planning proposals and other trees have been lost due to natural causes (senescence and windblow).	Considering the location and nature of remaining redevelopment works, no adverse effects on any areas of floristic interest are predicted and hence surveys are not required in relation to habitats within development parcels. The landscape of the fringes of the site, within the red line boundary, have been and remain the subject of various landscape and ecological enhancement proposals, some of which have been undertaken and some not at this stage. To provide a proper updated baseline in relation to the School's goals of achieving net botanical enhancement full higher plant listings and quadrat surveys of the habitats within School boundary but outside the playing field areas is proposed.	late April 2017

Taxa / feature	Protection and Policy status	Previous Surveys	Summary of previous survey findings	Proposed approach and methods for S73 ES	Timing of proposed surveys for S73 Application
Riparian Invertebrates	Habitat along the sites riverine fringe was assessed as potentially suitable (though suboptimal) for two species of uncommon riverine snail, the Two-lipped Door Snail <i>Lacinaria biplicata</i> and the German Hairy Snail <i>Perforatella rubiginosa</i> . Although neither of these species has protected status, both are London BAP Priority Species. The Two-lipped Door Snail is classified as Rare (RDB3) and is currently restricted in the UK to the lower Thames corridor. Its habitat is the soil surface (usually with Ivy cover) of occasionally- flooded riparian land in the shade of closed canopy woodland. The German Hairy Snail is classified as Vulnerable (RDB2) and is currently restricted in the UK to the catchments of the Thames and the Medway. It inhabits strandline detritus in the shade of closed canopy woodland and riparian vegetation.	Biodiversity by Design. (October 2009). Ecological Surveys in Relation to Proposed Outfall. Bats, Herpetofauna, Riverine Snails. BbD, Bath	Survey was focussed on the potential for uncommon riparian snails to be present within habitats potential affected by the proposed outfall. No uncommon riverine snails were noted.	Habitat conditions along the river edge /towpath do not appear to have greatly changed since last survey.	No survey proposed to support \$73 Application.
Terrestrial Invertebrates	Stag Beetle <i>Lucanus cervus</i> is listed on s41 of the Natural Environment and Rural Communities Act (2006) and is a Priority Species on both the London Biodiversity Action Plan and the London Borough of Richmond on Thames Biodiversity Action Plan. Habitat creation and enhancement proposals for this species are included in the redevelopment proposals. Various other London BAP Priority Species could be attracted to the recently created biodiverse habitats such as the New Science Building Living Roof.	No baseline survey of terrestrial invertebrates has ever been undertaken on Site as the quality and nature of potentially affected habitats has not warranted such survey. Incidental observations of more apparent fauna have been made during other surveys.	In general observations and habitat surveys Holly Blue Butterfly <i>Celastrina</i> <i>argiolus</i> (London BAP Garden Flagship species) was noted in the vicinity of what is now the Service Yard. During the redevelopment of this area, species were included that are of value to this species (Holly and Ivy). New deadwood piles have been put in place along the north-western and western boundaries, which may develop some value to saproxylic invertebrates over time but no Stag Beetle <i>Lucanus cervus</i> loggeries have as yet been installed. The biodiverse living roof of the New Science Building has developed well as a habitat and my now harbour important invertebrate species as intended. Over time fringe habitat enhancements should increase value to terrestrial invertebrates.	Considering the location and nature of remaining redevelopment works, there should be no significant direct adverse effects on newly existing or recently created habitats of value to 'important' terrestrial invertebrates. Lighting design will be as invertebrate-sensitive and bat-sensitive as reasonably possible. In order to assess the success of the previously installed Science Block living roof, invertebrate survey is to be carried out within this habitat in June 2017. Survey will extend to the best habitats for invertebrates around the periphery of the School Grounds (e.g. around the northern wooded fringe and the floristically enhanced grassland areas). Analysis of samples would be undertaken overwinter to keep costs to the School at an acceptable level. Findings are not considered necessary for the assessment of adverse ecological impacts. The data gathered would inform the assessment in terms of the potential value of proposed ecological mitigation and enhancement elsewhere.	No survey proposed to support S73 Application. Survey to be undertaken in June 2017 with lab identification in the winter and reporting in Spring 2018.

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					for S73 Application
Herpetofauna	The common reptile species that have any	• Morgan, K. (2006).	Surveys were undertaken by the	Considering the location and nature of remaining	No survey
(reptiles and	potential to occur are legally protected	Herpetofauna and Bird survey of St	herpetofaunal expert, Kevin Morgan	redevelopment works, and the previous negative	proposed to
amphibians)	against killing or injury under the terms of	Paul's School Castelnau London SW13.	on behalf of Nicholas Pearson	survey findings, no reptile or amphibian surveys are	support S73
	the Wildlife and Countryside Act (1981) as	Reported in Nathaniel Litchfield and	Associates in 2006 and again in 2009.	considered necessary in relation to the avoidance of	Application.
	amended.	Partners May 2007. St Paul's School	Standard methods of Artificial Cover	potentially significant adverse effects. Any works	
		Environmental Statement May 2007.	Object (ACO) deployment were used	that impinged upon the northern fringe of the	
	No amphibians that are protected against	NLP, London.	in all key potentially suitable areas of	grounds would be undertaken in precautionary	
	killing and injury have appreciable potential	Biodiversity by Design. (October	The School grounds, allowing bedding	fashion with habitat being made unsuitable for	
	to occur on site.	2009). Ecological Surveys in Relation to	in time before five surveys in good	reptiles or amphibians in advance of works.	
		Proposed Outfall. Bats, Herpetofauna,	conditions in summer and autumn.		
	Common Toad, Common Lizard Zootoca	Riverine Snails. BbD, Bath	Further survey using the same		
	vivipera, Slow-worm Anguis fragilis, and		methods was undertaken along a		
	Grass Snake Natrix natrix are all listed as are		localised section of the northern		
	all listed on S41 of the Natural Environment		boundary over three visits in		
	and Rural Communities Act (2006) and as		September and October 2009. No		
	Priority Species in the London Biodiversity		reptiles were detected.		
	Action Plan.				
			Since this time enhancements to the		
			north-western edge of the grounds		
			have been undertaken in the form of		
			shrub planting and establishment of		
			deadwood piles. This increases habitat		
			potential for common reptiles and		
			potentially terrestrial amphibians.		
			Pending enhancements elsewhere		
			along the fringes should also further		
			enhance attractiveness to these		
			species (as intended) though it is to be		
			noted that previously proposed		
			wetland areas along the norther fringe		
			are now no longer part of the School		
			requirements and will not be		
			implemented.		

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feature					proposed surveys for S73 Application
Breeding Birds	All birds, their nests and young are protected against killing or injury under the terms of the Wildlife and Countryside Act (1981) as amended. Certain species listed on Schedule 1 of the act are protected against disturbance while nesting. These species include the Black Redstart <i>Phoenicurus ochruros</i> for which habitat creation in the scheme on roofs is being targeted. Black Redstart is also a London Biodiversity Action Plan Priority Species. Song Thrush <i>Turdus philomelos</i> and Dunnock <i>Prunella modularis</i> and Starling <i>Sternus vulgaris</i> are listed on s41 of the Natural Environment and Rural Communities Act (2006) and as Priority Species in the London Biodiversity Action Plan. Song Thrush is listed as a Priority Species in the London Borough of Richmond upon Thames Biodiversity Action Plan.	 Morgan, K. (2006). Herpetofauna and Bird survey of St Paul's School Castelnau London SW13. Reported in Nathaniel Litchfield and Partners May 2007. St Paul's School Environmental Statement May 2007. NLP, London. Biodiversity by Design. (December 2010). Bird Breeding Activity: Monitoring Method Statement Before Vegetation Removal. BbD, Bath Biodiversity by Design. (June 2011). Breeding Bird Site Check. BbD, Bath. 	A survey of breeding birds was undertaken by Kevin Morgan MCIEEM, Ecologist (and bird survey expert) in April to June 2006. Red List species present, as might be expected from the habitats were Song Thrush and Common Starling with the following Amber List: Barn Swallow, House Martin, Dunnock, Mistle Thrush and Green Woodpecker. Breeding Great Spotted Woodpecker and Blackcap in the northern boundary tree belt were noted as of local interest. There are proposals for installation of many refuges for birds across the site fringes and on certain buildings, but to avoid potential conflicts with redevelopment activity, these have not yet been implemented.	On the basis of the past survey findings, and very limited changes to suitable habitat that would be caused by the remaining redevelopment proposals (and predominantly positive through landscape planting), breeding bird surveys are not considered strictly necessary in terms of ES assessment of significant adverse impacts. However, given the time elapsed, and habitat creation measures such as the Science Block green roof which have been implemented, an update to the previous survey would be undertaken. Methods would be based on a modified Common Bird Census (CBC) methodology (Bird Census Techniques: (Marchant, 1983; Gilbert, Gibbons & Evans, 1998), but adapted to the urban conditions the relatively limited habitat extent on site, and the very low probability of significant impacts (see above). Accordingly survey would entail 3 survey visits to the site between late April and mid- May, undertaken by one of most experienced ornithological field surveyors in London. Should the surveys demonstrate the presence of significant species then further investigations might be required (e.g. to locate possible nest site). Incidental records of breeding birds would also be compiled from other ecological site visits.	Survey to be undertaken between end of April and mid-May 2017

Bats:	All bats are fully protected under the terms	Nicholas Pearson Associates. (June	Bat Activity:	Bat Activity:	Bat Activity (static
Foraging and	of the Wildlife and Countryside Act (1981)	2004). Preliminary Assessment of On-			detector survey):
Commuting	and under the Conservation of Habitats and	Site Buildings for Potential to Support	Bat Activity surveys between 2004 and	Based on the results of activity surveys undertaken	Late April / early
_	Species Regulations 2012 (as amended).	Roosting Bats. NPA, Bath	2014 recorded foraging and	over a 10-year period to date, and the proposed	May 2017, and
	This protection means that it is an offence	Nicholas Pearson Associates. (May	commuting bats, principally along the	masterplan amendments reducing the proximity of	post ES submission:
	to:	2005). Walkover Assessment of Trees	offsite footpath adjacent to the River	proposals to the River Thames corridor, the potential	Summer 2017 and
	1. Deliberately capture, injure or kill a	and Internal Inspection of On-Site	Thames.	for the remaining redevelopment proposals to result	Autumn 2017.
	bat	Buildings for Potential to Support		in significant adverse effects on foraging or	
		Roosting Bats. NPA. Bath.	Species recorded included Common	commuting bats is considered to be extremely low.	
	2. Intentionally or recklessly disturb a	Nicholas Pearson Associates. (May	Pipistrelle, Soprano Pipistrelle,	Habitat creation measures can reasonably be	
	bat in its roost or deliberately disturb	2006). Bat Emergence. Forgaing and	Noctule and Daubenton's. Levels of	expected to result in an increase in foraging habitat	
	a group of bats	Commuting Survey, NPA, Bath	activity over the site away from the	availability and guality.	
	3. Damage or destroy a bat roosting	• Biodiversity by Design. (June 2009).	Thames Corridor have been	, , ,	
	place (even if bats are not occupying	Building and Tree Assessment.	consistently very low, with only	The overall value of the School Site, away from the	
	the roost at the time)	Transect and Emeraence Survey for	occasional passes.	narrow northern habitat fringe near the river	
	4 Decessor of advertise (call (avalage a	Bats. BbD. Bath.		footpath. for foraging and commuting bats is	
	4. Possess of advertise/sell/exchange a	Biodiversity by Design. (October	No bats have been recorded at times	considered to be 'Low', and only occasional bat	
	bat (dead or alive) or any part of a	2009). Ecological Surveys in Relation	considered suggestive of a roost in	passes have been recorded in these areas during	
	Dat	to Proposed Outfall. Bats.	close proximity to the site.	many historic surveys.	
	5. Intentionally or recklessly obstruct	Herpetofauna, Riverine Snails, BbD.	, ,		
	access to a bat roost	Bath	Construction of the New Science	Current 'good practice guidance' for understanding	
		• Biodiversity by Design. (2011). <i>Tree</i>	Building biodiverse roof was	bat foraging and commuting use of sites of Low	
	Common Dinistrelle Dinistrellus ninistrellus	Assessment for Bats. May 2011. BbD.	completed in summer 2013 and it has	value is to undertake foraging commuting surveys by	
	Sonrano Pinistrelle Pinistrellus nyamaeus	Bath	since evolved into a valuable habitat	walked transect and static detector once in spring,	
	Noctule Nyctalus poctua Leisler's Nyctalus	Biodiversity by Design. (September	as intended. From studies of	once in summer and once in autumn. Given the	
	leisleri Daubenton's Myotis daubentonii	2012). Bat and Badger Survey in	biodiverse living roofs elsewhere in	history of surveys on the Site, the very low risk of	
	Serotine Entesicus serotinus Natterer's	Relation to New Drama Centre. BbD.	London increased bat foraging activity	adverse effects on bats, and the distribution of	
	Myotis nattereri Whiskered Myotis	Bath	in the airspace over this roof is to be	habitats on site (mainly confined to the property and	
	mystacinus and Brandt's Mystis brandtii	• Biodiversity by Design. (2014). Winter	expected, but largely confined to	the living roof of the New Science Building) it is not	
	hats are listed as Priority Species on the	Bat Survey of Buildings and Trees in	species of pipistrelle (and high-flying	considered necessary to undertake walked transect	
	London Biodiversity Action Plan (as our	Relation to the General Teaching	Noctule) that are relatively light-	surveys. Rather it is considered that an adequate	
	Whiskered and Brandt's Bat but these are	Building and Associated Buildings and	tolerant.	picture of bat use of the Site can be obtained by	
	not likely to occur	Works. BbD, Bath.		deploying multiple static detectors. It is proposed	
		• Biodiversity by Design. (June 2014). St		that two static detectors be deployed on the	
	All hats are priority species on the London	Paul's School, Hammersmith, London.		northern boundary (one opposite the School	
	Borough of Richmond upon Thames	Spring 2014 Bat Emergence & Dawn		building complex and one away from this), one on	
	Biodiversity Action Plan	Re-Entry: Surveys of Buildings &		the New Science Building biodiverse roof and one	
	blouversity Action Fluit.	Trees. BbD, Bath.		along the Lilian Road hedgeline side of the School	
		Biodiversity by Design. (December		grounds. See plans at end of this document.	
		2014). St Paul's School, London: Colet			
		Court Pavillion Bat Building		Deployment would be over 5 nights in late April /	
		Inspection. BbD, Bath		early May, mid-summer and autumn 2017.	
		• Biodiversity by Design. (March 2017).			
		Update Assessment of Bat Roost		The data obtained would be used to fine tune	
		Potential of General Teaching		habitat creation / enhancement proposals for	
		Building, Link Building and Drama 2		foraging / commuting bats. These static detector	
		Building. BbD. Bath		activity surveys would also contribute to the	
				objectives of the Landscape and Ecology	
				Management Plan to achieve net gain for	
				biodiversity.	

Bats:		Bat Roost Potential	Bat Roost Potential
Roosting			
Potential		Buildings:	Updated Bat Roost Potential Survey
		Bat roost potential surveys	and trees within the Redline would b
		undertaken between 2004 and 2014	
		identified the vast majority of	Should evidence of roosting bats be
		buildings across the site to be of no	buildings, they would be would be s
		more than Low potential to support	number of emergence surveys depe
		roosting bats. A small number were	roost potential assessment. Any such
		Assessed to be of Low/Medium (3) or	following the submission of the ES
		electricity sub-station assessed to be	Tonowing the submission of the ES.
		of medium/high notential	Bat emergence surveys would contin
		A number of these Low/medium and	undertaken prior to demolition of ar
		Medium potential buildings (subject	assessed to be of I ow or higher bat
		to further emergence surveys) have	
		already been demolished as a part of	Bat emergence surveys of any trees
		the ongoing redevelopment works.	potential that could be affected by v
			indirectly would be undertaken prior
		It should be noted that the most	potential disturbance occurring.
		recent best practice guidance on	
		grading buildings for their bat roost	All bat roost potential surveys would
		potential differs somewhat from that	in line with the latest best practice g
		used in the previous building	Collins, J. (ed.) (2016) Bat Surveys for
		assessments. The greater emphasis	Ecologists: Good Practice Guidelines
		on habitat connectivity made in the	Bat Conservation Trust, London.
		latest guidance is likely to lead to	
		lower bat root potential assessments	
		for certain buildings within the site.	
		Trees:	
		The majority of trees identified to	
		have potential to support roosting	
		bats are located offsite, along the	
		Thames Footpath. Of trees scheduled	
		for removal, none has been assessed	
		to date to be of greater than 'Low'	
		potential.	
		Emergence surveys of buildings and	
		trees undertaken in relation to various	
		building demolitions and works	
		between 2011 and 2015 have not	
		detected any roosting bats, and only	
		very low levels of activity within the	
		site have been recorded. The timing	
		of bat passes recorded has not been	
		suggestive of roosts in close proximity.	
		There are proposals for the	
		installation of bat refuges on trees on	

y of all buildings be undertaken.	Bat Roost Potential Survey: late April/ early May 2017.
e detected within subject to a endant on the bat ch surveys would nformation	
inue to be any buildings roost potential.	
s with bat roost works directly or or to removal /	
ld be undertaken guidance: or Professional s (3rd edn). The	

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feature					proposed surveys
			the western and north-western periphery of the school site and on		for \$73 Application
			one of the school Buildings. These installations have not yet taken place in order not to interfere with		
			completion of the School redevelopment works, but will be		
			scheduled in due course when such works are completed.		
Badgers	Badgers and their setts are fully protected under the Protection of Badgers Act 1992. Protection extends to protection against disturbance when in their setts.	 Nicholas Pearson Associates. (2004). St Paul's School Existing Ecological Conditions: Preliminary Assessment. NPA, Bath. Biodiversity by Design. (September 2012). Bat and Badger Survey in Relation to New Drama Centre. BbD, Bath 	No signs of Badger activity have hitherto been noted on-Site. Badgers, however, are highly mobile animals with frequent changes to patterns of behaviour and dispersal.	Update inspections for signs of Badger would be undertaken as a part of the Extended Phase 1 Habitat Survey. If a Badger sett were found, further investigations might be necessary and would be added to the scope at that point.	late April 2017
Hedgehog Erinaceus europaeus	Hedgehogs are not legally protected but are considered species of conservation concern for which special conservation measures should be taken through listing on Section 41 of the Natural Environment and Rural Communities Act (2006). The Hedgehog is also a London Biodiversity Action Plan Priority Species.	All surveys listed above.	No signs of Hedgehog (e.g. dropping) or sightings of Hedgehog have been made on site during Phase 1 Habitat or other surveys. Over time with the gradual realisation of School ground fringe enhancements potential for use of the Site by Hedgehogs should increase (which would be an ecologically important outcome).	It is not impossible that Hedgehog use the School grounds (habitat is suitable) but considering the location and nature of remaining redevelopment works, and the overall intention to improve habitat for this species, no Hedgehog surveys are considered necessary in relation to the avoidance of potentially significant adverse effects. Any works that impinged upon any feature that might be used as refuge by a Hedgehog would be undertaken in precautionary fashion with such features investigated and being made unsuitable for Hedgehogs in advance of any works. Any excavations would be either covered or fitted with escape ramps in case Hedgehogs were to be on site and become victims of pitfall. However some neighbouring residents wish to enhance the connectivity between adjacent properties and the School and for the School to enhance habitat potential in the area generally for Hedgehogs. The School therefore plans to survey to find out if this species is already using the School grounds or not and hence to guide enhancement measures in management/ boundary modifications etc. Five footprint tunnels will be deployed at suitable locations around the School site fringes (see attached plan).	Hedgehog footprint tube survey for 5 nights in late April/early May around the site periphery.



Figure 1: Proposed locations for Hedgehog footprint tunnels and static detectors for bats for survey shown on the most recent tree location plan (from 2016).

Impact Assessment:

The impact assessment methodology would follow the recently revised Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition, prepared by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2016), and be in line with the British Standard 42020: Biodiversity — Code of practice for planning and development (2013).



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