

Table 4: Species Evaluation				
Receptor(species/taxa)	Description of Desk Study records	Status ³	Supporting Habitat(s)Present	Evaluation
Red Squirrel	X	WCA ,NC s.2(4)	No suitable habitat is found on Site.	Species likely to be absent.
Otter <i>Lutra lutra</i>	✓	EPS, WCA, NC s.2(4)	No suitable habitat is found on Site.	Given the lack of suitable habitat on, or in proximity to the site, species is likely absent.
Water Vole <i>Arvicola amphibia</i>	X	WCA, s.41	No suitable habitat is found on Site.	Given the lack of suitable habitat on, or in proximity to the site, species is likely absent.
Reptiles	✓	WCA, NC s.2(4)	Low value habitat.	Species are likely to be absent
Great Crested Newt <i>Triturus cristatus</i>	X	EPS, WCA, NC s.2(4)	Poor semi-grassland habitat within the survey boundary provides suitable foraging habitat for amphibians. There were ten ponds within 500m of the site, nine were assessed as poor (<0.5) and one as below average (0.59) habitat suitability to support great crested newts (See Appendix 2). It is considered very unlikely that great crested newts are within the area based on the poor terrestrial habitat on site and in the surrounding area; and only a single pond having below average suitability.	The onsite drain and ponds surrounding the site are not considered suitable to support great crested newts. The majority of suitable habitat is restricted to the site boundaries or in areas which are to be retained as part of the development.

Table 4: Species Evaluation				
Receptor(species/taxa)	Description of Desk Study records	Status ³	Supporting Habitat(s)Present	Evaluation
Common Toad <i>Bufo bufo</i>	X	NC s.2(4)	The drainage ditch on site and the ponds surrounding the site have the potential to support breeding toads and other amphibians.	The majority of suitable habitat is restricted to the site boundaries or in areas which are to be retained as part of the development.
Birds	Kingfisher <i>Alcedo atthis</i> Meadow Pipit <i>Anthus pratensis</i> Pink-footed Goose <i>Anser brachyrhynchus</i> Skylark <i>Alauda arvensis</i> Swift <i>Apus apus</i>	NC s.2(4), WCA BoCC	Site has limited suitable foraging and nesting habitat.	Potential foraging and breeding habitat may be lost/disturbed during the construction phase.

4 DISCUSSION AND RECOMMENDATIONS

4.1 Potential Constraints

4.1.1 The 2020 update confirms no change from the earlier evaluation, with only breeding birds and standing open water being considered potential site constraints (in the absence of mitigation). In addition, a screening HRA considering Airds Moss and Muirkirk and North Lowther Uplands SPA may be required. In this event it is considered that the only potential impact pathway of relevance would be acidification and Nitrogen deposition as a result of particulate emissions from the stack.

Breeding Birds

4.1.2 The habitats recorded within the survey area provide limited potential nesting habitat for common bird species. In order to avoid committing an offence under the relevant wildlife legislation it is recommended that all vegetation clearance works aim to avoid the breeding bird season (March – September).

4.1.3 Should it prove necessary to carry out vegetation clearance works within the breeding bird season, mitigation will include:

- A thorough check by a suitably qualified ecologist, for the presence of nesting birds within 24 hours of works commencing.
- In the event that nesting birds are recorded within the works area the active nest(s) will be retained undisturbed and protected by a buffer of at least 5m of uncut vegetation.
- Habitat clearance works will re-commence when the nesting attempt is complete, and the nest is confirmed by a suitably qualified ecologist to be inactive/disused.

Standing open water/Amphibians

4.1.4 The drainage ditch and bank vegetation on site is to be lost to the proposed development. The ditch is suitable habitat for common frog and common toad and there is suitable terrestrial habitat within the site boundaries. In addition, the ponds and terrestrial habitat to the west of the site are suitable for these species.

4.1.5 To avoid incidental harm, the vegetation clearance and infilling of the drainage ditch will be completed in accordance with a Precautionary Working Methods Statement (PWMS), attached as Appendix 3.

4.2 Conclusion

- 4.2.1 The 2020 PEA update confirms the site/habitats have remained relatively unchanged since the previous surveys. The site is generally of low ecological value and no designated conservation areas will be adversely impacted by the proposals. It will be necessary to mitigate against incidental harm to amphibians and nesting birds during habitat clearance, for which protocols are provided in this report and Appendix 3. Such measures will involve the attendance of a suitably qualified ecologist and restrictions relating to the timing of the works.
- 4.2.2 Assuming such mitigation is adhered to in full, there are no residual constraints to the development. It may be necessary to review the findings of this report prior to construction or in the event that works are delayed beyond summer 2022.

REFERENCES

- Bat Conservation Trust (2012) Bat Surveys Good Practice Guidelines- second edition
- Botanical Society of the British Isles (2013) *Online atlas of the British and Irish Flora*
http://www.brc.ac.uk/plantatlas/index.php?q=title_page
- Institute of Environmental Assessment, *Guidelines for Baseline Ecological Assessment* (1995).
- Institute of Ecological and Environmental Management. (2012). Guidelines for Preliminary Ecological Appraisal.
- Institute of Ecological and Environmental Management. (2015). Guidelines for Ecological Report Writing.
- JNCC, Handbook for Phase 1 habitat survey: A technique for environmental audit (2007), English Field Unit, Nature Conservancy Council.
- Scottish Natural Heritage (Online) Interactive mapping
- Stace. C. A, '*New Flora of the British Isles*' (1997), Cambridge University Press.

APPENDIX 1 – LEGISLATION AND POLICY SUMMARY

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Legislation for Habitats/Sites

Designated Site/Habitat	Status
Ramsar Sites	Ramsar Sites are wetlands of international importance designated following The Ramsar Convention. RAMSAR sites have the same level of protection as SSSIs under the Wildlife and Countryside Act 1981 (as amended).
SPA (Special Protection Areas)	SPAs are classified in accordance with Article 4 of the EC Directive on the Conservation of Wild Birds (79/409/EEC), the Birds Directive. They are they seek to protect the habitats of rare and vulnerable birds, listed in Annex I of the Birds Directive, and for regularly occurring migratory species. The Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010 implement the Birds Directive in the UK.
SAC (Special Areas for Conservation)	SACs are strictly protected areas which represent typical European Union of habitats and (non-bird) species listed in Annexes I and II of the EC Habitats Directive. The Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010 implement the Habitats Directive in the UK.
SSSI (Sites of Special Scientific Interest)	SSSIs protect the best examples of the UK's flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were renotified under the Wildlife and Countryside Act 1981 (as amended). Modified provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000.
NNR (National Nature Reserves)	NNRs are examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. NNRs are declared by the statutory country conservation agencies under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 (as amended). Legal protection of NNRs is provided under The Wildlife and Countryside Act 1981 (as amended).
Hedgerows	All hedgerows are protected by the Hedgerows Regulations 1997, under which it is an offence to remove or destroy certain hedgerows without planning consent or permission from the Local Planning Authority. These regulations do not apply to any hedgerow within the curtilage of, or marking the boundary of the curtilage of, a dwelling house.
LNR (Local Nature Reserves)	Designated by the National Parks and Access to the Countryside Act 1949, LNRs may be declared for nature conservation by local authorities after consultation with the relevant statutory nature conservation agency. Legal protection of LNRs is provided under The Wildlife and Countryside Act 1981 (as amended).

Legislation for Species

Species	Legal Status
<i>European Legislation</i>	
Creeping Marshwort, Early Gentian, Fen Orchid, Floating-leaved Water Plantain, Killarney Fern, Lady's Slipper, Shore Dock, Slender Naiad, Yellow Marsh Saxifrage	Under the Conservation of Habitats and Species Regulations 2010 (and as amended), it is illegal to deliberately pick, collect, uproot or destroy any such species.
Bats, Dormouse, Otter, Wild Cat, Great Crested Newt, Natterjack Toad, Sand Lizard, Smooth Snake, Large Blue Butterfly	<p>These animals and their breeding sites or resting places are protected under Regulation 41 of the Conservation of Habitats and Species Regulations 2010 (and as amended), which makes it illegal to:</p> <ul style="list-style-type: none"> • Deliberately capture, injure or kill any such animal or to deliberately take or destroy their eggs; • Deliberately disturb⁴ such an animal; and • Damage or destroy a breeding site or resting place of such an animal. <p>European Protected Species (EPS) licenses can be granted by Natural England in respect of development to permit activities that would otherwise be unlawful under the Conservation Regulations, providing that the following 3 tests (set out in the EC Habitats Directive) are passed, namely:</p> <ul style="list-style-type: none"> • The development is for reasons of overriding public interest; • There is no satisfactory alternative; and • The favourable conservation status of the species concerned will be maintained and/or enhanced. <p>Under Regulation 9(5) of the Conservation Regulations, Planning Authorities have a duty to 'have regard to the requirements of the EC Habitats Directive' i.e. LPA's must consider the above 3 'tests' when determining whether Planning Permission should be granted for developments likely to cause an offence under the Conservation Regulations.</p>
<i>Domestic (UK) Legislations</i>	
Bats, Dormouse, Great Crested Newt, Heath Fritillary, High Brown Fritillary, Large Blue, Marsh Fritillary, Natterjack Toad, Pine Martin, Otter, Red Squirrel, Sand Lizard, Smooth Snake, Swallowtail, Water Vole, Wildcat	<p>These animals receive full protection under the Wildlife and Countryside Act 1981 (and as amended), which makes it illegal (subject to certain exceptions) to:</p> <ul style="list-style-type: none"> • Intentionally kill, injure or take any such animal; • Intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any such animal; and • Intentionally or recklessly disturb such animals while they occupy a place used for shelter or protection.

⁴ Under the Conservation Regulations, disturbance of protected animals includes in particular any disturbance which is likely to: (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young or to hibernate or migrate; (ii) significantly affect the local distribution or abundance of the species in question.

Species	Legal Status
Adder, Common Lizard, Grass Snake, Slow Worm, White-clawed Crayfish	These animals receive partial protection under The Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which provide protection against intentional killing or injury of any such animal.
Nesting Birds	All wild birds (as defined by the act) are protected under the Wildlife and Countryside Act 1981 (and as amended), which makes it illegal (subject to exceptions) to: <ul style="list-style-type: none"> • Intentionally kill, injure or take any wild bird; • Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.
WCA Schedule 1 listed Birds	Additional protection is provided to birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (and as amended). In addition to the offences detailed above relating to all wild birds, it is illegal to: <ul style="list-style-type: none"> • Intentionally or recklessly disturb any bird listed on Schedule 1, or their dependent young while nesting.
Badgers	The Protection of Badgers Act 1992 makes it illegal to wilfully kill or injure a Badger or attempt to do so and to intentionally or recklessly interfere with a Badger sett. This includes: <ul style="list-style-type: none"> • damaging or destroying an active sett; • obstructing access to a sett; and • disturbing a Badger while it is occupying a sett. <p>Licences can be granted to permit sett closure and/or disturbance between July and November inclusive (i.e. outside the sow pregnancy/birth period).</p>
Wild Mammals	The Wild Mammals (Protection) Act 1996 provides legal protection to all wild mammals (as defined by the act) against the following actions: mutilate, kick, beat, nail, or otherwise impale, stab, burn, stone, drown, crush, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.
<i>Invasive Species</i>	
WCA Schedule 9 listed animals (Part 1) and plants (part 2)	Certain species of plants and animals that do not naturally occur in Great Britain have become established in the wild and represent a threat to the natural fauna and flora. Section 14 of the Wildlife & Countryside Act prohibits the release of any animal species that are: <p style="text-align: center;"><i>“not ordinarily resident in and is not a regular visitor to Great Britain in a wild state”</i></p>

Scottish Planning Policy 2014

The following has been taken from the ‘A Natural, Resilient Place’ section of the Scottish Planning Policy 2014, and is relevant to the development:

Policy Principles

The planning system should:

- *facilitate positive change while maintaining and enhancing distinctive landscape character;*
- *conserve and enhance protected sites and species, taking account of the need to maintain healthy ecosystems and work with the natural processes which provide important services to communities;*
- *promote protection and improvement of the water environment, including rivers, lochs, estuaries, wetlands, coastal waters and groundwater, in a sustainable and co-ordinated way;*
- *seek to protect soils from damage such as erosion or compaction;*
- *protect and enhance ancient semi-natural woodland as an important and irreplaceable resource, together with other native or long-established woods, hedgerows and individual trees with high nature conservation or landscape value;*
- *seek benefits for biodiversity from new development where possible, including the restoration of degraded habitats and the avoidance of further fragmentation or isolation of habitats; and*
- *support opportunities for enjoying and learning about the natural environment.*

Delivery

Planning authorities, and all public bodies, have a duty under the Nature Conservation (Scotland) Act 2004 to further the conservation of biodiversity. This duty must be reflected in development plans and development management decisions. They also have a duty under the Water Environment and Water Services (Scotland) Act 2003 to protect and improve Scotland's water environment. The Scottish Government expects public bodies to apply the Principles for Sustainable Land Use, as set out in the Land Use Strategy, when taking significant decisions affecting the use of land.

Development Plans

International, national and locally designated areas and sites should be identified and afforded the appropriate level of protection in development plans. Reasons for local designation should be clearly explained and their function and continuing relevance considered when preparing plans. Buffer zones should not be established around areas designated for their natural heritage importance. Plans should set out the factors which will be taken into account in development management. The level of protection given to local designations should not be as high as that given to international or national designations.

Protected Species

The presence (or potential presence) of a legally protected species is an important consideration in decisions on planning applications. If there is evidence to suggest that a protected species is present on site or may be affected by a proposed development, steps must be taken to establish their presence. The level of protection afforded by legislation must be factored into the planning and design of the development and any impacts must be fully considered prior to the determination of the application. Certain activities – for example those involving European Protected Species as specified in the Conservation (Natural Habitats, &c.) Regulations 1994 and wild birds, protected animals and plants under the Wildlife and Countryside Act 1981 – may only be undertaken under licence. Following the introduction of the Wildlife and Natural Environment (Scotland) Act 2011, Scottish Natural Heritage is now responsible for the majority of wildlife licensing in Scotland.

Woodland

Ancient semi-natural woodland is an irreplaceable resource and, along with other woodlands, hedgerows and individual trees, especially veteran trees of high nature conservation and landscape value, should be protected from adverse impacts resulting from development.

Tree Preservation Orders⁵ can be used to protect individual trees and groups of trees considered important for amenity or their cultural or historic interest.

Where appropriate, planning authorities should seek opportunities to create new woodland and plant native trees in association with development. If a development would result in the severing or impairment of connectivity between important woodland habitats, workable mitigation measures should be identified and implemented, preferably linked to a wider green network (see also the section on green infrastructure).

The Scottish Government's Control of Woodland Removal Policy⁶ includes a presumption in favour of protecting woodland. Removal should only be permitted where it would achieve significant and clearly defined additional public benefits. Where woodland is removed in association with development, developers will generally be expected to provide compensatory planting. The criteria for determining the acceptability of woodland removal and further information on the implementation of the policy is explained in the Control of Woodland

⁵ www.scotland.gov.uk/Publications/2011/01/28152314/0

⁶ www.forestry.gov.uk/pdf/fcfc125.pdf/%24FILE/fcfc125.pdf

Removal Policy, and this should be taken into account when preparing development plans and determining planning applications.

APPENDIX 2 – HABITAT SUITABILITY INDEX AND POND DESCRIPTION

Habitat Suitability Index		Pond 1		Pond 2		Pond 3		Pond 4	
			SI value		SI value		SI value		SI value
SI1. Map location	A/B/C	B	0.50	B	0.50	B	0.50	B	0.50
SI2. Surface area	rectangle/ellipse/irregular	rectangle		rectangle		rectangle		irregular	
	length (m)								
	width (m)								
	OR estimate (m ²) if irregular								
	<i>area (m²) =</i>	800	0.98	800	0.98	800	0.98	800	0.98
SI3. Dessication rate	never/rarely/sometimes/frequently	never	0.90	never	0.90	never	0.90	never	0.90
SI4. Water quality	good/moderate/poor/bad	bad	0.01	bad	0.01	bad	0.01	bad	0.01
SI5. Shade	% of margin shaded 1m from bank	5	1.00	5	1.00	0	1.00	5	1.00
SI6. Waterfowl	absent/major/minor	absent	1.00	absent	1.00	absent	1.00	absent	1.00
SI7. Fish population	absent/possible/minor/major	absent	1.00	absent	1.00	absent	1.00	absent	1.00
SI8. Pond density	number of ponds within 1km	15	1.00	15	1.00	15	1.00	15	1.00
SI9. Terrestrial habitat	good/moderate/poor/isolated	poor	0.33	poor	0.33	poor	0.33	poor	0.33
SI10. Macrophyte cover	%	0	0.31	0	0.31	0	0.31	5	0.36
		HSI =	0.46	HSI =	0.46	HSI =	0.46	HSI =	0.47

Pond 5		Pond 6		Pond 7		Pond 8		Pond 9		Pond 10	
	SI value										
B	0.50										
rectangle		rectangle		ellipse		rectangle		rectangle		irregular	
900	0.97	1200	0.92	300	0.60	900	0.97	600	1.00	800	0.98
never	0.90	frequently	0.10								
bad	0.01	bad	0.01	bad	0.01	bad	0.01	poor	0.33	moderate	0.67
5	1.00	5	1.00	0	1.00	20	1.00	20	1.00	10	1.00
absent	1.00	absent	1.00	absent	1.00	minor	0.67	absent	1.00	absent	1.00
absent	1.00	possible	0.67								
15	1.00	15	1.00	15	1.00	15	1.00	15	1.00	15	1.00
poor	0.33	poor	0.33	poor	0.33	poor	0.33	isolated	0.01	moderate	0.67
0	0.31	20	0.51	0	0.31	10	0.41	10	0.41	5	0.36
HSI =	0.46	HSI =	0.48	HSI =	0.44	HSI =	0.46	HSI =	0.48	HSI =	0.59

POND DESCRIPTION AND PHOTOGRAPH	HSI 'SCORE'	
<p>POND 1 (P1)</p> <p>NS 47560 20275</p> <p>A MEDIUM SIZED, PERMANENT SETTLING POND, RETANGULAR IN SHAPE WITH EMBANKMENTS BEING SAMLL, STEEP AND WELL VEGETATED. THE POND CONTAINED NO AQUATIC VEGETATION AND BLACK IN COLOUR DUE TO THE RUN-OFF FROM THE ADJACENT COAL SITE.</p>		<p>0.46, POOR</p>
<p>POND 2 (P2)</p> <p>NS 47575 20242</p> <p>A MEDIUM SIZED, PERMANENT SETTLING POND, RETANGULAR IN SHAPE WITH EMBANKMENTS BEING SAMLL, STEEP AND WELL VEGETATED. THE POND CONTAINED NO AQUATIC VEGETATION AND BLACK IN COLOUR DUE TO THE RUN-OFF FROM THE ADJACENT COAL SITE.</p>		<p>0.46, POOR</p>
<p>POND 3 (P3)</p> <p>NS 47590 20248</p> <p>A MEDIUM SIZED, PERMANENT SETTLING POND, RETANGULAR IN SHAPE WITH EMBANKMENTS BEING SAMLL, STEEP AND WELL VEGETATED. THE POND CONTAINED NO AQUATIC VEGETATION AND BLACK IN COLOUR DUE TO THE RUN-OFF FROM THE ADJACENT COAL SITE.</p>		<p>0.46, POOR</p>
<p>POND 4 (P4)</p> <p>NS 47579 20282</p> <p>A MEDIUM SIZED, PERMANENT SETTLING POND, RETANGULAR IN SHAPE WITH EMBANKMENTS BEING SAMLL, STEEP AND WELL VEGETATED. THE POND CONTAINED MINIMAL AQUATIC VEGETATION AND BLACK IN COLOUR DUE TO THE RUN-OFF FROM THE ADJACENT COAL SITE.</p>		<p>0.47, POOR</p>

<p>POND 5 (P5)</p> <p>NS 47603 20290</p> <p>A MEDIUM SIZED, PERMANENT SETTLING POND, RETANGULAR IN SHAPE WITH EMBANKMENTS BEING SAMLL, STEEP AND WELL VEGETATED. THE POND CONTAINED NO AQUATIC VEGETATION AND WAS BLACK IN COLOUR DUE TO THE RUN-OFF FROM THE ADJACENT COAL SITE.</p>		<p>0.46, POOR</p>
<p>POND 6 (P6)</p> <p>NS 47620 20264</p> <p>A MEDIUM SIZED, PERMANENT SETTLING POND, RETANGULAR IN SHAPE WITH EMBANKMENTS BEING SAMLL, STEEP AND WELL VEGETATED. THE POND CONTAINED SOME AQUATIC VEGETATION IN THE FORM OF BULRUSH <i>CYPERACEAE SP.</i> THE WATER WAS BLACK IN COLOUR DUE TO THE RUN-OFF FROM THE ADJACENT COAL SITE.</p>		<p>0.48, POOR</p>
<p>POND 7 (P7)</p> <p>NS 47636 20303</p> <p>A MEDIUM SIZED, PERMANENT SETTLING POND, RETANGULAR IN SHAPE WITH EMBANKMENTS BEING SAMLL, STEEP AND WELL VEGETATED. THE POND CONTAINED NO AQUATIC VEGETATION AND WAS BLACK IN COLOUR DUE TO THE RUN-OFF FROM THE ADJACENT COAL SITE.</p>		<p>0.44, POOR</p>
<p>POND 8 (P8)</p> <p>NS 47655 20275</p> <p>A MEDIUM SIZED, PERMANENT SETTLING POND, ELLIPSE IN SHAPE WITH EMBANKMENTS BEING SAMLL, STEEP AND WELL VEGETATED. THE POND CONTAINED NO AQUATIC VEGETATION AND WAS BLACK IN COLOUR DUE TO THE RUN-OFF FROM THE ADJACENT COAL SITE.</p>		<p>0.46, POOR</p>

<p>POND 9 (P9)</p> <p>NS 47405 20289</p> <p>A MEDIUM SIZED PERMANENT SETTLING POND, RETANGULAR IN SHAPE WITH EMBANKMENTS BEING SAMLL, STEEP AND WELL VEGETATED. THE POND CONTAINED SOME AQUATIC VEGETATION IN THE FORM OF BULRUSH. THE WATER WAS BLACK IN COLOUR DUE TO THE RUN-OFF FROM THE ADJACENT COAL SITE.</p>		<p>0.48, POOR</p>
<p>POND 10 (P10)</p> <p>NS 47649 20199</p> <p>AN EPHEMARAL POND WHICH COULD BE PRESENT DUE TO HIGH RAINFALL. THERE WAS NO AQUATIC VEGETATION.</p>		<p>0.59 BELOW AVERAGE</p>