Wing Hall Farm P1-0668 & P1-069 – Ecology Letter Report	
Job reference & client	11202 District Level Licencing, Natural England
Ecologist	Philip Bych
Date of issue	23/11/2021

Background

This letter report provides the results of a site visit conducted on 15th October 2021, to assess any potential ecological impacts associated with the proposed pond construction as detailed below. The proposed location and size of the pond is shown on the site plans on the appended sheet.

Proposals

The creation of two ponds is proposed within an grazing field south of Wing and south of Rutland Water just off Grammas lane, Rutland (P1-068 & P1-069 as shown on Figure 1 & 2 in the Appendix). The pond dimensions will be approximately 300m^2 with a depth of up to 2m, but with a variety of different depths and shallow areas and gradually sloping banks. A wide swathe of terrestrial vegetation will be retained in a 10m wide buffer zone surrounding the pond. This surrounding buffer, created from the spoil will vegetate naturally. Hibernacula used for over wintering of Great Crested Newts will be created from existing spoil, clean brick sized rubble and stone and large logs laid north to south on the eastern side of pond P1-068 and western boundary of P1-069. The hibernacula will be covered with nutrient poor soil from the pond excavations and left to vegetate naturally.

Bot ponds will rely on rainwater and ground water. Both locations were chosen due to natural groundwater upwelling which the cows were churning into very deep mud pits. The creation of the ponds for the enhancement of the environment and specifically for Great Crested Newts (*Triturus cristatus*) (GCN) will also control and direct to ditches the natural spring water that causes occasional flooding.

The proposed location and size of the pond, spoil area, hibernacula, in-flow and overflow pipes and access route are shown on the figures in the Appendix.

An Ecological Clerk of Works (ECoW) shall supervise all works. Access for machinery will be along the existing farm track and along field margins. A tracked eight tonne excavator will be used to construct the pond.

Site Location and Description

The location of the proposed pond is on arable grassland south of Wing and south of Rutland Water just off Grammas Lane in Rutland, grid reference SK8899402405 (P1-068) & SK8901802486 (P1-069). The pond site is in the bottom field of Wing Hall farm on the edge of a southern facing slope. There is a small broadleaved woodland 300m to the west on the other side of Grammas Lane, 1000m from a stratigraphically important SSSI (Wing water treatment works) to the east, and 100m from an active railway line to the south with two existing ponds 50m to the south. The immediate land surrounding the site is mixed arable and grazing land with the eastern boundary hedge being in poor condition with large gaps which are fenced. The western boundary is a Stock fence. To the south is a 20m strip of scrub. Exact locations of both ponds can be seen on the location plans in the Appendix. The soil is predominately clay, and it is largely water-logged in both pond locations.

Figure 1:Proposed location of P1-069 (view south)

P1-068

This pond is to be located within the western margin of an arable field parcel, adjacent to a stock fence. The area proposed for the pond is always waterlogged and the cattle tend to churn the site into a mudhole destroying all of the vegetation. The arable parcel was cut at the time of the survey and few species could be identified; spear thistle (Cirsium vulgare), hairy bittercress (Cardamine hirsuta) and dandelion (Taraxacum officinale agg.) could be identified at such an early stage of growth. The eastern hedgerow is 70m outside of the working site. 3m in height and 2m wide and runs between two arable parcels. The hedgerow comprised predominantly blackthorn (Prunus spinosa) and hawthorn (Crataegus monogyna) with an understory of bramble (Rubus fruticosus agg), common nettle (Urtica dioica), false oatgrass (Arrhenatherum elatius) and cocks-foot (Dactylis glomerata

Figure 2: Proposed location of P1-069 (view south)

P1-069

This pond is to be located within the southern margin of a semi-improved grassland used for grazing cattle The area proposed for the pond is 70m south of P1-068 in the same field. It also has an area of running spring water and is always waterlogged, with the cattle churning the site into a mudhole destroying all of the vegetation. Species comprise; perennial rye (Lolium perenne), red clover (Trifolium pratense) and meadow buttercup (Ranunculus acris) with occasional creeping thistle (Cirsium arvense), common bent (Agrostis capillaris) and Timothy (Phleum pratense). A large overgrown hedge is located and scrub 20m from the pond on the southern boundary. This feature has not been managed in some time and reaches a height of 4m and a width of 3m. Species comprise; damson (Prunus domestica) and blackthorn with occasional hawthorn. The ground flora is predominantly limited to cocksfoot and common nettle.

Assessment and Conclusions

Designated Nature Conservation Sites

There are no designated nature conservation sites within the site, although stratigraphically important SSSI (Wing water treatment works) is located 1000m to the east of the site. The scrub hedge to the south of the ponds now acts as a valuable corridor for wildlife and creates good connectivity to the nearby existing ponds and greater green space. Due to the small scale and nature of the works it is considered that no impact will be caused to either pond site.

Habitats

Machinery will access the pond location via existing farm tracks and field margins, and a tracked excavator will be used to limit damage to the ground (access shown on Figure 1 in the Appendix). As such, there will be minimal impact to grassland field or other vegetation outside of the excavation area. No seeding of the area or buffer zone will be undertaken, and the vegetation will be left to regenerate naturally.

Floral Species

There are no protected or priority plant species within the site. There is no recorded or visible presence of any invasive non-native species nearby or within the work site.

Faunal and avian species

The site survey found no evidence of badger (*Meles meles*) within the work site or boundary. There was evidence of animal trails crossing the edges of the meadow possibly fox and/or deer along the western boundary as well as areas with rabbit burrows. In most cases this was hard to distinguish as the field is regularly grazed by cattle.

No trees will be impacted by the works, therefore there will be no disturbance to any potential bat roosting features or barn owl roost sites.

There will be a small area of grassland removed for P1-068 & P1-069, suitable for ground nesting birds these areas will be inspected by an ECoW prior to removal. Should any nests be found, an exclusion buffer would need to be established and works in these areas would have to cease until all chicks had fledged. The preferred timing of the works should be outside of the nesting season.

Neither pond area is currently suitable for breeding amphibians due to lack of any deep standing water. The grassland at the proposed locations offers some, albeit limited foraging and sheltering opportunities for amphibians. As such, under ECoW supervision any vegetation to be cleared will be first cut to a height of 15cm, after which the ECoW will conduct a fingertip search of the ground and remaining vegetation. Under ECoW supervision the turf of the proposed pond locations will be removed reduce its suitability for amphibians and reptiles. Any common amphibians or reptiles found will be moved out of the working area to suitable nearby habitat by the ECoW. If any great crested newt (Triturus cristatus) is found they will be moved by an appropriately qualified ECoW to suitable terrestrial habitat within 20m of where they were found (under a licence to disturb issued by Natural England, reference WML–OR59).

Conclusion

It is concluded that any potential ecological impacts will be minimal, as the works will be undertaken over a short time and an ECoW will conduct checks for breeding birds, reptiles and amphibians prior to works. Once the ponds are established, the habitats in the area will be enhanced for a variety of fauna. The ponds will have a range of shallows and deeper areas of open water, and areas of well-developed emergent vegetation to enhance the waterbodies further. The ponds will provide opportunities for breeding amphibians, including great crested newt, as well as invertebrates, such as dragonflies and damselflies, and the surrounding marginal vegetation will provide shelter and foraging habitat for reptiles and opportunities for pollinators. The hibernaculum (to be created using the excavated materials) will be west and south-facing providing warm, sunny banks for basking fauna. Cleared vegetation will be combined within the hibernacula to provide hibernation and shelter habitat for a variety of fauna, including great crested newt

Appendix: Site Location (*Fig 1*) and Plans (*Fig 2*)

Figure 1

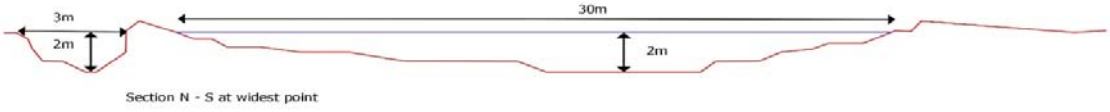
Site Location Plan 1:7000 for Proposed Ponds at Wing Hall Farm, Rutland

Site/Block Plan 1:2500 for Proposed Ponds at Wing Hall Farm, Rutland

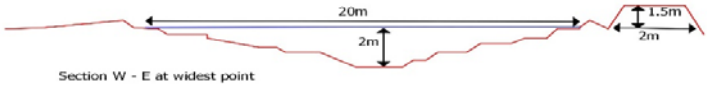
Figure 2

Figure 3

Cross section drawings of Pond P1-068 Wing Hall Farm, Rutland



Section N - S at widest point



Section W - E at widest point

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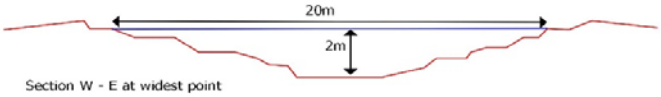
Figure 4

Cross section drawings of Pond P1-069 Wing Hall Farm, Rutland

Section NE - SW at widest point



Section W - E at widest point

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