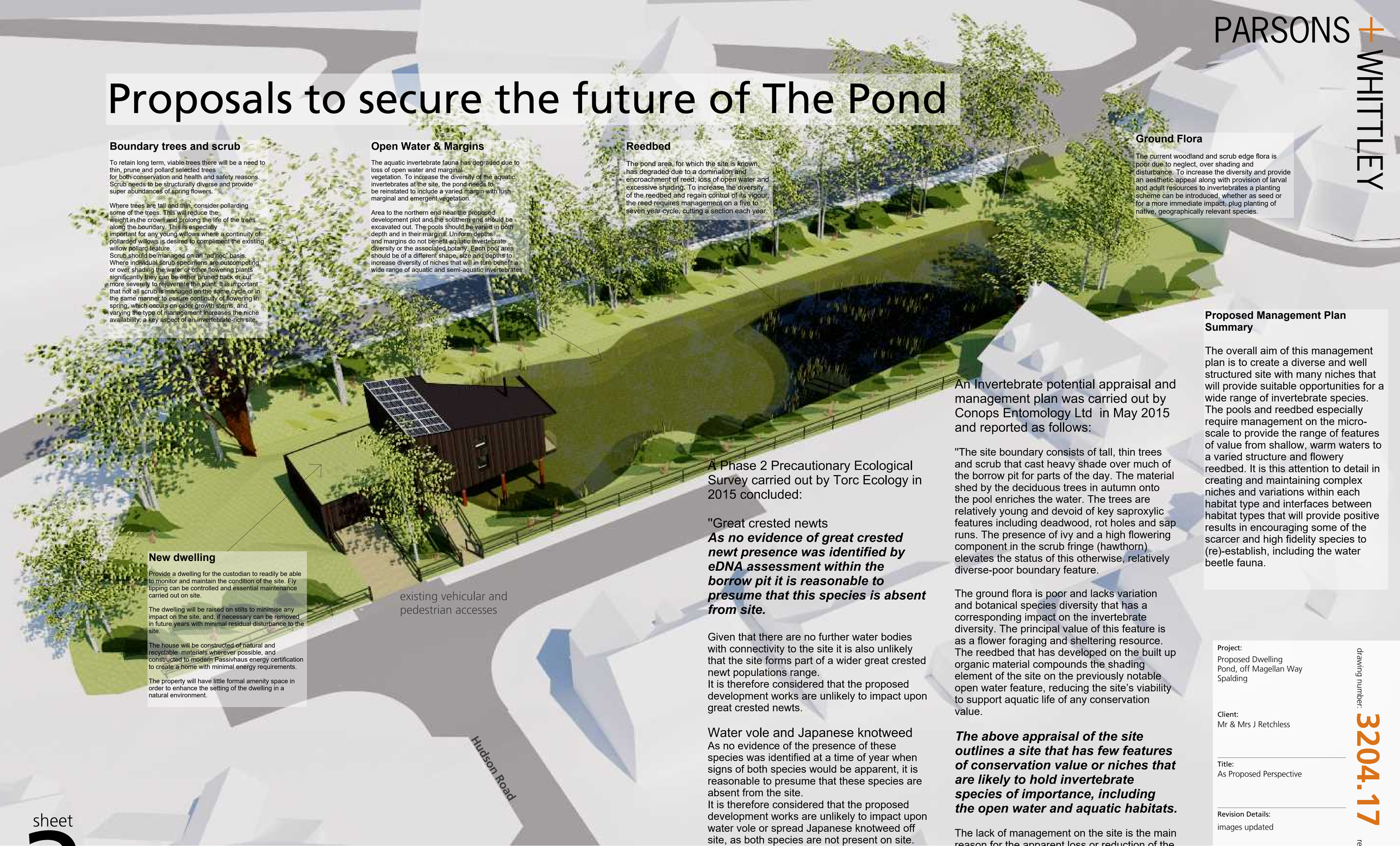
PARSONS + WHITTLEY

Proposals to secure the future of The Pond



Boundary trees and scrub

To retain long term, viable trees there will be a need to thin, prune and pollard selected trees for both conservation and health and safety reasons. Scrub needs to be structurally diverse and provide super abundances of spring flowers.

Where trees are tall and thin, consider pollarding some of the trees. This will reduce the weight in the crown and prolong the life of the trees along the boundary. This is especially important for any young willows where a continuity of pollarded willows is desired to compliment the existing willow pollard feature.
Scrub should be managed on an "ad'hoc" basis. Where individual scrub specimens are outcompeting or over shading the water or other flowering plants significantly they can be either pruned back or cut more severely to rejuvenate the plant. It is important that not all scrub is managed on the same cycle or in the same manner to ensure continuity of flowering in spring, which occurs on older growth stems, and varying the type of management increases the niche availability, a key aspect of an invertebrate-rich site.

Open Water & Margins

The aquatic invertebrate fauna has degraded due to loss of open water and marginal vegetation. To increase the diversity of the aquatic invertebrates at the site, the pond needs to be reinstated to include a varied margin with lush marginal and emergent vegetation.

Area to the northern end near the proposed development plot and the southern end should be excavated out. The pools should be varied in both depth and in their margins. Uniform depths and margins do not benefit aquatic invertebrate diversity or the associated botany. Each pool area should be of a different shape, size and depths to increase diversity of niches that will in turn benefit a wide range of aquatic and semi-aquatic invertebrates.

Reedbed

The pond area, for which the site is known, has degraded due to a domination and encroachment of reed, loss of open water and excessive shading. To increase the diversity of the reedbed and regain control of its vigour, the reed requires management on a five to seven year cycle, cutting a section each year.

Ground Flora

The current woodland and scrub edge flora is poor due to neglect, over shading and disturbance. To increase the diversity and provide an aesthetic appeal along with provision of larval and adult resources to invertebrates a planting scheme can be introduced, whether as seed or for a more immediate impact, plug planting of native, geographically relevant species.

New dwelling

Provide a dwelling for the custodian to readily be able to monitor and maintain the condition of the site. Fly tipping can be controlled and essential maintenance carried out on site.

The dwelling will be raised on stilts to minimise any impact on the site, and, if necessary can be removed in future years with minimal residual disturbance to the site.

The house will be constructed of natural and recyclable materials wherever possible, and constructed to modern Passivhaus energy certification to create a home with minimal energy requirements.

The property will have little formal amenity space in order to enhance the setting of the dwelling in a natural environment.

A Phase 2 Precautionary Ecological Survey carried out by Torc Ecology in 2015 concluded:

"Great crested newts
As no evidence of great crested newt presence was identified by eDNA assessment within the borrow pit it is reasonable to presume that this species is absent from site.

Given that there are no further water bodies with connectivity to the site it is also unlikely that the site forms part of a wider great crested newt populations range.
It is therefore considered that the proposed development works are unlikely to impact upon great crested newts.

Water vole and Japanese knotweed

As no evidence of the presence of these species was identified at a time of year when signs of both species would be apparent, it is reasonable to presume that these species are absent from the site.
It is therefore considered that the proposed development works are unlikely to impact upon water vole or spread Japanese knotweed off site, as both species are not present on site.

Impact of arboricultural works on bats/bat roosts

As the proposed arboricultural works will not involve working on the features considered suitable for use by roosting bats these works are therefore considered unlikely to significantly impact upon bat roosts (if present), provided suitable precautions are followed during works."

An Invertebrate potential appraisal and management plan was carried out by Conops Entomology Ltd in May 2015 and reported as follows:

"The site boundary consists of tall, thin trees and scrub that cast heavy shade over much of the borrow pit for parts of the day. The material shed by the deciduous trees in autumn onto the pool enriches the water. The trees are relatively young and devoid of key saproxylic features including deadwood, rot holes and sap runs. The presence of ivy and a high flowering component in the scrub fringe (hawthorn) elevates the status of this otherwise, relatively diverse-poor boundary feature.

The ground flora is poor and lacks variation and botanical species diversity that has a corresponding impact on the invertebrate diversity. The principal value of this feature is as a flower foraging and sheltering resource. The reedbed that has developed on the built up organic material compounds the shading element of the site on the previously notable open water feature, reducing the site's viability to support aquatic life of any conservation value.

The above appraisal of the site outlines a site that has few features of conservation value or niches that are likely to hold invertebrate species of importance, including the open water and aquatic habitats.

The lack of management on the site is the main reason for the apparent loss or reduction of the previously noted invertebrate species and also the overall degradation of high fidelity assemblages of importance.

To reinstate the open water element of the site and increase the site's value again it is proposed that a programme of on-site management options are delivered to raise the site's invertebrate status."

Proposed Management Plan Summary

The overall aim of this management plan is to create a diverse and well structured site with many niches that will provide suitable opportunities for a wide range of invertebrate species. The pools and reedbed especially require management on the micro-scale to provide the range of features of value from shallow, warm waters to a varied structure and flowery reedbed. It is this attention to detail in creating and maintaining complex niches and variations within each habitat type and interfaces between habitat types that will provide positive results in encouraging some of the scarcer and high fidelity species to (re)-establish, including the water beetle fauna.

Project:
Proposed Dwelling
Pond, off Magellan Way
Spalding

Client:
Mr & Mrs J Retchless

Title:
As Proposed Perspective

Revision Details:
images updated

Issue Date: 04-04-17

drawing number: 3204.17 rev: A size: A1

Parsons + Whittley Ltd Architects
1 London Street, Swaffham
Norfolk, PE37 7DD
Phone: 01760 722000
email: info@parsonswhittley.co.uk
web: www.parsonswhittley.co.uk

RIBA Chartered Practice

This line measures 200mm in length when printed correctly