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GLA Consultation on Revisions submitted by All England Lawn Tennis Ground plc to Planning Application LB Merton Ref 21/P2900 LB Wandsworth 2021/3609 Wimbledon Park Golf Club, Home Park Road SW19 7HR
(GLA Stage III Mayoral Call in Ref: 2024/0045/S3 and 2024/0047/S3)

Rebuttal of claimed biodiversity benefits of AELTC's proposed intensive tennis development

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Executive summary

The developer asserts that their proposals meet the statutory planning requirements that developments should achieve Biodiversity Net Gain (BNG) and surpass the threshold value for Urban Greening (UG).

We show that there are many errors and omissions and much wishful thinking in the developer's consideration of biodiversity in their planning application documents which mean that the proposals fail to protect Irreplaceable Habitat and could not achieve net gain nor meet the London Plan guidance for Urban Greening.

The developer's net gain calculation fails six of the nine checklist tests for compliance with the statutory BNG guidance.

Independent, expert calculations show that the developer's claimed 23% Biodiversity Net Gain is, in fact, a 36% Biodiversity Net Loss. This substantial net loss is a significant material consideration which we are hereby bringing to the attention of the Greater London Authority and any other planning decision-maker.

Since significant harm (a 36% loss) to biodiversity has now been established, and since Wimbledon Park golf course is an **Irreplaceable Habitat, planning policy requires the planning decision-maker to refuse permission. We respectfully request the Deputy Mayor to refuse this application accordingly.**

The proposals would cause the Urban Greening Factor to decline from the present 0.99 down to between 0.82 and 0.70, so failing to meet the London Plan Guidance.

The developer's main errors were failure to find that:

- The Wimbledon Park golf course, with its many Veteran English Oaks, is a remnant ancient Parkland, specially protected in national planning policy as an **Irreplaceable Habitat**. The proposed intensive tennis development would cause large-scale and irreversible loss of this.
- Existing old hawthorn Hedgerows with trees would be destroyed. The new hedges proposed by the developer are insufficient to compensate for the loss of this Priority Habitat.
- Some degraded Acid Grassland would be destroyed, sacrificing the opportunity to restore Priority Habitat.
- The Wet Woodland (Carr) around the lakeside, again a Priority Habitat, would be destroyed in its entirety by the proposed new reedbeds and the proposed replacement is insufficient.
- The water quality in Wimbledon Park Lake is threatened by the proposed method of sediment removal, harming specially protected species.
- The welcome "daylighting" of two tributary brooks and the new reedbeds will not prevent polluting sediment and nutrients entering the lake and water quality will not be ameliorated.
- The proposed public access *over* the lake would disturb sensitive species. The preferable alternative of screened access *around* the lake is not explored.

The developer's BNG calculation was invalid because it failed to recognise that the ex-golf course is an **Irreplaceable Habitat**, ancient Wood-pasture and Parkland, which is given great protection and so cannot be traded for lesser habitats. It is this that accounts for most of the Biodiversity Net Loss. There is also a significant loss of National Priority Wet Woodland (Carr). A further loss comes from failure to account for the phasing of the development. Whilst welcome, the tiny gains from "daylighting" two short lengths of brook and a little planting in the public park will be dwarfed by the net losses of ancient Parkland habitat. Proposals for lake water quality are infeasible and lead to the developer claiming illusory gains. These errors mean that planning authorities should reject the developer's claims for BNG. To do otherwise would pervert the government's clear intention, as expressed through legislation, to protect UK habitat in the face of the climate change and biodiversity crisis.

This Rebuttal of claimed biodiversity benefits is submitted in coordination with representations from Save Wimbledon Park in its paper dated 8th June 2024 and additional expert submissions of the same date from Richard Rees RIBA (addressing Green Belt Policy, Very Special Circumstances and "Need") from Mark Service (providing a Heritage Assessment) and from Parkside Residents and their chair Sue Cooke (addressing Social, Community and Economic Benefits).

PDF Condition Sheets for Ashen Grove Wood, Athletics Lombardy Poplar, Lake, Parkland, Reedbed and Wet Woodland, and Excel Statutory Biodiversity Metric Calculation Tool are submitted to the GLA along with this paper by separate email.

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Introduction

This representation has been prepared by Dr D. G. Dawson. He is a professional applied environmental scientist, specialising in environmental methodologies. He worked on environment, biodiversity, ecology, and nature conservation for London government from 1983 until 2006 and was joint Head of the Mayor of London's Environment Group. In that work, he developed Sites of Importance for Nature Conservation and Areas of Deficiency in Access to Nature and led work on the Mayor's Biodiversity Strategy for London. He has extensive experience in developing, testing and using ecological methods and with the conservation and evaluation of biodiversity in statutory planning. He has prepared in-depth reviews on these subjects and lectured on them at international scientific conferences and to professional associations. He lives in the area and has taken a keen interest in Wimbledon Park flora and fauna, studying it for 40 years.

In July 2021, AELTC applied for planning permission for an intensive tennis development on the Wimbledon Park Golf Course and Lake[1]. The planning application documents included a detailed BNG calculation and an accompanying report. This representation tests the AELTC assertions on Biodiversity Net Gain and Urban Greening.

Policy Context

The National Planning Policy Framework (NPPF) has long sought the protection of Irreplaceable Habitats and measurable net gains for biodiversity[2].

Protection of Irreplaceable Habitats

The NPPF requires that development resulting in the loss or deterioration of Irreplaceable Habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists. Ancient Wood Pasture and Parkland are included within the definition of ancient woodland and are to be treated the same when making planning decisions[3]. The ex-golf course is Ancient Parkland and so qualifies for this protection, see the section on this habitat type below.

Biodiversity Net Gain (BNG)

As required by the NPPF, BNG policies have been introduced into the London Plan and the two Local Plans[4]. When the planning application was made in 2021, the Environment Bill was passing through parliament[5] and the Act received Royal Assent in November that year. It amended the Planning Act 1990 to introduce a mandatory 10% Biodiversity Net Gain, calculated with a biodiversity metric[6]. In March 2023, the national BNG procedures were revised significantly[7] in anticipation of the forthcoming mandatory requirement. This 2023 version was the basis for the final, statutory metric, User Guide and ancillary material published in February 2024. This revision to the Act made BNG a statutory requirement and the procedures to meet the requirement were brought into force in February 2024.

Urban Greening (UG)

Urban Greening is a London Policy. It was mooted in 2017 and saw the light of day in the Mayor of London's Environment Strategy of 2018. Urban Greening is required by the 2021 London Plan Policy G5, with the aim to increase green cover for a range of environmental benefits, including, *health, climate change adaption and biodiversity conservation*.[8] UG policies were introduced in the two local plans[9]. Where development is proposed on a Site of Importance for Nature Conservation, as is the case with Wimbledon Park, the London Plan Guidance on UG requires *an overall gain in biodiversity*[10]. However,

the requirements and protocol of UG extend beyond biodiversity[11] and therefore need to be attended to in addition to biodiversity net gain considerations.

Net gain/loss calculations

By	*AELTC*	*AELTC*	*AELTC*	*This representation*
Date	July 2021	May 2022[12]	April 2024	May 2024
Metric version	2.0[13]	3.1[14]	3.1[15]	Statutory[16]
Area baseline habitat units	222	230	167	807
Area prediction habitat units	244 (10% gain)	260 (13% gain)	205 (23% gain)	518 (36% loss)
Hedge baseline units	32	33	41	3.1
Hedge prediction units	36 (13% gain)	48 (45% gain)	49 (19% gain)	4.8 (57% gain)
Rivers baseline units	0	0	0	0.5
Rivers prediction units	1	1	1	1.6 (200% gain)

Table 1. The three AELTC metric results, and ours

In July 2021, AELTC applied for planning permission for intensive tennis development on Wimbledon Park Golf Course and Lake. The planning application documents included a detailed BNG calculation and an accompanying report. AELTC revised the calculation ten months later, in May 2022, using the newly published version 3.1 of the metric, but no consequential revisions were posted by the two planning authorities for the BNG report, nor the Environmental Statement. AELTC erroneously presented their BNG calculations as proof that the proposals would result in a long-term gain, and made much of this claim[17], which seems to have been accepted uncritically by the Greater London

Authority at stage 1, without any opportunity for independent review or challenge[18]. However, the calculations *were* challenged in independent representations[19]. Then, in May 2024, AELTC submitted a new and radically different BNG metric in close co-operation with London Wildlife Trust[20]. However, this was in fact prepared using the now long superseded metric that was current in May 2022 and without adequate detail of the basis for the calculation[21]. We have prepared calculations based upon adequate detail and the UK Government's February 2024 metric and guidance, to give substance to our previous challenges and to provide calculations that follow the statutory standard[22]. In contrast, AELTC have chosen not to employ the statutory standard.

The majority of the planning application site, the ex-golf course, woodlands, wetlands and lake constitute "Area habitats". Table 1 gives the results of the four BNG metric calculations, showing a radical difference between the three AELTC claims and ours. We found that AELTC consistently underestimated the present value of the site: our baseline figure is over three times the AELTC figures. Largely as a result of this baseline difference, the net gain figures were greatly different:

AELTC claimed a 23% gain from their proposals. Independent, up-to-date, expert assessment, using the correct statutory procedure[23], calculated a Biodiversity Net Loss of 36%. This substantial net loss is a serious failure to achieve Best Practice Principles 5 and 6. It is also a significant material consideration. Whilst it is unfortunate that this significant error was not picked up by the Greater London Authority at stage 1, the GLA now has the opportunity to review the developer's claims critically and in depth.

Hedgerows and Brooks are accounted for separately in the metric. Because AELTC accounted for Parkland trees incorrectly, AELTC's baseline and predicted hedge units fall significantly short of those presented here, which were calculated using statutory best practice.

AELTC omitted an existing short length of brook and calculated that their proposals would provide a tiny gain: a single new "River unit". We took the existing brook into account and agreed that there would be a tiny biodiversity gain from the "daylighting" of two tributaries.

There is much technical detail underlying these BNG calculations, which is provided in Appendix I.

The Oxford University/Agile Checklist

In June 2023 an expert group, the Oxford University Agile Initiative, published a checklist focussed on what to do when a Biodiversity Gain Plan is submitted for a new development[24]. This was based in extensive experience, which discovered a worryingly great number of basic errors in metric calculations, and infeasible habitat creation proposals. They found that 21% of planning applications contained errors in their metric calculations. Half of these erroneous applications had been accepted by planning authorities. The checklist detailed the most common mistakes and pitfalls in planning applications, and how they can be detected.

The nine checklist items relating to the biodiversity gain metric are tabulated below, with a brief commentary on how AELTC's May 2024 metric performed. This serves to summarise where our independent, expert application of the metric[25] has illuminated the good and bad aspects of AELTC's process.

Checklist item[26]	**Pass?**	**Commentary**

1. Does the spreadsheet contain automatically identified errors?	**X**	The AELTC metric warned that trading rules were not satisfied as a habitat change was negative when required to be at least zero, if not positive[27]. The area cross check on site habitat creation failed.
2. What's being done for Irreplaceable Habitats?[28]	**X**	The 0.4ha of the Ancient Ashen Grove Wood is retained, so meeting the national planning requirement. However, the whole 28ha of Ancient Parkland is to be destroyed. As expected for an Irreplaceable Habitat the replacement habitats are not of the required high distinctiveness. Veteran trees are retained, as required, but the future of the veteran Crack Willows is not explicit.[29]
3. Where has the redline boundary been placed?	**X**	A minor incursion into the public Wimbledon Park in the north includes much of the existing perimeter path there. This is a mistake. Although much of Church Road is included, correctly, within the red line, the habitats there seem not to have been identified in the calculations.
4. Do the data add up?	**X**	The maps do not locate the habitat parcel numbers, making it impossible to find a one-to-one match of biodiversity features with the condition sheets and metric. "UKHab" and other floral survey data are not given for each parcel, so the documentation is questionable and deficient.
5. Is the proposal supporting strategic priorities?	✓	Yes. The whole redline area falls within a Site of Importance for Nature Conservation, so most of the proposals support these priorities, but inadequately. The off-site proposals are treated appropriately.
6. Are the proposed actions feasible?	✓**X**	The claimed future condition of veteran trees and the lake are not supported by explicit, realistic, authoritative, management proposals. We welcome the dropping of the unrealistic proposal to create Acid Grassland, so that AELTC finally agrees with our earlier representations, but no information is given on the alternative. There is no formal design drawing for the proposed offsite habitat creation and enhancement, preventing their evaluation.
7. Is the proposal realistic?	**X**	See checklist item 6.
8. Are there meaningful efforts to avoid impacting existing habitats?[30]	**X**	The proposals are for removal of almost all of the existing soils and vegetation, requiring their replacement from scratch[31]. The main four existing habitats to be sacrificed are: 1. The proposed destruction of existing degraded lowland meadows, which sacrifices the opportunity to retain and enhance them, as the basis for continuing the Parkland. 2. The failure to retain and enhance existing Carr (Wet Woodland) sacrificing a National Priority Habitat. The small area proposed for new Carr is far from compensatory. 3. The total replacement of existing swamps and reedbeds needlessly sacrifices existing value.

		4. The loss of existing peripheral woodland and replacement with new woodland planting sacrifices an existing habitat of great potential.
9. Is there an ongoing plan for management and monitoring?	**X**✓	There is no detailed plan, just the promise that one will be adopted and a few headlines.

So, consideration of the Oxford University/Agile checklist shows that AELTC's net gain metric fails at least six of the nine tests for compliance with the statutory guidance.

Data

Professional guidance on survey for biodiversity site evaluation[32] is that results will generally remain current over three years or more, provided that no significant change has occurred to habitats or their management. In our case a significant change is the cessation of golf course management. This change requires detailed resurvey of grasslands. The elapsed time also requires the precaution of update surveys of badgers and bats. Further survey is needed of trees because the tree schedule has never met the requirements of BS5837 and continuing tree felling since 2021 requires an update. Otherwise, surveys completed to an adequate standard since 2017 should remain current. AELTC commissioned further survey of the vegetation in August 2022[33], which was not an auspicious time as it was in the midst of a record summer drought[34], so that many species would be unusually difficult to discover. The results of this further AELTC survey have not been posted up by the planning authorities.

Our data, used in earlier representations and this one, were very largely obtained since 2017[35]. These data include many observations up to date, so adding data for the three years since completion of the AELTC surveys. So, our data meet the professional guidance on data currency. These data have been lodged with Greenspace Information for Greater London, or were published in recent, professional reports and representations, including this one. These data gave us, and will give the independent reader of this paper, ample information to judge the status of species and habitats of the site.

Checklist item 4 (above) states that the raw data for habitat parcels which feed into the metric score should be provided[36]. Our data were available and employed in our independent BNG calculations, but the AELTC BNG reports gave few or no data specific to the habitat parcels and the assessment of their condition (this is detailed in the appendices below).

Given this failure of AELTC to match the requirement of Checklist item 4, we sought sight of AELTC's survey data first in April 2021 and repeatedly afterwards, and this was promised[37], but never provided. So, we wrote to AELTC in January 2022, seeking an exchange of survey data. This was refused, and AELTC's reply gave their reason as that "*All the conclusions drawn within our planning documents are supported by the appropriate surveys and data…. This information can be found within the planning application documents".* The email listed these documents, which was an identical list to that in AELTC's Environmental Statement and so already known by us to fail the checklist requirement[38].

We submit that our data have been published or lodged with Greenspace Information for Greater London and suffice for the statutory BNG metric, whereas AELTC has failed to provide data adequate to justify their BNG metric.

AELTC's three BNG metric calculations

AELTC relied upon the calculations submitted with the planning application in July 2021 for their claims of biodiversity benefit (see table 1). Both these first and the second (May 2022) calculations have now been abandoned and replaced by the May 2024 calculations, which involved a radical revision of the proposals. However, there have been few revisions to the original planning documents to update them for major changes, such as the dropping of the proposals to "create" Acid Grasslands and acid woodlands and to create new peripheral shrub habitats[39]. The radically revised calculation is slightly more realistic than were the first two[40]. So, the biodiversity vision is at odds with the current detailed biodiversity proposals.

The May 2024 BNG Assessment was the first to be accompanied by plans. However, there are many discrepancies in the maps of existing and proposed habitats, which make it difficult or impossible to ascertain many details underlying the calculations. For example, the number of veteran trees indicated differs greatly between Figures 1, 2 and 3, and a length of Church Road of about 1ha in area is included in the planning application and shown as "developed land sealed surfaces" on the baseline habitat plan, but not on the proposals habitat plan[41].

Most of the scattered trees on the ex-golf course were treated as being in tree lines but, inconsistently, no paths were treated as built linear features. Most of these "tree lines" reflect clearance of trees which once occurred on the tees, fairways and greens of the ex-golf course, followed by planting away from those features, not the planting of avenues. Most fit the definition of scattered trees better than that of tree lines and we have treated them as such[42]. This has the considerable advantage of treating all the scattered trees in one evaluation, avoiding the spaghetti of 30 tree lines.

Habitat by habitat analysis

The topics below examine the basis for the AELTC claims of biodiversity benefit, with special reference to planning policy, Priority Habitats, Priority Species, Biodiversity gain or loss and Urban Greening[43]. These are technical matters, on which Dr Dawson is amply qualified to provide an expert commentary. We consider each aspect of the biodiversity value below.

Ancient Wood-pasture and Parkland and veteran trees

There was a deer park here in Tudor times when a new park was developed around and north of the Manor house. The present-day heritage landscape dates back to 1766, when "Capability" Brown incorporated it into a larger, landscaped park for Earl Spencer. This incorporated the previous deer park, including pasture, some pre-existing woodland and scattered trees. The park was grazed by cattle, sheep and horses for over 100 years before golf course management began in 1898. All but 15% of the park was lost to suburban development between 1846 and 1925 and to the existing AELTC development west of Church Road after 1922. In the 20th century, grazing was replaced by mowing, but many ancient and veteran trees survived in a grassland matrix until today[44].

"Wood-pasture and Parkland" is a UK national Priority Habitat[45], and is protected by national and local policies[46]. Beyond that, our Parkland is Ancient, which would make it an Irreplaceable Habitat and afford it the highest level of protection in planning[47]. The habitat was there in AD1600 and there has been a continuity of scattered trees in pasture since then. At least one tree, the Tudor Oak, dates back before AD1600[48]. As a rare habitat, there is no quality cut-off in the national description. As on the ex-golf course, Parkland often originated as landscaped Parkland, with grass grazed by animals, and with

scattered trees, clumps of trees, woodland, lakes, rivers and ponds. The whole Wimbledon Park heritage landscape is regarded by English Nature as Wood Pasture and Parkland[49]. The national priority definition states that "…. *for Parklands to be included within the scope of the [Priority Habitat] they must contain some ancient or veteran trees.*" The BNG metric employs the UKhab definition of the Parkland Priority Habitat, which neither requires the presence of grazing animals nor that the grassland component is of any particular condition (habitat "22" in the classification). Finding that AELTC was citing erroneous criteria for identifying Parkland we sought an independent, expert view. The response has been set out in endnotes[50]. The history and good number of veteran trees here satisfy essential criteria for identifying the whole golf course as Parkland, and hence as a National Priority Habitat. The components of Parkland constitute a "mosaic" habitat, which is evaluated as a whole. The entire ex-golf course, except for a few buildings, car parks, surfaces and pathways fits the national priority description, so the ex-golf course has nearly 30ha of UK Parkland Priority Habitat.

The Ancient Parkland has suffered from unsympathetic management, causing harm to both the grasslands[51] and trees[52] and a small amount of land-recontouring. Nevertheless, it retains typical features of Parkland, as described in the national Priority Habitat description, the UK Habitat Classification and criteria for selecting Sites of Special Scientific Interest [53], as follows. It is predominantly open grassland originating as a designed landscape. Although it has been used as amenity land, it retains a good number of veteran Oak trees of nature conservation interest and characteristic wood-pasture and Parkland species are present, including specialist fungi, invertebrates of dead wood (saproxylic), lichens, mosses and liverworts, Parkland birds, roosting, breeding and feeding bats. It has tree regeneration, providing structural diversity and the next generation of trees.

Fungi, saproxylic invertebrates and hole-nesting birds were listed as present on site in AELTC's Environmental Impact Assessment desk study and confirmed in subsequent AELTC surveys. Eight species of bat occur[54]. Hole nesting birds include: Stock Dove, Jackdaw, Kestrel, Nuthatch, Great Tit, Blue Tit, Coal Tit, Tawny Owl, Little Owl, Green Woodpecker, Great-spotted Woodpecker, Ring-necked Parakeet, House Sparrow and Starling[55].

AELTC claims that most of the grassland had lost its species-rich acid character and had been seeded and selected for amenity and recreational use as golf fairways[56]. This would not prevent its inclusion within the Parkland, but in fact, much "semi-improved" grassland survives, with structural and species diversity, as is documented in planning representations and in AELTC's "Phase I" survey[57]. Our Appendix reviews information on the grasslands and shows that:

1. AELTC's surveys were seriously deficient, in failing to identify 75% of the species.
2. Most of the grasslands are semi-improved meadows of neutral soils and there is only one small area of degraded Acid Grassland.
3. Improved grasslands are found on the ex-fairways, greens and tees and are in the minority.

Unlike us, AELTC failed to heed the national definition of Parkland and now identify no existing Parkland Priority Habitat. They previously identified a small area around each veteran oak as Parkland, but this most odd specification was dropped in the May 2024 amended BNG Assessment. They propose now to protect only the 35 veteran Oak trees scattered in the grassland as isolated features. AELTC's failure to see the Parkland allows them to plan to destroy 30ha of grassland, scrub and woodland and claim a biodiversity gain from the creation of Parkland where they have destroyed it[58].

AELTC claims to have "management plans for each veteran oak" but they have failed to make these public, despite requests, and so there is no assurance that any particular action is planned or will take place to conserve these irreplaceable features[59].

Unlike AELTC, we apply the accepted definition of Parkland and conclude that the site, with its many veteran English Oaks, is a remnant Ancient Parkland, specially protected in national planning policy.

Soil is to be stripped across the whole of the ex-golf course[60] and replaced by new soil, so destroying all the Ancient Parkland.

In the 10ha of the proposed private park in the south of the ex-golf course, the plan is to preserve all 14 veteran oaks and some of the other trees. The "creation" there of new grassland, woodland, scrub, scattered trees and water features may eventually result in a return of the lost components of the Parkland mosaic, but there is no assurance that this will be so, and the replacement trees will take 40 years or more to reach maturity. Just when the grassland matrix will recover, allowing a poor Parkland to return is guesswork.

The same treatment is proposed for the 20ha tennis area. Here, however, most of the replacement will be with 10ha of no biodiversity value: entrance zones, roads, paths, the "show court", other buildings, Church Road and the intensively managed courts[61]; and with areas of low biodiversity value: the 5ha of amenity grassland. Grassland of greater value, woodland and water features will occupy about 5ha, well under half of the area. At best there would be some 10ha with any chance of recovering Parkland value and this will be subdivided and disturbed by the rest. Whether the ultimate value of these decimated Parkland fragments could ever be considered Parkland again is not clear. To be kind to AELTC, our calculation has allowed 10ha of Parkland creation in this area. The whole tennis area could equally have been counted as a complete loss of Ancient Parkland followed by the creation of a suburban mosaic of developed and natural surface[62].

So, the intensive tennis development would greatly harm most of the Ancient Parkland. The National Planning policy is that this should not be permitted unless there are wholly exceptional reasons.

The loss of Ancient Parkland also constitutes a significant "trading down" of biodiversity value, contrary to BNG Good Practice principle 6, leading to a significant loss of biodiversity habitat.

Woodlands and scattered trees

Dr Dawson's earlier representation on trees and woodlands[63] puts these into perspective and should be consulted for the detail.

Half of the ancient Ashen Grove Wood lies in the eastern extremity of the site, beside the golf clubhouse, the other half being within the adjacent public park. Ancient woodland is given the same special protection in planning as is Ancient Parkland (see above). Although tiny (0.4ha only on the application site) and significantly degraded by bad management, it is good that the national requirement is finally acknowledged by AELTC in the protection that is now proposed.

Elsewhere, the presence of a range of species, and ages, of individual trees younger than the veterans, and of blocks of woodland, predominantly on the periphery of the golf course, add to the Parkland character. In AELTC's first two BNG calculations (see Table 1) peripheral woodland was separated from the Parkland, but in May 2024 it was treated the same as other blocks of woodland.

AELTC estimated that there were 0.79ha of peripheral woodland. This is made up largely of self-established trees and shrubs and has been subject to poor management but has acknowledged value. The welcome proposal to cease both mowing and the clearance of low woody growth here will soon result in the revelation of a better structure and species diversity. Unfortunately, AELTC now propose that all this peripheral woodland will be lost with newly created woodland replacing it. All this woodland should be retained and improved. It serves to re-create the lost perimeter woodland belts of Brown's original 18th century design.

There are many blocks of trees away from the golf course periphery, standing out in the grassland matrix[64]. At least two of these date back to Brown's landscaping of the 18th century park. The treatment of these non-peripheral trees in BNG is arguable[65], but we consider that they fall within the habitat description of Parkland and are appropriately included within this high distinctiveness mosaic habitat, so greatly simplifying their treatment.

AELTC estimated that there were some 5.88ha of "scattered trees" within the grassland, but now treat most of these as in "tree lines" and so as linear features[66]. On either view, they stand in the grassland matrix and so are certainly integral to the Parkland, a mosaic habitat of greater distinctiveness. As part of this important habitat, they require no separate accounting in BNG calculations.

The woodland, and especially the scattered trees, of the Parkland habitat have a great range of species and ages. This provides the essential future veterans for the Parkland to continue and improve. AELTC have treated these trees mainly from arboricultural and landscape viewpoints, so regarding valuable biodiversity habitat features as indicative of poor health, poor form or even risk. This is entirely inappropriate in BNG calculations. Counting these as integral to Parkland should ensure that they are valued as is appropriate.

Hedgerows

There is a 200m long 80-year-old Hawthorn hedgerow on the northern boundary between the public park and golf course[67], which qualifies as a National Priority Habitat. This, along with other planted Hawthorn Hedgerows, was missed in both AELTC's Phase I survey and tree survey[68] and, consequently, omitted from the first baseline assessment for the Biodiversity Net Gain calculation[69]. The May 2024 Assessment map continued to ignore the northern hedgerow, despite representations having been made. It was mapped as dense scrub in the north and lowland mixed woodland in the south. These Hedgerows are not retained in the AELTC plans. We consider them to be valuable and integral to the Parkland mosaic habitat and so not requiring separate evaluation.

We conclude that existing old hawthorn Hedgerows with trees would be destroyed and insufficient new hedges are proposed to compensate.

Grassland

Lowland Dry Acid Grassland is a Priority Habitat[70] in England, London and locally and so is afforded protection from harm. It often occurs in Parklands[71]. There are around 1300ha of Acid Grassland in London[72]. Locally, large areas are found on Wimbledon Common, Putney Heath, Mitcham Common, Bushy Park and Richmond Park.

A small amount of degraded Acid Grassland was found on the golf course in the Wildlife Habitat Survey of London in 1985[73] and about 0.3ha[74] was mapped in the Phase I habitat survey[75], confirming its survival over the intervening 35 years. However, it was rejected and identified as "other neutral grassland" in the May 2024 Baseline Habitat Plan. Even though degraded, Acid Grassland is rare locally, so it was most surprising that AELTC has submitted no subsequent survey to document it better[76], nor undertaken any further consideration of the species it might support[77]. Having chosen not to consider its potential, AELTC propose now to destroy all the grassland in this area[78].

AELTC focussed, instead, on a proposal to "create" 5.7ha of new Acid Grassland in the south of the golf course, where it was claimed that "free draining nutrient poor soils [are] characteristic"[79], but they "had lost species-rich acid character" and "have been heavily seeded (and now represent a low diversity amenity mix)". AELTC cited no vegetation survey of this southern area to support these claims but classified this area as wholly "modified grassland" in their May 2024 Baseline Habitat Plan. They proposed to strip the "historically enriched" topsoil of this area and replace it with acid soil from

elsewhere on site. In support of this, AELTC summarised "*detailed soil surveys completed at the Site"*, that were not commissioned as part of the "Phase I plus" work and not submitted to the planning authorities and so not available to the public[80]. No details were given of the nature and extent of these surveys and so of their applicability to the southern part of the golf course, or their identification of a donor area of acid soil. The summary also omitted detail of water regime, soil "horizons" and subsoil, as are needed to evaluate the potential for Acid Grassland creation. This overambitious proposal has now been abandoned and the proposed grasslands to be established there after stripping off the existing soil are indicated as "other neutral grassland"[81], a radical lowering of ambition and not requiring any soil stripping to establish. Sadly, however, AELTC still propose to strip most of the soil in the southern private park to promote this ambition.

This late change of ambition is a welcome application of Principle 7 of the BNG statutory guidance, which is that: *Habitat interventions need to be realistic and deliverable within a relevant project timeframe*.

We conclude that the remnant Acid Grassland would be destroyed, so precluding the rescue of this strategically important habitat, and the biodiversity gain this would have given.

Extensive soil stripping is also proposed in the tennis area, but the proposed replacements there are dominated by hard surfaces and amenity grassland, a significant loss compared to the present situation (see Parkland above). In our metric calculation, we have been generous to AELTC in our treatment of the proposed grassland "creation" by assuming that it will ultimately result in a restored Parkland, albeit fragmented and greatly reduced in size.

Wet Woodland (Carr)

Wet Woodland, or Carr, is a Priority Habitat[82]. Being rare, there is no quality cut-off in the national description. We found Carr species on the edge of the lake in 2013-2023[83]. Then, in 2018, we reported on the felling of woodland, including Carr on the lake edge north of the Wimbledon Club (Owl Copse) and, later that year, we were asked to survey the lake edge beside The Wimbledon Club and confirmed Carr there[84]. Carr still stands tall near The Wimbledon Club and is regenerating well in the other places[85]. The estimated canopy area[86] is between 0.5 and 1ha and it is visually important in views across the lake. This Carr supports many other species, such as Redpoll, Goldfinch, breeding wetland birds[87], amphibia, and the very many invertebrates associated with willows[88] and with the water's edge. Dragonflies and damselflies are abundant there in summer. Herons, Egrets and Kingfishers perch in the trees.

For well over two years AELTC resolutely refused to acknowledge the presence of Wet Woodland, nor its importance for other species, despite identifying five veteran Crack Willows on the lake edge, which are important for their standing dead wood habitat[89]. Although sometimes invasive, Wet Woodland is acknowledged as an important accompaniment to Reedbed (see below).

Although finally acknowledging the presence of Carr, AELTC denigrate it, complaining that both its size and water regime compromise its condition[90]. This argument is not supported by any survey detail and is at odds with our own survey results. The water regime suffered during dam safety works in early 2022 and had not fully recovered when the exceptional summer drought came, but those works are complete, and the water regime has returned to its previous condition[91]. There is a typical Carr ground flora, and the quantity of Carr regenerating after recent damage shows that it is appropriately mapped around more than twice the length of lake shore than is mapped by AELTC[92]. Beyond this, there is great potential on the golf course for Wet Woodland creation elsewhere in places where the existing soil is

wet[93]. These are close to the lake edge and in the shallow valleys of the tributaries. These areas include five places where clumps of trees have been lost since Brown's landscaping[94].

AELTC's 2024 revised BNG proposals map shows a small area of Carr newly created in the "Owl Copse" area, near the lake shore north of the Wimbledon Club[95], which is one of the areas with potential, and so is appropriate. However, as Carr is already regenerating there, its sacrifice and replacement is quite unnecessary, nor is this replacement of sufficient area to redress the planned loss. The new Carr also requires decades to mature.

We conclude that the belt of Carr around the lakeside, a National Priority Habitat, would be wholly destroyed. The tiny area of new Carr proposed is insufficient both in area and in the time needed for establishment (this infringes Best Practice Principle 4 and see the Oxford University/Agile checklist item 8 above).

Reedbeds

Reedbeds are a Priority Habitat[96] and so are protected from harm in planning policy. The national description describes no quality cut-off. It says: "[they] *are wetlands dominated by stands of the common reed, wherein the water table is at or above ground level for most of the year. They tend to incorporate areas of open water and ditches, and small areas of wet grassland and Carr woodland may be associated with them*. London has a reedbeds Biodiversity Action Plan[97]. Reedbeds have a low diversity of plant species[98], but they are rare[99] and support a few Priority Species. The lake has around 0.5ha of existing reedbed, with a breeding population of Reed Warbler, Sedge Warbler, Cetti's Warbler, Coot, Moorhen, Mute Swan, Great Crested Grebe, Little Grebe and Mallard and visiting species include Water Rail, Kingfisher, Snipe, Woodcock, Grey Heron, Little and Great White Egrets[100]. AELTC failed adequately to document the swamp vegetation that fringes most of the lake shore, underestimating its quantity and variety, and do not propose keeping the existing reedbed. The underestimation minimises the effect of losing the swamp vegetation, seriously biasing the Biodiversity Gain Assessment towards a net gain[101].

The Reedbeds benefit from the adjacent Wet Woodland providing a greater structural and species diversity and so increasing the number of species supported[102].

AELTC propose to destroy all the existing reedbeds and other swamps, so losing some 0.5ha of this Priority Habitat. It is proposed to replace this with 1.12ha of new reedbed. AELTC claimed two benefits of the proposed reedbed replacement. First, is the ability of the greater area of Reedbed[103] to treat pollutants with a supposed benefit for lake water quality. Our representations demonstrated that the size and positioning of the proposed Reedbeds would prevent them from providing any appreciable pollution benefit[104]. Second, is the habitat they provide for wetland animals. This, too, is genuine, but a marginal gain, given the existing area of Reedbed and other swamp in the lake and the species that they currently support. It also disregards the accompanying loss of Wet Woodland and Open Water habitat. AELTC did not claim that any additional species would come as a result of the greater area of Reedbed, but still claimed a considerable gain in condition.

We conclude that the proposed new reedbeds add little to existing reedbeds and other swamps and would destroy Carr.

Standing water, the lake

The lake[105] is a National Priority Habitat, Eutrophic Standing Water[106] and so is protected from harm through planning policies[107]. The national description warns that the value can be compromised by pollution with excessive nutrients. Most lakes in south-east England are Eutrophic[108]. Our lake fits the

UK priority description well[109]: concentrations of plant nutrients match the national description[110], and the sediment of dark anaerobic mud, rich in organic matter, fits the description precisely.

Strangely, the BNG protocols do not reflect the national priority, classifying lakes instead with a Water Framework Directive typology[111], which would make ours a "moderate alkalinity lake"[112]. AELTC classified the lake as a reservoir, which is a use category and not clearly applicable to a landscaped lake.

We have studied the water quality and biota of the lake since January 2017. A planning representation of December 2021[113] presented the methods and findings in detail alongside a review of the water quality and biodiversity value. Two subsequent years' study to date serve to confirm those findings. We confirm that three elements of the national description apply:

1. *Fennel-leaved pondweed Potamogeton pectinatus* ....[is] *characteristic..... Common floating-leaved plants include yellow water lily Nuphar lutea and there is ....a marginal fringe of reedswamp, which is an important component of the aquatic ecosystems.*
2. *Bottom-dwelling invertebrates such as snails, dragonflies.....are abundant.*
3. *Coarse fish such as roach Rutilus rutilus, tench Tinca tinca and pike Esox lucius are typical.*

The national description focuses on water life. Other important attributes locally, include the lake as a source of flying insect food for the eight species of bats, Swift, Swallow and Martins that come long distances to feed, and the international importance of the European Eel.

Both AELTC and we have employed the Freshwater Biological Association Habitat Naturalness Assessment, as is required by the lakes BNG condition sheet. We disagreed radically in our assessments because our information fully met the data requirements, but AELTC provided no survey data nor published studies to support their judgements (so infringing the Oxford University/Agile checklist criterion 4 above)[114]. The lake is assessed as of moderate to fairly good condition.

The national description lists threats to Eutrophic Standing Water that apply locally:

4. *Organic and inorganic fertilisers and nitrogen-rich gases, mainly from diffuse sources, cause nutrient enrichment.*
5. *The introduction of fish, the removal of predators, and the manipulation of existing fish stocks for recreational fishing leads to the loss of natural fish populations and may affect plant and invertebrate communities. Heavy stocking of bottom-feeding fish such as carp Cyprinus carpio can cause turbidity and accelerate the release of nutrients from sediments. This has caused major problems of enrichment in some eutrophic water bodies.*

Threat 4 above applies to our lake, as there have been blooms of Blue-green algae in recent summers, suggesting that the lake is on the cusp of a decline through excessive nutrients[115]. AELTC's proposed intensive lawn tennis development will cause an increase of inorganic fertiliser pollution[116]. Although AELTC's fish survey recommended large changes to the fishery to avoid pollution[117], AELTC still has no proposals for this.

AELTC did not acknowledge the National Priority Habitat Status of the lake, focussing instead on the measures proposed[118]. These measures were considered in representations[119]. Unfortunately, most are unlikely to provide a significant biodiversity benefit. For example, the effect of daylighting the brooks on the lake (considered below) will be insignificant. Although most welcome on heritage grounds, the long-proposed restoration of the tip of the southern arm of the lake provides a small biodiversity benefit, as it increases the lake area by just 3%[120]. The installation of bespoke habitat features for wetland species is a welcome, but small, benefit[121]. AELTC sees a biodiversity benefit in the removal of polluted sediment

from the lake bottom, apparently in ignorance of the likely dire consequences of the proposed method of doing this[122]. So, the measures celebrated by AELTC are unlikely, in sum, to provide any significant benefit. Indeed, if the sediment removal liberates significant pollutants, the net effect will be negative, even in the long-term.

We found little prospect that the proposed extensive works on the lake will achieve their stated aim of improving its condition and have been generous to AELTC in assuming no decline in the lake's condition in our BNG metric.

We conclude that the water quality in Wimbledon Park Lake is threatened by the preferred method of sediment removal, harming specially protected species.

Rivers & streams

There has been a long-standing aspiration to bring the lake's tributary brooks above ground, so this is a welcome biodiversity proposal[123]. Although some Rivers[124] are a national Priority Habitat, at present the only above-ground running water is a short length of Wimbledon Park Brook that runs through Ashen Grove Wood (and off-site downstream in the public park)[125] and it doesn't yet qualify as a national priority. Restoration of damaged rivers and brooks is often possible and is the main reason for the London Priority[126]. The lake has three main tributaries that could be restored ("daylighted") Rushmere and Bigden Brooks and the AELTC drain[127]. Around 400m of brook is to be daylighted, leaving the AELTC drain and minor tributaries still underground (around 800m)[128].

AELTC, correctly, sees daylighting as a gain for biodiversity, through the creation of a little riverine and waterside habitat. AELTC also claims effective interception of sediment and nutrient pollution as a result of the daylighting, however the planning application has no detailed proposals for this beyond the unsupported claims for reedbeds (see above) and it is technically difficult to intercept dissolved pollutants[129].

So, the welcome "daylighting" of two tributary brooks, will enhance the site by providing running water and waterside habitat. However, this will not prevent polluting sediment and nutrients entering the lake and water quality will not be ameliorated.

Accessible greenspace

In 2021 AELTC made much of a proposal for a private park, the "Southern Parkland". In May 2024 a further private Parkland was proposed for a small area centred on the northern access to the tennis area. Access to nature is an important London priority, the argument being that intrinsic quality alone does not suffice when valuing greenspace, but providing all the benefits of access to nature in places otherwise deficient in quality access is equally important. As providing access comes at a cost, planning policy helps to prioritise enhanced access through the concept of *Areas of Deficiency in Access to Nature (AOD)*[130]. The golf course does not lie within an AOD[131], so should not be given priority over places that do. Nevertheless, provision of access to nature is everywhere desirable.

However, both the "Parkland" areas and the proposed boardwalk will be gated and permissive only, so wholly controlled by AELTC. As such access is partial, time-specific, and not secured in perpetuity. Additionally, the proposed boardwalk has been widely criticised as substandard in comparison with the existing legal obligation of AELTC to create and dedicate a longer walkway wholly on AELTC land and around, rather than in the lake. The design of the boardwalk in the lake exposes sensitive wildlife to disturbance, denying them their habitat, so resulting in a biodiversity loss and compromising access to

nature[132]. The alternative in the legal obligation could be designed to provide much better access for people to nature, whilst avoiding disturbance[133].

Urban Greening Factor (UGF)

We also examined whether the London policy and guidance on UG are met by the developer's proposals. This was the subject of an earlier representation[134], which is summarised and updated here.

Initially, AELTC claimed their proposals would result in an "increase" to a nearly perfect "Urban Greening Factor" (UGF) of 0.98, and this impressed the Greater London Authority[135]. This, however, was based on a calculation that made fundamental mistakes, so that it did not follow the London protocol. Further details of the calculation reflected misunderstanding of the application of individual "factor scores". Correcting the mistakes showed that the Factor would actually decline from a current, near perfect 0.99 down to 0.82, a loss of 17%. Correcting the misunderstandings took the Factor down further to 0.70, a loss of 28%. So, the UGF would decline substantially if the proposals were implemented, and there would be substantial harm to Urban Greening.

In late 2023, AELTC submitted an Urban Greening Factor Calculation Update, which claimed a Factor of 0.90. However, this calculation was also erroneous as it assessed areas that summed to 47.1ha, 19% greater than the application area. This discrepancy is not possible where the protocol is followed, so there is a continuing failure of AELTC to follow the London protocol, and the claimed Factor score is erroneous.

In May 2024 AELTC submitted a third UGF result, without reference to the calculation error, a slight reduction down to 0.88[136]. This claimed a revision because of "*minor changes to the design and changes to the classification of the habitats.*" No detail of the calculation is given, and it is obvious that this calculation too did not follow the protocol.

Although AELTC must have been cognisant of our earlier representation, no reference was made to it. Clearly our correct application of the London protocol has to be preferred to AELTC's incorrect applications. Should the proposals be allowed, the Urban Greening Factor will decline from the present 0.99 down to between 0.82 and 0.70, so failing to meet the London Plan Guidance.

It is not appropriate that a planning authority should accept a claim that the Urban Greening Score demonstrates compliance with the London policy when this claim is shown to be grossly in error by an independent professional evaluation. To do so would pervert the Mayor of London's clear intention.

Appendix I. Biodiversity Net Gain (BNG) detail

In this appendix we give an account of our use of the February 2024 biodiversity metric. The headline is that the statutory metric finds that the AELTC proposals break BNG rules. This is because ancient Parkland is an Irreplaceable Habitat, so that its loss cannot be compensated by any benefit.

In BNG, development projects should leave the natural environment in a measurably better state than before, as now measured by the statutory Biodiversity Metric. To achieve this, there is a "mitigation hierarchy", in which the first priority is to avoid impacts, the second is reducing them and only as a last resort enhancing and creating compensatory habitats[137]. The result of applying this hierarchy is measured by the BNG metric. The first step in the hierarchy is impossible for the AELTC proposals, as ancient Parkland, woodland, reedbeds, Carr and grassland are to be destroyed. In the face of these losses, AELTC's calculated gains surprised us, as our own assessment of the same exercise reached quite different conclusions, as is detailed in this representation, so we have re-examined the AELTC's BNG calculations and checked our previous scrutiny[138]. To ensure that our examination followed government policy fully, we employed the current (June 2024) protocols. These differed in no material way from the earlier drafts. The calculation tool, as completed by us, is made available as a separate spreadsheet accompanied by six condition assessments[139].

The BNG Metric calculation tool is actually three independent modules: Area Habitats (these include almost all of the site), Hedgerows and Lines of Trees, and Rivers and Streams (here brooks). Each of these can be on-site or off-site, so there could be six assessments[140].

Habitat Areas

BNG begins with an examination of the amount of each habitat type before and after the proposed development.

Eighteenth century landscaped parks, like our site, had lakes, ponds and rivers (with their accompanying wetland habitats), and extensive grassland or heathland with tree clumps, woodland and perimeter woodland belts. The BNG protocol concentrates on the terrestrial habitat components of this mosaic, with an emphasis on open grown trees, especially those that are veteran and ancient, in a matrix of grassland with some scrub. This excludes extensive wetlands from the definition of Parkland, so our analysis of the present state considers the areas of six habitats: those in Table 2. The site comprises very largely ancient Parkland and lake, with only minor amounts of hard surfaces, woodland and wetland.

Our identification of most of the ex-golf course as Parkland is explained in *Wood Pasture and Parkland*, above. In the terminology of the BNG User Guide this is a "defined mosaic" habitat type. As detailed above, we have been generous to AELTC in counting the protected veteran and ancient trees accompanied by re-created grassland as re-created Parkland, whilst counting the hard surfaces and tennis courts as Parkland destroyed.

Habitat Units

BNG takes the area of each habitat type and weights it according to "distinctiveness", "condition" and "strategic significance" to come up with its "habitat units". The sum of the existing habitat units is the baseline biodiversity condition. The distinctiveness of each habitat type is fixed so, once the habitat is determined, so is its distinctiveness[141]. Our habitats have distinctiveness values across the whole

possible range, from zero for hard surfaces to eight for Wood Pasture and Parkland. The strategic significance of all habitats is high, and constant because they are all within sites protected in Greater London[142]. Effectively then, the calculated "habitat units" are the product of habitat area, distinctiveness, and condition. This leaves the condition of each to be judged[143]. This judgement is done strictly with reference to the desirable attributes of each habitat[144]. The calculation of habitat units follows the, now mandatory, use of a Statutory Biodiversity Metric Calculator.

When examining the changes in habitat units from the proposals, it is not just the losses and gains of habitat area, but also any changes of distinctiveness or condition as a result of harm, enhancement or "creation" of habitat that the calculator takes into account. The expected outcome is scaled down according to the time it takes to a change to reach its potential[145]. The time varies between habitat types, ranging from one year for some grasslands and low-distinctiveness habitats, up to 27 years for trees. The habitats taking longest are scaled down most. Another scaling involves the difficulty of creating each habitat type[146]. Both of these scaling factors, however, are determined by the habitat type proposed and the scaling is generated by the Calculator and involves no user judgement. The assessment also takes account of the phasing of the development, by adding to the time to completion and so adjusting the habitat units down for operations that do not occur immediately after the onset[147]. Where there is much stripping of soil and construction under way, it is inconceivable that habitat changes can be achieved as work begins. Nevertheless, AELTC chose not to account for phasing, with the result that most of their habitat creation and improvement proposals were overvalued[148]. As there are no proposals for off-site compensation on areas outside the planning authority boundaries, we do not need to consider "spatial risk".

In what follows, we give the results habitat by habitat, and full details are given in the statutory metric calculator, appended, and in the associated condition assessment sheets. These include all on-site habitat parcels, and there were no area proposals off-site.

	Now			**Proposed**			**Change**
Habitat	**ha**	**%**	**Habitat units**	**ha**	**%**	**Habitat units**	**Units %**
Ancient Parkland[149]	28.7	72	662	18	45	394	-40
Ashen Grove Wood	0.4	1	8.3	0.4	1	8.3	0
Carr (Wet Woodland)	0.75	2	15.5	0.4	1	1.9	-88
Reedbeds	0.5	1	10.4	1.1	3	11.2	8
Lake (Open water)	8	20	110	7.6	19	104	-6
Hard surfaces	1.7[150]	4	0	12	31	0	0
Total	**40**	**100**	**807**	**40**	**100**	**518**	**-36**

Table 2. Habitat areas and Habitat Units now and as proposed[151]

- The 29ha of ancient Wood Pasture and Parkland currently is in Fairly Good condition[152]. The crucial veteran trees of the Parkland have a Moderate habitat quality, with no possibility of improvement[153], so not contributing any gain. The loss of 11ha of ancient Parkland represents a very significant trading down and infringes trading rules, because an Irreplaceable Habitat may not be traded down[154].
- The retained and planted trees, scrub, daylighted brook surrounds, grasslands, ponds, sunken hedge and swale are part of the Parkland habitat mosaic and so do not require a separate evaluation[155].
- In contrast with the ancient Parkland, as required by national planning policy, the 0.4ha ancient Ashen Grove Wood is to be kept, retaining its present Good condition[156].
- Because of its national rarity, the Carr is afforded a high distinctiveness. It scores as in Good condition[157]. It is to be wholly lost and a smaller area created elsewhere[158].
- The existing reedbeds scored Good in condition[159].The introduction of new reedbeds in the lake[160] would be at the expense of these existing reedbeds, Carr and open water[161].
- The area of open water in the lake will be reduced slightly, as the small increase from the re-created southern tip is more than counterbalanced by the loss to new reedbed[162]. The positive proposals for the lake will have a marginal effect on its present Moderate condition, as any small benefit would be countered by the likely severe harm to lake water quality from the proposed method of "de-silting". We assume, optimistically, that the condition of the lake will remain unchanged.
- AELTC estimated the proposed non-habitat area (courts and hard surfaces) will sum to 10ha, but this does not allow for the hardware required for managing the courts[163], hence our revision to 12 units.

The statutory BNG metric calculator for the proposed Area Habitats gave a total of 518 units. This is 2/3rds of the present state, with its 807 units. So, far from a modest Biodiversity Net Gain, as calculated in the AELTC metric, this professional review corrects AELTC's errors and confirms a catastrophic decline. This decline is primarily due to proposals for the tennis area, which destroy most of the grassland there, so sacrificing much of the present-day ancient Parkland. The poor replacement for the loss of all the Wet Woodland is also a significant contribution to the overall loss.

Clearly AELTC's many errors in applying government's Biodiversity Net Gain protocols hid a substantial biodiversity net loss.

Hedges[164]

There are several hedges and tree lines on the golf course and it is also proposed to create further hedges and tree lines off-site.

	Now		**Proposed**	
	km	**Habitat Units**	**km**	**Habitat Units**
Leylandii	0.38	.4	0	0
Poplars	0.19	3	0	0
New athletics hedge			0.38	4
Tree lines, public park			0.5	1

Table 3. Off-site Hedgerow and Tree line habitats now and as proposed

Many of the scattered trees on the ex-golf course were treated by AELTC as "tree lines" (and hence belonging in the "hedge" sections of the BNG calculation). As was so for the area habitats (above), the existing and proposed on-site hedges are a component of to the Parkland mosaic habitat and so do not need separate accounting. Also, the veteran trees in these lines are not proposed to improve in condition, so do not need to be accounted for separately.

Although not included in the corrected BNG metric, some of the AELTC documentation of the ex-golf course is seriously misleading, we consider the on-site hedges here to assist others to understand the biodiversity impact of the proposals.

The northern hedgerow is an 80-year-old, 0.4km long, species-rich hedgerow with trees, which is a Priority Habitat and in Good condition[165] but it is not proposed for retention. It lies on the northern boundary with the public park. There are about 0.45km of Good hawthorn hedges on the boundaries with The Wimbledon Club and its access road, which are proposed for removal and replacement. There are also about 0.2km of hedges around the car park and overflow car park near the golf clubhouse which are not to be kept. Ecologically-valuable tree lines are on the boundaries of the golf course with Home Park, Church and Wimbledon Park Roads[166]. Finally, there are some short lengths of non-native Cypress and Laurel hedge on the boundaries of the golf course, which are of insignificant value and are proposed for removal.

Also included in the proposals, and integral to the Parkland, is a novel sunken hedge to prevent access between the southern private Parkland and the tennis area. A 0.38km "Wimbledon Park boundary planting"[167] was proposed, apparently in ignorance of the existing northern hedgerow (see above), but this proposal was dropped in the May 2024 revisions.

Compensatory planting of Hedgerows and lines of trees is planned in the public Wimbledon Park. Unlike the proposals within the Parkland, this enters the BNG metric, as it is outside the Parkland and off-site[168]. The details of this off-site proposal are not clear as there has been no consultation with park user and community groups[169], there is no detailed plan appended to the metric, and the description given in May 2024 BNG Assessment is just one brief sentence: "*A further 0.5km of ecologically valuable tree lines, and 0.38km of native, species-rich hedgerow will be created 'offsite' in the adjacent Wimbledon Park…*".[170]. The lack of consultation infringes the BNG best practice Oxford University/Agile checklist[171]. A BNG update was submitted by AELTC in May 2024, but the only plan of the off-site proposals was diagrammatic, and accompanied by out-of-date detail, so perhaps not up-to-date[172], and included extra hedge and tree line proposals not described in the text[173].

The proposed replacement of the Leylandii hedge on three sides of the athletics enclosure involves the sacrifice two rows of 100-year-old Lombardy Poplars, one at each end of this enclosure. The loss of these veteran poplars was not counted by AELTC. Correcting for this omission reduces the biodiversity gain down from AELTC's claimed 3.5 biodiversity units to a tiny 0.45 units[174]. The proposed 0.5km of new tree lines in the public park was impossible to quantify as some of the indicative lines might threaten existing tree planting, and a veteran oak. Assuming this would not be so, the gain there is also tiny. So, by following the statutory procedures, and avoiding the errors and omissions in AELTC's calculation, we corrected the AELTC's hedgerow gain down from a claimed 19 hedgerow units to a tiny 1.7 units.

AELTC claimed a much larger gain partly because they did not recognise Parkland on the ex-golf course, and so counted hedges there that should have been included within the Parkland mosaic. The reduction was also because they were unaware of the existence, or condition, of the athletics enclosure poplars.

River habitats (brooks)

The tributaries to, and outflow from the lake are the final element of the biodiversity change calculation.

AELTC failed to acknowledge the habitat provided by the lake outflow to Wimbledon Park Brook, about 50m of which is in the part of Ashen Grove Wood on AELTC land[175]. This very small length of brook partly flows over a concrete outflow structure, but most of the surrounds are green[176]. The brook continues downstream in the public park for around 0.4km, but there is no proposal for offsite gain there. However, AELTC, commendably, proposes to "daylight" a total of 0.4km of culverted tributaries (the parts of Bigden and Rushmere brooks that currently flow under the former golf course), bringing them back to the surface[177]. This positive proposal triples the river biodiversity units and, like the hedges, provides a tiny net gain.

Overall loss

The procedure does not allow the three components of the Biodiversity Net Gain Metric to be combined into one overall summary, but it is clear that the commendable gain from de-culverting two tributaries and from unspecified hedge and tree line planting in the public park, is well short of what would be needed to outweigh the considerable net loss from overdevelopment in the tennis area and harmful proposals for the lake.

Errors and omissions in AELTC's calculations hid this substantial overall loss. That such errors occurred was not unexpected, as others have found basic errors in metric calculations, and infeasible habitat creation proposals leading to the acceptance of illusory gains[178]. It is not appropriate that a planning authority should accept a claim of a biodiversity gain when this claim is shown to be grossly in error by an independent professional evaluation. To do so would pervert government's clear intention.

Appendix II. The grasslands of Wimbledon Park

Acid Grassland creation was proposed for the private park in the south of the ex-golf course and claimed as a net gain for biodiversity there. In a previous representation on the planning application, Dr Dawson tested the propositions that the natural soils are acid, and that previous Acid Grasslands have been lost to over 100 years of golf course management. Here, we review the information on grassland species to update and extend our previous examination[179], with four aims. To:

1. document better the species composition of the grasslands.
2. help determine the soil type.
3. review the existing condition of the grasslands.
4. help estimate the likely success of Acid Grassland creation in the southern park.

The Appendix table lists the 102 grassland species found recently on the ex-golf course. Dr Dawson found 99 species and the AELTC Phase I survey found 23. Clearly, the Phase I survey was inadequate, in that it found but 23% of the species known to be present. Ignoring the 79 species found by Dr Dawson and not by AELTC would seriously compromise the evaluation.

Differing soil types support different plant communities, so the species composition of an area indicates its soil. In most of the site[180], there are 23 species (highlighted in green in the Appendix table) which are more frequent in neutral than in acid soils[181] and five (highlighted in orange) the converse. Apart from the numerical preponderance of species preferential for neutral soils, it was telling that we found fully nine species which occur exclusively or nearly so in neutral soils (*Cynosurus cristatus, Trifolium pratense, Centaurea nigra, Ranunculus bulbosus, Dactylis glomerata, Prunella vulgaris, Festuca rubra, Leontodon autumnalis* and *Lolium perenne*). Conversely, there was but one species which is common and exclusive to acid soils, *Rumex acetosella*. Clearly the indication is that neutral soils predominate. However, *Rumex acetosella* is found more frequently in Acid Grassland, so acid soils are indicated where it was found, in a small strip beside the north-east boundary of the ex-golf course[182]. There is no such indication of acid soils, however, for the larger areas of rough north of The Wimbledon Club in the middle of the ex-golf course[183] where there the balance is six-to-one towards species strongly preferring neutral soils.

To avoid conflict with golf, most of our surveys avoided the golf fairways and roughs between them, concentrating on the roughs around the perimeter of the lake and near Home Park, Church and Wimbledon Park Roads, so we missed the areas identified in AELTC's target notes 7 and 8. Our more recent surveys were undertaken since the cessation of golf course management when mowing was less frequent than before, but AELTC restricted public access. Both AELTC and we found a great preponderance of neutral grassland species in the part of the site that includes the proposed southern private park, confirming our earlier conclusion that the soils there are unsuitable for Acid Grassland creation. We note that this conclusion appears now to be endorsed by AELTC.

Table: Grassland plant species from the ex-golf course

Those with an abundance score (an entry in column PPH) were found by Dr Dawson in 76 visits made in 2007 to 2023, totalling some 45 hours. The abundance is in plants per hour (PPH), an estimated number on a logarithmic scale (Dawson, D. 2018. *Recording plant species abundance: plants per hour***)** and so is a coarse measure, but sufficient to rank the species approximately in order. The "TN" columns give the less satisfactory "DAFOR" cover scale for species listed in the "target notes" of AELTC's Phase I habitat survey: note 3 being for the "majority of the site… short mown improved grassland"; note 7 being "a strip of semi-improved Acid Grassland" forming the 'rough' along the north-eastern edge of the site "with both fine and tussocky sward on sandy soils"; and note 8 being "semi-improved neutral grassland as a result of deliberate nature conservation efforts".

Species	PPH	TN3	TN7	TN8
Lolium perenne	1400	D		
Lotus pedunculatus	1000			
Poa trivialis	870			
Agrostis capillaris	560		D	D
Stellaria media	410			
Hordeum murinum	330			
Festuca rubra	210		D	D
Bellis perennis	180	O		
Poa annua	180	O		
Festuca ovina	170	O		
Lotus corniculatus	85			FO
Galium aparine	69			
Prunella vulgaris	63			
Veronica hederifolia	59			
Alopecurus pratensis	55			
Ficaria verna subsp. *fertilis*	46			
Potentilla reptans	45			A
Senecio vulgaris subsp. *vulgaris*	40			
Atriplex prostrata	35			
Achillea millefolium	34	O		A
Lamium album	34			
Veronica chamaedrys	33			
Cirsium arvense	32			
Polygonum aviculare	32			
Trifolium repens	31	O		
Cirsium vulgare	30			
Taraxacum sp.	29	O		
Plantago major	28	O		
Cerastium fontanum	26			
Erodium cicutarium	25			
Lactuca serriola	25			
Agrostis stolonifera	22			A

Cardamine flexuosa	18			
Glyceria fluitans	17			
Phleum pratense	16			
Plantago lanceolata	16	O		
Trifolium pratense	13			
Anisantha sterilis	12			
Juncus inflexus	12			
Schedonorus arundinaceus	11			
Alopecurus geniculatus	10			
Capsella bursa-pastoris	10			
Erodium moschatum	9			
Lepidium didymum	9			
Reseda luteola	9			
Sonchus asper	9			
Jacobaea vulgaris	8			
Ranunculus repens	8			FO
Rumex obtusifolius	8			
Solanum nigrum	8			
Dactylis glomerata	7	D	O	LA
Elymus repens	7			
Medicago lupulina	7			
Poa pratensis	7			
Chamaenerion angustifolium	6			
Silene dioica	6			
Cardamine hirsuta	5			
Cerastium glomeratum	5			
Leucanthemum vulgare	5			
Juncus effusus	4			
Rumex crispus subsp. *crispus*	4			
Rumex sanguineus var. *viridis*	4			
Arrhenatherum elatius	3			
Geranium dissectum	3			
Geranium robertianum	3			
Aegopodium podagraria	2			
Atriplex patula	2			
Carex remota	2			
Conopodium majus	2			
Crepis capillaris	2			
Cynosurus cristatus	2			
Daucus carota subsp. *carota*	2			A
Echinochloa crus-galli	2			
Geranium molle	2			
Geranium pusillum	2			
Heracleum sphondylium	2			
Holcus lanatus	2			

Hypochaeris radicata	2	O	O
Linaria vulgaris	2		
Origanum vulgare	2		
Papaver rhoeas	2		
Polygonum depressum	2		
Ranunculus bulbosus	2		
Scorzoneroides autumnalis	2		
Stellaria pallida	2		
Tragopogon pratensis	2	O	
Vicia cracca	2		
Anthoxanthum odoratum	1		
Bromus hordeaceus	1		
Carex hirta	1		
Centaurea cyanus	1		
Centaurea nigra	1		A
Epilobium parviflorum	1		
Medicago arabica	1		
Pilosella officinarum	1		FO
Ranunculus sceleratus	1		
Sinapis arvensis	1		
Vicia sativa	1		
Deschampsia cespitosa	0		
Hypericum perforatum	0		
Silaum silaus	0		
Phleum bertolonii	-	LA	A
Rumex acetosella	-	O	
Stellaria graminea	-		LF

End notes

[1]At the end of July 2021, the All England Lawn Tennis Ground Plc, a Public Limited Company, usually known under the acronym AELTC, submitted a planning application for intensive lawn tennis development on Wimbledon Park Golf Course and modifications to Wimbledon Park Lake to the London Boroughs of Merton (21/P2900) and Wandsworth (2021/3609).

[2] NPPF paragraph 186 states that "When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;……

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate."

This paragraph was in the February 2019 and July 2021 updates of the Framework, as well as in the current (December 2023 version) and so was current when the planning application was made.

[3] NPPF defines Ancient Woodland as: "*An area that has been wooded continuously since at least 1600 AD."* Government standing advice to planning authorities (*Ancient woodland, ancient trees and veteran trees: advice for making planning decisions.* www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions) includes ancient Parkland within the definition of Ancient Woodland: "*You should consider wood pastures identified as ancient in the same way as other ancient woodland when making planning decisions*."

[4] London Plan Policy G6 D states that "*Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain.*" And its paragraph 8.6.6 states that: "*Biodiversity net gain is an approach to development that leaves biodiversity in a better state than before. This means that where biodiversity is lost as a result of a development, the compensation provided should be of an overall greater biodiversity value than that which is lost. This approach does not change the fact that losses should be avoided, and biodiversity offsetting is the option of last resort.*" Wandsworth policy LP55 states that "*Developments will be required to deliver a net gain in biodiversity, through the incorporation of ecological enhancements*". Merton paragraph 15.3.22. reads: *In view of the Environment Bill 2020, applicants are expected to prepare planning applications using the latest good practice guidance for biodiversity net gain."*

[5] The Bill had its first reading in January 2020 and received Royal Assent on 9 November 2021.

[6] The enactment was in schedule 14 of the Environment Act 2021, which introduced amendments to the Town and Country Planning Act 1990 for Biodiversity gain as condition of planning permission in England. The biodiversity gain objective is met in relation to development for which planning permission is granted if the biodiversity value attributable to the development exceeds the pre-development biodiversity value of the onsite habitat by at least 10% as calculated in accordance with the biodiversity metric.

[7] With the introduction of version 4 of the metric and guidance, which included changes to the User Guide and many details of the metric. https://cieem.net/biodiversity-net-gain-metric-4-0-published/

[8] UGF is largely oriented towards residential and commercial development proposals, for which targets are set in London Plan. There are no targets for open space developments, but paragraph 8.5.1 of the London Plan expects designs that "*…will result in an increase in green cover…"* and paragraph 8.5.3 explains that the UG factors aim to indicate "*…. potential for rainwater infiltration as a proxy to provide a range of benefits such as improved health, climate change adaption and biodiversity conservation."*

[9] Wandsworth policy LP57 states *"Development proposals will be required to follow the guidance on the Urban Greening Factor (UGF) in the London Plan."* Developing Merton policy O15.5 states "*We will require major developments to incorporate Urban Greening through site and building design, by conducting an Urban Greening Factor (UGF) assessment in accordance with the methodology set out in the London Plan".*

[10] Paragraph 2.4.2 of the February 2023 London Plan Guidance on Urban Greening states that: "*Where protected species, or Priority Habitats or species, are found on a development site, or where a proposed development may impact a Site of Importance for Nature Conservation (SINC), the requirements of Policy G6 (Biodiversity and access to nature) to manage impacts on biodiversity should be met, in addition to any relevant UGF targets. In these cases, any new urban greening should prioritise helping to avoid or to mitigate the impacts of the proposed development on biodiversity; and providing locally relevant greening that complements the site's existing wildlife value and achieve an overall gain in biodiversity."*

[11] The protocol of table 8.2 of the London Plan, as explained in the London Plan Guidance on UGF, differs from the national BNG protocol and the purposes of Urban Greening extend beyond biodiversity conservation.

[12] In a Biodiversity Metric 3.1 calculation tool, dated 13/05/2022 and submitted to the two planning authorities. Strangely, the earlier *Assessment* document remained unrevised on the two Boroughs' planning explorers, similarly AELTC's May 2022 Environmental Assessment cited the earlier BNG metric results, not the revised ones.

[13] Introduced as a beta version in November 2018 (https://publications.naturalengland.org.uk/publication/6020204538888192). It had been replaced by version 3.0 by July 2021, but AELTC did not provide an update to this revised standard for 10 months.

[14] Metric 3.1 was published in April 2022, so was state of the art at the time of this first revision to the calculation. It involved small changes from the previous metric 3.0, which was introduced in July 2021 after extensive consultation (*Summary of changes from Biodiversity Metric 2.0 to version 3.0 First published July 2021*. Natural England).

[15] It is most odd that AELTC employed metric version 3.1, which had been superseded by version 4 some 5 months earlier and by the mandatory version of the metric 3 months earlier.

[16] First introduced as version 4.0, a substantial update to the previous version of the metric (3.1) and User Guide, on 28th November 2023 (*Summary of Changes. The Biodiversity Metric Version 3.1 to 4.0.* English Nature 2023**)**. When the mandatory requirement began in February 2024 the version number was dropped, but the metric and Guide remained unchanged. There were substantial changes to condition assessment sheets from those used in version 3.1. In our case

these included habitat types: Grassland, Hedgerows, Line of trees, Ponds, Woodland and Wood-pasture and Parkland. We chose to use the statutory metric because it supersedes the earlier versions and reflects best practice. Any desire to track the changes in thinking in the detail of the planning application could be met by employing the statutory metric retrospectively.

[17] For example their Rolfe Judd response to the Stage 1 GLA report (*GLA Stage 1 Report – Applicants Response*) stated that *"crucially the ecological enhancements, long term management, and demonstrable BNG which will be delivered will ensure that the value of Wimbledon Park, Lake, Woods and Golf course SINC will be increased, both by increasing the extent, quality and connectivity of the existing habitats for which the site receives SINC designation, or by replacing them with habitat types of greater ecological value, such as watercourses and species-rich grasslands."* In that report, LUC claimed that the project "*secures a Biodiversity Net Gainof 12.94% (please see updated biodiversity metric 3.1)."* In response, the GLA is cited as concluding that "*Biodiversity net gain has been demonstrated. …As such, the proposed development is considered compliant with Policy G6 on the condition that bespoke agreements are put in place detailing how the proposed habitats will be managed in order to reach the target condition (over 30 years plus). These agreements must be very specific to the target habitats and conditions, build on the lake management plan and be agreed prior to any works.* More recently, AELTC's 2024 BNG assessment paragraphs 1.15 & 5.18 stated that: *AELTC has consistently strived for the attainment of excellence by ensuring that the project will deliver BNG that far exceeds the 10% currently specified as a mandatory requirement for new planning applications by planning legislation.*

[18] In a GLA memo of 29/10/21: "*The applicant provides a standalone Biodiversity Net Gain Assessment. This states that there will be an overall net percentage change of +10.01% on the site area. No further information is required*."

[19] Summarised in a Wimbledon Park Residents' Association expert representation in October 2023: *Problems with the "GLA Stage 1 Report – Applicant Response" Biodiversity net loss.*

[20] Biodiversity net gain assessment Wimbledon Park project, LUC April 2024, Paragraph 1.2 stated that: "*The update also takes into account extensive discussions held with the London Wildlife Trust (LWT) during 2023/4. LWT was recognised as a key consultee and the scrutiny and advice provided by LWT helped to ensure a highly robust approach to the assessment and to maximise the biodiversity benefits delivered by the project. The outcome of the discussions was a position of formal support for the project by LWT."* Paragraph 1.3 states that: *The update has continued to use the 3.1 version of the Metric because this was the version of the Metric submitted with the application in 2022.* In fact, the original planning application was in July 2021 and accompanied by an assessment using metric 2.0! Paragraph 1.5 credited "*Changes to the classification of habitats in the baseline following expert advice from LWT".*

[21] AELTC's May 2024 Assessment referred to the User Guide for metric 3.1 to defend its use as best practice: "*The 2024 Assessment has continued to use the 3.1 version of the Metric because this was the version of the Metric submitted with the application. This is in accordance with best practice guidance*." This is incorrect, because it was the earlier metric 2.0, not 3.1, that was submitted with the application. Also, the relevant paragraph of the User Guide for metric 3.1 (paragraph 10.1) does not describe the use of an out-of-date metric as best practice. Rather if recommends use of the same metric at each stage and that same metric could be the current, statutory metric. Paragraphs 2.5 to 2.19 of AELTC' May 2024 Assessment are a summary of the updates, but the detailed data and reasoning are not provided. AELTC claim that they have employed a more conservative target condition for the created and enhanced habitats. Admission of previous fault (pointed out in our representations) whilst welcome, should be seen as more realistic, not as conservative and precautionary.

[22] Dr Dawson undertook this calculation. He has followed the February 2024 *The Statutory Biodiversity Metric User Guide* and the *Biodiversity Net Gain: Good practice principles for development © CIEEM, CIRIA, IEMA, 2016.* His knowledge and experience make him amply qualified to act as a reviewer in the context of Biodiversity Net Gain. We were completing a representation on this calculation when the GLA notified us of the revision to the proposals, necessitating a revision to our calculation.

[23] The statutory BNG metric will not calculate the Habitat Biodiversity Units for proposals that involve trading down Irreplaceable Habitat, such as the ancient Parkland. To obtain the baseline figures therefore required a false entry to the spreadsheet stating that the habitat is not irreplaceable.

[24] Duffus, N., Atkins, T., Nicholas, H., Butler, A., Milner-Gulland, E.J., Addison, P., Bull, J., zu Ermgassen, S. (2023) *Assessing Biodiversity Net Gain plans: A quick guide for planners and developers.* Oxford Martin School & NERC Agile programme.

[25] Reference should be made to the detailed representations on each habitat type and BNG, below, for the basis of these summaries.

[26] These are the checklist headlines, reference should be made to the full text of the Oxford University/Agile checklist for amplification of their consideration.

[27] See paragraph 2.17 of the April 2024 BNG Assessment.

[28] This is Best Practice Principle 2, which is not followed, despite the claim of paragraph 4.7 of the April 2024 BNG Assessment.

[29] The current definition of Irreplaceable Habitat follows NPPF, so includes Ancient Woodland (including Parkland with veteran trees) and veteran trees. https://defraenvironment.blog.gov.uk/2023/10/05/irreplaceable-habitats-and-bng-what-you-need-to-know/

[30] This is best practice Principle 1.

[31] Paragraphs 5.2 to 5.12 of AELTC's May 2024 BNG Assessment outline the proposed loss of vegetation and around 0.2m depth of topsoil across essentially all of the ex-golf course and the loss of wetland habitat on the edges of the lake (30ha in total). The extent of this on the ex-golf course is shown in the April 2024 AELTC plan of "*Grass and soil stripping works*".

[32] CIEEM Advice note 2019 "*On the lifespan of Ecological reports & surveys"* states that *"it is difficult to set a specific timeframe over which reports or survey data should be considered valid, as this will vary in different circumstances…. The likelihood of surveys needing to be updated increases with time, and is greater for mobile species or in circumstances where the habitat or its management has changed significantly since the surveys were undertaken*.

[33] See paragraphs 2.6, 2.7 and 3.5 of the AELTC BNG assessment 2024.

[34] https://rmets.onlinelibrary.wiley.com/doi/10.1002/wea.4531

[35] For example, Dr Dawson found 275 higher plants on the application area, of which 274 (99.6%) were confirmed in 2018 or later (data from botanical surveys lodged with GIGL, the 2018 report *The Wimbledon Club Lakeside*, and the December 2021 representation *The water quality and biodiversity of Wimbledon Park Lake*). Dr Dawson found 104 species of bird on the application area, of which 74 (71%) were confirmed in 2018 or later (data from monthly bird counts, supplemented by just seven species that were found by Dr Dawson when in the area at other times and two that were reported by others of known expertise. These data were amply sufficient to apply accepted criteria for judging breeding status). The data on the lake biota were provided in the December 2021 representation (see above), supplemented by discovery of a few species since then. This representation included data from 2017, but almost all of the 2017 species were found also in subsequent years. Despite the great variation in the lake biota from visit to visit, the number of recent visits was ample to confirm the status of the majority of the species found.

[36] This includes UKHab and other floral survey data used to determine the habitat type.

[37] Email from Ulrika Hogberg of AELTC to Dr Dawson, 11th May 2021.

[38] Dr Dawson's email of 21st January 2022 was:

I am writing to suggest an exchange of data on the physical environment and biota of the Site of Importance for nature conservation that is the subject of the AELTC's planning application. I have thrice offered to exchange data with your Ulrika Hogberg only to be given misleading anecdotes, but told each time that the full information was not ready (on the first two occasions) or (on the third occasion) that the data would be provided as part of the planning application.

It is common practice for such data exchanges to take place in a more timely fashion, because it enhances the information available and removes one source of doubt when trying to understand biodiversity value and impact. Provided the methods employed to obtain the data are documented, the data are neutral and cannot prejudice such issues. Indeed, best practice is for data to be provided to the local biological records centre so that they are available for all manner of future uses beyond the issue of the moment.

The failure to achieve a data exchange is most unsatisfactory, as it has left others to do the legwork finding and making sense of your data, not all of which can be found in the countless pages of documentation. It also means that significant aspects of your proposals remain without any apparent basis. Where I have already published my findings these are not everywhere taken into account in your documentation. Where they are, however, mine is often is the crucial information, based as it is on extensive survey over several years.

As an example of the difficulty, I saw a Bernadette Lanham of Wilmott Dixon and Royal Holloway collecting information on the water of Wimbledon Park Brook, in the public park, on 9/6/21. She was reluctant to tell me who commissioned the work, but said it was AELTC. When I offered to exchange data, she was enthusiastic but it became clear that she did not want an exchange, but rather to see my data and reserve her position on providing hers because of client confidentiality. You can imagine that I did not see this as satisfactory. I have Carried out extensive investigation of the lake over five years. Others have reported seeing various investigations taking place on the golf course that seem to involve matters beyond those reported in the planning application. I have seen claims in the planning application documents about the quality of the lake water, pollution, soils and vegetation types, not all of which seem to be supported by data and I'm left in ignorance of what investigations, if any, have taken place.

Where you have provided data, I have been able to understand their implications. For example, the excellent fish survey of the lake shows that the existing information from the anglers, and others, is broadly correct. This allows one to proceed to evaluation and prediction on a common foundation. The invertebrate survey, although very limited in scope, is also excellent in that it provides information that requires special skills to obtain and is indicative of value. Others of your surveys have suffered from poor methodology or minimal effort and would have benefitted greatly from an exchange of data with myself or others who know the site well.

So, I ask you to consider exchange of information on such matters as the soils and hydrology of the site, the distribution of plants and vegetation types across the site, invertebrates, amphibia, reptiles, birds and mammals and the biota and water quality of the lake. I am willing to provide you with a copy of my data in each sector in exchange." The reply from Ms Bolton, AELTC Chief Executive on 1/2/2022 was that: " *This information can be found within the planning application documents, specifically the Environmental Impact Assessment, which was made available on our website in July 2021 when we submitted the application to the relevant local authorities. Please click here for a link to a number of our ecology baseline surveys that I hope you will find of interest. They are:*

- *Extended Phase 1 Habitat survey*
- *Bat survey baseline*
- *Reptile survey baseline*
- *Amphibian survey baseline*
- *Invertebrate survey baseline*
- *Breeding birds survey baseline*
- *Wintering bird survey baseline*
- *Fish survey baseline*
- *BNG Assessment*
- *Ecology Mitigation Strategy."*

This list is identical to that given in paragraph 12.4 of AELTC's July 2021 Environmental Statement (the revision in May 22 did not add to the list), and so was already known to us.

[39] Indeed, even some of the documents submitted in May 2024 include detail now contradicted by others of those documents (an example is the plan on page 34 of AELTC's landscape planning addendum which maps most woodland as "new scrub", whereas the proposals habitat plan in AELTC's 2024 BNG assessment maps just three areas of "dense scrub" and many areas of woodland). Transplanted trees no longer feature in the 2024 BNG assessment, but are still mapped on the Tree planting proposals plan.

[40] Notably, maps of the baseline and proposed biodiversity features were not included with the metric. These metrics also included many proposals that have now been dropped: the "creation" of extensive areas of Acid Grassland, for example. This greater realism means that the May 2024 metric is somewhat better with regard to Oxford University/Agile checklist item 7.

[41] Other difficulties are the different treatment of buildings in the baseline and proposals plans, an obvious miss-mapping of the lake edge south of the island (a mistake originating in the 2021 Phase I survey plan), the indication of scattered trees on the baseline plan with no corresponding line in the baseline metric, the apparent omission of Church Road from the metric, the various areas indicated as buildings at the golf clubhouse. The erratic treatment of roads and paths: none are shown on the baseline plan and they are all shown as U1b, none as U1c, U1e or U1b6, on the proposals plans (roads should be mapped as U1b6).

[42] Tree lines (UKhab 33) have to be greater than 20m long and less than 5m wide, but most blocks of trees on the ex-golf course are wider than 5m at their base. Scattered trees (UKhab 32) can include a low density of trees in grassland, as here. It is simpler to treat the non-woodland trees of the ex-golf course as scattered trees within an area habitat (grassland).

[43] The AELTC Environmental Statement overlaps broadly with Biodiversity Net Gain (BNG) as it includes the baseline surveys employed for BNG, and duplicates much of the other material employed in their Biodiversity Net Gain assessment and makes direct reference to BNG in several places so, to avoid excessive repetition, we examine BNG rather than the Environmental Statement.

[44] The history is given in Dawson, D. 2016. *Capability Brown's Wimbledon Park, a History.* The present-day Heritage Landscape, which is 15% of the original, comprises the ex-golf course, Wimbledon Club and public park (which includes the lake).

[45] UK Priority Habitat *Wood-Pasture and Parkland, UK Biodiversity Action Plan Priority Habitat Descriptions, updated 2011* and *UK Habitat Classification, version 2.01, habitat 26, Wood Pasture and Parkland.* The Priority Habitats were renamed Habitats of Principal Importance in England, but the description remains unchanged. In the UK Habitat Classification (UKhab) this Priority Habitat (habitat 20) is seen as a habitat "complex" and can include grassland, heathland and scrub, woodland, wetland and even some cropland types. Confusingly, the equivalent Biodiversity Net Gain habitat type is defined more narrowly than the Priority Habitat, see below.

[46] National Planning Policy Framework (NPPF) Paragraph 185b: "*Plans should promote the conservation, restoration and enhancement of Priority Habitats….*"; The London Plan policy G6 (A & B3) requires the protection of Priority Habitats, including national priorities and additional London priorities listed in the London Environment Strategy; Wandsworth Local Plan Policy LP55C. "*Development which would have an impact on…. Priority Habitat(s) will only be permitted in exceptional circumstances…*" The London Environment Strategy includes Parklands under its Woodland priority.

[47] NPPF paragraph 186 states that: "*When determining planning applications, local planning authorities should apply the following principles:….. c) development resulting in the loss or deterioration of Irreplaceable Habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists……*". NPPF defines Ancient Woodland as: "*An area that has been wooded continuously since at least 1600 AD."* Government standing advice to planning authorities (*Ancient woodland, ancient trees and veteran trees: advice for making planning decisions.* www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions) includes ancient Parkland within the definition of Ancient Woodland: "*You should consider wood pastures identified as ancient in the same way as other ancient woodland when making planning decisions."*

[48] Its age was estimated as 500 years, so originating around 1520, (aged using White's method: White, J. 1998. Estimating the age of large and veteran trees in Britain. Forestry Commission Information Note). There are two other old oaks on the application site that probably date from before Brown's landscaping, but these are estimated to have originated since 1710, so are probably not ancient. One other ancient tree survives from Brown's 18th C park, in Southwood Close (Wandsworth suburbs). The oldest tree in the public park is in Horse Close Wood and dates from around 1660.

[49] www.data.gov.uk/dataset/bac6feb6-8222-4665-8abe-8774829ea623/wood-pasture-and-Parkland-england

[50] *"The UK Priority Habitat definition/description for Wood-pasture & Parkland varies from the UK Habitat Classification 2.0 definition. The AELTC dismissal apparently refers to the UK Priority Habitat definition. It is the UK Hab 2.0 that matters currently, as it this that informs use of the Defra Metric. The UK Hab 2.0 definition (see p.286 of the attached) does not require grazing animals. Both make it clear that it is the trees that are of primary importance ('veteran & ancient' required). UK Hab 2.0 does not specify any quality requirement for the grassland, which can therefore be anything. A documented history proving former land use as estate Parkland is however essential ('evidence of past use for extensive agriculture and transhumance systems'). UK Hab 2.0 definition includes Wood-pasture and Parkland 'that has been converted to other land uses, such as… amenity land, but where surviving veteran trees are of nature conservation value'. Presence of some scrub would also help. The landscape & ecological context specifies 'a range of native trees usually predominates amongst the oldest trees, but there may be non-native trees that have been planted or regenerated naturally'. Urban parks are excluded, unless if they were created from old Parkland (the documented history required above). So, the absence of grazing animals is not a valid eliminating reason. Neither is a lack of species-rich grassland. I am sure there are at least some veteran-associated fungi present, but the species interest is really only a nice-to-have for the UK Hab 2.0 definition. A golf course is clearly an amenity land use."*

[51] About 40% of the grasslands are in the fairways, tees and greens, which have been subject to herbicide and fertiliser treatment, and the very frequent mowing has supressed some grassland species. Better value survives on the 60% that compromises roughs, which were mown and fertilised much less, and where the lower frequency of mowing recently has allowed a range of species to manifest, that were previously hidden and for a more tussocky structure to be seen.

[52] Despite the national priority given to ancient and veteran trees and the protection of the trees in the LB Merton part of the site by a Tree Preservation Order, tree works have been permitted every year on the grounds of tree health, and safety for users. This has resulted in the loss of several veteran trees and the removal of biodiversity habitat features which were claimed to present a risk.

[53] *UK Biodiversity Action Plan Priority Habitat Descriptions: Wood-Pasture and Parkland,* 2011. The veteran trees qualify as of high to medium value on the SSSI criteria (table 5 of Guidelines for the Selection of Biological SSSIs – Part 2 Chapter 2 Wood Pasture and Parkland, and Veteran Trees (2018 revision v 1.0)).

[54] Dawson, D.G. Submission on Planning Applications Merton 21/P2900, Wandsworth 2021/3609 at Wimbledon Park Golf Club, SW19 7HR. September 2021.

[55] Wimbledon Park Residents' Association, October 2023. *Bird Species missed by the AELTC in their application documents.*

[56] Paragraph 3.17 of AELTC's *EIA technical appendix 12.10: Ecological Mitigation Strategy.* Paragraph 5.17 of the 2024 BNG Assessment describes the Parkland as *"intensively managed modified grassland and scattered tree habitats which dominate the Site",* and used this description incorrectly to justify a miss-reading of the Priority Habitat description and a "*change in habitat classification from 'wood-pasture and Parkland' to amenity grassland with scattered trees".*

[57] The latest edition of this survey methodology was published in 2010 by the Joint Nature Conservation Committee. It is designed to provide, relatively rapidly, a record of the habitat over large areas ("field-by-field"). In London, it has been superseded by the Open Space and Habitat Survey method, which collects more detailed information. Such survey methods are designed to find the most obvious habitats, and can discover habitats of great distinctiveness or good condition, but are often of greatest value for confirming previous discoveries and identifying areas that need further survey to evaluate the habitat. This is why follow-up studies may be necessary when judging the importance of habitats.

[58] Paragraph 12.8 of the May 2024 AELTC Assessment stated that "the intention of the scheme is to create Parkland", a new ambition, not previously specified.

[59] Dr Dawson made a freedom of information request to LB Merton and subsequently wrote to the Chief Executive of AELTC and in both cases the information was refused on the grounds that it was not part of the planning application, but rather was routine management of the ex-golf course and so a private matter. He emailed LB Merton Planning Representations on 3 August 2022, as follows: *The July 2021 Arboricultural Impact Assessment refers the reader to a supporting report (ref: 210716-1.1-WP-VTS-MS), which "details the survey findings along with individual management plans for each of the 41 trees". I have failed to find this supporting report amongst the application documents. It would be helpful to me should you direct me to the location of this supporting report.* The reply on 5 October that year stated: *The supporting report you refer to does not form part of the formal planning application submission. It was prepared to assist with the AELTC's ongoing management/maintenance of the land and in particular the management and protection of the veteran trees. Further, the supporting report also suggested remedial works and strategies to manage the current health and status of each of the veteran trees which do not form part of the WPP proposals.* His email to the AELTC Chief Executive of 4th Dec 2023 asked: *AELTC planning applications 21/P2900 (Merton) and 2021/3609 (Wandsworth) refer to management plans for 41 individual veteran trees as a material contribution to biodiversity net gain on the application site. The relevant documents submitted in support of your applications have a section devoted to these management plans, which is empty in each case. I have, therefore, been unable to examine the substance for this aspect of your planning proposals. I write to request copies of your management plans for the 41 individual veteran trees.* The reply on the following day stated: *The Veteran Tree Management Plans that you refer to were prepared to assist with our current management/maintenance of the land and in particular the management and protection of the veteran trees on-site. They do not form part of the formal planning application submission nor are they required to do so therefore they are not publicly available.*

[60] Section 5.3 of the May 2024 BNG Assessment describes the loss of 29ha of grassland, scrub and woodland habitat and the April 2024 revised soil stripping plan shows stripping across the whole of the ex-golf course, with the exception of tiny areas under retained trees.

[61] These areas are difficult to discover because of the failure of AELTC to show an explicit link between habitat areas in the metric and those on the accompanying map. Also, the areas given in section 5 of the May 2024 BNG Assessment are lamentably incomplete. All the tennis courts and most of the other hard surfaces are within the tennis area. We estimated areas, where necessary, by proportion.

[62] UKhab "U1d" *Small-scale mosaic of developed and natural surfaces, as in housing and gardens in suburban areas.* As a mosaic habitat this would be evaluated *en bloc* with the urban condition sheet.

[63] Dawson, D.G. September 2022. *Trees and woodland in the planning proposals for Wimbledon Park Golf Course.*

[64] These are difficult to classify, as most have few shrubs and saplings and the ground flora is predominantly grassy. Some of these areas were subject to clearance of the smaller woody growth in the last decade of golf course management in an apparent attempt to open up view lines, but these cleared areas are regenerating from coppice stools and seedlings and could be classified as woodland. Other areas have long been managed by mowing beneath the trees. Here, some long-supressed woodland seedlings have recently been revealed as the mowing is less frequent following the cessation of golf course management. They are classified under various types by AELTC's 2024 BNG metric, as tree lines, urban trees or "other woodland broadleaved", but these distinctions are artificial. The "urban" category is given inappropriately and should be "rural" according to the 2024 User Guide. In Dr Dawson's expert view these can all be included within the orbit of Parkland, so greatly simplifying their treatment.

[65] Some of the trees were correctly classified as woodland in the 2024 BNG Assessment (the UKhab classification is for areas with over 25% trees over 5m in height), but most were treated as lines of trees. Three tiny areas were incorrectly classified as "urban trees", despite not being located within or around the perimeter of urban land as required by the condition sheet. The Phase I survey identified many blocks of woodland or scattered trees between the fairways. In 2024, most of these were classified incorrectly as tree lines. There seems to be no wholly satisfactory way of treating the scattered trees, unless they are regarded as integral to a Parkland mosaic, which is certainly the case for the baseline habitats.

[66] Paragraph 2.10 of the May 2024 BNG Assessment. The BNG User Guide (Feb 2024) allows that ecologically valuable tree lines may include veteran trees. The BNG Assessment map of existing vegetation shows some residual trees not mapped within any of the BNG habitat types, so apparently ignored in the metric.

[67] Wimbledon Park Residents' Association, October 2023: *The northern hedgerow, Wimbledon Park. Expert assessment proves bio-diversity net loss.* This was shown as "dense scrub" and "*lowland mixed deciduous woodland*" on the May 2024 Baseline Habitat Plan. Whilst there may well be dense scrub beside the hedgerow, there is no doubt that a species-rich native hedgerow forms the boundary between the ex-golf course and public park (UKhab h2a5).

[68] The Phase I survey mapped broad-leaved woodland over scrub on this boundary, so missing the old hedgerow. The map of existing habitat in AELTC's 2024 Assessment indicated it as "*dense scrub"*. The tree survey missed out almost all the hedgerow trees even though they qualified for survey under the British Standard. In fact, the northern hedgerow

qualifies as a hedge feature in the UKhab definition. There may be dense scrub to the west of this hedgerow also. The Phase I Survey mapped "species poor" Hedgerows on the boundaries of The Wimbledon Club and its access road, and omitted planted Hedgerows on the Church Road and Home Park Road boundaries.

[69] Paragraphs 4.32-4.33 of AELTC's July 2021 Biodiversity Net Gain Assessment.

[70] UK Priority Habitat *Lowland Dry Acid Grassland, UK Biodiversity Action Plan Priority Habitat Descriptions, updated 2011.* The Priority Habitats were renamed Habitats of Principal Importance in England, but the description remains unchanged. The London Priority is listed in Appendix 2B of the Mayor's Environment Strategy, 2018. *Acid Grasslands are found on free-draining sands and gravels that are low in nutrients. They usually contain a limited range of fine-leaved grasses and wildflowers that support a distinctive group of insects and other invertebrates. Examples - Richmond Park; Wanstead Flats.* Wandsworth Priority Habitats are given in the 2020 Biodiversity Strategy: *Priority Habitats in Wandsworth are: Acid Grassland, Neutral wildflower) grassland, Rivers inc Tidal Thames, Lakes, ponds and reedbeds, and Woodland and scrub (including. veteran trees and dead wood).* The national habitat description identifies the National Vegetation Community type U1 as one component of Acid Grassland and it is this community that is found locally, for example on the three golf courses in the Wimbledon Common Special Area of Conservation. The UKhab definition is g1a.

[71] From the description of the national Priority Habitat, see previous note.

[72] London Biodiversity Partnership pamphlet: *Acid Grassland, a nationally important habitat in London.*

[73] Described in the 1998 London Ecology Handbook *Nature Conservation in Merton,* page 62: *".. a few remnant patches of a more Acid Grassland with sheep's sorrel and mouse-ear hawkweed on the sandier parts of the course. These, and other, species would be better appreciated were the mowing of the roughs less frequent."*

[74] The area of this remnant is not wholly clear from the various AELTC documents, but is given as 1.51ha in table 4.1 of AELTC's 2021 Biodiversity Net Gain document. Our Appendix II shows that the predominant species across most of this area indicate neutral, not acid, grassland and that a much smaller area can be classified as degraded Acid Grassland.

[75] This was mapped as at the western edges of the northern hedgerow (the hedgerow on the boundary between the public park and golf course in the north), see our Appendix II.

[76] Whilst it might be argued that the habitat is so degraded that it has no prospect of restoration to its previous condition, there is no documentation beyond that of the Phase I survey. This would have required a follow-up survey of vegetation, including bryophytes and lichens, and soils. The survey was described as "*Phase I plus*" and was supplemented with surveys of mammals, birds, reptiles, fish, invertebrates, but not vegetation nor soils. Value will inevitably be missed or minimised where adequate survey is not undertaken, see *The soils of Wimbledon Park Heritage Landscape.* Dawson, March 2022, and Appendix II to this representation.

[77] Species such as the solitary bees and wasps, Green Woodpecker and, potentially, the Skylark.

[78] AELTC's 2021 Biodiversity Net Gain table 4.1 and paragraph 2.12 of the April 2024 Assessment. The latter cites: *lack of species diversity, the absence of key Acid Grassland indicator species,* without giving any detail of any new investigation.

[79] Paragraph 3.36 of AELTC's *Site-wide proposals.*

[80] Paragraphs 3.17-3.21 of AELTC's *EIA technical appendix 12.10: Ecological Mitigation Strategy. "..extensive soil investigations*" found: loams of pH 5.0 – 6.8, high in organic matter and nitrogen, but low in phosphorus. AELTC stated that the soils "*offer a good opportunity for Acid Grassland habitat creation"*.

[81] In the "Proposals Habitat Plan" of the 2024 BNG Assessment.

[82] UK Priority Habitat *Wet Woodland, UK Biodiversity Action Plan Priority Habitat Descriptions, updated 2011.* The Priority Habitats were renamed Habitats of Principal Importance in England, but the description remains unchanged. *Wet Woodland occurs on poorly drained or seasonally wet soils, usually with alder, birch and willows as the predominant tree species, but sometimes including ash, oak, pine and beech on the drier riparian areas.* The UK habitat classification type w1d is congruent with the Priority Habitat description and notes that it occurs "along lake edges". It is not identified separately from other woodlands in the list of priorities in the two boroughs.

[83] Mainly since 2018 in a total of more than 5 hours of field work on the edge of the lake, Dr Dawson found much Crack Willow, Alder, Yellow-flag Iris, Water Mint, Great Willowherb, Reed Sweet-grass, Gypsywort, Hemlock Water-dropwort, Common Reed, Bullrush and a little Grey Willow, Birch, Kingcup, Greater Pond Sedge, Lesser Celandine, Soft Rush, Purple Loosetrife, Bittersweet and Watercress. These are all species of Wet Woodland. UKhab defines Wet Woodland (Carr) as an area feature, not a line.

[84] *The Wimbledon Club Lakeside*, Dawson 2018. There he identified it as National Vegetation Classification type W6b, "Alder-nettle woodland, Crack willow subcommunity", which is one of the NVC types included in the National Priority description. His report on the lakeside was fully documented and circulated widely and hence known to AELTC. This was the first explicit recognition of the National Priority Habitat in the Wimbledon Park Heritage Landscape. The Priority Habitat was missed by the London Wildlife Habitat Survey in 1985 and by the Salix Ecology 2018, *Wimbledon Park Lake Preliminary Ecological Appraisal.* Characteristic species were found on the western shore of the lake in AELTC's Phase I habitat survey ("Target note 11. Yellow Iris *Iris pseudacorus,* Grey Willow *Salix cinerea,* Crack Willow *Salix fragilis, and*

Alder *Alnus glutinosa,* with frequent Pedunculate Oak"), but AELTC failed to realise, or accept, that these mappable areas indicated the Priority Habitat. Doubtless the main reasons for the poor previous documentation were survey in an inappropriate season or that the lakeside vegetation is difficult to access and the golf club had coppiced much of it and grubbed up some of the larger trees in previous decades. The latest of those actions was described in Dr Dawson's report *Woodland management on the Wimbledon Park Golf Course, December 2017*. It is also possible that AELTC did not think that this strip fitted the national description, but our identification of the National Vegetation Classification type there is definitive. There is no doubt that detailed survey shows a mappable area of Wet Woodland distinct from any adjacent dryland woodland or reed swamp. The fringe of Wet Woodland extends some 880m around the lake edge (from the outflow in the east clockwise to opposite the island in the west) and its canopy extends some 5m to 15m out over the lake, so is around 0.5 to 1ha in area, even in its current depleted state.

[85] Information from visits in 2023. Six of the veteran trees are Crack Willows in Wet Woodland: five on the lakeside by The Wimbledon Club and one north of there.

[86] This is the estimated area of the canopy of the woodland trees, which overlaps adjacent habitats (Reedbed, Lake and dry woodland). The estimate is difficult to achieve as the width of the canopy varies. In the UK Habitat Classification, mappable Wet Woodland (w1d), as we have here, is explicitly excluded from eutrophic open water.

[87] Without an extensive search Dr Dawson noted many Coot, Great Crested Grebe, Moorhen, Mallard and Mute Swan in recent years.

[88] The genus *Salix,* willows, is well-known as being on a par with the oaks, *Quercus,* in the richness of the associated insect fauna.

[89] Finally, in their 2024 BNG Assessment paragraph 2.11, AELTC admitted that Carr is found on the western edge of the lake, but acknowledged less than half of its actual extent and failed to spot its typical ground flora, nor to acknowledge any of Dr Dawson's survey results.

[90] AELTC's 2024 BNG Assessment paragraph 2.11 states: *The condition of this Wet Woodland has been selected as 'poor' due to its narrow linear character and the absence of both permanently wet depressions and typical Wet Woodland ground layer.* Both these claims ignore detailed information long available to AELTC in Dr Dawson's report on the Wimbledon Club lakeside and representations to the two planning authorities. In fact the ground flora well-matches that listed in the UKhab description of w1d. The claim on the water regime is based upon AELTC's observations of a year when the lake was lowered well below historic levels to enable engineering work on the dam, followed by an extreme drought. Better information on the water regime comes from observations both before and after that year. The largest of the tree species in our Carr is Crack Willow (*Salix x fragilis*), which is well-known for its tendency to lean or split, even to the extent that branches can be under water whilst alive and thriving. It can also reproduce clonally by root suckers. Far from lacking "wet depressions", where Crack Willows occur our Carr occupies the near shallows of the lake. AELTC's denigration is clearly incorrect and prejudicial, probably based upon inadequate survey.

[91] This is demonstrated by regular monitoring of lake levels by Dr Dawson before, during and after the dam safety works.

[92] As shown by recent vegetation surveys by Dr Dawson which have been made freely available.

[93] The map of "*Surface Water Flooding"* in section 2.7 of AELTC's "*Surface water drainage statement*" shows extensive parts of the site which are low-lying and subject to flooding, including near the northern edge of the lake and on both sides of the southern arm. Away from the lake, there are broad areas focussed on the two main tributary culverts, but also around the historic positions of Dirty, Spencer and Vineyard Brooks (see the plan of historic brooks in Dr Dawson's September 2001 representation).

[94] This can be seen on Figure 6 of Dr Dawson's September 2022 representation, *Trees and woodland in the planning proposals for Wimbledon Park Golf Course,* where the lakeside tree clumps indicated as d, e, g ,h, i and j have been lost since Brown's time. This is contrasted with Figure 7 which shows tree clump j retained, but this is not proposed as Wet Woodland in the AELTC proposals.

[95] Indicated on the May 2024 Proposals Habitat Plans as in the area of Owl Copse where Carr was felled in 2018.

[96] UK Priority Habitat *Reedbeds, UK Biodiversity Action Plan Priority Habitat Descriptions, updated 2011.* The Priority Habitats were renamed Habitats of Principal Importance in England, but the description remains unchanged. The London Priority is listed in Appendix 2B of the Mayor's Environment Strategy, 2018. *Reedbeds are areas of shallow water dominated by a tall wetland grass – common reed. Reedbeds occur at the margins of all kinds of waterbodies and slow moving rivers, and in other areas where the ground lies wet for most of the year. Examples – Ingrebourne Marshes; London Wetland Centre.* Wandsworth Priority Habitats are given in the 2020 Biodiversity Strategy: *Priority Habitats in Wandsworth are: Acid Grassland, Neutral wildflower grassland, Rivers inc Tidal Thames, Lakes, ponds and reedbeds, and Woodland and scrub (including. veteran trees and dead wood).* In the National Habitat Classification, reedbeds less than 5m wide are included as part of the adjacent water body and there is no clarity on where some other swamps, such as our stands of Sweet Flag and of Reedmace, are to be classified. Most of our swamp vegetation clearly exceeds the width criterion.

[97] *Reedbeds,* London Biodiversity Partnership. 2007.

[98] *Where reeds are well-established, few other wetland herbs can grow in association with the reedbed,* (Reedbed Conservation in London, London Biodiversity Partnership 2007). See also: www.wwt.org.uk/discover-wetlands/wetlands/reedbeds/

[99] Most of London's reedbeds are distant from our lake, with 30ha in Newham, Waltham Forest, and Havering. The London Wetland Centre, however, has but 2ha. London Reedbed Audit: www.lbp.org.uk/hareed.htm. London doesn't have enough reedbed to support the charismatic reedbed species: Bearded Tits and Bitterns. Also missing is the Marsh Harrier. The Bittern, for example, needs at least 20 hectares for a viable population www.wwt.org.uk/discover-wetlands/wetlands/reedbeds/; so these three species are seen occasionally at the Wetland Centre as non-breeding visitors only.

[100] Table 4.1 of AELTC's 2021 *Biodiversity Net Gain Baseline Assessment* acknowledges 0.23ha of reedbed and this figure was Carried forward in 2024, but this reflects poor survey: the Salix Ecology Report illustrates a stand of Common Reed and another of Bullrush, but the summer-green nature of other swamp habitats: Greater Pond Sedge, Yellow Flag Iris and Sweet Flag led to these being described as "wet marginal vegetation" and with most being missed. The Phase I habitat survey map shows the main concentrations of reedbed as "swamp" and "marginal and inundation marginal vegetation", but the survey missed most of the fringing vegetation. This was Carried forward in the 2024 baseline habitats plan as "reedbed" but there is a fringe of swamp vegetation with little Common Reed and Bullrush but much Greater Pond Sedge, Sweet Flag and Yellow Iris along the whole western and south-eastern perimeter of the lake. Whilst the iris was listed in the Phase I survey, Sweet Flag and the sedge were missed and the extent and nature of the swamp fringe was underestimated. These swamps are included in the UKhab classification as an additional code for wetlands, "transition fen" (411), but are not referenced in the statutory condition sheets. Treatment of swamp in the BNG metric is problematic, as the condition sheet for fringing vegetation includes only "reedbed", in the narrow sense of the UKhab definition (f2e). The fringing vegetation is clearly swamp (UHhab f2), which includes "reedbed", but not all is reedbed. The UKhab definition clearly excludes Reedmace stands and narrow fringes of wet marginal vegetation (f2d) and is silent on wider fringes. These other species can be regarded as "other wetlands" (f2f), but neither of these UKhab types are included in the narrow definition of reedbed employed by the BNG protocol. We have to include just the narrowly defined reedbeds in the metric, in which case there is around twice as much reedbed as revealed by the poor AELTC survey. As with Wet Woodland (above) the area of this is difficult to measure, but it is clearly greater than the 0.23ha of the BNG audit, we estimate it as in the order of 0.5ha. The other swamps have to be evaluated as part of the lake, where the condition sheet considers fringing vegetation. Whilst it is most untidy to count part of the swamp in one place and the rest in another, this is required by the 2024 BNG process. The bird species were confirmed in recent years and are given in our representation on *Bird Species missed by the AELTC in their application documents.* (reference above). Unfortunately, although there are specialist insects confined to reedbeds, there has been no survey of the insects supported by the existing reedbeds. We expect that there will be losses of such species as a result of the proposals.

[101] Table 4.1 of AELTC's original Biodiversity Net Gain Assessment confirms the proposed loss: "*This habitat will be lost through construction impacts during the reprofiling of the lake edge.*" The loss is repeated in the 2024 Assessment, paragraph 2.14, where the existing reedbed is denigrated because of incorrect claims of a changed water regime (see Carr above).

[102] The national description gives: "*a mosaic of habitats such as semi-dry and wet reedbed, combined with wet scrub or woodland, will support a greater diversity of wildlife".*

[103] "*Creation of contiguous reedbed habitat along the west and east boundary of Wimbledon Park Lake*."

[104] Table 4.2 of AELTC's 2021 *Biodiversity Net Gain Enhancement and Creation Measures* describes *Creation of contiguous reedbed habitat along the west and east boundary of Wimbledon Park Lake* of some 1.08ha of new Reedbed, destroying the present reedbed and replacing it with more than double the amount, however Dr Dawson's representation in December 2021 showed that this is not designed to treat pollutants arising from the three main inflows, as none of these is directed through the proposed reedbeds and that the extent of the reedbeds is too small to treat the flows from a catchment as large as that of the lake.

[105] Figures for the extent of the lake are various, probably because of the fringing wetland vegetation around much of the perimeter, preventing straightforward aerial survey. We take the lake to be 8ha, whilst being aware that this is but an approximate figure.

[106] UK Priority Habitat *Eutrophic Standing Water, UK Biodiversity Action Plan Priority Habitat Descriptions, updated 2011.* The Priority Habitats were renamed Habitats of Principal Importance in England, but the description remains unchanged. The London Priority is listed in Appendix 2B of the Mayor's Environment Strategy, 2018. *Standing water comprises London's lakes, reservoirs and ponds. Examples – Walthamstow Reservoirs; Hampstead Heath Ponds.* Wandsworth Priority Habitats are given in the 2020 Biodiversity Strategy: *Priority Habitats in Wandsworth are: Acid Grassland, Neutral wildflower) grassland, Rivers inc Tidal Thames, Lakes, ponds and reedbeds, and Woodland and scrub*

(including. veteran trees and dead wood). The open water is classified as National Habitat r1a Eutrophic Standing Water. The fringing reedbeds and Wet Woodland are sufficiently large to be classified as habitats separate from the open water.

[107] NPPF Paragraph 185b: *Plans should promote the conservation, restoration and enhancement of Priority Habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity*; Wandsworth Local Plan Policy LP55C. *Development which would have an impact on…. Priority Habitat(s) will only be permitted in exceptional circumstances…*"

[108]As is typical of hard water areas of the lowlands of southern and eastern Britain, see next note.

[109] "*Eutrophic standing waters are highly productive because plant nutrients are plentiful, either naturally or as a result of artificial enrichment. [They] are characterised by having dense, long-term populations of algae in mid-summer, often making the water green. Their beds are covered by dark anaerobic mud, rich in organic matter. The water column typically contains at least 0.035mgL-1 total phosphorus (which includes phosphorus bound up in plankton and 0.5mgL-1 or more total inorganic nitrogen (mainly in the form of dissolved nitrates). Many lowland water bodies in the UK are now heavily polluted, with nutrient concentrations far in excess of these levels although there is some geographical variation in the extent of the enrichment. This action plan covers natural and man-made still waters such as lakes, reservoirs and gravel pits but it excludes small pools, field ponds and brackish waters. It includes some waters, such as Lough Neagh, Northern Ireland, which have been enriched as a result of human activity and so have been forced along the trophic continuum from a mesotrophic to a eutrophic state. The biodiversity action plans for mesotrophic and eutrophic waters are therefore complementary and their implementation should be coordinated. Eutrophic waters are most typical of hard water areas of the lowlands of southern and eastern Britain, but they also occur in the north and west, especially near the coast.*" The UK Habitat Classification excludes reedbeds and Wet Woodland that is mappable, which is the case here. So, this habitat is open water with the only plants being submerged, free-floating or floating-leaved.

[110] These are given in the section on "*Lake chemistry*" in Dr Dawson's December 2021 representation: *The water quality and biodiversity of Wimbledon Park Lake*. The national description is for "*at least 0.035mgL-1 [ppm] of phosphorus*", we had recent measurements of 0.3ppm, and for "*0.5mgL-1 or more total inorganic nitrogen*", we had 1ppm. These concentrations could not be considered "*far in excess*" of the description. The lake chemistry is currently being monitored by the angling club, who find no overall change from that given in Dr Dawson's 2021 representation.

[111] *UK Technical Advisory Group on the Water Framework Directive Guidance on Typology for Lakes for the UK.* No date.

[112] A calcareous, shallow, lowland, small lake.

[113] See the previous note.

[114] Our condition sheet (furnished separately) found physical, hydrological and chemical assessment scores of "3" and biological as "2", giving an average score of 2.75. It appears that AELTC have not undertaken sufficient survey to fully inform their condition sheet. For example we had water levels most months 2017 to date and the guidance states that "*it may be difficult to determine water level fluctuations, including extent of drawdown, without repeat visits.*" For chemical assessment, we had monthly water clarity measurements for 2017 through to date, and many test results for nitrates and phosphates. We had extensive sampling results which would have discovered non-native species.

[115] See Dr Dawson's December 2021 representation. Further data to date show blooms of *Aphanizomenon* each summer, *Microcystis* in 2022 and of *Dolichospermum* in 2020 and 2022.

[116] See the section on *Fertilizers and nutrients* in Dr Dawson's December 2021 representation.

[117] Survey for the Environmental Impact Assessment, which recommended keeping bottom feeding fish, such as Carp, to low numbers, see Dr Dawson's December 2021 representation.

[118] Paragraph 4.29 of AELTC's 2021 *EIA technical appendix 12.10: Ecological Mitigation Strategy* states, *"Dredging, removal of contaminants, daylighting of inlets and creation of reedbeds and marginal vegetation will result in an increase in the chemical, hydrological, and biological condition indicators."*

[119] Dawson December 2021 (see above) and also *Will the All England Tennis proposals stop the deterioration of Wimbledon Park Lake?* DG Dawson, July 2022; *Proposed development of Wimbledon Park Lake and surrounds. Planning submission on AELTC proposals.* D.G. Dawson June 2022.

[120] Historic Ordnance Survey Maps give a precise figure for the area of the southern arm that was lost some 110 years ago.

[121] See page 62 of *Nature Conservation in Merton* (1998 London Ecology Handbook *Nature Conservation in Merton,*) where restoration of the southern arm of the lake and a tern raft were suggested. A Sand Martin bank and Tern rafts are likely to be beneficial, given the success of both at the London Wetland Centre. The existing artificial Kingfisher nest sites have not been used. Bats are not short of places to roost, breed and hibernate.

[122] This was described in Dr Dawson's June 2022 representation, *Proposed development of Wimbledon Park Lake and surrounds*. Planning submission on AELTC proposals, summarised as: *It's proposed to pump out the silt mixed with lake water, returning the water back to the lake, Carrying with it all the pollutants washed out of the sediment. So, pollutants locked away at depth will be released into the lake water. This will cause long-term harm to the lake water quality and consequently to amenity use, fisheries and biodiversity.* See the representation for the technical basis for this summary.

[123] See page 62 of the 1998, *Nature Conservation in Merton,* London Ecology Unit.
[124] UK Priority Habitat *Rivers, UK Biodiversity Action Plan Priority Habitat Descriptions, updated 2011.* The Priority Habitats were renamed Habitats of Principal Importance in England, but the description remains unchanged. The London Priority is listed in Appendix 2B of the Mayor's Environment Strategy, 2018 and there is a London Habitat Action Plan for *Rivers and Streams.* The habitat is listed as a priority by LB Wandsworth (see footnotes above).
[125] Wimbledon Park Brook runs from the lake outflow weir through the public park to disappear under the Tube Line embankment to run one kilometre underground to join the Wandle at Earlsfield. Its species composition does not qualify it as a Priority Habitat. The river and riverside habitat there was created in the winter of 2021-2022 and we have documented the establishment of the vegetation in the last two seasons, finding a total of 150 species there. With the right management, the condition of the habitat will become significant.
[126] The London Action Plan states: *Where urban development has led to rivers being removed from their natural course, current practises* [sic] *are seeking to redress the balance, by restoring rivers to their more natural form*." The London list states: "*many of the channels have been straightened, embanked or piped. Though same (sic) areas of natural channel still exist and are being re-established through river restoration initiatives. Examples - River Wandle; River Crane".*
[127] See the map of the brooks in Dr Dawson's September 2021 representation and the description in his December 2021 representation (see both above).
[128] 200m each for Bigden Brook in the north and Rushmere Brook in the south. Paragraph 4.4 of AELTC's 2021 Biodiversity Net Gain Assessment gives 0.39km of daylighted brook. The 225m of the AELTC drain, as well as Hall's, Dirty, Spencer and Vineyard Brooks would remain in underground pipes.
[129] The *Proposed General Arrangement* plan of AELTC's 2021 Biodiversity Net Gain shows no sediment interception structure. Most sediments come in surface water flood events when water flow is such that all but the gravels and coarse sands will flush straight through to the lake. Catching the finer sediments requires a specialist device, but no detail has been provided. Some phosphate pollution comes adsorbed onto the sediments and so is captured with them, but much phosphate and almost all nitrate and ammonia would pass through on the flood flows essentially unchanged. Even run-of-the-mill brook flows would have insufficient residence time in the daylighted brooks for appreciable treatment to occur.
[130] The first recognition of the importance of biodiversity habitat because of a local deficiency was in the Gunnersbury Triangle Public Inquiry in 1983 in which the Greater London Council Ecology Section, London Wildlife Trust and local campaigners secured the site, which is still today an LWT reserve. Dr Dawson led formalisation of the concept through the advice of the London Ecology Unit to London Boroughs in the mid 1980s and it is now firmly part of the Mayor of London's green agenda for London.
[131] In our evidence to the recent LB Merton Local Plan Inquiry this was confirmed. Since then, the new AELTC proposed access to a northern private park is for an area close to existing access to nature: Horse Close Wood in the public park. The perimeter path beside the northern hedge on the boundary between AELTC and the public park also provides current access to nature, albeit threatened by the proposed destruction of this hedgerow in the AELTC proposals.
[132] In Dr Dawson's December 2021 representation, *The water quality and biodiversity of Wimbledon Park Lake*, he concluded: *Where the boardwalk crosses the open water of the lake or along the reedbed edge (28%), those using it would disturb sensitive species nearby. This denies the sensitive species use of their habitat, effectively reducing the area of the open water even further. It also limits the ability of the public to enjoy such species unless these sections should have adequate screening of people from view. No such screening forms part of the planning application.*
[133] Wimbledon Park Residents' Association, October 2023: *Problems with the "GLA Stage 1 Report – Applicant Response"*
[134] Representation by the Wimbledon Park Residents' Association, October 2023: *Urban Greening in Wimbledon Park.*
[135] In a GLA memo of 29/10/21: *The applicant has calculated the UGF of the proposed development as 0.98, which considerably exceeds the target set by Policy G5 of the London Plan. The proposed development is therefore compliant with Policy G5 of the London Plan.*
[136] Appendix B of AELTC's April 2024 GLA Landscape Planning Addendum states that this reflects "*…minor changes to the design and changes to the classification of the habitats*".
[137] The whole application site is a Site of Importance for Nature Conservation (Borough Grade I) as originally described in the 1989 handbook, "*Nature Conservation in Merton",* following extensive survey and consultation. Such sites are protected in planning (Policy G6 of the London Plan and equivalent policies in the two local plans). Part C of Policy G6 refers to the mitigation hierarchy and part D states that "Development proposals should … aim to secure net biodiversity gain.
[138] This has not been a straightforward process because AELTC's initial, July 2021, BNG calculation employed version 2.0 of the calculation tool, the updates submitted in May 2022 and May 2024 employed version 3.1, and the DEFRA website (in April 2024) had a "final" version from February 2024. Despite the requirement that "The location and extent of the habitat parcel(s) to be assessed must be mapped, either on digital or paper maps", AELTC's three submitted metric

calculations did not include maps giving the location and extent of all but a few habitat parcels, nor any reference as to where else these should be found, making it difficult for us to discover the basis for many of AELTC's calculations. AELTC's scheduling of habitat creation and management actions was not entered by them as a delay in starting. For methodology, we refer to DEFRA's *The Statutory Biodiversity Metric User Guide,* which was published in February 2024, so updating all previous versions. Finally, the government website provided a February 2024 version of the *Statutory Biodiversity Metric Technical Annex 1, Condition Assessment Sheets and Methodology.* Whilst we were able to follow these methods to the letter, AELTC used an earlier version of the methodology for many of the habitat types. Clearly, the current sheets and methodology should be employed, as this is the protocol now required by government and corrects for any deficiencies in earlier drafts. All our assessments followed the most recent protocols. In many cases these were the same as those employed by AELTC and any exceptions are noted below.

[139] One for each of the present habitat types given in Tables 1 and 2, with the exception of habitats afforded no or low distinctiveness for which no sheet is required. No condition sheet is available for rivers and the user is expected to employ a separate expert system to obtain a condition score (Gurnell, A.M. *et al.* 2020. *A guide to assessing river condition*). Part of the Rivers and Streams Component of the BioDiversity Net Gain Metric. This was not cited by AELTC. Our local knowledge of brooks enabled us to follow the procedures of the expert system to obtain a projected future condition of the "daylighted" brooks.

[140] AELTC's 2021 BNG Assessment, paragraph 4.13 proposes to "enhance" Approximately 1.0 ha of Horses (sic) Close Wood in the public park. "… *however given the baseline habitat condition of this area is unknown this enhancement has not been included in the biodiversity net gain calculations.* This is strange, as there is an adopted management plan for Horse Close Wood, which has extensive information of the current habitat condition. Leaving this undefined proposal to one side, AELTC did not propose any enhancement or creation of off-site habitat, so we have five components.

[141] On a scale from Very Low, through Medium to Very High, scored 0 to 8, see Table 5 of the BNG User Guide.

[142] The significance depends upon the location and habitat type, which is determined by the *Local Nature Recovery Strategy,* here that for Greater London, which will not be available until 2025. Meanwhile the London Government website states that, *the current London and Local Plans should be referenced to inform current decision making.* AELTC scored all on-site habitat types as "High" giving a multiplier of 1.15. and we have done the same.

[143] The judgement is made on a three-point scale of Poor through Moderate to Good with zero for non-habitats such as hard surfaces, see Table 6 of the BNG User Guide.

[144] Using "*condition assessment sheets and methodology"*. This was available from the DEFRA website, as *Technical Annex 1, Condition Sheets and Methodology,* downloaded April 2024.

[145] The scaling down is on an arbitrary exponential scale, so that the first few years of delay have a greater effect than do the same number of years later on. A 30-year delay scales down the units to 34% of a change without delay.

[146] The units for the most difficult habitats are scaled to 10%, but our habitats were largely of "low" difficulty, scaling 100% or "medium", scaling 67%.

[147] Section 10 of the planning application form gave "site preparation" beginning in January 2022 and completion of the "Show court" after eight years, in May 2030. Clearly, site preparation cannot begin until planning permission is granted, however. Somewhat different information was given on the April 2022 "phasing contract zones" map, which we take as revising the information in the application form. This shows work beginning in January 2023 (also now impossible) and completing over six years later, in June 2029. One zone (the lake and boardwalk) overlapped with adjacent zones, so we took the latest of the two construction periods for those. The nature and extent of "site preparation" was not clear, so this activity was disregarded. Rather than guess actual dates for construction of each zone, we used times after the beginning of each. On that basis, construction of most zones was scheduled to take between two and three years. Construction of the show court and surrounds was scheduled for the longest, at four years. Taking these times gave minimal figures for each zone, so a conservative evaluation of the phasing penalty in BNG. The actual durations used can be seen in our accompanying metric.

[148] This affected fully 13 of AELTC's positive proposals.

[149] The BNG metric is programmed to not provide this row of figures because ancient Parkland habitat is irreplaceable. The figures could be obtained only by stating that the habitat is not irreplaceable.

[150] This figure is from AELTC's 2024 BNG Assessment.

[151] Tables 4.1 and 4.2 of AELTC's original 2021 *Biodiversity Net Gain Enhancement and Creation Measures* gives the existing and proposed habitat areas. We checked these and made some corrections, which are explained in subsequent notes. We have also classified some habitats differently, for which reasons are given below. Some figures for these re-classifications were not found in the AELTC documentation and had to be estimated, again the basis for these estimates is given below. We took the area of intensive tennis development as 60% of the whole ex-golf course where required for these estimates.

[152] Unaccountably, AELTC gave no condition sheet for Wood Pasture and Parkland, despite considering it to be present until the 2024 revisions. We used the appropriate condition sheet (sheet 25) which requires the presence of veteran or

ancient trees for good condition. We found that the site passes criterion A (essential for a "good" score), and also criteria B, D, E and H. Large areas also pass criterion F as the grassland is semi-improved there, but our recent observations show that the grasslands have not been mapped accurately, this imprecision preventing any more detailed consideration. AELTC previously made much of adverse effects on veteran trees from ground compaction and competition from other trees, but this is not evidenced in their planning application and our professional ecological assessment is that these factors have but a trivial effect here. Under golf course management, little of the Parkland passed criterion G, but the less frequent mowing since golf ceased means it now meets this criterion. As the habitat met 6 or 7 of the criteria, its condition is Fairly Good, with a numerical weight of 2.5. Further improvement would come from management by grazing animals, rather than mowing, and with clumps of native scrub affording protection from grazing for the regeneration of trees, but this would not be practical under AELTC's present proposals.

[153] In their 2024 Assessment AELTC appears to agree this, as the veteran and ancient trees are not identified in the site habitat baseline, where they could be should an enhancement be claimed. AELTC earlier claimed a significant improvement from increased amounts of dead wood, but gave no condition sheet to support this. We would disagree, as much actual and potential dead wood is proposed to be removed with the felling of some 225 trees. This loss is essentially irreplaceable, as the replacement trees will have very little dead wood until they are around 40-years-old or older. The promise of better retention of dead wood on the veteran trees flies in the face of present practice, which is predicated on danger to human life and limb and always prevails over biodiversity value. AELTC did not explain how the proposed intensive use of this area can be achieved without an ancillary health and safety precaution. Whilst the confidential management plans for each of the veteran trees may have detail, no credence can be given to documents that are kept secret. Finally, whilst AELTC asserts that retained, non-veteran trees include future veterans no such trees are identified, let alone given management plans, so there is no secure proposal to provide future veterans.

[154] As ancient Parkland is an Irreplaceable Habitat, no trading is permitted under the BNG rules. The statutory BNG metric does not calculate the units for Parkland unless it is indicated not to be irreplaceable. We did this, so that the these illicit losses could be calculated.

[155] We did this because these features are small in comparison with the extensive grassland matrix and are typical of traditional Parklands. A strict use of the metric might count created features as separate from the Parkland, in which case most would represent trading down to a habitat of lower distinctiveness, which is not allowable and would count as a loss of biodiversity units in comparison to the Parkland grassland lost. So, we have not only simplified the evaluation, but also biased the results towards biodiversity gain: a conservative bias.

[156] As this tiny ancient wood is already in Good condition, the proposed positive measures, whilst welcome, do not deliver a gain in the BNG calculation. Elements preventing a better score were invasive non-native plants, damaged ground and ground flora. Strangely, AELTC failed to grasp three opportunities for enhancement:

1. Reintroduction of Wood Millet which was lost to the dam safety works.
2. Developing and implementing positive measures for the half of the wood that lies in the public park.
3. Responding to the Friends of Wimbledon Park proposal to re-instate the historic extension of the woodland northwards in the public park.

[157] Here the presence of veteran trees is enough to overcome deficiencies in ground flora, vertical structure and amount of dead wood. In 2024, AELTC employed essentially the same condition sheet, but assessed 9 of the criteria as significantly worse than did we: age distribution, number of native tree species, open space within, regeneration, ground flora, vertical structure, veteran trees, dead wood, and disturbance. We cannot account for AELTC's gross undervaluing of the Carr, but do observe that, unlike us, AELTC gave no account of their survey findings.

[158] The radical loss of Carr is mainly the result of employing the metric correctly for the creation of the replacement area. Essentially, the creation of this habitat is difficult and takes many years. This is not our judgement, but hard-wired into the metric.

[159] We downgraded them for the mediocre water quality. In 2024, AELTC employed a slightly different condition assessment sheet to justify a "poor" assessment. In their 2021 condition sheet, AELTC listed the species composition, demonstrating a poor survey. Again, our assessment was based upon comprehensive survey and AELTC not.

[160] The definition of Reedbed habitat is not wholly clear in the protocol, reflecting a poor classification in UKhab in comparison to National Vegetation Classification. The existing swamps have one of five species dominant in different places: Common Reed, Reedmace, Greater Pond Sedge, Yellow-flag Iris or Sweet Flag and clearly fall into the *Fen, Marsh and Swamp* (f2) group of the UKhab classification. Where Common Reed is dominant, *Reedbed* (f2e) is clearly apposite, but Reedmace is relegated to *Other swamps* (f2f). The calculator options give only Reedbed or lake and we have followed this coarse approach, as it is in the mandatory procedure.

[161] A small area of extra reedbed is claimed by AELTC in association with the "daylighted" brooks. In the lake itself, a loss of about 0.75ha of Wet Woodland tree canopy in Good condition, 0.5ha of existing reedbeds in Good condition and 0.6ha of open water in Moderate condition (see the descriptions of each above).

[162] The extremity of the southern arm of the lake that was lost around 110 years ago was 0.25ha, which is just 3% of the lake area. The proposed new reedbeds total 1.12ha of which 0.5ha or so replaces existing swamp vegetation, the rest replaces existing shallows of the lake with 0.6ha of reedbed.

[163] The courts will require gantries to hold the artificial lighting that is a routine operation on modern grass courts. Deterrent fencing will be required to prevent or deter access by animals, such as foxes, geese, jays, green woodpeckers, jackdaws, badgers and squirrels. Temporary built facilities, to enable car parking and hospitality, seating, and hardware for escorted public tours is likely to be required for several months each year. We have scaled up the AELTC figure for hard surfaces to allow for the soft surfaces affected by these requirements.

[164] Actually, linear woody vegetation, given the shorthand of "hedge".

[165] This hedge was described in an October 2023 representation by the Wimbledon Park Residents' Association: *The northern hedgerow, Wimbledon Park. Expert assessment proves bio-diversity net loss.* It is a native hedgerow with trees (Priority Habitat h2a) in Good condition. Whilst old, and tall in places, it has clearly been managed and so has not graduated to woodland. Our earlier representation did not describe the southern part of this hedge, that runs beside the athletics stadium, but the character there is similar to the northern part. It was all proposed to be replaced by a new hedge, but this proposal was dropped in the May 2024 revisions. The northern half of this is mapped as "dense scrub" and the southern half as "lowland mixed deciduous woodland" on the 2024 baseline habitat plan. Whilst these two habitat types may occur on the western edges of the hedge, there is no doubt that there is a national priority hedge there. Were this hedge to be counted as a stand-alone habitat parcel its loss would sacrifice 8 units.

[166] These boundaries are described by AELTC as ecologically-valuable lines of trees in Moderate condition. AELTC missed Hedgerows accompanying these trees. Species there include Hawthorn, Privet, Holly and Beech, but also much Pyracantha and Cotoneaster, so not having enough native content to qualify as Priority Habitat, rather as "other hedgerow (h2b)", given a condition score of Poor. That on the boundary with Home Park Road was described in the October 2023 representation by the Wimbledon Park Residents' Association (see above). These are to be enhanced by filling gaps, so providing a gain of 5 habitat units, were they accounted for separately.

[167] We presume that this was intended for the northern boundary, but no detail is provided.

[168] Whilst the public park is included in Historic England's registered park and garden and it retains features surviving from Lancelot Brown's landscaping (especially a few veteran trees and two woodlands) its history diverged from that of the golf course around 120 years ago. The development of the public park in the 1920s destroyed much of the previous grassland, woodland and scattered trees, so much of it falls short of BNG's Parkland definition and there is but one old veteran tree remaining in the grassland. The many 100-year-old poplars are veterans, but date from the establishment of the public park landscape and so do not qualify as UKhab Wood pasture and Parkland (26). Unfortunately, the veteran habitat features of these poplars are also a significant risk to the public in such a heavily-used area and the poplars are being felled as they become dangerous to be replaced by young trees planted by the Friends of Wimbledon Park.

[169] Dr Dawson made a request to the owner and manager of the public park for details of this proposal in early January 2024, but had received no reply by the time of writing.

[170] In AELTC's 2021 BNG Assessment it was proposed to replace the Leyland Cypress hedge surrounding three sides of the athletics area by a species-rich native hedge. There was also a proposal for 0.5km of new tree-lines, which was not detailed. This same proposal was described in paragraph 5.9 of AELTC's 2024 Biodiversity Assessment.

[171] The level of consultation is an Oxford University/Agile checklist item under the heading of "*People, wellbeing, and the local context."* The Friends of Wimbledon Park have an active programme of tree planting and other improvements for the public park and would surely have welcomed proposals that assist this.

[172] The update was appendix B of AELTC's April 2024 *GLA landscape planning addendum.* However, the proposals on that plan included many that were dropped in 2024 (for example 5.7ha of Acid Grassland creation).

[173] AELTC's 2024 BNG metric considers just 0.38km of hedge, which equates to that on three sides of the athletics enclosure. A total of about 0.4km of extra hedges was illustrated on the eastern side of the public park in two places: first between the brook and the northern end of Revelstoke Road Car park, where the Friends of Wimbledon Park have already planted Hedgerows. Second, around the north-eastern corner of the perimeter path, where the Friends have proposals for planting. The caption of the plan on page 34 of AELTC's 2024 landscape addendum gives a total of 1.5km of hedges, which is twice that outlined on the plan, which in turn is twice that considered in the metric. There must be at least one error in this information!

The location of the 0.5km of tree lines included in the 2024 metric is not clear: the proposed tree lines on the plan total around 1.5km (obviously given incorrectly in the caption to the plan as 1.3km), these amounts on the plan are two to three times the amount declared in the text.

[174] Probably more, as the timing of this proposal was not given and any delay would reduce the units. Were the poplars to be treated as veteran trees they would be high value habitat and no replacement would be possible. We have been generous to AELTC in counting these as an ecologically valuable line of trees and not as veterans. The athletics area is

one of the hot-spots for bats in the Heritage landscape. We have been surveying the self-established vegetation under the Leyland's hedge in 2022 and 2023 and have found substantial colonisation by hedgerow species, showing that hedgerow improvement here merely requires a change in management.

[175] This outfall replaced an earlier one as part of the dam safety works in the winter of 2021-22. We have been monitoring its vegetation since then. It is an "other river" in the habitat classification (r2b). AELTC could have included it as a proposed habitat enhancement. As our calculation was done over the two years after completion of works there, we were able to include it as an established feature. It is so short that it did not readily fit the river assessment protocol, but the detail provided in the User Guide enabled its evaluation.

[176] It has successfully established wetland vegetation, and is used by wetland animals, for example Grey Wagtails and Grey Herons regularly occur there.

[177] First, there is about 0.15km of culverted Rushmere Brook issuing into the southern arm of the lake, which will be de-culverted and will issue into the restored southern tip of the lake. Second, there is 0.2km of Bigden Brook issuing into the lake near the island. It will be de-culverted, and adding the meanders gives 0.4km in total. The proposals for these mean that they are each one "section" in the User Guide and can be assessed together. There is no proposal to de-culvert other tributaries, notably not the 0.25km drain that runs to the lake from the AELTC development west of Church Road and also issues near the island. All the tributaries were detailed in Figure I of Dr Dawson's September 2021 representation on the planning application (*Submission on Planning Applications Merton 21/P2900, Wandsworth 2021/3609 at Wimbledon Park Golf Club, SW19 7HR*).

[178] Duffus *et al.* 2023 (see above) found 20% of BNG submissions contained errors, yet half of those were accepted by the planning authorities involved.

[179] Dr Dawson's previous analysis was given in table 2 of his March 2022 representation, *The soils of Wimbledon Park Heritage Landscape.* Here we refine and update that analysis by inclusion of more recent survey information, exclusion of sites near, but not on, the ex-golf course and by full reference to the target notes of the AELTC Phase I habitat survey.

[180] In Dr Dawson's results and those of target note 3.

[181] For neutral grassland species (UK habitat classification g3c, g4), we used the National Vegetation Classification (NVC) type "MG5", the type of mesotrophic (neutral), unimproved meadows in our area, not because we believe this type is present, but because it would have been found on neutral soils here in the past and its long species list provides many potential points of comparison. This is contrasted with Acid Grassland (UK habitat classification found on soils of pH less than 5.5), for which we used the NVC type "U1", which is the Acid Grassland type of the top plateau of Wimbledon Common and Putney Heath. Indication is taken as a difference in the frequency of a species between the two types, as given in the NVC floristic tables, of at least two units (40%).

[182] Target note 7, an area which we have not visited since the late 1990s.

[183] Target note 8, areas which we have not visited since the late 1990s.