APPENDIX 2 - Landscape (NNDC) Comments:

Arboricultural comments

The response follows extensive pre-application consultation, communication and negotiation with the Gresham's design team to inform the submitted proposal. Ancient woodland, ancient, veteran and specimen trees are a valuable feature of the site. The irreplaceable habitats of the ancient and veteran trees and their afforded buffer zones have broadly been respected and retained. Situated in the Glaven Valley Conservation area, all trees over 7.5cm measured at 1.5m are afforded protection. The masterplan principles confirm the retention and protection of important landscape features which contribute to the setting of the historic Holt Hall and include the feature trees within grassland areas which provide a parkland character, the woodland edges surrounding the Hall form its setting, backdrop and skyline.

Woodland Management

Though the previous use of Holt Hall was for children's outdoor educational purposes the proposals will clearly result in increased pressure through increase in pupil numbers using the site throughout term-time, the 30-year Woodland Management Plan (WMP) sets out how access to the woodland area will be zoned to restrict and prevent overuse and damage to the more sensitive woodland habitats.

The plan also sets out appropriate and proactive measures to improve the woodland such as the reduction and management of invasive species (Rhododendron) and deer control. It seeks to ensure the ecological value of the habitat and restore the structure and condition of the ancient woodland.

Any tree planting in ancient woodland buffer should be consistent with the WMP and be sourced from locally collected seed or from known local provenance stock. The schedule of works states the replacement planting will occur in the first year, this can be extended into year 2 or 3 to source appropriate stock.

AIA

The arboricultural impact assessment provided by A T Coombes demonstrates how trees have been considered and will be protected throughout the proposals.

The tree survey has captured just three trees with bracing installed, T121, T123, T74, and recommends a further 6 trees to have non-invasive braces installed. The previous surveys and management of the trees indicate there are many more trees with bracing installed. These higher management requirement trees should be identified, and specific measure put in place.

The tree survey does however retain many trees with deadwood or decay habitat features and appears to achieve a balanced approach on retaining trees that are not necessarily structurally or physiologically sound but that contribute positively to the ecology of the woodland.

The tree survey ends Church Walk to south, though there is limited construction activities at this part of the site, the pedestrian access will need consideration.

Landscape scheme

The AIA sets out, 6.6, In order to mitigate the loss of the above trees a minimum of forty new heavy standard root balled or containerised trees (12 to 14 cm stem girth) will be planted. These trees will be planted in the context of the separate landscape plan for the site prepared by Guarda Landscape.

Species selection set out in the landscape master plan (GUA-DR-L-008) include Acer rubrum 'Armstrong', Betula pendula Fastigiata Fastigiate birch, Betula albosinensis Facination Liquidambar styraciflua Worpelston Pyrus calleryana Chanticleer and Ilex aquifolium Golden King.

Whilst providing good autumn colour, it's a limited palette of species and disappointing there are few large canopy, native species or longer-lived species selected to mitigate the loss of the trees removed for development purposes. (Seven individual B category trees (T3 T9, T10, T11, T12, T18 and T19), part of the B category yew hedge (G3b), one tree in G2b, eight individual C category trees (T4, X12, X13, T55, T56, T201, T3698 and T3699), 1 C category tree group (G1a) and three trees in the C category tree group G73.)

Chanticleer Pear tend to break apart when mature, the scent of the Callery pear flower is renowned to be unpleasant, it can remind some people of rotting fish. For others, they're like vomit. Alternative species could include Snowberry / Amelanchia lamarkii or mountain ash / Sorbus aucuparia or hawthorn / Crataegus monogyna which may prove more palatable especially in areas where children can be expected to be enjoying their food.
Fastigiate birch have been specified in the central area of the walled garden where more space is available, the opportunity for medium to large canopy trees should be embraced. Birch is relatively short-lived trees. A long-term investment into the arboreal architecture on site generally could and should be delivered.

Landscape
The 35ha. site lies within the Norfolk Coast National Landscape and the Landscape Type defined as Wooded Glacial Ridge (North Norfolk Landscape Character Assessment, SPD 2021). Due to the extensive wooded containment of the site, the Landscape section agree with the findings of the Landscape and Visual Appraisal (Guarda Landscape, Feb 2024) that the proposed development will have limited minimal wider landscape and visual impact on the designated landscape and the prevailing landscape character.

The amount, scale and siting of the new build elements will undoubtedly have an adverse impact on the setting of the Grade II listed Hall, essentially losing the functional and visual link with its ancillary buildings such as stables, glasshouses and walled garden which will be either demolished or lost within the scale of the new build.

The submitted information builds on previous draft proposals that were considered to be broadly appropriate in landscape terms. These principles included retaining key views to and from the Grade II listed Hall, respecting the wider woodland setting of the heritage asset containing ancient woodland with specimen veteran trees, retaining the Walled Garden and the formal features close to the Hall such as the lawn and the balustrade, and retaining the sinuous approach along the main drive.

The Sports Pavilion and Energy Centre are sited in an appropriate open location outside the Ancient Woodland where there are few trees. The Field Study Centre is also suitably located utilising the footprint of the existing buildings within an existing clearing and requiring minimal vegetation removal.

The tree species choice is somewhat underwhelming and relies too heavily on fastigiate forms which will look somewhat stiff and contrived, given the natural ancient woodland surround.

Native species such as Sorbus torminalis 'Wild Service Tree', Hawthorn varieties and Prunus padus (Bird Cherry) would be more appropriate adjacent to the multi-Purpose Hall and the ancient woodland than the fastigiate forms of birch as proposed on the Illustrative Landscape Masterplan (Guarda, Dec 2023).

Within the Walled Garden more interesting species such as local provenance heritage fruit trees could be selected across the whole garden, rather than the ubiquitous Pyrus Chanticleer and Betula Albosinensis Fascination that is proposed. Advice could be sought

from the East of England Apples and Orchards Project.
https://www.applesandorchards.org.uk/.

The inclusion of a long-term management plan for the extensive woodland within the site is a positive enhancement of the landscape and its habitats. This includes management of invasive species, encouragement of ground flora, a programme of replacement tree planting, and enhancement of the woodland edge. However, this needs to be accompanied by an Access Plan, to demonstrate how the proposed management will be achieved through regulation of access across the site.

Hard landscape features set out on the Illustrative Holt Hall Surrounds and Core Campus Landscape Masterplans are appropriate.

The boundary treatment for the wider site is appropriate, utilising simple deer fencing with provision for small mammal access to promote permeability and black estate railings at the site entrance. Restricting access into the site for mammals such as deer may impact the site ecology and this should be accounted for within the Ecological Assessments and the Woodland Management Plan.

The plan at 6.9 of the D&A Statement (p.91) shows an existing bin store to be retained and screened with planting. This is exactly at the proposed principle public arrival point and is surely not a suitable location.

External lighting
The development will result in a considerable intensification of use of the site, particularly around the Hall and with the introduction of sports pitches, both in terms of people and vehicles. The resulting requirement for external lighting, as proposed by lighting consultants will cumulatively cause a significant increase in glare and sky glow from the existing baseline that will incur landscape and visual impact in the wider area. The Lighting Impact Assessment (Qoda, 2nd Feb 2024) does propose lighting that conforms to the requirements of Environmental Zone 1 but sets out an inordinate amount of lighting (121 separate lighting units) that can surely be reduced whilst providing adequate and safe light levels. Some of the light fixture specifications seem very high, e.g. 24w LED Kirium.

Furthermore, the Assessment does not include any external lighting for the Sports Pavilion and the Energy Centre, the sports pitches or the Field Study Centre. As such, it does not present a complete picture of the overall lighting requirement and the assessment is therefore not complete. Details should be submitted of all requirements for lighting across the whole site in order to gain an accurate assessment of predicted light levels.

The DW Windsor Kirium One column and the Pharola Bollard are both Dark Sky Compliant and are acceptable, although a different type of bollard is shown on p.101 of the D& A Statement at 6.13.8. Although indicative, this would be a suitable bollard for illuminating paths as it is well cowled (more so than the Pharola option).

The proposed Windsor Heritage column is not Dark Sky compliant and spills light in all planes. This column is specified in profusion around the Hall where there may be ecological enhancements such as bird and bat boxes. Also, why are Windsor Heritage light columns proposed on the edge of and leading into the ancient woodland east of the multi-purpose hall? Surely bollard lighting would suffice along the route to the Field Study Centre? An alternative fitting should be proposed that limits light spill.

All lighting should be warm white and max 2700K, given the wooded context. It is noted at 10.3 of the D&S Statement that all lighting will be time controlled and switched off no later than 9pm, although 5.4 of the Lighting Assessment sets out the proposed lighting controls

and states that building mounted perimeter security lighting will be operated via PIRs. This requires clarification so that it can be conditioned.

Subject to further amendments and clarification, hard and soft landscape specifications can be secured by condition or incorporated into a LEMP condition. Landscape management will also require conditioning as this will be separate from the Woodland Management Plan. External lighting details can also be subject to condition, once the broad principles have been agreed.

Ecology Officer

This response has been prepared following a period of pre-application consultations (albeit with little ecological survey information provided) and upon review of the following submitted documents:

- Preliminary Ecological Assessment Report (Small Ecology Limited, February 2024) {'PEAR'}
- Great crested newt surveys (Small Ecology Limited, 13/11/23) {'GCN Report'}
- Reptile presence and absence survey (Small Ecology Limited, 13/11/23) {'Reptile Report'
- Bat emergence survey (Small Ecology Limited, February 2024) {'BES Report'}
- Ecological Impact Assessment Report (Lanpro, February 2024) {'EcIA'}
- Draft Biodiversity Net Gain Strategy (Lanpro, February 2024) {'BNG Strategy'}
- Holt Hall, Holt – Statutory Biodiversity Metric Calculation Tool V1.0 {'BNG Metric'}

Firstly, the Landscape section fully concurs with the comprehensive comments provided by the Norfolk Wildlife Trust dated 25 March 2024 which highlight significant concerns, including:

- Further survey work has been recommended in the PEAR but not subsequently undertaken. The recommendations included further survey in relation to fungi, rare and scarce plants, breeding birds (including red kite and barn owl), water vole, otter, badger, roosting and foraging/commuting bats.
- An area of waxcap-rich grassland would be permanently lost and not fully mitigated or compensated for.
- There are discrepancies between which grasslands lie within or outside of the CWS designation for Old Pollard Wood CWS.

Further Surveys (*Further Information Required*)
As noted above, a number of further surveys were recommended within the PEAR but do not appear to have subsequently been carried out yet. Paragraphs 4.2.91 – 4.2.95 of the EcIA draw attention to further surveys still being required with regards to bats and barn owl. These surveys must be completed and reported upon prior to determination and the Landscape section is rather disappointed the application has been submitted whilst knowingly providing inadequate survey information. Discussions regarding other protected species surveys which should still be carried out are provided in the relevant sections below.

Botanical Survey (*Further Information Required*)
The PEAR recommends further botanical survey between May and July to target rare and scarce plants. Paragraph 5.4.39 of the EcIA considers "*All recorded plant species have a conservation status of "least concern". Individual vascular plant species are not assessed to be important ecological features and therefore no significant effects are predicted."*. However, the habitat survey work undertaken as part of the EcIA was carried out in December 2023 and builds on species recorded during the PEA in April 2023. No targeted botanical survey has taken place during the optimal survey periods and therefore it has not been demonstrated that rare and/or scarce plants are not present and would not be

impacted by the proposed development. For example, records of an unknown species of orchid in grassland to the east of the lake is referred to in paragraph 4.1.14 of the EcIA and impacts of the proposed development could vary depending upon the species (or group of species) present, and their distribution.

The Landscape section requests further botanical survey is carried out during the optimal survey period for relevant flowering plants to support the application to ensure any rare and/or scarce plants are fully considered within the impact assessment.

Fungi (*Further Information Required*)
The PEAR recommends further survey is undertaken to determine the extent and distribution of waxcaps across the site. The EcIA uses waxcap and notable fungi records provided in the Grounds Management Plan to inform the impact assessment. The text in paragraph 4.1.13 suggests waxcaps are only known in the east, south and west lawns, and beneath an oak in the camping field to the north. Clarity is required as to whether this represents the full distribution and extent of waxcaps, and other notable fungi, present at the site. This should be provided in map form to clearly demonstrate spatial distribution and assist with undertaking the impact assessment.

The Landscape section considers it appropriate for the use of relevant recent records to be used to assist with determining the site value for, and impact assessment upon, rare and/or notable fungi. However, where there are significant gaps in information (e.g. where certain areas have not been surveyed, or data is not from the last 3 years), the expectation would be for detailed survey work to be undertaken, such as eDNA analysis of soil samples or fruiting body surveys by a suitably proficient mycologist.

It is worth noting that Bosanquet *et al.* (2018[1]) recommended sites with ≥ 19 species of waxcap to be designated as SSSIs and sites of 12-18 species should be further surveyed. The list of confirmed waxcap records provided in paragraph 4.1.13 of the EcIA includes 13 species and should therefore undergo more thorough investigation to assess its ecological value.

Additionally, research in the New Forest[2] has highlighted the potential harmful impacts of trampling on grasslands and with regards to veteran trees, including "*compaction around the roots will have a detrimental effect on roots and associated soil fungi and can lead to tree death in veteran trees*.".

Paragraph 5.4.43 of the EcIA states: "*Moderate trampling (through occasional use of the grassland by students and staff) is anticipated to have a neutral impact on the grassland as Natural England's guidance states that* "*the below-ground mycelia (as opposed to the fruitbodies) of these fungi seem relatively resilient to the effects of moderate trampling, either by livestock or in the case of lawns/churchyards by human activity*".". The Landscape section considers that the proposed use of the site could easily lead to some areas (the lawns around the buildings, in particular) being subjected to a much greater level of disturbance than the moderate volume anticipated and likely to be experienced at, for example, churchyards. Based on the number of students the proposed development would accommodate, it is considered likely that the increase in disturbance would extend into the realms of "*significant trampling*" which the Natural England advice would consider harmful.

The Landscape section therefore considers the rise in damage caused by trampling and recreational activities could lead to detrimental impacts upon the fungi communities present at the site. The EcIA should consider how trampling impacts could be appropriately and

sufficiently avoided, mitigated, or compensated for in order to conserve these habitats of 'regional importance'.

Lastly, the Catchment Plan (Dwg no. 001, Rev P1, dated 02.02.24) prepared by AKT proposes soakaways in the south lawn, walled garden and north of the proposed music block. These would significantly alter the soil conditions and must be taken into consideration within the impact assessment.

Breeding Birds (*Further Information Required*)
The PEAR recommends breeding bird surveys could be of assistance, though are non-essential, except for in regard to barn owl and red kites (both Schedule 1 species under the WCA 1981).

The EcIA accepts breeding birds will be present within woodlands, grassland, trees and buildings and would therefore be impacted upon through the proposed development. The recommendations for further survey include a check of the barn owl box on the stables (paragraph 4.2.94) – this must be undertaken by a licensed barn owl surveyor and a check must be undertaken prior to determination to enable the value of the site to barn owl to be ascertained.

There is no mention of red kite at all within the EcIA, and therefore impacts upon the species appear to have not been taken into consideration. The Landscape section recommends further investigation into the value of the woodlands for red kite, and an assessment of impacts undertaken.

Water Vole / Otter
The PEAR recommends survey for water vole and otter on the basis that discharge from the proposed development would into the existing lake. The drainage strategy has been designed to avoid the need for discharge into the lake. The EcIA therefore considers no further survey work necessary, though highlights the need for consideration of both species during woodland management within 10m of the lake. These requirements for consideration (including survey work by a suitably qualified ecologist) are highlighted in Section 7.6 of the Woodland Management Plan. The Landscape section therefore has no further concern with regards to impacts upon these species.

Badger (*Further Information Required*)
Field signs indicative of potential badger setts was recorded in W4 and W7 during the initial site walkover and a badger survey within 50m of the site was recommended.

The EcIA does not indicate further survey work has been completed, nor that it is necessary on the basis that any impacts would be restricted to construction only and managed through precautionary mitigation as no other setts were noted. Disturbance impacts during the operation phase were deemed negligible due to the known sett holes being away from areas of high recreational use. The Landscape section does not concur with this assessment.

The location and habitats present are "*highly suitable for badgers*" as noted in the PEAR, and that "*It's not clear if they're present or not*" within the grounds. The potential sett in W7 was found within an area of rhododendron and it is possible other evidence of badger presence is obscured by vegetation. Additionally, the Woodland Management Plan proposes areas of woodland to be cleared of rhododendron and for other works to take place which could impact upon badger setts, if present. However, in the absence of a detailed badger survey, it remains unknown as to whether badger setts would or would not be affected by these works.

Additionally, whilst the EcIA considers recreational disturbance to be negligible, this again assumes that no badger setts are present proximate to the building or areas of significant school-related activities. The reality is that the proposed use of the site, and the human presence it would introduce, would be a substantial intensification above existing or previous site use. It is unclear what measures would be put in place to prevent schoolchildren from using areas of woodland recreationally which may negatively impact wildlife or lead to interference with badger setts. Therefore, it is recommended an Access Plan is provided to demonstrate any measures necessary to regulate access to different parts of the wider site.

Lastly, the Landscape section notes that deer exclusion fencing is recommended in the Boundary Treatment, Security Features and Signage Plans (Guarda Landscape) around the perimeter of the site with badger gates to be installed at intervals. Confirmation is sought that the badger gates would allow for two-way access, and not installed to only allow one-way access.

In summary, the Landscape section considers there to be potential impacts upon badgers which have not been fully ascertained through targeted survey work and therefore requests a formal survey is undertaken of all relevant parts of the site which could feasibly be affected during both the construction and operation phases of the development. Impacts upon any known badger setts would then need to be considered within the Woodland Management Plan.

Great Crested Newts (*Further Information Required*)
Following survey work undertaken as part of the GCN Report and confirmation of GCN presence at the site, paragraph 5.4.18 of the EcIA recommends use of Natural England's District Level Licensing (DLL) scheme to allow works to proceed lawfully. Paragraph 6.2.8 notes the lack of pond availability in Norfolk at the time of enquiry as preventing the site from being accepted on the DLL scheme.

Confirmation of acceptance onto the DLL scheme, through provision of an Impact Assessment and Conservation Payment Certificate (IACPC) countersigned by Natural England (including the site area to be licensed which should incorporate the entire red line boundary where works will take place), must be provided prior to determination as detailed in government guidance[3]. Until this information has been provided, the Council is not in a position to approve the development in accordance with its statutory duties under Regulation 9 of the Conservation of Habitats and Species Regulations 2017 as amended.

Reptiles
The Reptile Report details the results of survey which identified a breeding population of slow worm (peak count 21) and low population of common lizard (peak count 1). Recommendations were made for translocating reptiles prior to development to an as yet unknown receptor site, though preferably within the wider site. The Landscape section are uncertain this would be possible given the extensive use of the site proposed and the majority of the site comprising woodland, with any grassland areas either proposed for development of some kind or to be subjected to a significant increase in disturbance.

The reptile surveys allowed for a significant 'bedding-in' period of refugia and a total of 8 surveys were conducted between 9th August 2023 and 7th October 2023. It is noted that weather conditions were "*not exceptional*" and that two of the surveys were on sequential days, though this was an additional visit over and above the standard seven used for presence/likely absence surveys.

The Landscape section notes that all surveys commenced during the morning with no surveys targeting the afternoon hours when refugia temperatures may have been more suitable in some locations (e.g. where refugia were deployed in areas heavily shaded throughout the early parts of the day, such as in camping field to the north of the site). However, there seems to have been a relatively even distribution of reptiles recorded across the site, and this should not have significantly affected the presence/likely absence survey.

The Landscape section is concerned by the interpretation in the Reptile Report which suggests the slow worm population is 'Low'. In accordance with Froglife Advice Sheet 10: Reptile Survey, the peak count of 11 adult slow worm recorded across the site would firmly indicate the overall population to be at least 'Good' (if not 'Exceptional' should additional population size assessment of at least 20 surveys in a season be conducted), whilst noting that survey conditions were not all during the optimal time survey period nor in optimal survey conditions.

The EcIA builds upon the recommendations of the Reptile Report and proposes translocation from the proposed car park area, the proposed location of the sports pavilion, the walled garden and the grassland area to the north of the walled garden. A destructive search would be carried out on those locations following completion of translocation works.

Paragraph 6.2.28 of the EcIA suggests a neutral residual impact upon reptile species during the operation phase based on improved management to enhance retained grassland habitats in the Camping Field to the north and around the margins of the proposed sports fields. The Landscape section notes paragraph 5.3.5 of the BNG Strategy which recommends grassland enhancement "*Grassland enhancement could be delivered by preparing the relevant grassland areas between August and mid-September by mowing the sward short and creating at least 50% bare ground throughout the sward using machinery to create bare patches at least 10cm in diameter.*". This could result in injury and/or death of individual reptiles, particular slow worm which are less mobile than common lizard and snake species. Therefore, the Landscape section queries whether the wider management strategy designed to achieve BNG of 10% would be detrimental to reptiles or would be sufficient to increase the carrying capacity of habitats to support the translocated reptiles.

The Landscape section does not object to the translocation of reptiles, although a Reptile Mitigation Strategy would need to be conditioned should the application be approved. The creation/enhancement of habitats at the receptor site(s) would need to be undertaken, and the habitats sufficiently established to receive reptiles, prior to the translocation being carried out. This process is integral to the success of the translocation programme and will require due consideration and completion prior to the commencement of any development works. It will also need to be informed by reptile capture rates and it may be prudent to identify additional receptor sites in the local area which could accommodate reptiles in the event significant numbers of reptiles are recorded/captured.

<u>Bat Emergence Surveys</u>
The Landscape section has concerns over the effectiveness of the bat emergence surveys already carried out, as reported upon in the BES Report.

Section 2 (Methods for field survey) of the BES Report notes the use of two thermal imaging scopes and an IR camera, but details of the equipment used are not provided in Appendix 1: Protocol for Emergence Surveys, nor photos showing the images obtained via these methods during dark conditions, and therefore it is not known whether this equipment was fit for purpose. Appendix 2: Survey Results only appears to show one night vision aid (NVA) being used on four of the seven surveys undertaken, when full coverage of the buildings/tree would be essential to accurately record late-emerging species, such as brown long-eared bat. Additionally, the height of the buildings and distance of surveyors from echolocating bats

would affect detectability of species with low volume echolocations (e.g. brown long-eared bat). Additionally, the number of surveyors used is deemed insufficient to provide comprehensive coverage of the buildings, particularly where one surveyor was used to survey the entire eastern elevation of the three-storey hall and its extensions/outbuildings to the north. This would be almost impossible for even the most experienced and sharp-sighted bat ecologist to survey with confidence, particularly in the absence of a night vision aid. The above factors are therefore considered likely to have contributed to why "*The number of droppings present within the loft spaces was consistent with a maternity roost, but there was no evidence of significant numbers of bats emerging during the surveys*."

Details of personnel are restricted to the lead surveyor, with only one other surveyor noted as holding a class survey licence. No indication is provided of the experience levels of surveyors. It should be noted that Natural England Class Survey Licences are not an indicator of surveyor competency or experience, only that the licensed activities can be carried out with due regard to the safety of the protected species.

The timing of surveys does not inspire much confidence in the results, with four of the surveys undertaken at the very end of August (29th/30th) and mid- to late-September (19th, 26th), following an initial dusk/dawn survey undertaken on 20th/21st June. Breeding periods vary across bat species and only the survey undertaken on 8th August would have potentially allowed for the survey to detect brown long-eared bat juveniles in flight which would assist in confirming presence of maternity roosts. In Norfolk, pipistrelle maternity colonies may form as early as mid-April and start to disperse by the end of July. In contrast, brown long-eared bat maternity roosts may not form until June and disperse towards the end of August. These timings can shift by 2-3 weeks each year dependent upon weather conditions during spring and summer.

With the above in mind, it brings into question whether the results of the survey work conducted provide accurate and reliable representation of the bat roosts present at the site and the overall predicted impacts upon roosting bats (*not taking into consideration any other impacts which may be determined following the required further survey work*). Given that the initial Preliminary Ecological Appraisal was undertaken in April 2023 before the optimal survey period commenced, it is somewhat disappointing that the majority of emergence surveys were undertaken so late in the season, including into September when any maternity roosts will have likely dispersed.

However, as the works will require a European Protected Species mitigation licence to be obtained from Natural England, update surveys during the most recent survey period will be needed to support the licence application. Further survey work will be necessary to confirm the roost species, type and status to ensure any mitigation and compensatory measures are appropriate and proportionate. The Landscape section therefore considers the survey information to provide sufficient certainty of impacts (i.e. maternity and day roosts for the species recorded will be lost, damaged and/or disturbed in the absence of mitigation), and that those impacts can be appropriately mitigated and compensated for. The Landscape section would recommend securing condition ECO6 in the event of an approval. *Please note this acceptance of impacts upon roosting bats applies only to where surveys have already been completed and reported upon within the BES Report, not where further surveys remain to be undertaken.*

External Lighting (*Further Information Required*)

With regards to potential impacts upon wildlife arising from external lighting, it is recommended the Electrical Services – Lighting drawing (Dwg No. 41096-QODA-EX-XX-DR-E-0904 Rev. P02, dated 01.02.24) is amended to fully take into consideration the potential for impacts upon nocturnal wildlife, such as bats and badger. This should also include provision of a separate "Lighting Design Strategy for Biodiversity". Whilst this

requirement could be conditioned, surveys remain to be undertaken for some of the protected species which could be affected (e.g. bats and badger) and therefore consideration of breeding sites and resting places for these species could alter the overall lighting plan.

Of particular interest are the 4m high lighting columns and the potential cumulative light spill arising from higher densities around the car park areas. The Landscape section queries whether the number of lighting columns could be reduced. Additionally, the light colour of all external lighting should be reduced to 2700k, rather than 3000k, which would lessen the potential impacts upon wildlife.

The "Lighting Design Strategy for Biodiversity" should include the following:

a) Identify those areas/features on site that are particularly sensitive for species active overnight, such as bats and badger, and that are likely to cause disturbance in or around their breeding sites and resting places or along important routes used to access key areas of their territory, for example, for foraging; and,
b) Show how and where external lighting will be installed (through provision of appropriate lighting contour plans and technical specifications) so it can be clearly demonstrated that areas to be lit will not disturb or prevent the above species using their territory or having access to their breeding sites and resting places.

In line with best practice guidance 'Guidance Note 08/23: Bats and Artificial Lighting at Night' (Institute of Lighting Professionals, 2023), item a) above must be prepared by a suitably qualified ecologist and item b) by a lighting engineer.

This will need to take into consideration known bat roosts which will be retained, and any new biodiversity enhancement features installed. Again, the 4m high lighting columns must not illuminate these areas or flight paths to/from features. Elevational drawings depicting the locations of relevant biodiversity features in relation to the height and light spill of these columns would better demonstrate no light spill upon features than a 2D drawing/plan.

<u>BNG</u>

The requirement for the application to deliver BNG of a minimum 10% is not mandatory due to the application being received by the Council prior to the 12th February 2024. Additionally, the BNG Strategy should be viewed as draft and the finalised plans and information will be approved post-consent. *The below comments regarding BNG should therefore be read and interpreted within this context.*

Firstly, the Landscape section would like to note the difficulty in reviewing the documents provided for a number of reasons. It is hard to establish which habitat parcels in the metric relate to which parcels on the baseline map provided. References to W1, W2, G1, etc. are relevant for the EcIA but are not cross-referenced within the metric. Whilst Table 1: Baseline Habitat Units of the BNG Strategy summarises habitat units and their corresponding references, this does not include the parcel reference in the metric. Commentary should also be provided in the user comments columns on the biodiversity metric to assist with review and assessment by the LPA.

The habitat surveys supporting the BNG metric were undertaken in December 2023. Therefore, it is unlikely these surveys would have detected the full range of flowering plants present in the various grassland parcels and therefore may have led to some habitats (grasslands in particular) being mistakenly classified and undervalued. Section 3.3.2 of the EcIA suggests a precautionary approach has been taken to ensure grassland is not undervalued though this relates to condition assessments.

As an example, the plant list provided in Appendix 1 of the PEAR includes four species named on the g3a (Lowland Meadows) indicator species list (*Anemone nemorosa*, *Centaurea nigra*, *Galium verum*, *Lotus corniculatus*), in addition to three of the 'typical grasses' associated with g3a. The distinctiveness of the 'other neutral grassland' category used in the BNG calculations is 'Medium', whilst 'Lowland Meadow' has a 'Very High' distinctiveness. For clarity, the Landscape section is not suggesting that grasslands at the site would include Lowland Meadow but highlighting the importance of undertaking botanical survey at an appropriate time of year to reliably ascertain the baseline habitats and their relative ecological values.

However, it is noted there is a discrepancy between the PEAR which identified the presence of semi-improved acid grassland (based on Phase 1 Habitat Survey methodology undertaken in April 2023). This habitat type corresponds to either g1 (acid grassland), g1d (other lowland acid grassland) or g1b6 (other upland acid grassland) using UKHabs Classifications – none of which have been included in the BNG calculations, though parcels G5 and G6 are displayed as other lowland acid grassland on the Baseline Biodiversity Plan (Appendix 1 of the BNG Strategy).

No indication of the botanical expertise or experience of the surveyor (e.g. FISC level, years undertaking botanical survey) is provided within the Metric or supporting BNG strategy. The minimum FISC level expected for undertaking professional habitat surveys is Level 3 (Reasonable ID skills), with a minimum of Level 4 (Good ID skills) expected for National Vegetation Classification (NVC) surveys which would align closer to the requirements for habitats potentially of higher ecological value. Again, the Landscape section is not saying the surveyor is not sufficiently experienced, only that this has not been demonstrated.

Paragraph 4.1.5 of the BNG Strategy highlights the reason why lowland mixed deciduous woodland is formally identified in local strategy for its spatial significance. However, it is not clear why some of the other woodlands are considered of low strategic significance, when any woodland within the wider wooded setting would contribute positively to local green infrastructure and could therefore be considered ecologically desirable but not in a local strategy.

The above also applies to baseline grassland habitats being considered of low strategic significance. For example, both the camping field (e.g. providing an area of parkland within a woodland setting) and lawn areas (e.g. for the well-established low nutrient input grassland allowing species indicative of a long term management regime) could be considered ecologically desirable in the wider context of the site and in contributing to a mosaic of habitats within the woodland setting which would support a greater range of species.

With regards to post-development habitats, there is less chance of certain habitats achieving a 'Moderate' or 'Good' condition due to the significant disturbance which will occur and therefore habitat is more likely to become degraded. The post-development calculations should therefore take into consideration where access is likely to be possible and how this may lead to habitat degradation. As noted in the Badger section above, it may be considered appropriate to provide an Access Plan to demonstrate how habitat disturbance (e.g. trampling across managed grassland and in woodlands) will be managed accordingly.

<u>Summary</u>
The Landscape section considers there to be significant ecological constraints at the site, some of which remain to have survey work carried out to fully inform the impact assessment. As such, the Landscape section does not consider the applicant to have provided sufficient information or that the Council is in a position to positively determine the application in accordance with its statutory duties.

The Landscape section has highlighted those areas where further information is required within the sub-heading titles above for clarity.

Additionally, it is also worth noting that where further protected species survey work will be required prior to management works taking place, these should be clearly identified and stated within the relevant management documents (e.g. the Woodland Management Plan).

The Landscape section appreciates the precarious balancing act which must be achieved in order to deliver the proposed development whilst taking into consideration all relevant biodiversity interests. However, at present, the Landscape section must maintain a holding objection to the proposed development due to insufficient information being provided and therefore not being in compliance with Policy EN 9 of the adopted Core Strategy.

Further comments received 23/07/2024
Arboricultural comments
These additional comments are being provided following information being received on 2 July.

It's positive that at the south wall, the reduction in building footprint has ensured additional space is given to the veteran Robinia tree, T5. Increasing the yew hedge height from 1.2m to 1.8m is also positive and supported.

The revised tree planting strategy for the site includes more varied tree species and larger canopy trees. It sets out a preferable species selection with good quality, large stock to be planted and can also be supported.

Boundary treatments, signage and security
ANPR cameras are situated in tree'd areas that have not been considered as part of the AIA document, these cameras will need power and connectivity and this needs to be considered in terms of arboricultural impact.

There is also mesh fencing illustrated around the perimeter, the AIA does not cover this aspect of work, a method statement for installing the fence is appropriate to ensure the work does not damage retained trees. The fence should be installed with the advice of ecologists to ensure existing mammal routes are maintained.

Woodland access plan
The woodland Management Plan sets out - 6.2 Access to the woods by pupils will be controlled to avoid damaging the most sensitive areas and avoid perceived hazards. For example, there will be no access to the ancient and semi natural woodland other than for supervised ecological studies. In other areas, including the ancient woodland replanted areas, access will range from unlimited to focused.

There are no submitted details about how the controls will look on the ground, will there be markers, signs or other boundary treatments?

Woodland management and Ecology
Further ecological information on badgers has been submitted, the WMP recommends the removal of the rhododendron across a large proportion of the site and though this work is positive from a woodland management perspective, the work has the potential to adversely impact protected species.

Any proposed rhododendron removal will need to consider impacts upon the existing setts, will need to avoid de-stabilisation of setts and be carried out at an appropriate time of year to minimise impacts.

It is recommended additional ecological input is gathered before rhododendron clearance work is carried out. It is also recommended a five-year annual badger monitoring survey should be undertaken in accordance with the five-year management timescale set out in the WMP to monitor and inform any changes to management prescriptions.

Highways and access
At the site frontage off Kelling Road, highway improvement works are set out on plans by Schema dated Jun '24, it shows a large stretch of required visibility splay and appears to include the removal of trees and hedgerows on Kelling Road. As a recent addition to the submitted information, the impact of this element of work is not considered as part of the AIA documentation but needs to be.

A new path on opposite side of road on the existing school site details a new estate maintenance track and could be surfaced with grasscrete or similar, the footpath routes into the site are also illustrated but materials are not detailed.

Additional information on the arboricultural impact of the visibility splays, new routes and surface details needs to be included in the submitted information. The path through the woodland should be no-dig and as set out in the drainage strategy documents, new surfaces should be permeable.

Drainage Strategy
The soakaway illustrated to the north of the music centre conflicts with the RPA of retained trees. This should be relocated further east.

It's not clear if the soakaway at the south of the existing hall conflicts with the RPA of T15 or not, it appears there is space to move this further east to avoid the RPA of this tree.

The soakaway associated with the field study centre also appears to conflict with the RPA of trees, there is space for this soakaway to be more carefully placed. All drainage and soakaway works should consider and seek to protect retained trees and their roots, further details of tree protection measures while this work is carried out needs to be submitted.
Climate & Environmental Policy (NNDC)

Further comments received 01/08/2024
<u>Ecology</u>

This response has been prepared following a period of pre-application consultations (albeit with little ecological survey information provided) and upon review of the following submitted documents:
- Ecological Impact Assessment Addendum (Lanpro, July 2024) {'EcIA Addendum'}
- Bat activity surveys (Small Ecology Limited, January 2024) {'BAS Report'}
- Badger and Barn Owl Impact Assessment (Torc Ecology, July 2024) {'BaBOIA'}

Botanical Survey
A more thorough botanical survey identified a variety of near threatened, scarce and vulnerable plant species.

Small populations of corn spurrey and corn mint would be lost as part of the proposed development, though both are considered widespread (though declining) in the UK.

Populations of common cudweed and mossy stonecrop will be reduced. Minor negative impacts are expected upon vascular plants which are of value at a county scale.

Fungi
The results of Fungi eDNA survey have not been received.

The EcIA notes that some of the scheme revisions, namely removal of footpath in the south lawn, will relocate some of the expected recreational impacts away from areas of lawn supporting waxcap fungi. Relocation of a soakaway from G6 to G5 will also relocate potential impacts to waxcaps and other fungi present within G5. Minor negative and moderate negative impacts are foreseen during the construction and operation phases of the development, respectively.

The Landscape section remains concerned that the long-term impacts of the proposed development would lead to a significant decline in mycological diversity and potential loss of species with a limited distribution in Norfolk.

Barn Owl
The BaBOIA details an inspection of an existing barn owl nest box and evaluates site habitats for their potential to support barn owl. The box was found to not be in use, nor show signs of any previous use by the species.

It is recommended the box is removed prior to January 2025 or following another inspection for signs of use by a suitably licensed ecologist.

Enhancement recommendations include the relocation of the existing nest box and installation of an additional nest box within more favourable habitat for the species in the 'Camping Field' to the north of the site, as shown on Figure 3 of the report.

The Landscape section is satisfied the impacts upon barn owl would be sufficiently mitigated and the site enhanced for the species subject to these recommendations being implemented.

Red Kite
No evidence of red kite nesting was recorded during three surveys, with only one individual recorded during one of the surveys. No impacts upon the species are foreseen.

Other species of interest recorded included an active buzzard nest and a singing firecrest.

No further concerns are raised in respect to breeding birds.

Badger
The BaBOIA provides details of detailed badger survey undertaking within the area to be affected by development works, in addition to survey of a known existing sett away from the building complex.

A main sett and outlier sett were identified at the site. Given the distance from the construction zone, direct impacts are considered unlikely and Reasonable Avoidance Measures (RAMs) are recommended to mitigate risk of harm to badgers.

However, woodland management prescriptions (i.e. removal of rhododendron) close to badger setts may affect their function and sensitive working methods will need to be followed to avoid the requirement for licensing. Ongoing ecological input and long-term monitoring of badger activity will be required to inform woodland management in the future.

With regard to ongoing disturbance impacts during operation of the school, the relevant woodland compartments will have no access other than supervised ecological group studies and for maintenance, as demonstrated in the submitted Woodland Access Plan. Additionally, two-way badger gates will need to be installed at suitable locations within deer exclusion

fencing to allow badger to travel between the woodlands and surrounding habitats.

The Landscape section is satisfied the impacts upon badger have been sufficiently considered and can be mitigated for effectively through the recommendations made in the report. Details of the locations for two-way badger gates to be installed and monitoring of badger setts will need to be secured via condition, and the RAMs measures incorporated into the previously recommended CEMP: Biodiversity.

Great Crested Newts
A valid countersigned IACPC has been provided (Appendix 4 of the EcIA Addendum) to demonstrate Natural England's DLL scheme will be used with regards to impacts upon GCN. The accompanying plan showing the site location proposed to be covered by the DLL agreement has not been provided. This must match the red line boundary of the planning application to ensure the impacts of all development works are covered by the licence.

Bat Emergence Surveys
Further survey work has been conducted to supplement those undertaken in 2023.

Overall, the proposed development would lead to:
- The loss of a small soprano pipistrelle maternity roost,
- Disturbance to a brown long-eared bat maternity roost,
- The loss of a hibernation roost for individual Natterer's bat and Daubenton's bat, and
- The loss of day roosts for soprano pipistrelle (three) and brown long-eared bat (one).

The majority of impacts would occur upon common and widespread species, whilst the hibernation roosts are only of individual Myotis species. Most importantly, the maternity roost of brown long-eared bat will be retained within the loft of Holt Hall and the mitigation licence will require ongoing monitoring to ensure mitigation is successful in the long-term.

Subject to works being carried out under licence, the Landscape section is satisfied impacts upon roosting bats will be sufficiently mitigated and compensated for.

Bat Activity Surveys
Firstly, it is noted the submitted BAS Report has a 'Draft' watermark and should therefore not be considered as the final report. Comments are provided based on the submitted report and would need to be reviewed if a final report is submitted.

The BAS Report details the result of bat activity surveys (walked transects and static detector deployment) undertaken in August and September 2023. Additional bat activity surveys undertaken between April and July 2024 are reported upon within the EcIA Addendum.

The assemblage of bat species recorded (10 of 18 resident UK bat species) categorises the site as being important at the 'County' scale according to the EcIA Addendum, although the BAS Report calculates an assemblage score of 22 points and being of 'National' importance. Taking account of the 8 species confirmed at the site (excluding Myotis sp., Whiskered bat and Pipistrelle sp.), the assemblage score would be 17 and of 'Regional' importance according to bat mitigation guidelines. Therefore, it is not clear where the 'County' scale importance has been derived as no justification for this has been provided.

The lighting plans have been amended to remove luminaires along the main drive. However, the lit footpath through woodland W1a is likely to impact upon barbastelle bat which were predominantly recorded within this woodland and a minor negative impact upon this species is foreseen.

The reduction of external lighting and lighting being turned off between the hours of 21:00 and

06:00 will limit the impacts of light spill during dark hours. As with other ecological receptors, it would be naïve to consider it possible for the proposed development to be implemented for its intended purpose with no impacts upon foraging/commuting bats whatsoever. However, the proposed mitigation measures would be considered sufficient to avoid significant detrimental long-term impacts upon bat behaviour at the site, although a period of habituation to the altered conditions at the site would be expected.

External Lighting
The Landscape section notes the light colour of all external lighting, except luminaires 'LE', are of 3000k or higher. Luminaire LE, which has a light colour of 2700k, has been used only in the Field Study Centre. Bollards and light fixtures within and close to woodlands should also have a light colour of 2700k to lessen the potential impacts upon wildlife, as requested in previous Landscape comments.

It is also noted that a Lighting Design Strategy for Biodiversity has not been submitted to clearly demonstrate important areas for sensitive species which are active overnight and how they may be impacted by the proposed lighting scheme. Therefore, the Landscape sections previous comments on External Lighting cannot be considered to have been fully addressed.

Summary
As previously commented, the Landscape section considers there to be significant ecological constraints at the site, and it is not feasible for all constraints to be overcome as part of the proposed development due to the many conflicting interests at the site and requirements for the school to function as intended.

Results of the fungi eDNA survey remain outstanding. The planning officer may take a view on whether the impending results would significantly alter the weight given to detrimental ecological impacts within the planning balance.

Regarding impacts, Old Pollard Wood CWS and areas of grassland supporting notable fungi will be subjected to ongoing recreational disturbance impacts. Light, visual and noise disturbance will all increase significantly at the site during operation which will deter wildlife in general and lead to behaviour changes for some species. The proposed works will require the translocation of reptiles and destruction of several minor bat roosts.

However, there would also be beneficial outcomes for biodiversity achieved as part of the proposed development, such as positive management of woodland and grassland habitats, increased foraging resources for a range of species, and providing the means for conserving the roof structure and void of Holt Hall which supports a maternity roost of brown long-eared bat.

Policy EN9 of the adopted Core Strategy states that "All development proposals should… protect the biodiversity value of land and buildings", and that development proposals will not be permitted unless "the benefits of the development clearly outweigh the impacts on the features of the site and the wider network of natural habitats". A proposal of this type and magnitude in a location which currently has significant historic and well-documented ecological interests will inevitably struggle to meet these requirements. On balance, and after much deliberation, the harm is considered likely to outweigh the benefits and the Landscape section feels obligated to maintain an objection on ecological grounds. The case officer should determine how much weight to apply to the expected ecological impacts alongside the other material considerations of the overall scheme.