

The Former Princess Helena College, Temple Dinsley – Statutory Biodiversity Metric Calculations

Background

This note provides a summary of the Statutory Biodiversity Metric (“the Metric”) calculations in relation to proposed development at the former Princess Helena College, Temple Dinsley, Hertfordshire (“the Site”). The full Metric calculator is provided alongside this note.

The Metric calculations presented incorporate proposals for the conversion of existing buildings, new housing and car-parking, and landscaping proposals (“the Development”). A package of new habitat creation and habitat enhancement measures are also proposed to meet BNG requirements and reflect the ecologically sensitive approach which underlies the proposals. The Development and enhancement proposals are shown by the Proposed Site Plan in **Appendix A**.

Habitat Baseline

A habitat survey of the Site was undertaken by AEL in June 2023, with supplementary habitat condition assessment surveys completed on 4 June 2024. The locations of individual trees (outside of woodland area) and tree sizes align with the detailed tree surveys and schedules prepared by Sharon Hosegood Associates. The habitat map has been transferred to a Geographical Information System (ArcPro) and is shown by **Figure 1**.

The Site (27.8ha) has a baseline value of 129 habitat units. This includes 31 units of semi-natural woodland, 33 units of other neutral grassland, 21 units of modified grassland and 27 units of trees. Habitats present within the Site that are classified as High Distinctiveness according to the Metric are lowland mixed deciduous woodland (including Summerhouse Plantation), traditional orchard (north of the Main House) and a small ephemeral pond supporting reedbed (reed sweet-grass swamp) located northwest of the Tank House. A total of 16 veteran trees, which are classified as irreplaceable habitat, are also present on Site according to the tree survey and schedules and will be retained and protected as a priority.

Development Impacts and Habitat Enhancement and Creation Proposals

Development impacts

Development areas and areas of new habitat creation and enhancement are shown by **Figure 2**, and are based on interpretation of Proposed Site Plan¹, the East Park Outline Planting plan², and Houses Outline Planting plan³.

¹ Scabal – Proposed Site Plan (drawing number 641-KS-03-XX-DR-A-10002), 28.03.24, Revision P11.

² Livingstone Eyre Associates – East Park Outline Planting (drawing number 641-LEA-00-00-DR-L-2001), 09.07.2024, Revision P04.

³ Livingstone Eyre Associates – Houses Outline Planting (drawing number 641-LEA-00-00-DR-L-1001), 09.07.2024, Revision P04.



Around 5.5ha of the Site will be impacted by the proposals, including areas of new Development and locations of new habitat creation, resulting in the loss of around 16 habitat units. Most of this is associated with the loss of semi-natural woodland through the placement of two new houses in Summerhouse Plantation (3.65 habitat units) and the loss of grassland due to woodland planting (6 habitat units). However, areas of new woodland planting have been located in areas of lower quality grassland and there is an overall net benefit to the new woodland creation being proposed.

Enhancing Summerhouse Plantation and southern woodland block

To address habitat trading issues associated with the loss of semi-natural woodland in Summerhouse Plantation (currently in poor condition) the larger unaffected part of this wood (4.5ha) and the southern woodland block will be enhanced by improving long-term management. Practical measures are likely to include tree thinning and select removal, restocking with mixed native trees and shrubs, improvements to the understorey and structural diversity and perhaps the exclusion of browsing deer. It is important to note that most existing trees within the proposed residential curtilages of Summerhouse plantation will be retained and incorporated into the gardens and therefore the actual extent of woodland loss is likely to be much smaller than the 'worst case' loss used by the BNG calculations and presented here. In addition, the Development boundary has been pulled back from the western boundary of Summerhouse Plantation to retain and allow the expansion of bluebell and dog's mercury patches present along this boundary.

Delivering a uplift in the condition of retained parts of Summerhouse Plantation and the southern woodland block from poor to moderate would generate **3.9 habitat units** and address habitat trading requirements for this High Distinctiveness habitat.

Enhancing existing grassland

Substantial areas of existing pasture grassland (modified grassland in poor condition) around 2.1ha in extent will be enhanced to other neutral grassland in good condition through wildflower over-sowing, and management by annual hay cutting and potentially light aftermath grazing. Enhancing this grassland would generate around **12 habitat units**.

New habitat creation

The planting of extensive new blocks of broadleaved woodland on open grassland and targeting moderate condition would generate **5-6 habitat units**, and the planting of 253 new small native trees would generate over **3 habitat units**. New soft landscaping within proposed Development plots has been included in the BNG calculations and would also deliver some BNG benefits.

Linear features

The Site supports a mix of linear features with a baseline value of 17.11 hedgerow units, including species-rich native hedgerow with trees (12 hedgerow units) and lines of trees (4.5 hedgerow units).

Only a short section of non-native Leyland cypress tree screening will be removed to facilitate the Development. New tree avenues 320m in length will be planted (0.6 hedgerow units), and most existing tree avenues will be enhanced by relaxing management and allowed features of value to biodiversity, such as deadwood, to develop overtime.

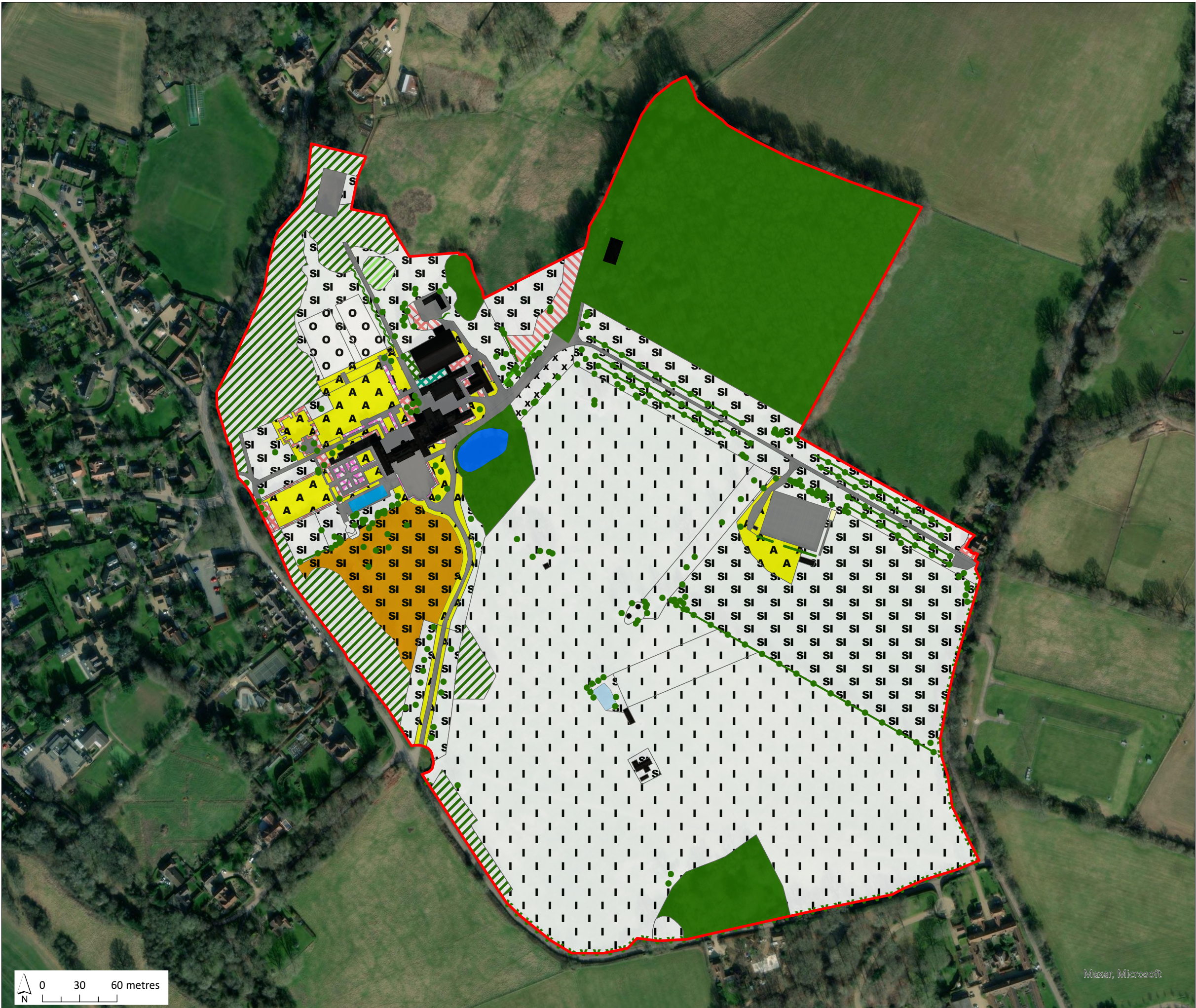


BNG Outcome

Based on the Development layouts and the proposed habitat enhancement and creation measures set out above, the overall scheme would achieve an uplift in habitat units from 129.7 before Development to 151.2 after Development (**+21.5 habitat units**), equivalent to a **+16.6% Biodiversity Net Gain (BNG)**, and would comply with habitat trading requirements.

Linear features would also be improved from 17.1 hedgerow units before Development to 21.5 hedgerow units after Development (**+2.2 hedgerow units**), equivalent to a **+12.8% BNG for hedgerows**.





Temple Dinsley

Habitat baseline

- Site boundary
- buildings (developed land; sealed surface, n/a)
- hard-standing (developed land; sealed surface, n/a)
- broadleaved semi-natural woodland, lowland mixed deciduous woodland, poor
- broadleaved plantation woodland (other woodland; broadleaved, poor condition)
- mixed plantation woodland, (other woodland; mixed, poor condition)
- dense scrub, (bramble scrub, n/a)
- amenity grassland (modified grassland, moderate condition)
- dense scrub (willow scrub, poor condition)
- orchard, (traditional orchards, moderate condition)
- semi-improved neutral grassland (other neutral grassland, good condition)
- poor semi-improved grassland, (other neutral grassland, poor condition)
- improved grassland (modified grassland, poor condition)
- bare ground (bare ground, poor condition)
- bare ground, (artificial unvegetated; unsealed surface, n/a)
- tall ruderal (ruderal / ephemeral, poor condition)
- ephemeral / short perennial (ruderal / ephemeral, poor condition)
- introduced shrubs (introduced shrubs, n/a)
- flowerbed (introduced shrub, n/a)
- standing water (ornamental lake or pond, poor condition)
- standing water, (pond, non-priority, moderate condition)
- swamp, (reedbed, moderate condition)
- line of trees (line of trees, moderate condition)
- species-rich hedge with trees, (species-rich native hedgerow with trees, good condition)
- species-poor intact hedge, (native hedgerow, good condition)
- species-poor intact hedge, (native hedgerow, moderate condition)
- species-poor intact hedge, (non-native and ornamental hedgerow, poor condition)
- individual tree (from Tree Survey)

Figure 1

Map Scale @ A3: 1:3,000

Surveyed by: RJH
Survey date: June 2023 and June 2024
Drawn by: RJH
Checked by: DP
Status: Final





Temple Dinsley

Proposed habitat creation and enhancements

- Site boundary
- new - artificial unvegetated: unsealed surface
- new - developed land; sealed surface, building (n/a)
- new - developed land; sealed surface, hard-standing (n/a)
- new - introduced shrub (n/a)
- new - mixed scrub (moderate condition)
- new - modified grassland (grasscrete in poor condition, otherwise moderate condition)
- new - other neutral grassland (cricket pitch in poor condition, otherwise moderate/good condition)
- new - other woodland; broadleaved (moderate condition)
- new - vegetated garden (n/a)
- retained and enhanced - lowland mixed deciduous woodland (poor to moderate condition)
- retained and enhanced - other neutral grassland (poor to good condition)
- new - line of trees, avenues (moderate condition)
- retained and enhanced - line of trees, avenues (moderate to good condition)

Notes

- Areas that are not coloured will be retained and unaffected by development.
- New trees are not shown, but based on interpretation of masterplan and landscape proposals, a total of 253 new small-sized trees (moderate condition) are to be planted outside of private gardens and have been included in the Metric calculations.
- Most of the trees located in the curtilages of the two new dwellings in Summerhouse Plantation will be retained. In line with Metric guidance, these retained trees have not been factored into the Metric calculations as they are in private gardens. However, these retained trees demonstrate the sensitive design adopted and will have significant ecological benefits that are unmeasured by the Metric calculations.

Figure 2

Map Scale @ A3: 1:3,000

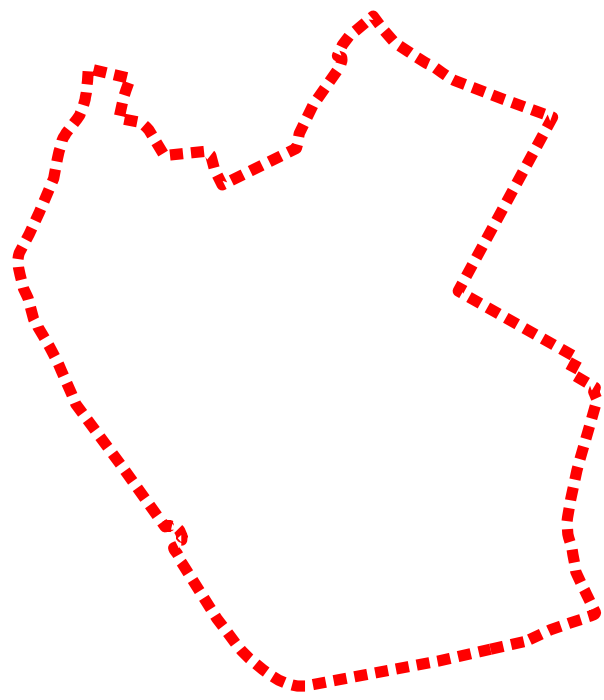
Surveyed by: N/A
Survey date: N/A
Drawn by: RJH
Checked by: DP
Status: Final



Appendix A

Proposed Site Plan





Site Area : 277945 sq.m (27.8 ha)

1. Main Building

2. Teaching Block

3. Edwin

4. Violet

5. Sadleir

6. Ithel

7. Templar

8. Summer House

9. Harwood House

10. Tank House
11. Pump House

12. Lodge Gate

13. Belvedere

14. Ice House

15. Piggery

16. Park Wall

17. Paved Rose Garden

18. Herbaceous Garden

19. Small Herbaceous Garden

20. Rose Garden
21. Magnolia Steps

22*. Cricket Pitch

23. North Tennis Court

24. Village Gate

25. Walled Parking Garden

26. Existing Parking

27. Visitor Parking

28. Summer House Plantation

29. East Tennis Court

30. Pergola Garden
31. Permissive Path (extended) & estate fencing

32. Permissive Path (new) to Dower House with estate fencing

33. Path to School Yard

34. St. Albans Road

35. East Avenue to exit

36. Construction traffic in and out
37. Substation

38. New Cricket Pavilion and Existing Sports Pavilion moved

39. Proposed woodland planting

40. Wildflower meadows

	1 Bed	2 Bed	3 Bed	4 Bed	5 Bed	Total Homes
Main Building	10	20	4	1		35
Teaching Block	2	5	1			8
Edwin		2	2			4
Violet				4		4
Sadleir			4	2		6
Ithel			6			6
Templar			2			2
Summer House					1	1
Harwood House					1	1
Tank House			1			1
Pump House			1			1
Number of Homes						69

Based on a TRICS assessment carried out by EAS, it is estimated that the proposals to develop 69 houses and apartments on site would generate circa 36 vehicle trips in both the AM and PM peak periods. This equates to a significant reduction of circa 280 vehicle trips in each of the network peak hours when related to the school operations at Princess Helena College.

*New **EIGHT-PITCH** natural grassed cricket square (or table), all eight pitches having an ECB senior cricket minimum boundary of 45.7m (50 yards).



DO NOT SCALE OFF THIS DRAWING
DO NOT SUBSTITUTE ANY OF THE PRODUCTS
OR MATERIALS.

1. This is a planning drawing and is intended for this use only; it must not be used for construction.
2. All dimensions are in MM and should be checked on site prior to commencement of work; do not scale off this drawing.
3. This drawing is to be read in conjunction with all other relevant information.
- 3.Discrepancies between drawings and information to be referred to Architect without delay.

P12	Fences and gates	04.07.24
P11	Wildflower meadows added	01.07.24
P10	Permissive path alterations	01.07.24
P09	Issued for Planning	25.06.24
P08	Updated SH,HH and TH boundary fences	17.06.24
P07	Issued for BNG calculations	07.06.24
P06	Updated to latest design	29.05.24
P05	Coordination issue	20.05.24
Revision	Description	Date

0 m

50 m

100 m

AY PILSBURY THOMAS ARCHITECTS

K

TURBO

ILLUMINATE

DESIGN

ARCHITECTS

T LTD

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Client
The Door UK Ltd

Project
Temple Dinsley
Preston, Hitchin, Hertfordshire,
SG4 7RT

Drawing title

Proposed Site Plan

Purpose of issue
Planning

Job no. Status Scale @ A0
641 S0 1:1000

Checked by
ST

Date Revision
28.03.24 P11

Drawing number
641-KS-03-XX-DR-A-10002