

Anglia Square,
Norwich
Biodiversity Net Gain
Assessment
Rev C

Weston
Homes



WESTON HOMES



ECOLOGYSOLUTIONS

Part of the ES Group

ANGLIA SQUARE,
NORWICH

**Biodiversity Net Gain
Assessment**

January 2023
7948.BNG.vf3

COPYRIGHT

The copyright of this document
remains with Ecology Solutions
The contents of this document
therefore must not be copied or
reproduced in whole or in part
for any purpose without the
written consent of Ecology Solutions.

CONTENTS

1	INTRODUCTION	1
2	CONSULTATION RESPONSES	2
3	BIODIVERSITY METRIC 3.0	4
4	METHOD FOR CALCULATING POST-DEVELOPMENT STATUS	5
5	RESULTS AND DISCUSSION OF METRIC	7
6	EVALUATION	12
7	SUMMARY AND CONCLUSIONS	15

PLANS

PLAN ECO1	Site Location and Ecological Designations
PLAN ECO2	Ecological Features
PLAN ECO3	Baseline Habitats
PLAN ECO4	Post-Development Habitats

1. INTRODUCTION

- 1.1. A hybrid planning application (Ref. 22/00434/F) (the Application) was submitted by Weston Homes (the Applicant) to Norwich City Council (NCC) on 1st April 2022 for the comprehensive redevelopment of Anglia Square and various parcels of mostly open surrounding land, (the Site), as shown within a red line on drawing 'ZZ-00-DR-A-01-0200'. The Application comprised a full set of technical documents to assess the potential impacts of the proposals, including an EIA which covered a number of topics. In respect of Biodiversity Net Gain (BNG), this was described and explained in the Biodiversity Net Gain Assessment (March 2022) and supporting metric document. Please refer to the original documents for further details.
- 1.2. Following submission of the Application, and completion of the statutory consultation exercise, amended application material (RevA) was submitted in July 2022 in response to consultation comments, which included a revised Biodiversity Net Gain Assessment (July 2022) and supporting metric.
- 1.3. On completion of the second statutory consultation on the RevA material, the Applicant has worked with NCC to review the consultation responses received to identify an appropriate response where considered relevant. As a result of consideration of these comments, as well as ongoing discussions with NCC, some further minor amendments are now proposed which are summarised in the Planning Statement Addendum. The Amended Application material (RevC) submitted in January 2023 continues to seek consent for up to 1,100 dwellings and up to 8,000 Sqm (NIA) non-residential floorspace and associated development.
- 1.4. This update to the Biodiversity Net Gain Assessment describes how the design has been developed and adapted and finally considers the implications of the changes to the scheme now proposed. It also provides responses to comments received from Norwich City Council.
- 1.5. This updated Biodiversity Net Gain Assessment provides Norwich City Council with information regarding the level of BNG of the proposed development. It has been prepared with due consideration to the guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)¹² in relation to BNG and is based on the results of the habitat surveys completed, as set out in the Ecological Assessment.

¹ CIEEM (2019). *Biodiversity Net Gain. Good Practice Principles for Development, A Practical Guide.*

² CIEEM, CIRIA, IEMA (2016). *Biodiversity Net Gain: Good Practice Principles for Development.*

2. CONSULTATION RESPONSES

2.1. Comments were received in September 2022 from Norwich City Council with regard to the previous BNG Assessment submitted as part of the Rev A application. Comments and responses are provided in Table 2.1 below.

Comment	Response
<p>The habitat baseline includes modified grassland, urban trees and developed urban land. These fall either into the broad habitat of grassland or urban. This appears to reflect what is on site.</p>	<p>The baseline habitats remain the same as the previously submitted BNG assessment, with the addition of an area of mixed scrub and bare ground. A spoil heap with colonising vegetation was identified to the west of Blocks E and E/F, the southern section of which has become scrub. The inclusion of this area provides a more accurate reflection as to the habitats present on-site.</p>
<p>There are no vegetated gardens in the metric for proposed habitats, but block B contains several private gardens. The agents have selected modified grassland in the metric instead, which I think is incorrect. Looking at both the UK Habitat Classification Habitat Definitions Version 1.1 (UK Hab) and the Biodiversity Metric 3.1 Technical Supplement [sic].</p>	<p>'Lawn Area' to the north of Block B has been re-classified as 'Vegetated Garden'. The areas either side remain as Modified Grassland.</p>
<p>All the green roofs have been classed as extensive green roofs and to be planted with a pre grown sedum system with a limited spp. diversity. The UK Hab defines extensive green roofs as roofs with vegetation on thin substrate with little or no irrigation and management, in contrast intensive green roofs have vegetation on thick substrate with irrigation and management. It seems that this classification is correct, but I would encourage the installation of intensive green roofs instead. This is different to the original submission, which included both extensive and intensive green roofs, please can this be explained. I cannot see that the roof top gardens are in the metric at all now, just those proposed to be planted with sedum.</p>	<p>Green roofs remain classified as Extensive Green Roof within the revised BNG metric. In addition to the proposed sedum system, a pre-grown wildflower blanket will also be incorporated onto some roofs. Both of these systems will utilise lightweight substrate and as such are considered to be an appropriate fit for Extensive Green Roof. Rooftop areas also constitute podiums and terraces which comprise areas of lawn and ornamental planting. These areas are accounted for in the metric as per the previously submitted assessment.</p>
<p>The ground level planters habitat is used for "New ground level planting ('St George's St Mix', 'Botolph St Mix' and 'Residential Yard Mix'). Also constitutes areas of planting on detailed application non-extensive roofs.". Ground level planters score relatively poorly as they restrict the free movement of species and therefore reduce the species that will utilise the proposed vegetation. Looking at plan reference ANG-PLA-XX-XX-DR-L-2000 S4 P02 Softworks Site Plan the key does not seem to describe ground planters, referring to shrubs and groundcover planting. Shrubs and</p>	<p>The majority of species within the 'St George's St Mix', 'Botolph St Mix', 'Residential Yard Mix', and 'Groundcover Mix' are non-native and largely comprise grasses, flowers and ferns. The UK Habitat Classification V1.1 defines Ground Level Planters as "Plants in pots or other planters at ground level".</p> <p>This description closely matches concept photographs and illustrations contained within the 'DSE Presentation (18.02.22)' and 'Landscape Addendum Rev01 (21.09.22)'. The implication is that vegetation in the public</p>

<p>planters would certainly be preferred to ground level planters, which is correct?</p>	<p>realm will constitute planting beds. The BNG metric habitat 'Introduced Shrub' was therefore not utilised and would additionally make no numerical difference to the habitat units delivered.</p> <p>Areas of 'St George's St Mix', 'Botolph St Mix', 'Residential Yard Mix', and 'Groundcover Mix' have thus been classified as Ground Level Planters.</p>
<p>It is now clear from the submitted metric that the proposed hedging has been classed as ornamental non-native. This would indicate that the proposed hedge may not have any native species and is not anticipated to have more than 80% canopy cover. This is in contrast to species rich native hedgerows. This is supported by the submitted landscape details. Plan reference ANG-PLA-XX-XX-DR-L-2000 S4 P02 Softworks Site Plan is therefore misleading by calling the hedges mixed native hedging. Is this also done elsewhere in the submission?</p>	<p>The BNG metric 3.0 Technical Supplement defines 'Hedgerow Ornamental Non-Native' as "Any hedgerow containing 20% or more canopy cover of a non-native species. Ornamental hedgerows of native species, such as Yew, Box, and Privet, should be recorded in this habitat category on the assumption that they are garden varieties of the native form unless evidence can be shown to suggest otherwise".</p> <p>The planting schedule details that proposed hedge planting will comprise 'Clipped Cube' and 'Instant Hedging Clipped Tight Sides and Top' suggesting ornamental varieties will be planted, thus fitting the description above.</p> <p>Hedgerows therefore remain as Hedgerow Ornamental Non-Native in this assessment.</p>
<p>The swales appear to be proposed to be planted with spp. which require an aquatic habitat. Presumably the swales will therefore normally contain water? The more recent BNG metric actively encourages bioswales to be both species rich and for the water table to be at or near the surface throughout the year.</p>	<p>Bioswale at Poor condition was utilised for this assessment in order to provide a conservative approach to habitat creation. This allows for minimal biodiversity impact to be visualised.</p>

Table 2.1. Comments received from Norwich City Council and corresponding responses.

3. BIODIVERSITY METRIC 3.0

- 3.1. The Biodiversity Metric 3.0 was released on 7 July 2021 and uses habitat features as a proxy measure for capturing the value and importance of nature. It uses calculations to assess the importance of each habitat based on its size, ecological condition and location. The Biodiversity Metric 3.0 has been used in place of the new 3.1 Metric, in order to be consistent with the previous assessment, as per guidance.
- 3.2. Measurements for habitats pre-development were calculated using QGIS. Assessments regarding the habitats present, as well as their condition, were based on information gathered during survey work. The Biodiversity Technical Supplement³ and professional judgment were used to inform the habitats' condition criteria.
- 3.3. Measurements for the post-development situation were calculated using the Hardworks Site Plan (ANG-PLA-XX-XX-DR-L-1001, Revision P05) (06.01.23), Softworks Site Plan (ANG-PLA-XX-XX-DR-L-2001, Revision P05) (06.01.23), Landscape Masterplan (ANG-PLA-XX-XX-DR-L-0001, Revision P05) (06.01.23), Landscape Masterplan Roof Level (ANG-PLA-XX-XX-DR-L-0002, Revision P05) (06.01.23), and Softworks Plan Roof Level (ANG-PLA-XX-XX-DR-L-2002, Revision P05) (06.01.23) prepared by Planit-IE, the project landscape architects. Clarification on the nature of the landscape proposals was provided by Planit-IE where necessary.

³ Natural England (2021). *The Biodiversity Metric 3.0, Auditing and Accounting for Biodiversity, Technical Supplement*, Natural England Joint Publication JP039.

4. METHOD FOR CALCULATING POST-DEVELOPMENT STATUS

BNG Metric

- 4.1. The metric runs calculations based on all areas within the detailed and outline application boundaries. The metric is designed to provide habitats which are accurately reflective of those proposed in the Hardworks and Softworks Site Plans but incorporates a more conservative approach to the condition scoring of proposed habitats. Proposed habitats have thus been classified as 'Poor' and 'Moderate' in condition to illustrate the minimal biodiversity impact that they will have within the site.

Green Roof

- 4.2. The 'Landscape Masterplan Roof Level' and 'Softworks Plan Roof Level' were used to inform the classification of proposed roof habitats. The extensive green roofs within the detailed application area will comprise a mixture of pre-grown sedum mat and pre-grown wildflower blanket on lightweight substrate and have been classified as 'Extensive Green Roof' within the metric. Proposed roof podiums and terraces within the detailed application area will comprise a mix of 'Lawns, 'Planting Area', 'Wet-Pour Safety Surface' and hardstanding. These habitats have been classified based on their expected future use (see Table 3.1). It has been assumed that the rooftop 'Planting Area' will comprise 'Residential Yard Mix' as per the previous BNG assessment.
- 4.3. Owing to the outline nature of roof areas beyond the detailed application boundary, coupled with the conservative approach taken, estimates of potential green roof space within the outline application area were not included in the metric. Such an approach will mean that any future green / brown roof space within the outline application area will positively impact the BNG on-site.

Remaining Areas

- 4.4. The remaining areas of hard and softworks were assigned appropriate habitats and condition scores based on their expected future use. The proposed habitats and their metric counterparts are illustrated in Table 3.1. Two street trees are proposed off-site, one of which will be within the blue line area (labelled land owned by CT on the landscape drawings) to the southeast, along Magdalen Street. The tree located off-site to the northwest of Block A was not included as part of the assessment considering its location outside of the application boundary. The proposed tree and existing trees contained within the blue line area were included due to the proposed removal of one of these trees.

Proposed Habitat	BNG Metric Habitat Classification
Wildflower	Other Neutral Grassland
Swale Planting	Bioswale
St George's St Mix	Ground Level Planters
Botolph St Mix	Ground Level Planters
Residential Yard Mix	Ground Level Planters
Groundcover Mix	Ground Level Planters
Lawn Area	Modified Grassland / Vegetated Garden
Green Roof	Extensive Green Roof
Semi-Natural Woodland	Mixed Scrub
Wetlands	Ponds (Non-Priority Habitat)
Tree Planting	Urban Tree
Mixed Native Hedging	Hedge Ornamental Non-Native
Buildings / Hardstanding	Developed Land; Sealed Surface
Vegetable Growing Area	Allotments
Wet-Pour Safety Surface	Artificial Unvegetated, Unsealed Surface

Table 3.1. Reconciliation of landscape strategy and metric habitat types.

5. RESULTS AND DISCUSSION OF METRIC

5.1. This section should be read in conjunction with the Biodiversity Metric calculation tool which has been provided separately.

5.2. Baseline Habitat (Pre-Development)

5.2.1. Table 4.1 below summarises the habitats present on site pre-development.

5.2.2. A baseline total of 1.36 habitat units and 0.04 hedgerow units are present within the site pre-development.

Habitat Units					
Baseline Habitat	Baseline Biodiversity Units	Condition	Ecological Features	Impact	After Works
Developed Land; Sealed Surface	0	N/A	The majority of the site comprises buildings with associated hardstanding including car parking and roads. Anglia Square, a concrete plaza, is situated towards the centre of the site.	All of these areas are to be lost with the exception of a small structure in Block B. New buildings and associated infrastructure will be created in their place.	0 units lost
Modified Grassland	0.55	Poor	Several areas of modified grassland are present across the site, with the majority of these areas being situated within the largest southern site parcel. A small area of grassland is present within Block B. The northeastern site parcel (Block C) is devoid of this habitat.	All areas are to be lost.	0.55 units lost
Vacant / Derelict Land / Bare Ground	0.02	Poor	A spoil heap is located in the west of the site, adjacent to Blocks E and E/F. The north of this area has been colonised by opportunistic plant species.	All of this area will be lost.	0.02 units lost
Mixed Scrub	0.23	Poor	The southern portion of the spoil heap has become an area of scrub.	All of this area will be lost.	0.23 units lost
Introduced Shrub	0.03	Poor	Two areas of introduced shrub are present within the southern site parcel.	Both of these areas are to be lost.	0.03 units lost
Ground Based Green Wall	0.02	Poor	An Ivy-covered wall is present within the southwest of the southern site parcel.	This wall is to be lost.	0.02 units lost

Urban Tree	0.50	Poor	<p>Twenty-seven trees are present across the site and comprise Silver Maple <i>Acer saccharinum</i>, Common Lime <i>Tilia x europaea</i>, Large-leaved Lime <i>Tilia platyphyllos</i>, Sycamore <i>Acer pseudoplatanus</i>, Oak <i>Quercus</i> sp., Red Oak <i>Quercus rubra</i>, Silver Birch <i>Betula pendula</i>, Whitebeam <i>Sorbus aria</i>, and London Plane <i>Platanus x hispanica</i>. These trees constitute Trees T1-T4, T6 and T7, T9-T22, and a group of seven trees (G1) comprising Sycamore, Laburnum <i>Laburnum anagyroides</i> and Elder <i>Sambucus nigra</i>. Trees T6 and T7 are situated within the blue line area to the southeast of the site, but were considered part of the site, given that Tree T6 is marked for removal.</p> <p>A single Rowan <i>Sorbus</i> sp. (T23) and Large-leaved Lime (T8) are present off-site to the southeast along Magdalen Street and a single Sycamore (T5) is present immediately off-site to the northwest of Block C. These trees were not included as part of the baseline.</p>	<p>Fourteen trees will be lost as part of the development (T1, T2, T3, T6, T11, T14, T15 and G1).</p>	<p>0.14 units lost 0.36 units retained</p>
Hedgerow Units					
Baseline Hedgerow	Baseline Biodiversity Units	Condition	Ecological Features	Impact	After Works
Hedge Ornamental Non-Native	0.04	Poor	Three ornamental hedges are present in the southern site parcel.	All hedges will be lost.	0.04 units lost

Table 4.1 Summary of baseline habitats and hedgerows.

5.3. Post-Development

- 5.3.1. Table 4.2 below summarises the habitats that are proposed on-site, post-development.
- 5.3.2. The proposals will comprise a variety of habitats including Other Neutral Grassland, Modified Grassland, Ground Level Planters, Bioswale,

Allotments, Extensive Green Roof, Vegetated Garden, Mixed Scrub, Hedgerow, Urban Trees and a Pond. In addition, Buildings with associated hardstanding and other artificial surfaces will be created across the site.

Created Habitats				
Metric Habitat	Landscape Plan Habitat	Condition	Biodiversity Units	Comments
Other Neutral Grassland	Wildflower Seed Mix	Poor	0.20	An area of Wildflower Grassland will be created within the south of the southern site parcel adjacent to St Crispins Road. This area will be sown with 'Emorsgate EM4 Meadow Mixture for Clay Soils'. This mix comprises a diverse assemblage of grass and floral species and it is considered that these areas will be left largely unmanaged to allow for areas of tall or tussocky sward. Thus, Other Neutral Grassland is considered an appropriate classification for this habitat.
Modified Grassland	Lawn Area	Poor	0.14	Amenity lawn is proposed in all three site parcels, both at ground level and on roof areas within the detailed application area. These areas will be managed to retain their aesthetic value and constitute a short species sward. Modified Grassland has therefore been used to classify this habitat.
Vegetated Garden	Lawn Area	Poor	0.05	In alignment with comments received from Norwich City Council, an area of lawn to the north of Block B has been reclassified as Vegetated Garden to more accurately reflect the future land use in this area.
Ground Level Planters	St George's St Mix / Botolph St Mix / Residential Yard Mix / Groundcover Mix	Poor	0.56	Shrub and groundcover planting is proposed across the site at ground level and on roof areas within the detailed application boundary. These areas will comprise an almost entirely non-native mix of ornamental plants. The proposed planting constitutes the 'St George's St Mix', the 'Botolph St Mix', the 'Residential Yard Mix' and the 'Groundcover Mix'. This vegetation will be situated in planting beds throughout the site and as such, these areas have been treated as 'Ground Level Planters', fixed at poor condition. It is assumed that rooftop 'Planting Area' will constitute 'Residential Yard Mix' as per the previous BNG assessment.
Bioswale	Swale Planting	Poor	0.09	Areas of swale are proposed within the southern site parcel, along the western and southwestern site boundary. These areas will be sown with 'Emorsgate EP1 Pond Edge Mixture' and 'Emorsgate EM4 Meadow Mixture for Clay Soils'. In addition, a selection of native and non-native species will be planted here including Yellow Iris <i>Iris pseudacorus</i> and Pendulous Sedge <i>Carex pendula</i> . The area is to be designed to provide benefits for biodiversity in addition to offering functional drainage.
Mixed Scrub	Semi-Natural Woodland	Moderate	0.26	Several areas of Semi-Natural Woodland are proposed in all three site parcels. These areas will comprise of native species and on account of their size, have been classified as Mixed Scrub in moderate condition. A moderate condition will be targeted for these areas to ensure that the loss of existing Mixed Scrub is adequately

				compensated for and all trading rules within the metric satisfied.
Ponds (Non-Priority Habitat)	Wetlands	Poor	0.01	A wetland species mix will be sown in the northwestern corner of Block C. This mix will comprise both marginal and aquatic plant species, in addition to oxygenating species. On account of its small size and plant composition, the area has been classified as a pond.
Extensive Green Roof	Extensive Green Roof	Poor	0.53	Extensive green roofs within the detailed application area will comprise a pre-grown sedum or pre-grown wildflower blanket green roof system. The roofs will use a lightweight substrate and are not considered to comprise an overly diverse assemblage of plant species and as such the low distinctiveness 'Extensive Green Roof' classification has been assigned to this habitat. Extensive Green Roofs are also proposed in Blocks B and C.
Developed Land; Sealed Surface	New buildings and associated hardstanding	N/A	0	The development proposal is to redevelop the site to provide up to 1,100 dwellings and up to 8,000sqm (NIA) flexible retail, commercial and other non-residential floorspace.
Artificial Unvegetated, Unsealed Surface	Wet-Pour Safety Surface	N/A	0	Several areas situated on roofs within the detailed application area will comprise a Wet-Pour Safety Surface. Some of this area will contain informal play equipment.
Vegetable Growing Area	Allotments	Poor	0.01	Although not detailed within the landscape plan keys, Planit-IE confirmed the proposed presence of vegetable growing space. One such area will be created on the roof within the detailed application area and has been classified as Allotments.
Urban Tree	Tree Planting	Poor	0.30	A total of 236 trees will be planted across all three site parcels, both at ground level and on roof areas within the detailed application boundary. A size class of small was used as a conservative approach.
Created Hedgerows				
Hedge Ornamental Non-Native	Mixed Native Hedging	Poor	1.25	New ornamental hedgerows will be planted throughout all three site parcels at both ground and roof level. Hedgerows will comprise native Box <i>Buxus sempervirens</i> and Beech <i>Fagus sylvatica</i> . Proposed hedgerows are to be maintained at 1.2m in height and will provide an amenity aesthetic in addition to offering habitat for local wildlife.

Table 4.2. Summary of post-development habitats and hedgerows.

5.3.3. Table 4.3 summarises the BNG results for the Site.

Baseline	Habitat Units	1.36
	Hedgerow Units	0.04
	River Units	0
Post-intervention	Habitat units	2.50
	Hedgerow Units	1.25
	River Units	0
Total Net Unit Change	Habitat units	1.15
	Hedgerow Units	1.21
	River Units	0
Total Net Percentage Gain	Habitat Units	84.78%
	Hedgerow units	3280.11%
	River Units	N/A

Table 4.3. Summary of Biodiversity Net Gain results.

- 5.3.4. The proposed development would result in a gain of 1.15 habitats units. This results in an increase of 84.78% from pre- to post-development.
- 5.3.5. There is also a gain in linear features (i.e. hedgerows) of 1.21 hedgerow units, which is a percentage change of 3280.11% owing to the scarcity of of linear features on site pre-development.
- 5.3.6. The targeted conditions for proposed habitats will be achieved through appropriate management undertaken during the operational phase of the proposals. This will ensure that the proposed habitats continue to offer biodiversity benefit in the future.
- 5.3.7. It is important to note that an error within the metric 3.0 calculation tool regarding the loss and creation of urban trees stated that the development footprint and habitat creation areas exceeded the areas lost, resulting in an error message. This error has since been rectified within the new 3.1 version of the metric. It is considered that an increase of 84.78% is an accurate measure of Biodiversity Net Gain within the site despite this computational error. (Following guidelines, this assessment continues the use of version 3.0 of the metric, since the start of the process predates the publication of version 3.1.)

6. EVALUATION

6.1. The Principles of Evaluation

Biodiversity Net Gain – Good Practice Principle for Development

- 6.1.1. CIRIA, CIEEM and IEMA have developed principles of good practice to achieve Biodiversity Net Gain. These principles provide a framework that helps improve the UK's biodiversity by contributing towards strategic priorities to conserve and enhance nature through sustainable development. There are ten principles in total, and all principles must be applied together as one approach. The ten principles are set out below.
- 6.1.2. **Principle 1. Apply Mitigation Hierarchy.** Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision makers where possible, compensate for losses that cannot be avoided. If compensation for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.
- 6.1.3. **Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere.** Avoid impacts on irreplaceable biodiversity; these impacts cannot be offset to achieve no net loss or net gain.
- 6.1.4. **Principle 3. Be inclusive and equitable.** Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluation of the approach to net gain. Achieve Net Gain in partnership with stakeholders where possible and share the benefits fairly among stakeholders.
- 6.1.5. **Principle 4. Address risks.** Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.
- 6.1.6. **Principle 5. Make a measurable net gain contribution.** Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.
- 6.1.7. **Principle 6. Achieve the best outcomes for biodiversity.** Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when:
- Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses.
 - Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation.
 - Achieving net gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels.
 - Enhancing existing or creating new habitat.

- Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity.

6.1.8. **Principle 7. Be additional.** Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).

6.1.9. **Principle 8. Create a net gain legacy.** Ensure net gain generates long-term benefits by:

- Engaging stakeholders and jointly agreeing practical solutions that secure net gain in perpetuity.
- Planning for adaptive management and securing dedicated funding for long-term management.
- Designing net gain for biodiversity to be resilient to external factors, especially climate change.
- Mitigating risks from other land uses.
- Avoiding displacing harmful activities from one location to another.
- Supporting local-level management of net gain activities.

6.1.10. **Principle 9. Optimise sustainability.** Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.

6.1.11. **Principle 10. Be transparent.** Communicate all net gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

Lawton's Principle

6.1.12. Principles for enhancing England's wildlife sites were developed as part of the Lawton Review⁴. Across the UK, these principles can be used to design Biodiversity Net Gain activities to boost wildlife sites. They are:

- Improving the quality of wildlife sites;
- Increasing the size of the wildlife sites;
- Enhancing connections between, or joining up wildlife sites;
- Creating new wildlife sites; and
- Reducing pressure on wildlife sites.

6.2. Post-Development Evaluation

6.2.1. The contribution of the Site to Biodiversity Net Gain has been assessed with due regard to the principles outlined and discussed above.

6.2.2. The landscape strategy includes a variety of habitats including Other Neutral Grassland, Modified Grassland, Ground Level Planters, Bioswale, Allotments, Extensive Green Roof, Vegetated Garden, Mixed Scrub, Hedgerow, Urban Trees, and a Pond. In addition, Buildings with associated hardstanding and other artificial surfaces will be created across the site. Provision of these new habitats will not only mitigate for the losses

⁴ Department for Environment, Food and Rural Affairs (2010). *Making Space for Nature: A Review of England's Wildlife Sites*, DEFRA.

of on-site habitat but provide significant net benefit and new opportunities for wildlife.

Baseline	Habitat Units	1.36
	Hedgerow Units	0.04
	River Units	0
Post-intervention	Habitat units	2.50
	Hedgerow Units	1.25
	River Units	0
Total Net Unit Change	Habitat units	1.15
	Hedgerow Units	1.21
	River Units	0
Total Net Percentage Gain	Habitat Units	84.78%
	Hedgerow units	3280.11%
	River Units	N/A

Table 5.1. Summary of Biodiversity Net Gain results.

6.3. Substantial Weight

- 6.3.1. In the decision in Rainham, Kent (MC/19/1566; 3 November 2021), the Inspector concluded a 20% gain should be given substantial weight (paragraph 12.204), stating:

Indeed, one of the suggested conditions secures at least 20% biodiversity net gain. I consider that the benefits secured in this regard attract substantial weight.

- 6.3.2. The Secretary of State agreed with the Inspector's decision (paragraph 35 of the Secretary of State's letter):

For the reasons given at IR12.204, the Secretary of State agrees that the development would result in significant improvements in terms of ecology and biodiversity. Like the Inspector, he considers that the benefits secured in this regard attract substantial weight.

- 6.3.3. Consistent with these positions, it can be stated that the BNG benefits that would accrue from the proposed development should attract substantial weight.

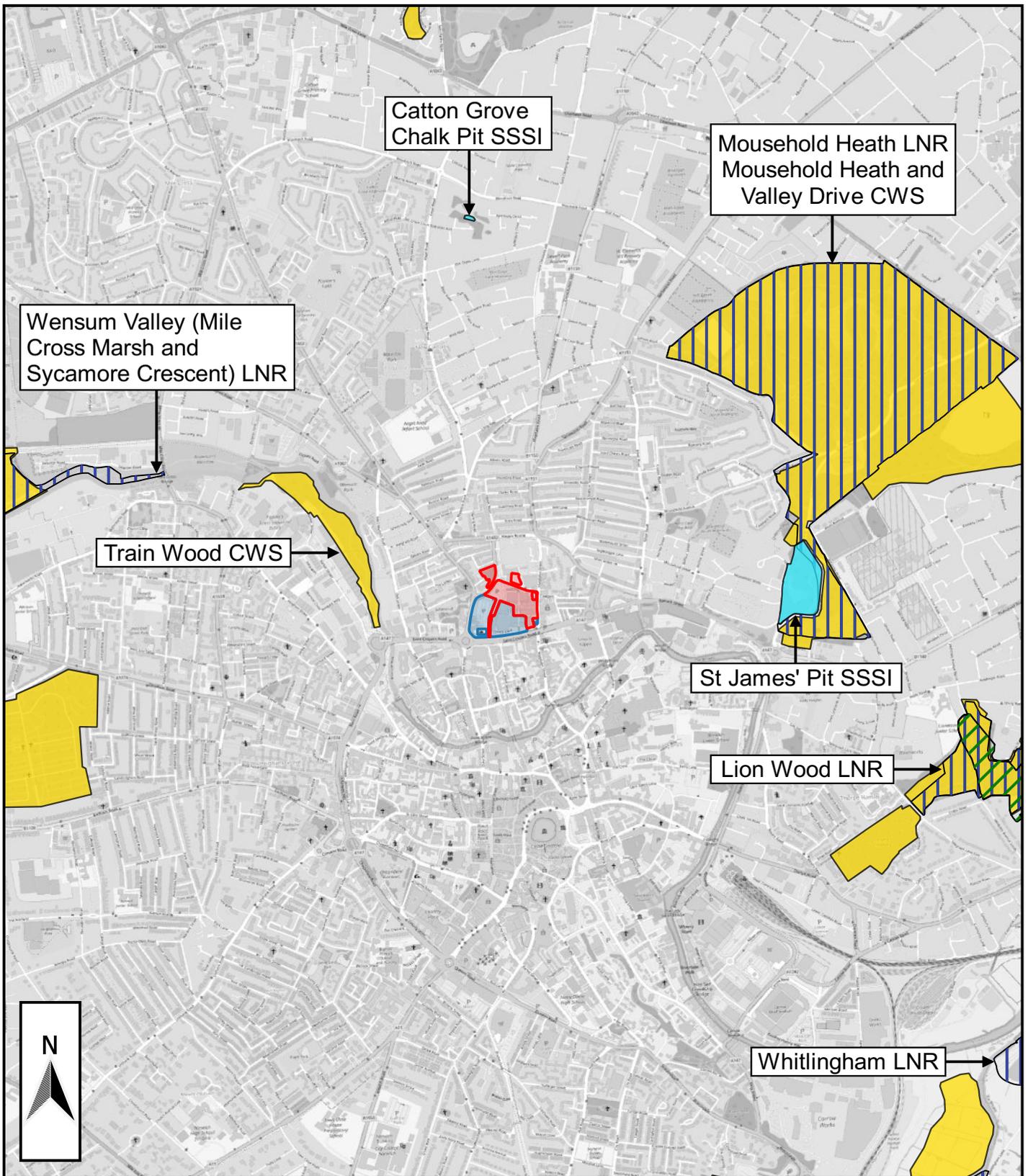
7. SUMMARY AND CONCLUSIONS

- 7.1. The Biodiversity Metric 3.0 was used to calculate the pre-development baseline units. A total of 1.36 baseline habitat units and 0.04 hedgerow units are present pre-development.
- 7.2. The proposed development will achieve an increase of 84.78% in habitat units and 3280.11% in hedgerow units.
- 7.3. The landscape scheme has been designed to ensure that gains for biodiversity are achieved. Proposals will increase the floristic diversity across the site, which in turn will attract a greater diversity of invertebrates and increase opportunities for foraging and dispersal for birds.
- 7.4. In conclusion, the site is projected to achieve a significant level of Biodiversity Net Gain. Conservative assumptions have been made as to the condition of new habitats. Revisions have also been made in response to comments received regarding the previous BNG assessment. Any future additions of green / brown roof within the outline application area will only be of benefit to the expected biodiversity net gain calculated.
- 7.5. It can be confidently stated that the results are in excess of the 20% net gain recognised by the Secretary of State as attracting 'substantial weight'.

PLANS

PLAN ECO1

Site Location and Ecological Designations



KEY:

- DETAILED APPLICATION BOUNDARY
- OUTLINE APPLICATION BOUNDARY
- SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
- LOCAL NATURE RESERVE (LNR)
- COUNTY WILDLIFE SITE (CWS)
- ANCIENT WOODLAND



ECOLOGY SOLUTIONS
Part of the ES Group

Cokenach Estate
Barkway | Royston
Hertfordshire | SG8 8DL

+44(0)1763 848084
east@ecology-solutions.co.uk
ecology-solutions.co.uk

7948: ANGLIA SQUARE, NORWICH

PLAN ECO1: SITE LOCATION AND
ECOLOGICAL DESIGNATIONS

Rev: C
Mar 2022

PLAN ECO2

Ecological Features



- KEY:**
-  DETAILED APPLICATION BOUNDARY
 -  OUTLINE APPLICATION BOUNDARY
 -  BUILDING
 -  HARDSTANDING
 -  AMENITY GRASSLAND
 -  BARE GROUND
 -  MIXED SCRUB
 -  INTRODUCED SHRUB
 -  ORNAMENTAL HEDGE
 -  IVY
 -  TREE



Cokenach Estate
 Barkway | Royston
 Hertfordshire | SG8 8DL
 +44(0)1763 848084
 east@ecology-solutions.co.uk
 ecology-solutions.co.uk

**7948: ANGLIA SQUARE,
 NORWICH**

**PLAN ECO2:
 ECOLOGICAL FEATURES**

Rev: C
 Jan 2023

PLAN ECO3

Baseline Habitats

Based upon the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office. © Crown Copyright. Ecology Solutions Ltd. Cokenach Estate, Barkway, Royston, Hertfordshire, SG8 8DL. 100044628

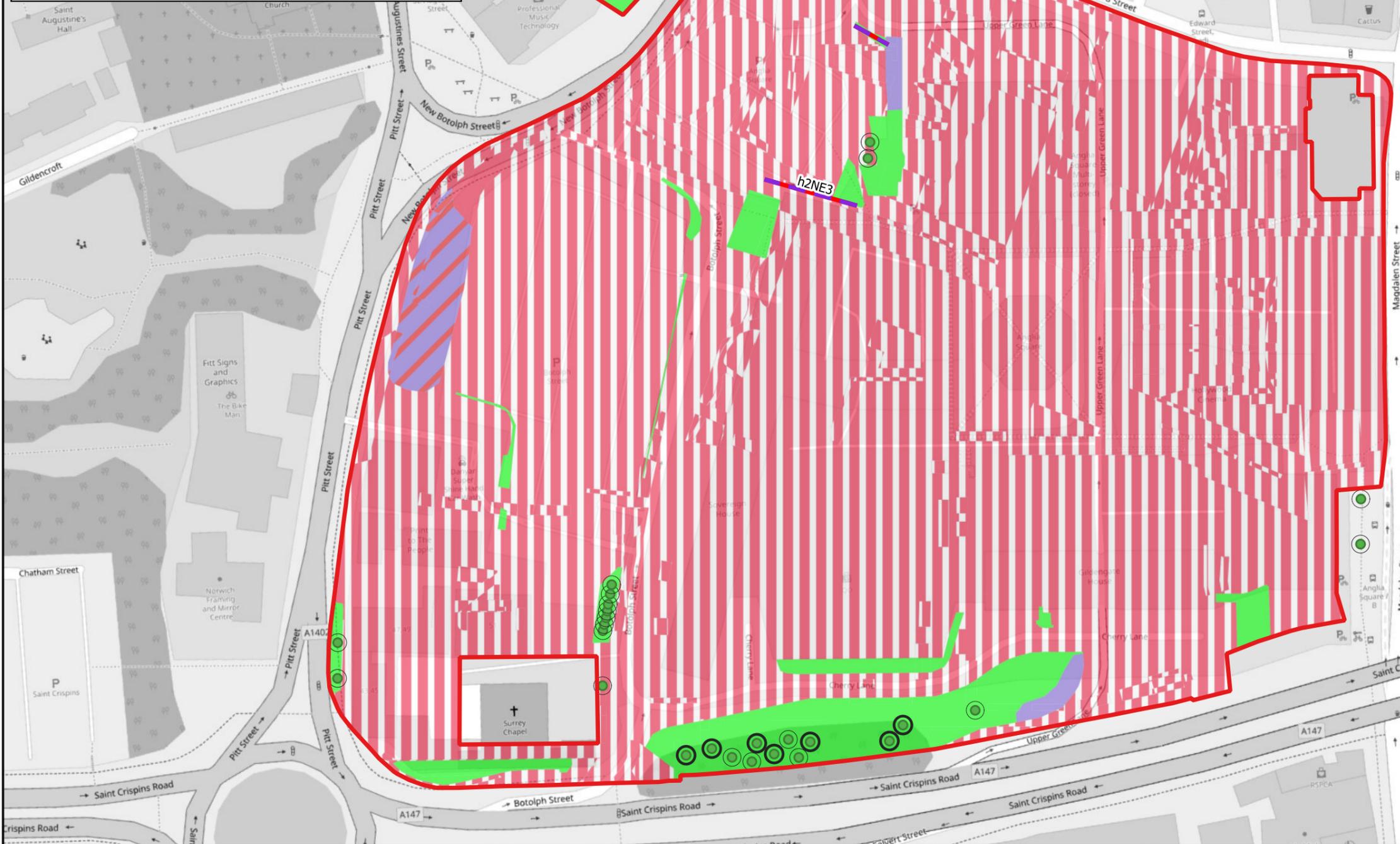
Baseline Habitat and Condition with Total Area:

Modified Grassland (Poor)	= 0.28 ha
Mixed Scrub (Poor)	= 0.06 ha
Introduced Shrub (Poor)	= 0.02 ha
Vacant / Derelict / Bare Ground (Poor)	= 0.01 ha
Developed Land; Sealed Surface (N/A)	= 4.28 ha
Ground Based Green Wall (Poor)	= 0.01 ha
Urban Tree (Poor)	= 0.12 ha

Green Walls and Urban Trees are excluded from the total site area.

Baseline Hedgerow and Condition with Total Length:

Hedge Ornamental Non-Native (Poor)	= 0.04 km
------------------------------------	-----------



- KEY:**
- SITE BOUNDARY
 - BASELINE URBAN TREES**
 - LARGE URBAN TREE
 - MEDIUM URBAN TREE
 - SMALL URBAN TREE
 - BASELINE HEDGEROWS**
 - HEDGE ORNAMENTAL NON-NATIVE (h2NE3)
 - BASELINE HABITATS**
 - DEVELOPED LAND; SEALED SURFACE
 - INTRODUCED SHRUB
 - MIXED SCRUB
 - MODIFIED GRASSLAND
 - VACANT / DERELICT / BARE GROUND



Cokenach Estate
Barkway | Royston
Hertfordshire | SG8 8DL

+44(0)1763 848084
east@ecologysolutions.co.uk
ecologysolutions.co.uk

7948: ANGLIA SQUARE, NORWICH

<p>PLAN ECO3: BASELINE HABITATS</p>	<p>Rev. C Jan 2023</p>
---	----------------------------

PLAN ECO4

Post-Development Habitats

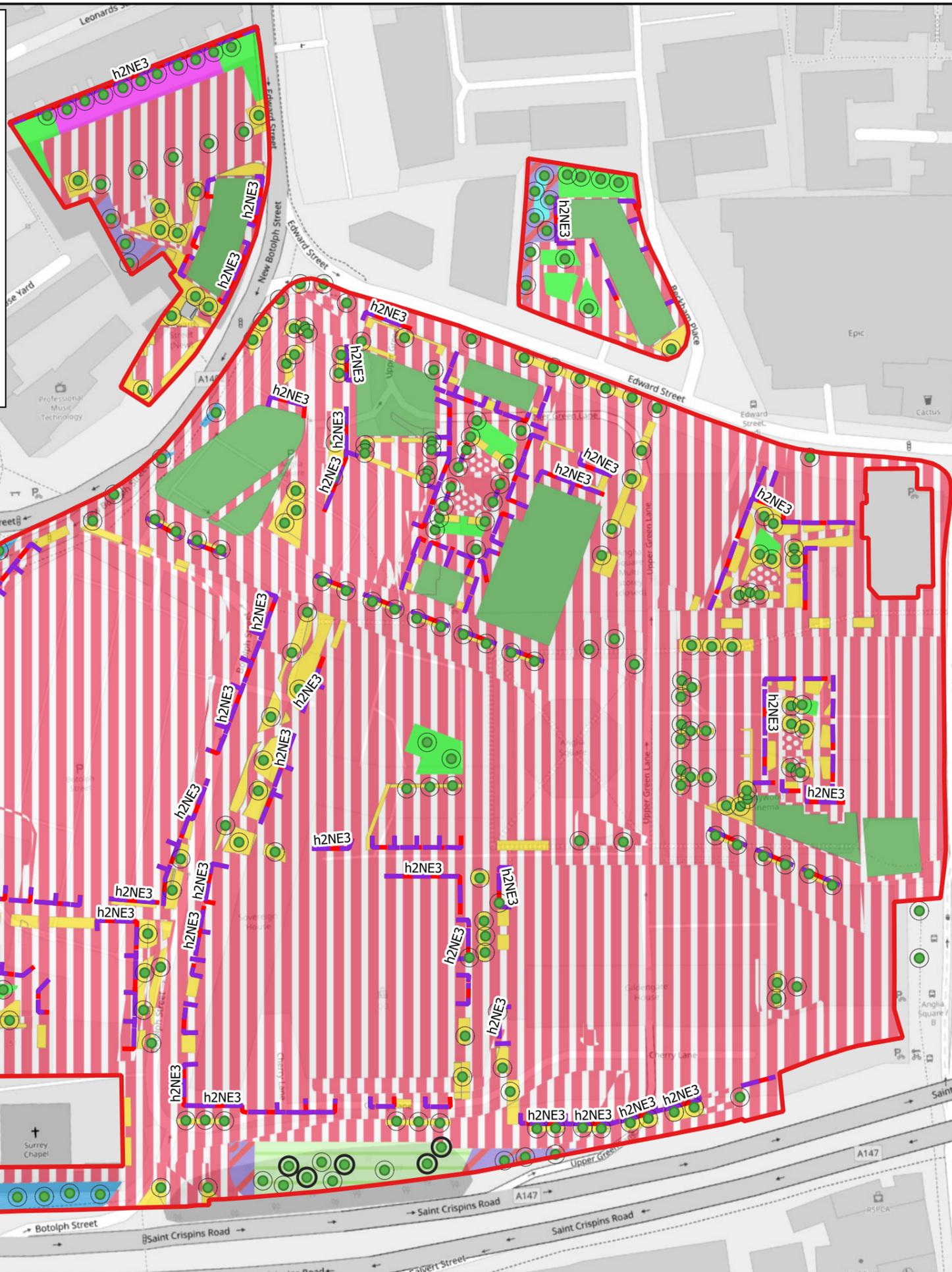
Based upon the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office. © Crown Copyright. Ecology Solutions Ltd. Cokenach Estate, Barkway, Royston, Hertfordshire, SG8 8DL. 100044628

Proposed Habitat and Condition with Total Area:

Allotments (Poor)	= 0.004 ha
Artificial Unvegetated, Unsealed Surface (N/A)	= 0.01 ha
Bioswale (Poor)	= 0.07 ha
Developed Land; Sealed Surface (N/A)	= 3.80 ha
Extensive Green Roof (Poor)	= 0.27 ha
Ground Level Planters (Poor)	= 0.29 ha
Modified Grassland (Poor)	= 0.07 ha
Other Neutral Grassland (Poor)	= 0.05 ha
Mixed Scrub (Moderate)	= 0.04 ha
Ponds (Non-Priority Habitat) (Poor)	= 0.003 ha
Vegetated Garden (Poor)	= 0.03 ha
Urban Tree (Poor)	= 0.11 ha

Proposed Hedgerow and Condition with Total Length:

Hedge Ornamental Non-Native (Poor)	= 1.30 km
------------------------------------	-----------



KEY:

- SITE BOUNDARY
- PROPOSED URBAN TREES**
- LARGE URBAN TREE
- MEDIUM URBAN TREE
- SMALL URBAN TREE
- PROPOSED HEDGEROWS**
- HEDGE ORNAMENTAL NON-NATIVE (h2NE3)
- PROPOSED HABITATS**
- ALLOTMENTS
- ARTIFICIAL UNVEGETATED, UNSEALED SURFACE
- BIOSWALE
- DEVELOPED LAND; SEALED SURFACE
- EXTENSIVE GREEN ROOF
- GROUND LEVEL PLANTERS
- MIXED SCRUB
- MODIFIED GRASSLAND
- OTHER NEUTRAL GRASSLAND
- PONDS (NON-PRIORITY HABITAT)
- VEGETATED GARDEN



Cokenach Estate
Barkway | Royston
Hertfordshire | SG8 8DL

+44(0)1763 848084
east@ecologysolutions.co.uk
ecologysolutions.co.uk

7948: ANGLIA SQUARE, NORWICH

<p>PLAN ECO4: POST-DEVELOPMENT HABITATS</p>	<p>Rev. C Jan 2023</p>
---	----------------------------



ECOLOGYSOLUTIONS

Part of the ES Group

Ecology Solutions Limited | Cokenach Estate | Barkway | Royston | Hertfordshire | SG8 8DL

01763 848084 | east@ecologysolutions.co.uk | www.ecologysolutions.co.uk