Ecology Briefing Note

CCTV Proposals, West Dene Playing Fields, Bristol. October 2025

1.0 Introduction

1.1 This report has been prepared by CSA Environmental on behalf of Cotham School in relation to the installation of CCTV cameras and associated infrastructure at playing fields to the south of West Dene, Bristol. The proposals entail the installation of eight CCTV cameras. The application area covers both the footprint of the future CCTV columns and the working area required to install underground cabling.

1.2 It provides an overview of ecological constraints associated with the proposed works as well as details of avoidance and mitigation measures which will be implemented to reduce impacts to biodiversity, as required.

1.3 Planning permission sought for the proposed development will be subject to the Biodiversity Gain Condition in accordance with Schedule 14 of the Environment Act (2021). This report includes details of a Biodiversity Net Gain assessment completed for baseline and proposed habitats, to determine if the proposals are able to deliver a minimum 10% net gain in biodiversity as per the Environment Act, 2021.

2.0 Methodology

Site Visit

2.1 CSA Environment completed a site visit on 29 August 2025 to collect baseline survey information for the Site, including the plant species present, and a habitat condition assessment in accordance with the Statutory Metric User Guide (Defra, 2024)[1].

Biodiversity Net Gain Calculations

2.2 The Statutory Biodiversity Metric (Defra, 2024) was used to determine baseline (pre-development) and post-intervention (post-development) biodiversity values, and to calculate the net effect of the development upon biodiversity. Specifically, the Statutory Biodiversity Metric Calculation Tool was populated and used to run all calculations present herein, and in accordance with the Statutory Metric User Guide (Defra, 2024).

[1] Defra, 2024. The Statutory Biodiversity Metric User Guide. London: Defra.

2.3 The Statutory Biodiversity Metric uses habitat (vegetation and edaphic conditions) as a proxy for measuring biodiversity more widely. This reductive approach allows for the relative biodiversity 'value' of land to be calculated and expressed as transferrable 'Biodiversity Units'. The metric adopts the UK Habitat Classification (UK Hab; Butcher et al., 2023)[2] system with some minor deviation.

2.4 The metric consists of a primarily 'Area' module which calculates 'Habitat Units' such as grassland, woodland and urban habitats, as well as two linear modules for 'Hedgerow Units' (including lines of trees) and 'Watercourse Units' (including rivers, canals and ditches). The separate Biodiversity Unit types cannot be converted between these modules and are addressed separately herein.

2.5 'Habitat trading' controls are integrated into the Statutory Metric to ensure any losses of habitat are mitigated or compensated for appropriately, in respect of conservation priorities and ecological functionality. Any deviation from habitat trading is cleared flagged within the Statutory Metric, and justifications, where necessary, are set out herein.

2.6 Any consideration of temporary impacts, those where habitats can be reinstated within 2 years of impacts as set out within the User Guide, will are explained in full herein.

2.7 A Statutory Biodiversity Metric Calculation Tool has been prepared for the proposed development and is provided separately in full for interrogation by Bristol City Council, relevant consultees and stakeholders.

2.8 Post-development habitats were determined with respect to 2025 the Proposed Site Plan (CCTV P03-CCTV). Consideration of construction methods, future land-use and management were used to determine the extent of existing habitat loss/deterioration, retention/enhancement and creation which would occur-post development.

2.9 Professional judgement was required throughout the calculation process to ensure target habitats were reasonable, achievable and ecologically justified. Habitat condition for both enhanced and created habitats was assigned taking a precautionary approach and with consideration of biotic and operational phase conditions (i.e. those which may limit the extent to which 'good' condition is likely to be reached).

[2] Butcher, B., Carey, P., Edmonds, R., Norton, L., and Treweek, J., 2023. *UK Habitat Classification Version 2.0* [pdf] UKHab Ltd. Available at http://www.ukhab.org/ [Accessed October 2025].

Strategic Significance

2.10 A desktop assessment was undertaken to determine relevant strategic significance multipliers for pre- and post-development habitats in accordance with Table 7 of the Statutory Metric User Guide (Defra, 2024) with particular consideration of Local Nature Recovery Strategies (LNRS).

Additionality & Wider Considerations

2.11 In accordance with the good practice principles as set out above, the following additional considerations have been given:

- Wider consideration of ecological functionality, with a qualitative ecological assessment presented herein
- Consideration of non-ecological stakeholders, such as end-users (e.g. residents) of the scheme and choices with regard to access and multi-functionality
- Identification of opportunities to deliver wider environmental gain (e.g. carbon sequestration, water quality and climate resilience) guiding habitat/design choices beyond certain ecological outcomes

Assumptions & Limitations

2.12 The Site visit and habitat assessment was undertaken following a period of prolonged drought and hot weather which may have affected the plant species visible during the survey. As such, a precautionary approach has been taken when assigning habitat condition, so as not to under-represent species diversity.

2.13 Professional judgement and a precautionary approach are required to establish baseline and post-development scenarios to assess current habitat type and condition, and to predict future changes. Accordingly, outcomes for habitats and biodiversity more widely may differ from those presented herein.

3.0 Results

Context

3.1 The application area consists entirely of short-mown modified grassland (UKHab code: g4) used for recreational purposes.

3.2 The application sits within a larger grassland field of the same habitat type. Some areas of rougher 'other neutral grassland' (g3c) are present to the south, around the adjoining Stoke Lodge. The field is bounded by roads and gardens, with intervening tree-lines and scrub containing a mix of native and non-native ornamental species.

3.3 The application area itself is of very low ecological value, particularly considering its extent. The wider field and boundary vegetation are likely to provide opportunities for a range of wildlife.

3.4 Photographs of the Site are included at the end of this report.

Habitat Description

3.5 Grassland within and surrounding the application area was found to be species-poor (though see limitations section above) and dominated by perennial rye-grass *Lolium perenne*, a species typical of amenity spaces and improved pastures. Additional species recorded included greater plantain *Plantago major*, dandelion *Taraxacum officinale* agg. and white clover *Trifolium repens* with patches of wall barley *Hordeum murinum*, knotgrass *Polygonum* sp. and yarrow *Achillea millefolium*.

3.6 Beyond the application area, some additional cock's-foot *Dactylis glomerata*, ribwort plantain *Plantago lanceolata*, Timothy *Phleum pratense*, false oat-grass *Arrhenatherum elatius*, common couch *Elymus repens*, bent-grass *Agrostis* sp. and hawkbit *Leontodon* sp. were recorded, predominantly at the field edges where there is less compaction or management pressure. One specimen of burnet saxifrage *Pimpinella saxifraga* was found towards the south-west of the field.

Protected Species

3.7 Evidence of badger *Meles meles* was confirmed within the wider field. Whilst full details are not fully disclosed herein for confidentiality reasons (but available on request to Local Authority), two badger setts were identified near the south-west and north-west ends of the playing fields, with a possible badger/fox den towards the south-east. These comprise of a three entrance sett and two single entrance burrows, respectively.

3.8 Badgers and their setts are protected under the Protection of Badgers Act 1992 which, in part, makes it an offence to:

- Kill, injure or take a badger
- Destroy or damage a badger sett or any part of it
- Obstruct access to, or any entrance of, a badger sett
- Disturb a badger whilst it is occupying a sett

3.9 With reference to guidance issued by the Badger Trust[3] and Natural England[4], the following considerations are applicable to works in proximity to badgers and their setts:

- Badger tunnels can typically extend to 20m from the entrance holes and are located 0.2m to several metres deep below ground level, depending on soil and topography. As a guide, works are more likely to disturb badgers within their setts in the following circumstances:
    - Use of heavy machinery within 30m of any sett entrance
    - Use of lighter machinery (particularly for digging) within 20m of any sett entrance

[3] Badger Trust, 2023. *Badger Protection: Best Practice Guidance for Developers, Ecologists and Planners* (England)
[4] Natural England, 2011. Badgers and Development. A Guide to Best Practice and Development. Version 12/11.

    - Use of hand tools such as hand digging or scrub clearance within 10m of any sett entrance.
- Badgers are most sensitive to disturbance around their setts from the beginning of December until the end of June, when they are breeding and raising young.

3.10 As a result, the CCTV proposals have been redesigned to ensure that CCTV columns and trenching routes are no closer than 20m from any sett or potential sett. As such, there is anticipated to be negligible risk of impacting underground tunnels or disturbing badgers within their setts.

3.11 Due to the nature and extent of the proposals, no other impacts to biodiversity or protected species have been identified.

Biodiversity Net Gain

3.12 To assist the Local Planning Authority in their consideration of BNG and the proposed development, relevant statements have been set out in Box 1 and 2 at the end of this report in respect of applicable BNG policy and legal requirements.

3.13 Due to the scale and nature of on-site habitats, a map of baseline and proposed habitats has not been specifically prepared. The extent of the Site boundary and full proposals are set out within the accompanying '2025 CCTV P01- CCTV Application Site Plan' and the '2025 CCTV P03- CCTV Proposed Site Plan' which can be viewed alongside aerial photography available online and Site photographs (see end of report).

Baseline Habitats

3.14 The application area is entirely comprised of modified grassland (0.1ha). It was found to pass four of seven condition criteria set out by the Statutory Metric but failed essential criterion A which is required to achieve moderate or good condition grassland. However, as described above, a moderate condition is assigned on a precautionary basis. The condition criteria are listed below:

A. There are 6-8 vascular plant species per m2 present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition: **(Yes)** (*Passed on precautionary basis. Species-richness at time of survey <4 species/m2. Whilst unlikely to exceed required threshold, weather conditions may have resulted in reduced presence of plant species)*
B. Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed: **No**
C. Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present): **Yes**

D. Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities: **No** (erosion, bare patches from high levels of access, particularly in north)
E. Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens): **Yes**
F. Cover of bracken *Pteridium aquilinum* is less than 20%: ***Yes***
G. There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA): ***Yes*** *(none seen)*

3.15 There are no irreplaceable habitat types on or adjacent to the application area.

3.16 The application area covers both the footprint of the future CCTV columns and the working area required to install underground cabling. In accordance with the Statutory Metric User Guide, temporary habitat impacts are not counted as lost within the metric whether the baseline habitat can be restored to the same habitat type and condition within two years of the initial impact. Given the nature of the Site, this is expected to be readily achievable.

Proposed Habitats

3.17 The proposals entail the installation of eight CCTV cameras. A precautionary 400mm square base is given for each CCTV column, accounted to a total habitat loss of 1.28m^2. This area is assigned as 'developed land; sealed surface; within the metric.

3.18 To compensate for the small loss of grassland to hard-standing, new tree planting is proposed within the application area. This will comprise both coniferous and deciduous varieties appropriate to the Site's context. These will provide value to wildlife, as well as aesthetic and landscape value without impeding the Site's use for sports and recreation. These are assigned as 'small' size and 'poor' condition on a precautionary basis.

Strategic Significance

3.19 With reference to the West of England Local Nature Recovery Strategy and Toolkit[5], the Site falls within Sub Area: Greater Bristol. With reference to the Core BNG priorities and measures, these are not applicable to the proposals given the habitats present, limited site area and future management requirements. As such, the BNG calculation does not receive any uplift from strategic significance (either baseline or proposed habitats).

[5] https://opendata.westofengland-ca.gov.uk/pages/lnrs-application/?headless=true

Net Effect on Biodiversity

3.20 The net effect on biodiversity as a result of the proposed development is set out within the accompanying Statutory Biodiversity Metric and summarised below in Table 1.

Table1. Net Effect on Biodiversity: Habitat Units

	Habitat Units	**% Change**
On-site baseline	0.40	
On-site post-intervention	0.47	
On-site net change	+ 0.07	+16.96%
Total net change	**+0.07**	**+16.96%**
Trading Rules Satisfied		

Significant On-site Gain

3.21 The following proposed habitat enhancement and creation proposals are likely to be considered 'significant' by Bristol City Council:

- Creation of habitats of medium distinctiveness, including 'urban trees'

3.22 In accordance with Paragraph 9, Schedule 7A of the Town & Country Planning Act (1990) these habitats contributing to significant on-site gains require additional mechanisms to secure their creation/enhancement and management over 30-years, such as through an appropriate planning condition and/or legal agreement in accordance with an on-site HMMP.

4.0 Summary

4.1 The Site comprises a small area of low value modified grassland habitat.

4.2 Proposals to install 8 CCTV cameras and associated infrastructure are anticipated to have negligible ecological impacts. The proposed working area has been realigned to avoid impacts to local badger setts. No other ecological constraints to the works have been identified.

4.3 As set out herein, a net gain in biodiversity in excess of 10% is predicted as a result of the proposed development, based upon provision of on-site gains to offset small-scale impacts at the Site. The Statutory Biodiversity Metric Calculation Tool was used to calculate the following outcomes:

- +0.07 Habitat Unit gain or +16.96%
- All relevant trading rules satisfied

4.4 Following any grant of planning permission an application to discharge the Biodiversity Gain Condition would be submitted to secure the measures described herein.

Box 1. Biodiversity Net Gain Statements
Planning permission sought for the development, if granted, **would be subject to the Biodiversity Gain Condition** as set out within Schedule 14 of the Environment Act (2021) given the following: • Planning permission is applied for after 12 February 2024 • Planning permission does not relate to development consented prior to 12 February 2024 ('major developments') and subject to a 'Section 73' amendment, or comprise a Reserved Matters application pursuant to such consent • Impacts to habitats are predicted on-site that either exceed 25 square metres per 5 linear metres with a value greater than zero, and/or impacts to any 'Section 41' habitat of principal importance • Planning permission sought does not relate to a 'householder application' or 'the high-speed railway transport network' • Planning permission is not for self-build or custom housebuilding and relates to more than 9 dwellings and/or proposals cover over 0.5ha • Planning permission does not relate directly to off-site gain developments to fulfil other BNG requirements
The biodiversity value of on-site habitats set out herein relate to the date of the planning application and not an earlier date.
The biodiversity value of on-site habitats set out herein are not lower than on date of application.
On-site biodiversity gain proposed herein is significant based upon the following: • Proposed habitats do include those of medium and higher distinctiveness comprising 'urban trees'
The Site does not contain irreplaceable habitat as defined under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024).
As set out herein measures have been taken in a step-wise fashion to: • First avoid adverse effects of the development upon on-site medium or higher distinctiveness habitat and, where they cannot be avoided, the mitigate these effects; • Taking an approach to first seek on-site habitat enhancement, then habitat creation (where appropriate) • Where above cannot fully compensate, seek registered off-site gains • And finally, where off-site gains cannot be secured, seeking purchase of biodiversity credits

Box 2. Accordance with 'Biodiversity Net Gain: Good Practice Principles for Development' (Baker et al., 2019).	
Principle 1. Apply the 'Mitigation Hierarchy'	Impacts to the site are limited to habitats of low distinctiveness. The working area is minimised as far as possible. Majority of impacts will be temporary, with habitats reinstated to their previous type and condition. Compensation and provision of biodiversity benefits (to reach in excess of 10% BNG) have been achieved within the Site, rather than offsite. Trading rules have been accorded with in the prepared metric and ecologically justified decisions have been taken in respect of proposed habitats.
Principle 2. Avoid losing biodiversity which cannot be offset by gains elsewhere (e.g., irreplaceable habitats).	No irreplaceable habitats will be affected by the proposals. All biodiversity impacts can be offset within the Site.
Principle 3. Be inclusive & equitable	Design decisions taken have considered the local context in addition to the Site's ongoing use for open space/sports.
Principle 4. Address risks (e.g., difficulty of achieving habitat creation/enhancement)	A precautionary approach has been taken to habitat type and condition with respect to baseline grassland and proposed tree habitats.
Principle 5. Make a 'measurable' Net Gain contribution (e.g., calculated using an appropriate metric).	The Statutory Biodiversity Metric has been used to demonstrate a clear and quantified calculation of the net effect of development upon biodiversity, using habitat as a proxy for wider biodiversity.
Principle 6. Ensure that Net Gain design achieves the best outcomes for biodiversity (quantitative and qualitative assessment) and create a net gain legacy for long-term benefits.	The proposed trees will contribute to an existing woody boundary and provide a long-term resource for wildlife. Tree species chosen will be a mix of coniferous and deciduous species to increase habitat diversity.
Principle 7. Be additional Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).	Tree planting has been proposed to provide a suitable and appropriate addition to biodiversity at the Site, being mindful of the Site's use for formal sports and recreation and the need to maintain sufficient and safe open space for these purposes.
Principle 8. Create a Net Gain legacy Ensure Net Gain generates long-term benefits.	The proposed trees will be long-lived and able to provide biodiversity benefits in the long-term. Their ongoing management will be secured as part of a Habitat Management and Monitoring Plan secured by planning condition.
Principle 9. Optimise sustainability Optimise the wider environmental benefits for a sustainable society and economy.	The proposed trees will require minimal management and generate low waste. Sustainable choices will be made with regards to their implementation and initial protection e.g. reusable tree guards and ties. A mix of deciduous and coniferous tree species provides a range of opportunities for wildlife.
Principle 10. Be transparent Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.	This report provides details of baseline and proposed habitats and the limitations and assumptions made during completion of the BNG assessment.

Photograph 1. Overview of field with distant mature trees to south (August 2025)

Photograph 2. Boundary trees and scrub

Photograph 3. 'Other neutral grassland' in south of field

Photograph 4. Boundary tree line

Photograph 5. Grassland view with worn paths (September 2025)

Photograph 6. Grassland overview and pavilion building