



PADDINGTON GREEN
POLICE STATION

Replacement Biodiversity Net Gain Assessment

Replacement Biodiversity Net Gain
Assessment
November 2022 - GLA0711

NOVEMBER 2022

Intended for
Berkeley Homes (Central London) Limited

Date
November 2022

Project Number
1620009008-001

PADDINGTON GREEN POLICE STATION REPLACEMENT BIODIVERSITY NET GAIN ASSESSMENT REPORT

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Project No. **1620009008-001**
Issue No. **Final**
Date **16 November 2022**
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Version Control Log

Revision	Date	Made by	Checked by	Approved by	Description
1	12/09/2022	DP	LS	PR	First Draft for Comment
Final	16/11/2022	DP	LS	MW	Final for Planning Submission

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EXECUTIVE SUMMARY

Ramboll UK Limited was commissioned by Berkeley Homes (Central London) Limited to undertake an updated Biodiversity Net Gain (BNG) Assessment of amended redevelopment proposals for a site located at 2-4 Harrow Road in Paddington, London.

BNG is a process whereby development leaves biodiversity in a measurably better state than before and is a planning policy requirement in England under the National Planning Policy Framework. BNG will soon become a legal requirement in England with the Environment Act (2021) setting out a mandatory 10% net gain in biodiversity for new development.

The aim of this report is to set out the results of the BNG assessment in relation to the 2022 amended proposed development. This has been achieved through calculating the biodiversity change as a result of the 2022 amended proposed development in terms of net loss, no net loss or a net gain and including recommendations to assist the 2022 amended proposed development to minimise biodiversity impacts and maximise biodiversity outputs.

The updated Biodiversity Net Gain assessment shows that with the current proposed landscape design, it is possible for the 2022 amended proposed development to achieve a 224.42 % net gain for area-based habitats. New hedgerow planting would result in a net gain of 0.06 hedgerow units, although a percentage change cannot be calculated owing to there being no hedgerow units pre-development.

This is a significant gain for the biodiversity of the site, far exceeding the 10 % net gain required by planning policy.

It is noted that following the completion of the assessment, a couple of minor amendments were made to the landscape proposals; however, these amendments would not alter the conclusions of the updated BNG assessment.

1. INTRODUCTION

1.1 Background

Ramboll UK Limited ('Ramboll') was commissioned by Berkeley Homes (Central London) Limited (the 'Applicant') to undertake an updated Biodiversity Net Gain (BNG) Assessment in respect of redevelopment proposals for a site at 2-4 Harrow Road, Paddington, W2 1XJ (the 'site'). The site is located at OS grid reference TQ 26952 81743, as shown in Figure 1.1.

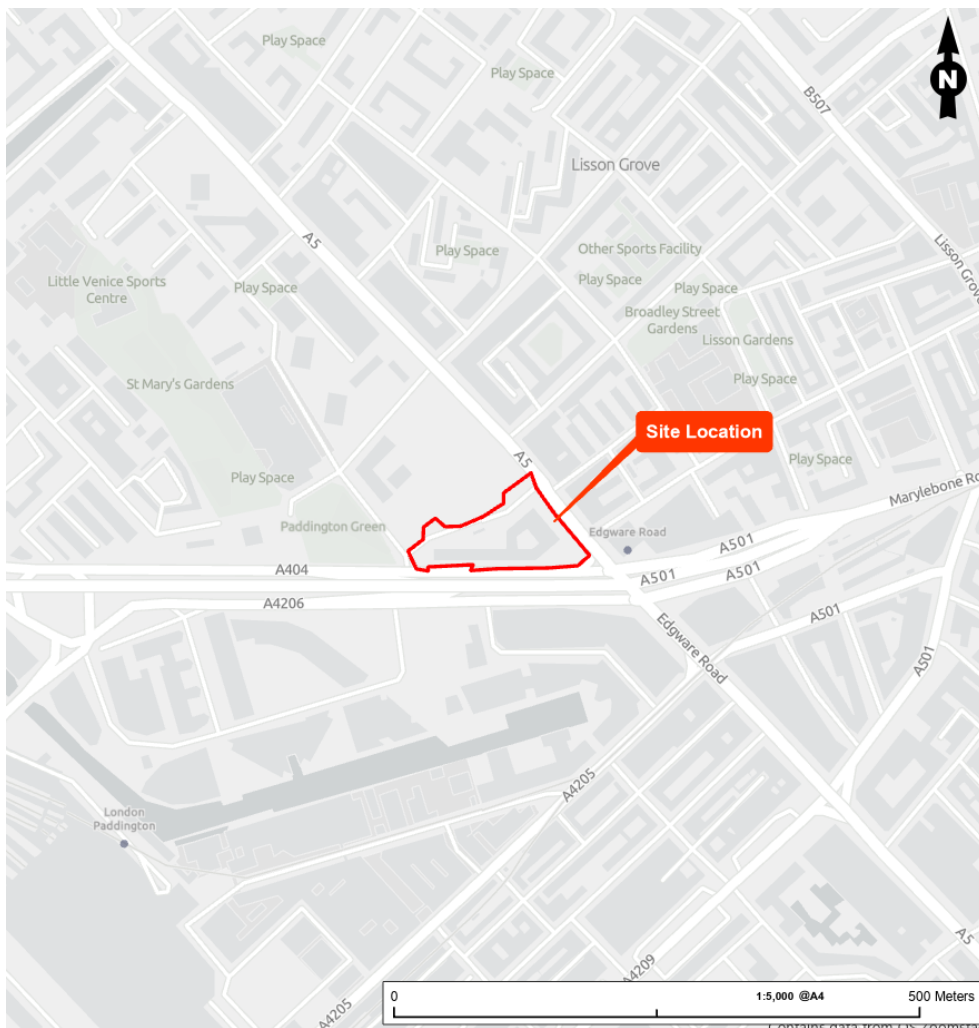


Figure 1.1: Site Location

1.2 Biodiversity Net Gain

BNG is a process whereby development leaves biodiversity in a measurably better state than before and is a policy requirement under the National Planning Policy Framework (NPPF; 2022)¹. BNG will soon become a legal requirement in England⁴ with the Environment Act (2021) setting out a mandatory 10% net gain in biodiversity for new development⁵. The BNG process is governed by a set of UK good practice principles (2016)² along with industry guidance which outlines the practical implementation of the principles (2019)³. The key principle is the

¹ Ministry of Housing, Communities and Local Government, 2022. National Planning Policy Framework. London. HMSO.

² CIEEM, CIRIA, IEMA, 2016. Biodiversity Net Gain: Good practice principles for development. Available at: <https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf>

³ CIEEM, CIRIA, IEMA, 2019. Biodiversity Net Gain: Good practice principles for development. A practical guide. Available at: <https://cieem.net/wp-content/uploads/2019/02/C776a-Biodiversity-net-gain.-Good-practice-principles-for-development.-A-practical-guide-web.pdf>

application of a mitigation hierarchy, which sets out that development should first avoid adverse impacts on biodiverse habitats, then mitigate/minimise impacts, then restore/reinstate habitats. As a last resort, once the mitigation hierarchy has been maximised on site, the project may use biodiversity offsetting to compensate for any residual biodiversity effects. The principles require use of a metric (e.g. Natural England metric v3.1⁴) to assess and quantify net biodiversity change.

Ramboll has in-house biodiversity specialists who have worked at the forefront of BNG across the UK since 2017. Our specialists have in-depth experience of applying BNG assessments to residential, road, rail and energy infrastructure developments, using the Defra metric, Natural England metric v3.1 and specific client-adapted metrics.

Applying this process enables transparent reporting on biodiversity to demonstrate successful improvement of biodiversity, including delivery against the current national policy requirement for BNG in development.

1.3 Objectives

The aim of this report is to provide the results of an updated BNG assessment in relation to the site and the associated construction works and landscape plans for the 2022 amended proposed development. The structure and content of the report are based on current BNG good practice and include the following:

- The biodiversity baseline;
- The predicted post-development biodiversity (based upon the landscaping proposals); and
- The calculation of overall biodiversity change.

The objectives of this report are to:

- calculate the biodiversity change as a result of the 2022 amended proposed development in terms of net loss, no net loss or a net gain; and
- include recommendations to assist the 2022 amended proposed development to minimise biodiversity impacts and maximise biodiversity outputs.

The report is supported by the following appendices:

- Appendix 1: Baseline Habitat. Includes Baseline Phase 1 Habitat Figure;
- Appendix 2: Condition Assessments for existing habitats; and
- Appendix 3: Post Development Habitat. Includes Landscape Plan and Planting Plan.

1.4 Background

A full planning application was submitted by the Applicant on 1 April 2021 for a residential-led development (the '2021 proposed development') at the site under application reference 21/02193/FULL.

The application was accompanied by an Environmental Statement (the '2021 ES') prepared by Ramboll UK Ltd ('Ramboll') and a team of technical specialists, which comprised the following documents:

- Non-Technical Summary (NTS);
- Volume 1: Main Environmental Statement;
- Volume 2: Townscape, Visual and Built Heritage Assessment;
- Volume 3A: Technical Appendices.

⁴ Natural England, 2022. The Biodiversity Metric 3.1 (JP029). Available at: <http://publications.naturalengland.org.uk/publication/5850908674228224>

The 2021 ES reported on the conclusions of an environmental impact assessment (EIA) that was undertaken of the 2021 proposed development in accordance with the statutory procedures set out in The Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2017 (hereafter referred to as the 'EIA Regulations').

A stand-alone BNG assessment accompanied this application.

Following the submission of the application, Avison Young were commissioned WCC to undertake an independent peer review of the 2021 ES. Ramboll and the team of technical specialists responded, on behalf of the Applicant, to clarification comments made by Avison Young.

The application was considered at WCC's planning committee on 9 September 2021. WCC officers made a recommendation for approval. The planning committee resolved to refuse the application contrary to the officers' recommendation for the following reasons (in summary):

- Due to the excessive height and bulk, Block K would have a detrimental impact on the local townscape, would result in substantial harm to the setting of the Little Venice, Paddington Green, Lisson Grove and Maida Vale Conservation Areas and have a detrimental impact on views from Regents Park and Hyde Park;
- The 2021 proposed development fails to maximise the number of dual aspect flats within Blocks I and J, resulting in poor levels of natural daylight and outlook due to the proximity of the existing buildings within West End Gate; and
- Due to the excessive height and bulk of the proposed blocks, the 2021 proposed development would result in a significant loss of daylight and sunlight to existing residential properties.

The application was subsequently referred to the Greater London Authority (GLA) for 'Stage 2' review. Following a review of the application and the proposed decision of WCC, the GLA considered that the 2021 proposed development was of strategic importance and had the potential to make an important contribution to housing and affordable housing supply. On 22 November 2021 the GLA directed that the GLA would act as the local planning authority for the purpose of determining the application.

1.5 Reason for Submission

The GLA's Stage 2 report (reference 2021/0711/S2) identified various areas where further work was anticipated in the event that the Mayor of London took over determination of the application. In particular, urban design, building height, residential quality, climate change and transport were identified.

The Applicant is now proposing to make amendments and refinements to the 2021 proposed development in order to address the areas of further work. These amendments comprise the following:

- Removal of Block I bullnose and movement of block footprint 8 m east;
- Reduction of Block J footprint width by 10 m;
- Increase in distance between Block I and Block J from 9 m to 10 m;
- Removal of Block K shoulder element;
- Removal of podium element (now three standalone blocks linked at basement level);
- Increase in the height of Block I from 62.020 m above ground floor finished floor level (FFL) (94.355 m AOD) (18 storeys) to 83.019 m above ground Floor FFL (115.219 m AOD) (24 storeys);
- Increase in the height of Block J from 54.145 m above ground floor FFL (86.480 m AOD) (15 storeys) to 60.389 m above ground floor FFL (92.724 m AOD) (17 storeys);

- Increase in the height of Block K from 110.720 m above ground floor FFL (143.055 m AOD) (32 storeys) to 133.969 m above ground floor FFL (166.304 m AOD) (39 storeys);
- Removal of roof level communal, residential amenity space at Block J;
- Removal of office floorspace and amenity space;
- Relocation of internal residential amenity space at Block K from level 25 to level 1;
- Amendment of residential unit / floorplate design to increase percentage of social rented units and the overall unit numbers;
- Removal of all north facing single aspect residential units and increase in dual aspect residential units up to approximately 55 %;
- Amendments to core arrangement (all cores now have a dual staircase, with one staircase terminating at basement level and one terminating at ground floor level);
- Amendments to B2 footprint (overall minor increase), previously B2 accessed via Block J core terminating at B2 level, now accessed via Block I core terminating at B2 level and redesign of waste management services;
- Amendments to B1 footprint (reduction of the western extent and north-eastern extent), on account of the following layout changes:
 - Omission of office bin store, office lifts and office facilities;
 - Relocation of residential bin store in Block K further south, to suit the new location of the refuse chute;
 - Relocation of plant to the north;
- Complete stopping-up and partial pedestrianisation of Newcastle Place to vehicle traffic with the exception of fire / emergency access;
- Increase in ground level public realm provision from 3,553 m² to 4,755 m²;
- Reduction in external communal amenity space provision from 835 m² to 0 m²;
- Increase in play space provision from 1,138 m² to 1,150 m²;
- Fully updated landscape design proposals; and
- Amendments to glazing ratio and the addition of spandrel panels to the façade to improve energy performance.

The 2021 proposed development as amended by the proposed amendments is hereafter referred to as the '2022 amended proposed development'.

A full update of the EIA has been undertaken to consider and assess the likely significant effects of the 2022 amended proposed development on the environment. Where relevant, consideration has been given to changes in baseline conditions; any new and emerging legislation, policy and assessment methodology requirements; and any new cumulative schemes that have come forward due to the passing of time.

An updated BNG assessment has been undertaken to determine the change in ecological value of the site as a result of the 2022 amended proposed development.

1.6 Project Description

The planning application description of the 2022 amended proposed development is as follows:

'Demolition of the existing building and redevelopment of the site to provide three buildings of 39, 24 and 17 storeys in height, providing residential units (including affordable units)(Class C3), commercial uses (Class E), a community use (Class F.2), landscaping, tree and other planting, public realm improvements throughout the site including new pedestrian and cycle links, provision of public art and play space, basement level excavation to provide associated plant, servicing, disabled car parking

and cycle parking and connection through to the basement of the neighbouring West End Gate development.'

The 2022 amended proposed development is anticipated to comprise the:

- demolition of the Paddington Green Police Station;
- excavation of a basement connection to the West End Gate (WEG) development basement;
- erection of three blocks along, set back from, Harrow Road and Edgware Road;
- delivery of ground floor commercial uses and residential at upper floors, with associated landscaped residential gardens; and
- stopping up of Newcastle Place with associated landscaping and cycle parking.

The proposed land uses comprise:

- 556 homes, including 219 affordable housing units (Class C3);
- 1,326 m² gross external area (GEA) flexible commercial space (Class E);
- servicing and disabled parking at basement level; and
- Air Source Heat Pumps (ASHP) at basement and roof level and connection to the West End Gate (WEG) basement and CHP led energy centre.

Building heights would range from ground plus 17 storeys to ground plus 39 storeys.

The 2022 amended proposed development would be car free with the exception of 3 % disabled parking provision.

1.7 Regional and Local Plan Policy

1.7.1 The Mayor's Biodiversity Strategy 2002

The Mayor's Biodiversity Strategy⁵ aims to protect and enhance the natural habitats of London together with their species. It presents 14 detailed policies and 72 implementation proposals around a number of themes including the protection of biodiversity, blue ribbon network, managing wildlife habitats and connecting people to nature. Of relevance to this assessment are the following proposals:

- Proposal 5: The Mayor will, and boroughs should, take account of the protection of wildlife habitats and biodiversity in the consideration of all planning applications; and
- Proposal 8: Where biodiversity assessments are submitted, the Mayor expects the options to be refined only after full investigation of the existing ecological conditions and consideration of the potential impacts of options.

1.7.2 The London Plan, March 2021

The London Plan⁶, published on 2 March 2021, is a Spatial Development Strategy (SDS) sets out an integrated economic, environmental, transport and social framework for development in London and runs from 2019 – 2041. This new London Plan replaces all previous versions of the London Plan. Policies of relevance to biodiversity are contained within Chapter 8 (Green Infrastructure and Natural Environment) of this document. These are:

- G1: Green Infrastructure;
- G4: Open Space;
- G5: Urban Greening;

⁵ Greater London Authority, 2002. Connecting with London's Nature - The Mayor's Biodiversity Strategy. London. GLA.

⁶ Greater London Authority, 2021. The London Plan: The Spatial Development Strategy for Greater London. London, GLA.

- G6: Biodiversity and Access to Nature; and
- G7: Trees and Woodlands.

1.7.3 Westminster City Plan 2019-2040, April 2021

The Westminster City Plan (2021)⁷ is the statutory development plan for Westminster, setting out the vision and strategy for development of the city. It includes a number of policies that relate to biodiversity:

- Policy 31: Waterways and Waterbodies; and
- Policy 34: Green Infrastructure.

1.7.4 Westminster Biodiversity Action Plan 2008

Westminster's Biodiversity Action Plan (BAP)⁸ has been produced by the Westminster Biodiversity Partnership and aims to prevent the decline of - and improve conditions for - species and habitats that are a conservation priority.

Those listed are:

- Habitats
 - Built Environment;
 - Churchyards and Cemeteries;
 - Parks and Green Spaces;
 - Private Gardens;
 - Standing Open Water; and
 - Tidal Thames.
- Species
 - Bats;
 - Buttoned Snout Moth;
 - Hedgehog;
 - House Sparrow; and
 - Tawny Owl.

1.7.5 Westminster Open Spaces and Biodiversity Strategy 2019

This strategy⁹ has a number of priorities, with associated commitments. The priorities include the following:

- Protecting existing green assets;
- Prioritising city greening by creating new green infrastructure;
- Biodiversity and Wildlife;
- High standards; and
- Managing and balancing demands.

⁷ City of Westminster. 2016. Westminster City Plan. Available online: <https://www.westminster.gov.uk/planning-building-and-environmental-regulations/city-plan-neighbourhood-planning-and-planning-policy/westminsters-city-plan-and-unitary-development-policies-udp/city-plan>

⁸ Westminster Biodiversity Partnership. 2008. Westminster Biodiversity Action Plan. Available online: <https://www.westminster.gov.uk/biodiversity-action-plan#:~:text=Westminster's%20Biodiversity%20Action%20Plan%20aims,to%20improving%20biodiversity%20in%20Westminster>

⁹ City of Westminster. 2019. Westminster Open Spaces and Biodiversity Strategy. Available online: https://www.westminster.gov.uk/sites/default/files/draft_strategy_for_open_spaces_and_biodiversity.pdf

2. METHODOLOGY

The methodology used for this BNG assessment is in line with the current published UK BNG guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM) and Natural England and utilises the Natural England Biodiversity Metric v3.1. The good practice principles have been applied, in particular the mitigation hierarchy. The following guidance documents have been used:

- CIEEM, CIRIA, IEMA, 2019. Biodiversity Net Gain: Good practice principles for development. Part A: A practical guide¹⁰;
- Natural England, 2022. Biodiversity Metric 3.1: User guide (detailed)¹¹;
- Natural England, 2022. Biodiversity Metric 3.1: Technical supplement¹²; and
- Natural England, 2022. Biodiversity Metric 3.1: Calculation tool (spreadsheet) – updated April 2022.

2.1 Desk Study

A desk study was undertaken as part of the Ecological Impact Assessment (EcIA)¹³ of the site. The purpose of the desk study was to identify designated sites and irreplaceable habitats within the application boundary and to identify other natural features which may have importance for biodiversity.

The following has been considered:

- All statutory designated sites up to 1 km from the site, including Special Areas of Conservation (SAC), Special Protection Areas (SPA), National Nature Reserves (NNR), Sites of Special Scientific Interest (SSSI) and Local Nature Reserves (LNR);
- Non-statutory designated sites: Sites of Importance for Nature Conservation (SINC) up to 1 km from the site;
- Records of protected species up to 1 km from the site; and
- International and national statutory designated sites with bats as a qualifying feature for designation, up to 10 km from the site.

Greenspace Information for Greater London (GiGL) was contacted to provide details of designated sites and protected species within 1 km of the site. Due to data ownership restrictions in the reproduction of the GiGL report [Report Ref. 12011aw, dated 2 September 2020], it is not appended to this EcIA, but the information provided is summarised in the relevant sections. In addition, the Multi Agency Geographic Information for the Countryside (MAGIC) website¹⁴ was searched for supplementary information on statutory sites. This included a search for European Protected Species licences issued within 1 km of the site. Supplementary information on the site and its surroundings were obtained from aerial images available from Google™ Earth.

In line with BNG guidance, any SAC, SPA, SSSI or irreplaceable habitats identified within the site boundary will not be included within the baseline calculations. Due to their high importance for

¹⁰ Baker, J., Hoskin, R. & Butterworth, T. 2019. Biodiversity Net Gain: Good practice principles for development. Part A: A practical guide. CIRIA, London.

¹¹ Crosher, I., Gold, S., Heaver, M., Heydon, M., Moore, L., Panks, S., Scott, S., Stone, D. & White, N. 2022. The Biodiversity Metric 3.1: Auditing and accounting for biodiversity value: User Guide (Beta version, July 2019). Natural England.

¹² Crosher, I., Gold, S., Heaver, M., Heydon, M., Moore, L., Panks, S., Scott, S., Stone, D. & White, N. 2022. The Biodiversity Metric 3.1: Auditing and accounting for biodiversity value: technical supplement, April 2022. Natural England.

¹³ Ramboll. 2022. 1620009008-001_2_Paddington Green Police Station Replacement EcIA.

¹⁴ [online] Available at: www.magic.gov.uk, accessed 2 September 2020.

biodiversity, impacts to these sites/habitats should be avoided at all costs as it is not possible to compensate for them within a reasonable management timeframe.

2.2 Baseline Biodiversity Assessment

2.2.1 Habitat Survey and Condition Assessment

An extended Phase 1 habitat survey of the site was undertaken by Laura Sanderson CEnv MCIEEM on 4 September 2020. Laura has a BSc in Zoology and an MSc in Wildlife Management and Conservation and has worked professionally as a consultant ecologist since 2005. The weather during the survey period was mild and dry with little wind.

A follow-up extended Phase 1 habitat survey of the site was undertaken by Malcolm Robertson CEnv MCIEEM on 27 May 2022. Malcolm has a BSc in Geography/Biology and has worked professionally as a consultant ecologist since 2001. The weather during the survey period was hot and dry with little wind.

The surveys involved a site walkover and preliminary assessment of key habitats, land use and ecological features, particularly focusing on areas of natural interest which will be affected by the 2022 amended proposed development. The main habitats present were recorded using the standard Phase 1 habitat survey methodology as described in the Handbook for Phase 1 Habitat Survey (JNCC, 2010¹⁵). Target notes were used to record habitats and features of particular interest. In addition to general habitat classification, a list was compiled of observed plant species (using the nomenclature of Stace, 2019¹⁶, with common and Latin names referred to in the first instance after which only the common names are used), where possible.

The site was assessed for its potential to support protected and notable species such as bats, and was inspected for signs of any invasive plant species subject to legal controls. This was in order to identify potential ecological constraints and to guide recommendations for further survey requirements for these species.

Habitats were categorised using the JNCC Phase 1 Habitat Survey methodology. However, for the purposes of this BNG Assessment, habitats had to be translated into their corresponding habitat under the UK Habitat Classification System. This was done using the Phase 1 – UKHAB Translation tab within the DEFRA Metric 3.1 calculator tool and based on the professional expertise of the ecologist. Any deviation from this translation is justified in full.

2.2.2 Condition Assessment

The habitat condition assessment (HCA) was undertaken using Natural England's Biodiversity Metric 3.1 Habitat Condition Assessment Sheets¹⁷ and condition scores were assigned based upon the number of pre-determined criteria the habitats met or did not meet. Full condition assessments for each pre-development habitat are provided in Appendix 2.

2.2.3 Habitat Distinctiveness and Strategic Significance

Distinctiveness per habitat type was determined by the pre-set values within the Natural England Biodiversity Metric 3.1. There has been no deviation from the pre-set distinctiveness scores within this assessment.

The strategic significance rating was assigned based upon the biodiversity value of the local surroundings, as determined by checking local biodiversity plans and sites (Local BAPs, Green

¹⁵ Joint Nature Conservation Committee (JNCC), 2010. Handbook for Phase 1 habitat survey – a technique for environmental audit. JNCC Peterborough.

¹⁶ Stace, C. 2019. New Flora of the British Isles 4th Edition. Cambridge University Press.

¹⁷ Crosher, I., Gold, S., Heaver, M., Heydon, M., Moore, L., Panks, S., Scott, S., Stone, D. & White, N. 2019. The Biodiversity Metric 3.1: Auditing and accounting for biodiversity value: User Guide (Beta version, April 2022). Natural England

infrastructure, Nature Recovery Areas, LNRs, SINCs, etc) and checking if any of the habitats were strategically significant for a rare species (e.g. critical for home range, functionally important for the species, etc.). The following significance levels apply:

- Within area formally identified in local strategy = high significance;
- Location desirable but not in local strategy = medium significance; and
- Area/compensation not in local strategy/no local strategy = low significance.

2.2.4 Baseline Biodiversity Calculation

The biodiversity unit (BU) score per area-based habitat was calculated via the metric using the quality factors (distinctiveness, condition and strategic significance) and their assigned values. The sum of all the BUs provided the area-based habitat biodiversity baseline.

Vegetated linear features (such as hedgerows or lines of trees) are calculated using length and the above quality factors. These are presented as hedgerow units (HUs) and separated from area-based BUs. To deliver net gains for biodiversity, net gains in BUs and HUs must be demonstrated.

Individual trees not forming part of a UKHab habitat type (and not considered a line of trees) have been entered into the 'Street Tree Helper' section of the metric to calculate a total area (ha). A habitat type deemed most appropriate for those trees, collectively, was assigned. In this study, individual trees most closely matched the UKHab type of 'urban – street tree', and the 'urban – street tree' condition assessment criteria were applied.

2.3 Post-development Biodiversity Assessment

2.3.1 Post-development Habitats and Target Condition

The post-development habitat types were determined based upon the following landscape plans produced by Murdoch Wickham landscape architects, all of which are provided in Appendix 3:

- 1446-014L Urban Greening Factor;
- 1446-013I Tree Planting Strategy and Size Guide; and
- 1446-015W All Levels Landscape Master Plan.

It is noted that following the completion of the assessment, minor amendments were made to the landscape proposals, which can be summarised as follows:

- Two planters were added to south-east plaza for wind mitigation;
- An additional 5 m tall tree was included within south-east plaza for wind mitigation;
- Public realm to the west of Block I was amended from lawn space to shrub planters with specific seating spaces;
- Public art panels were included alongside the hedgerow between Harrow Road and the public realm to the west of Block I; and
- The urban greening factor (UGF) was increased to 0.37 (+0.01).

These amendments would not alter the conclusions of the updated BNG assessment as presented in this report.

The habitat classification was determined based upon the professional judgement of the ecologist, likely future use of specific areas of the site and the planting typologies.

A habitat type deemed most appropriate for proposed trees, collectively, was assigned. In this study, proposed individual trees most closely matched the UKHab types of 'urban – street tree'. The size class of proposed trees is based upon the estimated stem diameter of each tree species

after 30 years. The target condition of the post-development habitats has been assigned based upon the expert judgement of the ecologist and the future management aspirations of the site.

2.3.2 Habitat Distinctiveness and Strategic Significance

The distinctiveness was again assigned by the metric based upon the habitat types entered in the post-development sections of the metric. Strategic significance values were assigned following the methodology described in Section 2.2.

2.3.3 Temporal and Difficulty Risk Factors

The relevant risk factors for the 'time to target condition' and the 'difficulty to create' were assigned by the Natural England metric and are deemed appropriate for the 2022 amended proposed development. No deviation from the pre-defined temporal or difficulty risk factors were made during this assessment.

2.3.4 Habitat Creation, Enhancement and Accelerated Succession

The BNG process includes a consideration of whether habitats would be newly created, retained and enhanced or, in limited cases, would undergo accelerated succession. The following actions were considered for each habitat polygon on-site and the action entered into the metric:

- Habitat lost to permanent development;
- Habitat lost during construction and created post-development;
- Habitat retained (no improvement);
- Habitat retained and enhanced; and
- Habitat retained and improved via accelerated succession.

Accelerated succession is used only when converting grassland (improved or poor-semi improved) to woodland, where the grassland is retained in the process (e.g. where whips are planted in a grassland and subsequent conversion to woodland occurs over time).

2.4 Biodiversity Metric

Natural England updated the BNG Defra metric in April 2022 and subsequently published the Biodiversity Metric v3.1. All calculations undertaken for this study have used the Natural England v3.1 metric

2.5 Assumptions and Limitations

It should be noted that availability and quality of the data obtained during desk studies is reliant on third party responses. This varies from region to region and for different species groups. Furthermore, the comprehensiveness of data often depends on the level of coverage, the expertise and experience of the recorder and the submission of records to the local recorder. Accordingly, the conclusions in this report are valid only to the extent that the information provided to Ramboll was accurate, complete and available to Ramboll within the reporting schedule.

The extended Phase 1 habitat survey provides a snapshot of ecological conditions and does not record plants or animals that may be present on-site at different times of the year but were absent at the time of the survey. The absence of a particular species cannot definitely be confirmed by a lack of field signs and only concludes that an indication of its presence was not located during the survey effort. The survey was undertaken during the optimum April to September Phase 1 habitat survey period when plants are generally visible.

All polygon areas were input into the metric in hectares (ha), rounded up to two decimal places, and the lengths of linear features input into the metric in kilometres (km), rounded up to two

decimal places. This can cause a slight variation to the sum of the individual numbers, but is unlikely to substantially change the results.

3. BIODIVERSITY BASELINE

3.1 Desk Study

Statutory Sites

No SPAs, SACs, SSSIs, NNRs or LNRs are located within 1 km of the site, and no SACs designated for bats are present within 10 km of the site.

Non-Statutory Sites

In London there are the following three tiers of SINC:

1. Sites of Metropolitan Importance (SMINC);
2. Sites of Borough Importance (Borough Grade I and Borough Grade II) (SBINC); and
3. Sites of Local Importance (SLINC).

GiGL identified nine SINCs located within 1 km of the site, listed in Table 3.1 below. No further designated sites are present within 1 km of the site.

Table 3.1: Sites of Importance for Nature Conservation within 1 km of Site			
Name	Type	Distance from Site (m)/ Direction	Description
London's Canals	Metropolitan	Approximately 200 m south at closest point, also north and west.	London's canals provide a home for many fish and aquatic plants.
Hyde Park and Kensington Gardens	Metropolitan	Over 500 m south.	The largest area of open space in central London, these Royal Parks have long been recognised as having considerable importance for their birds.
Hyde Park Gardens	Borough Grade II	Over 500 m south.	An attractive garden square, adjacent to Hyde Park, with a variety of habitats including woodland providing a home for a large number of common birds.
Little Venice Garden, Winston Garden and The Crescent Garden	Borough Grade II	Over 500 m north-west.	Three large communal back gardens in Maida Vale, which are home to many garden birds.
St Mary's Churchyard and Paddington Green	Borough Grade II	Immediately adjacent to the site boundary to the west.	This historic churchyard and associated open spaces combine cultural, wildlife and amenity value in a densely built-up area beside the Westway and Paddington Station.
Park Square Gardens	Borough Grade II	Approximately 100m north-west.	A garden square particularly valuable for birds.
Lisson Garden	Local	Approximately 260 m east.	A small children's playground and garden, in a heavily built up area just to the north of Marylebone

Name	Type	Distance from Site (m)/ Direction	Description
			Road, which has been developed on unusually naturalistic lines.
Talbot Square	Local	Over 500 m south.	A garden square with a range of wildlife habitats.
Hallfield Primary School and Housing Estate	Local	Over 500 m south-west.	A school and housing estate with a good range of wildlife habitats, reported to be supporting a population of hedgehogs.

Irreplaceable Habitats

No Habitats of Principal Importance (in accordance with Natural Environment and Rural Communities (NERC) Act 2006 Section 41) or irreplaceable habitats were identified on the site.

3.2 Baseline Biodiversity Units

The habitats found on the site are shown in Appendix 1 and detailed in Table 3.2, with the Phase 1 habitat type and JNCC code, as determined during the extended Phase 1 habitat survey and the corresponding UKHab habitat type. The condition rating and score of each habitat, as based upon the HCA (Appendix 2), is also shown.

UKHab Habitat Type	Plot	Distinctiveness	Condition	Area (ha)	BU
Urban – Developed land; sealed surface	1	N/A	N/A	0.61	0.00
Urban – developed land; sealed surface	2	N/A	N/A	0.21	0.00
Urban – Urban tree	3	Medium	Moderate	0.1831	1.46
Urban – Urban tree	4	Medium	Moderate	0.0163	0.13
Urban – Urban tree	5	Medium	Poor	0.0163	0.07
Total				0.82*	1.66
*The total site area is 0.82 ha. This varies to the sum of the individual numbers listed in the area column above. This is due to 'Urban - Street trees' being present, which exist over other habitat. As such, they are not added to the total site area figure.					

All of the habitats present were considered to have low strategic significance owing to their absence from LBAPs or local strategic sites.

Plot 3 describes the mature/semi-mature London plane *Platanus x hispanica* and lime *Tilia sp.* trees present on-site. Plot 4 describes the recently planted ornamental trees in raised beds/tree pits in the north of the site. Plot 5 describes the young Turkish hazel *Corylus colurna* trees present in the south of the site. These have been subject to individual condition assessments which are presented in Appendix 2.

3.3 Linear Habitats

3.3.1 Hedgerows

There are no hedgerows on-site.

3.3.2 Watercourses

There are no watercourses on-site.

3.3.3 Trees

There are currently 13 urban trees present on-site; five medium and eight small. Four of these trees are in planters. Using the Street Tree Helper tool in the metric, the estimated area of urban trees is 0.2157 ha. This has been included as 'Urban – street tree' in the metric.

4. POST-DEVELOPMENT BIODIVERSITY

This section assesses the post-development biodiversity of the site and is based on the landscape plans produced by Murdoch Wickham, shown in Appendix 3.

4.1 Landscape Plan Habitat Types and UKHab Translation

The landscaping areas/habitats proposed for the development are detailed in Table 4.1, with their equivalent UKHab habitat type translation (undertaken using the professional judgement of a suitably qualified ecologist and the methodology detailed in Section 2.4).

Landscape Plan Habitat	UKHab Type
Biodiverse green roof	Urban – biodiverse green roof
Rain gardens	Urban – rain garden
Focal water feature	Lake – ornamental lake or pond
Planters	Urban – ground level planters
Linear lawn with species-rich grass	Urban – vegetated garden
Sealed surfaces	Urban – developed land; sealed surfaces

4.2 Post-development Biodiversity

The proposed redevelopment of the site includes the demolition of all existing buildings and replacement of all hard surfaces. The urban trees retained would be protected throughout construction and demolition through production of an Arboricultural Method Statement (AMS).

Habitats within the 2022 amended proposed development include a biodiverse green roof seeking to mimic open-mosaic type habitat, flower-rich perennial planting, evergreen hedgerows, rain gardens and high levels of new tree planting. Species incorporated would be a mixture of native and non-native species with known biodiversity importance. All species included have been screened for their potential to become invasive non-native species (INNS) through cross-referencing the London Invasive Species Initiatives (LISI) species of concern lists¹⁸.

Table 4.2 summarises the changes in pre-existing area-based habitats within the site.

UKHab Habitat Type (Baseline)	Habitat Intervention	UKHab Habitat Type (Post-Intervention)
Urban – developed land; sealed surface (buildings)	Permanent loss of habitat during demolition and construction. New habitats created	Urban – vegetated garden
		Urban – biodiverse green roof
		Urban – developed land; sealed surface
		Urban – rain garden
		Urban – ground level planters
		Lake – ornamental lake or pond
Urban – Urban trees	Partly retained throughout construction. Poor condition	Urban – urban trees

¹⁸ London Invasive Species Initiative (2014); Species of Concern. LISI, UK

Table 4.2: Habitats Pre-Construction, Interventions and UKHab Translation Post-Construction		
UKHab Habitat Type (Baseline)	Habitat Intervention	UKHab Habitat Type (Post-Intervention)
	urban trees removed and replaced	

Table 4.3 shows details of the post-development habitats created and retained, and their corresponding biodiversity unit score, as determined by the metric.

Table 4.3: Post-Development Habitats Created		
UKHab Habitat Type	Area (ha)	Total BU Delivered
Urban – urban trees	1.07	3.45
Urban – ground level planters	0.08	0.16
Urban – rain garden	0.02	0.03
Urban – biodiverse green roof	0.08	0.35
Urban – vegetated garden	0.03	0.10
Lakes – ornamental lake or pond	0.00*	0.01
Urban – developed land; sealed surfaces	0.60	0.00
TOTAL	0.83**	4.10
Post-Development Habitats Retained		
Urban – urban trees	0.18	1.46
TOTAL	0.00**	1.46
*The area of ornamental lake or pond is below 0.00 ha when rounded to 2 d.p. (0.0031 ha) **The total site area is 0.83 ha. The area given for Urban – urban trees is not added to the total site area as estimates for the canopy size are counted, in addition to any habitats planted at ground level.		

4.3 Linear Habitats

4.3.1 Hedgerows

It is proposed that approximately 32 m (0.03 km) of new native hedgerow, consisting of double lines of yew *Taxus baccata* specimen, is planted as part of the development. This corresponds to 0.06 hedgerow units.

4.4 Trees

It is proposed that 77 new trees in total would be planted in the redevelopment of the site. The trees included within the proposed tree planting strategy were assessed for their likely stem diameter in 30 years post-construction, based on the size of the standard planted, species and likely lifespans. 55 were considered to be small trees, and 23 were considered to be medium sized.

5. CALCULATION OF BIODIVERSITY CHANGE

5.1 Quantitative Biodiversity Change

This section details the biodiversity unit changes between the baseline and the post-development site. Table 5.1 shows the calculation of change for area-based habitats (including street trees) and linear features and the development, pre-development and post-development, with the outcome for biodiversity.

Biodiversity Feature	Baseline (area (ha) /length (km))	Baseline Units (BU/LU/ RU)	Post-development (area (ha) /length (km))	Post-development (BU/LU/ RU)	Outcome
Area-based Habitats	0.83	1.66	0.83	5.39	224.42 % Net Gain
Hedgerows	0.00	0.00	0.03	0.06	N/A*

*Although approximately 30 m of new native hedgerow is proposed to be planted as part of the development, a percentage change is not available for hedgerows given the baseline hedgerow units being zero

The final change is a 224.42% net gain for area-based habitats and an increase of 0.06 hedgerow units created. This significantly exceeds the 10 % net gain mandated by emerging planning policy and legislation.

All requirements relating to habitat trading have been met, with no habitats above very low distinctiveness being lost.

Table 5.2 shows the broad habitat changes, highlighting where like-for-like or like-for-better compensation has been achieved, along with the overall outcome.

Total Site Units	Baseline (Pre-development)		Post-development		Overall Change	
Habitat Group	Baseline Area/ Length (ha/km)	Baseline Units (BU/LU)	Post development Area/Length (ha/km)	Post-development Units (BU/LU)	Area Change (ha)	BU Change
Urban*	0.83	1.79	0.83	5.39	0.00	+3.60
Lakes	0.00	0.00	0.00**	0.01	0.00**	0.01

*Urban street trees and urban woodland are included within this habitat group

**The area of lakes – ornamental lake and pond present within the site baseline is below 0.00 ha when rounded to 2 d.p. (actual value: 0.0031 ha) and hence is too small to be represented within the metric

Comparisons of the broad habitat groups pre- and post-intervention show positive results for medium and low distinctiveness habits grouped in Urban. The significant gain in biodiversity is achieved with the creation of new, more biodiverse urban habitats including biodiverse green roofs, a rain garden, ground level planters and urban trees.

5.2 Qualitative Biodiversity Change

As described in the Replacement EcIA, the proposed landscaping would bring additional benefits for biodiversity. The biodiverse green roof would have a species mix comprising at least 20 species and include plants of known benefit for pollinators, including a number listed on the Royal Horticultural Society's (RHS) 'Plants for Pollinators' list such as yarrow *Achillea millefolium*, vipers bugloss *Echium vulgare* and common cowslip *Primula veris*.

The provision of landscape planting within the redevelopment would provide new habitat for use by foraging and nesting birds. Furthermore, a variety of bird nest box types would be provided at suitable locations on the site, attached to or built within buildings and other infrastructure, as an additional enhancement. Boxes suitable for house sparrow, starling and swifts would be included.

6. DISCUSSION

6.1 Conclusion

Section 5 of this report demonstrates that under the current development proposals, it is possible for the 2022 amended proposed development to achieve a 224.42 % net gain for area-based habitats, and a net gain in hedgerow units. This far exceeds the 10 % net gain required by emerging planning policy and legislation. In order to ensure the net gains described in this report are achieved, a robust monitoring and management regime is to be implemented.

6.2 Monitoring and Management

Habitats delivered in the landscape scheme should be sympathetically managed for biodiversity to ensure they develop appropriately. A Habitat Management Plan (HMP) is proposed detailing the long-term management and monitoring of habitats and features suitable for use by wildlife, including the biodiverse roofs, and would be secured through planning condition. The HMP would set out monitoring actions and likely subsequent management practices to ensure the delivery of biodiversity units described within this report is maintained in the long term. The HMP would be handed over and explained to building/estates management for ongoing management of the site, and a simplified version would be provided to residents. The HMP would be suitable for a five- to ten-year period, after which it would be advised that it is reviewed and updated. Management and monitoring of the habitats over a 30-year period would be required to ensure correct development and management of the habitats, in line with the BNG principles.

APPENDIX 1 BASELINE HABITAT



- Legend**
- Site Boundary
 - A3.1 Broadleaved Parkland/Scattered Trees
 - Hardstanding
 - J3.6 Buildings
 - J1.3 Cultivated/Disturbed Land - Ephemeral/Short Perennial

Figure Title
Phase 1 Habitat Plan

Project Name
**Paddington Green Police Station,
 4 Harrow Road, London, W2 1XJ**

Project Number 1620009008-001	Figure No. -
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Date October 2022	Prepared By DH/ZW
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Scale 1:625 @A3	Issue 1
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Client
**Berkeley Homes
 (Central London) Limited**



Esri UK, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS

APPENDIX 2 CONDITION ASSESSMENTS

PRE-DEVELOPMENT CONDITION ASSESSMENTS

Condition Assessment for Urban – urban tree (Parcel 3)

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	The tree is a native species(or more than 70% within the block are native species).	Y	London plane and lime trees are considered native
2	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Automatically passed
3	The tree is mature ² or veteran ³ (or more than 50% within the block are mature ² or veteran ³).	Y	All are considered mature or early mature
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.	N	Lime trees exhibit epicormic growth and surface root reduction however London planes in good condition
5	Micro-habitats for birds, mammals and insects are present e.g. presence of deadwood, cavities, ivy or loose bark	N	No deadwood, cavities, ivy or loose bark
6	More than 20% of the tree canopy area is oversailing vegetation beneath.	N	Planted within tree pits and surrounded by hard surfaces
Number of criteria passed			3

Condition Assessment for Urban – urban tree (Parcel 4)

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	The tree is a native species(or more than 70% within the block are native species).	N	Non-native species
2	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Automatically passed
3	The tree is mature ² or veteran ³ (or more than 50% within the block are mature ² or veteran ³).	N	Young trees planted
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.	Y	Young trees with no obvious defects and protected by raised planters

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
5	Micro-habitats for birds, mammals and insects are present e.g. presence of deadwood, cavities, ivy or loose bark	N	Too young to possess such features
6	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Planted in raised planters with herbaceous planting
Number of criteria passed			3

Condition Assessment for Urban – urban tree (Parcel 5)

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	The tree is a native species(or more than 70% within the block are native species).	N	Turkish hazel is non native
2	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Automatically passed
3	The tree is mature ² or veteran ³ (or more than 50% within the block are mature ² or veteran ³).	Y	All are considered mature or early mature
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.	N	Considered to be in poor condition
5	Micro-habitats for birds, mammals and insects are present e.g. presence of deadwood, cavities, ivy or loose bark	N	No deadwood, cavities, ivy or loose bark
6	More than 20% of the tree canopy area is oversailing vegetation beneath.	N	Planted within tree pits and surrounded by hard surfaces
Number of criteria passed			2

CONDITION ASSESSMENTS FOR POST-DEVELOPMENT HABITATS

Condition Assessment for Urban – urban trees

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
1	The tree is a native species(or more than 70% within the block are native species).	N	Numerous non-native species proposed

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
2	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y	Automatically passed
3	The tree is mature ² or veteran ³ (or more than 50% within the block are mature ² or veteran ³).	Y	Most trees will reach maturity within 30-years as they are short-lived species, and those that don't will be replaced
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.	N	Trees will require extensive pruning due to highly urbanised environment
5	Micro-habitats for birds, mammals and insects are present e.g. presence of deadwood, cavities, ivy or loose bark	N	Trees unlikely to reach suitable size to meet this requirement
6	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y	Most trees planted within rain gardens and planted beds
Number of criteria passed			3

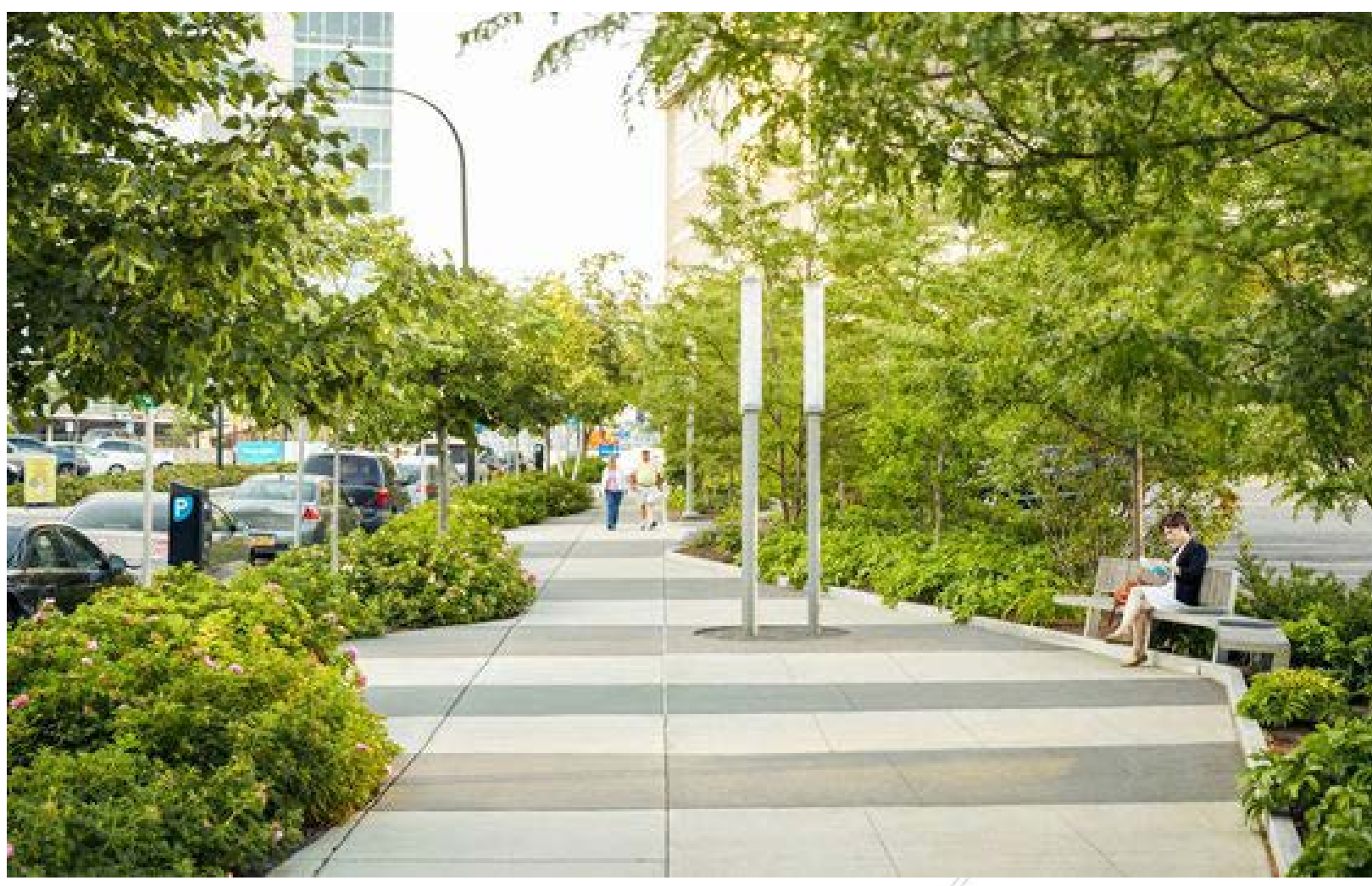
Condition Assessment for Urban – Biodiverse green roof

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
CORE CRITERIA - applicable to all urban habitat types:			
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.	N	Unlikely to be of a suitable size to deliver functional mosaics in ecotone
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. NB - To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife). Note that Biodiverse green roofs are exempt from this requirement, and can include non-native sedums, as set out in footnote 1.	Y	Species selected specifically for value to insects. Will consist of 100% native species and annual weeding will remove INNS

Condition Assessment Criteria		Condition Achieved (Y/N)	Notes/Justification
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area. NB - To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	Weeding will remove all INNS
ADDITIONAL CRITERION - only applicable to Open mosaic on previously developed land habitat type:			
4a	The site shows spatial variation, forming a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate AND pools. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.	N/A	N/A
ADDITIONAL CRITERION - only applicable to Bioswale and SUDS habitat types:			
4b	The water table is at or near the surface throughout the year. This could be open water or saturation of soil at the surface.	N/A	N/A
ADDITIONAL CRITERION - only applicable to green roof habitat types (select as necessary):			
4c1	Intensive green roofs – have a minimum of 50% native and non-native wildflowers - 70% of the roof area is soil and vegetation (including water features)	N/A	N/A
4c2	Biodiverse green roofs - have a varied depth of 80 - 150mm at least 50% is at 150mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. To achieve Good condition some additional habitat, such as sand piles, logs etc should be present.	N	Substrate will vary in depth, however due to space conflict with the Building Management Unit track, additional habitat features such as sand piles and logs are not feasible

APPENDIX 3

LANDSCAPING PROPOSALS



Met Opera House ceiling - Inspiration for water feature



Drinking fountains



Street rain gardens



Legend

1. Railings with yew hedge to garden.
2. Quiet tranquil garden with integrated seating and planting.
3. Central play area with planting and integrated seating.
4. Street trees in raised irrigated movable planters and cycle parking.
5. The Boulevards with raised planters, integrated seating and lit with overhead catenary lighting.
6. Planters with integrated seating and planted for horticultural interest and biodiversity. Planters designed as rain gardens.
7. Feature vertical stone wall fountain with green wall to southern elevation to screen visually and acoustically the busy Harrow Road. Reuse motif concrete panels to Harrow Road.
8. Linear lawn with species rich grass.
9. Granite sett paving.
10. Servicing lay-bys.
11. Existing ventilation shaft.
12. Al-fresco dining with table top Mulberry trees enclosed with 1.5m high yew hedge.
13. Main south facing piazza space with feature paving, feature public art and busking dial.
14. Drop bollards for emergency access.
15. Birch woodland planting to filter and capture particulates and clean the traffic air. Planting zone also designed as rain garden with outfall to historic subway.
16. Location for public art.
17. Outline of old subway.
18. Biodiverse green roof.
19. Resin bound gravel path with raised planters and integrated seating.
20. Feature paved shared surface for incidental emergency vehicle access.
21. Feature piazza with focal water feature and integrated seating.
22. Outdoor drinking fountain.



Scale
1:250
0 5 10 15m



View of central play space looking eastwards



View of gateway water feature



View of south eastern piazza



View of boulevard