Piccadilly Gardens Redevelopment

Biodiversity Net Gain Design Stage Report

August 2026

PREPARED FOR

Galliford Try on behalf of Manchester City Council



Biodiversity Net Gain Design Stage Report

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EXECUTIVE SUMMARY

This report presents the Biodiversity Net Gain (BNG) Design Stage assessment for Piccadilly Gardens, Manchester, prepared to support the redevelopment and reconfiguration proposals being developed by Galliford Try on behalf of Manchester City Council. The assessment establishes the Site's baseline ecological value, identifies the principal habitats currently present, and assesses the frozen design plans to determine the extent to which the redevelopment is predicted to achieve the statutory requirement for a minimum 10% biodiversity net gain.

Piccadilly Gardens is a highly urbanised public realm Site of approximately 0.93ha in central Manchester, with an estimated 150,000 people passing through daily[1]. The Site is dominated by hardstanding and transport infrastructure, with biodiversity value concentrated in areas of modified grassland and urban tree planting. Four habitat types were recorded within the Site boundary (modified grassland, urban trees, developed land; sealed surface and buildings), with the principal habitats assessed for the purposes of the Statutory Metric comprising modified grassland, developed land/sealed surface and urban trees. No irreplaceable habitats were identified.

The baseline metric assessment identifies a total of **2.68 habitat units** across the Site. The largest ecological contribution is provided by the Site's urban trees, which are of medium distinctiveness and high strategic significance within the Manchester Local Biodiversity Action Plan, although they were assessed as being in poor condition. Modified grassland also contributes to the baseline value but is of low distinctiveness and poor condition. Developed land and sealed surfaces dominate the Site spatially but make negligible contribution to biodiversity value under the statutory metric.

Based on the General Arrangement, Planting Schedule, Softworks - Trees and Tree Strategy provided on behalf of the client by Planit, the final design has been assessed as providing a BNG of **10.47%**, equating to a net gain of **0.28 habitat units**. Habitat enhancement and creation measures incorporated in the final design include:

- The retention and enhancement of eight *Gleditsia triacanthos* (Honey locust);
- Retention, relocation and enhancement of two *Magnolia* within the Site;
- Creation of 0.24ha of modified grassland (lawn);
- Creation of rain garden features across the scheme;
- Creation of 0.10ha of herbaceous perennials and ornamental planting;
- Creation and retention of 0.50ha of developed land; sealed surface including natural stone setts, Yorkstone, play surfacing, Burlington stone, exposed aggregate and in-situ concrete; and
- Preparation of a site-specific Habitat Management and Monitoring Plan for a minimum 30-year period;

Overall, the site has a relatively modest baseline ecological value in statutory metric terms, and development and landscaping plans incorporate robust mitigation and measurable enhancement. The report therefore concludes based on the final design information and Statutory Metric assessment, the scheme is predicted to deliver a biodiversity net gain, exceeding the statutory minimum 10% requirement.

Delivery of this outcome will be dependent on implementation of the approved landscape proposals, protection of retained habitats during construction, and long-term management and monitoring secured through a site-specific Habitat Management and Monitoring Plan.

[1] The Mill (February 2024) Can anyone save Piccadilly Gardens? Available at: https://manchestermill.co.uk/can-anyone-save-piccadilly-gardens/

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1. Introduction

1.1. Terms of Reference

Civic Engineers Limited was commissioned by Galliford Try on behalf of Manchester City Council to prepare a Biodiversity Net Gain (BNG) Design Stage Report of a site referred to as Piccadilly Gardens, to support a full planning application for redevelopment and reconfiguration of the Site.

The 'Site' is defined as the fixed red line boundary as shown as part of the Site Location Plan in Appendix A.

The BNG process is iterative, dependent on what is required in terms of net gain and what can be achieved in practical and ecological terms. Additionally, this BNG Design Stage Report contains recommendations on measures for achieving BNG and wider biodiversity enhancements. These recommendations do not constitute a design for BNG. In submitting these recommendations, the Civic Ecology Team has no Design Liability associated with these recommendations for BNG.

At the time of preparing this report, the development design was fixed with a General Arrangement (Appendix B), Softworks- Planting (Appendix C), Softworks - Trees (Appendix D) and Planting Schedule (Appendix E) available for review.

1.2. Scope of Report

The aim of the BNG Design Stage assessment is to assess the pre-development ecological value of the Site and evaluate the fixed landscape change to conclude whether a net gain in biodiversity can be achieved. The objectives were as follows:

- Review habitat data collected to inform the Preliminary Ecological Appraisal (PEA) Report[2], to confirm all broad habitats on Site, including classification of habitat type, distinctiveness, condition, and strategic significance;
- Determine all broad habitats on Site, including classification of habitat type, distinctiveness, condition, and strategic significance based on existing Site data;
- Establish the theoretical value of biodiversity within the Site pre- and post-development based on fixed development and landscaping proposals;
- Assess whether the project can deliver positive effects for biodiversity;
- Propose design and management suggestions, including use of any measures to avoid, minimise and compensate biodiversity loss, with the aim of maximising BNG, and where required, establish parameters of any biodiversity offsetting; and
- Identify the opportunities to deliver ecological enhancements outside of the Statutory Metric.

1.3. Report Usage

The information and recommendations contained within this report have been prepared in the specific context stated above and should not be utilised in any other context without prior written permission from Civic Engineers Limited.

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2 Civic Engineers Limited (May 2026). Preliminary Ecological Appraisal. 04475.

1.4. Site Location and Description

The Site is in Manchester city centre and is centred at National Grid Reference (NGR) SJ 84375 98275. Ground levels across the Site are relatively uniform, at approximately 50 m above sea level (asl).

The Site comprises an area of public realm, incorporating amenity grassland, a water fountain, urban tree planting, and extensive hardstanding associated with pavements and surrounding road and tram infrastructure. At the time of survey, temporary street food providers were on Site.

1.5. Project Description and Background

Piccadilly Gardens is an open, public realm space and public transport hub, located in central Manchester, bordering the Northern Quarter of the city centre, and is approximately 0.93 hectares (ha) in size. It is estimated that approximately 150,000 people pass through the gardens daily. The gardens currently offer little biodiversity value or functionality in terms of fostering positive social interaction or driving local economic activity. In recent years, the gardens have become associated with public disorder.

Redevelopment and reconfiguration of Piccadilly Gardens comprising works to the public realm including public open space and use of space for events, together with decommissioning and removal of the existing fountain; creation of play space, lawn area, hard and soft landscaping; lighting; and drainage and other associated infrastructure; and a severable plot for a future ancillary structure with associated interim landscaping.

The proposals make provision for a future structure within the Gardens, which will complement the ongoing investment in and refurbishment of the Piccadilly Gardens landscape. The structure does not form part of this application and will be brought forward under a separate full planning application.

The proposals seek to enhance the environmental quality, accessibility, safety and functionality of Piccadilly Gardens, creating a high-quality civic destination that reflects its importance within Manchester City Centre.

1.6. Legislation and Planning Policy

National and regional policies, legislation and guidance of relevance to the BNG Design Stage assessment, through which BNG is targeted, include:

- The Environment Act 2021[3]
- Biodiversity Gain Site Register Regulations (2024)[4]
- The Conservation of Habitats and Species Regulations 2017 (as amended),
- The Wildlife and Countryside Act 1981 (as amended) (WCA)
- The National Biodiversity Strategy and Action Plan[5]
- National Planning Policy Framework (2024)
- Manchester Biodiversity Strategy and Action Plan (LBAP) 2022- 2030[6]
- Manchester City Council Local Development Plan 2023[7]
- Greater Manchester Combined Authority (GMCA) Biodiversity Net Gain Guidance[8]

2. Methods

2.1. Names and Qualifications of Surveyors

This Biodiversity Net Gain Design Stage assessment was written by Principal Ecologist Aisling Wallace MA (Hons) MSc MCIEEM and was reviewed by Civic's Director of Environment and Sustainability - Rebecca McLean.

The habitat survey and condition assessments were undertaken by Principal Civic Engineers Limited Ecologist Aisling Wallace MCIEEM.

3 The Environment Act 2021. Available at: https://www.legislation.gov.uk/ukpga/2021/30/contents (Accessed May 2026)

4 The Biodiversity Gain Site Register (2024). Available at: https://www.legislation.gov.uk/uksi/2024/45/contents (Accessed May 2026)

5 UK's National Biodiversity Strategy and Action Plan for 2030 . Available at: https://uk.chm-cbd.net/sites/gb/files/2025-04/31.03.2025_UK_National_Biodiversity_Strategy_and_Action_Plan.pdf (Accessed May 2026).

6 Manchester Biodiversity Strategy and Action Plan 2022 – 2030:.Available online at Manchester Biodiversity Strategy and Action Plan | Manchester City Council (Accessed May 2026)

7 Manchester City Council Local Development Plan. Available online at: https://www.manchester.gov.uk/planning-and-regeneration/planning/core-strategy/interactive-proposals-map (Accessed May 2026)

8 GMCA Biodiversity Net Gain Guidance for Greater Manchester (February 2021). Available at:chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.greatermanchester-ca.gov.uk/media/4244/gmca-bng-guidance-update_250221-final-edited.pdf (Accessed May 2026)

2.2. Habitat Survey

All field survey work was undertaken by Civic Engineers Limited, Principal Ecologist Aisling Wallace who is a full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM). The survey was undertaken on 29th April 2026. Conditions were bright and dry, with a light easterly breeze. The average air temperature during the survey was 18°C. The weather in the week preceding the survey was largely dry.

A UK Habitat Classification (UKHab) Survey was carried out in accordance with the user manual[9]. UKHab is a hierarchical system for rapidly recording and classifying habitat via satellite imagery and field survey. The system comprises 5 levels of Primary Habitats which include ecosystems, broad habitats, priority habitats and Annex I habitats, along with non-hierarchical secondary codes which provide information on the environment, management and origin of Primary Habitats. The secondary codes are also used to map habitat mosaics and identify notable habitat features. The information collected is used to identify ecologically sensitive features and recommend mitigation and enhancement measures in connection with a proposed development.

The surveyor utilised the UKHab Version 2.0 Professional edition with a Minimum Mapping Unit (MMU) of 25m^2 and aimed to categorise habitats up to level 5. Where the level 5 habitat could not be determined or is not reflective of the habitat type due to a lack of indicative species, habitats were categorised to level 4 or the broader level 3 habitat.

Where present, point data such as scattered scrub and scattered tree is not included in the assessment, with the dominant primary habitat type selected instead (i.e. the habitat with the greatest area covered).

Where applicable, alterations to UKHab symbology on maps may occur for clarity.

2.3. Condition Assessment

2.3.1. Assessment Framework

For this BNG Design Stage Report, baseline habitats on Site and preliminary post-development habitats have been assessed using the Statutory Biodiversity Metric, in line with the User Guide[10] and supporting documents[11].

The principles of biodiversity net gain, as set out in the Biodiversity Net Gain Good Practice Principles[12], have been considered throughout this process.

2.3.2. Habitat Measurements

The Statutory Biodiversity Metric includes separate calculations for area and linear habitats. Overall, there are three broad categories of habitats for which scores are calculated:

- Area habitats (such as grasslands, woodlands and mudflats) measured in hectares;
- Linear hedgerows and lines of trees measured in kilometres[13]; and
- Linear rivers and streams measured in kilometres.

Baseline habitat measurements were carried out in line with the results of the Habitat Survey. Measurements were predominantly made using online mapping tools (QGIS); however, habitats have been ground-truthed during the field survey.

All measurements were entered to the nearest 0.01ha in area and 1m in length.

2.4. Habitat Distinctiveness

Habitats are assigned to distinctiveness bands automatically within the Statutory Biodiversity Metric. These are pre-determined for each primary habitat or linear feature and consider species richness, rarity (at local, regional, national and international scales), and the degree to which a habitat supports species rarely found in other habitats.

9 UKHab Ltd (2023). UK Habitat Classification Version 2.0. Available at: https://www.ukhab.org.

10 Department for Environment and Rural Affairs (DEFRA) (July 2025) The Statutory Biodiversity Metric User Guide. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://assets.publishing.service.gov.uk/media/689c5ee17b2e384441636196/The_Statutory_Biodiversity_Metric_-_User_Guide_-_July_2025.pdf

11 Natural England (2024) The Biodiversity Metric Supporting Documents (JP039). Available at: https://publications.naturalengland.org.uk/publication/6049804846366720?category=5098178404417536

12 CIEEM (2019) Biodiversity Net Gain Good Practice Principles for Development. Available at: https://cieem.net/biodiversity-net-gain-guidance-published/.

13 The Defra 'Hedgerow Survey Handbook' (2nd edition) has been used to determine whether a feature is a hedgerow and to accurately describe the type of hedgerows present: DEFRA. (2007). Hedgerow Survey Handbook. A standard procedure for local surveys in the UK. Defra, London. PB1195.

Under the current Metric definitions, habitats are of High or Very High distinctiveness only if listed under S.41 of the NERC Act: a list of priority habitats in England. S.41 are derived from UK Biodiversity Action Plan (UKBAP) definitions[14]. These adapted definitions are shown in

Table 1 (overleaf).

Table 1: Distinctiveness Assessments

Category	Definition
Very High	Priority Habitats featured on the UK BAP that are highly threatened, internationally scarce and require conservation action *e.g.* native pine woodlands; blanket bog
High	Priority Habitats featured on the UK BAP not requiring conservation action *e.g.* upland flushes, fens and swamps
Medium	Semi-natural habitats not classed as a Priority Habitat *e.g.* other neutral grassland
Low	Habitat of low biodiversity value *e.g.* agricultural temporary grass and clover ley; intensive orchard; rhododendron scrub
Very Low	Little or no biodiversity value *e.g.* hard standing or sealed surface

2.5. Habitat Condition

Habitat Condition is a measure of quality based on the biodiversity value of the habitat relative to others of the same type.

Most baseline habitats will be assigned a result of Good, Moderate or Poor based on the scoring instructions provided within the condition criteria set out in the technical supplement[15]. To reflect the preliminary design stage, condition assessments of habitats to be created will illustrate best and worst-case scenarios.

Certain habitats are allocated a fixed condition score and do not require an assessment. These are marked 'No assessment required – condition fixed at 'Poor'' for some Low distinctiveness habitats, or 'No assessment required – condition N/A' for all Very Low distinctiveness habitats.

It must be noted that during a condition assessment, a habitat parcel, hedgerow length or watercourse may be deemed to contain areas of differing condition. Any differences within a habitat should trigger a new condition assessment to ensure accurate representation.

2.6. Strategic Significance

Strategic significance relates to the spatial location of a habitat parcel and works at a landscape scale. It utilises published local strategies and objectives to identify local priorities for targeting biodiversity and nature improvement.

Strategic significance definitions are detailed within Table 2. Manchester Local Biodiversity Action Plan (LBAP)[6] was used to aid in the determination of 'Strategic Significance'.

Table 2: Strategic Significance Assessments

Strategic Significance	Definition
High	Within area formally identified in local strategy, plan or policy
Medium	Location ecologically desirable but not identified in a local strategy, plan or policy (As this may be based on professional judgment, detailed justification must be provided)
Low	Not identified in a local strategy, plan or policy OR No strategy or plan is in place in the area

14 Joint Nature Conservation Committee (2011) UK Biodiversity Action Plan: Priority Habitat Descriptions. Available at: https://hub.jncc.gov.uk/assets/2728792c-c8c6-4b8c-9ccd-a908cb0f1432

15 The Statutory Biodiversity Metric User Guide (July 2025). Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://assets.publishing.service.gov.uk/media/689c5ee17b2e384441636196/The_Statutory_Biodiversity_Metric_-_User_Guide_-_July_2025.pdf (Accessed May 2026)

2.7. Risk Factors

The scores for post-development habitats are estimated by accounting for the characteristics above (distinctiveness, condition and spatial significance), as well as additional factors to account for the risk associated with creating, restoring or enhancing habitats. Temporal, difficulty and spatial risks are standardised components considered within the Statutory Biodiversity Metric as summarised below.

2.7.1. Temporal Risk

A score based on how long the habitat takes to establish and reach target condition and any advances or delays in habitat creation as recommended by the Natural England Biodiversity Metric 3.1 Technical Supplement[16].

Where a time lag occurs between habitat loss and creation of new habitat, there will be a loss of biodiversity for a period. This is a pre-determined value measured in years and will vary between habitat types based on the average time taken to achieve 'target condition'.

It is recognised that there will be situations where habitat creation occurs prior to habitat loss or may be delayed beyond the point at which the baseline losses occur. A review of the proposals and recommended habitat planting has been carried out as part of this BNG Design Stage Report. Where there is likely to be a significant advancement or delay in habitat creation, measured in years, this has been recorded within the metric and appropriate evidence provided.

2.7.2. Spatial Risk

A score based on the distance between the site of habitat loss and the site where creation / enhancement is provided.

Spatial risk has not been included in the preliminary post-development calculation as it is assumed that habitat compensation and retention will be delivered within the scheme's footprint or within the same ecological network as the loss occurs rather than off-site.

2.7.3. Difficulty Risk

A pre-assigned score automatically generated by the Metric to reflect the difficulty in creating/restoring/enhancing the required habitat.

The difficulty risk is pre-assigned based on available science/expert opinion and uncertainty in the effectiveness of management techniques used to restore or create habitat. There are two separate difficulty multipliers assigned to each habitat, one for creation and one for enhancement/restoration, recognising that the technical challenges will not necessarily be the same for both.

2.8. Disclaimer

Habitat Conditions can change frequently, primarily because of management. The reported baseline conditions provide a snapshot of the habitats present at the time of survey (April 2026).

Please note that the BNG Design Stage Report does not cover requirements arising from potential impacts on protected species and off-site designated sites.

2.9. Limitations

2.9.1. Field Survey

The field survey was undertaken early within the botanical survey season (April–September inclusive); therefore, only a limited floral species list could be recorded.

2.9.2. Biodiversity Metric

It should be noted that the accuracy of habitat area measurements is limited by the form of baseline data collection and resolution of development proposal plans. In this instance, baseline habitat areas have been calculated by cross referencing illustrative Habitats Plans with field survey work. Post-development habitat areas have been calculated

16 Natural England. 2022. Biodiversity Metric 3.1 Technical Supplement. [Online] Available at: Archive Site for Legacy Biodiversity Metrics

based on information provided within the development and landscaping plans provided by Planit (Appendix, B,C,D and E).

3. Baseline Conditions

3.1. Habitat Descriptions

Four habitat types, classified using primary and secondary codes, are present within the Site boundary (Appendix A). Table 3 below outlines the habitats present:

Table 3: On-Site Habitats

HABITAT TYPE	HABITAT	PRIMARY CODES	SECONDARY CODES
-	-	-	200 – tree (urban)
Grassland	Modified grassland	g4	
Urban	Buildings	u1b5	
	Developed land; Sealed surface	u1b	800 - road

Full habitat descriptions are provided within the Preliminary Ecological Appraisal[2] and a UKHab plan is shown in Appendix F.

3.1.1. Urban trees

Secondary Code - 200

Within the Site boundary, there are twenty-six, young-mature urban trees and an additional sixteen of which are within raised planters.

Adjacent to the street food vendors, were seven London plane (*Platanus x hispanica (acerifolia*). A further eight young-mature London plane trees were identified at the along the northern boundary of the Site.

To the west of the street food vendors, were eight, young-mature Honey locust (*Gleditsia triacanthos*).

Three young-mature trees were also identified within the modified grassland habitat.

Three raised planters (raised approximately 1m in height) were also noted within the Site boundary. These were planted with a mixture of ornamental trees and shrubs. Following Statutory Metric guidance, trees within planters do not contribute to the ecological baseline value, due to not being in contact with ground soil.

All the urban trees within the proposed development Site were assessed as being of poor condition, due to passing one of the condition assessment criteria; the tree is mature (or more than 50% within the block are mature). All trees within the Site were considered 'young mature'. Additionally, an arboriculture assessment[17], determined the trees to be of moderate health, due to trees growing into planting grids.

Under the Statutory Biodiversity Metric, urban trees are assigned a 'Medium' distinctiveness value. Urban trees were also assessed as being of High Strategic Significance, as they are identified as a priority habitat in the Manchester Local Biodiversity Action Plan (LBAP), with the number of urban trees planted being a measure of integrating nature-based solutions into wildlife friendly design and regeneration schemes.

3.1.2. Grassland

Modified grassland

The central area of Piccadilly Gardens is characterised by amenity grassland classified as modified grassland under UKHab classification. At the time of survey, the sward was closely mown and of uniformly short height, reflecting intensive mowing management and high levels of pedestrian use. Localised areas of bare ground were also present within the grassed areas because of trampling. Although, not directly relevant to the BNG baseline calculation but relevant when considering what habitat enhancement and creation can be practicably achieved, underneath a section of the grassland are large water storage tanks, used to fill water fountains redundant on Site.

This habitat parcel was assigned a 'poor' condition score, as it met only two of the condition criteria (absence of scrub and invasive non-native species) and failed to meet the essential criteria. The grassland was assessed as being of Medium Strategic Significance because modified grassland (urban amenity grassland) is not directly identified as a

17 BSG Ecology (March 2024) Phase 1 Pre-Development Arboriculture Report, Piccadilly Gardens, Manchester.

priority habitat in the Manchester LBAP. However, enhancing areas of lowland grasslands inclusive of incidental spaces is identified as a priority.

3.1.3. Urban

Developed land; Sealed surface

Developed land; sealed surface is the dominant habitat within the Piccadilly Gardens Site, with paving, road and tram infrastructure.

Developed land; sealed surface is categorised as a Very Low distinctiveness habitat in the Statutory Biodiversity Metric and, as such, attracts a fixed condition score (no condition assessment required). This habitat type is assessed as being of Low Strategic Significance and is not listed as a priority habitat in the Manchester Local Biodiversity Action Plan (LBAP).

Buildings

There are no permanent buildings or structures within the Site boundary at the time of survey. There are three statues within the Site boundary, the John Peel statue, Queen Victoria statue and James Watt statue. Statues do not have a defined habitat code, so for the purpose of this assessment have been considered as buildings

Within the Statutory Metric, buildings are not a defined habitat, so for the purpose of this assessment they are considered as developed land; sealed surface. As above, developed land; sealed surface is categorised as a Very Low distinctiveness habitat in the Statutory Biodiversity Metric and, as such, attracts a fixed condition score (no condition assessment required). This habitat type is assessed as being of Low Strategic Significance and is not listed as a priority habitat in the Manchester Local Biodiversity Action Plan (LBAP).

3.2. Baseline Assessment

A summary of habitats present, including assessment of condition, strategic significance, and associated trading rules[18], is provided in Table 4 below.

A Habitats Plan showing habitat locations and extents can be found in Appendix F.

Table 4: Summary of the Baseline Habitat and Linear Biodiversity Unit Assessment

Habitat	ha/km	Distinctiveness	Irreplaceable Habitats	Condition Score	Strategic Significance	Total Habitat Units	Trading Rules
Modified grassland	ha	Low	No	Poor	Medium Strategic Significance	0.73	Same distinctiveness or better habitat required ≥
Developed land; Sealed surface	ha	Very low	No	N/A	Low Strategic Significance	0.00	Compensation not required
Urban trees	ha	Medium	No	Poor	High Strategic Significance	1.95	Same broad habitat or a higher distinctiveness habitat required (≥)
Total value of baseline habitat units						**2.68**	

4. Feasibility of Biodiversity Net Gain

Considering the four stages of the mitigation hierarchy[19], the redevelopment seeks to avoid biodiversity loss where possible and minimise, restore or compensate for residual losses in accordance with the mitigation hierarchy. Biodiversity gain hierarchy is defined as:

[18] The Statutory Biodiversity Metric User Guide, p.12: "*The trading rules set minimum habitat creation and enhancement requirements to compensate for specific habitat losses, up to the point of no net loss. They are based on the habitat type and distinctiveness of the lost habitat.*"
[19] Biodiversity mitigation hierarchy explained (2022) Ecology by Design. Available at: https://www.ecologybydesign.co.uk/ecology-resources/biodiversity-mitigation-hierarchy (Accessed May 2026)

- **Avoid** – Retain and protect existing biodiversity features where feasible through the design process and any areas with existing habitat value.
- **Minimise** – Where impacts cannot be avoided, refine the design to reduce their extent and severity. This may include minimising construction footprints, reduce unnecessary hardstanding, and incorporate green infrastructure such as tree planting, species-rich planting, rain gardens and other nature-based drainage features.
- **Restore** – Where habitat loss or damage is unavoidable, provide measures to restore or reinstate biodiversity value on Site. This may include habitat replacement planting, soil improvement, and landscape proposals designed to enhance ecological function as part of the final scheme.
- **Offset** – Where residual biodiversity losses remain after avoidance, minimisation and on-site restoration have been fully considered, compensatory measures may be required. Any offsetting should be used only as a last resort and should align with the statutory biodiversity metric and relevant local planning policy.

The General Arrangement (Appendix B), Softworks - Planting (Appendix C), Softworks - Tree Plan (Appendix D) and Planting Schedule (Appendix E) [20] have been provided by Planit on behalf of the client, illustrating fixed design concepts, considerate of the mitigation hierarchy.

Table 5 below lists the existing and proposed size and value of the broad-scale habitats, with a calculation of net value post-development. Based on the baseline calculations below, a **10.47% biodiversity net gain**, equating to a net gain of **0.28 habitat units** is achievable.

Table 5: Summary of the Post- development Habitat Biodiversity Unit Assessment

Habitat Type	Existing		Proposed		Net Habitat Units	Justification
	Site ha	Habitat Units	Site ha	Habitat Units		
Modified grassland	0.332	0.73	0.24	0.49	-0.24	All existing grassland will be removed to facilitate the creation of two new areas of lawn (modified) grassland.
Developed land; Sealed surface	0.601	0.00	0.50	0.00	0.00	Areas of existing road infrastructure will be retained. Areas of natural stone setts, Yorkstone, play surfacing, Burlington stone and exposed aggregate will be created to facilitate the redevelopment.
Urban trees	0.4234	1.95	0.4234	1.97	0.02	Eight Honey locust trees will be retained and enhanced in situ. Two Magnolia trees will be removed from their current location within Piccadilly Gardens and relocated elsewhere in Site and enhanced. 16 trees will be removed to facilitate the development. 49 trees of mixed varieties will be planted within the Site. Proposed Site ha = Enhanced (0.1629ha) + Creation (0.2606ha).
Rain garden	-	-	0.09	0.31	0.31	Rain garden features comprising mixed shrub, herbaceous perennial and ornamental planting will be created throughout the Site.
Introduced Shrub	-	-	0.10	0.19	0.19	Garden shrub planting and play planting.
Totals	0.93	2.68	0.93	**2.96**	**0.28**	

As highlighted in the Arboriculture Report[21] and supported by information from Planit, many of the urban trees within the Site are growing sub-optimally, for their age-class. This may reflect suboptimal planting conditions or planting preparation and potentially poor maintenance. The Arboricultural Report also identifies the trees within the Site

[20] 4004-ID-001-02-Piccadilly-Gardens-Workbook (April 2026) Planit.
[21] Phase 1 -re-Development Arboricultural Report (March 2024) Wharncliffe Trees and Woodland Consultancy.

boundary as being of low habitat value. In addition, many trees are growing into the paving grids and are therefore likely to be damaged if the grids are removed or if translocation is attempted.

Notwithstanding this, urban trees are of high strategic significance within the Statutory Biodiversity Metric, reflecting their recognition in the Manchester LBAP as an important component of green infrastructure. In applying the biodiversity gain hierarchy, efforts have been made to avoid and minimising impacts, including identifying individual trees that could feasibly be retained or successfully translocated. Where losses cannot be avoided or minimised, habitat replacement has been incorporated into the scheme through additional tree planting, complying with the trading rules within the Statutory Biodiversity Metric.

Regarding modified grassland, as outlined above, the grassland on Site was classified as being of poor condition and medium strategic value. However, none of the existing grassland can be retained as part of the final development design.

As set out in Section 3.2, no irreplaceable habitats have been identified within the Site boundary. There is therefore no requirement for bespoke compensation in relation to irreplaceable habitat loss.

4.1. Recommendations to Provide Net Gain

The following recommendations have been considered with reference to relevant national or local biodiversity strategies.

The recommendations and actions outlined within this document should be treated as ‘live’, and therefore reviewed and amended as required and appropriate, to achieve a positive BNG target.

4.2. Design and Management Suggestions

4.2.1. Habitat Retention

Retained and enhanced habitats must be protected throughout development. To avoid accidental damage to habitats during construction, exclusion fencing must be erected. No storage of machinery, building materials or topsoil would be permitted outside of the exclusion fencing. Where this is not achievable damage to habitats are likely to occur and classification of retained and enhanced habitat could not be realistic.

4.2.2. Urban Trees

To align urban tree proposals with achieving Biodiversity Net Gain, the design approach prioritises retention and relocation of existing trees where feasible, followed by replacement and new planting that delivers measurable habitat value, long-term resilience and clear strategic benefit. Under the Statutory Metric, retained trees can reduce baseline losses and newly planted trees can contribute to post-development habitat units, if they are designed with sufficient space and appropriate management to establish successfully and reach their target condition.

Strengthening tree cover, canopy continuity and associated green infrastructure at Piccadilly Gardens will therefore not only assist with on-Site BNG delivery but can also contribute to the broader ambition of bringing nature closer to people, improving ecological connectivity and reinforcing the role of central public spaces within Manchester’s emerging network of linked green corridors.

- **Retain existing trees where practicable** by designing around trees with realistic root protection areas and adequate future canopy space, as retention reduces losses and supports compliance with the mitigation hierarchy.
- **Provide sufficient rooting volume and uncompacted soil** for all retained and new trees, including linked soil trenches or structural soil systems where appropriate, to avoid the constrained planting conditions that often limit urban tree performance.
- **Select species using a right tree, right place approach**, favouring hardy, long-lived and climate-resilient species suited to central Manchester conditions, while seeking diversity in species composition to improve resilience to pests, disease and climate stress.
- **Prioritise larger-canopy and longer-lived species where appropriate**, as these can provide greater ecological and wider ecosystem service benefits over time, provided that the available space and site conditions can support them.
- **Incorporate tree planting within nature-based drainage features** such as rain gardens, tree pits with runoff inputs, and other sustainable drainage features, where this is compatible with Arboricultural and engineering requirements, to improve both habitat value and climate adaptation.

- **Design tree planting as connected green infrastructure** rather than isolated specimens, using linear avenues, linked planting zones and association with understorey or species-rich herbaceous planting where feasible to strengthen ecological connectivity and visual quality.
- **Avoid over-engineered surfacing around trees** and provide permeable surfaces, aeration and irrigation opportunities so that trees are not confined by restrictive grids or sealed edges that undermine establishment and long-term condition.
- **Protect retained and newly planted trees during construction** through suitable fencing, exclusion zones and site controls, with no storage, excavation, level changes or service installation within protected areas unless specifically designed and supervised.
- **Prepare a detailed establishment and aftercare specification** covering watering, mulching, formative pruning, inspection, replacement of failures and weed control, particularly during the first five years when establishment risk is highest.
- **Embed urban trees within the Habitat Management and Monitoring Plan** so that condition is reviewed against the relevant statutory metric criteria, remedial management is triggered where needed, and replacement planting is secured if losses occur during the management period.

4.2.3. Modified Grassland

Retention of existing grassland within the Site, is not considered possible. Therefore, to align modified grassland proposals with achieving Biodiversity Net Gain, the design approach seeks to create replacement grassland that is realistic for the Site conditions, management intensity and intended public use. At Piccadilly Gardens, the current grassland is of low distinctiveness and poor condition, so there is an opportunity to improve ecological performance through better soil management, more diverse planting and an amended maintenance regime. However, the target habitat should remain deliverable within a heavily used city-centre public realm and should be designed to reach and maintain its intended condition under the Statutory Metric over the long term. More diverse and better-managed grassland, particularly where integrated with rain gardens, herb-rich planting and other nature-based features, could therefore contribute not only to on-site BNG delivery but also to the broader ambition of creating ecological stepping stones, improving climate resilience and strengthening the experience of nature within central Manchester's public realm.

- **Set a realistic target habitat and condition** at the outset, recognising the likely levels of footfall, amenity use and maintenance constraints, so that the proposed grassland type can genuinely be established and sustained for at least 30 years.
- **Manage wear and trampling through design** by directing pedestrian movement with paths, seating edges, level changes or planting buffers so that areas intended for biodiversity are protected from the highest levels of footfall and compaction.
- **Design around appropriate soil conditions**, including suitable soil depth, structure and nutrient status, as successful grassland enhancement and creation depend heavily on the quality of the growing medium and should not rely on heavily compacted or nutrient-enriched imported substrates.
- **Reduce mowing frequency and vary cutting regimes where feasible** to allow a more structurally diverse sward to develop, while retaining closely managed edges or desire lines where these are needed for usability, access and visual legibility.
- **Increase botanical diversity through suitable seed mixes or plug planting**, favouring species appropriate to the site's soils, aspect and urban conditions, rather than generic ornamental mixes that may provide short-term colour but limited long-term habitat value.
- **Integrate grassland with wider green infrastructure** where possible, for example through rain gardens, swales or herb-rich planting zones, so that habitat creation also contributes to drainage, cooling and visual quality.
- **Avoid routine use of fertilisers and herbicides** unless specifically justified, as lower-input management is generally more compatible with improving species diversity and ecological function.
- **Prepare a clear establishment and maintenance specification** covering watering where required, litter removal, invasive species control, overseeding or replanting of failed areas, and the timing of cuts and arisings removal, so that the target condition is actively managed rather than assumed.
- **Embed modified grassland within the Habitat Management and Monitoring Plan** so that condition is reviewed against the relevant statutory metric criteria, management can be adapted if the habitat is not meeting its target condition, and any degraded areas are restored promptly during the management period.

4.2.4. Ornamental Planting

Ornamental planting should be designed as a resilient, species-diverse planting community that provides measurable biodiversity value while remaining appropriate for a high-footfall city-centre public realm. The target should be to establish mixed ornamental beds that include herbaceous perennials, grasses, bulbs, low shrubs and other non-invasive species selected for seasonal flowering, structural interest and wildlife value. Planting should provide nectar, pollen, seed heads, shelter and year-round vegetation structure where feasible, while also meeting public realm requirements for visual quality, safety, sightlines and maintenance access.

- **Specify a diverse ornamental planting palette** that includes a mix of herbaceous perennials, ornamental grasses, bulbs, groundcover and low shrubs, that provide nectar, pollen, seed or shelter value and are suitable for urban soils, pollution exposure and anticipated microclimate conditions.
- **Create seasonal and structural diversity** by combining plants with varied heights, growth forms, flowering periods and winter seed heads so that ornamental beds provide habitat resources across as much of the year as possible.
- **Prioritise ornamental species with ecological function**, including cultivars and species known to support pollinators and other urban wildlife, while avoiding sterile, invasive or short-lived planting that would provide limited long-term habitat value.
- **Provide adequate soil volume and preparation**, including decompaction, suitable organic matter, drainage and mulching, to support long-term establishment and reduce the need for intensive watering or replacement planting.
- **Protect ornamental beds from trampling and compaction** through robust edging, desire-line management and clear maintenance access, particularly where planting adjoins pedestrian routes, seating areas or play space.
- **Avoid overly intensive maintenance** that removes flowering stems, seed heads or winter structure too early; cutting back, division and replacement planting should be phased where practicable to retain habitat value while maintaining a tidy public realm appearance.
- **Manage weeds, litter and invasive species** through regular inspection and targeted intervention, avoiding blanket herbicide use except where required for specific invasive or injurious species control.
- **Replace failed plants promptly** during the establishment period using species that maintain the intended ornamental character, planting diversity and ecological function rather than substituting with low-value or single-species alternatives.
- **Include ornamental planting within the HMMP** with clear success criteria for establishment, species diversity, vegetation cover, seasonal structure, invasive species control and adaptive management over the 30-year period.

4.2.5. Rain Garden

Rain gardens should be designed as multifunctional urban habitat features that contribute to sustainable drainage, climate resilience, visual quality and biodiversity. Although they are primarily engineered drainage features, their biodiversity value will depend on the quality of the planting design, soil profile, hydrological performance and long-term management. At Piccadilly Gardens, rain gardens have been designed to receive and temporarily hold runoff where feasible, while supporting resilient planting that can tolerate alternating wet and dry conditions, urban heat, pollution and intensive public realm use.

- **Select planting for variable moisture conditions**, using species capable of tolerating periodic inundation, drought and urban heat, while also providing nectar, pollen, seed heads and structural cover across the year.
- **Design for year-round habitat value** by combining grasses, sedges, herbaceous perennials and low shrubs with staggered flowering periods, winter structure and varied vegetation heights.
- **Avoid overly manicured management** so that rain garden planting can develop sufficient cover and structure, while still maintaining clear sightlines, access, public safety and litter control.
- **Use suitable substrate and mulch** that supports drainage and plant establishment without excessive nutrient enrichment and avoid materials that could clog inlets or reduce infiltration capacity.
- **Protect inlets and planting during construction** to prevent compaction, sediment build-up and contamination, with rain garden areas brought into service only once surrounding works are sufficiently complete.
- **Inspect and maintain drainage function regularly**, including removal of silt, litter and debris from inlets, outlets and overflow points, and checking that standing water does not persist beyond the intended design period.

- **Allow adaptive replacement planting** where species fail due to moisture regime, shading, trampling or drought stress, ensuring replacements maintain the intended habitat condition and ecological function.
- **Embed rain gardens within the HMMP** with monitoring covering vegetation establishment, species diversity, bare ground, invasive species, sediment accumulation, drainage performance and remedial actions required to maintain target condition.

4.2.6. Protected and Notable Species Enhancements

Whilst the addition of further enhancements targeting faunal species does not directly contribute to the overall BNG assessment score, these enhancements can still benefit associated species and improve biodiversity, including:

- Where feasible and appropriate bat and bird boxes; could be affixed to retained trees or additional trees planted within the Site, once they reach a suitable height and girth, to increase nesting/roosting provisions.
- Any on-site tree surgery works could retain any removed wood to create log piles on Site to further enhance small mammal, invertebrate and amphibian sheltering opportunities.
- Where feasible and appropriate artificial hedgehog nesting boxes could also be incorporated into any grassland or shrub, within the Site.
- Installation of a 'swift tower', within the Site could provide valuable nesting provision for common swift (*Apus apus*), which are classified as Red under the Birds of Conservation Concern 5: the Red list for Birds (2025).

4.3. Monitoring

Monitoring is required to determine the success of mitigation and enhancement measures and provide data on which to base adaptive management when objectives are not being achieved. A Site-specific Habitat Management and Monitoring Plan (HMMP) will be developed to outline how the land will be managed over at least 30 years to;

- Outline habitats to be retained, created and enhanced for biodiversity net gain (BNG);
- Provide timescales for actions to be delivered as part of the HMMP;
- Outline monitoring requirements;
- Outline relevant consents and licences required;
- Detail how funding will be secured to deliver the HMMP and who will be accountable; and
- Provide details of any legal agreements required to secure the delivery of the HMMP.

Monitoring will be required during and/or post-construction:

- It is anticipated that habitats including urban trees, modified grassland, ornamental planting and rain gardens will require annual monitoring for the first three years as they become established, and then at five-year intervals for the duration of the management plan. Monitoring will determine the 'condition' of each habitat based on relevant criteria outlined within the Statutory Metric Condition Assessment:
    - 5A Grassland (low distinctiveness);
    - 9A Individual urban trees; and
    - 22A Urban (rain gardens);
- Bat, bird boxes and other hibernacula should be checked annually for damage and be replaced as necessary.
- Results of habitat monitoring would be reported to Manchester City Council and the Greater Manchester Ecology Unit (GMEU) and any other relevant stakeholders.
- If monitoring results indicate that habitats were not establishing as expected or achieving desired outcomes, then management will need to be revised.

APPENDIX A – SITE LOCATION PLAN



Legend

Red Line Boundary

Do not scale this map

Client
Manchester City Council

Project
Piccadilly Gardens, Manchester

Title
Site Location Plan

Status
FINAL

Drawing No.	Revision	Date
4475 - 002	-	21 May 2026
Drawn	**Checked**	**Approved**
AW	RMcL	RMcL

Scale 1:1500 @ A3 — 0 — 15 — 30 m

Rev	Date	Amendment	Initials
-	-	-	-

CIVIC

APPENDIX B – GENERAL ARRANGEMENT



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4. All setting out, levels and dimensions to be agreed on site.
5. The dimensions of all materials must be checked on site before being laid out.
6. This drawing must be read with the relevant specification clauses and detail drawings.
7. Order of construction and setting out to be agreed on site.

KEY

Red Line Boundary

Key

1. Raised Lawn

2. Peel Square

3. Robert Peel Statue

4. Plot for Future Structure

5. New Crossing Point

6. James Watt Statue

7. Queen Victoria Statue

8. Victoria Garden

9. Existing Electrical Cabinets Retained

10. Play Area

11. Restaurant Spill Out Retained (Beyond Red Line)

12. Existing Retianed Hatch Basement Access

13. Retained Trees

Revision	Date	Description	Drawn	Apprvd.
P11	04/08/26	Issue for Technical Planning Reporting	CB	LH

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Project	Piccadilly Gardens
Drg Title	General Arrangement

Created on	Created by	Approved by
13-04-2026	CB	LH

Scale	Size	Workstage
1:500	A2	Planning

Drg No. 4004-PLA-XX-XX-DR-L-0001

Suitability S2 **Revision** P11

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APPENDIX C – SOFTWORKS – PLANTING PLAN



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KEY

- **Red Line Boundary**
- **Lawn**
- **Rain Garden Mix**
- **Evergreen Planting Mix**
- **Garden Planting Mix**
- **Play Planting Mix**
- **Lawn Bulbs Mix**

- Choisya dewitteana 'White Dazzler'
- Viburnum tinus 'Gwenllian'
- Pieris japonica 'Variegata'
- Pieris Little frosty
- Pieris japonica 'Little Heath'
- Mahonia eurybracteata ganpinensis 'Soft Caress

Refer to drawing 4004-PLA-XX-XX-DR-L-2004 Softworks - Planting schedule for more information on plant species

Revision	Date	Description	Drawn	Apprvd.
P03	21/07/26	Draft Planning	CB	LH

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Project	Piccadilly Gardens
Drg Title	Softworks - Planting

Created on	Created by	Approved by
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Scale	Size	Workstage
1:500	A2	Planning

Drg No. 4004-PLA-XX-XX-DR-L-2003

Suitability S2 **Revision** P03

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Internal Source file:4004-PLA-XX-XX-DR-L-0001-Piccadilly-Working-File.vwx

APPENDIX D – SOFTWORKS - TREES PLAN

Trees.

Abbrev.	Number	Botanical Name	Form	Age	Girth cm	Height cm	Clear Stem	Root Type	Cont. Size	Min. Breaks	Spacing	Comments
	2	Acer x freemanii 'Autumn Blaze'	Standard (Semi mature)		60-70	700-900	min 270	RB			Counted	
	3	Acer saccharinum	Standard (Semi mature)		70-80	700-900	min 270	RB			Counted	
	3	Acer Neglectum Annae	Standard (Semi mature)		80-90		min 270	RB			Counted	
	10	Amelanchier lamarkii	Multi stem, Umbrella			500-600	min 250	RB		5 stems min	Counted	
	1	Catalpa bignonioides	Standard (Semi mature)	7x	60-70	700-900	min 270	RB			Counted	
	3	Gleditsia Christine Halka	Standard (Semi mature)		40-45	500-600	min 270	RB			Counted	
	1	Gleditsia triacanthos 'Skyline'	Standard (Semi mature)	7x	60-70	700-900	min 270	RB			Counted	
	5	Gleditsia inermis	Standard (Semi mature)		40-45	500-600	min 270	RB			Counted	
	2	Liriodendron tulipifera	Standard (Semi mature)	6x	70-80	700-900	min 270	RB			Counted	
	1	Liriodendron tulipifera	Standard (Semi mature)	6x	60-70	700-900	min 270	RB			Counted	
	2	Existing Magnolia Tree - Retained and Relocated										Existing Magnolia tree lifted and stored at local nursery before being replanted into the scheme in appropriate locations
	3	Pinus sylvestris	Standard (Semi mature)		70-80	700-900	min 270	RB			Counted	Canopy width 4-5m
	5	Paulownia tomentosa	Standard (Semi mature)		60-70	700-900	min 270	RB			Counted	
	3	Acer saccharinum 'Laciniatum Wieri'	Standard (Semi mature)	6x	60-70	700-900	min 270	RB			Counted	
	2	Prunus avium plena	Standard (Semi mature)		70-80	700-900	min 270	RB			Counted	
	4	Ginkgo biloba	Multi stem, Umbrella	7x		700-900	min 250	RB		5 stems min	Counted	
	1	Liquidambar styraciflua	Standard (Semi mature)		80-90	700-900	min 270	RB			Counted	



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KEY

Red Line Boundary

SOFTWORKS

TREE - Existing Retained
- Subject to arboricultural management & maintenance works.
Number of existing trees in hard: 8

Single Stem Tree - Proposed
Refer to tree schedule for further information

Multistem Tree - Proposed
Refer to tree schedule for further information

Existing Tree Retained and Relocated
Existing Magnolia tree retained and relocated in suitable locations within the proposed design

Note: Tree locations coordinated with GPR survey. Final tree locations to be confirmed with underground services.

Revision	Date	Description	Drawn	Apprvd.
P03	21/07/26	Draft Planning	CB	LH

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Client	Manchester City Council
Project	Piccadilly Gardens
Drg Title	Softworks - Trees

Created on	Created by	Approved by
13-04-2026	CB	LH

Scale	Size	Workstage
1:500	A2	RIBA 1

Drg No. 4004-PLA-XX-XX-DR-L-2000

Suitability S2 **Revision** P03

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APPENDIX E – PLANTING SCHEDULE

Garden Planting - Shrubs

Abbrev.	Number	Botanical Name	Height cm	Root Type	Cont. Size	Habit	Min. Breaks	Spacing
CxDWD		Choisya x dewitteana White Dazzler	40-60	C	10L	Bushy	7	Counted
Me'SC'		Mahonia eurybracteata ganpinensis 'Soft Caress'	40-60	C	5L	Bushy	3	Counted
Pj'V'		Pieris japonica 'Variegata'	40-60	C	10L	Branched	7	Counted
PLF		Pieris Little frosty		C	15L			Counted
PLH		Pieris Little Heath		C	15L			Counted
Vt'G'		Viburnum tinus 'Gwenllian'	40-60	C	10L	Bushy	7	Counted

Garden Planting

Mix %	Number	Botanical Name	Height cm	Root Type	Cont. Size	Density	Spacing Type	Comments
		Acanthus spinosus		C	5L	5	m²	Full pot; vegetative propagation
		Agapanthus 'Dokter Brouwer'		C	3L	7	m²	Full pot; seed or vegetative propagation
		Anthriscus sylvestris 'Ravenswing'		C	3L	9	m²	Full pot; seed or vegetative propagation
60%		Armeria maritima 'Splendens'		C	1L	13	m²	Full pot; seed or vegetative propagation
40%		Armeria maritima 'Splendens'		C	3L	9	m²	Full pot; vegetative propagation
		Aster x frikartii 'Mönch'		C	5L	5	m²	Full pot; vegetative propagation
		Astilbe 'Hyazinth'		C	5L	5	m²	Full pot; vegetative propagation
		Astilbe 'Red Sentinel'		C	3L	7	m²	Full pot
		Astilbe 'Snowdrift'		C	3L	7	m²	Full pot; vegetative propagation
		Astrantia major 'Roma'		C	5L	5	m²	Full pot
		Echinops bannaticus 'Taplow Blue'		C	3L	7	m²	Full pot; vegetative propagation
60%		Erigeron karvinskianus 'Lavender Lady		C	1L	13	m²	Full pot
40%		Erigeron karvinskianus 'Lavender Lady		C	3L	9	m²	Full pot; seed or vegetative propagation
60%		Festuca glauca 'Elijah Blue'		C	3L	7	m²	Full pot; vegetative propagation
40%		Festuca glauca 'Elijah Blue'		C	5L	5	m²	Full pot
		Gaura lindheimeri 'Siskiyou Pink'		C	5L	5	m²	Full pot; vegetative propagation
		Geranium cinereum 'Ballerina'		C	3L	7	m²	Full pot; vegetative propagation
		Geranium sanguineum 'Album'		C	3L	7	m²	Full pot; seed or vegetative propagation
		Geranium sanguineum 'Max Frei'		C	3L	7	m²	Full pot; seed or vegetative propagation
		Helenium 'Moerheim Beauty'		C	3L	7	m²	Full pot; vegetative propagation
		Kniphofia 'Nancy's Red'		C	3L	7	m²	Full pot; seed or vegetative propagation
60%		Libertia formosa		C	3L	7	m²	Full pot; vegetative propagation
40%		Libertia formosa		C	5L	5	m²	Full pot; vegetative propagation
		Liriope muscari		C	3L	9	m²	Full pot; seed or vegetative propagation
		Miscanthus sinensis		C	5L	5	m²	Full pot; vegetative propagation
		Persicaria affinis 'Darjeeling Red'		C	5L	5	m²	Full pot; vegetative propagation
		Rudbeckia fulgida sullivantii 'Goldsturm'		C	3L	7	m²	Full pot; seed or vegetative propagation
		Salvia nemorosa 'Schneehügel'		C	3L	7	m²	Full pot; vegetative propagation
		Sanguisorba officinalis 'Tanna'		C	3L	7	m²	Full pot; vegetative propagation
		Sedum spectabile 'Brilliant'		C	5L	5	m²	Full pot; vegetative propagation
60%		Stipa arundinacea		C	3L	7	m²	Full pot; seed or vegetative propagation
40%		Stipa arundinacea		C	5L	5	m²	Full pot; seed or vegetative propagation
		Veronicastrum sibiricum		C	3L	7	m²	Full pot; seed or vegetative propagation

Green and Robust

Mix %	Number	Botanical Name	Height cm	Root Type	Cont. Size	Density	Spacing Type	Comments
60%		Asplenium scolopendrium		C	3L	7	m²	Full pot; seed propagation
40%		Asplenium scolopendrium		C	5L	5	m²	Full pot; seed propagation
60%		Athyrium filix-femina		C	3L	7	m²	Full pot
40%		Athyrium filix-femina		C	5L	5	m²	Full pot; seed propagation
60%		Blechnum spicant		C	3L	7	m²	Full pot; seed propagation
40%		Blechnum spicant		C	5L	5	m²	Full pot; seed propagation
60%		Epimedium x rubrum		C	3L	7	m²	Full pot; seed propagation
40%		Epimedium x rubrum		C	5L	5	m²	Full pot; vegetative propagation
		Helleborus argutifolius		C	3L	7	m²	Full pot; seed propagation
		Helleborus x hybridus		C	5L	5	m²	Full pot; vegetative propagation
		Helleborus niger		C	5L	5	m²	Full pot; vegetative propagation
60%		Matteuccia struthiopteris		C	3L	7	m²	Full pot; seed propagation
40%		Matteuccia struthiopteris		C	5L	5	m²	Full pot; seed propagation
		Pachysandra terminalis		C	1L	13	m²	Full pot; seed or vegetative propagation

Rain Garden

Mix %	Number	Botanical Name	Height cm	Root Type	Cont. Size	Density	Spacing Type	Comments
		Actaea simplex 'White Pearl'		C	5L	5	m²	Full pot; vegetative propagation
		Anthriscus sylvestris 'Ravenswing'		C	3L	9	m²	Full pot; seed or vegetative propagation
		Astilbe 'Hyazinth'		C	5L	5	m²	Full pot; vegetative propagation
		Astilbe 'Red Sentinel'		C	3L	7	m²	Full pot
		Astilbe 'Snowdrift'		C	3L	7	m²	Full pot; vegetative propagation
		Astrantia major 'Roma'		C	5L	5	m²	Full pot
60%		Blechnum spicant		C	3L	7	m²	Full pot; seed propagation
40%		Blechnum spicant		C	5L	5	m²	Full pot; vegetative propagation
60%		Carex morrowii		C	3L	7	m²	Full pot; vegetative propagation
40%		Carex morrowii		C	5L	5	m²	Full pot; vegetative propagation
60%		Carex morrowii 'Ice Dance'		C	3L	7	m²	Full pot; vegetative propagation
40%		Carex morrowii 'Ice Dance'		C	5L	5	m²	Full pot; vegetative propagation
		Helleborus niger		C	5L	5	m²	Full pot; vegetative propagation
		Helenium 'Moerheim Beauty'		C	3L	7	m²	Full pot; vegetative propagation
		Hemerocallis 'Pink Damask'		C	3L	7	m²	Full pot; vegetative propagation
60%		Houttuynia cordata 'Chameleon'		C	3L	7	m²	Full pot; vegetative propagation
40%		Houttuynia cordata 'Chameleon'		C	5L	5	m²	Full pot; vegetative propagation
60%		Libertia formosa		C	3L	7	m²	Full pot; vegetative propagation
40%		Libertia formosa		C	5L	5	m²	Full pot; vegetative propagation
		Ligularia 'Sungold'		C	3L	7	m²	Full pot; seed or vegetative propagation
		Liriope muscari		C	3L	9	m²	Full pot; seed or vegetative propagation
		Miscanthus sinensis		C	5L	5	m²	Full pot; vegetative propagation
		Nepeta 'Blue Dragon'		C	3L	7	m²	Full pot; seed or vegetative propagation
		Osmunda regalis	60-80	C	5L	5	m²	Full pot; seed or vegetative propagation
		Persicaria affinis 'Darjeeling Red'		C	5L	5	m²	Full pot; vegetative propagation
		Persicaria bistorta 'Superba'		C	5L	5	m²	Full pot; vegetative propagation
		Polystichum setiferum		C	3L	5	m²	Full pot; seed or vegetative propagation
		Primula japonica 'Apple Blossom'		C	3L	5	m²	Full pot; seed or vegetative propagation
		Rudbeckia fulgida sullivantii 'Goldsturm'		C	3L	7	m²	Full pot; seed or vegetative propagation
		Sanguisorba officinalis 'Tanna'		C	3L	7	m²	Full pot; vegetative propagation
60%		Stipa arundinacea		C	3L	7	m²	Full pot; seed or vegetative propagation
40%		Stipa arundinacea		C	5L	5	m²	Full pot; seed or vegetative propagation
60%		Tiarella 'Spring Symphony'	40-50	C	3L	7	m²	Full pot; seed or vegetative propagation
40%		Tiarella 'Spring Symphony'		C	5L	5	m²	Full pot; seed or vegetative propagation
		Veronicastrum sibiricum		C	3L	7	m²	Full pot; seed or vegetative propagation

Play Planting

Mix %	Number	Botanical Name	Height cm	Root Type	Cont. Size	Density	Spacing Type	Comments
		Anthriscus sylvestris 'Ravenswing'		C	3L	9	m²	Full pot; seed or vegetative propagation
		Asplenium scolopendrium		C	5L	5	m²	Full pot; seed propagation
		Astilbe 'Hyazinth'		C	5L	5	m²	Full pot; vegetative propagation
		Astilbe 'Snowdrift'		C	3L	7	m²	Full pot; vegetative propagation
		Astrantia major 'Roma'		C	5L	5	m²	Full pot
60%		Blechnum spicant		C	3L	7	m²	Full pot; seed propagation
40%		Blechnum spicant		C	5L	5	m²	Full pot; seed propagation
60%		Brunnera macrophylla		C	3L	7	m²	Full pot; seed or vegetative propagation
40%		Brunnera macrophylla		C	5L	5	m²	Full pot; seed or vegetative propagation
		Dycentra spectabilis 'pink flower'		C	5L	5	m²	Full pot; vegetative propagation
		Geranium cinereum 'Ballerina'		C	3L	7	m²	Full pot; vegetative propagation
		Geranium sanguineum 'Album'		C	3L	7	m²	Full pot; seed or vegetative propagation
		Geranium sanguineum 'Max Frei'		C	3L	7	m²	Full pot; seed or vegetative propagation
		Geum 'Mrs J. Bradshaw'		C	3L	7	m²	Full pot; seed or vegetative propagation
		Lamium maculatum 'Beacon Silver'		C	3L	7	m²	Full pot; vegetative propagation
60%		Libertia formosa		C	3L	7	m²	Full pot
40%		Libertia formosa		C	5L	5	m²	Full pot; vegetative propagation
		Miscanthus sinensis		C	5L	5	m²	Full pot; vegetative propagation
		Primula japonica 'Apple Blossom'		C	3L	11	m²	Full pot; seed or vegetative propagation
		Sanguisorba officinalis 'Tanna'		C	3L	7	m²	Full pot; vegetative propagation
60%		Sesleria autumnalis		C	3L	7	m²	Full pot; vegetative propagation
40%		Sesleria autumnalis		C	5L	5	m²	Full pot; seed or vegetative propagation
60%		Stipa arundinacea		C	3L	7	m²	Full pot; vegetative propagation
40%		Stipa arundinacea		C	5L	5	m²	Full pot; seed or vegetative propagation

Bulbs in green and robust planting

Mix %	Number	Botanical Name	Form	Density	Spacing Type	Comments
50.0		Galanthus nivalis	Grade 5/6	25	m²	In the green
50.0		Narcissus papyraceus	Grade 5/6	25	m²	

Bulb - Lawn mix

Mix %	Number	Botanical Name	Form	Density	Spacing Type	Comments
20.0		Crocus vernus	Grade 7/8	20	m²	
20.0		Fritillaria meleagris	Grade 5/6	20	m²	
30.0		Galanthus nivalis	Grade 5/6	25	m²	In the green
30.0		Narcissus papyraceus	Grade 5/6	25	m²	

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NOTES:

1. Do not scale from this drawing.
2. Always work to noted dimensions.
3. All dimensions are in millimetres unless otherwise stated.
4. All setting out, levels and dimensions to be agreed on site.
5. The dimensions of all materials must be checked on site before being laid out.
6. This drawing must be read with the relevant specification clauses and detail drawings.
7. Order of construction and setting out to be agreed on site.

Revision	Date	Description	Drawn	Apprvd.
P02	21/07/26	Draft Planning	CB	LH

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Client Manchester City Council

Project Piccadilly Gardens

Drg Title Softworks - Planting Schedule

Created on	Created by	Approved by
13-04-2026	CB	LH

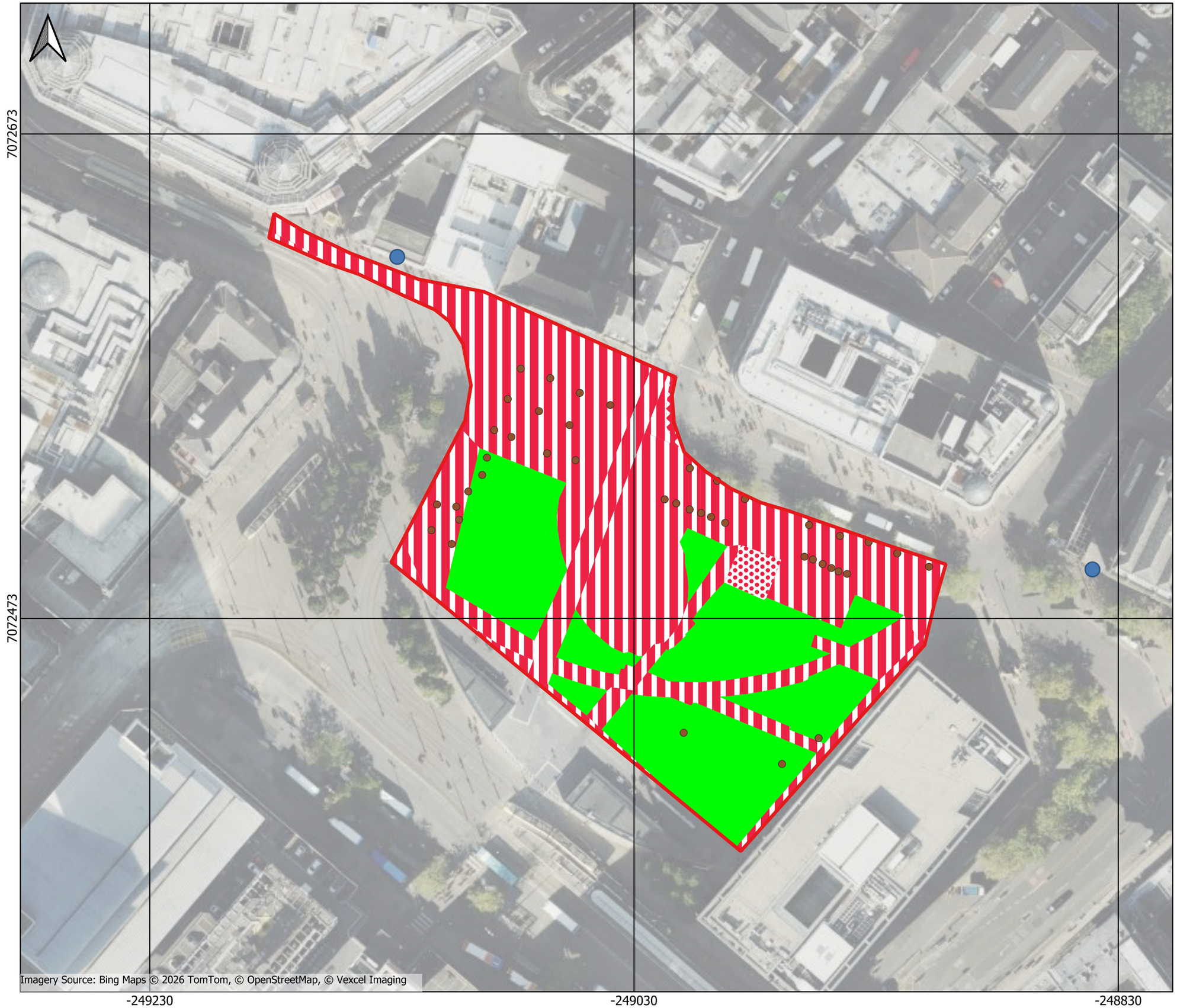
Scale	Size	Workstage
N/A	A2	Planning

Drg No. 4004-PLA-XX-XX-DR-L-2004

Suitability S2 **Revision** P02

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APPENDIX F – HABITAT PLAN



Legend

- Red Line Boundary
- Trees (including planters)
- g4 - Modified Grassland
- u1b - Developed Land. Sealed Surface
- u1b5 - Buildings
- u1b6 - Other Developed Land
- Potential Roost Features

Do not scale this map

Client
Manchester City Council

Project
Piccadilly Gardens, Manchester

Title
UKHab Plan and Ecological Constraints Plan

Status
FINAL

Drawing No.	Revision	Date
4475 - 001	V4	22 July 2027
Drawn	**Checked**	**Approved**
AW	RMcL	RMcL

Scale 1:1500 @ A3 — 0 — 15 — 30 m

Rev	Date	Amendment	Initials
-	-	-	-

CIVIC