

LM Park
Toutley Road
Wokingham
Berkshire
RG41 1DB

River Condition Assessment & Biodiversity Net Gain Assessment

Ref.: R3116_RCA_&_WHBNG_a

Report Quality Control Information	
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1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was commissioned by Tony Grover, of BDS Surveyors Limited, to provide a Biodiversity Net Gain (BNG) Assessment for LM Park, Toutley Road, in Wokingham. The BNG Assessment (habitats, hedgerows and watercourses) was commissioned to accompany a full planning application to be submitted to Wokingham Borough Council seeking consent for the erection of one new two-storey office building with associated landscape works and carparking facilities.
- 1.1.2** This report follows a Preliminary Ecological Appraisal (PEA) (JWEC; January 2026; R3116_PEA_a). The baseline habitats for the site comprise: g4 Modified grassland; u1b5 Developed land - sealed surface (Buildings); u1b Developed land; sealed surface; h3d Bramble Scrub; and hb2 Non-native and ornamental hedgerow.
- 1.1.3** The BNG Strategy uses the Statutory Biodiversity Metric (DEFRA 2025) to calculate the losses and gains in biodiversity value resulting from the proposed changes on site. The watercourse element of the BNG assessment is required because the development is within the 10m riparian zone of a tributary of the Emm Brook which flows on the northern boundary of the site. The habitats of this watercourse were assessed using the Modular River Survey (MoRPH5).
- 1.1.4** The proposed habitats are derived from the proposed site plan where the bramble scrub, hedgerows, small area of grassland on the eastern side of site and the hard standing around the existing building will be retained with some new areas of newly created habitat that comprise Buildings (u1b5); and Developed land; sealed surface (ub1).
- 1.1.5** The proposals will not directly impact the watercourse as shown in the proposed site layout plan; however, the watercourse is within 10m of the red line boundary and therefore is classified as being onsite. There will be some encroachment within the 10m bank top with the loss of modified grassland to buildings and developed land. A total length of 50m of the watercourse was surveyed. The

Morph5 survey results showed that the watercourse has a moderate river condition.

- 1.1.6** The Statutory Biodiversity Metric calculation tool demonstrates that the feasibility of delivering a minimum of 10% onsite net gain for biodiversity is not possible within the scope of the proposals. The tool gives a total onsite net % change of - 65.18% in habitat units, 0% in hedgerow units and 0% water units. The tool calculates that there is a deficit of 0.57 in habitat units, 0.02 in hedgerow units and 0.13 in watercourse units to reach a 10% gain. The '*LM Park, Toutley Road, Wokingham*' – *Statutory Biodiversity Metric (R3116_BNG_a)*' document should be referred to separately for the full calculation.
- 1.1.7** To meet the mandatory requirement of a minimum of 10% net gain for biodiversity, offsite gains will need to be made by purchasing units from a registered off-site habitat bank, which is to be finalised as part of the Biodiversity Gain Plan condition attached to planning consent.

2 INTRODUCTION

2.1 Project Background

2.1.1 John Wenman Ecological Consultancy LLP was instructed by Tony Grover, of BDS Surveyors Limited, to provide a Biodiversity Net Gain (BNG) (covering Habitats and Watercourses) Assessment for LM Park, Toutley Road, in Wokingham. The assessment was commissioned to accompany a full planning application to be submitted to Wokingham Borough Council seeking consent for the erection of one new two-storey office building with associated landscape works and car parking facilities.

2.1.2 The watercourses element of the BNG metric is required because the development is within the riparian zone for the tributary to the Emm Brook, which flows on the northern boundary of the site. This report follows a Preliminary Ecological Appraisal (PEA) (JWEC; January 2026; R3116_PEA_a).

2.2 Site Location and Context

2.2.1 The site is approximately 0.27 hectares of land on the eastern side of LM Park, Toutley Road in Wokingham, Berkshire (OS central grid ref.: SU 80050 70458), comprising a commercial building, hardstanding car parking facilities, an area of modified grassland, non-native hedgerows and bramble scrub along the northern boundary.

2.2.2 The site is bordered by similar industrial properties to the north and east and residential properties to the west and south. A stream runs adjacent to the northern site boundary, behind the bramble scrub. The wider area is characterized by farmland to the north and east, open grassland areas with parcels of woodland, including Old Forest Road Meadow, to the west and several parcels of ancient woodland with the closest parcel of ancient and semi-natural woodland situated approximately 745 meters to the south-west of the site. Holt Copse and Joel Park, a Local Wildlife Site (LWS), is located approximately 1050 metres south-east of the site. The railway, boarded by mature trees, runs approximately 835 meters to the south-west of the site.

2.3 Objectives

2.3.1 The aim of the BNG Assessment is to demonstrate that a minimum of 10% on-site net gain in biodiversity can be achieved as part of the proposed development. The key objectives are to:

- detail the approach taken for the BNG calculation (i.e. the Statutory Biodiversity

Metric);

- describe and map the baseline habitats and important ecological features on site;
- describe and map the proposed habitats based on post-development design;
- complete the biodiversity metric tool with supporting condition assessment sheets; and
- outline the implementation of the design concepts and the long-term management to deliver BNG.

2.3.2 In addition, the key objectives for the watercourse BNG Assessment are to:

- detail the approach taken to survey the watercourses and determine the condition of the rivers onsite (MoRHh5 survey)
- detail the approach taken for the BNG watercourse calculation (i.e. the Statutory Biodiversity Metric); and
- complete the biodiversity metric tool for watercourses

2.3.3 This BNG Assessment report should be read in conjunction with the completed Statutory Biodiversity Metric calculation tool, river condition reporting and habitat condition assessment documents.

3 POLICY BACKGROUND

3.1 National Planning Policy

- 3.1.1** The revised National Planning Policy Framework (NPPF), published in December 2024, sets out the Government's planning policies for England and how they should be applied. Section 15 of the NPPF sets out the approach local authorities should adopt to conserve and enhancing the natural environment when preparing planning policy and when considering planning applications. Paragraph 193 sets out the principles LPAs should apply when determining planning applications, as follows:

'When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.'

- 3.1.2** In England, Biodiversity Net Gain (BNG) is mandatory from the 12th February 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). In practice, planning permission in

England is now subject to a condition to secure a minimum 10% net gain for biodiversity, unless the development is a type that is exempt from mandatory BNG requirements. A Biodiversity Gain Plan detailing BNG management and monitoring over a 30 year period will be required as a condition following the grant of planning permission; the development cannot commence until the Plan has been approved in writing by the LPA.

- 3.1.3** The selection of excerpts taken from Section 15 referring to Biodiversity Net Gain (BNG) in addition to paragraph 193 above are as follows:

'Paragraph 187. Planning policies and decisions should contribute to and enhance the natural and local environment by: [...] d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs [...]

Paragraph 192. To protect and enhance biodiversity and geodiversity, plans should: [...] b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity [...]

- 3.1.4** In England, BNG became mandatory for major development from the 12th February 2024 and for minor development (small sites) from the 2nd April 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). In practice, planning permission in England is now subject to a condition to secure a minimum 10% net gain for biodiversity, unless the development is a type that is exempt from mandatory BNG requirements.

3.2 Local Planning Policy

- 3.2.1** Wokingham Borough Council's development plan is formed of a number of documents including the Core Strategy Development Plan Document (DPD) (January 2010), Managing Development Delivery (MDD) Local Plan (February 2014), and supplementary planning documents (SPDs), which set out planning criteria used to determine applications for planning permission in the Borough. The Local Plan Update

aims to refine the current Core Strategy and provide a strategy for the Borough up to March 2036. The following policies relate to biodiversity:

'Core Strategy DPD: 'Policy CP7 – Biodiversity

Sites designated as of importance for nature conservation at an international or national level will be conserved and enhanced and inappropriate development will be resisted. The degree of protection given will be appropriate to the status of the site in terms of its international or national importance. Development:

- A) Which may harm county designated sites (Local Wildlife Sites in Berkshire), whether directly or indirectly, or*
- B) Which may harm habitats or, species of principle importance in England for nature conservation, veteran trees or features of the landscape that are of major importance for wild flora and fauna (including wildlife and river corridors), whether directly or indirectly, or*
- C) That compromises the implementation of the national, regional, county and local biodiversity action plans will be only permitted if it has been clearly demonstrated that the need for the proposal outweighs the need to safeguard the nature conservation importance, that no alternative site that would result in less or no harm is available which will meet the need, and:*
 - i) Mitigation measures can be put in place to prevent damaging impacts; or*
 - ii) Appropriate compensation measures to offset the scale and kind of losses are provided.*

Core Strategy DPD: 'Policy CP8 – Thames Basin Heaths

Development which alone or in combination is likely to have a significant effect on the Thames Basin Heaths Special Protection Area will be required to demonstrate that adequate measures to avoid and mitigate any potential adverse effects are delivered.

MDD Local Plan: 'Policy TB23: Biodiversity and Development

- 1. Sites of national or international importance are shown and sites of local importance are defined on the Policies Map.*

2. *Planning permission for development proposals will only be granted where they comply with policy CP7 – Biodiversity of the Core Strategy and also demonstrate how they:*

- a) Provide opportunities, including through design, layout and landscaping to incorporate new biodiversity features or enhance existing;*
- b) Provide appropriate buffer zones between development proposals and designated sites as well as habitats and species of principle importance for nature conservation; and*

Ensure that all existing and new developments are ecologically permeable through the protection of existing and the provision of new continuous wildlife corridors, which shall be integrated and linked to the wider green infrastructure network'

4 METHODOLOGY

Modular River Survey

- 4.1.1** A site walkover was undertaken on 11th February by Vicky Potts - a qualified surveyor accredited to undertake a River Condition Assessments (RCA) and a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM), and Lauren Hayard - an Assistant Ecologist.
- 4.1.2** The site was surveyed using the Modular River Physical (MoRPh) Field Survey technique and the UK Habitat Classification (UKHab) system (UKHab Ltd 2023) in accordance with the CIEEM Guidelines for Preliminary Ecological Appraisal 2nd Edition (CIEEM 2017). The field survey method was used to characterise the watercourse within the red line boundary and within 10 metres of the development and project area.
- 4.1.3** The equipment used during the survey comprised binoculars, measuring pole, a tape measure, MoRPh survey sheets and code sheet, an iphone with the Cartographer platform and for the What3words app.
- 4.1.4** Five 10m sections of river length were sampled along the watercourse – the tributary of the Em Brook - therefore covering at least 20% of the river's length required as part of the MoRPH survey method. Rivers which are less than 10m in width require five lengths of 10m to be surveyed for each module as part of the MoRPh5. The surveys need to be undertaken within the red line boundary to achieve the RCA scores in the Cartographer platform, forecast potential impacts and undertake any future assessments.
- 4.1.5** The river was surveyed from the left bank as it fell within the red line boundary so access was not possible from the right bank. Binoculars were used to survey the opposite bank to make more detailed observations and produce accurate results. Online aerial imagery on google earth was used to view the channel and margins at different times.
- 4.1.6** The survey identified the morphology, sediments and vegetation structure plus modifications of the river channel and margins within 10m of the bank tops within each

river section. This information was used to determine a provisional condition score for the river.

Desk Study

- 4.1.7** A desktop study was conducted by Vicky Potts – an experienced Senior Ecologist and full member of CIEEM. The study utilised data from online resources to acquire information into an extended area of the watercourse offsite to provide a river type, looking at the planform, gradient and confinement of the watercourse. All the information collected during the field and desk-based surveys were entered into and reviewed on the River Condition Assessment information system using the online Cartographer platform. The provisional river condition score and river type were combined to generate a river condition class and final river condition score.

Survey Limitations and Validity

- 4.1.8** A single MoRPh survey is supposed to be applied to a short length of river approximately equal to 2 channel widths, i.e. for the tributary of the Emm Brook the length of river survey should be 10m (x5) for a river that is less than 10m in width. The watercourse and riparian zone along the red line boundary was 116m in length and therefore five river lengths were able to be surveyed.
- 4.1.9** The riverbed material was not visible possible due to recent heavy rain, but it was assumed to be clay based on the local surroundings and riverbank faces. There were signs of any larger materials such as boulders, pebbles or rock. Parts of the left bank were overgrown with scrub and therefore some sections were surveyed from further up or downstream with the use of binoculars and therefore this is not considered a significant constraint.
- 4.1.10** There were no other significant survey limitations because RCAs can be carried out at any time of year. Although spring and autumn are the best times to survey as physical features and vegetation structures are clearly visible, the riverbanks and riparian zone

were accessible, and a detailed assessment could be made. In addition, online imagery was used to view the channel and margins at different times.

Biodiversity Net Gain Approach

4.1.11 This Biodiversity Net Gain (BNG) Assessment uses the Statutory Biodiversity Metric (July 2025) to calculate the losses and gains in biodiversity unit values resulting from the proposed redevelopment. The biodiversity metric tool has been used to guide the proposed site layout and landscaping to deliver a minimum 10% net gain for biodiversity for watercourses.

4.1.12 The biodiversity metric rules must be followed for a valid biodiversity net gain and are as follows:

***Rule 1:** The trading rules of this biodiversity metric must be followed.*

***Rule 2:** Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit.*

***Rule 3:** To accurately apply the biodiversity metric formula, you must use the statutory biodiversity metric calculation tool or small sites biodiversity metric tool (SSM) for small sites.*

The tools remove the need for a user to manually calculate the change in biodiversity value.

The tool will summarise the results of the calculation and inform a user whether the biodiversity net gain objective has been met.

***Rule 4:** In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority.*

4.1.13 The biodiversity metric principles inform the use of the biodiversity metric tool and are as follows:

***Principle 1:** The metric assessment should be completed by a competent person.*

***Principle 2:** The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or*

licensing processes, for example woodlands.

Principle 3: *This biodiversity metric should be used in accordance with established good practice guidance and professional codes.*

Principle 4: *This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.*

Principle 5: *Biodiversity units are a proxy for biodiversity and should be treated as relative values.*

Principle 6: *This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.*

Principle 7: *Habitat interventions need to be realistic and deliverable within a relevant project timeframe.*

Principle 8: *Created and enhanced habitats should be, where practical and reasonable, local to any impact and deliver strategically important outcomes for nature conservation.*

Principle 9: *This biodiversity metric does not enforce a minimum habitat size ratio for compensation of losses. Proposals should aim to:*

- *maintain habitat extent - supporting more, bigger, better and more joined up ecological networks*
- *ensure that proposed or retained habitat parcels are of sufficient size for ecological function'*

5 WATERCOURSE BASELINE INFORMATION

5.1 Desk Study

5.1.1 The desk study data highlighted that the site had one river – a tributary which flows from the east to west into the Emm Brook - along the northern boundary of the development site.

5.1.2 The stream runs through some industrial and residential areas of Wokingham from the Dowles Green area of Wokingham and joins the Emm Brook - a statutory river approximately 180m to the west of the site which is a tributary of the River Loddon. The river has gone through improvements historically as the area has become more built up and for flood relief. Mapping from 1798 shows the river had a lot more meanders, although the general route of the river is similar to existing.

5.2 MoRPh Field Survey Results

5.2.1 A total length of 50m of the tributary was surveyed with five 10m stretches surveyed see **Figure 1**.below. The watercourse is classified a 'Other River', and for the purpose of the report is identified as the Tributary of the Emm Brook.

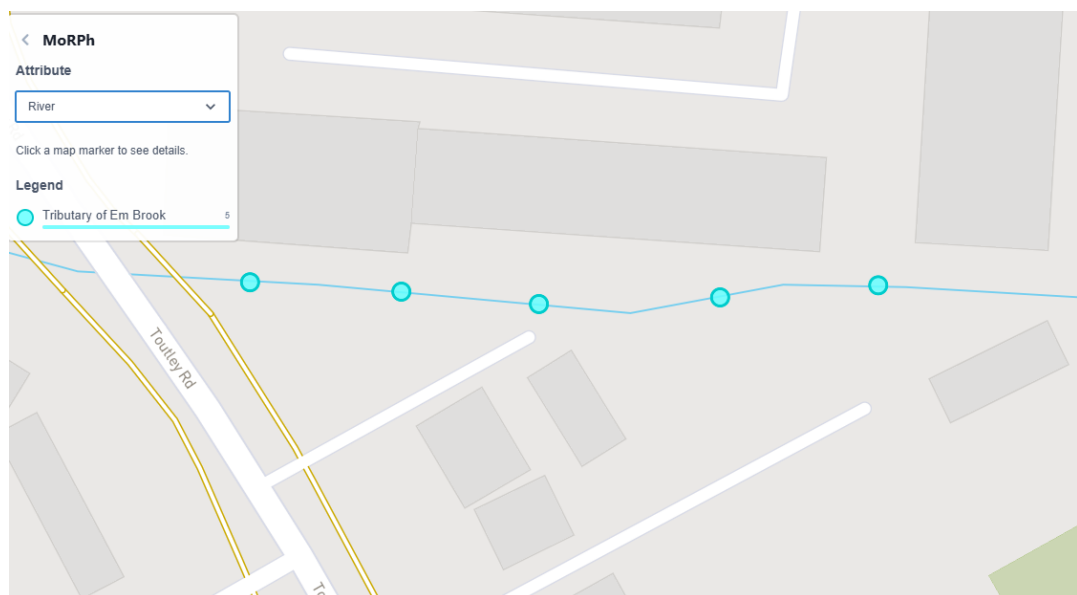


Figure 1. MoRPH Survey Plan – Five modules surveyed (Screenshot from Cartographer)

5.2.2 The Tributary of the Emm Brook is situated along the northern boundary of the site, and the site comprised an industrial site with buildings, hard

standing and modified grassland. A built-up industrial area with buildings and hardstanding is situated along the opposite northern side of the watercourse (see **Photographs 1 – 6 below**).

5.2.3 The southern riverbank face was dominated by steep and gentle faces with natural vegetation including grasses and short herbs, and areas of bare ground. The bank top comprised the managed closely cut grassland with car parking at LM Park with a strip of scrub and trees along the top of the bank.

5.2.4 The southern riverbank was dominated by steep and gentle banks, areas of bare ground, tall herbs, scattered trees and shrubs with short herbs and grasses. The bank top was dominated by scrub and scattered trees, modified closely cut grassland and pedestrianised areas towards the eastern end. There were traces of discrete organic accumulation and vegetation trailing into the river. The northern riverbank face was a gentle bank with a trace of bio textile reinforcement at the western end, with the banks dominated by an accumulation of leaf litter with extensive bare ground, scattered trees and shrub, grasses and short herbs. The bank top comprised a pedestrianised footpath, car parking and buildings. There was a trace of emergent broad-leaved vegetation along the margins of the bank and some rubbish floating in the water. Several pipes were visible along the banks at both sides of the river. There was no submerged and emergent vegetation in the channel. The trees on either side of the river caused there to be shading to be present along the river (i.e. 5 -<30%). A bridge at the western boundary also caused a trace of shading along the western end river.



Photograph 1. View of the southern bank top, viewing west..



Photograph 2. View of the southern bank top, viewing west..



Photograph 3. Western end of the site viewing the northern bank.



Photograph 4. Northern bank of the river.



Photograph 5. Northern bank of the river viewing upstream.



Photograph 6. Northern bank of the river viewing upstream.



Photograph 7. Northern bank of the river viewing upstream



Photograph 8. Pipe on the northern bank of the river.

5.3 River Condition Scores

- 5.3.1** The preliminary score of the tributary of the Emm Brook was 0.72, the river type is classed as K a straight/sinuuous, with clay sediment and the final

condition of the river was classed as moderate – refer to **Figures 2 & 3** below.

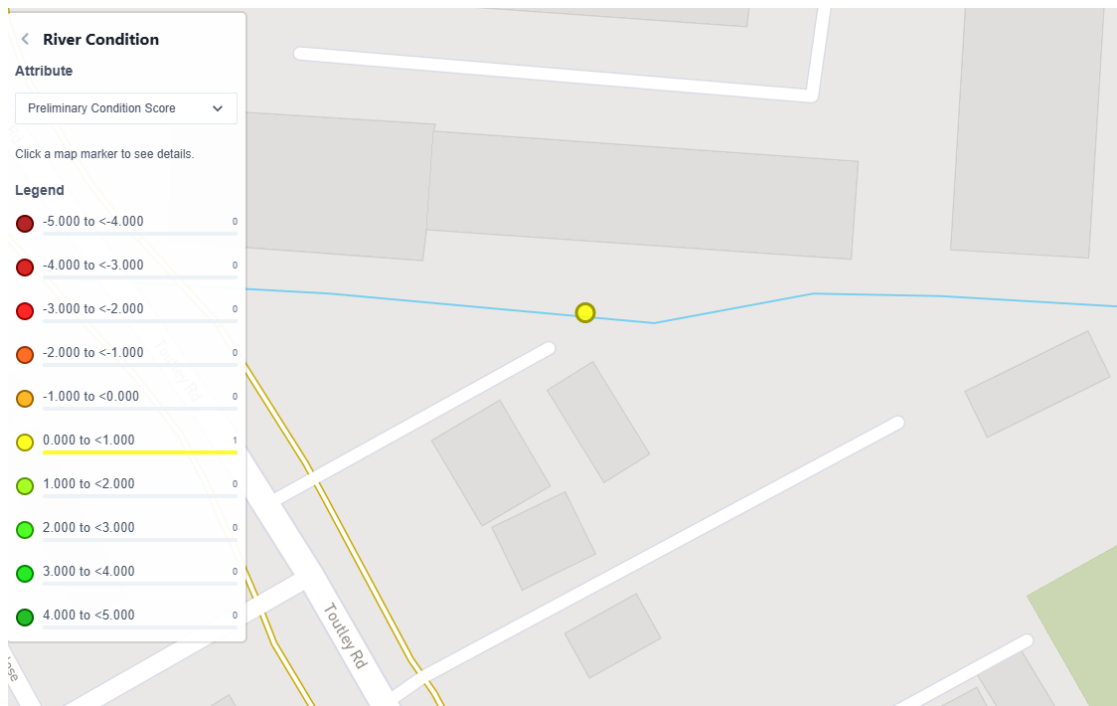


Figure 2. MoRPH Survey Plan – Preliminary River Condition Score (Screenshot from Cartographer)

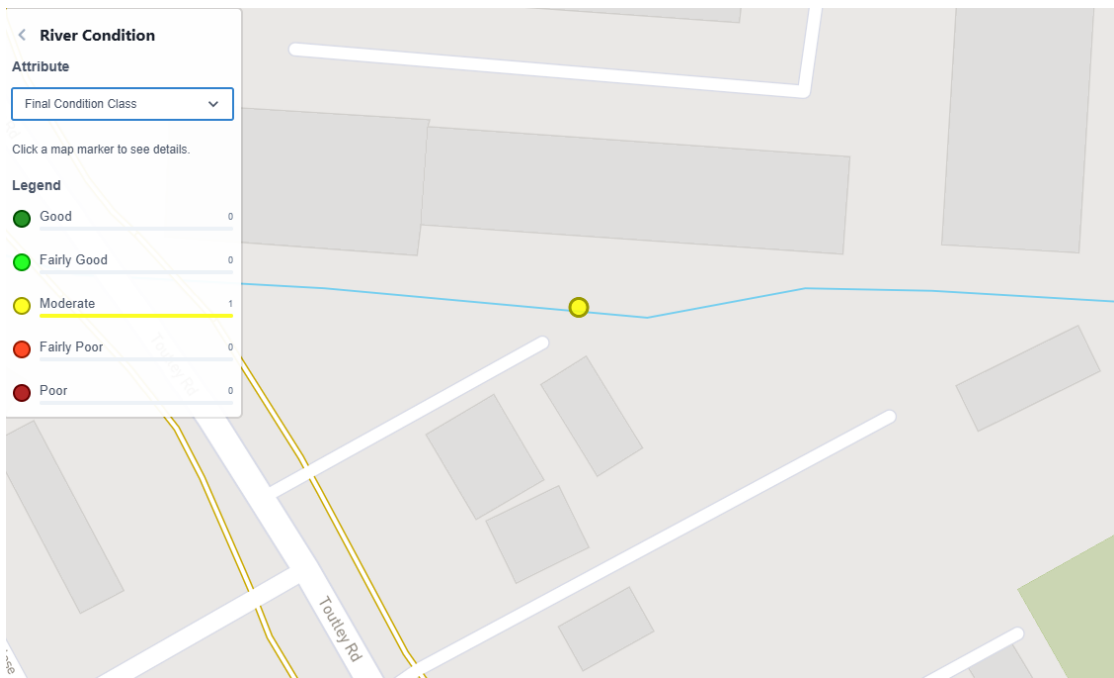


Figure 3. MoRPH Survey Plan – Final River Condition Class (Screenshot from Cartographer)

5.4 Summary of the RCA results

- 5.4.1** A table summarizing the river indicator scores which are used to provide a condition score for the river is shown in **Appendix 2**.
- 5.4.2** The survey showed one attribute that strongly negatively influenced the preliminary conditions and final condition class - the bank top managed ground cover, which was dominated by managed grassland, buildings or hard standing on the southern side and buildings and hard standing on the northern side of the river, which had a score of -4. This area presents opportunities for improvements.
- 5.4.3** There were no attributes that strongly positively impacted the score, i.e. features that scored 3 or 4. However, a few attributes that positively impacted the score with a low score (i.e. 1 or 2 which have potential for improvement) included: the extent of the bank top vegetation structure, the bank face tree feature richness, and channel bed hydraulic feature richness which scored 2, and bank face natural bank material richness, channel margin aquatic vegetation, channel margin aquatic morphotype, and channel bed material richness which scored 1.

5.5 Watercourse Baseline Habitats Onsite

- 5.5.1** The baseline UKHab watercourse habitats for the site comprise: other rivers and streams (r2b) – refer to **Figure 4** below.
- 5.5.2** The final river condition class was calculated, following the MoRPh5 Surveys and desk study and the following was noted:
- Baseline condition assessments were defined as: other rivers and streams; Tributary of the Emm Brook - moderate.



Figure 4. Baseline Watercourse Plan

5.6 Proposed Watercourse Habitats Onsite

5.6.1 The post-development habitat onsite is derived from the Site Layout plan (refer to **Appendix 1**) and includes the following minor changes –

- There will be some encroachment into the riparian zone (10m from top of bank) on site southern side of the river and therefore there is a small risk that the proposals could reduce the quantity, quality or ecological function of the river. However, the patch of grassland to the east of the site and strip of scrub and trees will be retained directly along the riverbank and therefore wildlife will still be able to access the riverbank. The new structure and hard standing would not prevent wildlife from accessing the riverbank any more than the existing tarmac car park and shortly cut managed grassland, as they are more likely to use the unmanaged habitats along the river's margins rather than the site itself.
- The riparian area will be retained as existing on the northern offsite side of the river, i.e. the industrial estate with buildings and hard standing.
- The post-development site will be limited to what can be achieved onsite and biodiversity net gains on the watercourses cannot be legally

secured, and the other bank of the river are outside of the responsibility of the landowners.

5.7 Calculation Result

5.7.1 The Biodiversity Metric calculation tool demonstrates that the feasibility of delivering a minimum of 10% onsite net gain for biodiversity for the watercourse is not possible within the scope of the proposals – see metric calculation tool enclosed separately (The_Statutory_Metric_LM Park, Toutley Road (R3116_BNG_a)). The results taken from the tool give a total onsite net gain of 0% and no change in watercourse units. To achieve a 10% biodiversity net gain, offsite watercourse units will need to be purchased to cover the deficit of 0.13 watercourse units – see **Figure 5** below. As per the Statutory Biodiversity Metric User Guide (2025) the compensation for the loss of water course units should be on a section of watercourse with similar habitat features, of similar size, function and stream order (rivers), for example impacts on rivers cannot be offset on canals.

LM Park, Toutley Road, Wokingham

Return to results menu

Headline Results

Scroll down for final results ▲

On-site baseline

Area habitat units0.76

Hedgerow units0.16

Watercourse units1.27

On-site post-intervention

(Including habitat retention, creation & enhancement)

Area habitat units0.26

Hedgerow units0.16

Watercourse units1.27

On-site net change

(units & percentage)

Area habitat units-0.49

Hedgerow units0.00

Watercourse units0.00

-65.18%

On-site net gain is less than target set ▲

0.00%

On-site net gain is less than target set ▲

0.00%

Off-site baseline

Area habitat units0.00

Hedgerow units0.00

Watercourse units0.00

Off-site post-intervention

(Including habitat retention, creation & enhancement)

Area habitat units0.00

Hedgerow units0.00

Watercourse units0.00

Off-site net change

(units & percentage)

Area habitat units0.00

Hedgerow units0.00

Watercourse units0.00

0.00%

0.00%

0.00%

Combined net unit change

(Including all on-site & off-site habitat retention, creation & enhancement)

Area habitat units-0.49

Hedgerow units0.00

Watercourse units0.00

Spatial risk multiplier (SRM) deductions

Area habitat units0.00

Hedgerow units0.00

Watercourse units0.00

FINAL RESULTS

Total net unit change

(Including all on-site & off-site habitat retention, creation & enhancement)

Area habitat units-0.49

Hedgerow units0.00

Watercourse units0.00

Total net % change

(Including all on-site & off-site habitat retention, creation & enhancement)

Area habitat units-65.18%

Hedgerow units0.00%

Watercourse units0.00%

Total net gain achieved is less than target set ▲

Total net gain achieved is less than target set ▲

Total net gain achieved is less than target set ▲

Trading rules satisfied?

No - Check Trading Summaries ▲

Unit Type

Target

Baseline Units

Units Required

Unit Deficit

Area habitat units

10.00%

0.76

0.83

0.67

Hedgerow units

10.00%

0.16

0.17

0.02

Watercourse units

10.00%

1.27

1.40

0.13

Input errors/rule breaks present in metric ▲

Figure 5. Final Results taken from the Statutory Biodiversity Metric calculation tool.

5.8 Habitat Protection Measures

5.8.1 The onsite scattered trees will be protected during construction. The following protection measures are recommended:

- Erection of Heras fencing in advance of site clearance, enclosing Root Protection Areas (RPAs) along the river;
- Prohibition of construction activities, material storage, use of vehicles, fires etc. within the fenced RPAs to prevent damage to tree roots and soil compaction; and

5.8.2 The offsite river must be protected during construction. The following protection measures could form part of a strategy to avoid impacts:

- Creation of a 10m buffer zone where possible, marked by temporary fencing, between the construction and the rivers, within which construction and storage would be prohibited.
- Use of a silt fence at the base of the natural slope to the water to prevent sediments such as soil and mud from washing downstream.
- Use of protective coverings to help prevent runoff stripping material stockpiles.
- Regular sweeping of surfaces used as access roads and for storage during construction to prevent the accumulation of dust and mud.
- Avoidance of the discharge of any groundwater, if it were to be encountered in excavations, to the watercourse.
- Measures to avoid the spill or fuel or oil e.g. regular maintenance of vehicles and availability of spill kits.

5.9 Suggested Enhancements

5.9.1 Although enhancements cannot be easily secured through the BNG as there are limits to what can be done to enhance the river which is beyond the site's boundary, there are still opportunities to improve the riverbank tops for wildlife. The MoRPh5 survey revealed that the main factors that negatively impacted the condition of the banks of the river were the managed ground cover. Sections of the grassland could be enhanced by allowing areas of

the grassland along the edge of the river to grow uncut on the banks to enhance the vegetation structure within the riparian zone.

- 5.9.2** The bank top vegetation structure which comprised of a patch of scrub and tall herbs with some scattered trees along the river provided good structure so should be retained providing a mosaic of cover with taller and shorter vegetation.

6 HABITAT BASELINE INFORMATION

6.1 Desk Study

Designated Sites and Priority Habitats

- 6.1.1** The desk study data identified two non-statutorily designated site within a 1km radius of the site: Furze Covert Local Wildlife Site (LWS) located approximately 925 metres north-west; and Cantley Park Local Wildlife Site (LWS) located approximately 968 metres north-east. No national or international statutorily designated site were identified within a 5km radius of the site.

Protected and Notable Species

- 6.1.2** The search of the TVERC database revealed a range of protected and/or notable species records; no records were found for the site.
- 6.1.3** A search of MAGIC revealed three granted European Protected Species (EPS) licence applications within a 2 kilometre radius of the site; the nearest bat mitigation licence was granted approximately 250m south-east of the application site, covering the destruction of common pipistrelle (*Pipistrellus pipistrellus*) bats resting place between 2016 and 2021 (Case ref.: 2016-24486-EPS-MIT).
- 6.1.4** The desk study data included 45 recent records of great crested newt (GCN) *Triturus cristatus*) records within a 1km radius of the application site, with the closest being approximately 421 metres south-west. One GCN mitigation licence was granted within a 2km radius; approximately 970 metres south-west of the site. Online mapping shows there to be nine body of standing water that could potentially support breeding GCN within a 500 metre radius of the site; the closest pond is approximately 150m to the north-west, and the second closest pond approximately 230 metres south-east.
- 6.1.5** The NatureSpace GCN Impact Risk Zone map shows the application site falls within an amber risk zone; land in these zones is considered to have

suitable habitat – great crested newts are likely to be present. The site lacks any suitable waterbodies or terrestrial habitats for use by GCNs.

6.1.6 The importance of the site to great crested newts if present within the local ponds is considered likely to be minimal on account of the distance from ponds, barriers to newt movement, and the limited amount of suitable habitat, however, there is adjoining semi-natural habitats to the west and east of the site.

6.1.7 Recommendations for protected/notable species include a sensitive lighting scheme for bats, precautions for amphibians, mammals and reptiles, and biodiversity enhancements.

6.1.8 Baseline Habitats Onsite



Figure 6. Baseline Habitats Plan

6.1.9 The UK Habitat Classification (UKHab) habitat identified on site was: g4 Modified grassland; u1b5 Developed land - sealed surface (Buildings); u1b

Developed land; sealed surface; h3d Bramble Scrub; and hb2 Non-native and ornamental hedgerow.

6.1.10 Condition assessments of each habitat, where applicable, were completed (refer to Statutory_Biodiversity_Metric_Condition_Assessments_LM Park_Toutley_Road (R3116_BNG_a), the following findings were noted:

6.1.11 The modified grasslands were classified as being in moderate condition by meeting four of the condition assessment criteria. One large tree had been felled along the boundary, and the condition assessment defined the habitat in moderate condition.

6.2 Strategic Significance

6.2.1 A Berkshire Local Nature Recovery Strategy has been published in 2025. This shows that the site falls within the area covered by Priority Measure 15 (PM15) within the Plan, that proposes creating uncultivated 25m buffers along watercourses. Therefore, the vegetated zones within the site, which fall within this PM, have been classified as being of high strategic significance.

6.3 Proposed Habitat Onsite

6.3.1 The post-development habitat onsite is derived from the proposed site plan and includes the following minor changes – refer to **Figure 7** below:

6.3.2 The modified grassland will be partially lost to become developed land, sealed surface and introduced shrub to the eastern side of the existing developed land.

6.3.3 The small section of grassland in the north western corner of the site, strip of bramble scrub and non-native hedgerows will be retained.



Figure 7. Post-Development Habitat Plan

6.4 Calculation Result

- 6.4.1** The Biodiversity Metric calculation tool demonstrates that the feasibility of delivering a minimum of 10% onsite net gain for biodiversity is not possible within the scope of the proposals – see metric calculation tool enclosed separately (The_Statutory_Metric_LM Park, Toutley Road (R3116_BNG_a)). The results taken from the tool gives a total onsite net % change of -65.18% in habitat units, 0% in hedgerow units and 0% water units. The tool calculates that there is a deficit of 0.57 in habitat units, 0.02 in hedgerow units and 0.13 in watercourse units to reach a 10% gain – see **Figure 5** above.
- 6.4.2** The on-site post-development habitats do not achieve 10% net gain for habitats. To meet the mandatory requirement of a minimum of 10% net gain for biodiversity, offsite gains will need to be delivered e.g. through an offsite habitat bank on the register of offsite providers.

7 REFERENCES

CIEEM (2021). *Biodiversity Net Gain Report and Audit Templates*. Chartered Institute of Ecology and Environmental Management, Winchester, UK.

DEFRA (updated July 2025). *The Statutory Biodiversity Metric – User Guide*. DEFRA

Gurnell, A.M. et al. (2019) *The Morph Survey: A Modular River Physical Survey for Citizen Scientists - Field Guide*. Modular River Survey, Queen Mary University of London, Environment Agency, Cartographer, UK

UKHab Ltd (2023). *UK Habitat Classification Version 2.0* <https://www.ukhab.org>

Modular River Survey - Frequently Asked Questions: MoRPh Pro & RCA (Website available for trained surveyors)

APPENDIX 1 PROPOSED PLANS



APPENDIX 2 RIVER CONDITION INDICATOR SCORES

River Condition Indicators	Location	Code	Tributary of Em Brook Scores
Bank top vegetation structure	Bank top	B1	2
Bank top tree feature richness	Bank top	B2	0
Bank top water-related features	Bank top	B3	0
Bank top NNIPS cover	Bank top	B4	0
Bank top managed ground cover	Bank top	B5	-4
Bank face riparian vegetation structure	Bank face	C1	4
Bank face tree feature richness	Bank face	C2	2
Bank face natural bank profile extent	Bank face	C3	3
Bank face natural bank profile richness	Bank face	C4	3
Bank face natural bank material richness	Bank face	C5	1
Bank face bare sediment extent	Bank face	C6	4
Bank face artificial bank profile extent	Bank face	C7	0
Bank face reinforcement extent	Bank face	C8	-1
Bank face reinforcement material severity	Bank face	C9	0
Bank face NNIPS cover	Bank face	C10	0
Channel margin aquatic vegetation extent	Channel – water margin	D1	1
Channel margin aquatic morphotype richness	Channel – water margin	D2	1
Channel margin physical feature extent	Channel – water margin	D3	0
Channel margin physical feature richness	Channel – water margin	D4	0
Channel margin artificial features	Channel – water margin	D5	-1
Channel aquatic morphotype richness	Channel bed	E1	0
Channel bed tree features richness	Channel bed	E2	0
Channel bed hydraulic features richness	Channel bed	E3	2
Channel bed natural features extent	Channel bed	E4	0
Channel bed natural features richness	Channel bed	E5	0
Channel bed material richness	Channel bed	E6	1
Channel bed siltation	Channel bed	E7	0
Channel bed reinforcement extent	Channel bed	E8	0
Channel bed reinforcement severity	Channel bed	E9	0
Channel bed artificial features severity	Channel bed	E10	-1
Channel bed NNIPS extent	Channel bed	E11	0
Channel bed filamentous algae extent	Channel bed	E12	0

	Tributary of Em Brook Scores
Average of positive scores	1.26
Average of negative scores	-0.54
Provisional condition score	0.72

