

APPENDICES

Appendices

Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Project Number: WIE19442 (101)

Document Reference: 19442101-WAT-XX-XX-RP-N-700001_C01_A0

A. Competent Experts

Name and Role (Organisation)	Qualifications	Relevant Experience
Lara Knapman Environmental Project Director (Waterman)	BSc (Hons) Geography MAppSci Environmental Management Member of the Chartered Institution of Water and Environmental Management (CIWEM) Chartered Environmentalist (CEnv) Affiliate Member of the Institute of Environmental Management and Assessment	20 years' environmental consultancy experience within a range of industry sectors including transport (road, rail, airports); utilities; renewable energy; flood defence; housing and mixed-use. Experienced in co-ordinating Environmental Impact Assessments and preparing and reviewing Environmental Statements.
Victoria Williams Environmental Project Manager (Waterman)	BSc (Hons) Geography MA Environmental Impact Assessment and Management Practitioner Member of the Institute of Environmental Management and Assessment (PIEMA).	Over 17 years' experience of co-ordinating Environmental Impact Assessments and preparing Environmental Statements within minerals and mining, urban regeneration, retail, commercial, residential, industrial, transportation and highways sectors.
Leila Payne Ecology & Biodiversity (Waterman)	BSc (Hons) Geography MA Environmental Impact Assessment University Certification of Biological Recording Chartered Ecologist (CEcol) Chartered Environmentalist (CEnv) Full member of CIEEM (MCIEEM)	Over 20 years' consultancy experience within a range of industry sectors including overhead power, energy from waste/solar, transport (road, airports, rail (including high speed and light rail)), flood defence, utilities, housing and mixed-use. Leila is highly experienced in working with clients and multi-disciplinary teams to develop project programmes, designing bespoke deliverables specific to project requirements, managing complex projects and coordinating the production of ecology deliverables, identifying appropriate and cost-effective mitigation, gaining the agreement of regulators, procuring and managing sub-contractors, managing projects, including health and safety and supervising implementation on site.
Stephen Henry Flood Risk & Drainage (Waterman)	Meng Civil Engineering CEng MICE	Over 12 years of practical experience in water management including extensive flood risk, hydraulics, hydrology, drainage, SuDS and blue/green infrastructure for within public sector and private residential and commercial sectors.
Tom Hurlstone Landscape & Visual (Waterman)	BA (Hons) Masters of Landscape Architecture (MLA) Chartered Member of the Landscape Institute (CMLI)	Chartered Landscape Architect with 15 years' experience including the preparation and review of Landscape and Townscape Visual Impact Assessments.

Appendices

Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Project Number: WIE19442 (101)

Document Reference: 19442101-WAT-XX-XX-RP-N-700001_C01_A0

Name and Role (Organisation)	Qualifications	Relevant Experience
Anna Barnes Landscape & Visual (Waterman)	BA (Hons Human Geography PGDip Landscape Architecture	Senior Landscape Architect with 15 years' experience including the preparation and review of Landscape and Townscape Visual Impact Assessments.
Lorraine Mayo Archaeology (Buried Heritage) (Lanpro Services Ltd)	BA (Hons) Archaeology MA Archaeology Fellow of the Society of Antiquaries of London (FSA) Member of the Chartered Institute of Archaeologists (MCIFA)	Over 25 years' experience in the archaeology sector, managing archaeological projects, and preparing Cultural Heritage Environmental Statements for a wide range of schemes.
Innes Urbanski Noise & Vibration (Waterman)	MSc Applied Acoustics BSc (Hons) Natural Environmental Sciences Member of the Institute of Acoustics (MIOA) Certificate of competence in workplace noise assessment	Over 20 years' experience in the field of acoustics with extensive experience in undertaking Environmental Impact Assessments ranging from greenfield to brownfield development, residential mixed use, industrial and mineral workings.
Andrew Fowler Air Quality (Waterman)	BSc (Hons), CEnv Member of the IAQM Full Member of the Institution of Environmental Sciences (IES)	Over 14 years' environmental consultancy experience, including the preparation of Air Quality Assessments and ES Chapters. Responsible for the technical delivery of a wide range of air quality projects for a variety of clients in both the public and private sector. These projects include consideration of emissions from both transportation and industrial sources, through both monitoring and modelling, and therefore he has an in depth understanding of the regulatory requirements for these sources and the published technical guidance for their assessment.

Appendices

Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Project Number: WIE19442 (101)

Document Reference: 19442101-WAT-XX-XX-RP-N-700001_C01_A0

B. Ecological Impact Assessment (EcIA)

Appendices

Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Project Number: WIE19442 (101)

Document Reference: 19442101-WAT-XX-XX-RP-N-700001_C01_A0



Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Biodiversity Net Gain Report

January 2025

Waterman Infrastructure & Environment Ltd

5th Floor Alan House Clumber Street Nottingham NG1 3ED
www.watermangroup.com

Client Name: Homes England
Document Reference: WIE19442-103-R_3_2_2
Project Number: WIE19442 (103)

Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Revision	Status	Date	Prepared by	Checked by	Approved by
01	S3	02/12/2024	Vicky Fletcher Principal Ecologist	Leila Payne Senior Associate Assessment	Leila Payne Senior Associate Assessment
02	S5	09/12/2024	Vicky Fletcher Principal Ecologist	Leila Payne Senior Associate Assessment	Leila Payne Senior Associate Assessment

Comments

Revision		Status	
Pnn	Preliminary (shared; non-contractual)	S1	Coordination
Cnn	Contractual	S2	Information
		S3	Review & Comment
		S4	Review & Authorise
		S5	Review & Acceptance
		A0, A1, An	Authorised & Accepted (<i>n</i> =work stage if applicable)

Disclaimer

This report has been prepared by Waterman Infrastructure & Environment Ltd, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

Contents

1. Introduction	1
1.1 Proposed Scheme	1
1.2 Relevant Legislation and Policy	2
1.3 Relationship to the Wider Brookleigh Development.....	2
2. Methodology.....	3
2.1 Defining Biodiversity Net Gain.....	3
2.2 The Statutory Biodiversity Metric.....	3
2.3 Assumptions & Limitations	4
3. Baseline Habitats	5
3.1 Area Habitats	5
3.2 Hedgerows.....	6
3.3 Water courses (Ditches)	6
4. Proposed Habitats	7
4.1 Habitat Loss and Retention	7
4.2 Habitat Enhancement	8
4.3 Habitat Creation.....	9
4.4 Other Ditch Impacts	10
5. Results	11
6. Good Practice Principles for Development	13

Figures

Figure 1: Baseline Habitats

Figure 2: Post-Intervention Habitats

Tables

Table 1: Baseline Area Habitats	5
Table 2: Baseline Hedgerows.....	6
Table 3: Baseline Ditches	6
Table 4: Summary of Existing Biodiversity Units Lost	8
Table 5: Summary of Potential Units Created	10
Table 6: Good Practice BNG Principles	13

Appendices

A. Habitat Condition Assessments

1. Introduction

Waterman Infrastructure & Environment Ltd (Waterman) has been commissioned by Jackson Civil Engineering Group Ltd on behalf of Homes England (hereafter referred to as 'the Applicant') to carry out a Biodiversity Net Gain (BNG) Assessment to support a reserved matters application for new pedestrian and cycle routes. The RMA is pursuant to an outline planning permission for wider mixed-use development on land to the north-west of Burgess Hill (Application Reference: DM/21/3279) (hereafter referred to as 'the Brookleigh Development').

The Applicant intends to provide highways infrastructure improvements, known as Phase 3 of the Western Bridge and Link Road (WBLR Phase 3). The development is subject to a reserved matters application (RMA) and a separate, but concurrent, full application.

The WBLR Phase 3 proposes new pedestrian and cycle routes which will:

- connect the two new WBLR Phase 1 roundabouts on the A2300 ('the A2300 Roundabout') and A273 (Jane Murray Way) ('the A273 Roundabout'), via the roundabout junction connecting the A2300 and A273, known as 'the Triangle Roundabout' (this section of route is located within the outline planning boundary and is subject to a RMA (this planning application), and assessed within this report). These are referred to as 'the RMA Works'; and
- provide a connection between the A273 Roundabout and Gatehouse Lane (this section is outside of the outline planning boundary and is subject to a separate, full planning application).

Together, the works proposed on land within the Brookleigh Development area (Reserved Matters Application) and the land located outside of it (Full Application), are referred to as 'the Proposed Scheme'.

It has been discussed, and agreed with Mid Sussex District Council that a BNG Assessment would only be required to support the RMA.

1.1 The Site and Proposed Scheme

The RMA Works are located on the north-western edge of Burgess Hill, within the administrative boundary of Mid Sussex District Council (MSDC) and is approximately centred on TQ 296 201. The RMA Application Site covers a total area of approximately 3.08 hectares (ha) and consists of modified grassland, mixed scrub, bramble scrub, sparsely vegetated land, a ditch, hedgerows with trees and other broadleaved woodland.

The description of development for the Reserved Matters application is:

"Reserved Matters application pursuant to outline application DM/21/3279 - WBLR Phase 3 (A2300 pedestrian/cycle improvement), comprising the construction of a segregated 2 metre footway and 3 metre cycle track (Green Superhighway) and 2.75 metre verge along the northern side of the A2300, construction of a 3-metre shared use route with up to 1 metre verge along the southern side of the A2300, construction of a 3 metre shared use route along the western side of the A273 Jane Murray Way with up to 2.75 metre verge drainage works, fencing, lighting, landscaping and associated works."

The elements of the Proposed Scheme, within the RMA Application Site include:

- A new segregated footway and cycle track on the north side of the A2300, between the new Link Road roundabout and the Triangle Roundabout. This forms part of the 'Green Superhighway', proposed as part of the Brookleigh development;
- A new shared connection non-motorised users (NMU) on the south and west side of the A2300 and A273, respectively. This shared route connects the two roundabouts on the A2300 and A273 (WBLR Phase 1 works), via the Triangle Roundabout;
- An NMU connection to the future development area;

- Installation of new surface water drainage infrastructure (filter drains, ditch and swale), and adjustments to existing (culverts and headwalls);
- Installation of new street lighting; and
- Landscaping to the north of the A2300.

1.2 Relevant Legislation and Policy

The Environment Act 2021, which was given Royal Assent in November 2021, makes it mandatory to contribute a minimum of 10% net gain for biodiversity as a component of new development in England. This requirement was mandated in February 2024 through the implementation of secondary regulations.

1.3 Relationship to the Wider Brookleigh Development

It has previously been agreed with MSDC that the minimum 10% BNG will be considered throughout the whole Brookleigh Development scheme rather than individual phases such as the RMA Works.

This report has been produced because MSDC require a copy of the BNG calculations so they can keep a “running total” across each of the RM applications that come forward as part of the Brookleigh Development.

Any overall biodiversity losses will be considered in the overarching Brookleigh BNG Assessment which will detail how the Brookleigh Development seeks to deliver 10% BNG. As part of this a management plan for the entire development will be produced.

2. Methodology

2.1 Defining Biodiversity Net Gain

Biodiversity Net Gain (BNG) is defined as a specific, quantifiable outcome of project activities that deliver demonstrable benefits for biodiversity compared to the baseline situation. Achieving BNG means that a project's activities (i.e., the development) leaves biodiversity in a better state than before. It is also an approach where developers work with local governments, wildlife groups, landowners and other stakeholders in order to support their priorities for nature conservation.

This BNG assessment compares the biodiversity value of RMA Application Site baseline habitats with those habitats anticipated to be present following completion of the RMA Works. The following simple calculation is used:

Post-Development Biodiversity – Pre-Development Biodiversity = Biodiversity Net Change.

The aim is to achieve the target net gain of 10% through habitat creation on Site, with off-site provision of biodiversity units where on-site is not possible. As outlined in Section 1, the 10% BNG is being managed as part of the wider Brookleigh Development BNG assessment.

2.2 The Statutory Biodiversity Metric

This assessment has been completed using the Statutory Biodiversity Metric (hereafter referred to as 'the Metric') and has been written in line with current guidance¹. The Metric calculates biodiversity unit scores (which are a proxy for true biodiversity value) and uses these to indicate percentage change in biodiversity as a result of a development.

In line with standard good practice guidance², the ten principles of BNG have been applied to the RMA Works which are intended to inform the process of master planning and development design. These ten principles, when applied together, set out a good practice framework for achieving BNG.

Baseline

Baseline habitat data was collected as part of a desk study and a field survey completed on 9th April 2024, reported in the Ecological Impact Assessment³. The baseline data was collected in line with the UK Habitat Classification System (UK Habs)⁴ as mapped on **Figure 1**. A condition assessment was also undertaken alongside this survey using the condition assessment tools provided with the Metric⁵.

Post-Development

The post development calculations are based on the landscape design for the RMA Application Site and the 'best fit' in terms of UKHabs for the proposed habitats. A CAD version of the landscape design was used to plot the habitats as polygons in GIS and thus calculate areas in hectares for input into the metric.

Areas for new trees were calculated using the Metric 'Urban Tree Helper'. As per guidance, all new trees are entered as small.

¹ Defra 2024, The Statutory Biodiversity Metric User Guide

² CIEEM (2021). Biodiversity Net Gain Report and Audit Templates Chartered Institute of Ecology and Environmental Management, Winchester, UK

³ WIE 19442-103 R 2-2-2 EcIA

⁴ <https://ukhab.org/>

⁵ The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology. July 2024 (v1.0.2)

2.3 Assumptions & Limitations

Baseline habitats have been mapped using a 'Minimum Mappable Unit' area of 25m² applied in line with UK Hab methodology. As such, some small areas of habitat including ground level planters are excluded from the BNG assessment. This will not significantly affect the BNG calculations undertaken as part of this assessment.

Time between losses occurring and the gains being fully realised have not been taken account of in this assessment. Whilst the Metric allows for a timescale with regard to the delay in starting habitat creation on-site, given the nature and scale of the RMA Works any such delays are not considered to be significant (less than 12 months).

The Metric's 'Total Area' and 'Total Units' are rounded to two decimal places, which can create small discrepancies where these are rounded up or down.

It has been assumed the new landscaping under the Applicant's ownership will be subject to a management regime of a minimum of 30 years as per best practice guidance or to a timeframe agreed with the local planning authority as part of BNG Assessment for the wider Brookleigh Development. The mechanism to achieve this is usually completed by a suitably worded pre-commencement planning condition but this is subject to the local planning authority's approach to BNG.

Detail on the assumptions made for the post development habitat conditions, is detailed in the following section.

It is important to note that this report does not define the full detailed methodology for BNG assessment, the guidance documents should be referred to where relevant and if necessary.

Strategic Significance

Burgess Hill is not within the High Weald Area of Outstanding Natural Beauty, or within the South Downs National Park. It does not fall within the 7km Impact Risk zone for the Ashdown Forest SAC/SPA and there are no Local Nature Recovery Strategies or other similar strategies produced for the area. In addition, the habitats are small and located within the highly urban area.

Therefore, the strategic significance for all habitats baseline and proposed is entered as low – 'area/compensation not in local strategy/no local strategy'.

3. Baseline Habitats

This section provides a brief description of the current baseline conditions at the RMA Application Site. Further details of habitat descriptions and photographs can be found in the EcIA report³, included as Appendix B of the Further Environmental Information Report which accompanies the reserved matters planning application. Habitats are mapped and labelled on **Figure 1** and condition assessments are given in **Appendix A**.

3.1 Area Habitats

The medium distinctiveness habitats present within the RMA Application Site include two areas of 'other broadleaved woodland' (OBW1 and OW2), two areas of mixed scrub (MS1 and MS2) and an area of bramble scrub (BS1).

The low distinctiveness habitats present at the Site include modified grassland (MG1 – MG7) and the sparsely vegetated land (ruderal ephemeral vegetation assessed under the urban habitat criteria) U1).

The very low distinctives habitats present at the Site include developed land – sealed surface (U2).

A summary of the habitats present within the Site and their condition is given in **Table 1** below.

Table 1: Baseline Area Habitats

Habitat	Area (ha)	Habitat Distinctiveness	Habitat Condition	Baseline Habitat Units**
Urban: developed land; sealed surface (U2)	0.66	Very Low	N/A*	0.00
Urban: Sparsely vegetated land (U1)	0.53	Low	Poor	1.06
Mixed Scrub (MS1)	0.27	Medium	Moderate	2.16
Mixed Scrub (MS2)	0.09	Medium	Poor	0.36
Bramble Scrub (BS1)	0.02	Medium	N/A	0.08
Other broadleaved woodland (OBW1)	0.13	Medium	Moderate	1.14
Other broadleaved woodland (OBW2)	0.20	Medium	Poor	0.80
Grassland: modified grassland (MG1)	0.68	Low	Moderate	2.72
Grassland: modified grassland (MG2)	0.17	Low	Good	1.02
Grassland: modified grassland (MG3)	0.05	Low	Poor	0.10
Grassland: modified grassland (MG4)	0.09	Low	Poor	0.18
Grassland: modified grassland (MG5)	0.02	Low	Poor	0.04
Grassland: modified grassland (MG6)	0.01	Low	Poor	0.02
Grassland: modified grassland (MG7)	0.02	Low	Poor	0.04
Total area	2.94	-	-	9.73

3.2 Hedgerows

There are two hedgerows with trees within the RMA Application Site. A summary of the hedgerows present and their condition is given in **Table 2** below.

Table 2: Baseline Hedgerows

Habitat	Length (km)	Habitat Distinctiveness	Habitat Condition	Baseline Habitat Units**
Hedgerow with trees (H1)	0.07	Medium	Good	0.89
Hedgerow with trees (H2)	0.04	Medium	Moderate	0.34
Total Length	0.12	-	-	1.23

3.3 Water courses (Ditches)

There are two ditches present within the RMA Application Site and another with a riparian zone that falls within the RMA Application Site.

Ditch D1 runs along the northeast boundary. There is no encroachment into the channel or on the southern bank. The northern bank lies close to a carpark that spans approximately a third of the length and thus encroachment onto one bank is minor.

Riparian zone encroachment is “any feature or intervention within the riparian zone that reduces the quantity, quality or ecological function of the riparian habitat”. The carpark is an unnatural habitat and is thus considered to impact the ecological function of the riparian habitat of ditch D1.

Ditch D3 lies at the southern end of the RMA Application Site near the A237. There are many culverts to this ditch and headwalls, therefore in channel encroachment is considered major. There is, however, no encroachment within the 5m riparian zone on either side of this ditch.

Ditch D2 does not fall within the RMA Application Site boundary but the 5m riparian zone does fall within the RMA Application Site boundary and so it is included in the calculations.

A summary of the ditches present within the RMA Application Site and their condition is given in **Table 3** below.

Table 3: Baseline Ditches

Habitat	Length (km)	Habitat Distinctiveness	Habitat Condition	Baseline Habitat Units**
Ditch D1	0.26	Medium	poor	1.01
Ditch D2	0.07		Moderate	0.58
Ditch D3	0.05		Poor	0.09
Total Length	0.38	-	-	1.69

4. Proposed Habitats

The proposed habitats are mapped on **Figure 2**. The proposed habitats are based on the landscape design by Waterman (Drawing number 19442-WIE-ZZ-XX-DR-C-740101 to 19442-WIE-ZZ-XX-DR-C-740104) and the drainage strategy for the Site (drawing number 19942-WIE-ZZ-XX-DR-C-900522). Proposed soft landscaping habitats as listed in these drawings include:

- Proposed wildflower mix;
- Proposed whip specimens;
- Existing ground flora retained/seeded;
- Proposed tree planting;
- A proposed vegetated swale; and
- A newly created ditch.

What these listed habitats correspond to within the Metric is discussed below.

4.1 Habitat Loss and Retention

Retention

The landscape design displays areas of retained vegetation – this includes part of OBW1 and OBW2, MS1 and MS2. These layers have been used to identify the extent of habitat retention to input into the metric using GIS.

In addition, areas not covered by the landscape design (i.e. not identified as habitat loss/creation or retention but appear blank in the landscape drawings) but that fall within the redline boundary are inputted as retained as it is assumed that these will be left untouched. This includes parts of modified grassland MG1, MG2 and MG4, BS1, some of the ruderal ephemeral habitat (U1) and some of the sealed surface.

All existing sealed surface is inputted as retained.

All of hedgerow H2 will be retained and a majority of hedgerow H1.

Ditch D1 and D2 will be retained.

Loss

All other areas of habitat are lost, with replacement habitat creation proposed either to proposed wildflower mix, swale, or new areas of sealed surface.

Where areas of modified grassland are to be replaced with a wild flower mix, this is inputted as a loss and habitat creation. This is because it is assumed that the area will be removed during construction and ultimately planted up upon the completion of construction within one year (rather than targeted enhancement/ protection and management during the construction period).

Habitats lost to proposed wildflower mix include parts of U1 and OBW2, MG1, MG2, MG3 and MG4.

Habitats lost to sealed surface covers areas of U1 and OBW2.

A small amount of hedgerow H1 will be lost to development.

Ditch D3 will be realigned and is thus entered as lost and recreated.

A summary of habitat losses is given in **Table 4** below.

Table 4: Summary of Existing Biodiversity Units Lost

Habitat	Area/length retained	Area/length lost	Distinctiveness	Condition	Habitat Units Lost
Urban: developed land; sealed surface (U2)	0.66 ha	0 ha	Very low	N/A*	0.00
Urban: Sparsely vegetated land (U1)	0.24 ha	0.29 ha	Low	Poor	0.58
Mixed Scrub (MS1)	0.18 ha	0.09 ha	Medium	Moderate	0.72
Mixed Scrub (MS2)	0.05 ha	0.04 ha	Medium	Poor	0.16
Bramble Scrub (BS1)	0.02 ha	0.00 ha	Medium	N/A	0.00
Other broadleaved woodland (OBW1)	0.10 ha	0.03 ha	Medium	Moderate	0.26
Other broadleaved woodland (OBW2)	0.14 ha	0.03 ha	Medium	Poor	0.26
Grassland: modified grassland (MG1)	0.54 ha	0.14 ha	Low	Moderate	0.56
Grassland: modified grassland (MG2)	0.14 ha	0.03 ha	Low	Good	0.18
Grassland: modified grassland (MG3)	0.02 ha	0.03 ha	Low	Poor	0.06
Grassland: modified grassland (MG4)	0.00 ha	0.00 ha	Low	Poor	0.18
Grassland: modified grassland (MG5)	0.01 ha	0.01 ha	Low	Poor	0.02
Grassland: modified grassland (MG6)	0.01 ha	0.00 ha	Low	Poor	0.00
Grassland: modified grassland (MG7)	0.01 ha	0.01 ha	Low	Poor	0.02
Area Total	2.12 ha	0.82 ha	-	-	2.99
Hedgerow with trees (H1)	0.62 km	0.01 km	Medium	Good	0.14
Hedgerow with trees (H2)	0.04 km	0.00 km	Medium	Moderate	0.00
Hedge Total	0.11km	0.01 km	-	-	0.14
Ditch (D1)	0.26 km	0.00 km	Medium	Poor	0.00
Ditch (D2)	0.07 km	0.00 km	Medium	Moderate	0.00
Ditch (D3)	0.00 km	0.05 km	Medium	Poor	0.09
Ditch Total	0.33 km	0.5 km	-	-	0.09

4.2 Habitat Enhancement

Areas are shown in the landscape design as ‘existing ground flora to be retained’. Patchy areas to be seeded with wildflower mix’ are currently classified as mixed scrub, MS1. Therefore, this ground flora seeding is considered an enhancement to the existing scrub, not a new grassland. This landscape seeding would enable the mixed scrub to pass criteria D in the condition assessment (*“The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and*

adjacent habitat”). However, this would take the pass rate from 4 to 5, therefore, this scrub remains as moderate condition and therefore cannot be inputted as enhanced within the Metric.

The new whip/specimen planting will also be within MS1. Even with the new whip planting within it, this scrub area is still expected to fail criteria E (*“There are clearings, glades or rides present within the scrub, providing sheltered edges”*). in the condition assessment and thus the predicted condition remains as moderate.

4.3 Habitat Creation

The landscape design shows two created habitats (other than those discussed above with regards to habitat enhancement):

- Proposed Wildflower mix; and
- Proposed tree planting.

The Drainage Strategy shows two habitats to be created:

- Vegetated swale; and
- New ditch (D4)

The proposed wildflower mix is likely to be suitable to be considered as an ‘other neutral grassland’. To be such a grassland it has to pass three of the following criteria:

- >20% cover of broadleaved herbs and sedges
- >8 species per sqm (excluding bryophytes)
- ≥ 1 species not generally sown for intensive agricultural production is at least dominant
- Cover of ryegrasses and white clover, if present, is less than 30%

A majority of available wildflower meadow mixes would meet all of these criteria. With appropriate management, these areas are likely to reach moderate condition as shown in **Appendix A**.

Proposed trees are entered as small trees. These trees, if native species are selected, with appropriate management should be able to reach moderate condition as shown in **Appendix A** as they will be oversailing wildflower grassland.

New footways and cycle ways and tactile paving are inputted as sealed surface. The filter drain (stone filled trench) is inputted as artificial, unvegetated unsealed surface.

Impacts to the existing ditches, creation of a swale and creation of a new length of ditch are proposed as part of the Proposed Drainage Overview Plan (drawing number 19942-WIE-ZZ-XX-DR-C-900522).

The swale is described as a vegetated open channel in the Drainage Strategy. There is no landscape specification for this and therefore, this habitat has been entered as urban – SUDs in poor condition as shown in **Appendix A**.

A new ditch (D4) will be created to provide a connection between the swale and the existing ditch D2 (D2 is not within the redline boundary). As no landscaping or planting scheme has been designed for this habitat, the condition is likely to be poor as shown in **Appendix A**.

Ditch D3 will be realigned. This ditch is therefore inputted as lost and recreated. The recreated ditch will have no in-channel encroachment as the existing culverts will not feature in the new sections. The condition is assumed to be the same (poor) as no other works are proposed to this ditch, other than, post development, it will be surrounded by wildflower grassland rather than scrub. This will mean the shading criteria will be passed but this still only results in the ditch passing of three instead of two criteria and this remains in poor condition. The removal of in channel encroachment is considered an enhancement.

Encroachment is “any feature or action that adversely affects the natural function of the watercourse, or results in localised changes in habitat, species and migratory pathways”. The existing culverts within ditch 3 impact the natural function of the ditch and thus removing them, removes the encroachment.

A summary of the created habitats is given in **Table 5** below.

Table 5: Summary of Potential Units Created

Habitat	Habitat Distinctiveness	Habitat Condition	Area/length Created	Habitat Units Created
Grassland: Other neutral grassland	Medium	Moderate	0.65 ha	3.72
Individual trees: urban trees (6 in total)	Medium	Moderate	0.02 ha	0.07
Urban: sealed surface	V.Low	N/A	0.82 ha	0.00
Urban: artificial unvegetated, unsealed surface	V.Low	N/A	0.001 ha	0.00
Urban: Sustainable drainage strategy	Low	Poor	0.03 ha	0.03
Total without trees	-	-	0.83 ha	-
Total with trees	-	-	0.85 ha	3.83
Ditch (D4)	Medium	Poor	0.04 km	0.11
Ditch (D3)	Medium	Poor	0.04 km	0.11
Ditch Total				0.23

4.4 Other Ditch Impacts

Ditch D1 will be cleared and reprofiled with obstructions removed. As this ditch is already in poor condition, it has left as retained as the works cannot ‘degrade’ this ditch.

5. Results and Conclusion

5.1 Results

The existing baseline value of the RMA Application Site is:

- 9.73 habitat units;
- 1.23 hedgerow units; and
- 1.69 watercourse (ditch) units.

The post development value of the RMA Application Site is:

- 10.57 habitat units (0.84 unit and 8.67% gain);
- 1.09 hedgerow units (0.14 unit and 11.4% loss); and
- 1.82 watercourse (ditch) units (0.13 unit and 7.93% gain).

A screenshot of the headline results is given below. These results will be part of the overall BNG assessment for the entire Brookleigh Development.

WBLR Phase 3, Burgess Hill		Return to results menu	
Headline Results			
Scroll down for final results ▲			
On-site baseline	Habitat units	9.73	
	Hedgerow units	1.23	
	Watercourse units	1.69	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	10.57	
	Hedgerow units	1.09	
	Watercourse units	1.82	
On-site net change (units & percentage)	Habitat units	0.84	8.67%
	Hedgerow units	-0.14	-11.40%
	Watercourse units	0.13	7.93%
		On-site net gain is less than target set ▲	
		On-site net gain is less than target set ▲	
		On-site net gain is less than target set ▲	
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.84	
	Hedgerow units	-0.14	
	Watercourse units	0.13	
Spatial risk multiplier (SRM) deductions	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
FINAL RESULTS			
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.84	
	Hedgerow units	-0.14	
	Watercourse units	0.13	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	8.67%	Total net gain achieved is less than target set ▲
	Hedgerow units	-11.40%	Total net gain achieved is less than target set ▲
	Watercourse units	7.93%	Total net gain achieved is less than target set ▲
Trading rules satisfied?	No - Check Trading Summaries ▲		

5.2 Conclusions

The calculations for the RMA Works are to feed into an overall BNG assessment for the wider Brookleigh Development.

The proposed habitat conditions are based on assumptions on management that would be inputted to the Habitat Management and Maintenance Plan (HMMP) for the Brookleigh Development.

The proposed trees reaching moderate condition is achievable whatever the management is post development as long as native species are planted and they are oversailing other vegetation.

The moderate condition of the Proposed Wildflower Grassland (other neutral grassland in the metric) does require specific management and monitoring. If, when the HMMP is produced, moderate condition for the other neutral grassland is not considered feasible for the RMA Works, then the Metric would require a re-run with a target 'poor' condition and post development units would reduce.

All other habitats (the swale and the newly created ditch) are inputted as poor condition and thus post development management are unlikely to alter this conservative estimate.

The discrepancies in trading standards and shortage of units to achieve 10% net gain for habitat and watercourse units (highlighted in red in the screenshot above) will be addressed in the wider Brookleigh Development BNG strategy.

6. Good Practice Principles for Development

The RMA Works has considered and incorporated the 10 Biodiversity Net Gain Good Practice Principles⁶. How this has been achieved is described in **Table 6** below.

Table 6: Good Practice BNG Principles

Principle	Definition	Evidence
Principle 1. Apply the Mitigation Hierarchy	Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.	As much of the medium distinctiveness habitats have been retained as possible whilst still retaining feasibility of the scheme. New habitats to be created have been selected to have the highest biodiversity value feasible in a scheme of this type.
Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere	Avoid impacts on irreplaceable biodiversity - these impacts cannot be offset to achieve No Net Loss or Net Gain.	No irreplaceable habitats were identified within the Site and no mature trees are to be lost
Principle 3. Be inclusive and equitable	Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible, and share the benefits fairly among stakeholders.	This BNG is submitted as part of the planning application submission. Stakeholders have been informed early, and involved in the designing, implementing, monitoring, and evaluating approach to Net Gain.
Principle 4. Address risks	Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.	Time between losses occurring and the gains being fully realised have not been taken account of in this assessment as the timescales of delivery in relation to the wider Brookleigh Development BNG assessment is unknown. Habitats appropriate to the area and scheme type have been selected, rather than high distinctiveness habitats that are unlikely to be achieved. A management plan will be created and implemented as part of the wider Brookleigh Development BNG to mitigate the risks of not achieving a Net Gain.
Principle 5. Make a measurable Net Gain contribution	Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.	A measurable, overall gain for biodiversity will be calculated and achieved for the entire Brookleigh Development.
Principle 6. Achieve the best outcomes for biodiversity	Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when: Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses. Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature	No important ecological features or ecologically distinctive habitats were identified within the RMA Application Site. The tree species chosen will be native and the grassland mixes will be as diverse as possible.

⁶ Biodiversity Net Gain: Good practice principles for development © CIEEM, CIRIA, IEMA, 2016.

Principle	Definition	Evidence
	conservation. Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels Enhancing existing or creating new habitat Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity	
Principle 7. Be additional	Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).	Due to the retention of a majority of the scrub and woodland, the diversity of grassland that can be created and the enhancement measures for the scrub, botanical diversity within the RMA Application Site will naturally be increased.
Principle 8. Create a Net Gain legacy	Ensure Net Gain generates long-term benefits by: Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity; Planning for adaptive management and securing dedicated funding for long-term management; Designing Net Gain for biodiversity to be resilient to external factors, especially climate change; Mitigating risks from other land uses; Avoiding displacing harmful activities from one location to another; and Supporting local-level management of Net Gain activities	A 30 year Habitat Management and Maintenance Plan will be created with input from stakeholders to agree practical solutions to ensure a Net Gain is maintained across the wider Brookleigh Development. Details of funding for long-term management will be agreed and detailed within the management plan
Principle 9. Optimise sustainability	Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.	BNG has been prioritised throughout the whole design process of the RMA Works and this will optimise the wider environmental benefits.
Principle 10. Be transparent	Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.	This BNG Assessment will be shared with the project team and will be submitted as part of the consenting process for the RMA Application Site, and used to inform future BNG Assessments for the wider Brookleigh Development.

Appendices

A. Habitat Condition Assessments

Baseline Habitats

Table A1: Baseline Grassland Condition Assessment

Criteria		MG1	MG2	MG3	MG4	MG5
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition.	Pass	Pass	Fail	Fail	Fail
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	Pass	Pass	Fail	Fail	Fail
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present).	Pass	Pass	Pass	Pass	Pass
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Fail	Pass	Fail	Fail	Fail
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	Fail	Pass	Pass	Pass	Pass
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Pass	Pass	Pass	Pass	Pass
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	Pass	Pass	Pass	Pass	Pass
Condition		Mod.	Good	Poor	Poor	Poor
Passes 6 or 7 criteria including passing essential criterion A - Good Passes 4 or 5 criteria including passing essential criterion A - Moderate Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A) - Poor						

Table A2: Baseline Woodland Assessment

Criteria	Scores 3	Scores 2	Scores 1	OBW1	OBW2
A Age distribution of trees	Three age-classes present.	Two age-classes present.	One age-class present.	2	1
B Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in less than 40% of whole woodland.	Evidence of significant browsing pressure is present in 40% or more of whole woodland.	3	2
C Invasive plant species	No invasive species present in woodland.	Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, other invasive species <10% cover.	Rhododendron or cherry laurel present, or other invasive species ≥10% cover.	3	3

Appendices

Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Document Reference: WIE19442 (103)

WIE19442-103-R_3_2_2

Criteria		Scores 3	Scores 2	Scores 1	OBW1	OBW2
D	Number of native tree species	Five or more native tree or shrub species found across woodland parcel.	Three to four native tree or shrub species found across woodland parcel.	Two or less native tree or shrub species across woodland parcel.	3	3
E	Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native.	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native.	<50% of canopy trees and <50% of understory shrubs are native.	3	3
F	Open space within woodland	10 - 20% of woodland has areas of temporary open space. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted.	21 - 40% of woodland has areas of temporary open space.	<10% or >40% of woodland has areas of temporary open space. But if woodland <10ha has <10% temporary open space, please see Good category.	2	1
G	Woodland regeneration	All three classes present in woodland; trees 4 - 7 cm Diameter at Breast Height, saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland.	No classes or coppice regrowth present in woodland.	2	1
H	Tree health	Tree mortality 10% or less, no pests or diseases and no crown dieback.	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present.	Greater than 25% tree mortality and or any high-risk pest or disease present.	3	3
I	Vegetation and ground flora	Recognisable NVC plant community at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community at ground layer present.	No recognisable woodland NVC plant community at ground layer present.	1	1
J	Woodland vertical structure	Three or more storeys across all survey plots, or a complex woodland.	Two storeys across all survey plots.	One or less storey across all survey plots.	2	1
K	Veteran trees	Two or more veteran trees per hectare.	One veteran tree per hectare.	No veteran trees present in woodland.	1	1

Appendices

Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Document Reference: WIE19442 (103)

WIE19442-103-R_3_2_2

Criteria	Scores 3	Scores 2	Scores 1	OBW1	OBW2
L Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities.	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities.	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities.	3	2
M Woodland disturbance	No nutrient enrichment or damaged ground evident.	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground.	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground.	3	3
Total Score				31	25
Condition				Mod.	Poor
Total score >32 (33 to 39) - Good					
Total score 26 to 32 - Moderate					
Total score <26 (13 to 25) - Poor					

Table A3: Baseline Ruderal/Ephemeral Habitat Condition Assessment

Criteria	U1
A Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	Fail
B The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Fail
C Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Fail
Condition	Poor
Passes all 3 core criteria; AND Meets the requirements for Good condition within criterion C - Good	
Passes 2 of 3 core criteria; OR Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C. - Moderate	
Passes 0 or 1 of 3 core criteria. - Poor	

Table A4: Baseline Scrub Condition Assessment

Appendices

Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Document Reference: WIE19442 (103)

WIE19442-103-R_3_2_2

Criteria	MS1	MS2	BS1	
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). - At least 80% of scrub is native, - There are at least three native woody species, - No single species comprises more than 75% of the cover (except hazel <i>Corylus avellana</i> , common juniper <i>Juniperus communis</i> , sea buckthorn <i>Hippophae rhamnoides</i> (only in its restricted native range), or box <i>Buxus sempervirens</i> , which can be up to 100% cover).			
B	Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	Pass	Fail	N/A
C	There is an absence of invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA5) and species indicative of suboptimal condition ⁶ make up less than 5% of ground cover.	Pass	Pass	N/A
D	The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	Fail	Fail	N/A
E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Fail	Fail	N/A
Condition	Mod.	Poor	N/A	
Passes 5 criteria - Good Passes 3 or 4 criteria - Moderate Passes 2 or fewer criteria - Poor				

Table A5: Baseline Hedgerow Condition Assessment

Criteria	H1	H2
A1	Height	
	>1.5 m average along length	
A2	Width	
	>1.5 m average along length	
B1	Gap – Hedge base	
	Gap between ground and base of canopy <0.5 m for >90% of length	
B2	Gap – hedgerow canopy continuity	
	Gaps make up <10% of total length; and	
C1	Undisturbed ground and perennial vegetation	
	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length:	
	· Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	
C2	Nutrient enriched perennial vegetation	
	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	
D1	Invasive and Neophyte Species	
	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA3) and recently introduced species.	
D2	Current Damage	
	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	
E1	Tree Class	

Appendices

Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Document Reference: WIE19442 (103)

WIE19442-103-R_3_2_2

Criteria		H1	H2
There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient ⁸), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.			
E2	Tree Health At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Pass	Pass
Condition		Good	Moderate
No more than 2 failures in total; AND No more than 1 failure in any functional group. - Good			
No more than 5 failures in total; AND Does not fail both attributes in more than one functional group. - Moderate			
Fails a total of more than 5 attributes; OR Fails both attributes in more than one functional group. - Poor			

Table A6: Baseline Ditch Condition Assessment

Criteria		D1	D2	D3
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Fail	Pass	Fail
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	Fail	Pass	Pass
C	There is less than 10% cover of filamentous algae and or duckweed Lemna spp. (these are signs of eutrophication).	Pass	Pass	Fail
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	Fail	Pass	Fail
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Fail	Pass	Fail
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	Pass	Pass	Fail
G	Less than 10% of the ditch is heavily shaded.	Fail	Fail	Fail
H	There is an absence of non-native plant and animal species.	Pass	Pass	Pass
Condition		Poor	Moderate	Poor
Passes 8 criteria - Good				
Passes 6 or 7 criteria - Moderate				
Passes 5 or fewer criteria - Poor				

Table A7: Proposed Other Neutral Grassland Condition Assessment

Criteria		Pass/ Fail
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type Note - this criterion is essential for achieving Moderate or Good condition for non-acid	Pass

Appendices

Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Document Reference: WIE19442 (103)

WIE19442-103-R_3_2_2

Criteria		Pass/ Fail
	grassland types only.	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Pass
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.	Fail
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Pass
E	Combined cover of species indicative of suboptimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.	Fail
Additional Criteria for non Acid Grassland Only		
F	There are 10 or more vascular plant species per m2 present, including forbs that are characteristic of the habitat type Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	Pass
Condition		Moderate
Passes 5 or 6 criteria, including essential criterion A and additional criterion F - Good		
Passes 3 - 5 criteria, including essential criterion A - Moderate		
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F - Poor		

Table A8: Proposed Urban Tree Condition Assessment

Criteria		Pass/Fail
A	The tree is a native species (or at least 70% within the block are native species).	Pass
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Pass
C	The tree is mature (or more than 50% within the block are mature).	Fail
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Fail
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Fail
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Pass
Condition		Moderate
Passes 5 or 6 criteria - Good		
Passes 3 or 4 criteria - Moderate		
Passes 2 or fewer criteria - Poor		

Table A9: Proposed SUDs Habitat Condition Assessment

Criteria		Pass/ Fail
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more	Fail

Appendices

Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Document Reference: WIE19442 (103)

WIE19442-103-R_3_2_2

Criteria		Pass/ Fail
	than 80% of the total habitat area.	
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Fail
C	Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area. Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Fail
Additional Criteria - must be assessed for Bioswale and SuDS habitat types only		
E1	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife.	Fail
E2	The vegetation is comprised of plant species suited to wetland or riparian situations.	Fail
Condition		Poor
Passes all 3 core criteria; AND Meets the requirements for Good condition within criterion C; AND Passes all additional criteria relevant to specific habitat type (Group E) – Good. Passes 3 or 4 of 5 criteria; OR Passes 5 of 5 criteria but does not meet the requirements for Good condition within criterion C- Moderate. Passes 2 or fewer of 5 criteria – Poor.		

Table A10: New Ditch Proposed Habitat Condition Assessment

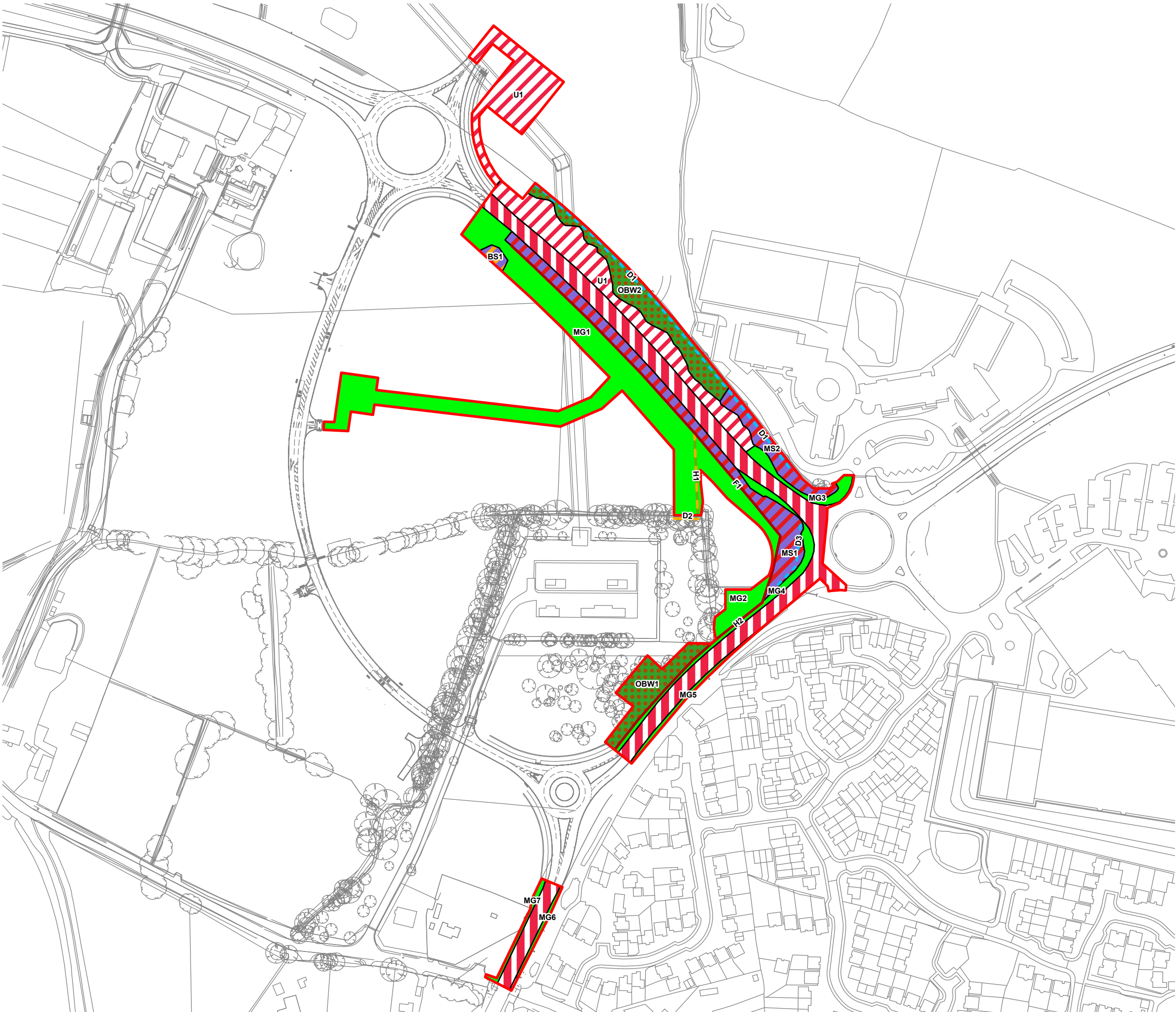
Criteria		D3 (realigned)	D4
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Fail	Fail
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	Fail	Fail
C	There is less than 10% cover of filamentous algae and or duckweed Lemna spp. (these are signs of eutrophication).	Pass	Pass
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	Fail	Fail
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Fail	Pass
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	Fail	Fail
G	Less than 10% of the ditch is heavily shaded.	Pass	Fail
H	There is an absence of non-native plant and animal species.	Pass	Pass
Condition		Poor	Poor
Passes 8 criteria - Good Passes 6 or 7 criteria - Moderate Passes 5 or fewer criteria - Poor			

Appendices

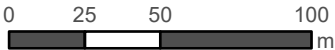
Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Document Reference: WIE19442 (103)

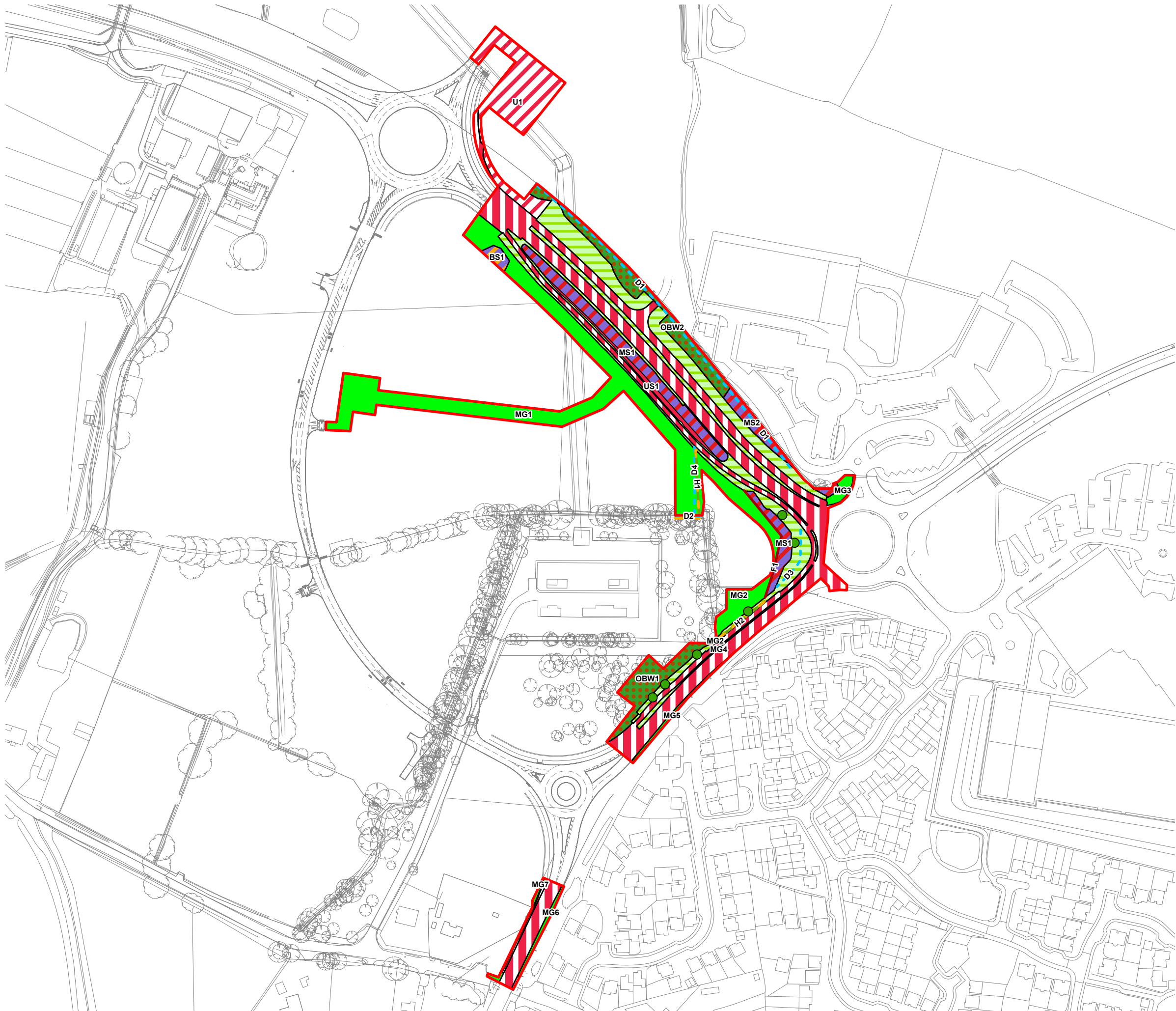
WIE19442-103-R_3_2_2



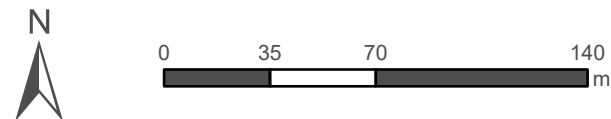
- Site Boundary (2.933Ha)
- Baseline Habitats**
- g4 - Modified grassland (1.035Ha)
 - h3d - Bramble scrub (0.016Ha)
 - h3h - Mixed scrub (0.367Ha)
 - u1b - Developed land; sealed surface (0.648Ha)
 - u1f - Sparsely vegetated land (0.532Ha)
 - w1g - Other woodland; broadleaved (0.335Ha)
 - h2a6 - Other native hedgerow (0.117km)
 - r50 - Ditch (0.322km)
 - u1e - Built linear feature (0.453km)



Project Details	WIE19442-103: Burgess Hill
Figure Title	Figure 1: Baseline Habitats
Figure Ref	WIE19442-103_GIS_BNG_1D
Date	November 2024
File Location	N:\Projects\WIE19442-103\GIS\WIE19442-103_GIS_EC



- Site Boundary (2.933Ha)
- Post-Intervention Retained Existing Habitats**
- g4 - Modified grassland (0.725Ha)
 - h3d - Bramble scrub (0.016Ha)
 - h3h - Mixed scrub (0.233Ha)
 - u1f - Sparsely vegetated land (0.239Ha)
 - w1g - Other woodland; broadleaved (0.232Ha)
 - h2a6 - Other native hedgerow (0.106km)
 - r50 - Ditch (0.275km)
 - u1e - Built linear feature (0.082km)
- Post-Intervention Habitats Created / Enhanced**
- u1b - Developed land; sealed surface (0.902Ha)
 - g3c - Other neutral grassland, SC 200 Tree (0.559Ha)
 - u - Urban, SC 848 (SUDS) (0.027Ha)
 - r50 - Ditch (0.088km)
 - Post-Intervention Trees (6No.)



Project Details	WIE19442-103: Burgess Hill
Figure Title	Figure 2: Post-Intervention Habitats
Figure Ref	WIE19442-103_GIS_BNG_2D
Date	November 2024
File Location	N:\Projects\WIE19442-103\9_GIS\WIE19442-103_GIS_EC

www.watermangroup.com

C. Consultation Response from WSCC Archaeology Advisor

From: Mark Baister - Historic Environment Consultant <[REDACTED]>
Sent: Thursday, November 28, 2024 10:12 am
To: Natalie Wood <[REDACTED]>
Subject: RE: Western Bridge and Link Road (Phase 3) - Heritage Review

Hi Natalie,

Thanks for sending this over – given the limited nature of the proposed groundworks and the likely disturbance from the existing roadway, I'd be fine with no archaeological mitigation being undertaken for these specific works.

Kind regards,

Mark

Mark Baister, BA MCIfA
Historic Environment Consultant

Email: [REDACTED]

Tel: [REDACTED]

Mob: [REDACTED]

Place Services, E4 Zone 3, County Hall, Market Street,
Chelmsford, Essex, CM1 1QH

www.placeservices.co.uk

www.linkedin.com/company/place-services



Appendices

Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Project Number: WIE19442 (101)

Document Reference: 19442101-WAT-XX-XX-RP-N-700001_C01_A0

From: Natalie Wood <[REDACTED]>
Sent: Wednesday, November 27, 2024 1:34 PM
To: Mark Baister - Historic Environment Consultant <[REDACTED]>
Subject: FW: Western Bridge and Link Road (Phase 3) - Heritage Review

Good afternoon Mark,

I am currently undertaking a heritage review of a Further Environmental Information Report (FEIR) on behalf of Waterman, for a site at Burgess Hill: Phase 3 which relates to the provision of a shared footway and cycleway over a distance of approximately 500m. Within the report, there is a recommendation to consult with the county archaeologist to establish whether any further archaeological works would be required to support the RMA.

The assessment established that there was low potential for archaeological remains within the site and that the Phase 3 construction and operation impacts would be negligible as they are minimal. The proposed groundworks will be limited, and will be contained within made ground deposits forming the embankment of the existing roadway constructed in the 1990's. It has been concluded that no mitigation works are proposed but I wanted to check that you are happy with this approach

Please see attached the general arrangement plan

Let me know if you need anything else

Kind regards

Natalie

Natalie Wood

Senior Historic Environment Consultant

M: [REDACTED]

T: [REDACTED]

W: Lanpro.co.uk



Planning | Design | Environment

Appendices

Western Bridge and Link Road (WBLR) Phase 3 (Brookleigh, Burgess Hill)

Project Number: WIE19442 (101)

Document Reference: 19442101-WAT-XX-XX-RP-N-700001_C01_A0

Our vision

“Engineering a better environment for people and the planet”

Our mission

“To solve complex problems for the benefit of clients, communities and the climate”

Our values

People orientated

Individually and collectively, people are our business. We strive to create environments for everyone to flourish and thrive.

Flexible

Pragmatic by nature and dedicated to getting the job done to the highest possible standard.

Professional

Operating at pace with integrity to deliver technical and robust solutions.

Environmentally aware

We understand our responsibility to the environment, it shapes our decision making and informs our practice.

Innovative

Our forensic questioning provides the ability to deliver appropriate innovations at every stage on every project.

Relationship focused

We value individuality and the benefits of working collaboratively to achieve positive outcomes for all.

