

**QINETIQ SITE, FORT HALSTEAD,
KENT**

BIODIVERSITY NET GAIN ASSESSMENT

A Report to: QinetiQ

Report No: RT-MME-153844-02 Rev B

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REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development".

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The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

DISCLAIMER

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1. INTRODUCTION

1.1 PROJECT BACKGROUND

In November 2020 QinetiQ commissioned Middlemarch Environmental Ltd to undertake a Biodiversity Net Gain Assessment associated with the strategic redevelopment of QinetiQ owned land within Fort Halstead. A full description of the proposals is provided in Section 1.3.

A range of ecological surveys were completed by Waterman Group between 2006 and 2013 and by Middlemarch Environmental Ltd in 2018, with further updated surveys in 2020, to inform a separate hybrid planning application associated with the redevelopment of the wider Fort Halstead site. Land surveyed as part of these assessments included QinetiQ owned land.

Middlemarch Environmental Ltd was subsequently instructed to undertake a full suite of targeted surveys of the QinetiQ owned land in 2020, comprising:

- Preliminary Arboricultural Assessment (Report RT-MME-150872-01);
- Arboricultural Impact Assessment (Report RT-MME-150872-02 Rev B) ;
- Preliminary Ecological Appraisal (Report RT-MME-150872-03 Rev B);
- Preliminary Bat Roost Assessment (Report RT-MME-150872-04 Rev B);
- Badger Survey (Report RT-MME-150872-05 Rev B); and,
- Dusk Emergence and Dawn Re-Entry Bat Surveys (Report RT-MME-153340-01 Rev C).

An Ecological Mitigation Strategy (Report RT-MME-150872-06 Rev B), a separate Bat Protection Strategy (Report RT-MME-150872-08 Rev B) relating to Building X78 and a separate Bat Mitigation Strategy (Report RT-MME-153704-01 Rev B) relating to Building X9 have also been prepared.

Middlemarch Environmental Ltd has also compiled a Construction Ecological Management Plan (CEcMP, Report RT-MME-153844-01 Rev C) and a Landscape and Ecological Management Plan (LEMP, Report RT-MME-153844-03 Rev B).

To establish the habitat baseline of the site, a Phase 1 Habitat Survey was completed as part of the Preliminary Ecological Appraisal (Report RT-MME-150872-03 Rev B). The projected impacts upon the baseline habitats as a result of the development proposals and the potential for achieving biodiversity net gain through habitat creation and enhancement were calculated using the 'The Biodiversity Metric 2.0' published by Natural England in 2019.

Habitat enhancement and creation measures have been based on the 'Proposed Site Plan' prepared by Baker Hicks, which has allowed a comparison to be made between the site's existing biodiversity value and the projected biodiversity value on completion of the scheme.

1.2 SITE DESCRIPTION AND CONTEXT

The wider Fort Halstead site is located off Star Hill Road in Halstead, Kent, centred at National Grid Reference TQ 4970 5922. It is an irregular shaped parcel of land that measures 131.89 ha in size. The wider Fort Halstead site is bordered by the A224 Polhill to the north-east and Star Hill Road to the south-west. A mixture of arable and pastoral fields, pockets of woodland and farm buildings surround the site. The wider landscape is dominated by a rural setting, consisting of agricultural land interspersed with pockets of woodland and small settlements.

The planning application site extends to 15.8 ha and sits within the wider Fort Halstead site. The site is known as the QinetiQ enclave and is located on the southern-most boundary of the wider Fort Halstead site. The application site is bound by Crow Road to the north, the Scheduled Ancient Monument to the east, ancient woodland to the west and the existing site perimeter fence to the south.

At the time of the survey, the QinetiQ enclave comprised a defence research facility which contained a number of buildings with associated areas of hardstanding, surrounded by parcels of semi-natural and plantation woodland. Areas of neutral grassland, calcareous grassland and amenity grassland were also present, as well as patches of scrub and tall ruderal vegetation.

1.3 DESCRIPTION OF DEVELOPMENT

The proposals for the site are as follows:

Works to the proposed QinetiQ enclave comprising the erection of perimeter security fence, erection of a new reception building, creation of a new main site entrance along Crow Road, refurbishment of existing buildings including plant installation, creation of a new surface level car park and access, installation of two new explosive magazine stores and surrounding pendine block walls, demolition of existing buildings, installation of 6no. storage containers, installation of new site utilities and landscaping works.

1.4 DOCUMENTATION PROVIDED

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.1.

Document Name / Drawing Number	Author
Proposed Site Plan / 30002236-BHK-00-XX-DR-A-003	Baker Hicks

Table 1.1: Documentation Provided by Client

2. METHODOLOGY

2.1 ESTABLISHING THE HABITAT BASELINE

A baseline biodiversity value for the site was established through a Phase 1 Habitat Survey, carried out by Middlemarch Environmental Ltd in August 2020.

The walkover survey was conducted following the Phase 1 Habitat Survey methodology of the Joint Nature Conservation Committee (JNCC, 2010¹) and the Institute of Environmental Assessment (IEA, 1995²). Phase 1 Habitat Survey is a standard technique for classifying and mapping British habitats. The aim is to provide a record of habitats that are present on site.

2.2 CALCULATION OF NET LOSS/GAIN

The calculation was undertaken using 'The Biodiversity Metric 2.0' published by Natural England (2019³). The metric uses habitat as a proxy for wider biodiversity. Each habitat is scored according to its relative biodiversity value. This value is then adjusted depending on various factors (such as the condition and location of the habitat), to calculate the 'biodiversity units' for each habitat.

2.2.1 Calculating the On-Site Baseline

Each habitat type recorded on site and the respective areas (in hectares) are entered into the calculator. The Biodiversity Metric 2.0 calculator requires habitats present on site to be described using the UKHabs Classification System and includes a tool to translate Phase 1 habitats into UKHabs habitats.

Habitats are assigned scores for 'Distinctiveness', 'Condition', 'Strategic Significance' and 'Connectivity':

- **Distinctiveness** – An automated score based on the type of habitat present. Highly diverse habitats such as those listed as Habitats of Principal Importance under the NERC Act (2006) or Annex 1 habitats in the Habitats Directive (1992) score highly in this category whilst highly modified and low diversity habitats such as arable crops will have low distinctiveness scores.
- **Condition** – A score based on the quality of the habitat parcel. Condition criteria for different habitat types are given in the Metric 2.0 Technical Supplement (Crosher et al, 2019⁴) and condition is assessed using these criteria during the baseline survey.
- **Connectivity** – A score based on the relationship of a habitat patch to similar or related habitat patches. For this version of the metric, a default value of 'low' connectivity is used, except for high or very high distinctiveness habitats which are scored as 'Medium'.
- **Strategic significance** – A score based on information set out in local plans or policies.

The metric includes a 'Street tree helper', which allows numbers of trees to be converted to an area in hectares. Trees are categorised as 'small', 'medium' or 'large'. For the purposes of this assessment, categories assigned during the Preliminary Arboricultural Assessment (Report RT-MME-150872-01) have been translated as follows:

- Category A trees (those of high quality with an estimated remaining life expectancy of at least 40 years) are defined as 'large';
- Category B trees (those of moderate quality with an estimated remaining life expectancy of at least 20 years) have been defined as 'medium' and;
- Category C trees (those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm) have been defined as 'small'.

Including individual trees within the calculation accounts for their value to wildlife. It is accepted that trees will often occupy the same 'space' as other habitats (such as grassland) which will also be included within the calculation. As such, when trees are included within the metric, the total area of habitats may be greater than the actual area of the site within the red-line boundary.

¹ JNCC. (2010). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit*. Joint Nature Conservation Committee, Peterborough.

² IEA. (1995). *Guidelines for Baseline Ecological Assessment*, Institute of Environmental Assessment. E&FN Spon, An Imprint of Chapman and Hall, London.

³ Natural England. (2019). *The Biodiversity Metric 2.0 (JP029)*

⁴ Crosher, I., Gold, S., Heaver, M., Heydon, M., Moore, L., Panks, S., Scott, S., Stone, D. and White, N. (2019). *The Biodiversity Metric 2.0: Auditing and accounting for biodiversity value: technical supplement* (Beta version, July 2019). Natural England

2.2.2 Calculating the Post-Development Changes

Data is entered for habitats that will be created, and those that will be retained and enhanced. Habitats are assigned scores for 'Distinctiveness', 'Condition', 'Strategic Significance' and 'Connectivity'. Because the calculation of post-development value requires some degree of prediction based on professional judgement, additional risk factors are included in the calculation to account for the difficulty in restoring or creating habitats and the time it takes for enhanced or created habitats to reach the predicted level of quality.

For the purposes of this assessment, proposed trees are assigned a size category of 'medium'.

2.2.3 Limitations of the Metric

It should be noted that the metric is only a proxy for biodiversity and that any proposed mitigation or compensation should be designed using appropriate ecological expertise and common sense. Existing levels of protection afforded to protected species and to habitats are not changed by use of the metric and statutory obligations will still need to be satisfied. In addition, the metric cannot account for impacts on, or enhancements to, irreplaceable habitats or protected sites, which will need to be assessed separately.

3. BIODIVERSITY NET GAIN ASSESSMENT

3.1 EXISTING HABITATS

The existing habitats are described in Table 3.1 and their value in biodiversity units provided. The full assessment is provided in Appendix 1.

Phase 1 Habitat	UKHabs Habitat	Area (ha)	Description (distinctiveness, condition, connectivity and strategic significance)	Value (Biodiversity Units)
Irreplaceable Habitats				
Ancient woodland		0.91	A portion of the semi-natural broadleaved woodland within the QinetiQ site is classified as 'Ancient and Semi-Natural Woodland'. It is defined as an irreplaceable habitat as it takes hundreds of years to establish.	n/a ¹
Area Based Habitats				
Semi-natural broadleaved woodland	Lowland mixed deciduous woodland	3.14	This habitat is automatically classed as being of 'High' distinctiveness, and is by default classed as having 'Medium' ecological connectivity. Based on the 2020 Phase 1 Habitat Survey (see Report RT-MME-150872-03 Rev B), this habitat has been classed as being in 'Moderate' condition. The full condition assessment is provided in Appendix 2. 'Woodland and Scrub' is a Kent Biodiversity Action Plan (BAP) habitat. This habitat has therefore considered to be of 'High' strategic significance.	47.67
Unimproved calcareous grassland	Lowland calcareous grassland	3.85	This habitat is automatically classed as being of 'High' distinctiveness, and is by default classed as having 'Medium' ecological connectivity. Based on the 2020 Phase 1 Habitat Survey (see Report RT-MME-150872-03 Rev B), this habitat has been classed as being in 'Moderate' condition. The full condition assessment is provided in Appendix 2. 'Chalk grassland' is a Kent Biodiversity Action Plan (BAP) habitat. This habitat has therefore considered to be of 'High' strategic significance.	58.44
Other habitat	Suburban / mosaic of developed/ natural surface	8.03	This habitat is automatically classed as being of 'Low' distinctiveness, and is by default classed as having 'Low' ecological connectivity. It is deemed to be in 'Fairly Poor' condition due to the managed and well-used nature of the habitats. This habitat is considered to be of 'Low' strategic significance.	24.09
Scattered trees	Street trees	2.61	This habitat is automatically classed as being of 'Low' distinctiveness, and is by default classed as having 'Low' ecological connectivity. The condition of trees across the site varies, and therefore they have been classed as being in 'Moderate' condition overall. This habitat is considered to be of 'Low' strategic significance.	10.44
Total Area (ha) (excluding irreplaceable habitat)		15.02	Total Site Baseline (Biodiversity Units)	140.64
Notes: ¹ Ancient woodland is classed as an irreplaceable habitat and cannot be accounted for within the metric.				

Table 1: Summary of Existing Habitats

3.2 DEVELOPMENT PROPOSALS

3.2.1 Habitat Retention (and Enhancement)

Ancient woodland (an irreplaceable habitat which is not accounted for within the Biodiversity Net Gain Assessment), will be retained. This habitat will be enhanced, although this does not contribute towards the assessment.

All other semi-natural broadleaved woodland (outside of the area of ancient woodland) will be retained and enhanced, in order to achieve 'Good' condition. This will deliver an uplift of **3.85 units**.

All unimproved calcareous grassland will be retained and enhanced, in order to achieve 'Good' condition. This will deliver an uplift of **5.65 units**.

The majority of scattered trees will be retained.

The extent of the 'Suburban / mosaic of developed/natural surface' habitat will remain unchanged.

3.2.2 Habitat Loss

A small number of scattered trees are to be removed to accommodate the works. This results in a loss of **0.72 units**.

Some buildings will be demolished, although this will have no effect on the extent of the 'Suburban / mosaic of developed/natural surface' habitat within the site.

3.2.3 Habitat Creation

A small number of native trees will be planted to compensate for those lost, delivering **0.12 units**.

3.3 HEADLINE RESULTS

Table 3.1 details the headline results. Full details of the Biodiversity Metric calculations can be found in Appendix 1.

	Habitat units
On-site baseline	140.64
On-site post-intervention	149.55
Total net unit change	8.91
Total net % change	6.34

Table 3.1: Biodiversity Impact Assessment – Headline Results

The existing value of the habitats on site is **140.64 units**.

The proposals (habitat loss, retention and enhancement and creation), as based on the 'Proposed Site Plan' prepared by Baker Hicks, will deliver an uplift of **8.91 units**, a **6.34 % net gain**.

Habitat management and monitoring proposals are detailed in Chapter 4.

4. HABITAT MANAGEMENT AND MONITORING

4.1 PURPOSE OF HABITAT MANAGEMENT AND MONITORING

The 'target condition' of enhanced and created habitats can only be reached and maintained in the long-term subject to the implementation of appropriate management measures. The following sections provide an overview of the habitat management and monitoring proposals.

4.2 HABITAT MANAGEMENT

Management measures which will be implemented to ensure that habitats on site reach their potential biodiversity value are as follows:

- Woodland enhancement, to include thinning, retention of deadwood and removal of invasive species; and,
- Grassland enhancement, to include cutting back of encroaching scrub and trees and mowing as required.

Further details are provided in the LEMP (Report RT-MME-153844-03 Rev B).

4.3 HABITAT MONITORING

A programme of habitat monitoring will be instigated to ensure that habitats are establishing correctly and to inform requirements for future management.

Further details are provided in the LEMP (Report RT-MME-153844-03 Rev B).

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

The proposed development will result in a biodiversity net gain, delivering an uplift of **8.91 biodiversity units**, a site increase in biodiversity value of **6.34 %** over the current habitat value.

5.2 RECOMMENDATIONS

- R1** Management and monitoring of habitats should be completed in accordance with the LEMP (Report RT-MME-153844-03 Rev B), to ensure that the proposed net gain can be achieved.

6. DRAWINGS

Drawing C15844-02-01 – Biodiversity Net Gain Assessment



C153844-02-01-RevA

Legend

Trees to be removed

Proposed tree

Ancient & Semi-Natural

Proposed Habitat

Semi-natural broad-leaved

Unimproved calcareous

Phase 1 habitats

Dense scrub

SI

Poor semi-improved grassland

Semi-natural broad-leaved

Unimproved calcareous

Other habitat: area supports high number of scattered trees and poor semi-improved grassland around buildings

Proposed Car Parking and road

Building in disuse

Site boundary

Project

QinetiQ Site, Fort Halstead, Kent

Drawing

Biodiversity Net Gain Assessment

Client

QinetiQ

Drawing Number

C153844-02-01-RevA

Revision

Rev A

Scale @ A3

1:2500

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APPENDICES

Appendix 1 – Biodiversity Metric 2.0 Calculation, QinetiQ Site, Fort Halstead, Kent

Appendix 2 – Condition Assessment, QinetiQ Site, Fort Halstead, Kent

APPENDIX 1

Biodiversity Metric 2.0 Calculation, QinetiQ Site, Fort Halstead, Kent

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Retention category biodiversity value							Bespoke compensation agreed for uncorrigible losses	Comments	
Area observed	Area enhanced	Area succession	Baseline units retained	Baseline units released	Baseline units succession	Area lost		Units lost	Assessor comments
	3.14		0.00	87.67	0.00	0.00	0.00		
	3.85		0.00	58.44	0.00	0.00	0.00		
8.03			24.09	0.00	0.00	0.00	0.00		
2.43			9.72	0.00	0.00	0.18	0.73		
10.48	6.39	0.00	33.81	106.11	0.00	0.10	0.72		

QinetiQ Site, Fort Halstead, Kent

A-2 Site Habitat Creation

Condense / Show Columns

Condense / Show Rows

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Post development/ post intervention habitats																		
Proposed habitat	Area (hectare)	Distinctiveness	Score	Condition	Score	Ecological connectivity			Strategic significance			Temporal multiplier		Difficulty multiplier		Habitat units delivered	Comments	
						Ecological connectivity	Connectivity	Connectivity multiplier	Strategic significance	Strategic significance	Strategic position multiplier	Time to target condition/years	Time to target multiplier	Difficulty of creation category	Difficulty of creation multiplier		Assessor comments	Reviewer comments
Urban - Street Tree	0.08	Low	2	Moderate	2	Low	Unconnected habitat	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	27	0.382	Low	1	0.12		
Totals	0.08															Total Units	0.12	

Check Areas- Area of development and habitat creation must match the area of habitats lost

QinetiQ Site, Fort Halstead, Kent

A-3 Site Habitat Enhancement

Condense / Show Columns

Condense / Show Rows

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Baseline habitats		Post development/ post intervention habitats													
		Change in distinctiveness and condition			Area (hectares)	Distinctiveness	Condition	Ecological connectivity	Strategic significance	Temporal multiplier	Difficulty multipliers	Habitat units delivered	Comments		
Baseline ref	Baseline habitat	Proposed habitat (Pre-populated but can be overridden)	Distinctiveness change	Condition change				Ecological connectivity score	Strategic significance	Time to target condition/years	Difficulty of enhancement category		Assessor comments	Reviewer comments	
1	Woodland and forest - Lowland mixed deciduous woodland	Woodland and forest - Lowland mixed deciduous woodland	High - High	Moderate - Good	3.14	High	Good	Medium	Within area formally identified in local strategy	20	High	51.52			
2	Grassland - Lowland calcareous grassland	Grassland - Lowland calcareous grassland	High - High	Moderate - Good	3.85	High	Good	Medium	Within area formally identified in local strategy	15	High	64.09			
					Total site area	6.99						Enhancement total	115.62		

QinetiQ Site, Fort Halstead, Kent

Headline Results

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results menu](#)

On-site baseline	Habitat units	140.64
	Hedgerow units	0.00
	River units	0.00
On-site post-intervention (Including habitat retention, creation, enhancement & succession)	Habitat units	149.55
	Hedgerow units	0.00
	River units	0.00
Off-site baseline	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (Including habitat retention, creation, enhancement & succession)	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention/creation)	Habitat units	8.91
	Hedgerow units	0.00
	River units	0.00
Total net % change (including all on-site & off-site habitat creation + retained habitats)	Habitat units	6.34%
	Hedgerow units	0.00%
	River units	0.00%

APPENDIX 2

Condition Assessment, QinetiQ Site, Fort Halstead, Kent

Grassland		
Condition Assessment Criteria		Yes/No
The area is clearly and easily recognisable as a good example of this type of habitat and there is little difference between what is described in the relevant habitat classifications and what is visible on site.		Yes
The appearance and composition of the vegetation on site should very closely match the characteristics for the specific Priority Habitat [i.e as described by either the Phase 1 Habitat Classification or the UK Habitat Classification], with species typical of the habitat representing a significant majority of the vegetation.		Yes
Wildflowers, sedges and indicator species for the specific Priority grassland habitat are very clearly and easily visible throughout the sward and occur at high densities in high frequency. See relevant Habitat Classification for details of indicator species for specific habitat.		Yes
Undesirable species and physical damage is below 5% cover.		Yes – though scrub/scattered trees account for >5% cover.
Cover of bare ground less than 10% (including localised areas, for example, rabbit warrens).		Yes
Cover of bracken less than 20% and cover of scrub and bramble less than 5%.		No – high amount of scrub and scattered trees establishing.
Condition	Assessment Criteria	Select
Good (Score = 3)	<ul style="list-style-type: none"> Species-rich Grassland of all Priority Habitat Types. Of high to moderate quality. Wildflower and sedges above 30% excluding white clover <i>Trifolium repens</i>, creeping buttercup <i>Ranunculus repens</i> and injurious weeds. Meets all the condition criteria with only minor variation. None of the indicators of poor condition are present (4, 5 & 6). 	
Moderate (Score = 2)	<ul style="list-style-type: none"> Semi-improved grassland occurs on a wide range of soils and may be derived from higher quality Priority Habitat grassland habitats in poor condition. Often as they deteriorate following nutrient inputs. Typical grasses include: cock's-foot, common bent, creeping bent, crested dog's-tail, false oat-grass, meadow fescue, meadow foxtail, red fescue, sweet vernal grass, Timothy, tufted hair-grass and Yorkshire-fog. Total cover of wildflowers and sedges less than 30%, excluding white clover, creeping buttercup and injurious weeds. Rye-grass cover is less than 25% including amenity grasslands. OR clearly fails at least 1 of the condition criteria. OR The grassland type has some differences between what is described in the relevant habitat classifications and what is visible on site. It is a Lower Quality Priority Habitat, but clearly recognisable as such. 2 20 Potentially restorable to grassland Priority Habitat with improved management. Cover of undesirable species at 5- 15%. 	✓
Poor (Score = 1)	<ul style="list-style-type: none"> Agricultural grasslands are characterised by vegetation dominated by a few fast-growing grasses on fertile, neutral soils. It is frequently characterised by an abundance of rye-grass <i>Lolium</i> spp. (above 25% cover) and white clover <i>Trifolium repens</i>. These grasslands are typically either managed as pasture or mown regularly for silage production or in non-agricultural contexts for recreation and amenity purposes; they are often periodically re-sown and are maintained by fertiliser treatment and weed control. They may also be temporary and sown as part of the rotation of arable crops but they are only included in this broad habitat type if they are more than one year old. Amenity and Road verge grasslands with similar species to description for agriculture grasslands. OR Most of the condition criteria are being failed. Cover of undesirable species above 15%, usually resulting in a dense scrub or tree cover, or high cover of exotic species. 	
Notes		
<p>Undesirable species:</p> <ul style="list-style-type: none"> creeping thistle <i>Cirsium arvense</i>, spear thistle <i>Cirsium vulgare</i>, curled dock <i>Rumex crispus</i>, broad-leaved dock <i>Rumex obtusifolius</i>, common ragwort <i>Senecio jacobaea</i>, common nettle <i>Urtica dioica</i>, creeping buttercup <i>Ranunculus repens</i>, white clover <i>Trifolium repens</i>, cow parsley <i>Anthriscus sylvestris</i>, marsh thistle <i>Cirsium palustre</i> and marsh ragwort <i>Senecio aquaticus</i>. <p>Physical damage:</p> <ul style="list-style-type: none"> excessive poaching, damage from machinery use or storage, or any other damaging management activities. 		

Table A2.1: Condition Assessment – Existing Grassland, QinetiQ Site, Fort Halstead, Kent (Adapted from Crosher et al, 2019⁴)

Woodland (Excluding irreplaceable habitat, i.e. ancient woodland)		
Condition Assessment Criteria		Yes/No
This should be an area of trees with complete canopy cover.		Yes
Native species are dominant. Non-native and invasive species account for less than 10% of the vegetation cover.		Yes
A diverse age and height structure of the trees.		No – limited age diversity for majority of woodland due to excessive canopy shading and lack of management e.g. coppicing.
Free from damage [Bark stripping; Browse line; Damage shoot tips] (in the last five years) from stock or wild mammals with less than 20% of vegetation being browsed.		Yes – site perimeter fencing has excluded deer from site. Roe and fallow deer present outside of site perimeter fencing and will colonise site if fencing is removed.
There should be evidence of successful (i.e. not browsed off before it gets well established) tree regeneration such as seedlings, saplings and young trees.		Yes – some evidence present, though not abundant.
Standing and fallen dead wood of over 20 cm diameter are present including fallen large dead branches/stems and stumps.		Yes
Wetland habitat if they exist within the wood has little sign of drainage or channel straightening.		No – no wetland habitat present.
The area is protected from damage by agricultural and other adjacent operations.		Yes
There should be no evidence of inappropriate management (e.g. deep ruts, animal poaching or compaction).		Yes
Invasive non-native plants are below 5% (see list below).		No – high amounts of cherry laurel in sections of woodland. Other areas free from cherry laurel etc.
No signs of significant nutrient enrichment present.		Yes
More than 3 different native trees and 3 shrub species in an average 10 m radius.		Yes
Condition	Assessment Criteria	Select
Good (Score = 3)	<ul style="list-style-type: none"> Meets at least 10 of the criteria with only minor variation. No more than 1 of the indicators of poor condition are present. Stands of native trees that do not obviously originate from planting should be classified as native semi-natural woodland. 	
Moderate (Score = 2)	<ul style="list-style-type: none"> Clearly fails at least 2 of the criteria above. OR invasive non-native plants are 5-20%. OR where non-native species comprise more than 20% of the canopy, the woodland should be recorded as either non-native plantation or mixed woodland. A mixed woodland is woodland with native and non-native species. (This includes woodlands established by planting and by natural regeneration.) Trees of similar age and height structure throughout the woodland. Little standing or fallen deadwood present. 	✓
Poor (Score = 1)	<p>The following characteristics can help to identify plantations: (note: BAP woodlands can be plantation woodlands)</p> <ul style="list-style-type: none"> Non-native trees often of a single species or the same age are the dominant component; OR invasive non-native plants are greater than 20%. Mixed species show a consistent planting pattern across the site. Original planting lines, or remains of planting lines, can be seen. Drainage features and channel straightening of watercourses. 	
Notes		
<p>Undesirable species:</p> <ul style="list-style-type: none"> American skunk cabbage <i>Lysichiton americanus</i> Himalayan balsam <i>Impatiens glandulifera</i> Japanese knotweed <i>Fallopia japonica</i> Cherry Laurel <i>Prunus laurocerasus</i> Shallon <i>Gaultheria shallon</i> Snowberry <i>Symphoricarpos albus</i> Variegated yellow archangel <i>Lamiastrum galeobdolon</i> subsp. <i>argentatum</i> Rhododendron <i>Rhododendron ponticum</i> 		

Table A2.2: Condition Assessment – Existing Woodland, QinetiQ Site, Fort Halstead, Kent (Adapted from Crosher et al, 2019⁴)