



BNG Assessment

Land North of Ashford Road (A20)

Wates Developments Ltd

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Basis of Report

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Acronyms and Abbreviations

BNG	Biodiversity Net Gain
BREEAM	Building Research Establishment Environmental Assessment Method
BU	Biodiversity Units
CIEEM	Chartered Institute of Ecology and Environmental Managers
HGV	Heavy Goods Vehicle
JNCC	Joint Nature Conservation Committee
LWS	Local Wildlife Site
NPPF	National Planning Policy Framework
NVC	National Vegetation Classification
OEP	Office for Environmental Protection
UKHab	UK Habitat Classification



1.0 Introduction

SLR Consulting Ltd (SLR) was commissioned by Wates Developments Limited to undertake an evaluation of biodiversity performance and to undertake a Biodiversity Net Gain (BNG) assessment for a proposed warehouse development on land north of the A20 (Ashford Road) Hollingbourne (Planning Application 23/500899/OUT) located in the administrative boundary of Kent County Council.

The purpose of this BNG Plan is to inform Maidstone Borough Council of the biodiversity gain outcome.

1.1 Site Location & Description

The application site extends to approximately 2.88 hectares (ha) and is centred National Grid coordinates (TQ 82239 54733). The Site and survey boundaries can be seen on **Appendix A**.

The Site comprises a roughly triangular arable field, bordered by partial lengths hedgerows and scrub. Due to the development of the adjacent Woodcut Farm the Site is now an isolated parcel of agricultural land with two major road corridors, the M20 to the north-east and the A20 to the south/south-west, in close proximity.

Typically, the surrounding land is dominated by farmland with some built up areas including dwellings, farms and a camp site.

The nearest sites of ecological interest include River Len Millpond and Carr Local Wildlife Site (LWS), located 340 m south-east and Snarkhurst Wood and Howe Court Wood LWS located 506 m north.

1.2 Proposed Development Summary

The proposed development comprises a up to up to 10,788sqm / 116,121sqft industrial warehouse with a mezzanine area, associated parking (maximum of 24 HGV parking spaces and 104 car parking spaces) and a secure yard with gatehouse. It is understood that the proposed development will be designed to achieve a target of "Excellent" within the Building Research Establishment Environmental Assessment Method criteria (BREEAM).

The Site would be accessed via the A20, via the south-western corner where there is an existing gateway.

Approximately 70% of the Site (c. 2.3 ha) would be occupied by buildings and hardstanding (urban habitats) with the remainder being landscaped (c.0.5 ha). The latter would include a "green buffer" area created adjacent to the warehouse on the eastern aspect and comprising a 10m wide area of grassland with newly planted trees. It is also proposed climbing vines are installed on the eastern outer wall of the warehouse to provide screening. Additional planting includes areas of scrub, located throughout the carparking areas. It is understood that all the existing scrub and boundary hedgerow are to be retained.

The proposed development layout is presented in **Appendix B**.

With regards to biodiversity enhancements the following habitats are proposed as part of the landscape plans:

- Creation of a ground based green wall;
- Planting of 25 urban trees;



- Planting of mixed scrub within 'green buffer' and areas of scrub scattered across the parking area;
- Planting of 0.03 km of native hedgerow;
- Planting of modified grassland; and,
- Ornamental planting.

1.3 Purpose of this Report

This report is intended to provide the planning authority with sufficient information on the biodiversity performance of the proposed development to inform consideration of the planning application and specifically alignment of the application with the relevant planning policy.

1.4 Relevant Policy and Legislation

1.4.1 Environment Act 2021

The Environment Act (the Act) gained Royal Assent on 9 November 2021 and is now enshrined within UK law. The Act provides a mechanism for implementing Government's ambitions for 'improving the natural environment', which were previously set out in publications including the 25 Year Environment Plan. The Act provides recognition of the 25 Year Environment Plan as the first "environmental improvement plan" which will, once the relevant regulations come into force, be used as the basis for understanding the steps Government intends to take to improve the natural environment.

The Act implements the ambitions for an improved natural environment, by setting out statutory or legal requirements which mandate action, under the oversight of the newly formed Office for Environmental Protection (OEP). The focus of the Act is the "*...provision [of] targets, plans and policies for improving the natural environment...*" and its requirements are structured around a number of broad themes.

Of relevance to this report Part 6 of the Act sets out provisions for 'Biodiversity gain as condition of planning permission'. Once enacted, amendments to the Town and Country Planning Act 1990 will in future (expected to be by January 2024) require planning applications to be supported with additional information on the change in the biodiversity value attributed to a project, with biodiversity metric calculations, and with biodiversity gain plans. Planning authorities will be required to consider these submissions in the exercise of their planning functions, to ensure that they are secured, approved and, where relevant, registered.

While the Environment Act is now part of UK law, its required actions do not commence either directly or immediately, for all parties. There remain a range of preparatory actions that need to be undertaken before further implementation of the wider legal framework (secondary legislation or regulations) will take place.

1.4.2 National Planning Policy Framework

A summary of national planning policy relevant to (onshore) biodiversity in England and Wales is provided below. Note that the summary provided here is intended for general guidance only and the original policy documents should be consulted for definitive information.

For local planning policy relevant to biodiversity the relevant local plans should be consulted.



1.4.2.1 National - The National Planning Policy Framework (NPPF), 2023

The National Planning Policy Framework (NPPF)¹ sets out guidance for local planning authorities and decision makers on how to apply planning policies when drawing up plans and making decisions about planning applications. Along with Government Circular 06/05², the broad policy objectives in relation to the protection of biodiversity and geological conservation in England through the planning system are set out. Specific policies relating to habitats and biodiversity are set out in paragraphs 174 and 179-182 of the NPPF.

Paragraph 174 states that:

“Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); ...*
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate.*
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; ...”*

Paragraph 180 of the NPPF states that:

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

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused; ...*
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can*

¹ Department for Levelling Up, Housing and Communities (2023) National Planning Policy Framework [last accessed October 23]

² Office of the Deputy Prime Minister (2005). ODPM Circular 06/2005. Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.



secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.”

1.4.3 Local Planning Policy

1.4.3.1 Maidstone District Council

Maidstone Borough Local Plan (Adopted October 2017)³

Policy DM3 Natural Environment:

1. To enable Maidstone borough to retain a high quality of living and to be able to respond to the effects of climate change, developers will ensure that new development protects and enhances the natural environment by incorporating measures where appropriate to:
 - i. Protect positive landscape character, areas of Ancient Woodland, veteran trees, trees with significant amenity value, important hedgerows, features of biological or geological interest, and the existing public rights of way network from inappropriate development and avoid significant adverse impacts as a result of development;
 - ii. Avoid damage to and inappropriate development considered likely to have significant direct or indirect adverse effects on:
 - a. Internationally, nationally and locally designated sites of importance for biodiversity; and
 - b. Local Biodiversity Action Plan priority habitats;
 - iii. Control pollution to protect ground and surface waters where necessary and mitigate against the deterioration of water bodies and adverse impacts on Groundwater Source Protection Zones, and/or incorporate measures to improve the ecological status of water bodies as appropriate;
 - iv. Enhance, extend and connect designated sites of importance for biodiversity, priority habitats and fragmented Ancient Woodland; support opportunities for the creation of new Biodiversity Action Plan priority habitats; create, enhance, restore and connect other habitats, including links to habitats outside Maidstone Borough, where opportunities arise;
 - v. Provide for the long term maintenance and management of all natural assets, including landscape character, associated with the development;
 - vi. Mitigate for and adapt to the effects of climate change; and
 - vii. Positively contribute to the improvement of accessibility of natural green space within walking distance of housing, employment, health and education facilities and to the creation of a wider network of new links between green and blue spaces including links to the Public Rights of Way network.
2. Where appropriate, development proposals will be expected to appraise the value of the borough’s natural environment through the provision of the following:

³ https://maidstone.gov.uk/_data/assets/pdf_file/0005/171149/Local-Plan-v2-November-2017.pdf [Accessed September 23]



- i. An ecological evaluation of development sites and any additional land put forward for mitigation purposes to take full account of the biodiversity present, including the potential for the retention and provision of native plant species;
- ii. Arboricultural assessments to take full account of any natural assets connected with the development and associated sites; and
- iii. A landscape and visual impact assessment to take full account of the significance of, and potential effects of change on, the landscape as an environmental resource together with views and visual amenity.

2.0 Key Concepts

2.1 Overview

Natural England advise that Biodiversity Metric 4.0 *"can be used or specified by any development project, consenting body or landowner that needs to calculate biodiversity losses and gains for terrestrial and/or intertidal habitats. It will be this metric that underpins the Environment Bill's provisions for mandatory biodiversity net gain in England..."*. It has become the standardised way of describing biodiversity change in England, noting that there are a limited number of local exceptions to its use. The biodiversity evaluation of the proposed development has been undertaken using Biodiversity Metric 4.0⁴.

The Biodiversity Metric uses a comparison of habitats as a proxy for biodiversity and describes these habitats using standard units referred to as biodiversity units (BUs). There are three distinct types of BUs and these are not of equivalence or interchangeable, they are:

- Habitat BUs – which describe areas of habitat based on measurement in hectares;
- Linear BUs – which describe hedgerows and lines of trees measured in kilometres; and
- Riparian BUs – which described rivers and streams measured again in kilometres.

The overall calculation of the change in biodiversity resulting from a project or development is derived by subtracting pre-project or 'baseline' biodiversity units valuation of an area of land from the number of post-project units.

The results are influenced by:

- Habitat area/length;
- Distinctiveness (an indication of value);
- Condition – an indication of quality; and
- Multipliers or risk factors – that take account of the contribution to local priorities, the difficulty of habitat creation/management, the time it takes to deliver and variation in the location of habitat delivery.

2.2 Definitions

In the context of this project, we have assumed the following definitions:

⁴ <https://publications.naturalengland.org.uk/publication/6049804846366720> [Accessed September 23]



- Biodiversity net gain (BNG) is an approach to development, and/or land management, that aims to leave the natural environment in a measurably better state than it was beforehand.

Under the Act the relevant percentage for BNG is a change in value attributed to a development $\geq 10\%$ the pre-development value (of onsite habitats). It should be noted that while the Act sets out the relevant percentage for Biodiversity Net Gain, the relevant parts of the Act (Section 98 and Schedule 14) are still subject to implementation through secondary legislation before they formally apply to applications.

In the interim, clarification of requirements for BNG have been set out through recent appeal decisions⁵ which have clarified that:

- *"the 10% biodiversity net gain requirement set out in the Act is not yet law and is not applicable to these appeals";*
- *"Paragraph 174 of the Framework [the NPPF encourages applicants to], ... seek a net gain in biodiversity without identifying a specific percentage..."*
- The relevant Core Strategy may *"...seek a net gain in biodiversity without identifying a specific percentage..."*; and
- *"A net gain of just 1% would be policy compliant in these circumstances."*

Therefore, for this project the aim is to achieve simply a biodiversity net gain and no % target has been set, in line with the NPPF.

2.3 Methodology

In supporting the assessment of biodiversity changes SLR have made reference to:

- [Biodiversity Metric 4.0 - Calculation Tool⁶](#);
- [Biodiversity Metric 4.0 - User Guide⁷](#);
- [Biodiversity Metric 4.0 - Technical Annex 1⁸](#)
- [Biodiversity Metric 4.0 – Technical Annex 2⁹](#)

The Metric uses a unified habitat classification system known as UK Habitat Classification (UKHab)¹⁰. This system provides a number of benefits over existing systems such as Phase 1 and National Vegetation Classification (NVC), and allows Natural England, Scottish Natural Heritage, Natural Resources Wales, Department of the Environment Northern Ireland and JNCC to report consistently on habitats of European and national significance. UKHab information has been used where available to support the assessment of biodiversity changes.

In addition, the approach requires the condition of habitats to be assessed. Where habitat data was collected before the publication or widespread use of the Metric this is unlikely to

⁵ Planning Inspectorate (2022). Appeal Decisions APP/Y3940/W/21/3278256, APP/Y3940/Q/21/3278923, APP/Y3940/W/21/3282365

⁶ <https://publications.naturalengland.org.uk/file/5338007268491264> (Accessed 09/10/2023)

⁷ <https://publications.naturalengland.org.uk/file/6188841413902336> (Accessed 09/10/2023)

⁸ <https://publications.naturalengland.org.uk/file/6188841413902336> (Accessed 09/10/2023)

⁹ <https://publications.naturalengland.org.uk/file/6653727197626368> (Accessed 09/10/2023)

¹⁰ [ukhab – UK Habitat Classification](#)



have been collected and, in this case, an assumed condition rating has been adopted. Such variations from the Metric approach are explained in the relevant sections.

2.4 Metric 4.0 Principles and Rules

Natural England advise that the Metric is a tool that helps inform plans and decisions, by using habitats as a proxy for measuring biodiversity value, but that any assessment must be undertaken with awareness of its limitations. The metric specifically requires interpretation and ecological expertise to provide evidence of the appropriateness of proposed approaches to BNG and sets out a series of key principles and rules that help to support an understanding of whether proposals support wider considerations that a calculation output.

The Metric User Guide indicates that assessments should be conducted with regard to:

- **Principle 1:** *This metric does not change existing biodiversity protections, statutory obligations, or policy requirements. The use of this metric does not override the ecological mitigation hierarchy and other requirements (such as consenting or licensing processes, for example woodlands).*
- **Principle 2:** *This metric should be used in accordance with established good practice guidance and professional codes.*
- **Principle 3:** *This metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.*
- **Principle 4:** *Biodiversity units are a proxy for biodiversity and should be treated as relative values.*
- **Principle 5:** *This metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.*
- **Principle 6:** *Habitat interventions need to be realistic and deliverable within a relevant project timeframe.*
- **Principle 7:** *Created and enhanced habitats should seek, where practical and reasonable, to be local to any impact and deliver strategically important outcomes for nature conservation.*
- **Principle 8:** *The metric does not enforce a minimum habitat size ratio for compensation of losses. However, proposals should aim to:*
 - *maintain habitat extent (supporting more, bigger, better and more joined up ecological networks)*
 - and • *ensure that proposed or retained habitat parcels are of sufficient size for ecological function.*

In addition to these principles the Metric also sets out a series of rules that should be followed when undertaking a BNG calculation. These are:

- **Rule 1:** Competency requirements must be complied with.
- **Rule 2:** Biodiversity unit outputs are unique to this metric. The results of other metrics, including previous versions of this metric, are not comparable to those of this metric. The three types of biodiversity units generated by this metric (area, hedgerow and watercourse) cannot be summed, traded, or converted between modules.
- **Rule 3:** The trading rules of this metric (Table 3-2) must be followed.



- **Rule 4:** Losses and deterioration of irreplaceable or very high distinctiveness habitat cannot be accounted for through this metric.
- **Rule 5:** In exceptional ecological circumstances, deviation from this metric methodology may be permitted by the relevant consenting body or planning authority. Any deviation must be fully justified and evidenced, and follow advice set out in the Metric Guide.

The Metric guidance also confirms:

- **Irreplaceable habitats** – the Metric does not adequately measure impacts on irreplaceable habitats and separate consideration should be given to relevant policy and legislation. These habitats can be entered into the calculator to give an indication of value or to support an understanding of enhancement or restoration actions and a guide to minimum areas of replacement habitats (compensation) but that *“bespoke compensation should be agreed with the relevant decision maker for any losses or impacts to these habitats”*.
- **Ancient woodland** – “Ancient woodland is a finite and irreplaceable resource and is protected by existing policy and legislation. However, ancient woodland is not a discrete habitat type and, as such, is not listed in biodiversity metric 3.1;
- **Woodland cover** – *“In England there is a presumption against the loss of woodland and a need to increase overall woodland cover. The metric trading rules support the delivery of this policy through requiring ‘like for like’ habitat replacement for all high distinctiveness woodland types.”* With limited exceptions; and
- **Hedgerows** – *“Lost double hedgerows should be compensated with a double hedge, typically a path or track width apart.”*

To support the BNG assessment soil samples were undertaken offsite to further inform the type of habitat that could be created. Soil methodology is provided in detail in **Appendix D**.

Fungi metabarcoding analysis was also undertaken, this was done via Nature Metrics¹¹ and five soil samples were taken across the offsite grassland, as this was identified as potentially valuable for fungi.

2.5 Evidence of Technical Competence and Experience

This report has been prepared by Giselle Hynes, Senior Ecologist at SLR Consulting. Giselle has a Master’s degree in Wildlife Management and Conservation and is a Qualifying Member of CIEEM. Giselle has over four years’ professional experience within ecological consultancy and has undertaken numerous ecological assessments of this type.

Michelle Robertson, who reviewed this report, is an Associate Ecologist at SLR. She is a full member of CIEEM (MCIEEM) and has over 15 years ecology experience, 11 of which are experience in consultancy.

This report has been approved by Corin Simmonds MCIEEM CEcol. Corin is a Technical Director at SLR Consulting. She has a Master’s degree in Environmental Technology and over 10 years’ experience in ecological consultancy.

¹¹ <https://www.naturemetrics.com/> [Accessed September 23]



2.6 Limitations

For areas of habitat creation 'Good' condition has been set as habitat objectives in all cases except where the relevant guidance indicates that a 'Moderate' condition is more likely to be achieved and for those habitats which have default condition scores in the Metric e.g. 'Poor' condition.

No significant limitations were encountered during completion of the BNG assessment; although the baseline habitat survey was undertaken in early March, which is not considered to be the optimal time for completing botanical surveys. However, it is thought that this has been counteracted by undertaking soil and fungi sampling.

Natural England note that Biodiversity Metric 4.0 has been extensively tested, but that they continue to listen to feedback to support correction of any errors or problems. No such errors were encountered.



3.0 Baseline Habitats

3.1 Pre-development Habitats – On site

Full description of the baseline habitats within the Site are provided within the Ecological Impact Assessment Report¹². This habitat survey was undertaken in accordance with UKHab methodology and using the associated classification system. The survey was initially undertaken by Michelle Robertson MCIEEM on 13th June 2022. This habitat data is still considered valid, providing there has been no change in management on site¹³. A summary of the habitats is given in Table 3-1 and presented at **Appendix A**.

Table 3-1 Baseline Habitats within the Proposed Development Site

Broad Habitat	Habitat Type	Size (ha/km) ¹⁴	Description
Cropland	c1c Arable-cereal crop	2.75 ha	The majority of the Site comprised arable field, currently growing wheat. The field margin was limited to 1 m in width. In the margins, common nettle <i>Urtica</i> was dominant. Other frequent species comprised mugwort <i>Artemisia vulgaris</i> , perennial rye grass <i>Lolium perenne</i> , false oat grass <i>Arrhenatherum elatius</i> , tall fescue <i>Festuca arundinacea</i> and hemlock <i>Conium maculatum</i> . Occasional yarrow <i>Achillea millefolium</i> , red campion <i>Silene dioica</i> , Yorkshire fog grass <i>Holcus lanatus</i> and broad-leaved dock <i>Rumex obtusifolius</i> were also recorded.
Heathland and shrub	h3h Mixed scrub	0.02 ha	Along the eastern and southern site boundaries were areas of mixed, dense scrub, dominated by hawthorn <i>Crataegus monogyna</i> . Downy birch <i>Betula pubescens</i> was also frequent. Species present less abundantly included hazel <i>Corylus avellana</i> , dogwood <i>Cornus sanguinea</i> and bramble. A single ash <i>Fraxinus excelsior</i> tree was also located in the south-eastern corner of the Site
Heathland and shrub	h3d Bramble scrub	0.03 ha	Along the southern boundary of the Site, located on the slip road verge, was a bank dominated by bramble <i>Rubus fruticosus</i> agg. scrub with some isolated patches of common nettle. There was also a field maple <i>Acer campestre</i> and cherry <i>Prunus</i> sp. tree present, as well as a patch of blackthorn <i>Prunus spinosa</i> with dog rose <i>Rosa canina</i> .

¹² 404.000010.00001 EclA Land North of Ashford Road, SLR Consulting Ltd (January 2023).

¹³ CIEEM (2019) *On the Lifespan of Ecological Reports and Surveys*. Available at: <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>. Last accessed October 2023.

¹⁴ Rounded to two decimal places



Broad Habitat	Habitat Type	Size (ha/km) ¹⁴	Description
Grassland	g4 Modified grassland	0.08 ha	An area of grass verge was located along the southern and western site boundaries, beyond the fence. The sward was dominated by perennial rye with false oat grass, common nettle and cock's foot <i>Dactylis glomerata</i> . Other occasional species included cow parsley <i>Anthriscus sylvestris</i> , cleavers <i>Galium aparine</i> , horseradish <i>Armoracia rusticana</i> , common chickweed <i>Stellaria media</i> , doves foot cranesbill <i>Geranium molle</i> , creeping cinquefoil <i>Potentilla reptans</i> , annual mercury <i>Mercurialis annua</i> , common mallow <i>Malva neglecta</i> , hemlock <i>Conium maculatum</i> and lesser burdock <i>Arctium minus</i> .
Hedgerow	h2 190 Hedgerow with trees	0.12 km	A hawthorn dominated hedgerow with occasional blackthorn was located along part of the northern boundary of the Site. The ground flora comprised common nettle, with frequent stands of cleavers. Some white campion <i>Silene latifolia</i> , common mallow <i>Malva sylvestris</i> and burdock <i>Arctium</i> sp.were also present. Trees comprised two oak <i>Quercus robur</i> .
Urban	u1b Developed land, sealed surface	0.005 ha	Where the Site boundary spread onto the A20 Ashford Road, a small strip of hardstanding road was encompassed into the survey area. This comprised a tarmac road with little encroaching vegetation.

3.1.1 Consideration of principles and rules

Protected and locally important species needs are not considered through the Metric. Such areas need specific separate consideration of existing policy and legislation. Protected species are considered in the Preliminary Ecological Appraisal report for the Site and the Ecological Impact Assessment¹⁵.

This report has recognised the 'trading down' rule (rule 3), the need to avoid such situations and specifically any losses of irreplaceable or very high distinctiveness habitat. In considering any proposed works to the Site, existing areas of woodland, will be retained, and consideration given to their enhancement, where possible. If required, such habitats will need to be replaced on a "like for like" or "like for better" basis.

3.2 Pre-development Habitats – Off site

Due to the size of the Project an offsite option for BNG is required. Wates Developments Ltd. have identified a suitable site for BNG, this is located locally within Kent, 4.8km to the Southeast of the project and referred to as Water Lane. This site is under third party ownership and biodiversity improvements are subject to agreement from the landowner.

¹⁵ 404.000010.00001 EclA Land North of Ashford Road, SLR Consulting Ltd (January 2023).



The location of the offsite area is shown below in **Appendix C**. SLR ecologist, Giselle Hynes qualifying CIEEM, visited the Water Lane site on 1st March 2023 and undertook an initial assessment of the habitat. The habitats on site are detailed in Table 3-1:

Table 3-2 Baseline Habitats within the Water Lane Site

Broad Habitat	Habitat Type	Size (ha/km) ¹⁶	Description
Woodland and forest	Lowland mixed deciduous woodland	0.9 ha	An area of woodland was located in the northern portion of the site. This comprised mainly mature alder <i>Alnus glutinosa</i> and ground flora included lords-and-ladies <i>Arum maculatum</i> , bluebells <i>Hyacinthoides non-scripta</i> , ground ivy <i>Glechoma headrace</i> , dog's mercury <i>Mercurialis perennis</i> , lady's bedstraw <i>Galium verum</i> and pendulous sedge <i>Carex pendula</i> .
Grassland	Other neutral grassland	0.5 ha	An area of grassland was located in the centre of the site. At the time of survey the grassland comprised predominantly clubmoss <i>Lycopodiopsida</i> sp. with occasional perennial rye <i>Lolium perenne</i> and false oat grass <i>Arrhenatherum elatius</i> . Cow parsley <i>Anthriscus sylvestris</i> was also abundant.
Heathland and shrub	Bramble scrub	0.5 ha	Scattered areas of bramble <i>Rubus fruticosus</i> scrub were located across the site, especially along the southern boundary.
Grassland	Bracken	0.1 ha	A large area of bracken <i>Pteridium aquilinum</i> was located along the eastern boundary of the site.

3.3 Baseline Habitat Value

3.3.1 On-site

The total area of the site is approximately 2.88ha. This includes areas of arable-cereal crop (2.75ha), mixed scrub (0.02ha), bramble scrub (0.03 ha), modified grassland, hedgerow with trees (0.12km) and urban habitat (0.005ha). Of these, the area of cropland had the highest biodiversity value (5.49 BU), followed by the hedgerow habitat (0.85 BU), the scrub habitat (0.18 BU) and modified grassland (0.16 BU). The total overall ecological baseline is around **5.84 BU** for area habitats and **0.85 BU** for hedgerow habitats. A summary of the baseline habitat value is given below in Table 3-3.

3.3.2 Off-site

The total area of the off-site Water Lane location is approximately 2ha. This includes areas of woodland (0.9ha), other neutral grassland (0.5ha), bramble scrub (0.5 ha) and bracken (0.1 ha). Of these, the woodland has the highest biodiversity value (12.42 BU), followed by

¹⁶ Rounded to two decimal places



the grassland (3.2 BU) and the scrub (2 BU). A summary of the off-site baseline habitat value is given below in Table 3-3.

3.4 Overall Baseline Habitat Value

A summary of the current baseline biodiversity value to two decimal places is given in Table 3-3.

Table 3-3 Summary of Baseline Habitat Value

Biodiversity Unit Type	Area/Length	Baseline Units		Total Units
		On-site (dev. site)	Off-site (private or market provided)	
Area habitat	2.88 ha on-site.	5.84 BU	17.62 BU	23.46 BU
	2 ha off-site.			
Linear habitat – Hedgerow with trees	0.12 km on-site	0.85 BU	N/A	0.85 BU
	0 km off-site.			
Linear habitat – Rivers and streams	N/A	N/A	N/A	N/A



4.0 Proposed Habitat Changes (On and Off-site)

4.1 Future Habitat Creation

Biodiversity calculations have been completed for:

- Comparison of the current site baseline with the proposed plans.
- The off-site Water Lane location.

This comparison supports an understanding of the differences in biodiversity performance of proposed development between the current on-site habitats with the proposed plans.

The proposed plans are illustrated at **Appendix C** at the end of this report.

4.2 Current Baseline to Proposed Post-intervention Habitats

In line with Metric 4.0 a comparison has been made between the current site baseline and the proposed post-intervention habitats.

4.2.1 Habitat Units

Once the proposed post development has been delivered, the total area of the development site is estimated to be 2.88 ha, comprising 0.56 ha of habitats and 2.32 ha of urban area.

The red line boundary, and basis for this assessment, includes the full extent of the planning application.

4.2.2 Hedgerow Units

The hedgerow on site is to be retained under current plans for the Site. A length of 0.027 km of hedgerow will also be created, supporting a +0.1 BU increase.

4.2.3 On-site Habitat Creation

Under the current landscape plan for the site as detailed in **Appendix B**, -5.29 BU of cereal crops will be lost to facilitate construction of the warehouse. This will be compensated for by:

- Creation of ground based green wall on eastern elevation comprising climbing plants (+0.02BU);
- Planting of 25 native trees of moderate condition (+0.31BU);
- Creation of onsite mixed scrub of good condition (+2.27BU);
- Creation of modified grassland on site (+0.64BU);
- Creation of ornamental planting on site (+0.04BU);
- Green roofs on gatehouse, visitor cycle store, secure cycle store and refuse store (+0.04BU);

Without further off-site habitat creation and enhancement, the above results in a net loss of -39.94% in habitat units. Compensatory off-site habitat creation is detailed below in Section 4.2.4. An overall summary of the proposed biodiversity net gain is given in Table 4-1.



4.2.4 Off-site Habitat Creation

During the initial survey of the Water Lane site, the grassland was identified as the most suitable area for habitat enhancements. Due to the time of year when the initial survey was undertaken, additional surveys were undertaken to classify the grassland habitat accurately and to have more certainty that any recommended habitat would establish successfully. This comprised soil sampling and DNA metabarcoding for fungi.

The results of the soil sampling and DNA metabarcoding are detailed in **Appendix D and Appendix E**, respectively.

In summary, the soil was found to be slightly acidic (pH 5.2-5.8) with low nutrients. The DNA metabarcoding results for fungi identified the presence of three waxcaps;

- Glistening waxcap *Gloixanthomyces vitellinus*;
- Citrine waxcap *Hygrocybe citrinovirens* and;
- Glutinous waxcap *Hygrocybe glutinibes*.

A further two clavarioids; yellow club *Clavulinopsis helvola* and handsome club *Clavulinopsis laeticolor* fungus and globally vulnerable black magic *Demaloma magicum* were identified as present within the soil.

The results of the soil sampling and DNA metabarcoding indicate the presence of a high conservation value waxcap grassland. As such, habitat creation and management to deliver Biodiversity Net Gain should also consider the conservation of the waxcap grassland. According to Plantlife (2013)¹⁷, to manage grassland for grassland fungi, sward height should be maintained through livestock grazing and the encroachment of trees and scrub should be prevented.

As such, 0.25 ha of the grassland will be enhanced from fairly poor to moderate condition. This grassland was assessed as fairly poor during the baseline survey, due to low species and sward height diversity, the encroachment of scrub and the presence of bare ground. Due to the presence of waxcaps, the sward height and species diversity should not be altered. However, in order to deliver a moderate condition, this area will be taken into management and the encroachment of scrub and bracken will be prevented, as well as reducing damaging practices leading to bare ground cover. The enhancement of this area will deliver +0.38 BU. The area of grassland would also benefit from livestock grazing as part of the management plan for the site. In addition, the areas of bramble scrub will be enhanced to mixed scrub which will be less vigorous and will also provide additional benefits to wildlife, delivering +2.80 BU. The area of woodland should be retained and protected, as should the remainder of the grassland, especially considering it's importance for fungi.

An overall summary of the proposed biodiversity net gain is given in Table 4-1.

¹⁷ Plantlife (2023) Waxcaps and grassland fungi: A guide to identification and management. Available at: https://www.plantlife.org.uk/wp-content/uploads/2023/03/Waxcaps_GrasslandFungiGuideManagement.pdf (Last accessed: 09/10/2023).



4.3 Current Baseline to Proposed Plans (Overall)

The proposed plans are expected to support changes in habitat of 14.49% and hedgerows of 12.36%, that is an increase of +0.95BU (0.85 habitat BU and 0.1 hedgerow BU) respectively, which satisfies the current requirement for biodiversity enhancement under the National Planning Policy Framework. An overall summary of the proposed biodiversity gain is given in Table 4-1.

The biodiversity gain identified within this report requires planting plans and management plans to secure the predicted level of gain.

Table 4-1 Summary of biodiversity net gain

Biodiversity Unit Type	Baseline Units		Post-Intervention Units		Total Net Change Units	% Net Gain
	On-site (dev. site)	Off-site (private or market provided)	On-site (dev. site)	Off-site (private or market provided)		
Area habitat	5.84	17.62	3.51	20.80	0.85	14.49%
Linear habitat – Hedgerows/lines of trees	0.85	N/A	0.95	N/A	0.10	12.36%

5.0 Recommendations for Achieving Biodiversity Net Gain

The assessment of the proposed development against the current baseline indicates that an increase in biodiversity performance of the Site of approximately 14.49% in habitat and 12.36% in hedgerow can be achieved. This is subject to appropriate planting plans and 30-year management plans being developed, with agreement from the landowner, to optimise the delivery of biodiversity performance both on-site and off-site and to realise its intended condition specified in the metric calculations.



Appendix A **Baseline Habitats On-Site**

UK Habitat Survey Drawing

Land north of Ashford Road

Wates Developments Ltd

SLR Project No.: 404.000010.00001





LEGEND

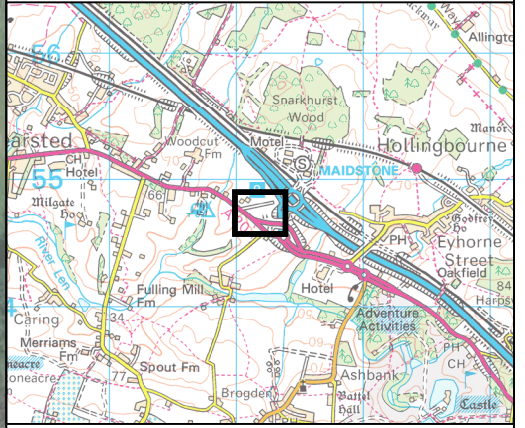
- Site Boundary With Visibility Splays
- Site Boundary Without Visibility Splays

UK Habitat Areas

- c1c - Cereal Crops
- g4 - Modified Grassland
- h3d - Bramble Scrub
- h3h - Mixed Scrub
- u1b - Developed Land, Sealed Surface

Secondary Habitats

- 111 - Road
- 431 - Road Island/Verge



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ASHFORD ROAD
BIODIVERSITY GAIN PLAN
UK HABITAT PLAN

DRAWING 01

Scale 1:1,200 @ A3	Date FEBRUARY 2023
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Appendix B Landscape Plan

Landscape Plan

Land north of Ashford Road

Wates Developments Ltd

SLR Project No.: 404.000010.00001





- KEY**
- Site Boundary
 - Existing trees, hedgerows and vegetation to be retained - refer to tree survey
 - Proposed tree planting
 - Proposed structural planting
 - Proposed native hedgerow planting
 - Retained scrub planting
 - Proposed scrub planting
 - Proposed native shrub planting
 - Proposed ornamental shrub/herbaceous planting with specimen shrub planting
 - Proposed amenity grass
 - Proposed long grass - e.g. Low Flowering Lawn Mix by wildflowerslawnandmeadow.com or similar approved by ecologist, planted at 3g/m²
 - Proposed bulb planting
 - Proposed green roof
 - Proposed climbers for screening along building facade
 - Proposed permeable paving
 - Proposed bench / seat
 - Proposed picnic bench
 - Proposed EV charging points - refer to engineering plans by Ramboll
 - Proposed infrastructure for charging points - refer to engineering plans by Ramboll

PROPOSED TREE PLANTING

Species	Form	Girth	Height cm	Clear Stem	Root Condition
Acer campestre	EHS	16-18	400-450	Min. 200	RB
Carpinus betulus	EHS	14-16	350-450	Min. 200	RB
Corylus avellana (ms)	Multi Stem	-	250-300	-	75L
Fagus sylvatica	EHS	16-18	400-450	Min. 200	RB
Malus sylvestris	HS	12-14	250-300	Min. 200	RB
Prunus avium	HS	12-14	250-300	Min. 200	RB
Sorbus aria	EHS	14-16	400-450	Min. 200	RB
Tilia x europaea	HS	12-14	250-300	Min. 200	RB

PROPOSED NATIVE SHRUB PLANTING MIX
To be planted 2/m²

Species	Mix %	Height	Form	Root Condition
Cornus sanguinea	20	60-80cm	Branched	B
Crataegus monogyna	50	60-80cm	Branched	B
Euroyonmus europaea	10	60-80cm	Branched	B
Rosa canina	10	60-80cm	Branched	B
Viburnum opulus	10	60-80cm	Branched	B

PROPOSED NATIVE HEDGEROW PLANTING
To be planted at 7 per linear metre at 0.3 cm offsets in triple staggered rows

Species	Mix %	Height cm	Root Condition	Habit
Crataegus monogyna	60	60-80	B	Feathered
Corylus avellana	20	60-80	B	Feathered
Prunus spinosa	20	60-80	B	Feathered

SCRUB PLANTING
To be planted 1/m²

Species	Mix %	Height	Form	Root Condition
Cornus sanguinea	20	60-80cm	Branched	B
Crataegus monogyna	35	60-80cm	Branched	B
Euroyonmus europaea	10	60-80cm	Branched	B
Ligustrum vulgare	10	60-80	B	Feathered
Prunus spinosa	10	60-80cm	Branched	B
Sambucus nigra	10	60-80cm	Branched	B
Viburnum lantana	5	60-80cm	Branched	B

BULB PLANTING
To be planted at 20/m²

Species	Specification
Crocus tommasinianus	5-6
Crocus 'Prins Claus'	5/+
Crocus speciosus 'Albus'	5
Narcissus 'Spring Dawn'	12/14

PROPOSED ORNAMENTAL SHRUB/HERBACEOUS PLANTING

Species	Height	Form	Root Condition
Bergenia cordifolia	-	-	3L
Ceanothus 'Blue Mound'	40-60cm	Bushy	5L
Ceanothus thyrsiflorus repens	30-40cm	Bushy	5L
Cornus sanguinea 'Midwinter Fire'	40-60cm	Bushy	5L
Cornus stolonifera 'Flaviramea'	40-60cm	Bushy	5L
Hebe 'Great Orme'	40-60cm	Bushy	5L
Hebe x franciscana 'Blue Gem'	30-40cm	Bushy	5L
Hebe 'Marjorie'	30-40cm	Bushy	5L
Hebe rakaiensis	40-60cm	Bushy	5L
Hypericum 'hidcote'	40-60cm	Bushy	5L
Geranium macrorrhizum	-	-	3L
Liriodé muscari	-	-	3L
Lonicera pileata 'Moss Green'	30-40cm	Bushy	5L
Pachysandra 'Green carpet'	-	-	3L
Prunus laurocerasus 'Otto Lucan'	40-60cm	Bushy	5L
Philadelphus 'Manteau d'Hermine'	30-40cm	Bushy	5L
Pittosporum tenuifolium 'Golden ball'	40-60cm	Bushy	5L
Pittosporum golf ball	40-60cm	Bushy	5L
Potentilla fruticosa 'Pink Beauty'	30-40cm	Bushy	5L
Sedum spectabile brilliant	-	-	3L
Salvia nemorosa 'Amethyst'	-	-	3L
Salvia icterina	30-40cm	Bushy	5L
Symphoricarpos x chenaultii 'Hancock'	30-40cm	Bushy	5L
Skimmia 'Kew green'	30-40cm	Bushy	5L
Verbena bonariensis	-	-	3L

PROPOSED SPECIMEN SHRUB PLANTING

Species	Height cm	Form	Root Condition
Cornus sanguinea 'Midwinter Fire'	800-100	Branched	10L
Cornus stolonifera 'Flaviramea'	800-100	Branched	10L
Corylus avellana	125-150	Bushy 5 stems min	45-65L
Ilex aquifolium	800-100	Leader with laterals	10L

CLIMBER PLANTING
To be planted at 2 per lin m along frame

Species	Height	Form	Root Condition
Hedera hibernica	150-200	Caned - Several shoots	10L
Parthenocissus henryana	100-150	Caned - Several shoots	10L

STRUCTURAL PLANTING MIX
Trees to be planted at 3m centres over understorey planting with breaks for specimen tree planting - refer to proposed tree planting - schedule

Species	Mix %	Height cm	Girth cm	Form	Root Condition
Acer campestre	10	300-350	10-12	Selected standard	RB
Fagus sylvatica	10	300-350	10-12	Selected standard	RB
Malus sylvestris	5	300-350	10-12	Selected standard	RB
Pinus sylvestris	5	300-350	10-12	Selected standard	RB
Prunus avium	15	300-350	10-12	Selected standard	RB
Tilia x europaea	5	300-350	10-12	Selected standard	RB

Understorey To be planted 2/m²

Species	Mix %	Height cm	Habit	Age + times	Root condition
Cornus sanguinea	5	60-80	Branched min. 3 breaks	1+2	B
Crataegus monogyna	25	60-80	Branched min. 3 breaks	1+2	B
Euroyonmus europaea	5	60-80	Branched min. 3 breaks	1+2	B
Ilex aquifolium	10	60-80	Branched min. 3 breaks	1+2	B
Sambucus nigra	5	60-80	Branched min. 3 breaks	1+2	B

Revisions:
First Issue- 12/12/2022

Landscape Masterplan Ashford Road, Maidstone

Client: Wates Developments
 DRWG No: **P21-3546_06** Sheet No: _ REV: -
 Drawn by: RVF/LAB Approved by: RVF/JE
 Date: 12/12/2022
 Scale: 1:500@A1



Appendix C **Baseline Habitats Off-Site: Water Lane**

Landscape Plan

Land north of Ashford Road

Wates Developments Ltd

SLR Project No.: 404.000010.00001



586200

586300

586400



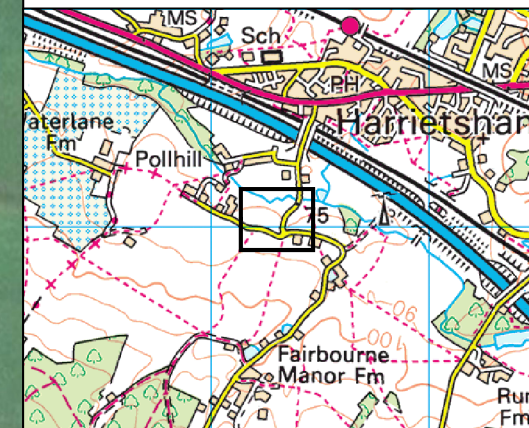
LEGEND

- Site Boundary
- UK Habitat Classification**
- g1c - Bracken
- g3c - Other Neutral Grassland
- h3d - Bramble Scrub
- w1f - Lowland Mixed Deciduous Woodland

152100

152000

404.000010.00001.0007.0 UK Habitat Plan - Offsite Water Lane



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LAND NORTH ASHFORD ROAD
BIODIVERSITY GAIN PLAN
WATER LANE UK HABITAT PLAN

FIGURE 1

Scale 1:1,000 @ A3 Date OCTOBER 2023

Appendix D Soil Sampling Factual Report

Biodiversity Net Gain – Ashford Road, Maidstone – Alternative Site Factual Report

Land north of Ashford Road

Wates Developments Ltd

SLR Project No.: 404.000010.00001





Biodiversity Net Gain – Ashford Road, Maidstone – Alternative Site Factual Report

Ashford Road, Maidstone

Wates Developments Ltd

Prepared by:

SLR Consulting Limited

Mill Barn, 28 Hollingworth Court, Turkey Mill, Maidstone,
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SLR Project No.: 404.000010.00001

4 September 2023

Revision: Final

Revision Record

Revision	Date	Prepared By	Checked By	Authorized By
Final	4 September 2023	Bob Hughes	James Appleby	James Appleby

Basis of Report

This document has been prepared by SLR Consulting Limited (SLR) with reasonable skill, care and diligence, and taking account of the manpower, timescales and resources devoted to it by agreement with Wates Developments Ltd (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

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Appendices

Appendix A	Drawings
Appendix B	Exploratory Hole Logs
Appendix C	Laboratory Certificates



Acronyms and Abbreviations

BNG	Biodiversity Net Gain
ha	Hectares
EA	Environment Agency
BGS	British Geological Society
bgl	Below Ground Level



1.0 Introduction

1.1 Background

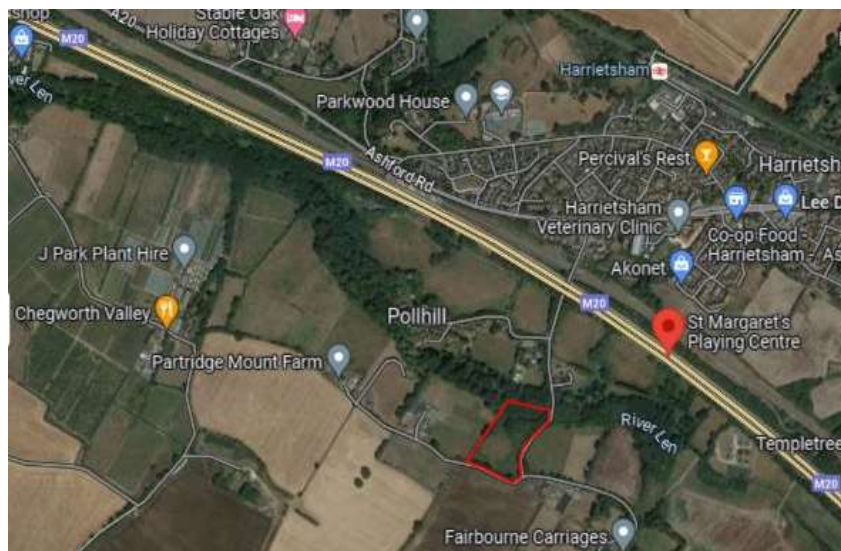
In May 2023, SLR Consulting Ltd (SLR) were commissioned by Wates Developments Ltd (the client) to conduct an intrusive ground investigation to ascertain whether the site may be suitable as Biodiversity Net Gain (BNG) area associated with a development site located on Ashford Road, Maidstone, Kent as depicted by Figure 01. The investigation site indicated for BNG is located off Water Lane/Fishbourne Lane, Harrietsham, Kent (the Site) as shown by Figure 02.

This report has been prepared by the SLR Land Quality Group based at Mill Barn, Turkey Mill, Maidstone, ME14 5PP.

Figure 01: Ashford Road, Maidstone – Development Site.



Figure 02: Water Lane/Fishbourne Lane - Offsite BNG location (red line boundary).



1.2 Scope of Work and Objectives

The scope of work devised by SLR comprised the following:

- Establish the shallow geological conditions beneath the site via the formation of 8No. hand dug trial pits;
- Recovery of shallow soil samples;
- Submission of obtained soil samples for BS3882_2015 topsoil suite and for eDNA metabarcoding analysis; and
- Provision of a factual report including the provisions of engineer’s exploratory hole logs and comparison of topsoil results to BS3882_2015 parameters.

1.3 Site Description

Table 1-1, summarises the details for the site and has been derived from OS, the site walkover undertaken and site investigation undertaken on 26th July 2023, and aerial photography.

Table 1-1: Site Location

Address	Water Lane/Fishbourne Lane Harrietsham, Kent	
Grid Ref	586276, 152016	
Site Description	The Site comprises an approximately 2.0 hectare, irregular shaped plot of land accessed from near to the junction of Water Lane and Fishbourne Lane. The Site is currently unused and comprises lowland mixed deciduous woodland, grassland, bramble scrub and bracken.	
Land uses Surrounding the Site	North	A small stream and woodlands form the Site’s northern boundary with a residential dwelling beyond.
	East	Fairbourne Lane bounds the east of the Site with farmland beyond.
	South	The access gate is in the south east corner off Water Lane/Fishbourne Lane, with Water Lane forming the southern boundary, beyond which is farmland.
	West	Farmland is immediately to the west with farm buildings beyond this field.
Geology	British Geological Survey (BGS) information indicates that the site is underlain by the Folkestone Formation which is noted to comprise sand and sandstone. There are no overlying superficial deposits mapped beneath the site.	



2.0 Ground Investigation

A site investigation was undertaken on 26th July 2023.

2.1 Utility Clearance

A review of freely available information and previous site visits noted that an overhead cable traversed the site in a north to south direction. All exploratory holes were chosen to appropriate stand off from overhead lines. Although only hand digging equipment was utilised, each location was cleared using a Cable Avoidance Tool (C.A.T) and Genny by the supervising SLR engineer. The shallow hand dug pits were excavated to a minimum of 0.25m bgl and proved the absence of shallow services to this depth.

2.2 Hand dug Trial Pits

A total of 8 shallow hand dug trial pits, denoted as HDTP01 to HDTP08, were excavated using manual equipment to a maximum depth of 0.5m bgl. **Drawing 01** in **Appendix A** provides exploratory hole locations along with the corresponding what3words positions.

During the works, SLR's site engineer supervised the sub-contractors and logged the soil strata for visual and olfactory indications of contamination, providing soil descriptions in accordance with BS5930. On completion of excavation, representative samples were recovered from the pits prior to them being backfilled with arisings.

2.3 Geology

The ground conditions encountered during the investigation are shown on the exploratory borehole logs presented in **Appendix B**. The geology encountered on site conforms to that recorded by BGS mapping.

2.3.1 Topsoil

Topsoil type material was encountered at all investigation locations to a maximum thickness of 0.45m within HDTP01 and HDTP03.

These soils predominantly comprised brown, light brown, slightly sandy, silty clay with frequent rootlets.

2.3.2 Folkestone Formation

Folkestone Formation was encountered at all locations underlying the Topsoil and was proved to the final depth of all exploratory holes.

This stratum predominantly comprised brown, light brown slightly sandy, clayey silt with rare rootlets.

2.3.3 Laboratory Analysis

As per the instructions provided by SLR's subcontractor Nature Metrics UK, five representative soil samples were obtained via a syringe and submitted to their laboratory for eDNA Metabarcoding.

A further eight representative soil samples were obtained for the BS3882_2015 Topsoil Suite, however due to the similar nature of the shallows soils encountered across the study Site, adjacent samples were combined at the laboratory prior to analysis. Laboratory Certificates are included as **Appendix C**.



3.0 Topsoil Comparison

The information below is in general accordance with BS3882_2015 Specification for Topsoil. It is our understanding that the sample submitted for analysis is to be considered under the requirements of the multipurpose specification of BS3882: 2015.

The samples could generally be described as a brown, light brown, moderately with rare stones and gravels, dry, SANDY CLAYEY LOAM with a poorly developed structure, visually consisting of fine (<2 mm) and rare medium (2 - 5 mm) granular aggregates. The sample was free from deleterious material (ash, brick, concrete, glass, etc.) and no particular odours were noticed.

3.1 Analytical Results

The following parameters were determined in general accordance with the British Standard 3882: 2015, comparing against multipurposes thresholds only, which is appropriate for assessment of topsoil for general landscaping use.

3.1.1 Soil Reaction (pH Value)

The samples were found to be acidic to slightly acidic in reaction (pH 5.2 to 5.8) and as such two of the four tested samples are non-compliant with the corresponding BS:3882 threshold for 'multipurpose topsoil'.

3.1.2 Organic Matter and Major Plant Nutrients

The organic matter and major plant nutrient content of the samples have been summarised in the table below:

Table 3-1: Summary organic matter and major plant nutrient

Sample Reference	Organic Matter	Total Nitrogen	Phosphorus	Potassium	Magnesium
HDTP01	M	✓	X	✓	✓
HDTP02	M	✓	X	✓	✓
HDTP03	M	✓	X	✓	✓
HDTP04	M	M	X	✓	✓

- ✓ Indicates parameter which is sufficient (does not require improvement)
- M Indicates parameter which is moderate (may benefit from improvement)
- X Indicates parameter which is low or deficient (would benefit from improvement)

3.2 Summary

From our visual examination and subsequent laboratory analysis, the four tested soil samples were found to be acid to slightly acid, sandy clayey loams, with weakly developed structures, low stone contents and low levels of salinity. When compared the thresholds stipulated by BS:3882 for 'multipurpose topsoil', the following was noted:

- All four samples recorded phosphorus concentrations below the threshold for 'multipurpose topsoil';
- A single sample had a 'moderate' level of total nitrogen;



- All four samples had a 'moderate' organic matter content; and
- Both potassium and magnesium were compliant with the requirements of 'multipurpose topsoil'.

In light of the above, it is likely that the tested soils would be considered unsuitable as 'multipurpose topsoil' as the results failed to meet a number of the minimum requirements set out in BS3882_2015.

Please note that the eDNA analysis will be considered as part of the separate SLR report issued upon receipt of this data.





Appendix A Drawings

Biodiversity Net Gain – Ashford Road, Maidstone – Alternative
Site Factual Report

Ashford Road, Maidstone

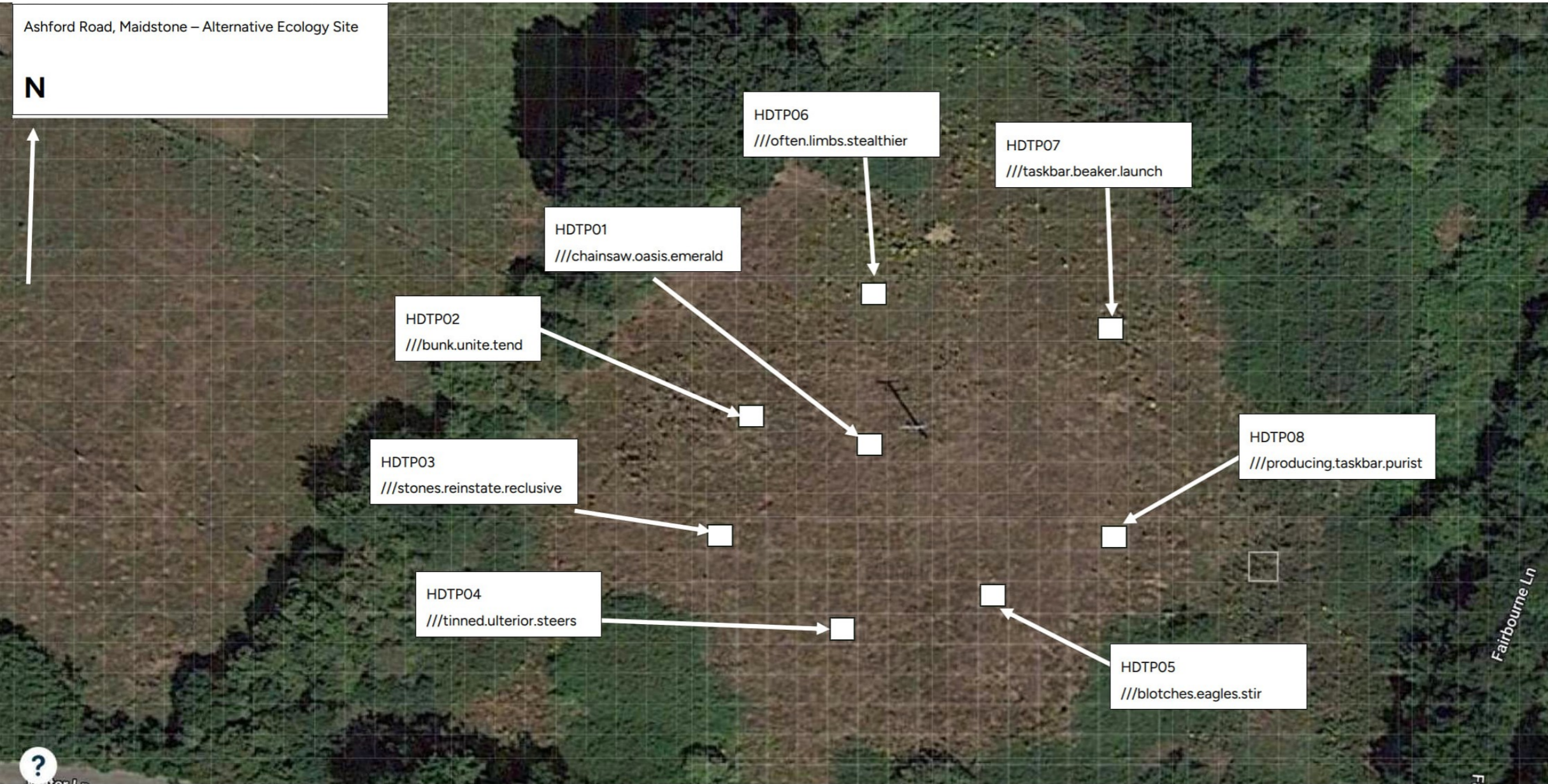
Wates Developments Ltd

SLR Project No.: 404.000010.00001

4 September 2023

Ashford Road, Maidstone – Alternative Ecology Site

N



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Ashford Road, Maidstone – Alternative BNG
Area –
Site Layout Plan
DWG No. 01

scale NTS

Date July 2023



Appendix B Exploratory Hole Logs


Biodiversity Net Gain – Ashford Road, Maidstone – Alternative
Site Factual Report


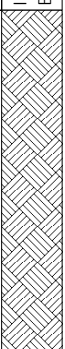

Ashford Road, Maidstone

Wates Developments Ltd

SLR Project No.: 404.000010.00001

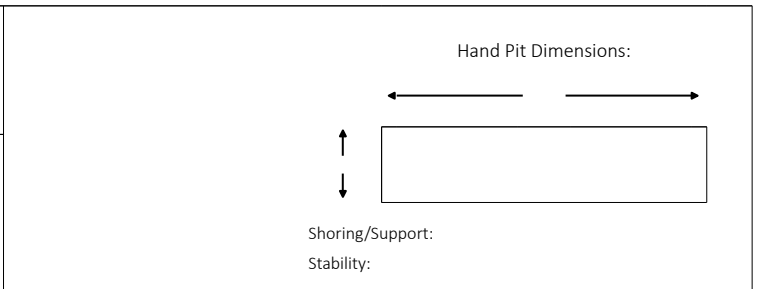
4 September 2023

HAND PIT LOG				HAND PIT No HOTP01	
Client: Wates Development Ltd					
Project: Ashford Road					
Project No: 404.000010.00001	Date: 26/07/2023	Ground Level:	Co-ordinates:	Sheet 1 of 1	


SAMPLES & TESTS				Water	STRATA				Instrument Backfill
Depth	Type No	Test Type	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.05 - 0.10	ES					(0.45)	Grass over, brown, light brown, slightly sandy, silty clay with frequent rootlets (TOPSOIL).		
0.20 - 0.2	ES								
0.4						0.45	Brown, light brown slightly sandy, clayey, silt with rare rootlets.		
						0.50	Hand Dug Pit Complete at 0.50m		
0.6									
0.8									
1.0									
1.2									
1.4									

GENERAL REMARKS:
CAT scanned. Backfilled with arisings.

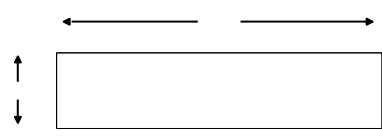
KEY
V = Hand Vane Shear Strength
PP = Pocket Penetrometer Shear Strength
J = Jar Sample
D = Disturbed Sample
B = Large Bulk Sample
HS = Head Space Measurement




All dimensions in metres Scale 1:10	Contractor: Endeavour Drilling Plant: Hand Tools	Method: Hand Auger	Logged By: BH	Approved By:
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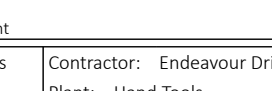


HAND PIT LOG				HAND PIT No HOTP02	
Client: Wates Development Ltd					
Project: Ashford Road					
Project No: 404.000010.00001	Date: 26/07/2023	Ground Level:	Co-ordinates:	Sheet 1 of 1	

SAMPLES & TESTS				Water	STRATA				Instrument Backfill
Depth	Type No	Test Type	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.05 - 0.10	ES						Grass over, brown, light brown, slightly sandy, silty clay with frequent rootlets (TOPSOIL).		
0.20 - 0.2	ES					(0.35)			
						0.35			
0.4						0.40	Brown, light brown slightly sandy, clayey, silt with rare rootlets.		
							Hand Dug Pit Complete at 0.40m		
0.6									
0.8									
1.0									
1.2									
1.4									

<p>GENERAL REMARKS:</p> <p>CAT scanned. Backfilled with arisings.</p>	<p style="text-align: center;">Hand Pit Dimensions:</p>  <p>Shoring/Support: Stability:</p>
<p>KEY</p> <p>V = Hand Vane Shear Strength PP = Pocket Penetrometer Shear Strength J = Jar Sample D = Disturbed Sample B = Large Bulk Sample HS = Head Space Measurement</p>	

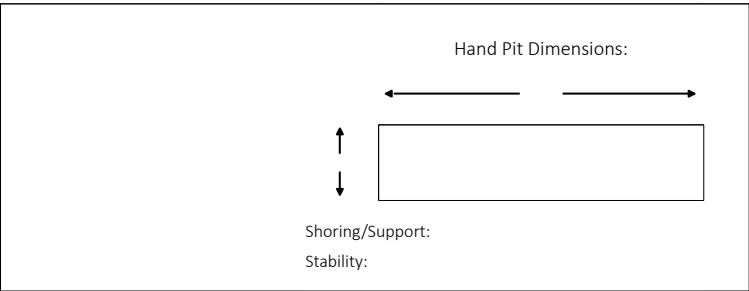
All dimensions in metres Scale 1:10	Contractor: Endeavour Drilling Plant: Hand Tools	Method: Hand Auger	Logged By: BH	Approved By:
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HAND PIT LOG				HAND PIT No HOTP03	
Client: Wates Development Ltd					
Project: Ashford Road					
Project No: 404.000010.00001	Date: 26/07/2023	Ground Level:	Co-ordinates:	Sheet 1 of 1	


SAMPLES & TESTS				Water	STRATA				Instrument Backfill
Depth	Type No	Test Type	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.05 - 0.10	ES					(0.45)	Grass over, brown, light brown, slightly sandy, silty clay with frequent rootlets (TOPSOIL).		
0.20 - 0.2	ES								
0.4						0.45	Brown, light brown slightly sandy, clayey, silt with rare rootlets.		
					0.50				
0.6							Hand Dug Pit Complete at 0.50m		
0.8									
1.0									
1.2									
1.4									




GENERAL REMARKS:
CAT scanned. Backfilled with arisings.

KEY
V = Hand Vane Shear Strength
PP = Pocket Penetrometer Shear Strength
J = Jar Sample
D = Disturbed Sample
B = Large Bulk Sample
HS = Head Space Measurement



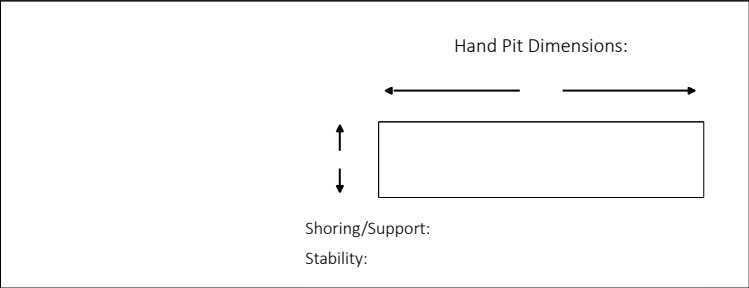
All dimensions in metres Scale 1:10	Contractor: Endeavour Drilling Plant: Hand Tools	Method: Hand Auger	Logged By: BH	Approved By:
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HAND PIT LOG				HAND PIT No HOTP04	
Client: Wates Development Ltd					
Project: Ashford Road					
Project No: 404.000010.00001	Date: 26/07/2023	Ground Level:	Co-ordinates:	Sheet 1 of 1	


SAMPLES & TESTS				Water	STRATA				Instrument Backfill
Depth	Type No	Test Type	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.20	ES						(0.20)	Grass over, brown, light brown, slightly sandy, silty clay with frequent rootlets (TOPSOIL).	
							0.20	Brown, light brown slightly sandy, clayey, silt with rare rootlets.	
							0.25	Hand Dug Pit Complete at 0.25m	
0.4									
0.6									
0.8									
1.0									
1.2									
1.4									

GENERAL REMARKS:
CAT scanned. Backfilled with arisings.

KEY
V = Hand Vane Shear Strength
PP = Pocket Penetrometer Shear Strength
J = Jar Sample
D = Disturbed Sample
B = Large Bulk Sample
HS = Head Space Measurement



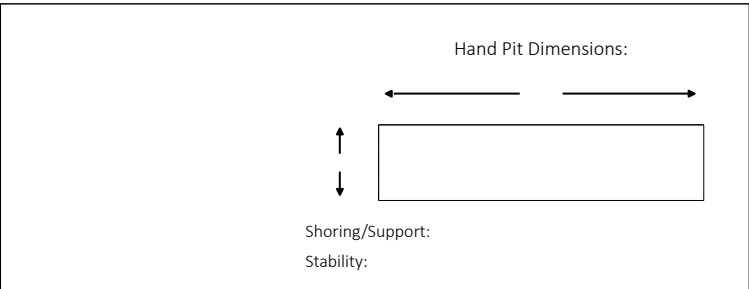
All dimensions in metres Scale 1:10	Contractor: Endeavour Drilling Plant: Hand Tools	Method: Hand Auger	Logged By: BH	Approved By:
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HAND PIT LOG				HAND PIT No HDP05	
Client: Wates Development Ltd					
Project: Ashford Road					
Project No: 404.000010.00001	Date: 26/07/2023	Ground Level:	Co-ordinates:	Sheet 1 of 1	


SAMPLES & TESTS				Water	STRATA				Instrument Backfill
Depth	Type No	Test Type	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.05 - 0.10	ES					(0.25)	Grass over, brown, light brown, slightly sandy, silty clay with frequent rootlets (TOPSOIL).		
0.20 - 0.2	ES					0.25			
						0.30	Brown, light brown slightly sandy, clayey, silt with rare rootlets.		
							Hand Dug Pit Complete at 0.30m		
0.4									
0.6									
0.8									
1.0									
1.2									
1.4									

GENERAL REMARKS:
CAT scanned. Backfilled with arisings.

KEY
V = Hand Vane Shear Strength
PP = Pocket Penetrometer Shear Strength
J = Jar Sample
D = Disturbed Sample
B = Large Bulk Sample
HS = Head Space Measurement



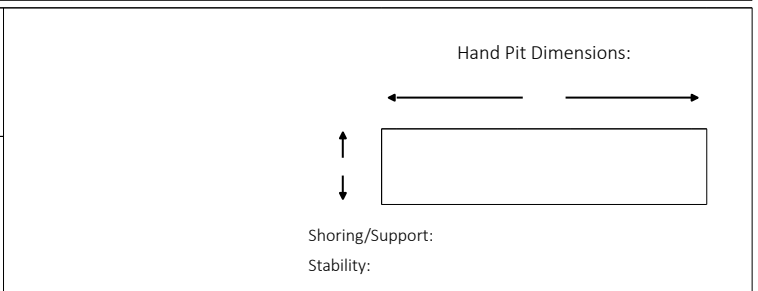
All dimensions in metres Scale 1:10	Contractor: Endeavour Drilling Plant: Hand Tools	Method: Hand Auger	Logged By: BH	Approved By:
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HAND PIT LOG				HAND PIT No HDP07	
Client: Wates Development Ltd					
Project: Ashford Road					
Project No: 404.000010.00001	Date: 26/07/2023	Ground Level:	Co-ordinates:	Sheet 1 of 1	


SAMPLES & TESTS				Water	STRATA				Instrument Backfill
Depth	Type No	Test Type	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.05 - 0.10	ES					(0.25)	Grass over, brown, light brown, slightly sandy, silty clay with frequent rootlets (TOPSOIL).		
0.20 - 0.2	ES					0.25			
						0.30	Brown, light brown slightly sandy, clayey, silt with rare rootlets.		
							Hand Dug Pit Complete at 0.30m		
0.4									
0.6									
0.8									
1.0									
1.2									
1.4									

GENERAL REMARKS:
CAT scanned. Backfilled with arisings.

KEY
V = Hand Vane Shear Strength
PP = Pocket Penetrometer Shear Strength
J = Jar Sample
D = Disturbed Sample
B = Large Bulk Sample
HS = Head Space Measurement



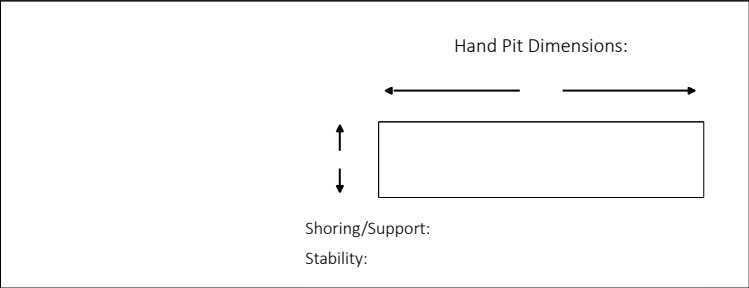
All dimensions in metres Scale 1:10	Contractor: Endeavour Drilling Plant: Hand Tools	Method: Hand Auger	Logged By: BH	Approved By:
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HAND PIT LOG				HAND PIT No HOTP08	
Client: Wates Development Ltd					
Project: Ashford Road					
Project No: 404.000010.00001	Date: 26/07/2023	Ground Level:	Co-ordinates:	Sheet 1 of 1	

SAMPLES & TESTS				Water	STRATA				Instrument Backfill
Depth	Type No	Test Type	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
0.20	0.2	ES					(0.25)	Grass over, brown, light brown, slightly sandy, silty clay with frequent rootlets (TOPSOIL).	
							0.25		
							0.30	Brown, light brown slightly sandy, clayey, silt with rare rootlets.	
								Hand Dug Pit Complete at 0.30m	
0.4									
0.6									
0.8									
1.0									
1.2									
1.4									

GENERAL REMARKS:
CAT scanned. Backfilled with arisings.

KEY
V = Hand Vane Shear Strength
PP = Pocket Penetrometer Shear Strength
J = Jar Sample
D = Disturbed Sample
B = Large Bulk Sample
HS = Head Space Measurement



All dimensions in metres Scale 1:10	Contractor: Endeavour Drilling Plant: Hand Tools	Method: Hand Auger	Logged By: BH	Approved By:
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Appendix C Laboratory Certificates

Biodiversity Net Gain – Ashford Road, Maidstone – Alternative Site Factual Report

Ashford Road, Maidstone

Wates Developments Ltd

SLR Project No.: 404.000010.00001

4 September 2023

ANALYTICAL REPORT

Report Number	82678-23	K920	ELEMENT ENVIRONMENTAL	Client GB05101539PO
Date Received	04-AUG-2023		LABS DEESIDE UNIT 3	26-07-2023
Date Reported	14-AUG-2023		DEESIDE POINT ZONE 3	
Project	23 12577		DEESIDE IND PK	
Reference	GB05101539PO		FLINTSHIRE	
Order Number	GB05101539PO		CH5 2UA	

Laboratory Reference		SOIL639693	SOIL639694	SOIL639695	SOIL639696					
Sample Reference		23/12577-9	23/12577-10	23/12577-11	23/12577-12					
Determinand	Unit	SOIL	SOIL	SOIL	SOIL					
pH water [1:2.5]		5.4	5.8	5.2	5.4					
Available Phosphorus (Index)	mg/l	5.0 (0)	5.8 (0)	6.6 (0)	5.2 (0)					
Available Potassium (Index)	mg/l	129 (2-)	192 (2+)	138 (2-)	169 (2-)					
Available Magnesium (Index)	mg/l	81.5 (2)	99.2 (2)	80.1 (2)	93.7 (2)					
Sand 2.00-0.063mm	% w/w	I.S.	I.S.	I.S.	I.S.					
Silt 0.063-0.002mm	% w/w	I.S.	I.S.	I.S.	I.S.					
Clay <0.002mm	% w/w	I.S.	I.S.	I.S.	I.S.					
Stones >50mm	% w/w	0.0	0.0	0.0	0.0					
Stones 20-50mm	% w/w	0.0	0.0	0.0	0.0					
Stones 2-20mm	% w/w	0.3	0.1	0.2	0.0					
Conductivity Sat CaSO4	uS/cm	I.S.	I.S.	I.S.	I.S.					
Available Sodium	mg/l	11.4	11.0	9.6	10.9					
Available Calcium	mg/l	870	885	835	820					
Organic Matter LOI	% w/w	3.9	5.0	4.4	4.6					
Total Nitrogen	% w/w	0.157	0.192	0.153	0.106					
Neutralising Value as CaCO3 eq.	% w/w	<1	<1	<1	<1					
Neutralising Value as CaO eq.	% w/w	<1	<1	<1	<1					
Total Copper	mg/kg	6.2	50.9	6.3	7.7					
Total Zinc	mg/kg	32.2	35.2	38.4	39.0					
Total Nickel	mg/kg	12.8	10.9	12.7	41.7					
Total Fresh Weight (Fresh)	g	1050.8	1007.6	1046.0	1029.7					
Total Visible Contaminants	%	0.00	0.00	0.00	0.00					
Number of Sharps	No.	0	0	0	0					
Glass/Sharps	%	0.00	0.00	0.00	0.00					
Plastic	%	0.00	0.00	0.00	0.00					

ANALYTICAL REPORT

Report Number	82678-23	K920	ELEMENT ENVIRONMENTAL	Client GB05101539PO
Date Received	04-AUG-2023		LABS DEESIDE UNIT 3	26-07-2023
Date Reported	14-AUG-2023		DEESIDE POINT ZONE 3	
Project	23 12577		DEESIDE IND PK	
Reference	GB05101539PO		FLINTSHIRE	
Order Number	GB05101539PO		CH5 2UA	

Laboratory Reference	SOIL639693	SOIL639694	SOIL639695	SOIL639696						
Sample Reference	23/12577-9	23/12577-10	23/12577-11	23/12577-12						
Determinand	Unit	SOIL	SOIL	SOIL	SOIL					
Estimated CEC	meq/100g	14.7	13.8	15.2	14.7					

Notes

Analysis Notes The sample submitted was of adequate size to complete all analysis requested.
 The results as reported relate only to the item(s) submitted for testing.
 The results are presented on a dry matter basis unless otherwise stipulated.

Document Control **This test report shall not be reproduced, except in full, without the written approval of the laboratory.**

Reported by ***Myles Nicholson***
 Natural Resource Management, a trading division of Cawood Scientific Ltd.
 Coopers Bridge, Braziers Lane, Bracknell, Berkshire, RG42 6NS
 Tel: 01344 886338
 Fax: 01344 890972
 email: enquiries@nrm.uk.com



Making Sustainability Happen

Appendix E Fungi DNA Metabarcoding Factual Report

NatureMetrics Fungi Results

Land north of Ashford Road

Wates Developments Ltd

SLR Project No.: 404.000010.00001





Thank you for choosing NatureMetrics

Please read the following information to help you understand the data in this file. For more information on how to interpret your results please see our Report Interpretation Guide. This file contains four tables: Species Data Table Percentages, Species Data Table Read Counts, Metrics by Sample Table, Quality Control Table

Species Data Table Percentages

This table provides a list of all the species detected in each of your samples. Where a species was detected in a sample, the percentage of DNA sequences assigned to that species is provided. A dash indicates that the species was not detected in the sample. Additionally, for each species the following is included:

- The OTU DNA sequence
- The taxonomic identification: Kingdom, Phylum, Class, Order, Family, Genus, Species
- The Common Name*
- IUCN Threat Status^
- Invasive status: A Yes/No status indicating whether the species is listed as invasive in the country the sample was taken from*
- Target Status: Our tests are targeted to detect certain groups of species, but species outside these targeted groups are sometimes detected incidentally. We call these Non-Targets. Non-Targets can provide useful additional information from your samples and for your project. These are reported in this table but are not included in main report and do not contribute to calculation of metrics.
- Number of samples in which the species occurs

* Only available for species named at the species level

^ Only available for species named at the species level and not applicable for Bacteria

Species Data Table Read Counts

This table is very similar to the Species Data Table Percentages table, but Read Counts (the number of DNA sequences assigned to a species) are reported for each species in each sample rather than the percentage of DNA sequences. This is useful if you intend to publish results or intend to run further analyses on the data. A dash indicates that the species was not detected in the sample.

Metrics by Sample Table

This table provides the metric values for each sample for each applicable metric. More information on how each metric is calculated is provided in the Report Interpretation Guide. The available metrics are:

- Species Richness
- Evolutionary Diversity
- IUCN Threatened Species (Not applicable to: Bacteria)
- Invasive Species (Not applicable to: Bacteria, Soil Fungi, Marine Sediment Eukaryotes, Marine Aquatic Eukaryotes)
- Bacterial Functional Diversity (Applicable only to: Bacteria)
- Fungal Functional Diversity (Applicable only to: Soil Fungi)
- Fungal:Bacterial Ratio (Applicable only to: soil samples)
- Fish Food-Chain Integrity (Applicable only to: Fish (excl sharks & rays), Vertebrates, marine samples)
- Fish: Commercial Value (Applicable only to: Fish (excl sharks & rays), Vertebrates, marine samples)
- Fish: Prevalence of Sensitive Species (Applicable only to: Fish (excl sharks & rays), Vertebrates, marine samples)
- Marine Sediment Pollution Index (Applicable only to: Marine Sediment Invertebrates)

Quality Control Table

This table provides information on each sample, an overview of how each sample progressed through each of our quality control steps and shows the outcome of what is reported. More information on each Quality Control step is provided in the Report Interpretation Guide. The table is comprised of four sections

Sample Information

- Kit ID
- Client Label: The name you gave to your sample
- Sample Type: This will be either 'Field sample' or 'Field blank'
- Volume Filtered (Applicable only to aquatic kits)
- Date Received – This is the date the sample was received at NM labs

Quality Control

- DNA Amplified (Yes/No): This shows if target DNA was amplified and sequenced
- Passed Data QC (Yes/No): This shows if a sequenced sample contained high quality data
- Target OTUs Detected (Yes/No): This shows if target species were detected. Our tests are targeted to detect certain groups of species

Percentage Reads

- % Target: The percentage of target species DNA sequences that were identified in the sample
- % Non-Target: The percentage of reads belonging to non- target species DNA sequences that were identified in the sample

Result

- Reported (Yes/No): If samples passed all QC steps and contained either target or non-target species then it is classed as reported
- Outcome (Yes/No): A statement on whether a sample was reported, if it had target species or only non-target species, and, if applicable, whether any contamination was found in Field blanks

Species Data Table Percentages

NMSeqID	Sequence	Kingdom	Phylum	Class	Order	Family	Genus	Species	Common Name	IUCN Threat Status	Target Status	Invasive	Comments	Number of samples in which OTU occurs	HDP01	HDP02	HDP03	HDP05	HDP07
IM-3Y99G	TCACAATATCA	Fungi									Target			4	0.14	0.40	0.96	0.07	-
IM-82DGH	TCACAATATCA	Fungi									Target		There is lower support for this t	4	0.16	0.05	0.22	-	-
IM-685QZ	AACACCTCAA	Fungi									Target			3	0.12	0.19	0.12	-	-
IM-LAJB13	TCACAGTATCA	Fungi									Target			1	-	0.07	-	-	-
IM-YZ4RN0	TCACAATATCA	Fungi									Target			1	-	-	0.07	-	-
IM-S75A3K	TCACGGTATCA	Fungi	Ascomycota								Target			5	1.49	4.19	3.49	1.07	0.07
IM-M91ZKL	TCACGGTATCA	Fungi	Ascomycota								Target			3	-	1.10	0.51	1.06	-
IM-21Q4CC	GCACCTTCAA	Fungi	Ascomycota								Target		There is lower support for this t	3	0.07	1.07	-	-	0.08
IM-871885	CAACCTTCAAG	Fungi	Ascomycota								Target			5	0.08	0.22	0.62	0.09	0.35
IM-6WUB2X	CAACCTTCAAG	Fungi	Ascomycota								Target			5	0.54	0.18	0.35	0.65	0.16
IM-55R1Q1	TCACGGTATCA	Fungi	Ascomycota								Target			5	0.50	1.01	1.10	0.08	0.43
IM-7BG5L5	AATCATTCAAG	Fungi	Ascomycota								Target			5	0.19	0.22	0.35	0.21	0.18
IM-KUB700	CAACCTTCAAG	Fungi	Ascomycota								Target			5	0.08	0.24	0.20	0.17	0.17
IM-09KR35	TCACAGTATCA	Fungi	Ascomycota								Target			1	-	0.24	-	-	-
IM-I2RQ4I	CAACCTTCAAG	Fungi	Ascomycota								Target			4	0.04	0.05	0.29	-	0.05
IM-368IU6	CAACCTTCAAG	Fungi	Ascomycota								Target			2	-	-	-	0.17	0.05
IM-558X23	AATCAATCAAI	Fungi	Ascomycota								Target		There is lower support for this t	3	0.03	-	-	-	0.10
IM-C4U9YB	TCACCAATCCC	Fungi	Ascomycota								Target			4	0.06	0.09	0.09	0.04	-
IM-T857HO	CAACCTTCAAG	Fungi	Ascomycota								Target		There is lower support for this t	2	-	0.04	-	-	0.06
IM-5P82T9	CAACCTTAAAG	Fungi	Ascomycota								Target			1	-	-	-	0.04	-
IM-RDKZ81	TCAACCTCAAI	Fungi	Ascomycota								Target			3	0.03	0.05	0.04	-	-
IM-BV6B05	CAACCTTCAAG	Fungi	Ascomycota								Target		There is lower support for this t	4	0.06	0.06	0.04	-	0.05
IM-J1HY9C	TCATAATATCA	Fungi	Ascomycota								Target		There is lower support for this t	1	-	0.03	-	-	-
IM-HKT31Y	CAACCTTCAAG	Fungi	Ascomycota				<i>Polyabatispora</i>				Target		There is lower support for this t	1	-	-	-	0.24	-
IM-675MR8	AATCAATCAAI	Fungi	Ascomycota	Dothideomycetes							Target			1	-	-	-	0.06	-
IM-377K5L	GTACCTTCAAG	Fungi	Ascomycota	Dothideomycetes							Target			1	-	0.05	-	-	-
IM-V47SKF	CACCACTCAAG	Fungi	Ascomycota	Dothideomycetes	Capnodiales						Target			1	-	-	-	0.04	-
IM-S3SLQ1	CACCACTCAAG	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Cladosporiaceae					Target			4	0.03	0.25	-	0.88	0.18
IM-G8FMM3	CACCAATCAAG	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Teratosphaeriaceae	<i>Devriesia</i>				Target			4	0.08	0.06	-	0.39	0.04
IM-5X5CGK	CACCACTCAAG	Fungi	Ascomycota	Dothideomycetes	Myltilidiales						Target			4	0.11	0.04	0.13	0.15	-
IM-QE5N3C	GTACCTTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales						Target			3	0.04	0.04	0.10	-	-
IM-C4142Q	TGTACCTCAA	Fungi	Ascomycota	Dothideomycetes	Pleosporales						Target			1	-	0.05	-	-	-
IM-D505D6	AACCTTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales						Target			1	-	-	-	0.04	-
IM-0K8NR1	ACACCTTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Didymosphaeriaceae					Target			1	-	-	-	3.55	-
IM-23BX3P	ACACCTTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Didymosphaeriaceae					Target			3	-	0.04	-	0.12	0.05
IM-8PN167	GTACCTTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Phaeosphaeriaceae					Target			1	-	0.09	-	-	-
IM-5053KA	GTACCTTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Phaeosphaeriaceae					Target			1	-	0.09	-	-	-
IM-GZ8168	GTACCTTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Pleosporaceae					Target			5	0.27	0.06	0.06	0.17	0.21
IM-QC8874	GTACCTTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Pleosporaceae					Target			1	-	-	-	0.18	-
IM-5Y510F	GTACCTTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Pleosporaceae	<i>Pyrenophora</i>	<i>Pyrenophora erythraspila</i>			Target			1	-	-	-	0.35	-
IM-Y53L2P	AAACCTTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Sporormiaceae					Target			3	0.06	-	-	0.18	0.06
IM-LH8254	TCAACCTCGA	Fungi	Ascomycota	Eurotiomycetes							Target			1	-	-	-	0.16	-
IM-051P3C	TCAACCTCAAI	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales						Target		There is lower support for this t	5	0.23	2.24	0.07	0.09	0.07
IM-U7765J	TCCTCCCTCAA	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales						Target			5	0.64	0.18	0.32	0.40	0.21
IM-E4Q619	TCAACCTCAAI	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales						Target			3	0.29	0.22	-	0.15	-
IM-M8103X	TCCTCCCTCAA	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales						Target			2	0.06	0.03	-	-	-
IM-76L1RB	TCACCTTCAA	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales	Herpotrichiellaceae					Target			5	0.73	0.33	0.25	0.18	0.65
IM-PM431C	TCAACCTCAAI	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales	Herpotrichiellaceae					Target			2	0.07	-	-	0.11	-
IM-B1L1UW8	CTATACCTCAA	Fungi	Ascomycota	Eurotiomycetes	Eurotiales						Target			4	0.07	-	-	0.83	-
IM-GZ7753	CTGTATCAAI	Fungi	Ascomycota	Eurotiomycetes	Eurotiales						Target			2	-	0.07	0.05	0.03	-
IM-RG2333	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae					Target			3	0.09	1.41	-	3.59	-
IM-AV9583	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae					Target			5	0.71	1.16	1.09	3.82	0.05
IM-7J195D	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae					Target			5	0.19	0.17	0.28	0.90	0.13
IM-3215UM	CTGTACTCAA	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae					Target			1	-	-	-	0.13	-
IM-WG8X2O	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae					Target			2	-	0.05	-	-	0.03
IM-81IG2G	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae					Target			1	-	-	-	0.05	-
IM-6T427M	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Penicillium</i>				Target			5	0.12	0.14	1.49	0.73	0.44
IM-0R7407	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Penicillium</i>				Target			5	0.13	0.17	0.31	0.56	0.28
IM-YA7780	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Penicillium</i>				Target			4	0.06	0.03	0.10	0.29	-
IM-9G5E24	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Penicillium</i>				Target			1	-	-	-	0.14	-
IM-05H723	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Penicillium</i>	<i>Penicillium adametzii</i>			Target			5	0.25	0.11	0.20	4.68	0.82
IM-26W4JP	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Penicillium</i>	<i>Penicillium simplicissimum</i>			Target			5	0.32	0.53	0.75	1.00	0.33
IM-ATE51G	CTACCTTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Sagenomella</i>	<i>Sagenomella striatispora</i>			Target			5	0.69	0.95	0.18	0.86	0.18
IM-BNAQ16	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Talaromyces</i>				Target			4	5.32	1.27	8.77	1.45	-
IM-3QQ67T	TACAATCTCTC	Fungi	Ascomycota	Geoglossomycetes							Target			1	-	0.04	-	-	-
IM-28912F	TGAAAAATCTC	Fungi	Ascomycota	Geoglossomycetes	Geoglossales	Geoglossaceae	<i>Trichoglossum</i>				Target			1	-	0.11	-	-	-
IM-US0V9H	CAACCTTCAAG	Fungi	Ascomycota	Leotiomycetes							Target			4	0.16	1.65	0.44	0.05	-
IM-1R098U	CAACCTTCAAG	Fungi	Ascomycota	Leotiomycetes							Target			3	0.04	0.21	0.33	-	-
IM-0SR8C9	CAACCTTCAAG	Fungi	Ascomycota	Leotiomycetes							Target			1	-	-	-	-	0.27
IM-G9V2H4	TCAACCTCAAI	Fungi	Ascomycota	Leotiomycetes							Target			4	0.05	0.04	0.05	0.03	-
IM-9UXOU1	CAACCTTCAAG	Fungi	Ascomycota	Leotiomycetes							Target			2	-	0.05	0.04	-	-
IM-CA6R61	TCAACCTCAAI	Fungi	Ascomycota	Leotiomycetes							Target		There is lower support for this t	3	0.03	0.04	-	-	0.04
IM-S021W3	CAACCTTCAAG	Fungi	Ascomycota	Leotiomycetes							Target			1	-	0.04	-	-	-
IM-NEQ759	CAACCTTCAAG	Fungi	Ascomycota	Leotiomycetes	Erysiphales	Amorphothecaceae					Target			5	0.15	0.20	0.54	0.09	0.78
IM-4HC44	CAACCTTCAAG	Fungi	Ascomycota	Leotiomycetes	Erysiphales	Amorphothecaceae					Target			1	0.05	-	-	-	-

IM-L9N205	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Erysiphales	Amorphothecaceae	<i>Oidiodendron</i>	Target	5	2.86	1.10	5.54	3.46	1.11
IM-SM5A56	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Erysiphales	Amorphothecaceae	<i>Oidiodendron</i>	Target	5	0.09	0.04	0.31	5.12	0.11
IM-Q3151	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Erysiphales	Amorphothecaceae	<i>Oidiodendron</i>	Target	4	0.13	0.47	0.12	-	0.26
IM-P7W63A	TAACCTTCAAG	Fungi	Ascomycota	Leotiomycetes	Helotiales			Target	1	-	-	0.07	-	-
IM-1IA5JS	CAACACTCAAG	Fungi	Ascomycota	Leotiomycetes	Helotiales			Target	1	-	-	-	-	0.05
IM-G4376G	CAACCTCTCAAG	Fungi	Ascomycota	Leotiomycetes	Helotiales	Gelatinodiscaceae		Target	1	-	0.09	-	-	-
IM-590E7X	TAACCACTCAAI	Fungi	Ascomycota	Leotiomycetes	Helotiales	Leptodontidiaceae		Target	4	0.03	0.12	0.14	-	0.11
IM-XQQ53V	CAACCACTCAAI	Fungi	Ascomycota	Leotiomycetes	Helotiales	Mollisiaceae	<i>Phialocephala</i>	Target	3	0.07	0.10	0.06	-	-
IM-02BW6K	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Helotiales	Ploetnerulaceae	<i>Cadophora</i>	Target	4	0.93	0.96	0.07	0.04	-
IM-99JSX8	CAACTCTCAAG	Fungi	Ascomycota	Leotiomycetes	Helotiales	Ploetnerulaceae	<i>Cadophora</i>	Target	2	0.15	0.45	-	-	-
IM-5N337Q	TAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Rhytismatales			Target	2	-	0.04	-	-	0.07
IM-1YQ2V3	TAACCTCTCAAI	Fungi	Ascomycota	Leotiomycetes	Rhytismatales	Calloriaceae	<i>Leohumicola</i>	Target	5	1.17	0.38	1.06	1.05	0.60
IM-7WP9BK	TAACCTCTCAAI	Fungi	Ascomycota	Leotiomycetes	Rhytismatales	Calloriaceae	<i>Leohumicola</i>	Target	4	0.09	0.12	0.14	0.07	-
IM-R24KMN	TACCCCTCAAG	Fungi	Ascomycota	Leotiomycetes	Rhytismatales	Calloriaceae	<i>Leohumicola</i>	Target	1	-	0.06	-	-	-
IM-VYG455	TAACCCCTCAAI	Fungi	Ascomycota	Leotiomycetes	Rhytismatales	Calloriaceae	<i>Leohumicola</i>	Target	5	0.42	1.14	0.06	0.03	0.49
IM-780B54	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Thelebolales			Target	5	0.16	0.75	0.75	0.27	0.31
IM-2M59W7	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Thelebolales	Thelebolaceae		Target	4	0.19	0.06	0.35	-	0.06
IM-4J60TE	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Thelebolales	Thelebolaceae		Target	5	0.26	0.07	0.10	0.04	0.08
IM-4J60H4	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Thelebolales	Thelebolaceae	<i>Pseudotarium</i>	Target	2	-	0.04	-	-	-
IM-WI95BY	TCAACCTCAAI	Fungi	Ascomycota	Pezizomycetes				Target	1	-	-	-	-	0.05
IM-9D56TF	ATATCTCAAI	Fungi	Ascomycota	Saccharomycetes	Saccharomycetales	Lipomyces	<i>Lipomyces starkeyi</i>	Target	2	-	0.13	-	-	0.14
IM-90XVSL	CTTTCTCAAI	Fungi	Ascomycota	Saccharomycetes	Saccharomycetales	Saccharomycodaceae	<i>Nadsania</i>	Target	5	0.16	0.32	0.19	0.08	0.36
IM-U6TE07	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes				Target	2	0.04	-	-	-	0.04
IM-W4L10H	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Chaetosphaeriaceae	Chaetosphaeriaceae		Target	1	-	-	-	-	0.04
IM-P237E1	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Coniochaetales			Target	1	-	-	-	0.31	-
IM-OA674Y	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Coniochaetales	Coniochaetaeae	<i>Coniochaeta</i>	Target	5	0.16	0.12	0.08	0.23	0.20
IM-4742FY	CAACCTCAGC	Fungi	Ascomycota	Sordariomycetes	Hypocreales			Target	5	0.04	0.58	0.05	0.08	0.11
IM-9K7SX2	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales			Target	1	-	-	-	0.27	-
IM-UJF33GL	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Hypocreales			Target	1	-	-	-	0.22	-
IM-EG8R96	CAACCTCGGG	Fungi	Ascomycota	Sordariomycetes	Hypocreales			Target	3	0.03	-	-	0.06	0.10
IM-7ZE9E3	CAACCTCATG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Bionectriaceae		Target	2	-	2.79	0.04	-	-
IM-G33M49	CAACCTCATG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Bionectriaceae		Target	5	0.23	0.30	0.41	0.17	0.14
IM-X8E0CU	CGACCTCGCC	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Bionectriaceae	<i>Acremonium</i>	Target	5	0.36	0.33	0.65	0.60	0.21
IM-O3R4TV	CAACCTCATG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Bionectriaceae	<i>Clonostachys</i>	Target	5	0.19	0.10	0.34	0.16	1.94
IM-0T7P1C	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Clavicipitaceae		Target	5	2.48	1.35	7.40	2.66	1.67
IM-359YK7	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Clavicipitaceae		Target	3	-	0.04	0.04	0.03	-
IM-G1GVP3	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Clavicipitaceae		Target	1	-	-	0.04	-	-
IM-X7SP91	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Clavicipitaceae		Target	1	-	-	0.04	-	-
IM-61E71C	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Clavicipitaceae		Target	1	-	-	-	0.03	-
IM-053LSW	CAACCTCGAT	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Cordycipitaceae		Target	1	-	-	-	0.07	-
IM-D2F630	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Cordycipitaceae		Target	1	0.05	-	-	-	-
IM-M4B0IV	CAACCTCGAC	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Cordycipitaceae	<i>Lecanicillium</i>	Target	1	-	-	-	0.05	-
IM-07E7HY	CAACCTCGAA	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Hypocreaceae		Target	5	0.26	0.97	0.37	0.34	1.33
IM-8TM1B0	CAACCTCGAA	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Hypocreaceae		Target	4	0.03	0.03	-	0.13	0.21
IM-4921PL	CAACCTCGAA	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Hypocreaceae	<i>Trichoderma</i>	Target	3	-	0.04	0.06	-	0.25
IM-6J4WDL	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae		Target	5	1.19	0.60	0.93	7.58	0.56
IM-D668PZ	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae		Target	3	0.05	-	-	0.09	0.05
IM-B6DT13	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae		Target	2	-	0.04	0.08	-	-
IM-B251K7	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae		Target	2	0.03	-	0.03	-	-
IM-Q67X7E	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Ophiocordycipitaceae		Target	5	0.09	0.10	0.06	0.26	0.05
IM-7M2Y87	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Ophiocordycipitaceae		Target	3	-	0.07	0.03	-	0.07
IM-8MHZ82	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales			Target	1	-	-	-	0.08	-
IM-G4C453	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Sordariales			Target	1	-	-	-	0.04	-
IM-M398QJ	CAACCTCAAI	Fungi	Ascomycota	Sordariomycetes	Sordariales			Target	1	0.04	-	-	-	-
IM-RG63C6	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Chaetomiaceae		Target	4	-	0.06	0.03	0.07	0.09
IM-U3Q3GG	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Chaetomiaceae		Target	2	-	-	-	0.08	0.09
IM-F2ER00	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Chaetomiaceae		Target	1	0.04	-	-	-	-
IM-1YCN9Q	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Chaetomiaceae	<i>Chaetomium</i>	Target	5	0.16	0.18	0.36	0.05	0.29
IM-SU11W4	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Lasiosphaeriaceae		Target	1	-	-	-	0.07	-
IM-FL143X	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Lasiosphaeriaceae	<i>Cercophora</i>	Target	5	0.06	0.12	0.23	0.09	0.08
IM-R6F61C	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Lasiosphaeriaceae	<i>Podospora</i>	Target	1	-	0.18	-	-	-
IM-SUN770	CAACCTTCAAG	Fungi	Ascomycota	Sordariomycetes	Xylariales	Xylariaceae		Target	1	-	0.53	-	-	-
IM-4TP605	AATTCTCAACT	Fungi	Basidiomycota	Agaricomycetes	Agaricales			Target	1	-	-	-	0.05	-
IM-V07Y7E	AATTCTCAACT	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Clavariaceae		Target	1	-	0.12	-	-	-
IM-S3B4HK	ATCTATCAACG	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Clavariaceae		Target	1	-	0.15	-	-	-
IM-L31435	AATTCTCAACT	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Clavariaceae	<i>Clavulinopsis</i>	Target	5	0.53	1.99	0.91	5.37	1.55
IM-6057UV	AATTCTCAACT	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Clavariaceae	<i>Clavulinopsis helvola</i>	Target	3	0.03	0.05	0.21	-	-
IM-HRC503	AATTCTCAACC	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Clavariaceae	<i>Clavulinopsis laeticolor</i>	Target	5	-	-	-	-	-
IM-1VN9W1	AATTATCAACI	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Entolomataceae		Target	2	0.06	-	-	-	0.11
IM-1D9Y0C	AAACATCAAAA	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Hygrophoraceae		Target	1	-	0.04	-	-	-
IM-3ETM70	AAACTTCAAAI	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Hygrophoraceae	<i>Gloioxanthomyces</i>	Target	4	1.51	0.20	-	0.04	11.07
IM-9F145N	AAACATCAAAA	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Hygrophoraceae	<i>Hygrocybe citrinoviens</i>	Target	1	-	-	-	-	0.10
IM-79E2G2	AATCATCAACC	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Hygrophoraceae	<i>Hygrocybe</i>	Target	3	1.77	2.01	-	-	6.19
IM-4O4V85	AAATCTCAACI	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Stephanosporaceae		Target	1	-	-	-	-	0.05
IM-BV6406	AAACCTCACO	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Tricholomataceae	<i>Dermoloma</i>	Target	4	0.10	0.17	1.39	-	0.07
IM-GD112E	AAATATCAAAI	Fungi	Basidiomycota	Agaricomycetes	Auriculariales	Oliveaceae		Target	1	-	0.04	-	-	-
IM-326AU7	AAATCTCAAAI	Fungi	Basidiomycota	Agaricomycetes	Cantharellales	Ceratobasidiaceae		Target	2	-	-	0.04	0.32	-
IM-9H4WBU	TAATCTCACTI	Fungi	Basidiomycota	Agaricomycetes	Cantharellales	Ceratobasidiaceae		Target	2	-	-	0.03	0.11	-
IM-4974KY	AATCATCAGGC	Fungi	Basidiomycota	Agaricomycetes	Sebacinales	Sebacinaeae		Target	2	0.04	0.29	-	-	-
IM-X0R92I	ACTCTCAAGC	Fungi	Basidiomycota	Agaricomycetes	Trechisporales			Target	1	-	-	-	-	0.04
IM-X837LS	AAATATCAACI	Fungi	Basidiomycota	Micrbotomyces				Target	1	-	-	-	-	0.06
IM-98H2CH	AAATATCAACI	Fungi	Basidiomycota	Tremellomycetes				Target	1	-	0.03	-	-	-
IM-237C4Y	AAATATCAACC	Fungi	Basidiomycota	Tremellomycetes	Filobasidiales	Piskurozymaceae		Target	5	0.54	0.25	0.25	0.44	0.75
IM-6NLER6	ATACCTCAACI	Fungi	Basidiomycota	Tremellomycetes	Filobasidiales	Piskurozymaceae	<i>Solicozozyma</i>	Target	5	3.73	3.37	4.36	1.06	8.10
					Tremellales			Target	4	0.20	0.31	0.73	0.22	-

IM-815CGN	AACCTCACCCC	Fungi	Basidiomycota	Tremellomycetes	Tremellales					Target	1	-	-	-	0.08	-
IM-3DGCT6	AGACTCAATCO	Fungi	Basidiomycota	Tremellomycetes	Tremellales	Trimorphomycetaceae				Target	5	52.10	36.42	44.58	36.52	44.58
IM-147B70	AATCTCAACCA	Fungi	Basidiomycota	Tremellomycetes	Trichosporonales	Trichosporonaceae				Target	2	-	0.07	-	-	0.20
IM-0100XP	CTAAAAAAT	Fungi	Glomeromycota	Glomeromycetes						Target	1	-	-	-	0.04	-
IM-0642QW	ACACCTCACTA	Fungi	Zygomycota		Umbelopsidales	Umbelopsidaceae	<i>Umbelopsis</i>			Target	1	-	-	-	-	0.07
IM-M3V170	AACACCTCAAC	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae				Target	5	9.88	11.68	2.16	0.71	7.35
IM-GHK703	AACACCTCAAC	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae				Target	5	1.76	4.62	0.66	0.04	0.74
IM-5H887Q	AACACCTCAAA	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae				Target	5	0.05	0.71	0.05	0.05	0.19
IM-86AU10	AACACCTCAAC	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae				Target	3	0.05	0.06	-	-	0.05
IM-6YF0D6	AACACCTCAAA	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae				Target	1	-	0.04	-	-	-
IM-6H8LU7	AACACCTCAAC	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae	<i>Gamsiella</i>			Target	5	0.32	0.03	0.13	0.10	0.07
IM-S9ZV4E	AACACCTCAAA	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae	<i>Mortierella</i>			Target	3	0.06	0.06	-	-	0.42
IM-S6B1US	AACACCTCAAA	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae	<i>Mortierella</i>			Target	5	0.03	0.12	0.03	0.03	0.04
IM-H1019Y	ATACTTCTCTG	Fungi	Zygomycota	Mucoromycetes	Mucorales	Cunninghamellaceae	<i>Absidia</i>			Target	1	0.10	-	-	-	-
IM-B05N06	ATACTTCTCTG	Fungi	Zygomycota	Mucoromycetes	Mucorales	Cunninghamellaceae	<i>Absidia</i>			Target	1	-	-	-	-	0.04
IM-38RMN9	ATACTTCTCTG	Fungi	Zygomycota	Mucoromycetes	Mucorales	Cunninghamellaceae	<i>Absidia</i>	<i>Absidia cylindraspora</i>		Target	2	0.10	-	-	-	0.29
IM-4PMP13	ATACTTCTCTG	Fungi	Zygomycota	Mucoromycetes	Mucorales	Cunninghamellaceae	<i>Absidia</i>	<i>Absidia cylindraspora</i>		Target	1	0.07	-	-	-	-
IM-FU7154	CCCAAAATCTC	Fungi	Zygomycota	Mucoromycetes	Mucorales	Cunninghamellaceae	<i>Gangranella</i>	<i>Gangranella butleri</i>		Target	4	0.05	0.23	0.15	0.23	-
IM-47QS4U	ACACCCACAT	Fungi	Zygomycota	Mucoromycetes	Mucorales	Mucoraceae				Target	4	0.05	0.22	0.07	-	0.14



Species Data Table Read Counts

NMSeqID	Sequence	Kingdom	Phylum	Class	Order	Family	Genus	Species	Common Name	IUCN Threat Status	Target Status	Invasive	Comments	Number of samples in which OTU occurs	HDP01	HDP02	HDP03	HDP05	HDP07
IM-3Y99G	TCACAATATCA	Fungi									Target			4	111	344	762	50	-
IM-82DGH	TCACAATATCA	Fungi									Target		There is lower support for this t	3	128	46	171	-	-
IM-685QQZ	AACACCTCAA	Fungi									Target			3	97	160	93	-	-
IM-LAJB13	TCACAGTATCA	Fungi									Target			1	-	57	-	-	-
IM-VZ4RN0	TCACAATATCA	Fungi									Target			1	-	-	57	-	-
IM-S75A3K	TCACGGTATCA	Fungi	Ascomycota								Target			5	1187	3585	2775	800	51
IM-M91ZKL	TCACGGTATCA	Fungi	Ascomycota								Target			3	-	941	403	794	-
IM-21Q4CC	GCACCCCTCAA	Fungi	Ascomycota								Target		There is lower support for this t	3	58	914	-	-	57
IM-871885	CAACCCCTCAAG	Fungi	Ascomycota								Target			5	64	190	490	67	250
IM-6WUB2X	CAACCCCTCAAG	Fungi	Ascomycota								Target			5	431	150	280	488	115
IM-55R1Q1	TCACGGTATCA	Fungi	Ascomycota								Target			5	400	861	873	59	304
IM-7BG5L5	AATCATTCAAGI	Fungi	Ascomycota								Target			5	149	186	276	160	131
IM-KUB700	CAACCCCTCAAG	Fungi	Ascomycota								Target			5	62	204	159	126	122
IM-09KR35	TCACAGTATCA	Fungi	Ascomycota								Target			1	-	206	-	-	-
IM-I2RQ4I	CAACCCCTCAAG	Fungi	Ascomycota								Target			4	30	41	232	-	39
IM-368IU6	CAACCCCTCAAG	Fungi	Ascomycota								Target			2	-	-	-	129	32
IM-558X23	AATCCAATCAAI	Fungi	Ascomycota								Target		There is lower support for this t	3	25	-	-	127	73
IM-C419YB	TCACCAATCCC	Fungi	Ascomycota								Target			4	45	80	71	31	-
IM-T857HO	CAACCCCTCAAG	Fungi	Ascomycota								Target		There is lower support for this t	2	-	30	-	-	46
IM-5P82T9	CAACCCCTCAAG	Fungi	Ascomycota								Target			1	-	-	-	27	-
IM-RDKZ81	TCACCAATCAAI	Fungi	Ascomycota								Target			3	24	42	34	-	-
IM-BV6B05	CAACCCCTCAAG	Fungi	Ascomycota								Target		There is lower support for this t	4	50	54	32	-	39
IM-J1H9YC	TCATAATATCAJ	Fungi	Ascomycota								Target		There is lower support for this t	1	-	26	-	-	-
IM-HKT31Y	CAACCCCTCAAG	Fungi	Ascomycota				<i>Polyblastopora</i>				Target		There is lower support for this t	1	-	-	-	180	-
IM-675MR8	AATCCAATCAAI	Fungi	Ascomycota	Dothideomycetes							Target			1	-	-	-	42	-
IM-377K5L	GTACCCCTCAAG	Fungi	Ascomycota	Dothideomycetes							Target			1	-	40	-	-	-
IM-V475KF	CACCACTCAAG	Fungi	Ascomycota	Dothideomycetes	Capnodiales						Target			1	-	-	-	29	-
IM-S35LQ1	CACCACTCAAG	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Cladosporiaceae					Target			4	24	218	-	662	128
IM-68FMM3	CACCAATCAAG	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Teratosphaeriaceae	<i>Devriesia</i>				Target			4	63	52	-	292	27
IM-5X5CGK	CACCACTCAAG	Fungi	Ascomycota	Dothideomycetes	Mylitidiales						Target			4	89	30	104	113	-
IM-QE5N3C	GTACCCCTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales						Target			3	31	31	83	-	-
IM-C4142Q	TGTACCCCTCAAI	Fungi	Ascomycota	Dothideomycetes	Pleosporales						Target			1	-	39	-	-	-
IM-D505D6	AACCCCTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales						Target			1	-	-	-	28	-
IM-0K8NR1	ACACCCCTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Didymosphaeriaceae					Target			1	-	-	-	2660	-
IM-23BX3P	ACACCCCTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Didymosphaeriaceae					Target			3	-	30	-	91	32
IM-8PN167	GTACCTTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Phaeosphaeriaceae					Target			1	-	78	-	-	-
IM-5053KA	GTACCCCTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Phaeosphaeriaceae					Target			1	-	78	-	-	-
IM-GZ8168	GTACCCCTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Pleosporaceae					Target			5	211	48	44	129	147
IM-QC8874	GTACCCCTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Pleosporaceae					Target			1	-	-	-	136	-
IM-5Y510F	GTACCCCTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Pleosporaceae	<i>Pyrenophora</i>	<i>Pyrenophora erythraspila</i>			Target			1	-	-	-	260	-
IM-Y53L2P	AAACCTTCAAG	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Sporormiaceae					Target			3	48	-	-	135	45
IM-LH8254	TCAACCTCGA	Fungi	Ascomycota	Eurotiomycetes							Target			1	-	-	-	118	-
IM-051P3C	TCAACCTCAAI	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales						Target		There is lower support for this t	5	182	1917	54	67	53
IM-U7765J	TCCTCCCTCAA	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales						Target			5	509	154	257	303	150
IM-E4Q619	TCAACCTCAAI	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales						Target			3	229	185	-	114	-
IM-M8103X	TCCTCCCTCAA	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales						Target			2	44	28	-	-	-
IM-76L1RB	TCACCCCTCAA	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales	Herpotrichiellaceae					Target			5	580	280	201	137	459
IM-PM431C	TCAACCTCAAI	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales	Herpotrichiellaceae					Target			2	55	-	-	82	-
IM-B11UW8	CTGTACTCAAI	Fungi	Ascomycota	Eurotiomycetes	Eurotiales						Target			4	54	60	40	625	-
IM-GZ7753	CTGTACTCAAI	Fungi	Ascomycota	Eurotiomycetes	Eurotiales						Target			2	-	63	25	-	-
IM-RG2333	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae					Target			3	72	1205	-	2690	-
IM-AV9583	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae					Target			5	563	994	868	2861	36
IM-7195D3	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae					Target			5	148	145	221	674	93
IM-3215UM	CTGTACTCAAI	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae					Target			1	-	-	-	98	-
IM-WG8X2O	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae					Target			2	-	39	-	-	21
IM-81IG2G	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae					Target			1	-	-	-	34	-
IM-6T427M	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Penicillium</i>				Target			5	94	123	1185	546	314
IM-0RT4O7	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Penicillium</i>				Target			5	104	143	248	418	201
IM-YA7780	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Penicillium</i>				Target			4	51	25	81	221	-
IM-9G5E24	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Penicillium</i>				Target			1	-	-	-	107	-
IM-05H723	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Penicillium</i>	<i>Penicillium adametzii</i>			Target			5	197	97	157	3510	581
IM-26W4JP	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Penicillium</i>	<i>Penicillium simplicissimum</i>			Target			5	255	453	597	751	235
IM-ATE51G	CTACCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Sagenomella</i>	<i>Sagenomella striatospira</i>			Target			5	551	813	143	645	130
IM-BNAQ16	CTGCCCTCAAG	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Talaromyces</i>				Target			4	4233	1088	6975	1090	-
IM-3QQ67T	TACAATCTCTO	Fungi	Ascomycota	Geoglossomycetes							Target			1	-	33	-	-	-
IM-28912F	TGAAAAATCTO	Fungi	Ascomycota	Geoglossomycetes	Geoglossales	Geoglossaceae	<i>Trichoglossum</i>				Target			1	-	91	-	-	-
IM-US0V9H	CAACCCCTCAAG	Fungi	Ascomycota	Leotiomycetes							Target			4	131	1411	346	38	-
IM-1R098U	CAACCCCTCAAG	Fungi	Ascomycota	Leotiomycetes							Target			3	33	180	260	-	-
IM-0SR8C9	CAACCCCTCAAG	Fungi	Ascomycota	Leotiomycetes							Target			1	-	-	-	-	192
IM-G9V2H4	TCAACCATCAAI	Fungi	Ascomycota	Leotiomycetes							Target			4	36	31	41	21	-
IM-9UOXU1	CAACCCCTCAAG	Fungi	Ascomycota	Leotiomycetes							Target			2	-	41	30	-	-
IM-CA6R61	TCAACCATCAAI	Fungi	Ascomycota	Leotiomycetes							Target		There is lower support for this t	3	25	34	-	-	27
IM-S021W3	CAACCCCTCAAG	Fungi	Ascomycota	Leotiomycetes							Target			1	-	33	-	-	-
IM-NEQ759	CAACCCCTCAAG	Fungi	Ascomycota	Leotiomycetes	Erysiphales	Amorphothecaceae					Target			5	119	172	427	67	556
IM-4HC44	CAACCCCTCAAG	Fungi	Ascomycota	Leotiomycetes	Erysiphales	Amorphothecaceae					Target			1	37	-	-	-	-

IM-L9N20S	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Erysiphales	Amorphothecaceae	<i>Oidiodendron</i>	Target	5	2278	938	4404	2593	784
IM-SM5A56	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Erysiphales	Amorphothecaceae	<i>Oidiodendron</i>	Target	5	75	34	243	3836	80
IM-QJ3151	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Erysiphales	Amorphothecaceae	<i>Oidiodendron</i>	Target	4	107	400	97	-	182
IM-P7W63A	TAACCTTCAAG	Fungi	Ascomycota	Leotiomycetes	Helotiales			Target	1	-	-	52	-	-
IM-1IA5J5	CAACACTCAAG	Fungi	Ascomycota	Leotiomycetes	Helotiales			Target	1	-	-	-	-	33
IM-G4376G	CAACCTCTCAA	Fungi	Ascomycota	Leotiomycetes	Helotiales	Gelatinodiscaceae		Target	1	-	80	-	-	-
IM-590E7X	TAACCACTCAA	Fungi	Ascomycota	Leotiomycetes	Helotiales	Leptodontidiaceae		Target	4	25	105	115	-	79
IM-XQQ53V	CAACCACTCAA	Fungi	Ascomycota	Leotiomycetes	Helotiales	Mollisiaceae	<i>Phialocephala</i>	Target	3	53	84	49	-	-
IM-02BW6K	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Helotiales	Ploettnerulaceae	<i>Cadophora</i>	Target	4	738	825	53	29	-
IM-99J5X8	CAACTCTCAAG	Fungi	Ascomycota	Leotiomycetes	Helotiales	Ploettnerulaceae	<i>Cadophora</i>	Target	2	118	386	-	-	-
IM-SN337Q	TAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Rhytismatales			Target	2	-	33	-	-	50
IM-1YQ2V3	TAACCTCTCAA	Fungi	Ascomycota	Leotiomycetes	Rhytismatales	Calloriaceae	<i>Leohumicola</i>	Target	5	932	325	840	786	429
IM-7WP9BK	TAACCTCTCAA	Fungi	Ascomycota	Leotiomycetes	Rhytismatales	Calloriaceae	<i>Leohumicola</i>	Target	4	74	105	114	55	-
IM-R24KMN	TACCCCTCAAG	Fungi	Ascomycota	Leotiomycetes	Rhytismatales	Calloriaceae	<i>Leohumicola</i>	Target	1	-	55	-	-	-
IM-VYG455	TAACCTCTCAA	Fungi	Ascomycota	Leotiomycetes	Rhytismatales	Calloriaceae	<i>Leohumicola</i>	Target	5	331	976	46	23	350
IM-780B54	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Thelebolales			Target	5	130	639	598	201	222
IM-2M59W7	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Thelebolales	Thelebolaceae		Target	4	151	54	282	-	42
IM-4J684E	CAACCTCAAG	Fungi	Ascomycota	Leotiomycetes	Thelebolales	Thelebolaceae		Target	5	204	63	80	32	55
IM-WI95BY	TCAACCTCAA	Fungi	Ascomycota	Pezizomycetes			<i>Pseudotarium</i>	Target	2	-	33	35	-	-
IM-9D567F	ATATCTCAA	Fungi	Ascomycota	Saccharomycetes	Saccharomycetales	Lipomycesaceae	<i>Lipomyces</i>	Target	1	-	-	-	-	34
IM-90XVSL	CTTTCTCAA	Fungi	Ascomycota	Saccharomycetes	Saccharomycetales	Lipomycesaceae	<i>Lipomyces starkeyi</i>	Target	2	-	110	-	-	105
IM-U6T0E7	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes			<i>Nadsania</i>	Target	5	130	272	151	63	256
IM-JW4L1QH	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Chaetosphaeriaceae			Target	2	30	-	-	-	28
IM-P237E1	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Coniochaetales			Target	1	-	-	-	-	29
IM-OA674Y	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Coniochaetales	Coniochaetaeae	<i>Coniochaeta</i>	Target	5	124	104	61	170	144
IM-4742FY	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Hypocreales			Target	5	31	492	40	59	77
IM-9K7SX2	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales			Target	1	-	-	-	-	202
IM-UJF33GL	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Hypocreales			Target	1	-	-	-	-	167
IM-EG8R96	CAACCTCGGG	Fungi	Ascomycota	Sordariomycetes	Hypocreales			Target	3	27	-	-	-	48
IM-7ZE9E3	CAACCTCATG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Bionectriaceae		Target	2	-	2383	29	-	-
IM-G33M49	CAACCTCATG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Bionectriaceae		Target	5	185	260	329	129	101
IM-X8E0CU	CGACCTCGCC	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Bionectriaceae	<i>Acremonium</i>	Target	5	286	282	515	449	147
IM-O3R4TV	CAACCTCATG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Bionectriaceae	<i>Clonostachys</i>	Target	5	151	84	269	121	1377
IM-077P1C	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Clavicipitaceae		Target	5	1970	1154	5887	1995	1183
IM-359YK7	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Clavicipitaceae		Target	3	-	33	28	21	-
IM-G1GVP3	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Clavicipitaceae		Target	1	-	-	31	-	-
IM-X7SP91	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Clavicipitaceae		Target	1	-	-	32	-	-
IM-61E71C	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Clavicipitaceae		Target	1	-	-	-	21	-
IM-053LSW	CAACCTCGAT	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Cordycipitaceae		Target	1	-	-	-	52	-
IM-D2F630	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Cordycipitaceae		Target	1	37	-	-	-	-
IM-M4B0IV	CAACCTCGAC	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Cordycipitaceae	<i>Lecanicillium</i>	Target	1	-	-	-	-	38
IM-07E7HY	CAACCTCGAA	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Hypocreaceae		Target	5	205	827	293	255	943
IM-8TM1B0	CAACCTCGAA	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Hypocreaceae		Target	4	22	26	-	97	149
IM-4921PL	CAACCTCGAA	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Hypocreaceae		Target	3	-	30	46	-	179
IM-6J4WDL	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae	<i>Trichoderma</i>	Target	5	949	513	738	5680	394
IM-D668PZ	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae		Target	3	37	-	-	-	66
IM-B6DT13	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae		Target	2	-	32	61	-	-
IM-B251K7	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae		Target	2	27	-	21	-	-
IM-Q6J7X7	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Ophiocordycipitaceae		Target	5	69	86	44	192	33
IM-7M7287	CAACCTCAAG	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Ophiocordycipitaceae		Target	3	-	60	24	-	47
IM-8MHZ82	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales			Target	1	-	-	-	-	57
IM-G4C453	CAACCTCAGG	Fungi	Ascomycota	Sordariomycetes	Sordariales			Target	1	-	-	-	-	28
IM-M398QJ	CAACCATCAA	Fungi	Ascomycota	Sordariomycetes	Sordariales			Target	1	34	-	-	-	-
IM-RG63C6	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Chaetomiaceae		Target	4	-	54	27	54	64
IM-UJ3Q3G	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Chaetomiaceae		Target	2	-	-	-	-	61
IM-F2ER00	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Chaetomiaceae		Target	1	32	-	-	-	-
IM-1YCN9Q	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Chaetomiaceae	<i>Chaetomium</i>	Target	5	130	154	289	39	209
IM-SU11W4	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Lasiosphaeriaceae		Target	1	-	-	-	-	50
IM-FL143X	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Lasiosphaeriaceae	<i>Cercophora</i>	Target	5	51	101	184	66	60
IM-R8F61C	CAACCATCAAG	Fungi	Ascomycota	Sordariomycetes	Sordariales	Lasiosphaeriaceae	<i>Podospora</i>	Target	1	-	152	-	-	-
IM-SUN770	CAACCTTCAAG	Fungi	Ascomycota	Sordariomycetes	Xylariales	Xylariaceae		Target	1	-	450	-	-	-
IM-4TP605	AATTCTCAACT	Fungi	Basidiomycota	Agaricomycetes	Agaricales			Target	1	-	-	-	-	36
IM-V07Y7E	AATTCTCAACT	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Clavariaceae		Target	1	-	106	-	-	-
IM-S3B4HK	ATCTATCAACG	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Clavariaceae		Target	1	-	129	-	-	-
IM-L31435	AATTCTCAACT	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Clavariaceae	<i>Clavulinopsis</i>	Target	5	421	1698	724	4027	1097
IM-6057UV	AATTCTCAACT	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Clavariaceae	<i>Clavulinopsis</i>	Target	3	23	44	167	-	-
IM-HRC503	AATTCTCAACC	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Entolomataceae		Target	2	44	-	-	-	81
IM-1VN9W1	AATTATCAACI	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Hygrophoraceae		Target	1	-	38	-	-	-
IM-1D9Y0C	AAACATCAAAA	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Hygrophoraceae	<i>Gloioxanthomyces</i>	Target	4	1200	167	-	29	7853
IM-3ETM70	AAACTTCAAAI	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Hygrophoraceae	<i>Hygrocybe citrinovirens</i>	Target	1	-	-	-	-	71
IM-9F145N	AAACATCAAAA	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Hygrophoraceae	<i>Hygrocybe</i>	Target	3	1404	1719	-	-	4389
IM-79E2G2	AATCATCAACC	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Stephanosporaceae		Target	1	-	-	-	-	35
IM-4O4V85	AAATCTCAACI	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Tricholomataceae	<i>Dermoloma</i>	Target	4	82	148	1108	-	52
IM-BV6406	AAACCTCACO	Fungi	Basidiomycota	Agaricomycetes	Auriculariales	Oliveaceae		Target	1	-	36	-	-	-
IM-GD112E	AAATATCAAAI	Fungi	Basidiomycota	Agaricomycetes	Cantharellales	Ceratobasidiaceae		Target	2	-	-	28	241	-
IM-326AU7	AAATTCTCAA	Fungi	Basidiomycota	Agaricomycetes	Cantharellales	Ceratobasidiaceae		Target	2	-	-	23	79	-
IM-9H4WBU	TAATCTCACTI	Fungi	Basidiomycota	Agaricomycetes	Sebacinales	Sebacinaeae		Target	2	29	248	-	-	-
IM-4974KY	AATCATCAGGC	Fungi	Basidiomycota	Agaricomycetes	Trechisporales			Target	1	-	-	-	-	26
IM-X0R92L	ACTCTTCAAGC	Fungi	Basidiomycota	Micrbotomyces				Target	1	-	-	-	-	44
IM-X837L5	AAATATCAACI	Fungi	Basidiomycota	Tremellomycetes				Target	1	-	25	-	-	-
IM-98H2CH	AAATATCAACI	Fungi	Basidiomycota	Tremellomycetes	Filobasidiales	Piskurozymaceae		Target	5	426	213	200	332	533
IM-237C4Y	AAATATCAACC	Fungi	Basidiomycota	Tremellomycetes	Filobasidiales	Piskurozymaceae	<i>Solicozozyma</i>	Target	5	2966	2884	3470	795	5745
IM-6NLER6	ATACCTCAACI	Fungi	Basidiomycota	Tremellomycetes	Tremellales			Target	4	162	263	578	165	-

IM-815CGN	AACCTCACCC	Fungi	Basidiomycota	Tremellomycetes	Tremellales						Target	1	-	-	-	60	-
IM-3DGCT6	AGACTCAATCO	Fungi	Basidiomycota	Tremellomycetes	Tremellales	Trimorphomycetaceae					Target	5	41432	31135	35450	27377	31618
IM-147B70	AATCTCAACCA	Fungi	Basidiomycota	Tremellomycetes	Trichosporonales	Trichosporonaceae					Target	2	-	57	-	-	139
IM-0100XP	CTAAAAAAT	Fungi	Glomeromycota	Glomeromycetes							Target	1	-	-	-	27	-
IM-0642QW	ACACCTCACTAI	Fungi	Zygomycota		Umbelopsidales	Umbelopsidaceae	<i>Umbelopsis</i>				Target	1	-	-	-	-	51
IM-M3V170	AACACCTCAAI	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae					Target	5	7861	9986	1715	531	5216
IM-GHK703	AACACCTCAAI	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae					Target	5	1397	3950	521	33	526
IM-5H887Q	AACACCTCAAI	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae					Target	5	43	609	37	35	135
IM-86AU10	AACACCTCAAC	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae					Target	3	40	50	-	-	33
IM-6YF0D6	AACACCTCAAA	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae					Target	1	-	32	-	-	-
IM-6H8LU7	AACACCTCAAC	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae	<i>Gamsiella</i>				Target	5	257	29	103	78	51
IM-S9ZV4E	AACACCTCAAI	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae	<i>Martirella</i>				Target	3	44	53	-	-	298
IM-S6B1US	AACACCTCAAI	Fungi	Zygomycota	Mortierellomycetes	Mortierellales	Mortierellaceae	<i>Martirella</i>				Target	5	25	100	22	21	25
IM-I1019Y	ATACTTCTCTCI	Fungi	Zygomycota	Mucoromycetes	Mucorales	Cunninghamellaceae	<i>Absidia</i>				Target	1	80	-	-	-	-
IM-B05N06	ATACTTCTCTCI	Fungi	Zygomycota	Mucoromycetes	Mucorales	Cunninghamellaceae	<i>Absidia</i>				Target	1	-	-	-	-	25
IM-38RMN9	ATACTTCTCTCI	Fungi	Zygomycota	Mucoromycetes	Mucorales	Cunninghamellaceae	<i>Absidia</i>	<i>Absidia cylindraspora</i>			Target	2	82	-	-	-	209
IM-4PMP13	ATACTTCTCTCI	Fungi	Zygomycota	Mucoromycetes	Mucorales	Cunninghamellaceae	<i>Absidia</i>	<i>Absidia cylindraspora</i>			Target	1	56	-	-	-	-
IM-FU7154	CCCAAAATCTCI	Fungi	Zygomycota	Mucoromycetes	Mucorales	Cunninghamellaceae	<i>Gangranella</i>	<i>Gangranella butleri</i>			Target	4	37	198	120	171	-
IM-47QS4U	ACACCCACAT	Fungi	Zygomycota	Mucoromycetes	Mucorales	Mucoraceae					Target	4	42	188	58	-	96



Metrics by Sample Table

Sample ID	Sample Type	Species Richness (number of OTUs)	Number of OTUs named at species level	Evolutionary Diversity	Fungal Functional Diversity
HDTP01	Client sample	100	16	26.9	1.33
HDTP02	Client sample	121	17	30.48	1.4
HDTP03	Client sample	88	13	22.48	1.23
HDTP05	Client sample	102	14	28.2	1.49
HDTP07	Client sample	87	15	26.36	1.4



Quality Control Table

Kit ID	NMID	Sample ID	Sample Type	Volume Filtered	Date Received	DNA Amplified	Sequencing QC	Target OTUs Detected	% Target	% Non-Target	Reported	Comment
SSC-01-01493	33857	HDTP01	Client Sample	NA	02/8/2023	Yes	Yes	Yes	100	0	Yes	Sample reported
SSC-01-01490	33858	HDTP02	Client Sample	NA	02/8/2023	Yes	Yes	Yes	100	0	Yes	Sample reported
SSC-01-01492	33859	HDTP03	Client Sample	NA	02/8/2023	Yes	Yes	Yes	100	0	Yes	Sample reported
SSC-01-01491	33860	HDTP05	Client Sample	NA	02/8/2023	Yes	Yes	Yes	100	0	Yes	Sample reported
SSC-01-01489	33861	HDTP07	Client Sample	NA	02/8/2023	Yes	Yes	Yes	100	0	Yes	Sample reported

