



A614/A6097 Corridor Improvements Ollerton Roundabout.

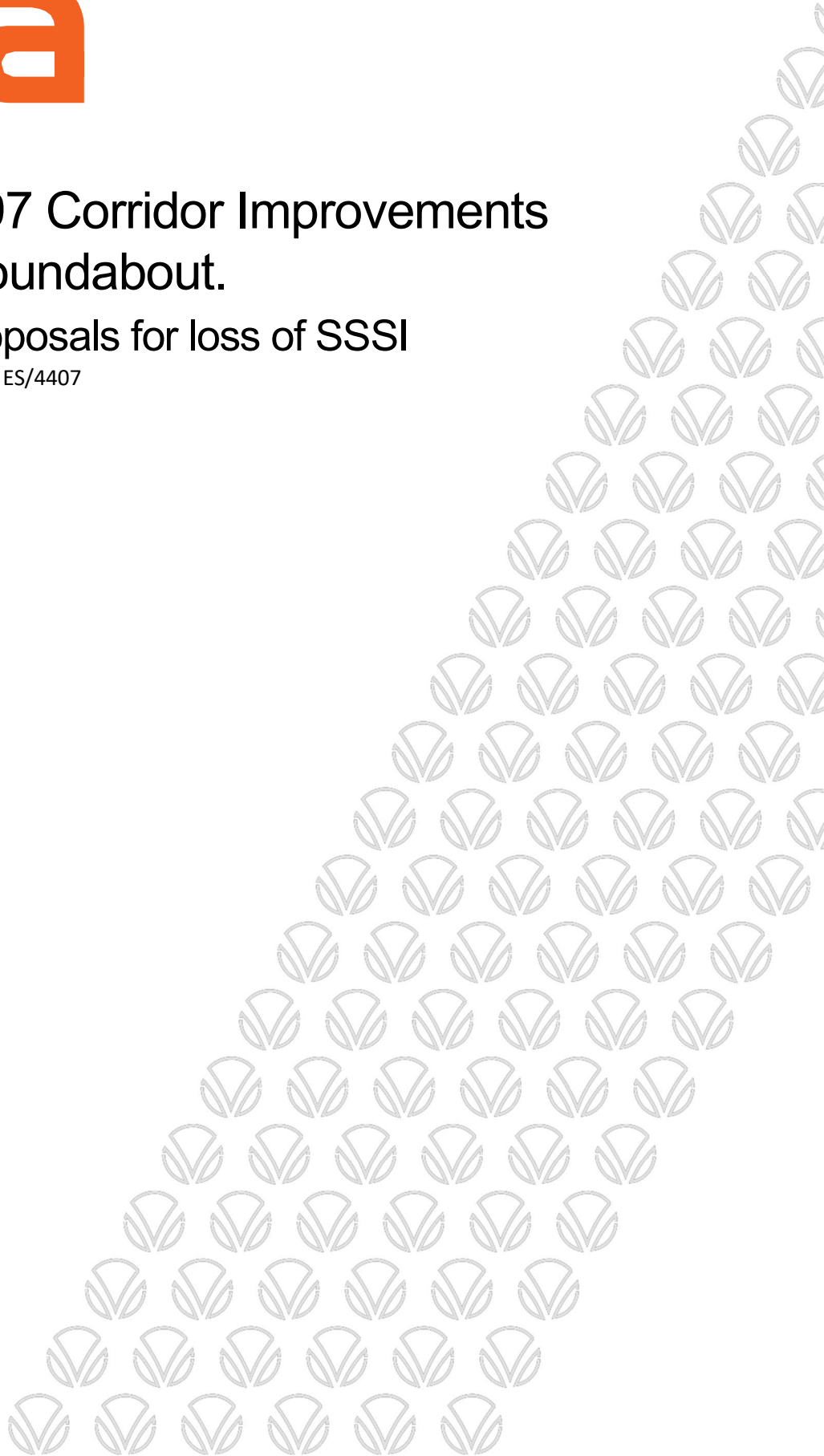
Mitigation proposals for loss of SSSI

Planning application ref: ES/4407

Date: July 2022

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1. Introduction

1.1 This report has been prepared by Via East Midlands Ltd on behalf of Nottinghamshire County Council to set out proposals for offsite mitigation for the loss of SSSI as a result of proposed highways works to Ollerton Roundabout. Forming part of a wider strategic highway network improvement project, these highways works are focussed on the reconfiguration and enlargement of the roundabout junction at the intersection of the A614, A616, A6075 and Newark Road Ollerton.

2. Existing landscape

2.1 Ollerton junction lies west of Ollerton, Newark approximately 12 km northeast of Mansfield and 26 km north of Nottingham. Situated within the Sherwood National Character Area (NCA 49) (Natural England 2022) the site is surrounded by numerous statutory and non-statutory designated sites several of which overlap. These are listed below and shown in relation to Ollerton Roundabout in Appendix A. The designations affected are highlighted below.

Table 1.1 Statutory and non-statutory designated sites

Name	Status	Location	Interest
Sherwood Forest Area	Possible Potential Special Protected Area (ppSPA) ¹	Within red line boundary	Nightjar and woodlark
Birklands West and Ollerton Corner	Site of Special Scientific Interest (SSSI)	Within red line boundary	Botanical, invertebrate, herpetofauna
Birklands and Bilhaugh	SAC	1.1 km to the north-west (a second area of this site is located 2.2 km to the west)	Ancient oak woodland
	SSSI	500 m to the north-west	
	Local Wildlife Site (LWS)	Within Scheme red line boundary	
Ollerton Colliery	LWS	800 m to the south-east	Birds, botanical, and invertebrate
Sherwood Heath	Local Nature Reserve (LNR)	Within Scheme red line boundary	Botanical (heathland), invertebrate, herpetofauna
	LWS	Within Scheme red line boundary	
Cockglode and Rotary Wood	LNR	600 m to the west	Woodland, colliery spoil tip

¹ ppSPA - a site that may be added to the list of candidate sites, with regards to designation as an SPA.

3. Proposed Ollerton Roundabout Scheme

- 3.1 The Environmental Statement (AECOM/ Via 2022) identified that the construction of the Ollerton Roundabout Scheme would have a direct impact on Birklands West and Ollerton Corner SSSI. This SSSI is described by Natural England as:

‘a remnant of the historic Sherwood Forest which supports an outstanding invertebrate fauna associated with old trees characteristic of open oak-birch woodland in Nottinghamshire together with notable tracts of lowland acid grassland and heath’

- 3.2 The proposed extent of site clearance works is shown in Appendix B. The area of SSSI lost is made up of highway verge and is 0.05ha.
- 3.3 A Preliminary Ecological Appraisal (PEA) was undertaken as part of baseline assessment for the study area (Baker Associates 2019). This described the area, between the A616 and A614 highways that falls within the SSSI and that is adjacent to the roundabout, as consisting of semi-natural broad-leaved woodland with roadside verges of species poor neutral grassland. Near the road the oak birch tree cover becomes scrubby, relatively immature and bracken tends to dominate.
- 3.4 The proposed landscape and ecological mitigation for Ollerton Roundabout are shown in Appendix C and includes:
- Informal native hedgerow planting
 - Acid grassland creation to the highway’s boundary
 - Native tree planting
 - Species rich grassland creation with the existing Birklands and Bilhaugh LWS
- 3.5 Whilst these proposals were considered acceptable as part of the scheme, additional works to independently compensate for the loss of SSSI (as shown in the yellow hatch within Appendix B) were identified by Natural England as a requirement. A proposal for these works is outlined below.

4. Identification of recipient site

- 4.1 Following consultation between Nottinghamshire County Council, Natural England and Via (June 2022) an area immediately adjacent to Birklands West and Ollerton Corner SSSI, Cockglode and Rotary Woods, was identified as a potential site for compensatory works. (Refer to Appendix D). This is an existing Local Nature Reserve (Cockglode and Rotary Woods LNR) covering just over 14 hectares which is owned by Nottinghamshire County Council. Two parcels of land were highlighted by the County Ecologist/Green Spaces Manager that would benefit from some ongoing land management works to improve habitat and control invasive species. The focus of the management operations is shown in Appendix D and relate to the areas closest to the SSSI known as Cockglode Woods. These are:

- **Cockglode Woods: Area 1 Mature woodland (Appx. 1.75ha)**
Ancient and Semi-Natural Woodland - Magic map
- **Cockglode Woods: Area 2 Birch woodland with open heathy habitat (Appx. 2.80ha)**
Wood pasture and Parkland BAP Priority Habitat (England) - Magic map

- 4.2 The following management objectives are outline and subject to agreement with Natural England and Nottinghamshire County Council. The detailed proposals would be informed by a Preliminary Ecological Appraisal to establish base line conditions and more targeted objectives and delivery proposals.
- 4.3 **Cockglode Woods**- is thought to have ancient origins (Sherwood Forest Trust et al. 2016) with mature tree cover oak/birch woodland as well as non-natives false acacia (*Robinia pseudoacacia*) and rhododendron (*Rhododendron ponticum*), a legacy from being the former gardens of Cockglode Hall which was demolished in the 1950s as Thoresby Colliery expanded. Ancient woodland indicator species are present.
- 4.4 **Designations**- Both Area 1 and 2 are within Birkland and Bilhaugh Local Wildlife Site (LWS 1/91) described as “An extensive remnant of the historic Sherwood Forest including excellent examples of the characteristic heathland and woodland communities”
- 4.5 The south-eastern corner of Area 2 (approximately a third of the area) also lies within Birklands West and Ollerton Corner SSSI. (Refer to Appendix A for other ecological designations in the wider area)
- 4.6 Area 1 also has heritage interest and it is on the Historic Environment Record as a non-designated Park and Garden being the former grounds of Cockglode Hall.

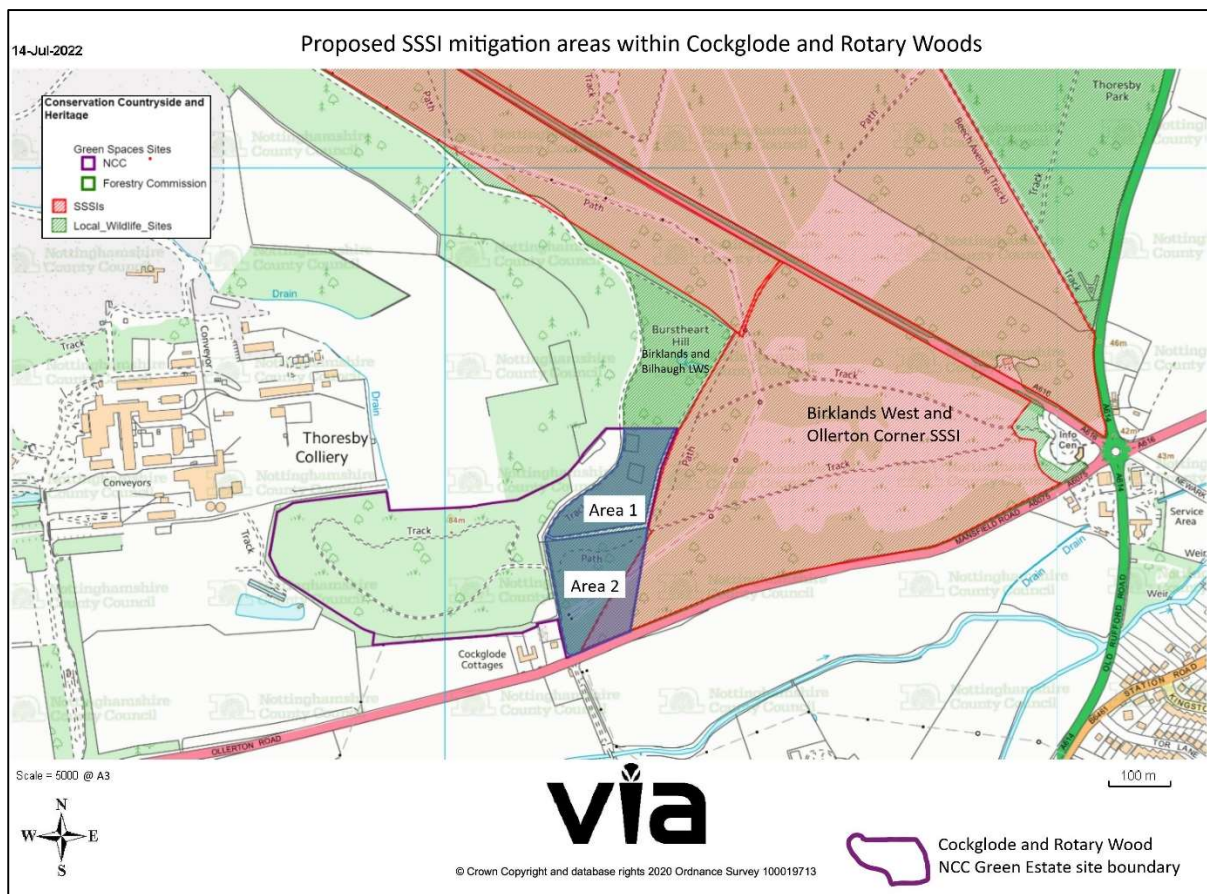


Figure 1: Proposed Mitigation areas relationship to affected SSSI

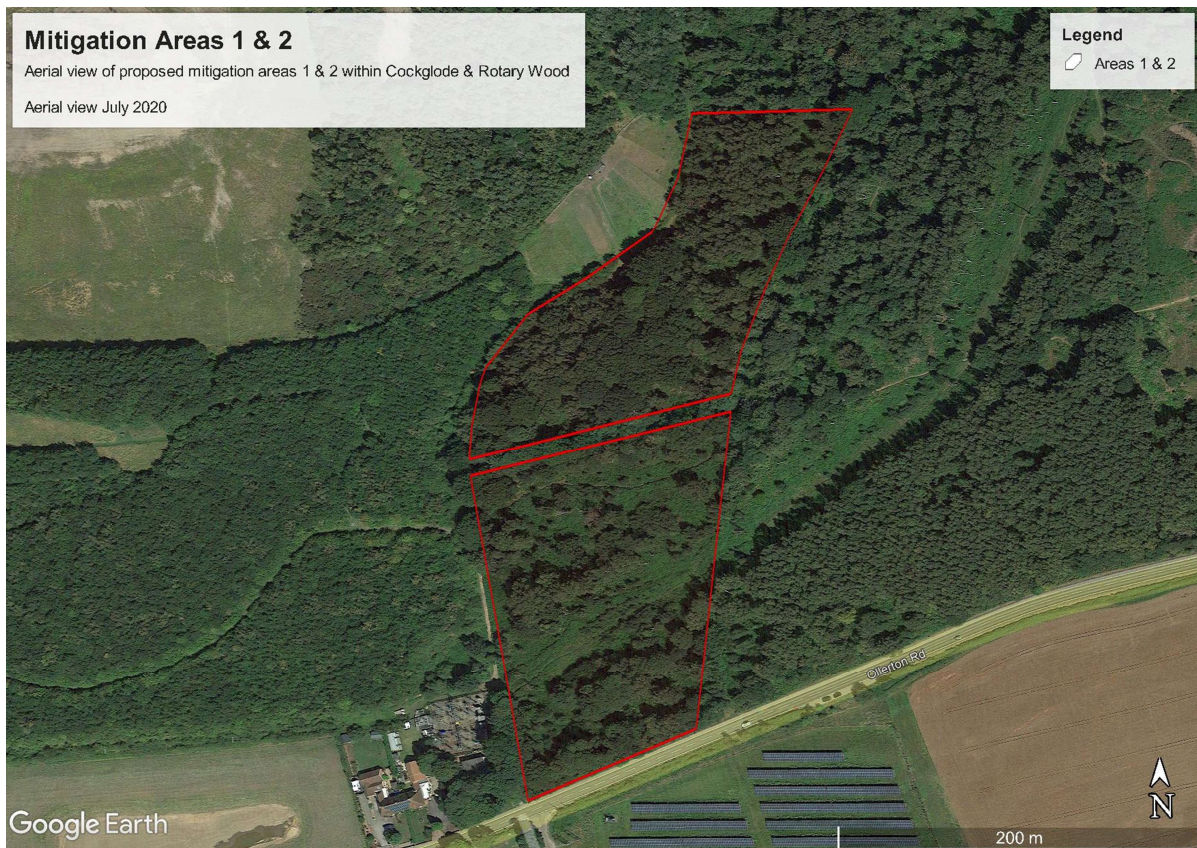


Figure 2: Aerial view of Areas 1 & 2 habitat types

- 4.7 **Existing Habitats** Area 1 to the north, lies on a south facing slope and is largely covered in a close canopy broadleaf woodland made up of mature oak, with occasional yew and holly. Some common sycamore is also apparent. Rhododendron forms the understory and in more open areas (such as along informal footpaths) bracken has become more dominant.
- 4.8 Area 2 is on lower lying flatter ground and consists of a belt of mature oak and sycamore along the road frontage with patches of holly along the access track to the west. Amongst sycamore and birch saplings there are mixed age oak as well as occasional wild cherry and sweet chestnut. Under a power line running east to west is an established swath of bracken with some hawthorn and occasional gorse. The informal path that runs under this is intermittently fringed with areas of acid grassland whilst in other areas more ruderal species such as rose-bay willow herb, common hogweed, creeping thistle and bramble have become established.
- 4.9 Whilst woodland cover in area 1 is good there are several invasive species present that unchecked could create detrimental impacts upon the quality of this habitat. These include false acacia (*Robinia pseudoacacia*), rhododendron (*Rhododendron ponticum*) and Himalayan balsam (*Impatiens glandulifera*).

Area 1 - Overall management aim:

To improve the condition of woodland habitat to eliminate invasive species and provide a mosaic woodland edge/heathland habitat. Lowland heathland is a Habitat of Conservation Concern



Figure 3: False acacia trees within mature woodland – remove invasive species.



Figure 4: False acacia saplings along informal footpath – remove invasives/control bracken.

Area 2 - Overall management aim:

To improve the condition of relict heathland habitat by bracken control so that over time an acid grassland/heathland mosaic establishes. The long-term aim is that it qualifies as Lowland heathland as Nottinghamshire’s Habitat Action Plan (HAP).



Figure 5: Area 2 - Cockglode Wood way leave –Bracken control in targeted areas



Figure 6: Area 2 Bracken dominated understory – Control bracken to create heathland mosaic

5. Cockglode Woods management proposals

- 5.1 The aim of the mitigation works in Area 1 is to improve the condition of woodland habitat by eliminating invasive species and provide a mosaic woodland edge/heathland habitat. In Area 2 the aims are to improve the condition of relict habitat so that over time it qualifies as lowland heathland in alignment with Nottinghamshire’s Habitat Action Plan (HAP).
- 5.2 A detailed programme of works will be developed to include initial clearance activities to the identified sites, scrape creation, heather brashing, control of invasive species and ongoing management. It is anticipated works would be carried out over several years to ensure successful establishment, then passed over to NCC Green Estates to be maintained as part of the wider management programme. An indicative example programme is included below for reference.

Table 5.1 Indicative example management programme

Activity	Year 1	Year 2	Year 3	Year 4	Year 5
Bracken clearance					
Scrape creation					
Heather brashing					
Bracken control					
False-acacia control					
Rhododendron control					
Himalayan balsam control					
Primary main works					
Ongoing establishment works					
Minor control works					

- 5.3 Work to control non-native invasive species would be undertaken across areas 1 & 2 where identified. The bracken control and heathland creation work would be carried out over an area equivalent to 3 times the loss of SSSI, i.e., 0.15ha. The distribution of these works would be informed by an ecological site survey and agreement with the County Ecologist/Green Spaces Manager.
- 5.4 Once a site-specific detailed plan and programme of activities has been developed and agreed, quotations for undertaking this work will be sought from specialist local management contractors confirmed as acceptable by NCC Green Estates. These works will be carried out as part of the construction delivery package associated with the A614/A6097 Corridor Improvements scheme for the full 5-year duration outlined above. Following completion of this initial 5-year period, a sum of money sufficient to cover ongoing maintenance activities for the determined period will then be transferred to NCC Green Estates along with responsibility for upkeep.
- 5.5 **Management and control of Bracken (*Pteridium aquilinum*)** - An ecological site survey of both areas will be carried out to identify bracken stands that will be most effective to treat. The principles followed will be as set out in Natural England Technical Information Note TIN048 and include the following:
- Treating bracken stands that still have remnant heathland/grassland ground vegetation.
 - Assessing the existing ecological condition of each area and having a phased approach to avoid large scale disturbance and “block” clearance

- Aim for a mosaic habitat to maintain bracken at low levels with a two-stage process (refer below)
- Working within the ecological calendar for optimal timing to avoid impacts to existing bird/reptile/invertebrates/plant communities and use of a Suitably Qualified Ecologist (SQE)
- Evaluating any archaeological /heritage interest particularly in relation to Area 1 by consulting with NCC Archaeology and Heritage and relevant local conservation groups where required

5.6 **Mechanical control of bracken**- Following identification of suitable areas for bracken control two cuts per season would be undertaken for 5 years.

5.7 The site would be checked for ground nesting birds by a SQE and the first cut undertaken in mid-July when the bracken is 50-75 cm high. The area would be cut again approximately 6 weeks later. Those areas treated would then require further nonchemical treatment, including the removal of some of the bracken litter and the reinstatement of scrapes to receive heather brash for heathland creation. This would be carried out under consultation, with monitoring of the targeted areas to assess the suitability of the prevailing ground conditions in terms of ecological and heritage constraints.

5.8 **Reinstatement of scrapes for heather seeding**- Former locations of sites where scrapes were carried out would be assessed for reinstatement and those considered most suitable would be marked out. Following ecological checks any scrub would be cleared/bracken cut and then litter removed to allow a suitably prepared receptor site for heather seeding. Using a forage harvester seed material would be collected from a local approved source in the Sherwood area. The site management works would follow the principles set out with the practical guide to the restoration and management of lowlands RSPB (Symes, N.C. and Day, J. 2003)

5.9 **Removal of invasive species**

Rhododendron (*Rhododendron ponticum*)

The site would be surveyed to locate stands and work areas prioritised for clearing. Appropriate control treatments would be informed by both the ecological survey recommendations and the bush type (i.e., age/size/groups/stumps and regrowth present). The top woody growth would be cut, and material chipped on site. Stump treatment would be agreed with NCC Green Estates. The management would follow the principles within Managing and controlling invasive rhododendron. Forestry Commission Practice Guide (Edwards, C 2006). Ongoing control and monitoring of rhododendron would be carried out during the subsequent 5-year programme.

Himalayan balsam (*Impatiens glandulifera*)

Himalayan balsam that is present within the area will be hand pulled during the summer prior to it flowering and going to seed. Plant material will be piled at source on site and left to wilt and then disposed of at an appropriately licenced landfill facility. Biosecurity measures for tools/PPE and any footwear will be followed to prevent transfer of any seed around the site. Ongoing control and monitoring of Himalayan balsam would be carried out during the subsequent 5-year programme.

False acacia (*Robinia pseudoacacia*)

Following survey mature false acacia trees will be identified and felled outside the bird nesting season. Tree stumps will be treated to prevent suckers and regrowth. Younger sapling trees will also be removed, and the site monitored for 5 years with seedling and saplings removed.

- 5.10 **Species Benefitting** The species benefitting from the management proposals include those listed below many of which are species of conservation concern both nationally and within Nottinghamshire (Nottinghamshire Biodiversity Action Group 2020). They would include some of the flagship species that were identified in the State of Nature in Sherwood Report 2015 (Crouch, N.C. 2016)

Invertebrates

Removal of invasive trees provides space for native oak-birch woodland which benefit species for invertebrates such as moths- e.g., Welsh clearwing, large red-belted clearwing, yellow-legged clearwing. Retention of dead wood piles, improving environment for native mature/veteran trees would benefit beetles e.g., green tiger beetle, four banded longhorn beetle, hazel pot beetle and spiders.

Reptiles

Manage scrub and habitat improvements to support common lizard, slow worm and adder.

Bats

Conservation of mature trees for roosting opportunities for bats particularly Leisler's bat and improving connectivity of trees lines and woodland edge for commuting and foraging.

Birds

Woodland and heathland management for bird species such as green woodpecker, chiffchaff, bullfinch, kestrel, yellow hammer with the intention of creating habitat suitable for woodlark and nightjar.

Plants and fungi

Clearing dense stands of bracken and heather seeding to allow a more diverse range of native acid grassland and heathland plant species to colonise. Retaining decaying trees timber and woodpiles on site for fungi including notable species identified in the Sherwood region.

6. Summary

- 6.1 The offsite mitigation works proposed is appropriate to the immediate local area and is connected to the boundary of the affected SSSI. The proposed compensation area is 3 times the area of SSSI that is to be lost as part of the development.
- 6.2 The methods used to control non-native invasive species will follow best practice guidance to reduce the spread and remove the invasive species from the works areas. Monitoring of the site during the 5-year period will form part of the works to assess and steer ongoing management activities. Control of bracken and creation of heathland to form an open mosaic habitat will be targeted in the most suitable areas as identified by ecological surveys and use best practice methods for establishment.
- 6.3 The outlined maintenance programme should provide the new habitats with the best possible chance of successful establishment which will add significantly to this wildlife site.

7. Conclusion

The proposed offsite mitigation in Cockglode Woods will provide compensation for the small area of SSSI habitat that would be lost to the development. The management works will extend over a significantly larger area than the existing highways verge and will bring benefits to a wide range of species. Through the mitigation works described the condition and quality of the oak – birch woodland and lowland heathland habitats would improve and ultimately, with ongoing management, warrant consideration as an extension of the SSSI.

References

Baker Consultants (2019) A614/A6097 Route Corridor, Nottinghamshire Ecological Appraisal March

AECOM/VIA (2022) A614/A6097 Corridor Improvements Environmental Statement Volume 1A Scheme Specific Assessment – Ollerton Roundabout

AECOM/VIA (2022) A614/A6097 Major Road Network Improvement Environmental Statement – Non- Technical Summary

Crouch, N.C. (2016) The State of Nature in Sherwood Report 2015. Sherwood Habitats Strategy Group, published online: <http://www.nottsbag.org.uk/projects.htm>

EDWARDS, C. (2006). Managing and controlling invasive rhododendron. Forestry Commission Practice Guide

Natural England (2022) National Character Area 49 National Character Area Profiles [Sherwood - Natural England \(nationalcharacterareas.co.uk\)](https://www.naturalengland.org.uk/national-character-areas/nca-profiles/49-sherwood)

Natural England (2016) Bracken management and control Natural England Technical Information Note TIN048

Nottinghamshire Biodiversity Action Group (2020) Species and Habitats of Conservation Concern [Species and Habitats of Conservation Concern – Nottinghamshire Biodiversity Action Group \(nottsbag.org.uk\)](https://www.nottsbag.org.uk/species-and-habitats-of-conservation-concern)

Nottinghamshire Biodiversity Action Group (2008) Nottinghamshire Local Biodiversity Habitat Action Plan for Lowland Heath

Nottinghamshire Biodiversity Action Group (2008) Nottinghamshire Local Biodiversity Habitat Action Plan for Oak -Birch Woodland

Sherwood Forest Trust NCC NSDC FC (2016) Sherwood Heath, Cockglode and Rotary Woods Management Plan 2016-2021

Symes, N.C.and Day, J. (2003) RSPB Practical guide to the restoration and management of lowlands

Appendices

Appendix A: Ollerton Roundabout - Nature Conservation designations

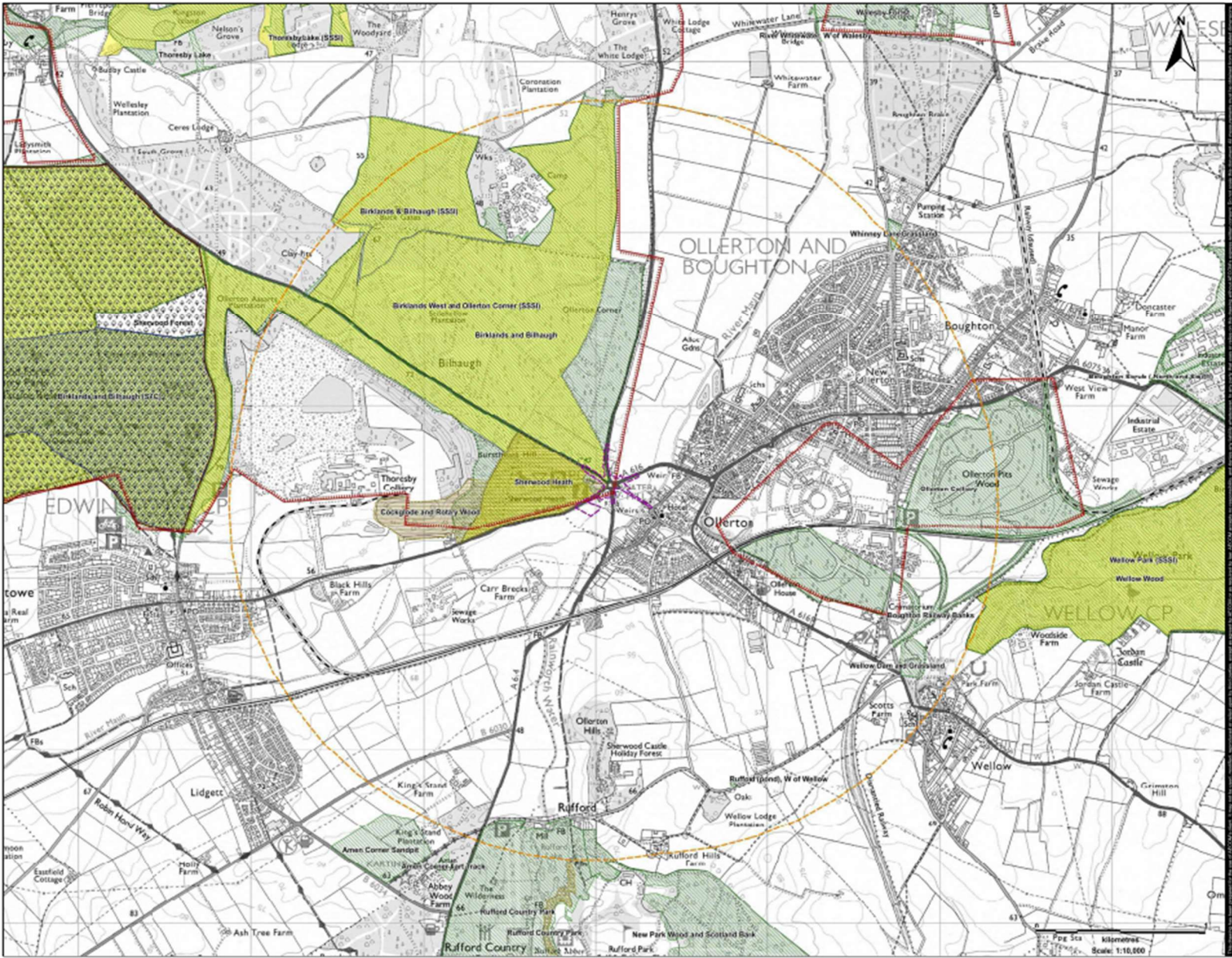
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Appendix C: Landscape Proposals

Appendix D: Rotary and Cockglode Woods - Mitigation areas

Appendix E: Rotary and Cockglode Woods – Aerial view of mitigation areas & representative scale of habitat improvement

Appendix A: Ollerton Roundabout - Nature Conservation designations



via

PROJECT
A614/A6097 Major Road Network Improvement

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LEGEND

- Assessment Boundary
- 2 km Buffer Study Area

Designated Sites

- Local Nature Reserves
- National Nature Reserves
- Special Areas of Conservation
- Local Wildlife Sites
- Site of Special Scientific Interest (SSSI)
- Possible Potential Special Protection Area

NOTES

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ISSUE PURPOSE
FINAL

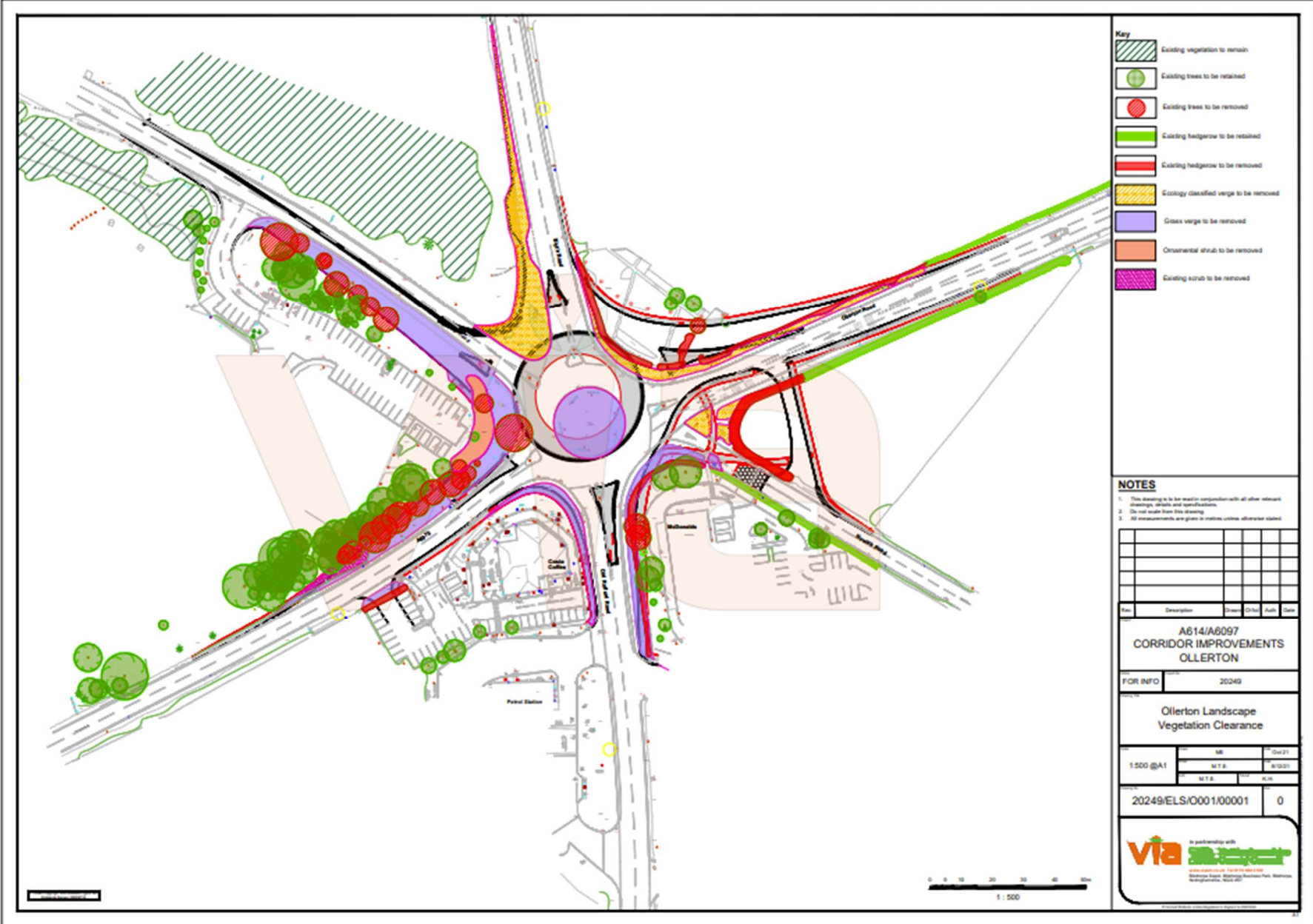
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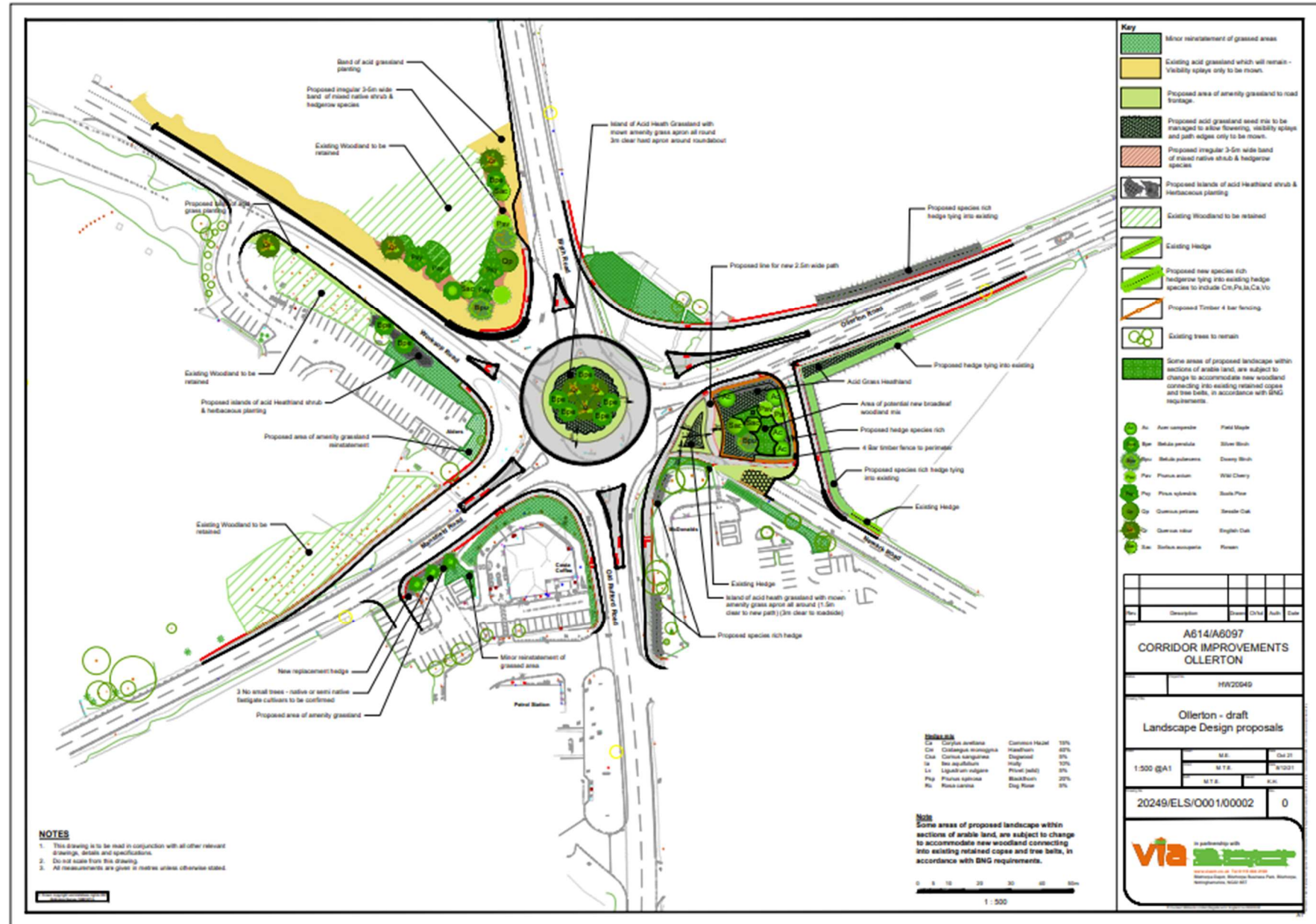
SHEET TITLE
Figure 5-1
Designated Sites Within 2km of the Assessment Boundary

VOLUME NUMBER
Volume 2A

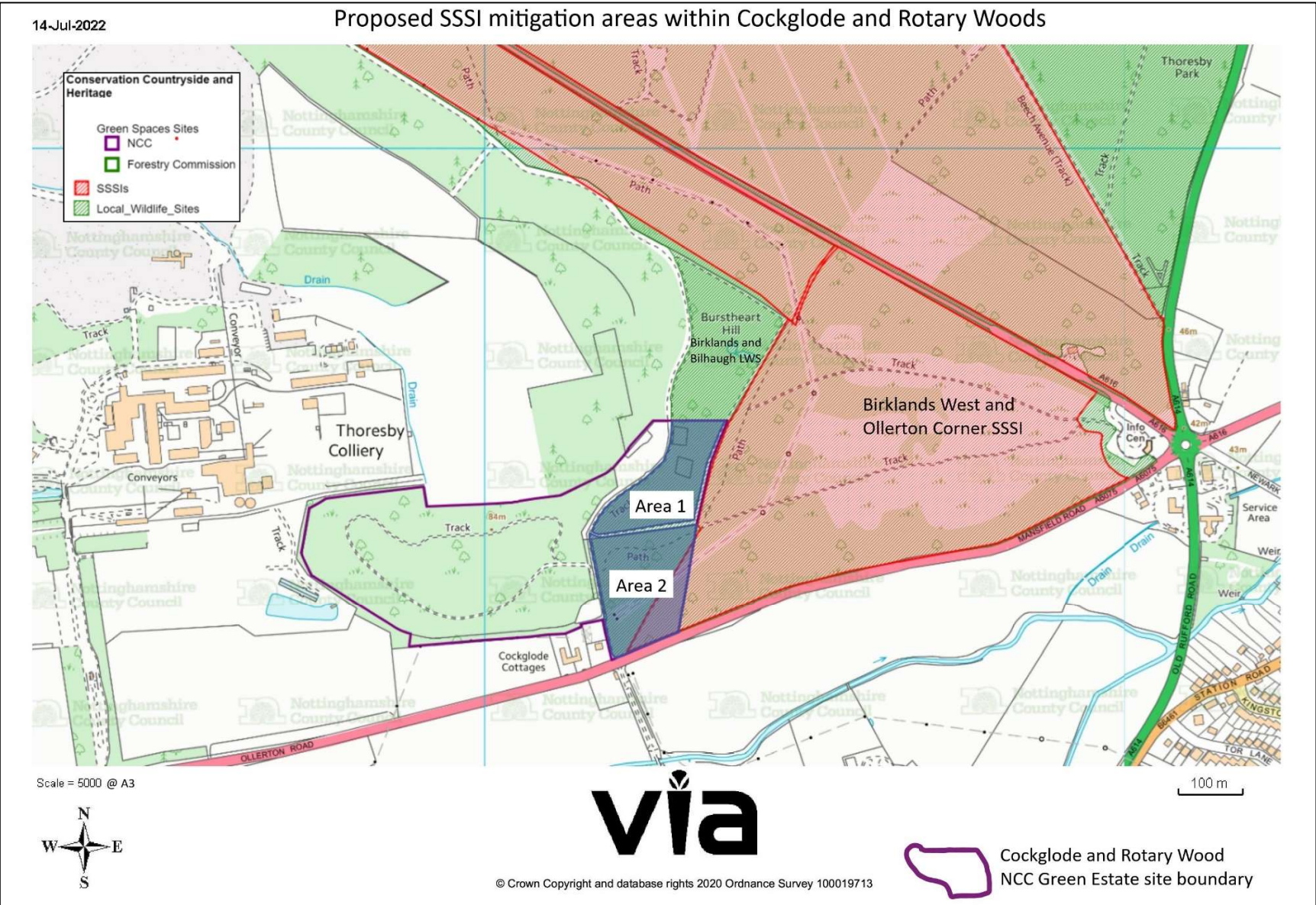
Appendix B: Vegetation Clearance showing loss of verge within SSSI (Yellow hatch)



Appendix C: Landscape Proposals



Appendix D: Rotary and Cockglode Woods - Mitigation areas



Appendix E: Rotary and Cockglode Woods – Aerial view of mitigation areas & representative scale of habitat improvement

