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Designated Sites

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1. Introduction

1.1 Background

- 1.1.1 This report has been produced as an appendix to Chapter 8: Ecology and Biodiversity (document reference 6.8) of the Environment Statement (ES) (Volume 6 of the Development Consent Order (DCO) application) for Norwich to Tilbury (the 'Project').
- 1.1.2 This report uses existing desk study data to provide information on the following internationally, nationally and locally designated sites for biodiversity which have the potential to be affected by the Project:
- Ramsar sites
 - Special Protection Areas (SPAs)
 - Special Areas of Conservation (SACs)
 - Sites of Special Scientific Interest (SSSIs)
 - National Nature Reserves (NNRs)
 - Local Nature Reserves (LNRs)
 - County Wildlife Sites (CWS) (Norfolk and Suffolk)
 - Local Wildlife Sites (LWS) (Essex)
 - Roadside Nature Reserves (RNR).
- 1.1.3 The Project has also been sub-divided into eight geographical sections for reader accessibility, based largely on Local Planning Authority boundaries. These are shown on the supporting figures in Annex A, and comprise:
- Section A – South Norfolk Council
 - Section B – Mid-Suffolk District Council
 - Section C – Babergh District Council, Colchester City Council and Tendring District Council
 - Section D – Colchester City Council
 - Section E – Braintree District Council
 - Section F – Chelmsford City Council and Brentwood District Council
 - Section G – Basildon Borough Council and Brentwood Borough Council (and part of Chelmsford City Council)
 - Section H – Thurrock Council.
- 1.1.4 This desk study informs the baseline conditions and support the impact assessment for the Project. Results reported in this document reference the Section that the designated site is located within.

1.2 Brief and Objectives

- 1.2.1 The purpose of this report is to provide baseline data, based on desk study information only, for the statutory and non-statutory designated sites of nature conservation importance, that may be affected during the construction and operation (and maintenance) of the Project.

1.3 Study Area

- 1.3.1 The Study Area for this data search is defined as the land within the Order Limits as well as that within a specific distance of the Order Limits (based upon the maximum likely predicted zone of influence), these are presented in Table A8.16.1.

Table A8.16.1 Study Area for each designation type (based upon the maximum likely predicted zone of influence)

Designation type	Study Area
Statutory Designated Sites	
Ramsar Sites	20 km
Special Protection Areas	20 km
Special Areas of Conservation	2 km
Special Areas of Conservation designated for bats	30 km
Sites of Special Scientific Interest	2 km
Sites of Special Scientific Interest Impact Risk Zones	Within the Order Limits
National Nature Reserves	2 km
Local Nature Reserves	2 km
Non-statutory Designated sites	
County Wildlife Sites	2 km
Local Wildlife Sites	2 km
Roadside Nature Reserves	2 km

2. Relevant Legislation and Policy

2.1 Legal Compliance

- 2.1.1 This study has been informed by current legislation in the context of the Project, as listed in Table A8.16.2.

Table A8.16.2 Legal compliance

Legislation	Details
Convention on Wetlands of International Importance Especially as Waterfowl Habitat 1971 (Ramsar Convention Secretariat, 1971)	An international treaty created to ensure the conservation and sustainable management of wetlands, through the designation of Ramsar sites and international cooperation between contracting parties such as the UK Government. The Contracting Party responsible for the site must ensure the protection of wintering bird populations, implementing appropriate measures, such as controlling invasive species and maintain suitable water levels.
Directive 2009/147/EC of The European Parliament and of the council of 30 November 2009 on the conservation of wild birds (European Parliament and council, 2009).	This directive known as the 'Birds Directive' establishes a legal framework across Europe, enforcing the establishment of SPAs in member states of the European Union, to protect bird species. The directive prohibits activities such as deliberate killing, capture, and disturbance of bird species during their breeding, rearing, and migration periods.
Conservation of Habitats and Species Regulations 2017 (as amended in 2019) ('Habitats Regulations') (UK Government, 2019)	The regulations known as the 'Habitats and Species Regulations' require authorities on behalf of the Secretary of State to maintain a list of sites which are important for either habitats or species (SACs and SPAs) and to provide protection for these sites through designation, planning, and other controls.
The Wildlife and Countryside Act 1981, as amended (WCA)	<p>The WCA is the main mechanism for legislative protection of wildlife in England. It gives protection to native species (particularly threatened species), their resting places and places of shelter by making it an offence to kill, injure, take, damage, destroy, sell, or possess them (with exceptions).</p> <p>Under the WCA, the country nature conservation bodies have a duty to notify any area of land which is 'of special interest by reason of any of its flora, fauna, or geological or physiographical features' – these areas are known as SSSIs.</p>

2.2 Planning Policy

- 2.2.1 Chapter 8: Ecology and Biodiversity (document reference 6.8) provides further details of relevant planning policy.

3. Methodology

3.1 Desk Study

- 3.1.1 A desk study was conducted in April 2025 to identify any statutory or non-statutory designated sites of nature conservation importance within the Study Area.
- 3.1.2 Statutory designated sites were searched for using Multi-Agency Geographic Information for the Countryside (MAGIC) (Natural England, 2025). These included Ramsar sites, SPAs, SACs, SSSIs, NNRs and LNRs.
- 3.1.3 The locations of non-statutory designated sites i.e., CWS, LWS and RNR were obtained from the following Local Ecological Record Centres (LERCs):
 - Norfolk Biodiversity Information Service (NBIS)
 - Suffolk Biodiversity Information Service (SBIS)
 - Essex Field Club (EFC).
- 3.1.4 The 20 km Study Area for SPA and Ramsar sites specifically relates to the foraging range of the bird species that are the qualifying features for these sites.
- 3.1.5 The results of this assessment have informed the scoping for the potential effects presented in Chapter 8: Ecology and Biodiversity (document reference 6.8).

3.2 Notes and Limitations

- 3.2.1 This report is solely based on desk study information that was available up to and including the end of March 2025.

4. Results

4.1 Overview

- 4.1.1 There are 13 Ramsar sites, 15 SPAs, one SAC, 26 SSSIs and 13 LNRs located within the Study Area. These statutory designated sites are shown on Figure A8.16.1: Statutory Sites Designated for Biodiversity Ramsar Sites and Special Protection Areas and Figure A8.16.2: Statutory Sites Designated for Biodiversity (excepting Ramsar Sites and Special Protection Areas) in Annex A.
- 4.1.2 There are 111 CWSs, 244 LWSs and 17 RNRs located within the Study Area. These non-statutory designated sites are shown on Figure A8.16.3: Non-Statutory Sites Designated for Biodiversity in Annex A.
- 4.1.3 Further details are outlined below.

4.2 Statutory Designated Sites

Ramsar Sites

- 4.2.1 There are 13 Ramsar sites located within 20 km of the Order Limits, as presented in Table A8.16.3 and shown on Figure A8.16.1: Statutory Sites Designated for Biodiversity Ramsar Sites and Special Protection Areas in Annex A. Site descriptions for each Ramsar site are presented in Annex B.

Table A8.16.3 Ramsar sites located within 20 km of the Order Limits

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
A	Redgrave and South Lopham Fens	2.81	West
A	Broadland	8.90	North-east
B, C	Deben Estuary	13.80	East
C	Stour and Orwell Estuaries	3.07	East
C	Hamford Water	7.91	East
D	Colne Estuary (Mid-Essex Coast Phase 2)	7.30	South-east
D	Abberton Reservoir	7.68	South-east
D	Dengie (Mid-Essex Coast Phase 1)	17.70	East
D, E	Blackwater Estuary (Mid-Essex Coast Phase 4)	10.99	South-east
G	Crouch and Roach Estuaries (Mid-Essex Coast Phase 3)	12.21	East
H	Thames Estuary and Marshes	1.83	South-east
H	Benfleet and Southend Marshes	11.72	East
H	Medway Estuary and Marshes	12.59	South-east

Special Protection Areas

- 4.2.2 There are 15 SPAs located within 20 km of the Order Limits as presented in Table A8.16.4 and shown on Figure A8.16.1: Statutory Sites Designated for Biodiversity Ramsar Sites and Special Protection Areas in Annex A. Site descriptions for each SPA are presented in Annex C.

Table A8.16.4 SPAs located within 20 km of the Order Limits

Project section(s)	Site Name	Distance from Order Limits (km)	Direction
All sections	Outer Thames Estuary	13.79	East
A	Breckland	9.69	West
A	Broadland	8.90	North-east
B, C	Deben Estuary	13.80	East
C	Sandlings	17.93	East
C	Hamford Water	7.91	East
C	Stour and Orwell Estuaries	3.07	East
D	Colne Estuary (Mid-Essex Coast Phase 2)	7.30	South-east
D	Abberton Reservoir	7.68	South-east
D	Dengie (Mid-Essex Coast Phase 1)	17.70	East
D, E	Blackwater Estuary (Mid-Essex Coast Phase 4)	10.99	South-east
G	Crouch and Roach Estuaries (Mid-Essex Coast Phase 3)	12.21	East
H	Thames Estuary and Marshes	1.83	South-east
H	Benfleet and Southend Marshes	11.72	East
H	Medway Estuary and Marshes	12.59	South-east

Special Areas of Conservation

- 4.2.3 There are no SACs designated for bats within 30 km of the Order Limits. There is one SAC located within 2 km of the Order Limits; this is Norfolk Valley Fens (Section A) listed in Table A8.16.5 and shown on Figure A8.16.2: Statutory Sites Designated for Biodiversity (excepting Ramsar Sites and Special Protection Areas) in Annex A. A site description of Norfolk Valley Fens SAC is presented in Annex D.

Table A8.16.5 SACs located within 2 km of the Order Limits

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
A	Norfolk Valley Fens	0.29	South-east

Sites of Special Scientific Interest

- 4.2.4 There are 26 SSSIs located within 2 km of the Order Limits as identified in Table A8.16.6 and shown on Figure A8.16.2: Statutory Sites Designated for Biodiversity (excepting Ramsar Sites and Special Protection Areas) in Annex A. As identified in the table, seven of these sites are designated for their geological interest and so not relevant to the biodiversity and ecology baseline.
- 4.2.5 There are, therefore, 19 SSSIs located within 2 km of the Order Limits that are of relevance to the biodiversity and ecology baseline. One of these sites is located within the Order Limits (Middle Wood, Offton (Section B), shown in **Bold text** below).
- 4.2.6 All 19 sites have Impact Risk Zones (IRZs) within the Order Limits which have restrictions that are relevant to the Project (i.e. pipelines, underground cables, pylons, overhead cables).
- 4.2.7 Site descriptions for each SSSI are presented in Annex E.

Table A8.16.6 SSSIs located within 2 km of the Order Limits

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
A	Flordon Common	0.29	South-east
A	Aslacton Parish Land	1.27	East
A	Forncett Meadows	1.14	East
A	Shelfanger Meadows	0.16	North-west
B	Wortham Ling	0.01	West
B	Gypsy Camp Meadows, Thrandeston	0.11	East
B	Burgate Wood	0.36	North-west
B	Westhall Wood and Meadow	1.60	West
B	Gipping Great Wood	0.70	West
B	Combs Wood	1.44	West
B	Barking Woods	0.20	East
B	Middle Wood, Offton	0.00	Within the Order Limits
B	Creeting St. Mary Pits (geological SSSI)	Scoped out of ecology and biodiversity assessment	
B	Hascot Hill Pit (geological SSSI)	Scoped out of ecology and biodiversity assessment	
C	Ardleigh Gravel Pit (geological SSSI)	Scoped out of ecology and biodiversity assessment	
C	Elmsett Park Wood	1.14	West
C	Hintlesham Woods	1.33	West
C	Bullock Wood	1.41	South
D	Marks Tey Brickpit (geological SSSI)	Scoped out of ecology and biodiversity assessment	

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
F	River Ter (geological SSSI)	Scoped out of ecology and biodiversity assessment	
F	Newney Green Pit (geological SSSI)	Scoped out of ecology and biodiversity assessment	
G	Thorndon Park	1.89	West
G, H	Langdon Ridge	0.00	Adjacent with the Order Limits
H	Mucking Flats and Marshes	1.83	East
H	Globe Pit (geological SSSI)	Scoped out of ecology and biodiversity assessment	
H	Hangman's Wood and Deneholes	0.47	West

National Nature Reserves

4.2.8 There are no NNRs located within the 2 km Study Area.

Local Nature Reserves

4.2.9 There are 13 LNRs located within 2 km of the Order Limits as presented in Table A8.16.7 and shown on Figure A8.16.1: Statutory Sites Designated for Biodiversity (excepting Ramsar Sites and Special Protection Areas) in Annex A. The closest LNR is Roydon Fen (Section A) which is located 0.01 km east of the Order Limits at its closest point. Site descriptions for each LNR are presented in Annex F.

Table A8.16.7 LNRs located within 2 km of the Order Limits

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
A	Dunston Common	0.41	East
A	Roydon Fen	0.01	East
A	Smockmill Common	1.52	South-east
B	Bramford Meadows	0.58	East
B	Fen Alder Carr	0.22	East
B	Needham Lake	1.52	East
C	Railway Walk, Hadleigh	0.42	North-west
E	Brockwell Meadows	1.93	South
F	Chelmer Valley Riverside	1.79	East
G	Hutton Country Park	0.14	West
G	Mill Meadow	1.91	East
H	Grove House Wood	1.21	East
H	Linford Wood	0.65	East

4.3 Non-Statutory Designated Sites

County Wildlife Sites

- 4.3.1 There are 111 CWSs located within 2 km of the Order Limits as presented in Table A8.16.8 and shown on Figure A8.16.3: Non-Statutory Sites Designated for Biodiversity in Annex A. Nine of these CWSs are located within the Order Limits (shown in **bold text** below).
- 4.3.2 Site descriptions for the CWSs located within 2 km of the Order Limits are presented in Annex G.

Table A8.16.8 CWSs located within 2 km of the Order Limits

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
A	Bayes Meadow	0.63	East
A	Bracon Ash Common	0.79	North-west
A	Bressingham Fen	1.97	West
A	Brewer's Green	0.37	North-east
A	Brick Kiln Lane, Bunwell Hill	0.00	Adjacent to the Order Limits
A	Brock's Watering	0.00	Adjacent to the Order Limits
A	Bunwell Fen	0.71	East
A	Bunwell Wood	0.10	North-west
A	Caistor St Edmund Roman Town	0.64	North-east
A	Carlton Rode Fen	0.01	West
A	Diss Cemetery	0.87	South-east
A	Dunston Common	0.40	East
A	Eagle Farm Pond	0.80	East
A	Flordon Meadow (East)	0.15	West
A	Flordon Meadow (West)	0.20	West
A	Foxes' Grove	1.51	North-east
A	Gissing Common	1.69	East
A	Grove Wood	1.10	West
A	Hall Plantation	1.32	North-west
A	Hapton Common	0.10	South-east
A	Hethel Pond and 'The Drift'	1.11	West
A	Home Wood and The Belt	1.81	East
A	Horse Fen	1.46	West
A	Horse Fen Carr	1.20	West

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
A	Horseford Meadow	1.18	East
A	Long Plantation	1.14	North-east
A	Muir Lane Meadow	1.41	East
A	Mulbarton Common	0.97	West
A	New Plantation and Brick Kiln Covert	1.82	East
A	Norton's Wood	0.00	Adjacent to the Order Limits
A	Roydon Fen	0.01	East
A	Smockmill Common	1.52	East
A	Spring Meadow	0.70	East
A	Street Plantation and Bracon Hall Lake	1.15	West
A	Swardeston Common	1.16	North-west
A	Tas Pond	1.09	East
A	Tas Valley	1.35	East
A	The Carr	1.50	East
A	The Carrs Woodland	1.85	West
A	The Grange, Wreningham	0.54	North-west
A	The Grove	1.83	West
A	Tibenham Airfield	1.53	East
A	Valley Farmhouse Meadow	1.49	East
A	Wreningham Marsh	1.35	North-west
A	Wreningham Meadow	1.06	North-west
B	Ash Plantation	0.89	West
B	Bonny Wood	0.50	South-east
B	Bramford Meadows	0.58	North-east
B	Bullen Wood	0.00	Within the Order Limits
B	Burgate Great Green	1.06	North-west
B	Burgate Little Green	0.10	North-west
B	Chaffinch Wood	1.87	East
B	Chalkeith Road Meadow	1.72	East
B	Creeping St Mary Churchyard	0.69	East
B	Creeping St Mary Meadows	0.40	East
B	Fen Alder Carr	0.20	South-east
B	Flordon Road Grassland	1.67	South-east
B	Flowtonhall Grove	0.79	West

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
B	Fore and Bushey Groves	0.00	Within the Order Limits
B	Forrold Meadow	1.45	East
B	Gipping Little Wood	1.25	West
B	Gittin Wood	1.57	North-west
B	Great Newton Wood	0.00	Adjacent to the Order Limits
B	Guidepost Plantation	1.48	West
B	Hall Farm Meadow	0.63	South-west
B	Jacobites Wood	1.77	North-west
B	Keyfield Groves	0.12	North-west
B	Lion Inn Meadow and Chalk Pit	1.78	East
B	Little Newton Wood	0.00	Adjacent to the Order Limits
B	Mellis Common	0.15	South-east
B	Miller's Wood	0.00	Within the Order Limits
B	Muckinger Wood	0.28	West
B	RAF Wattisham Woodland	1.91	West
B	Railway Meadows	0.02	East
B	River Gipping (Sections)	0.00	Within the Order Limits
B	River Waveney (Sections)	0.00	Adjacent to the Order Limits
B	Round Wood and Elms Grove	0.00	Within the Order Limits
B	Somersham Park	0.00	Within the Order Limits
B	St John's Grove	1.23	West
B	Stubbing's Wood	1.09	North-west
B	Suffolk Business Park Meadow - Formerly EEB	0.99	North-west
B	The Marsh	0.23	North-west
B	Thornham Estate Woods	0.01	East

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
B	Thrandeston Marsh	0.00	Within the Order Limits
B	Topcroft Farm Meadows	1.89	South-west
B	Upper Badley Wood	0.82	West
B	Wortham Long Green	0.46	West
B, C	Bushey Ley Farm (Arable Fields)	0.10	South-west
C	Bentley Long Wood	1.86	South-east
C	Borley`s Wood	1.46	South-west
C	Brimlin Wood	0.00	Adjacent to the Order Limits
C	Burstall Long Wood	0.00	Adjacent to the Order Limits
C	Chantry Park, Beechwater and Meadow	1.22	East
C	Hadleigh Railway Walk	0.42	North-west
C	Hazel Wood	0.87	East
C	Higham Meadow	0.00	Within the Order Limits
C	Langham Close Wood	1.31	South-west
C	Laurel Cottage Grassland	1.43	South-west
C	Long Wood	0.40	North-west
C	Raydon Great Wood	0.47	West
C	River Brett (Sections)	1.50	West
C	Rowley Grove	0.88	West
C	Springhill Meadows	1.84	East
C	Sproughton Churchyard	0.92	East
C	Sproughton Park	0.00	Within the Order Limits
C	Squire`s Wood	0.14	North-west
C	Thorington Street Pit and Reservoir	1.56	West
C	Tom`s / Broadoak Wood	0.77	North-west
C	Wasses Marshes	0.11	West
C	Water Farm Meadow	0.92	West
C	Wenham Thicks	0.00	Adjacent to the Order Limits

Local Wildlife Sites

- 4.3.3 There are 242 LWSs located within 2 km of the Order Limits as presented in Table A8.16.9 and shown on Figure A8.16.3: Non-Statutory Sites Designated for Biodiversity in Annex A. Nineteen of these LWS are located within the Order Limits (shown in **Bold text** below).
- 4.3.4 Site descriptions for the LWSs located within 2 km of the Order Limits are presented in Annex H.

Table A8.16.9 LWSs located within 2 km of the Order Limits

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
C	Ardleigh Reservoir Grassland	0.98	South
C	Ardleigh Reservoir Wood	0.78	South
C	Ash Wood	0.69	West
C	Birch Wood	0.20	North-east
C	Birch Wood, Langham	0.34	North-east
C	Black Brook	0.00	Within the Order Limits
C	Bridges Farm	1.03	East
C	Cophedge Wood	0.92	West
C	Dalethorpe Park	0.70	East
C	Dedham Churchyard	1.87	East
C	Gt Bromley Churchyard	1.41	South-west
C	Gun Hill Grassland	0.07	North-east
C	Gun Hill Place	0.00	Adjacent to the Order Limits
C	Langham SRV	0.19	South-east
C	Langham Water Works	0.61	West
C	Little Bentleyhall Wood	1.64	South
C	Little Bromley Churchyard	0.11	North-east
C, D	Little Wood	1.95	North
C	Manning Grove	0.27	South
C	Manor House Meadow	0.67	South-west
C	Shir Burn Wood and Meadow	1.39	North-east
C	Springhead Corner Meadow	0.69	South
C	St Mary's Churchyard, Langham Hall	0.30	South-east
C	The Coombs	0.27	South-east
C	Wall's Wood	1.77	South
C	Wignall Brook Grasslands	1.79	North-east

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
C	Wignall Street Grassland	1.50	North-east
D	Aldercar Wood	0.70	South
D	Aldercar, Wormingford	1.83	North-west
D	Aldham Hall Wood	0.00	Adjacent to the Order Limits
D	Buckler's Farm Wood	1.46	North-west
D	Church House Wood	0.00	Adjacent to the Order Limits
D	Creak's Grove	1.90	North
D	Daisy Green Grove	0.85	South-east
D	Fiddler's Wood	0.00	Adjacent to the Order Limits
D	Florie's Hedgerows	1.86	North-west
D	Fordham Bridge Meadow	0.07	South
D	Fordham Churchyard	0.31	North-west
D	Fordham Heath	1.31	South-east
D	Great Horkesley Churchyard	1.21	North
D	Grove Wood	1.59	South-east
D	Harrow Wood	0.00	Within the Order Limits
D	High Woods	1.53	South
D	Hillhouse Wood	0.49	South-east
D	Hoe Wood	0.88	North-west
D	Keeper's Cottage Wood	1.92	South-east
D	Kiln Wood	0.21	South
D	Langham Road Grassland	0.14	South
D	Little Tey Churchyard	0.13	South
D	Marks Tey Brick Pit	0.04	South
D	Pitchbury Wood	0.84	South-east
D	Pits Wood	1.75	South-east
D	Rectory Wood	0.97	North-west
D	Seven Star Green	1.34	South-east
D	Slough Grove	0.55	North
D	Spring Wood (West Bergholt)	1.55	South-east
D	Stitching Wood	0.86	South-east

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
D	Stonefield Strip	0.00	Adjacent to the Order Limits
D	West Bergholt Alderwoods	0.26	South-east
D	West Bergholt Church	1.82	South-east
D	West Bergholt Hall Church	1.22	South-east
D	West Bergholt Heath	1.64	South-east
D	Wood near Fordham Place	0.02	South-east
E	Adam's Wood	1.56	North
E	Ardley Wood Complex	1.50	South
E	Barrowfield Wood	0.55	South-east
E	Batemans Farm Green Lane	1.11	North-west
E	Blackwater Plantation	1.36	North-west
E	Brickhouse Wood	0.26	South-east
E	Brockwell Meadows	1.92	South-east
E	Coggeshall Hall Farm	0.00	Within the Order Limits
E	Craigments Spring	1.03	South-east
E	Fairsteadhall Wood	0.43	South-east
E	Feering Marsh	0.63	South-east
E	Galleycable Wood	0.15	South-east
E	Hallhook Row	0.00	Within the Order Limits
E	Hazelton Wood	0.46	North
E	Hoo Hall Meadow	1.31	South-east
E	Hookley Wood	0.56	South-east
E	Ivy Wood	0.84	South
E	Paul's Wood	1.23	North-west
E	Ringer's Wood	1.00	South-east
E	Rivenhall Thicks	0.00	Within the Order Limits
E	Sandy Wood	0.00	Adjacent to the Order Limits
E	Scarlett's Wood	0.66	South-west
E	Sheepcote Wood	1.15	North-west
E	Stockley Wood	0.94	South

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
E	Storey's Wood	0.49	North-east
E	Stream Wood	1.63	North
E	Tarecroft Wood	0.64	South-east
E	Terling Churchyard and Green	1.97	East
E	Tilkey Road, Coggeshall	1.82	North-west
E	Troys Wood	0.14	South
E	Upney Wood	0.19	North-west
E	Wade's Spring	0.95	East
E	Witch Wood, lane and hedges	1.82	North-west
E	Witham Marsh	1.53	South-east
E, F	Scarlett's Wood (part of)	0.78	South-west
F	All Saints Church, Writtle	1.32	East
F	Border Wood	0.00	Adjacent to the Order Limits
F	Border Wood Lake	0.11	West
F	Box Wood	1.22	West
F	Boyton Cross Verges	1.41	North-west
F	Broomfield - Little Waltham Chelmer	0.72	South-east
F	Bushey Wood	0.09	West
F	Bushy Wood (Chignall St James)	0.00	Within the Order Limits
F	Bushy Wood (Great Leighs)	1.43	North-west
F	Chapel Wood	0.22	East
F	Chathamhall Spring	0.27	North-west
F	Chelmer Valley Riverside	1.75	South-east
F	Chopping's Wood	0.92	South-east
F	College Wood	0.89	East
F	Cooley Spring	1.94	North-west
F	Cow Watering Lane Verge	0.39	East
F	Daffy Wood	0.70	South-east
F	Ellis Wood and Lane	1.51	West
F	Engine Spring/Ring Grove	1.92	West
F	Great Hyde Wood	1.32	North-west
F	Great/Little Edney Woods	0.00	Within the Order Limits
F	Hopgarden Spring	1.81	West

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
F	Hylands Park	0.29	East
F	James's Spring	0.00	Adjacent to the Order Limits
F	King Wood	0.02	East
F	Lady Grove	0.00	Adjacent to the Order Limits
F	Langleys Deer Park	0.00	Within the Order Limits
F	Lee Wood	0.26	South-west
F	Little Leighs Orchid Meadow	0.65	North-west
F	Little Waltham Village Meadows	0.35	South-east
F	Littley Green Road Verges	0.86	North-west
F	Lowley's Farm Meadow	0.01	North-west
F	Lyonshall Wood	0.01	East
F	Mann/Parson's Wood	0.05	West
F	Mill Green Heathland	1.79	West
F	Mill Green Woodland	1.55	West
F	Newland's Spring	0.87	South-east
F	Nightingale Wood	1.69	North-west
F	Osborne's Wood	0.00	Adjacent to the Order Limits
F	Parson's and Queen's Wood	0.00	Adjacent to the Order Limits ¹
F	Penden Hill Verges	1.43	North-west
F	Puddings Wood	0.48	East
F	Sandylay and Moat Woods	0.91	North-west
F	Sheepcotes Wood	0.00	Adjacent to the Order Limits
F	Sparrowhawk Wood	0.00	Adjacent to the Order Limits
F	St John the Evangelist Church, Little Leighs	0.96	North-west

¹ This LWS GIS layer shows a very small part of the designation within the Order Limits, however this appears to be a mapping/scale error, as the small part of the designation within the Order Limits is an arable field.

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
F	St Martin's Church, Little Waltham	0.67	South-east
F	St Mary the Virgin Churchyard, Fryerning	1.87	South-west
F	St Mary the Virgin, Great Leighs	0.15	South-west
F	St Mary's Church, Broomfield	1.11	East
F	St Paul Highwood Churchyard	1.52	West
F	Stonage Wood	0.01	East
F	Stonemore Woods	1.78	West
F	Straw Brook Plantation	0.31	North-west
F	The Grove	0.71	West
F	Well Wood	0.97	West
F	Writtle Bridge Meadows	1.80	East
F	Writtle High Woods	0.90	West
F	Writtlepark Woods	0.00	Within the Order Limits
G	All Saints Churchyard and Keepers Cottages Meadow	1.36	West
G	All Saints Churchyard, Hutton	0.07	East
G	Arnold's Wood Complex	1.32	West
G	Barn Wood/Stonyhill Wood	0.87	West
G	Birches Wood	1.90	West
G	Bladen's Wood	0.19	South-west
G	Blind Lane	0.00	Within the Order Limits
G	Bluntswall Shaws	0.57	East
G	Bluntswall Wood	0.26	East
G	Botneyhill Wood	0.00	Adjacent to the Order Limits
G	Buckwyns Wood	0.18	South-east
G	Clapgate Wood	0.00	Within the Order Limits
G	Cock Wood/Collins's Shaw	0.14	North
G	Dog Wood	0.35	North-west
G	Eastlands Spring	0.36	West
G	Friern Manor Wood	0.04	West
G	Frith Wood	1.50	North-east
G	Gravelpit Wood	0.15	East

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
G	Hall Wood, Ingrave	0.48	South-west
G	Hankin's Wood	1.88	East
G	Hare Hall Shaw	1.69	South-west
G	Harespring Wood	0.06	North-west
G	Heron Pond	1.07	South-west
G	Highfield Wood	1.19	South-west
G	Hutton Country Park	0.24	North-west
G	Imphy Hall Wood	0.79	East
G	James's Wood	0.09	East
G	Kitchen Wood	0.88	North-west
G	Laindon Common	1.47	North-east
G	Little and Long Woods	1.09	North-east
G	Little Bladen's Wood	0.00	Within the Order Limits
G	Little Burstead Common	0.04	East
G	Little Burstead Wood	1.44	East
G	Lodge Wood	1.28	North-west
G	Long Ridings	1.58	North-west
G	Mill Meadows	1.90	South-east
G	Mountnessing Hall Woods	0.23	North-west
G	Oak Stables Meadow	0.26	South-east
G	Parkhill Wood	0.06	West
G	Parkhill Wood Meadow	0.04	West
G	Poles Wood	1.11	East
G	Pound Wood	1.14	East
G	Primstock	0.00	Adjacent to the Order Limits
G	Queens Park Country	0.80	East
G	Queens Park Meadow	0.64	East
G	Rook Wood	0.23	East
G	Round Wood	0.00	Adjacent to the Order Limits
G	Spearshill Wood	0.27	North-west
G	Spring Wood (Brentwood)	0.03	East
G	St Giles Churchyard, Mountnessing	0.34	West

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
G	St Margarets Wood and Lane	0.00	Within the Order Limits
G	Stock Brook Meadow	1.38	East
G	Stock Hill Wood	1.88	East
G	Straight Path Shaw	1.98	West
G	Sutton Shaw	0.93	West
G	Swan Wood	1.95	East
G	The Wilderness	0.95	North-east
G	Thick/Hollow Bottom Shaws	1.74	North-west
G	Thrift Wood	1.94	South-west
G	Turkshill Wood	1.57	East
G	Westley Heights	1.98	East
G	White's Wood/Martin's Grove	0.95	East
H	Baker Street Brownfield, Chadwell St Mary	0.09	North
H	Blackshots Nature Area	0.00	Within the Order Limits
H	Broom Hill	0.75	South-west
H	Buckingham Hill	0.00	Within the Order Limits
G, H	Coombe Wood Extension	1.95	East
H	Goldsmith's Meadow	1.67	East
H	Hob Hill and Sandy Lane Pit, Chadwell St Mary	1.23	South-west
H	Horndon Meadow	1.43	East
H	Linford Pit	0.00	Within the Order Limits
H	Linford Wood	0.65	South-east
H	Little Thurrock Reedbeds	1.74	South-west
H	Low Street Pit	0.55	South-east
H	Mucking Creek Wetlands	1.05	East
H	Mucking Heath Complex, Southfields	0.00	Within the Order Limits
H	Rainbow Wood and Ashen Shaw	0.00	Within the Order Limits
H	Stifford Clays Copse	1.28	West

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
H	Terrels Heath	0.45	South
H	Thurrock Thameside Nature Park, Mucking	0.96	East
H	Tilbury Power Station	1.15	South
H	Victoria Road Grassland, Stanford-le-Hope	0.96	North-east
H	Warren Lakes	1.80	East
H	West Tilbury Church	0.39	South-west
H	West Tilbury Hall	0.49	South-west

Roadside Nature Reserves

4.3.5 There are 17 RNRs located within 2 km of the Order Limits as presented in Table A8.16.10 and shown on Figure A8.16.3: Non-Statutory Sites Designated for Biodiversity in Annex A. One of these RNRs (RNR 200 (Section B)) is located within the Order Limits (shown in Bold text below). Descriptions of each LNR are presented in Annex F.

Table A8.16.10 RNRs located within 2 km of the Order Limits

Project Section(s)	Site Name	Distance from Order Limits (km)	Direction
A	RNR 7	1.13	East
A	RNR 8	1.60	North-west
A	RNR 12	0.43	South-east
A	RNR 13	0.62	East
A	RNR 71	0.50	South-east
A	RNR 83	0.45	North-west
A	RNR 84	0.30	North-west
A	RNR 85	1.08	South-east
B	RNR 48	0.19	West
B	RNR 92	0.48	West
B	RNR 70	1.41	East
B	RNR 200	0.00	Within the Order Limits
B	RNR 157	1.80	East
B	RNR 169	0.82	West
B	RNR 212	0.71	West
B	RNR 211	1.14	West
B	RNR 217	1.07	South-east

4.4 Conclusion

- 4.4.1 In conclusion, a review of desk study data identified statutory and non-statutory sites designated for biodiversity within the Study Area. The survey identified 13 Ramsar sites, 15 SPAs, one SAC, 26 biological SSSIs, 13 LNRs, 111 CWSs, 242 LWSs and 17 RNRs located within the Study Area. Of these, one SSSI, nine CWSs, 19 LWS, and one RNR are located within the Order Limits as detailed above.

Abbreviations

Abbreviation	Full Reference
CWS	County Wildlife Sites
DCO	Development Consent Order
EFC	Essex Field Club
ES	Environmental Statement
IRZ	Impact Risk Zone
LERC	Local Environmental Record Centre
LNR	Local Nature Reserve
LWS	Local Wildlife Sites
MAGIC	Multi-Agency Geographic Information for the Countryside
NBIS	Norfolk Biodiversity Information Service
NNR	National Nature Reserve
RNR	Roadside Nature Reserve
SAC	Special Areas of Conservation
SBIS	Suffolk Biodiversity Information Service
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
WCA	The Wildlife and Countryside Act 1981

Glossary

Term	Description
Ancient woodland	Land that has been continually wooded since at least 1600 in England. Regarded as 'irreplaceable habitat' in national planning policy and guidance. Ancient woodland greater than 2 ha is recorded on the Natural England Ancient Woodland Inventory.
Ancient Woodland Inventory	A dataset managed by Natural England to identify and record information about ancient woodland sites in England.
Biodiversity	The variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems.
County Wildlife Site	Non-designated areas of land important for their wildlife and nature conservation value.
Ecosystem	A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.
European Protected Species	Animals and plants listed under the Habitats Directive (Council Directive 92/43/EEC) and protected under the Conservation of Habitats and Species Regulations 2017, as amended.
Fauna	All the animals in a given area.
Flora	The plants within a particular habitat or region.
Habitat	The natural home or environment of an animal, plant, or other organism.
Habitat of Principal Importance	A habitat which has been deemed to be of principal importance for the purpose of conserving biodiversity, currently adopted under Section 41 of the Natural Environment and Rural Communities Act 2006, formerly listed in the UK Biodiversity Action Plan.
Impact Risk Zone	Geographical zones within the area surrounding a designated Site of Special Scientific Interest (SSSI), where each zone has specific guidance on what types of developments or activities may pose a risk to the sites ecological, geological, or landscape value.
Invasive Non-Native Species	An invasive non-native species is any non-native animal or plant that can spread, causing damage to the environment, the economy, health, and way of life.
Local Nature Reserve	Sites dedicated by the local authority under Section 21 of the National Parks and Access to the Countryside Act 1949 for nature conservation which have wildlife or geological features that are of special interest locally.

Term	Description
Local Planning Authority	The public authority whose duty it is to carry out specific planning functions for a particular area.
Local Wildlife Site	Non-statutory designated areas of land important for their wildlife and nature conservation value (Essex).
National Nature Reserve	Sites designated by relevant authorities (e.g. Natural England, Natural Resources Wales) under the Wildlife and Countryside act 1981 and the National Parks and Access to the Countryside Act 1949, for their outstanding natural interest either due to its ecology, geology, or geomorphology.
Non-Statutory Designated Site	Areas which are recognised for their ecological importance but do not have the same level of legal protection as statutory designated sites. These are typically identified at a local or regional level through non-legally binding agreements, policies, or planning frameworks.
Order Limits	The maximum extent of land within which the authorised development may take place.
Priority species	Species identified as of principal importance in England, in accordance with requirements of the Natural Environment and Rural Communities Act 2006. These are based on the UK Biodiversity Action Plan Priority Species.
Ramsar	Wetlands of international importance designated under the Convention on Wetlands of International Importance Especially as Waterfowl Habitat 1971.
Roadside Nature Reserve	Non-statutory designated areas along the roadside that are important for their wildlife and Nature conservation value.
Sites of Special Scientific Interest	SSSIs are protected by law under the Wildlife and Countryside Act 1981. They are important because they support rare or endangered fauna and flora, and they represent the United Kingdom's best wildlife and geological sites.
Special Areas of Conservation	Protected areas designated under the European Union's Habitats Directive (Council Directive 92/43/EEC) to conserve and protect rare, vulnerable, or endangered habitats and species of plants and animals that are considered of European importance.
Special Protection Areas	An area designated under the European Union's Birds Directive (Directive 2009/147/EC) aimed at protecting rare, vulnerable, and migratory bird species and their habitats of European importance.
Species	A group of living organisms consisting of similar individuals capable of exchanging genes or interbreeding.
Statutory Designated Site	An area that has been legally designated and protected for its importance to biodiversity.

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Annex A.

Figures

Annex A

Figures



- Order limits
- Pages

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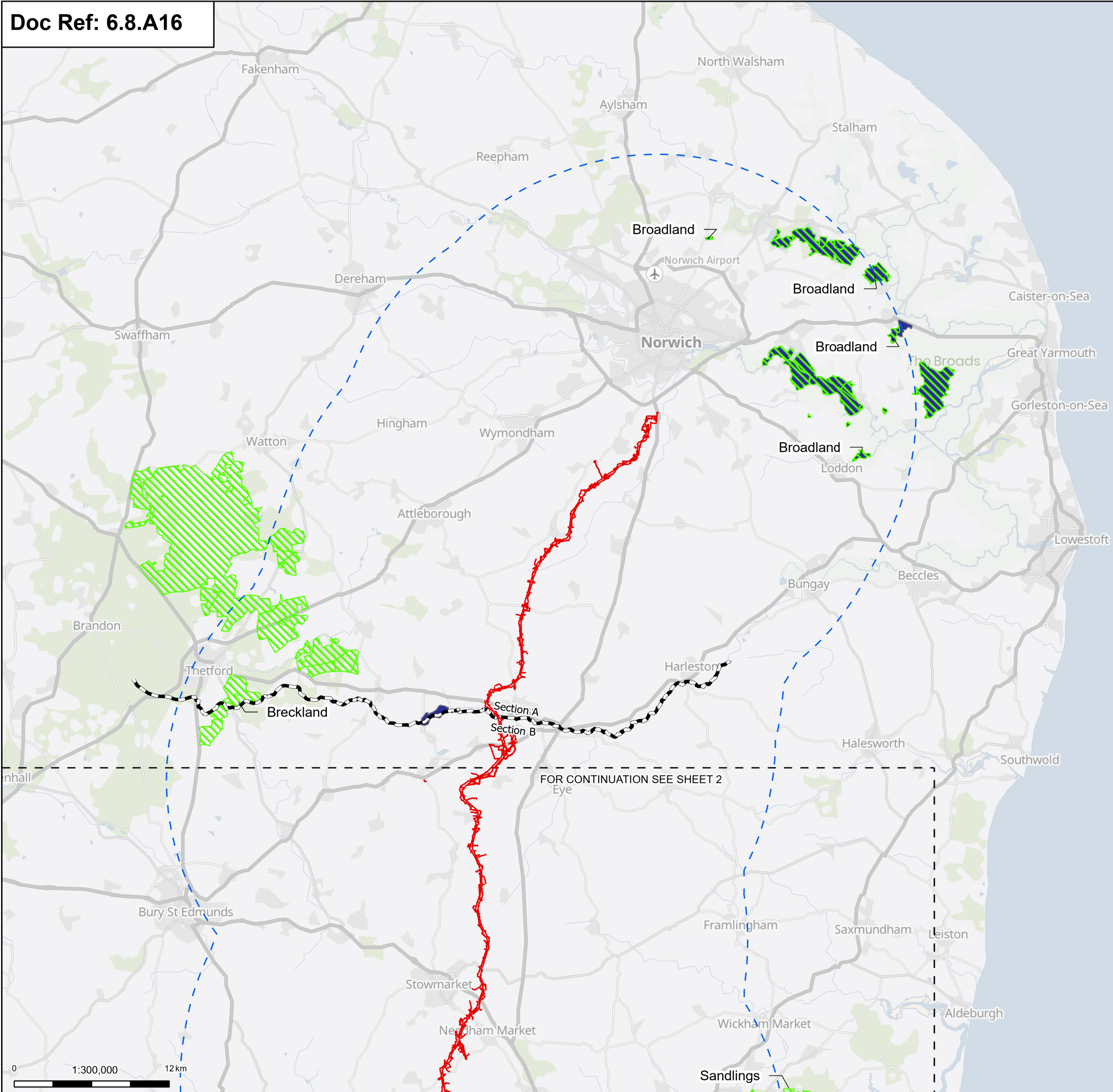
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Regulation 5(2)(a)&(l)(i)







Title: **Figure: A8.16.1 - Ecology and Biodiversity - Statutory Designated Sites for Biodiversity - Ramsar Sites and Special Protection Areas Overview**

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Drawn	K. Fischer	Date	21 Aug 25
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Approved	K. Burrows	Date	21 Aug 25
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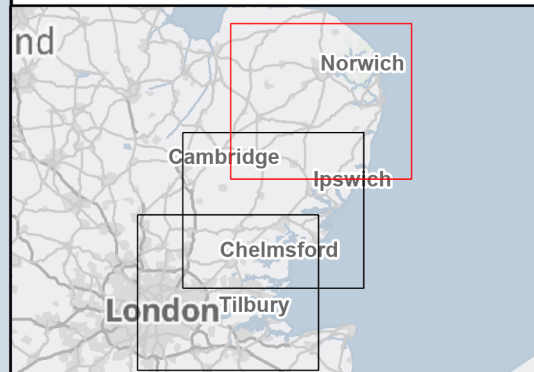
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-  Order limits
 -  Sheet index cutline
 -  Project sections
- Discipline specific constraints**
-  20 km Study Area
 -  Special Protection Areas
 -  Ramsar Sites

Note: For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)&(l)(i)

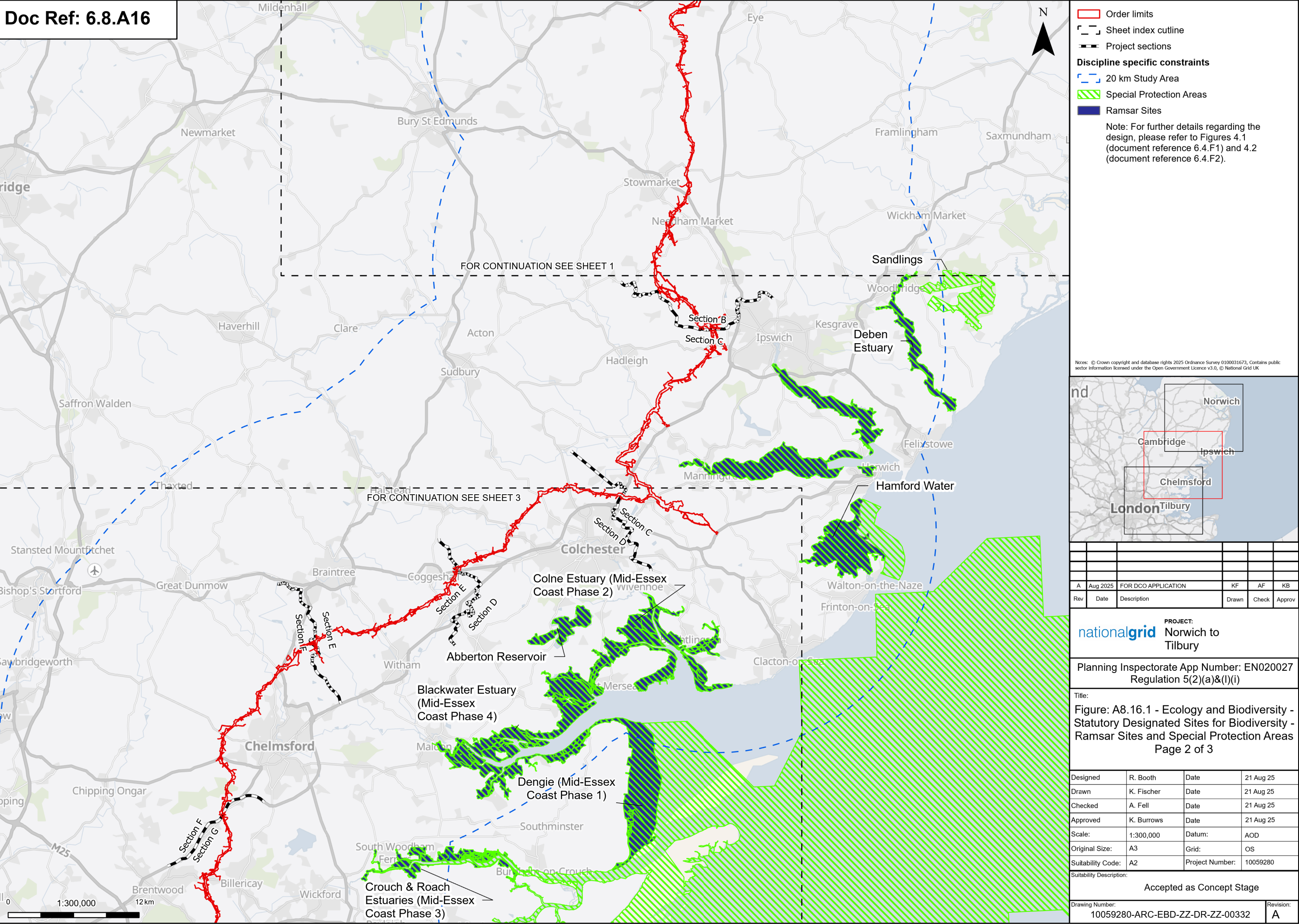
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Ramsar Sites and Special Protection Areas
Page 1 of 3

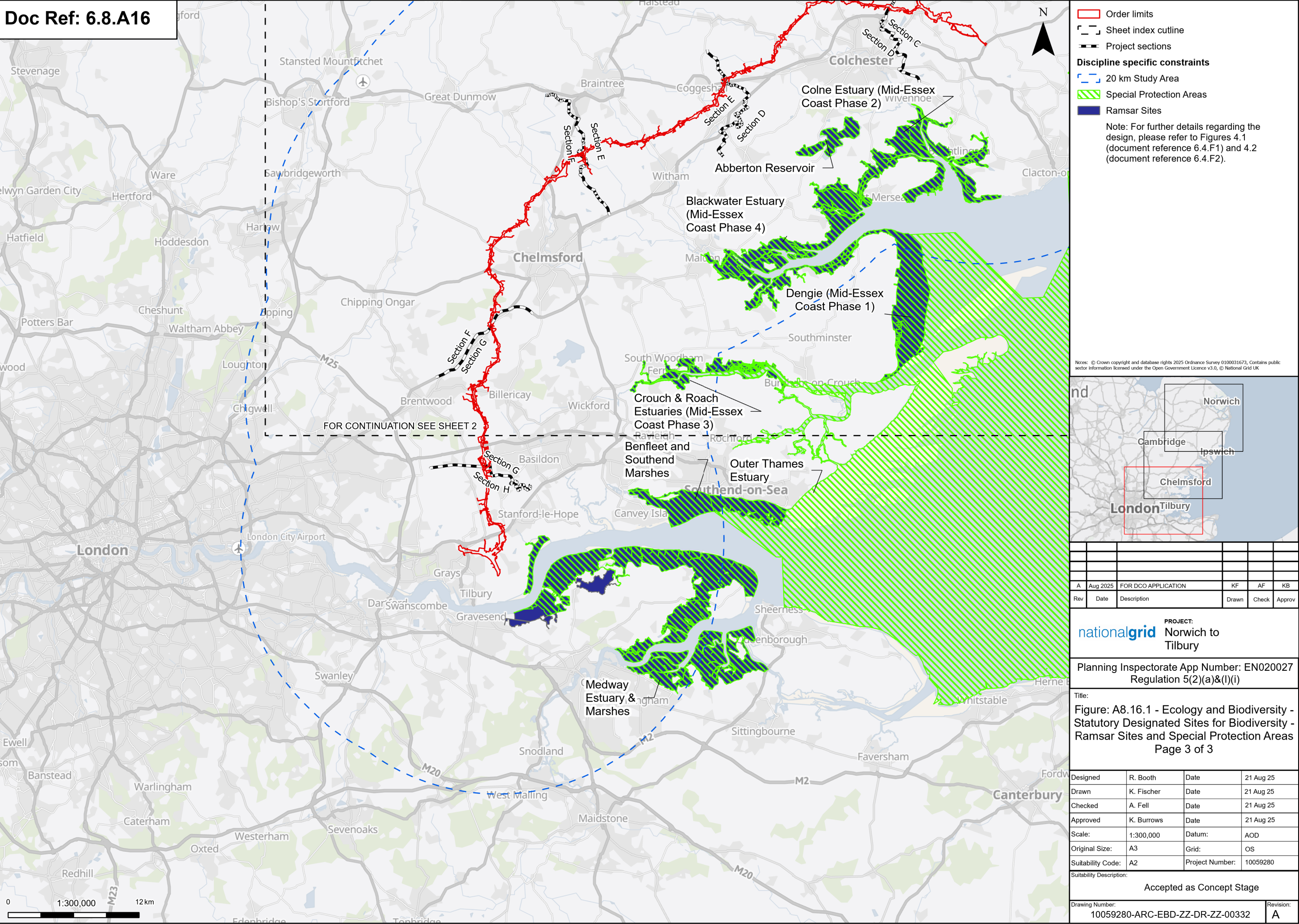
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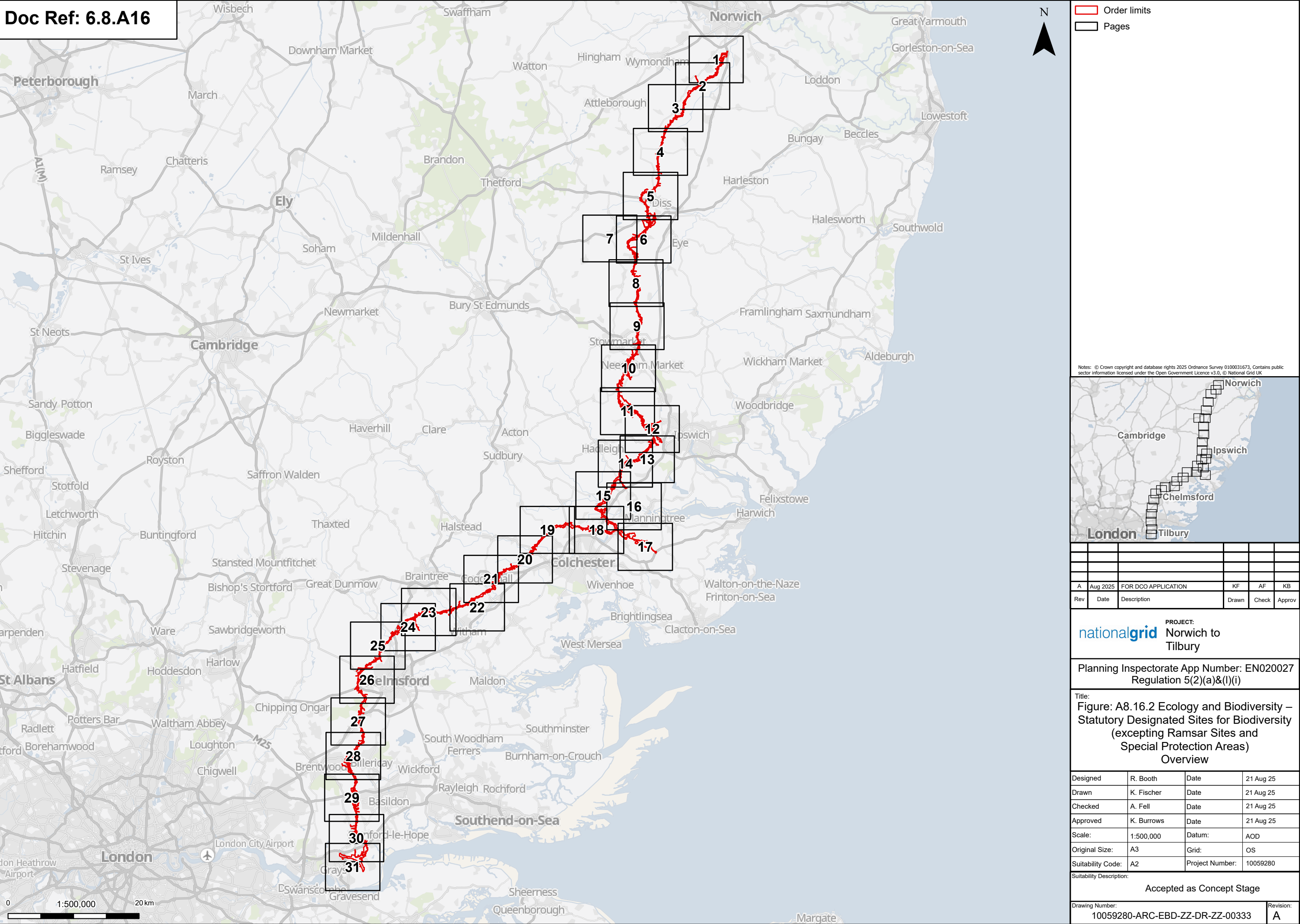
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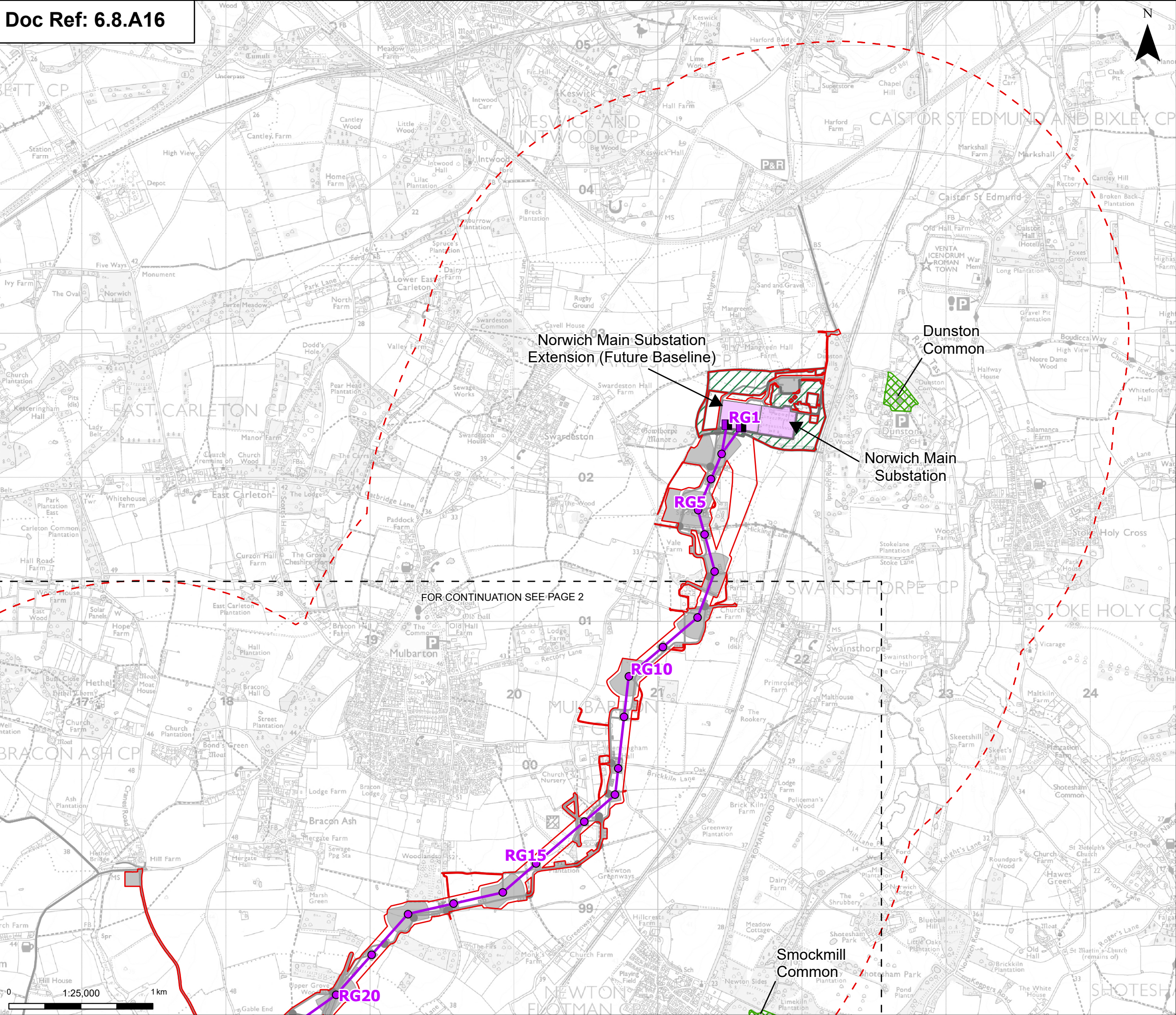
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Drawing Number:	Revision:
10059280-ARC-EBD-ZZ-DR-ZZ-00332	A









Order limits

Sheet index outline

Proposed project design details

Proposed full line tension gantry

Proposed standard lattice pylon location

Proposed overhead line alignment

Norwich Main Substation

Norwich Main Substation Extension (future baseline)

Environmental area

Other temporary and permanent construction and operational works

Discipline specific constraints

2 km Study Area

Local Nature Reserves

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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Planning Inspectorate App Number: EN020027 Regulation 5(2)(a)&(I)(i)

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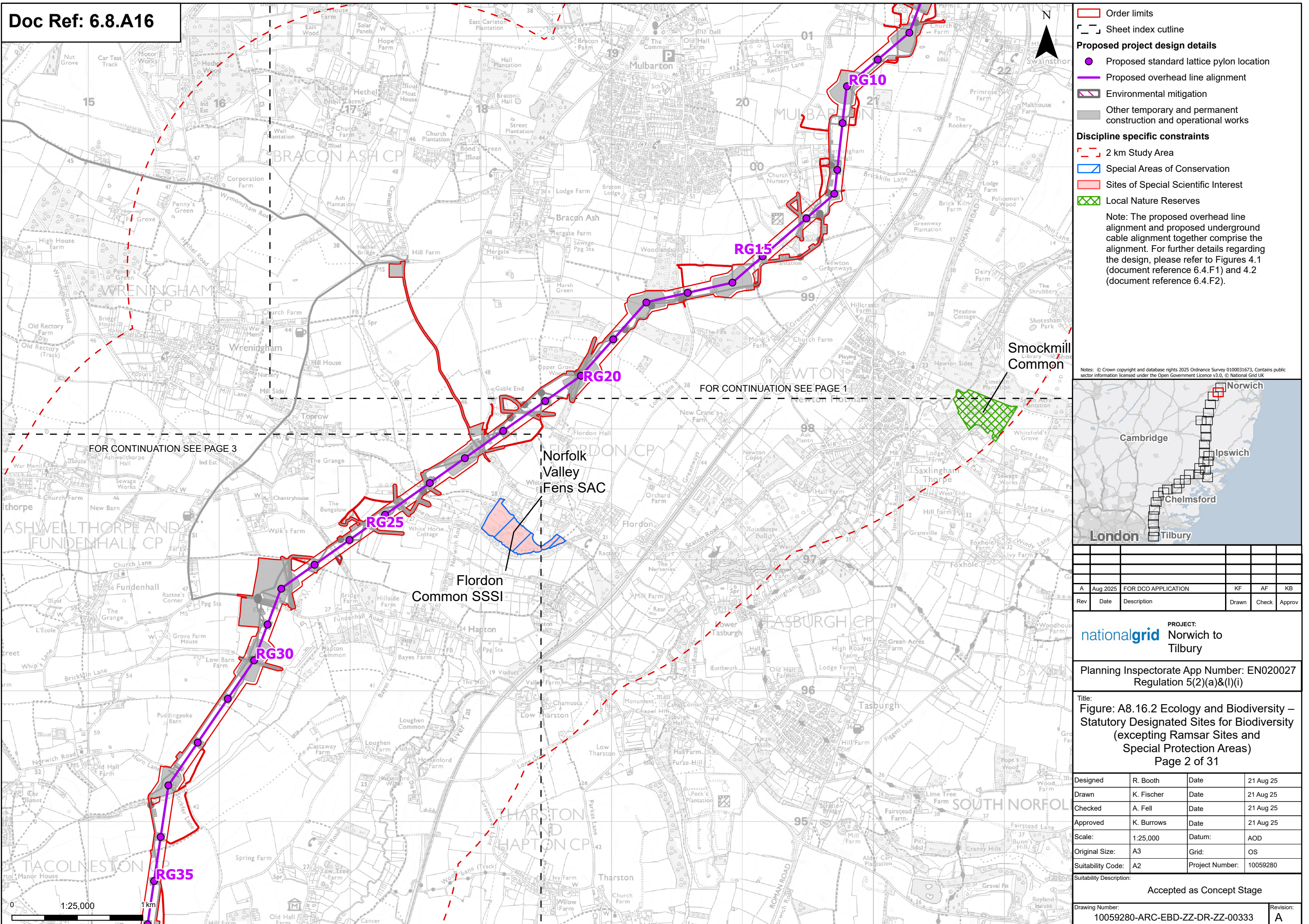
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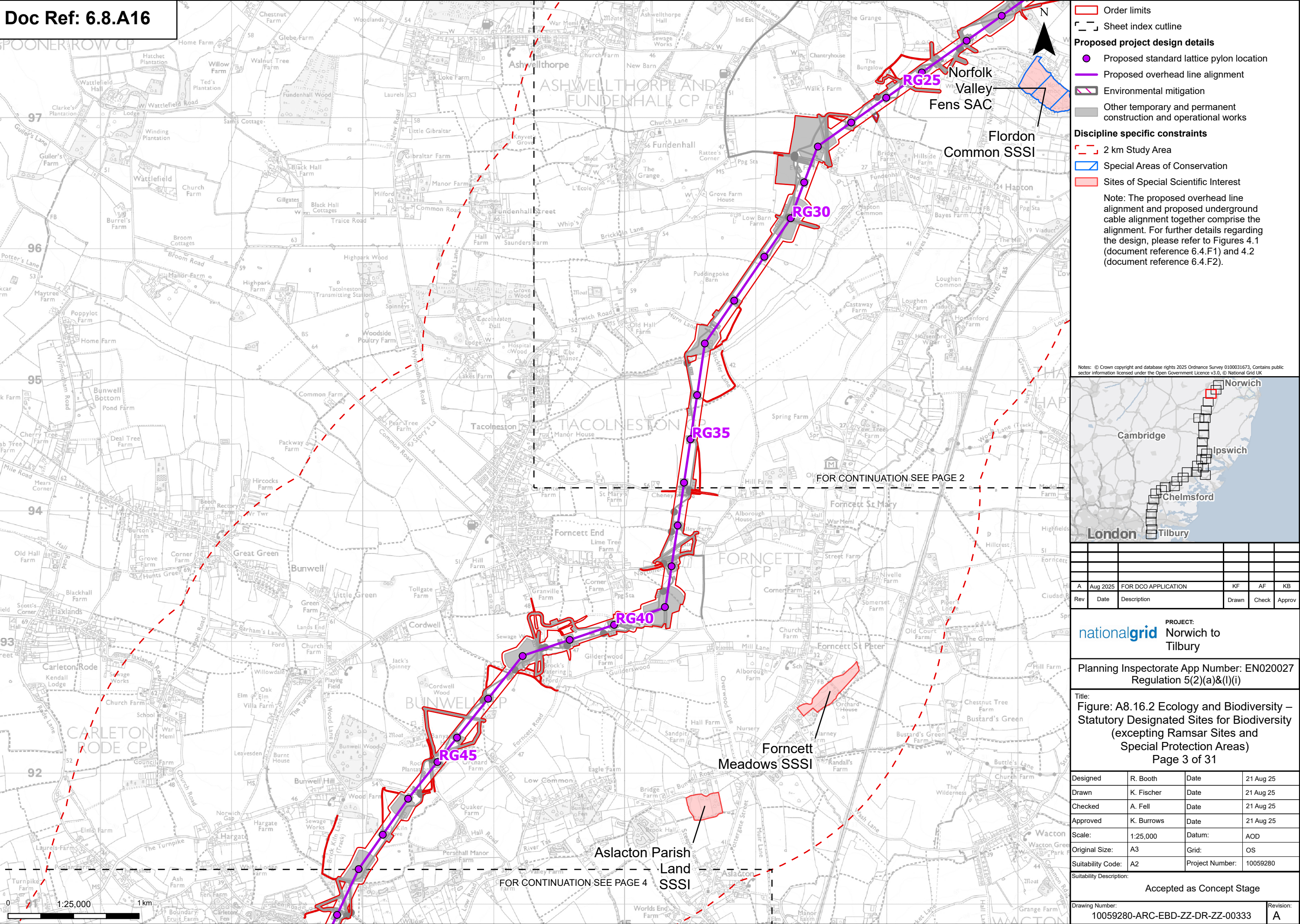
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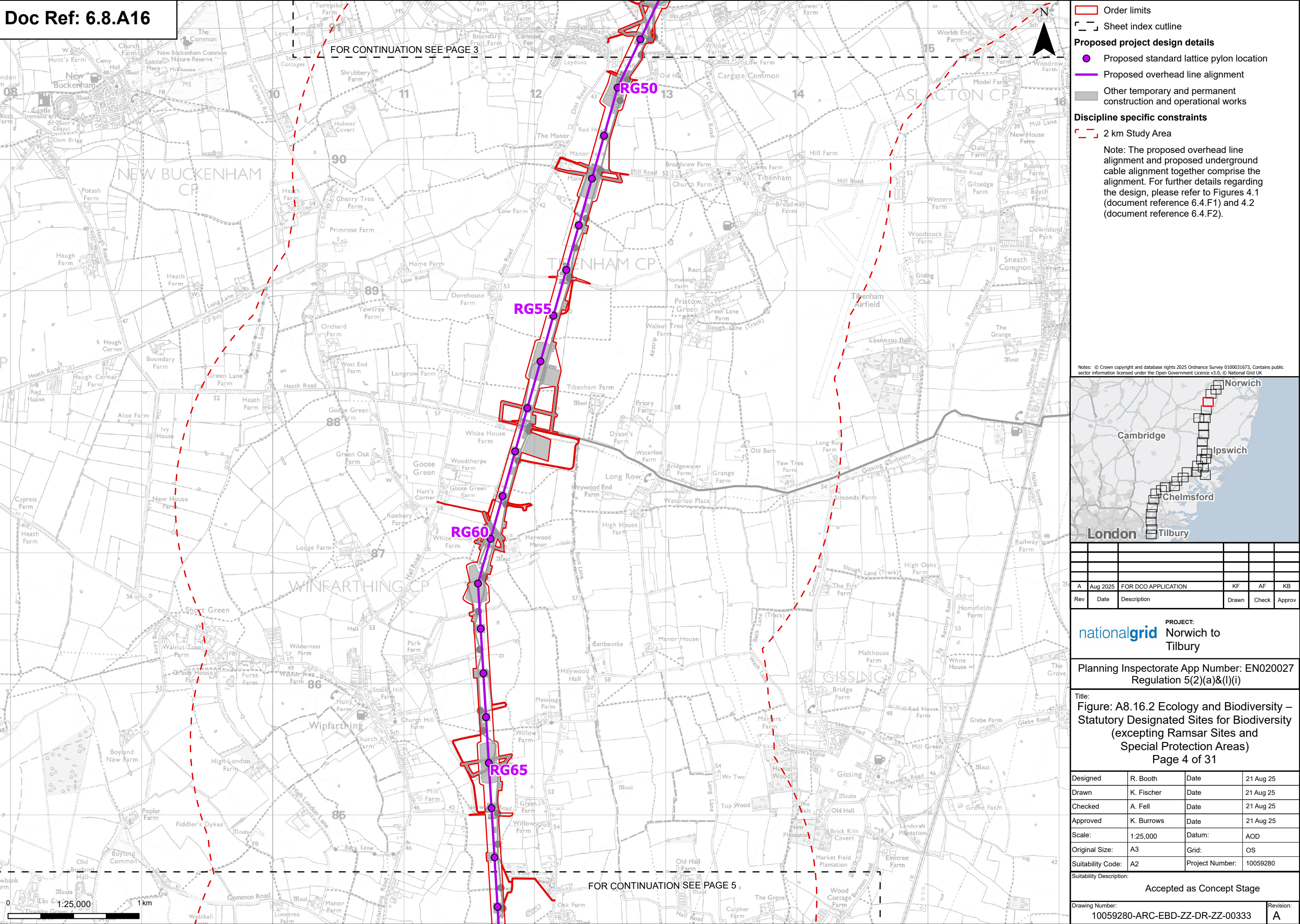
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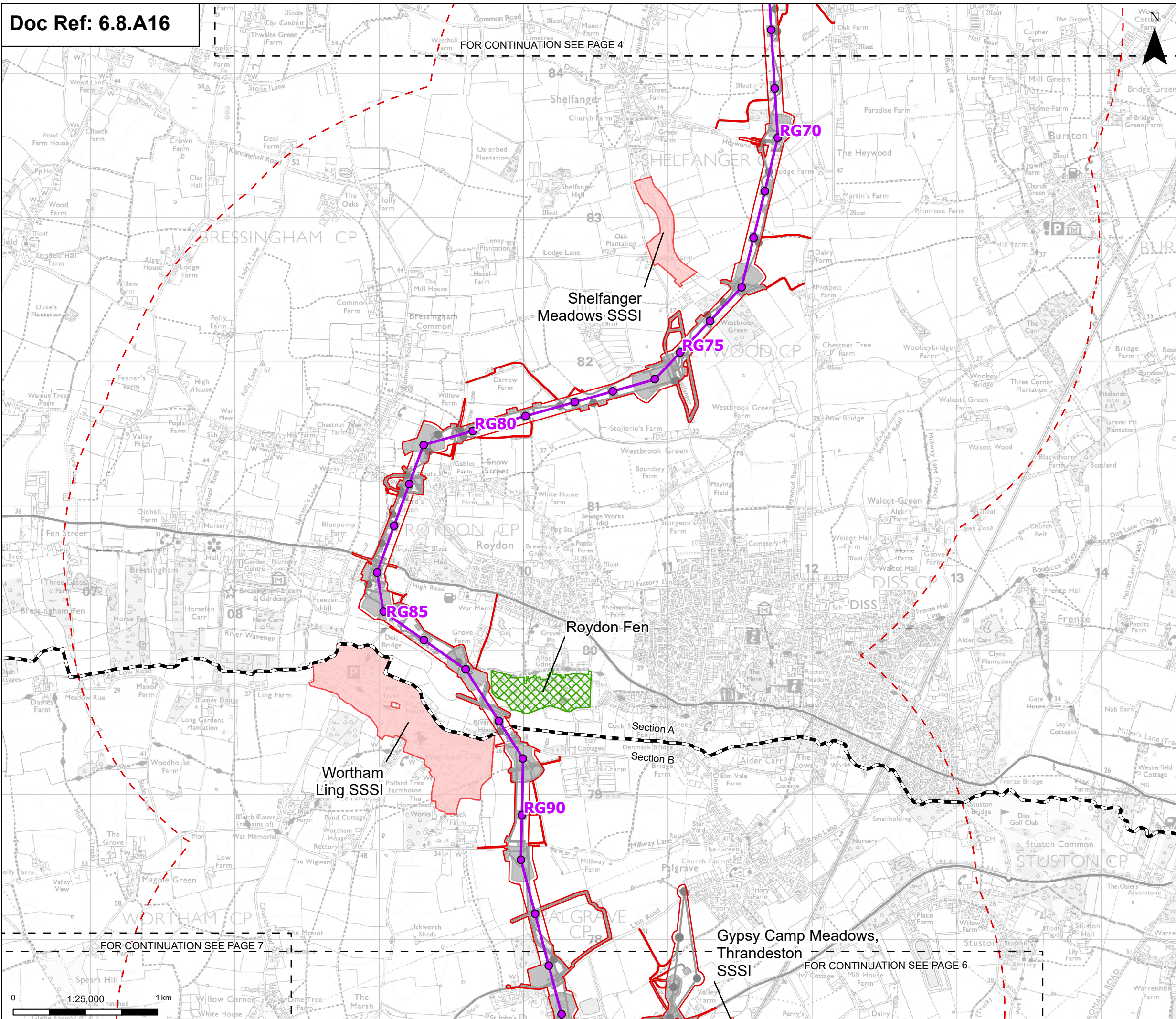
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


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









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 -  Project section line

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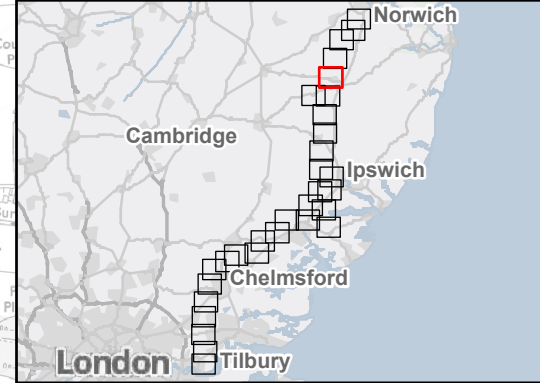
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 -  Proposed overhead line alignment
 -  Environmental mitigation
 -  Other temporary and permanent construction and operational works

Discipline specific constraints

 -  2 km Study Area
 -  Sites of Special Scientific Interest
 -  Local Nature Reserves

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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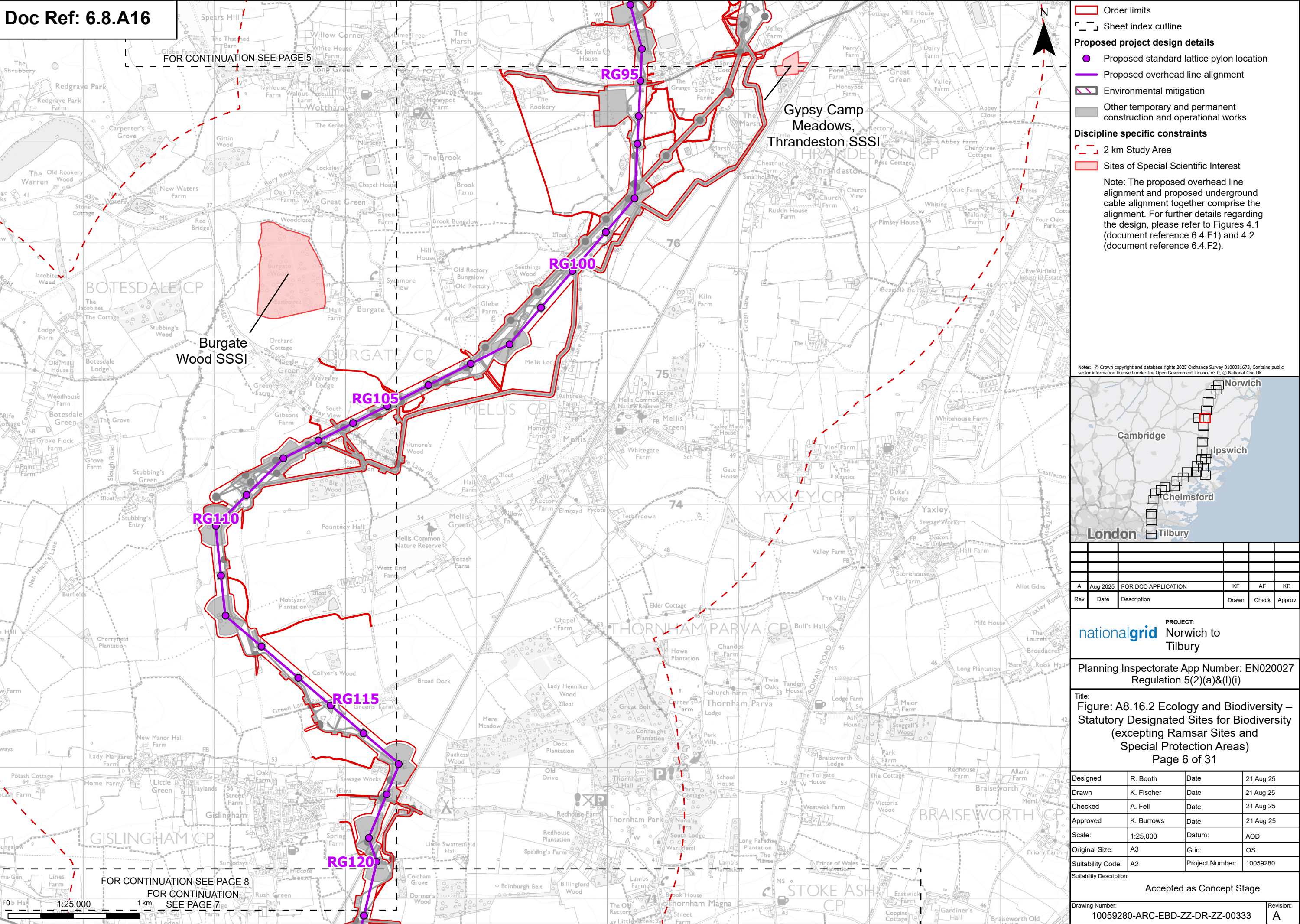
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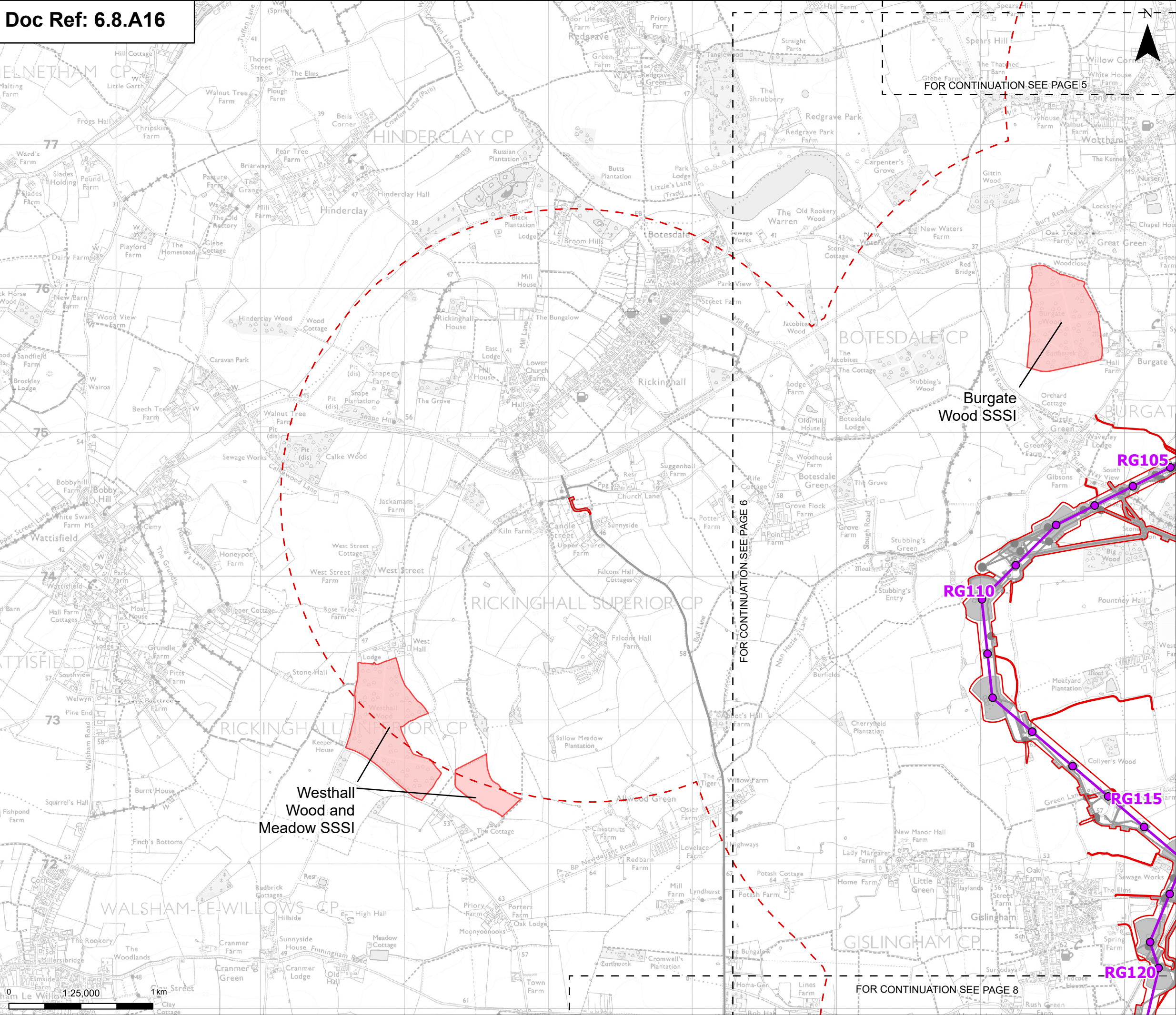
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(excepting Ramsar Sites and
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Page 5 of 31

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Proposed project design details

Proposed standard lattice pylon location

Proposed overhead line alignment

Other temporary and permanent construction and operational works

Discipline specific constraints

2 km Study Area

Sites of Special Scientific Interest

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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Norwich

Ipswich

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Figure: A8.16.2 Ecology and Biodiversity – Statutory Designated Sites for Biodiversity (excepting Ramsar Sites and Special Protection Areas)

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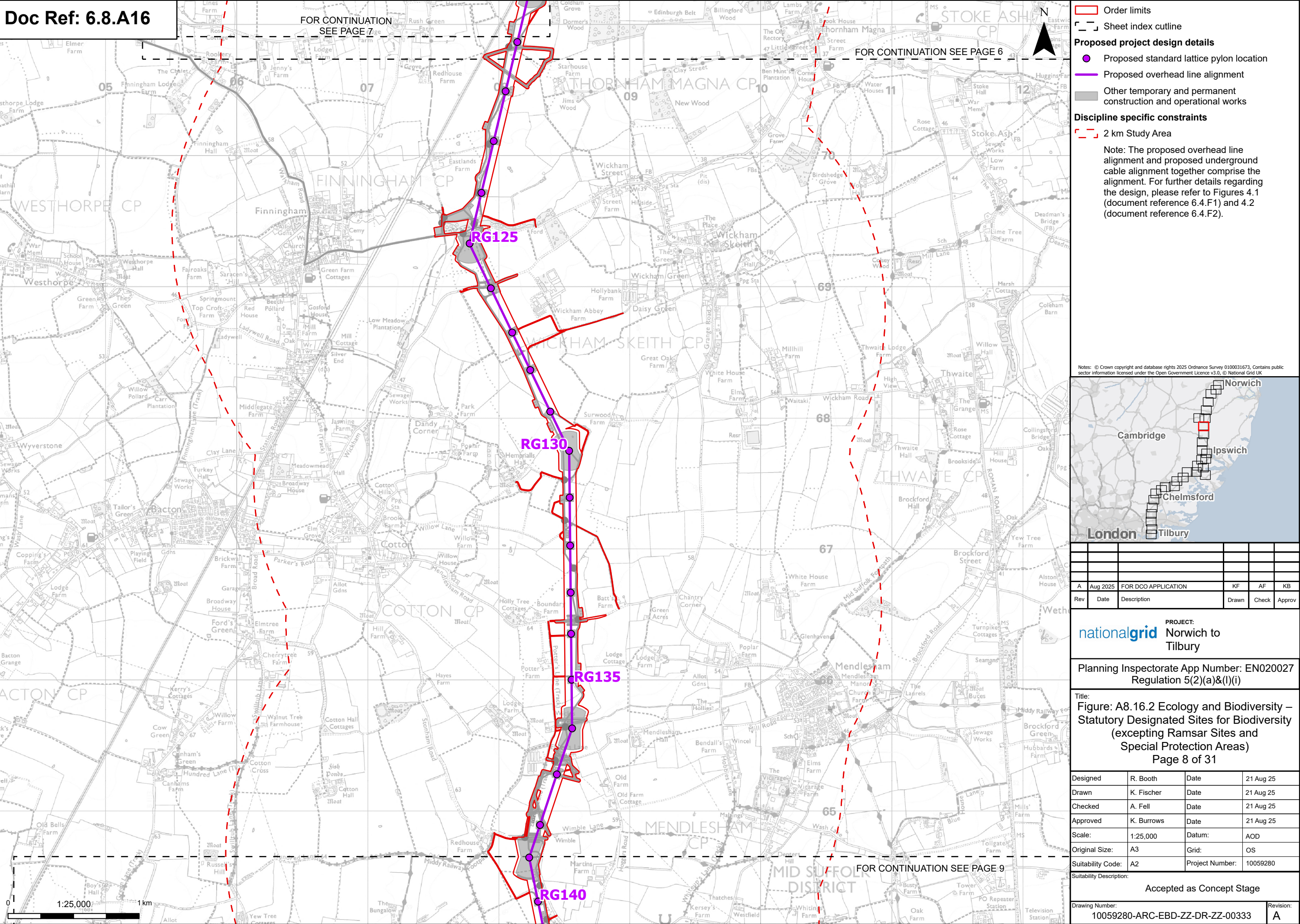
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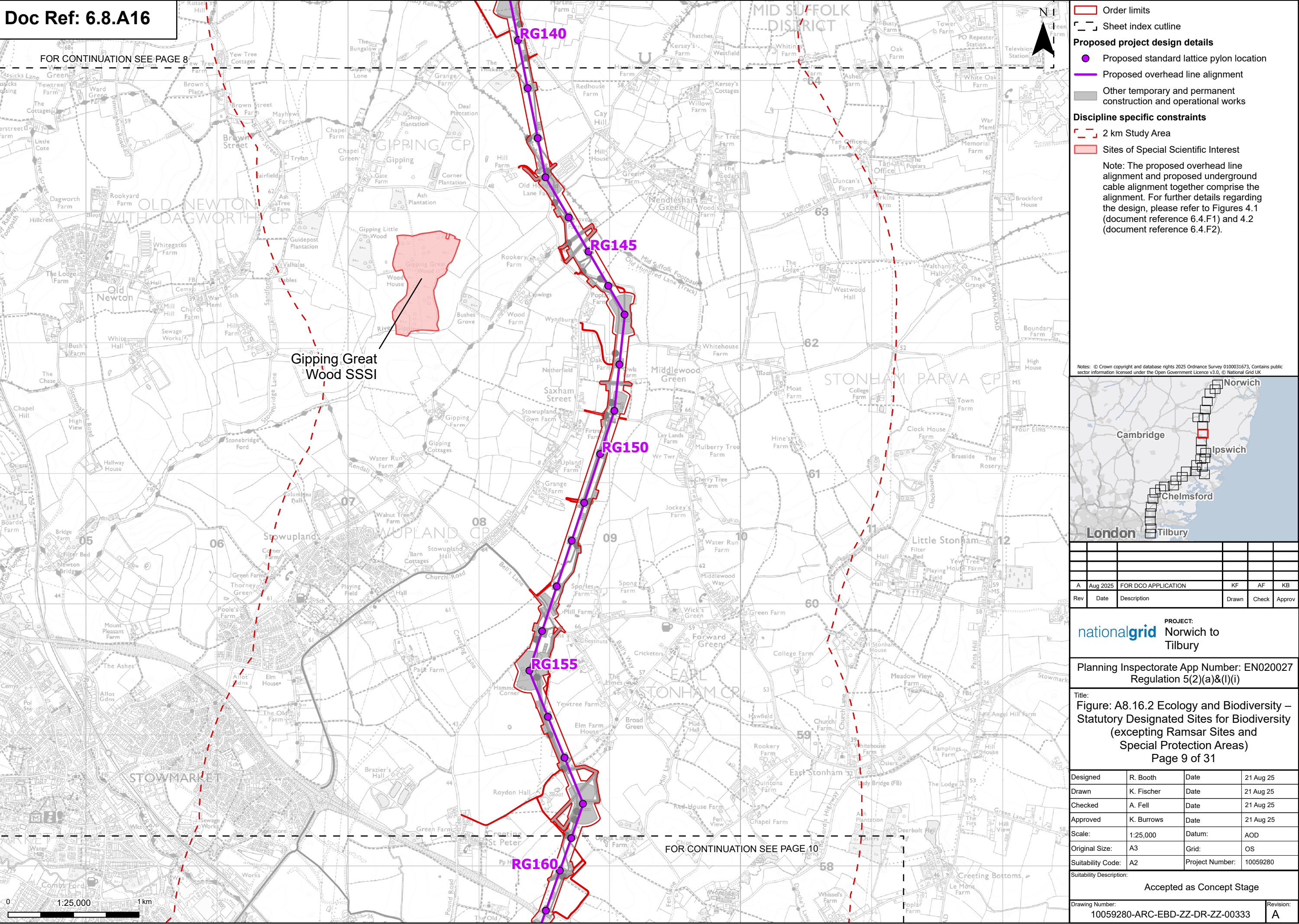
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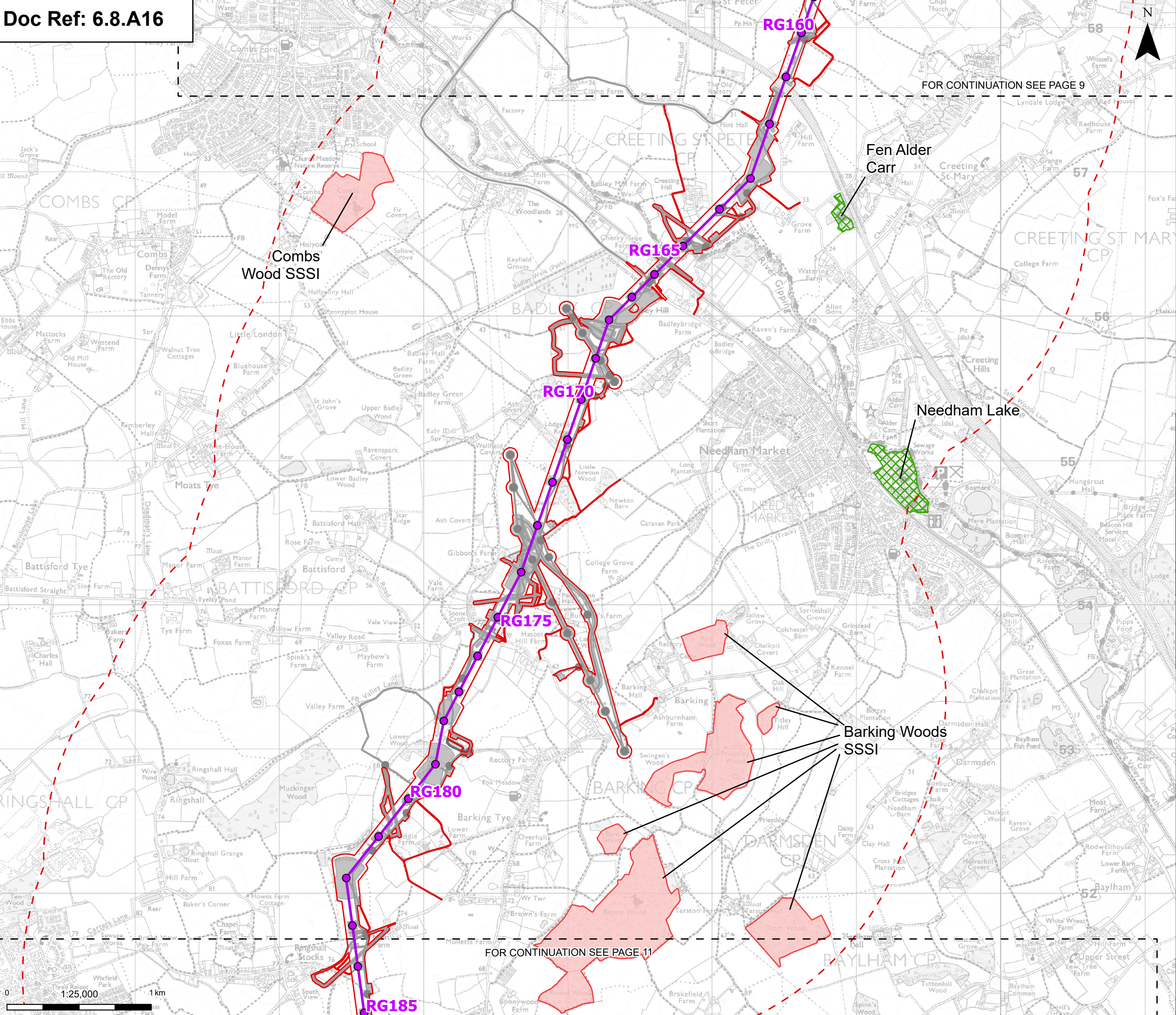
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Proposed standard lattice pylon location

Proposed overhead line alignment

Environmental mitigation

Other temporary and permanent construction and operational works

Discipline specific constraints

2 km Study Area

Sites of Special Scientific Interest

Local Nature Reserves

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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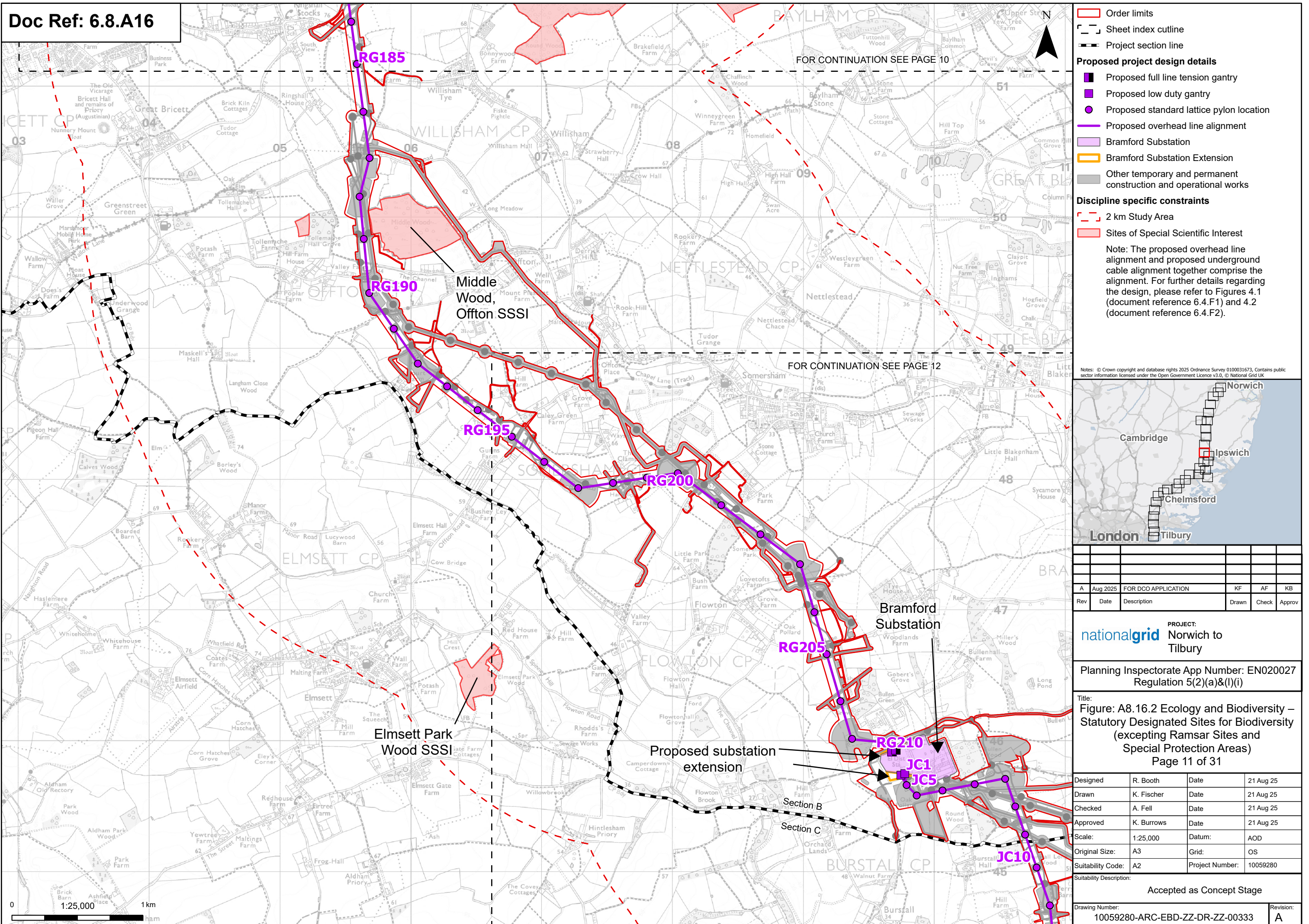
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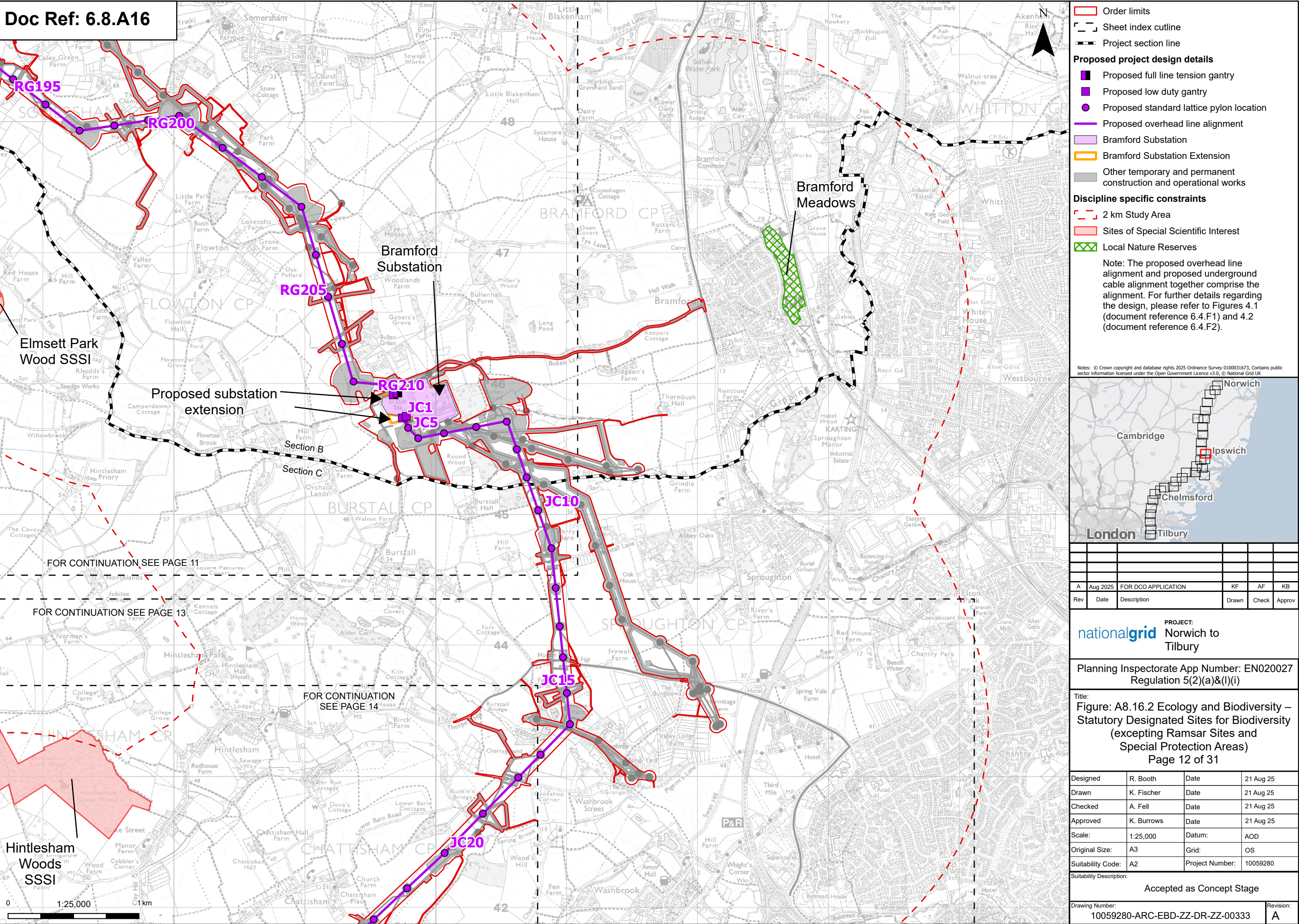
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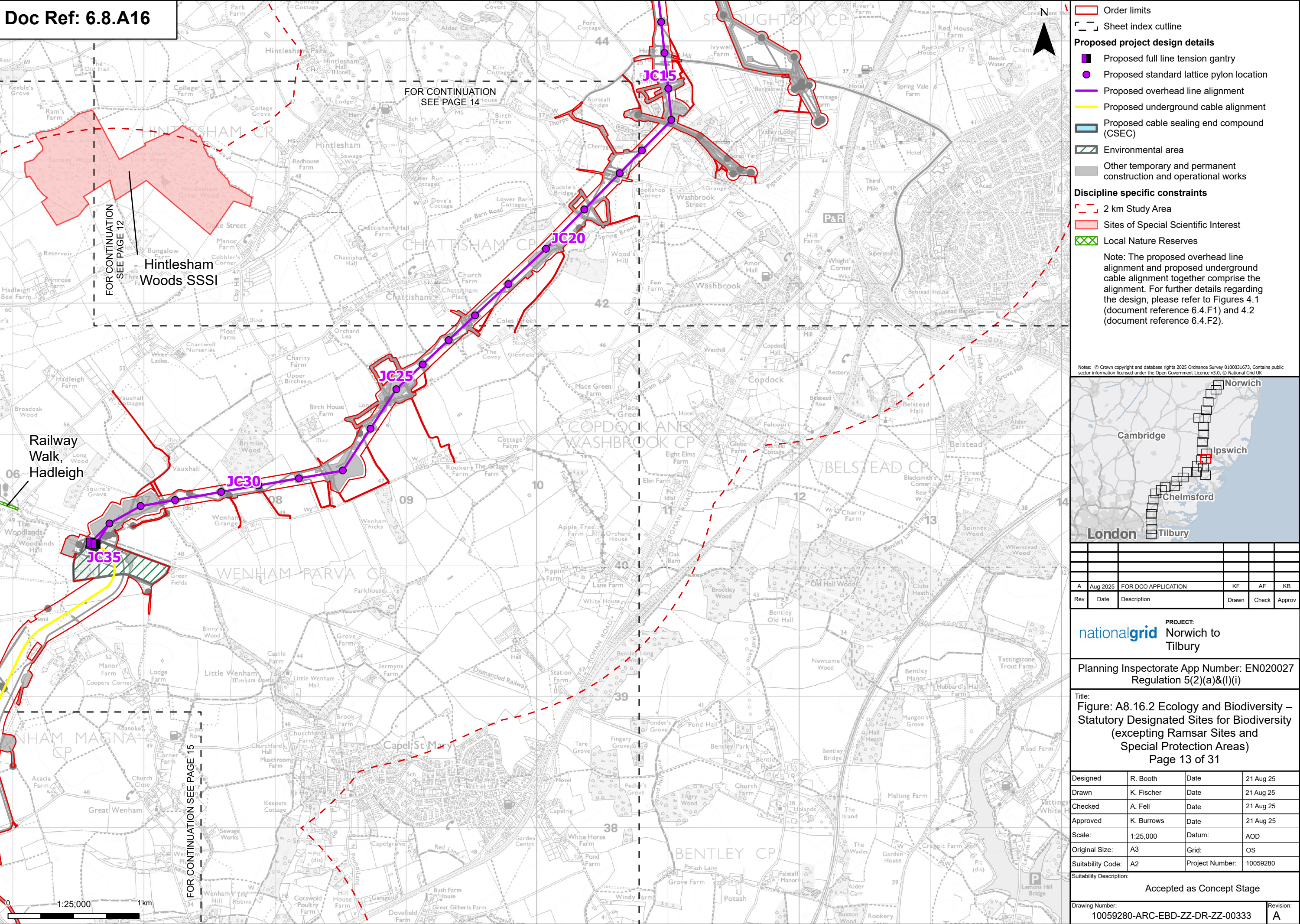
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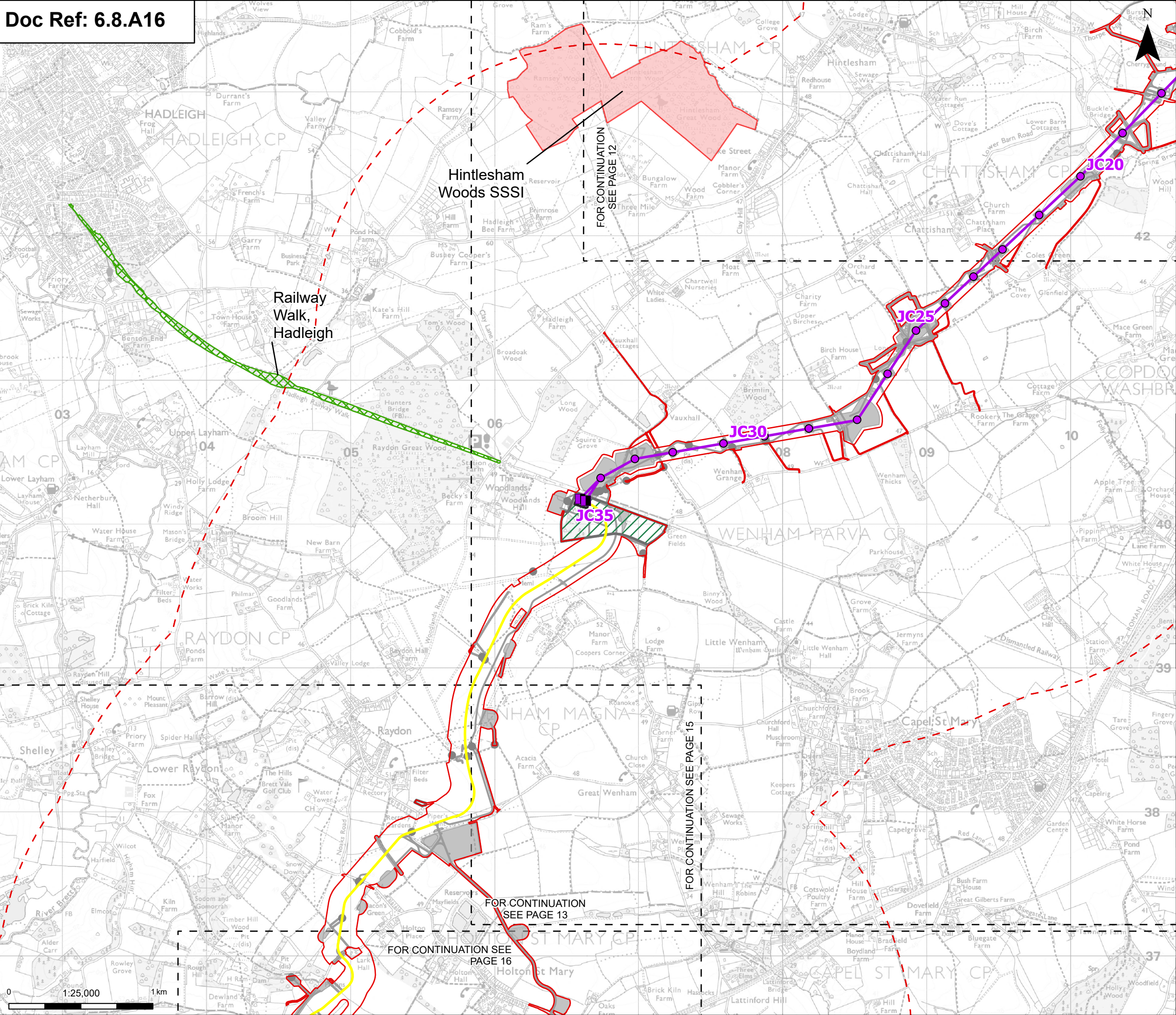
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Proposed overhead line alignment

Proposed underground cable alignment

Proposed cable sealing end compound (CSEC)

Environmental area

Environmental mitigation

Other temporary and permanent construction and operational works

Discipline specific constraints

2 km Study Area

Sites of Special Scientific Interest

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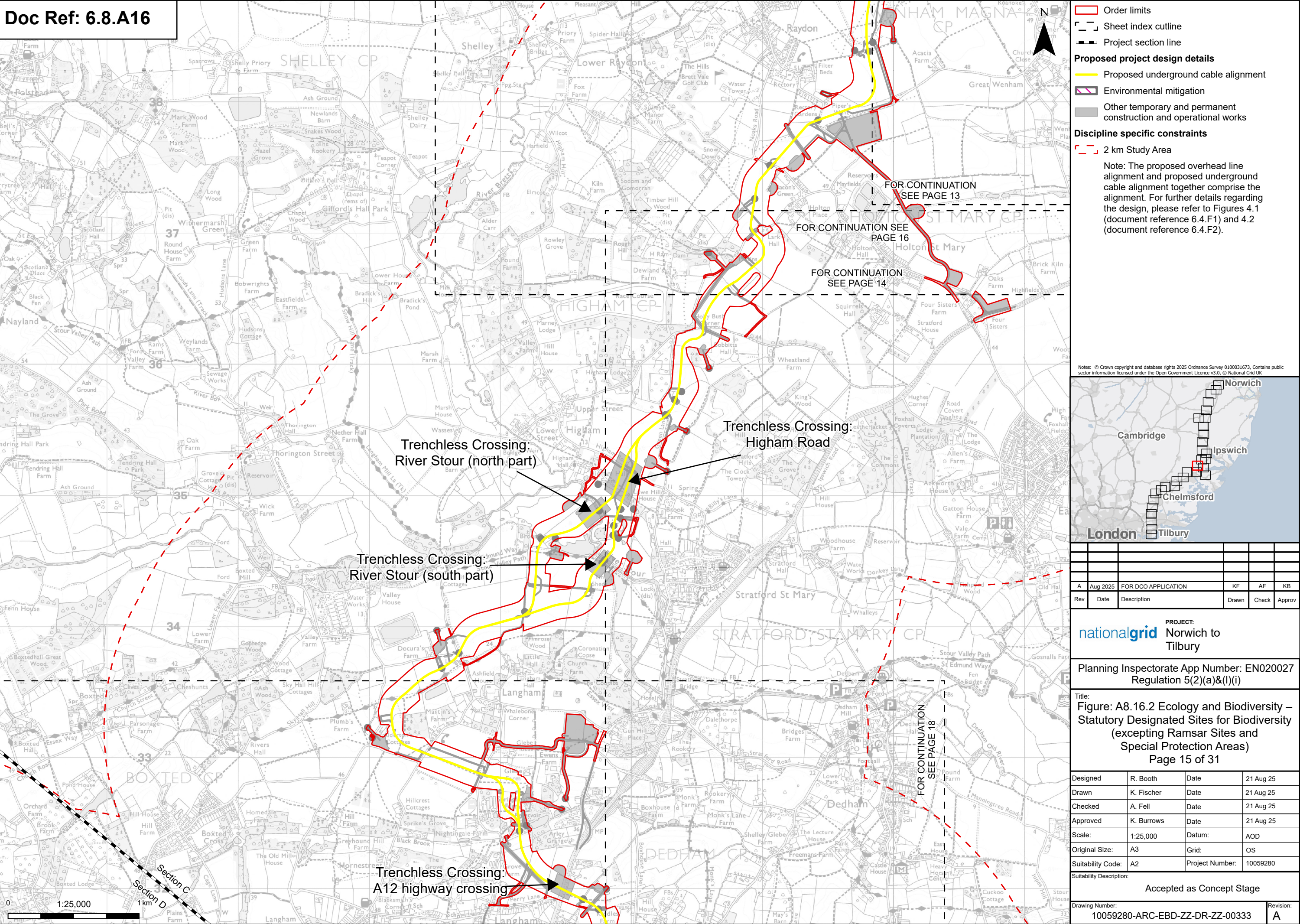
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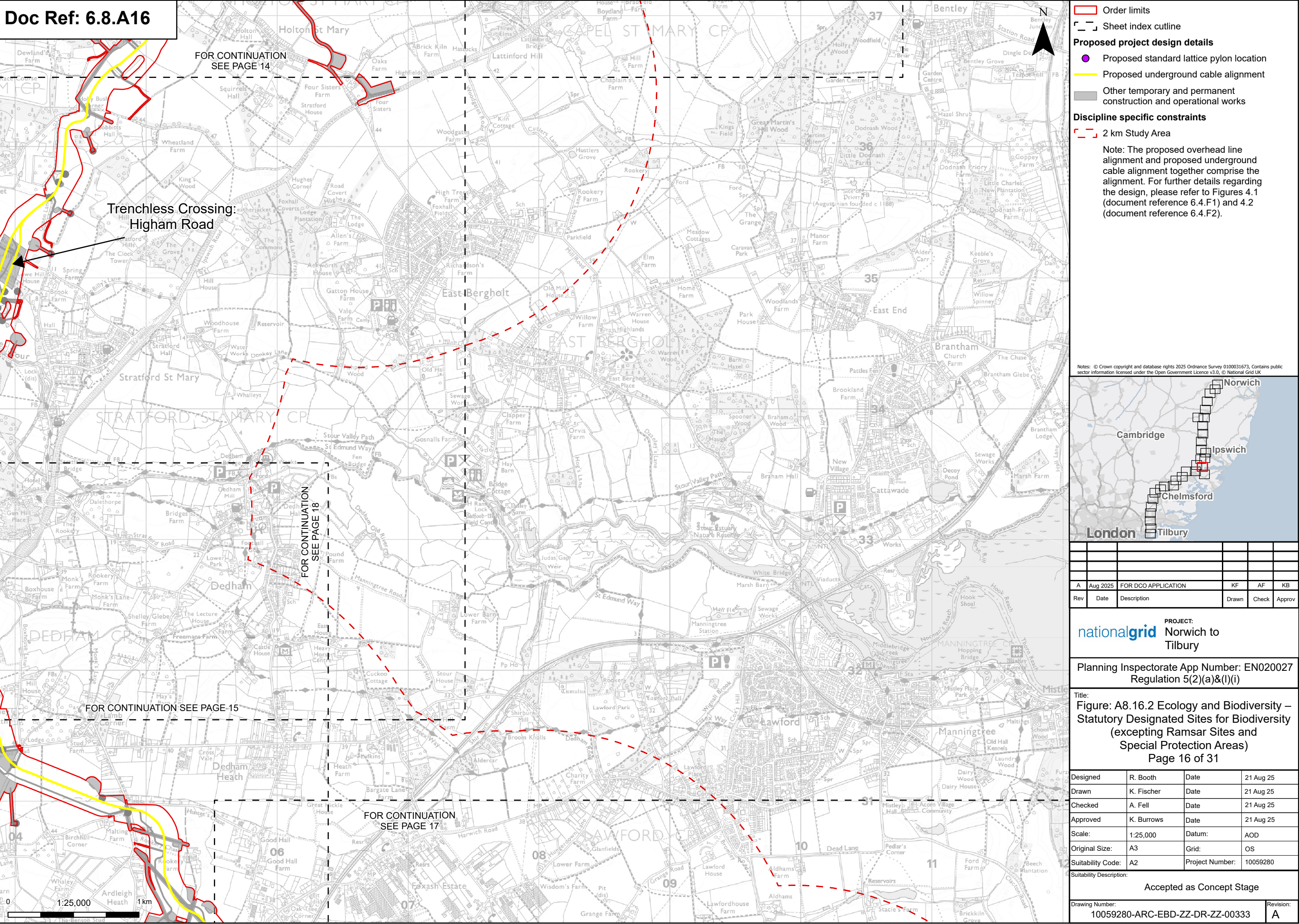
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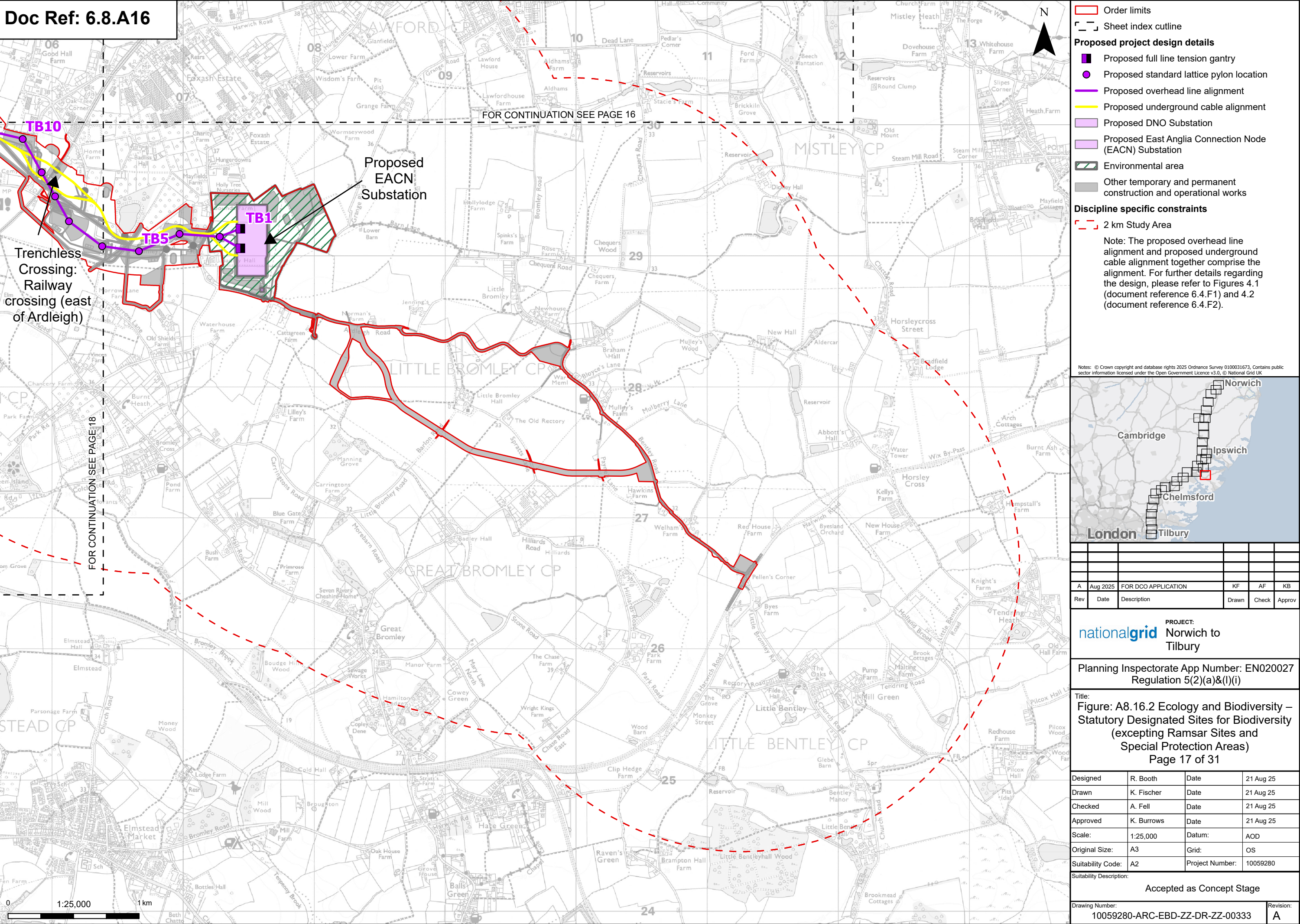
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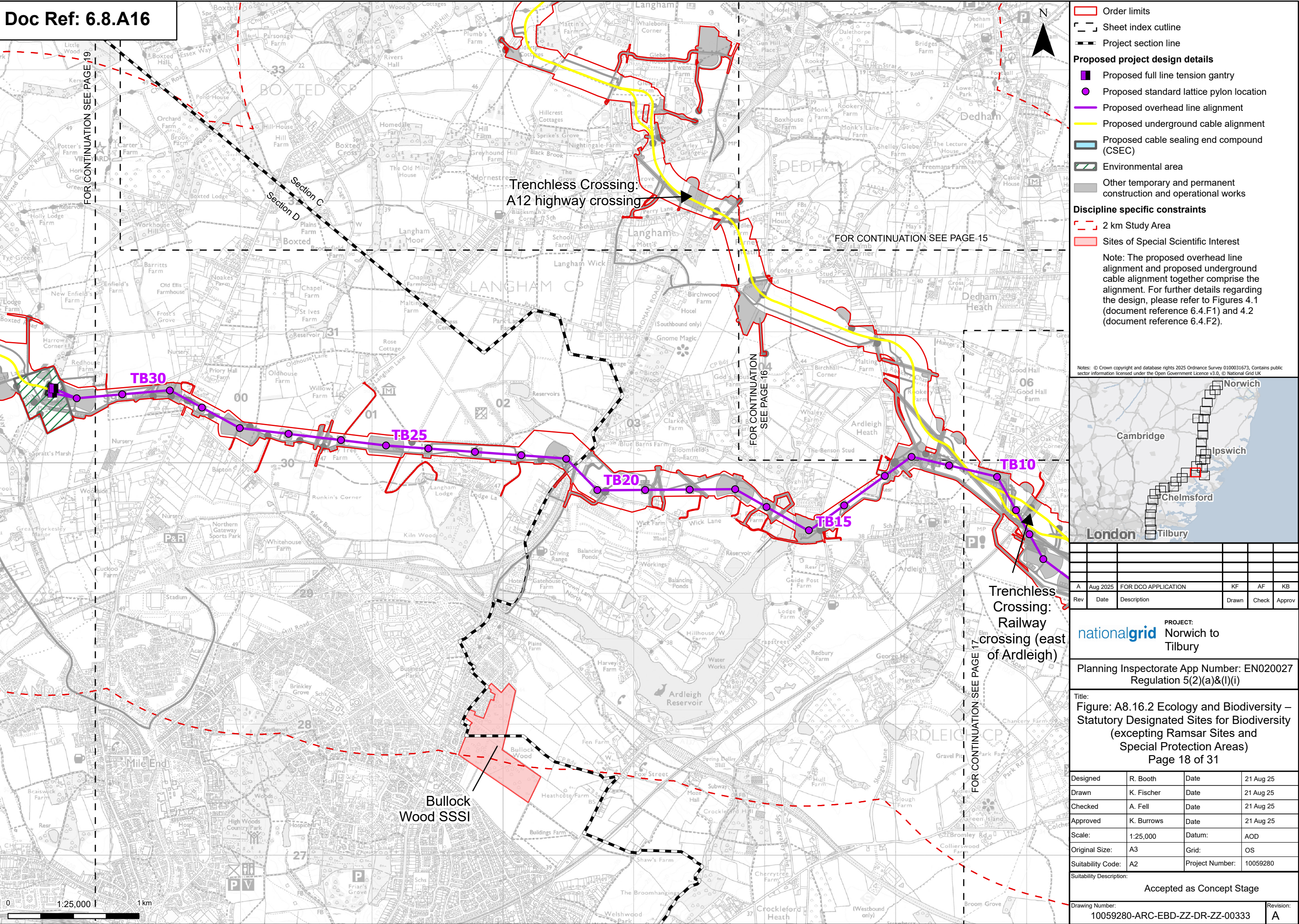
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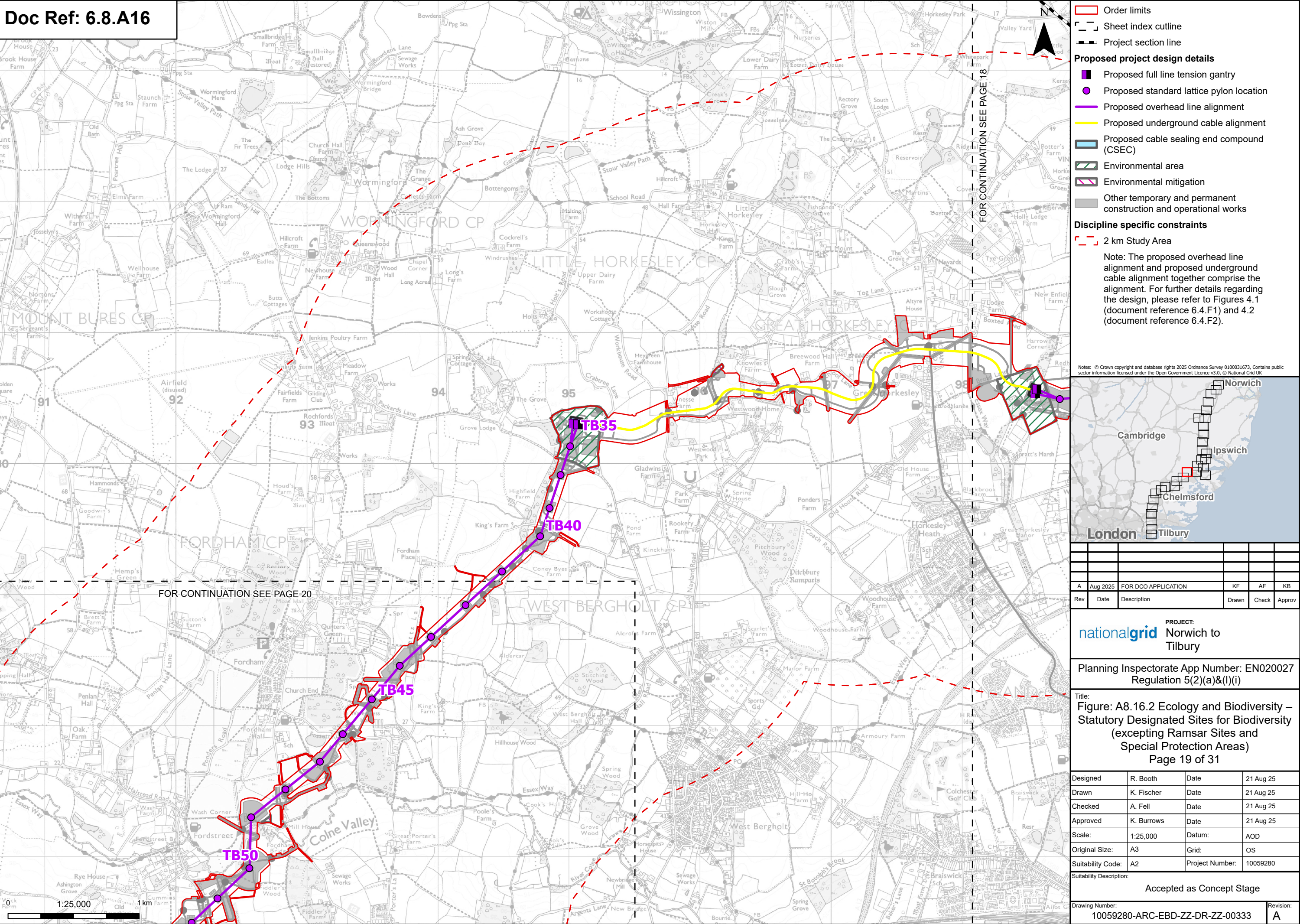
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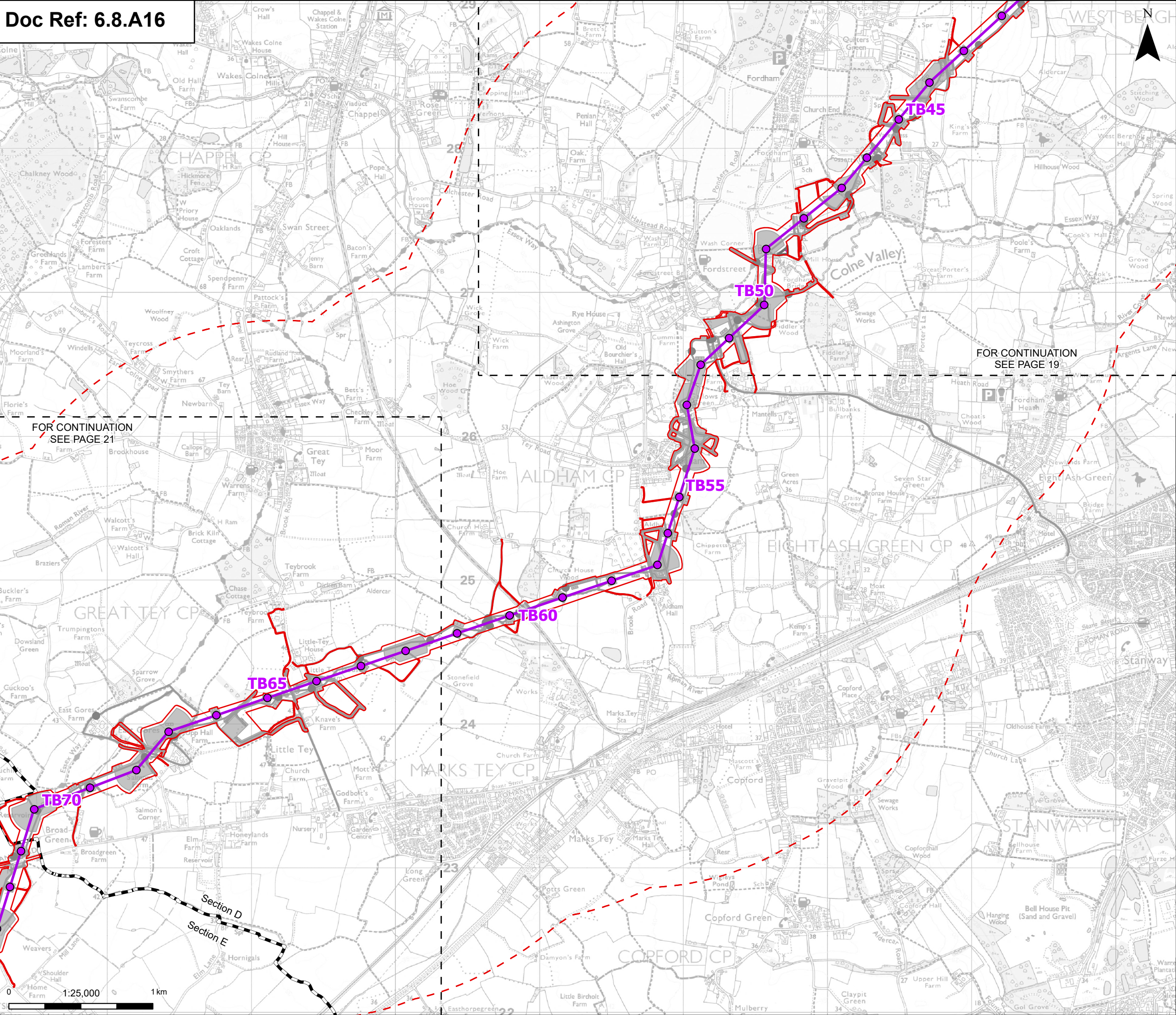












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Proposed standard lattice pylon location

Proposed overhead line alignment

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Other temporary and permanent construction and operational works

Discipline specific constraints

2 km Study Area

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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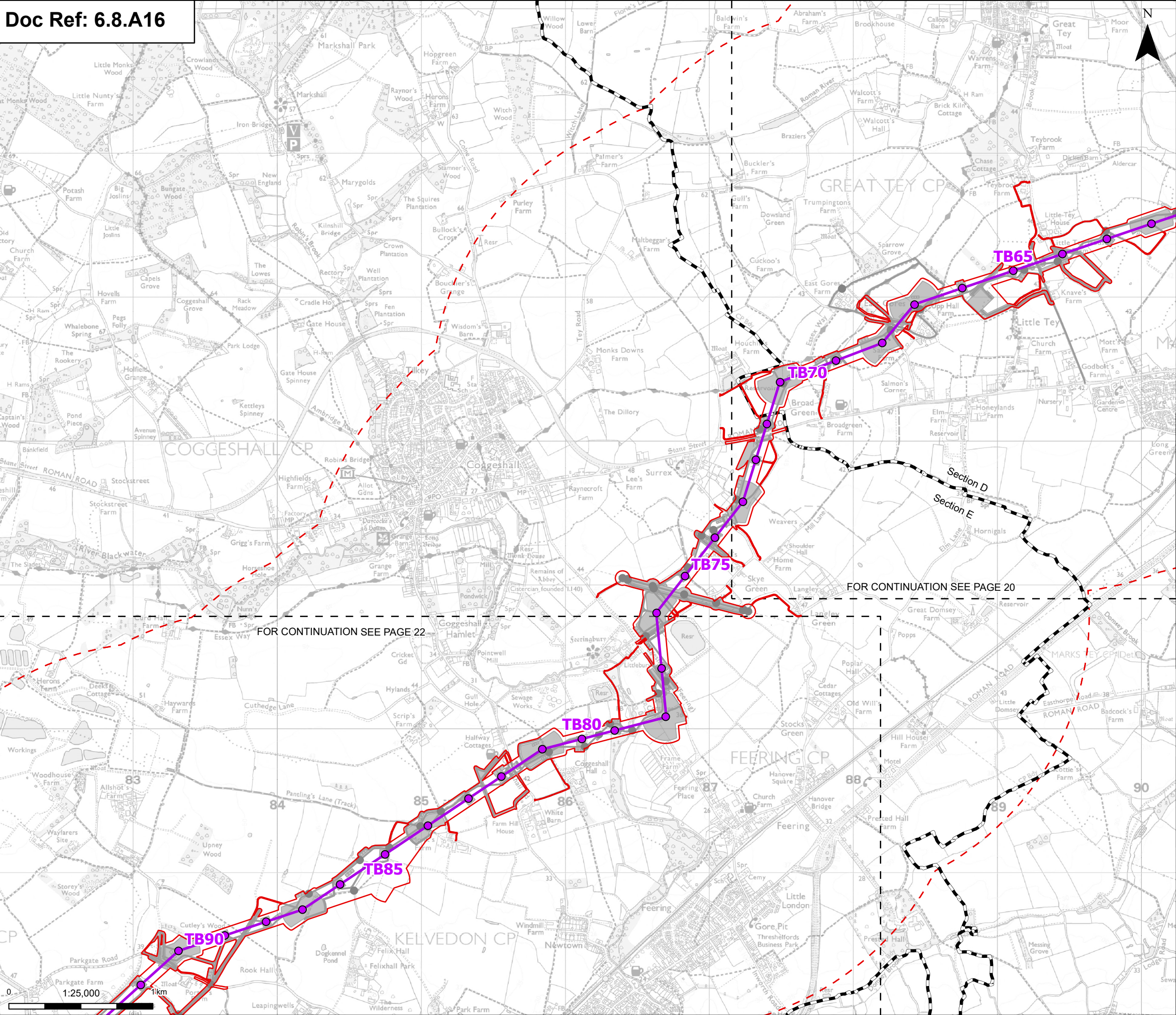
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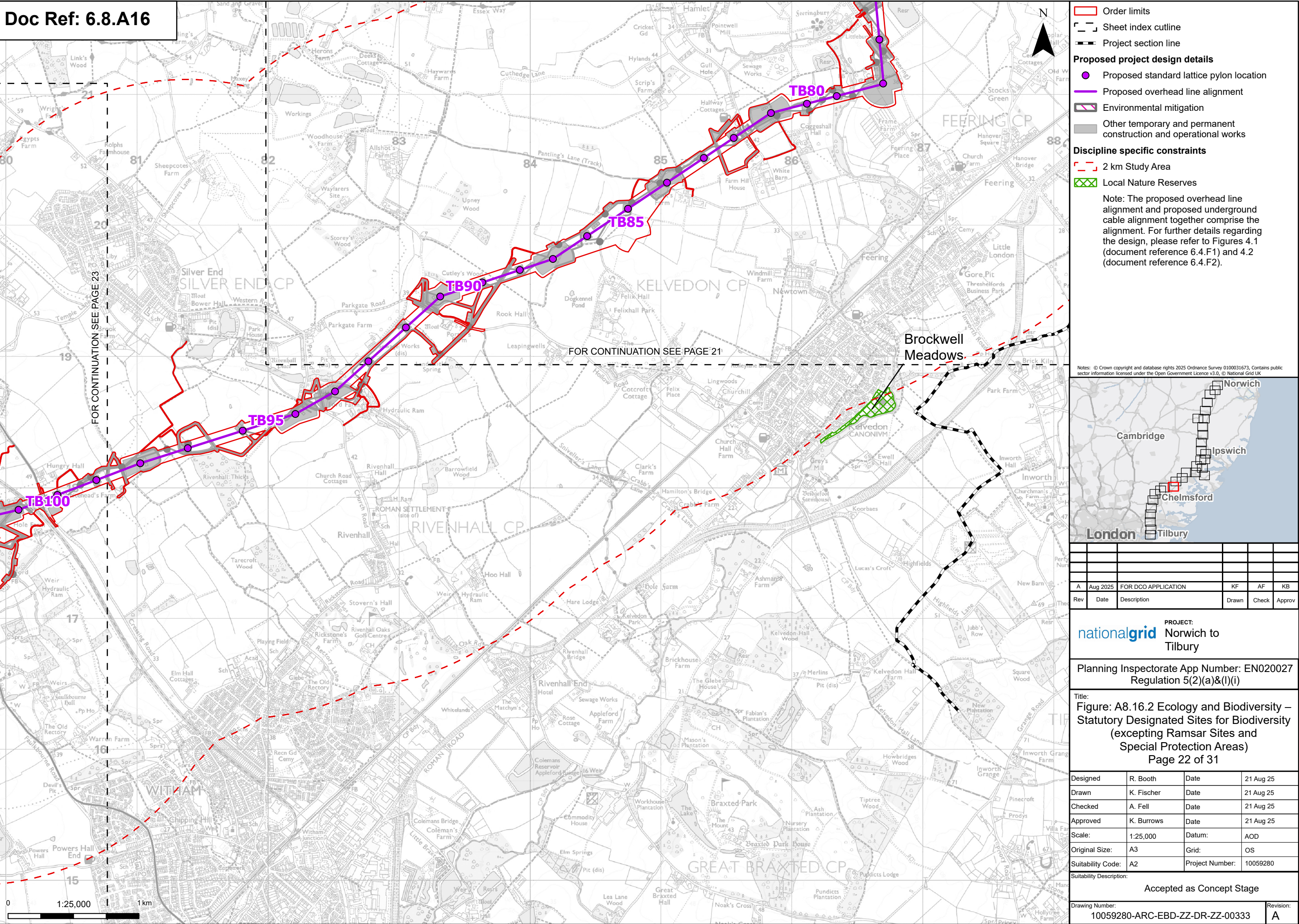
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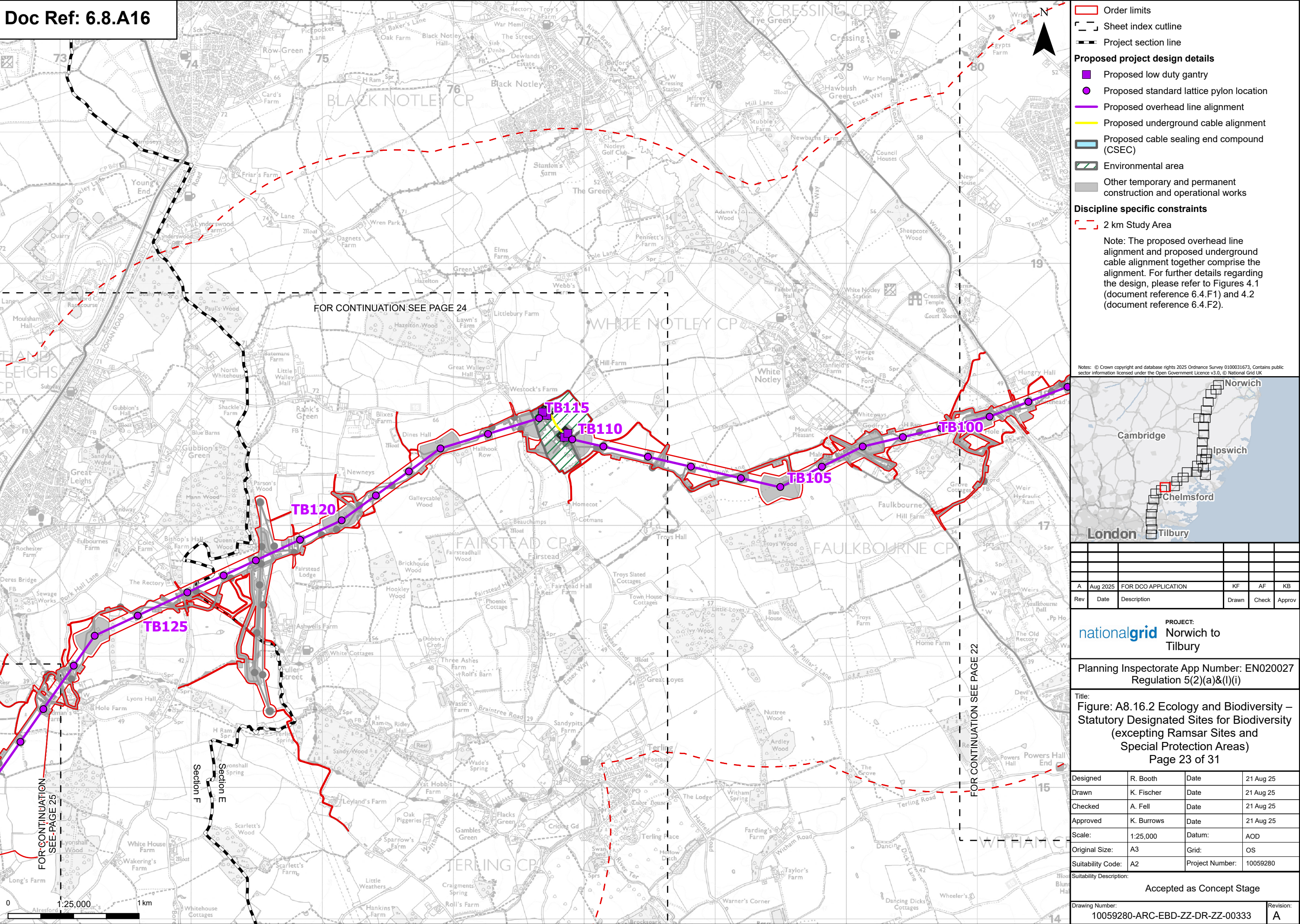
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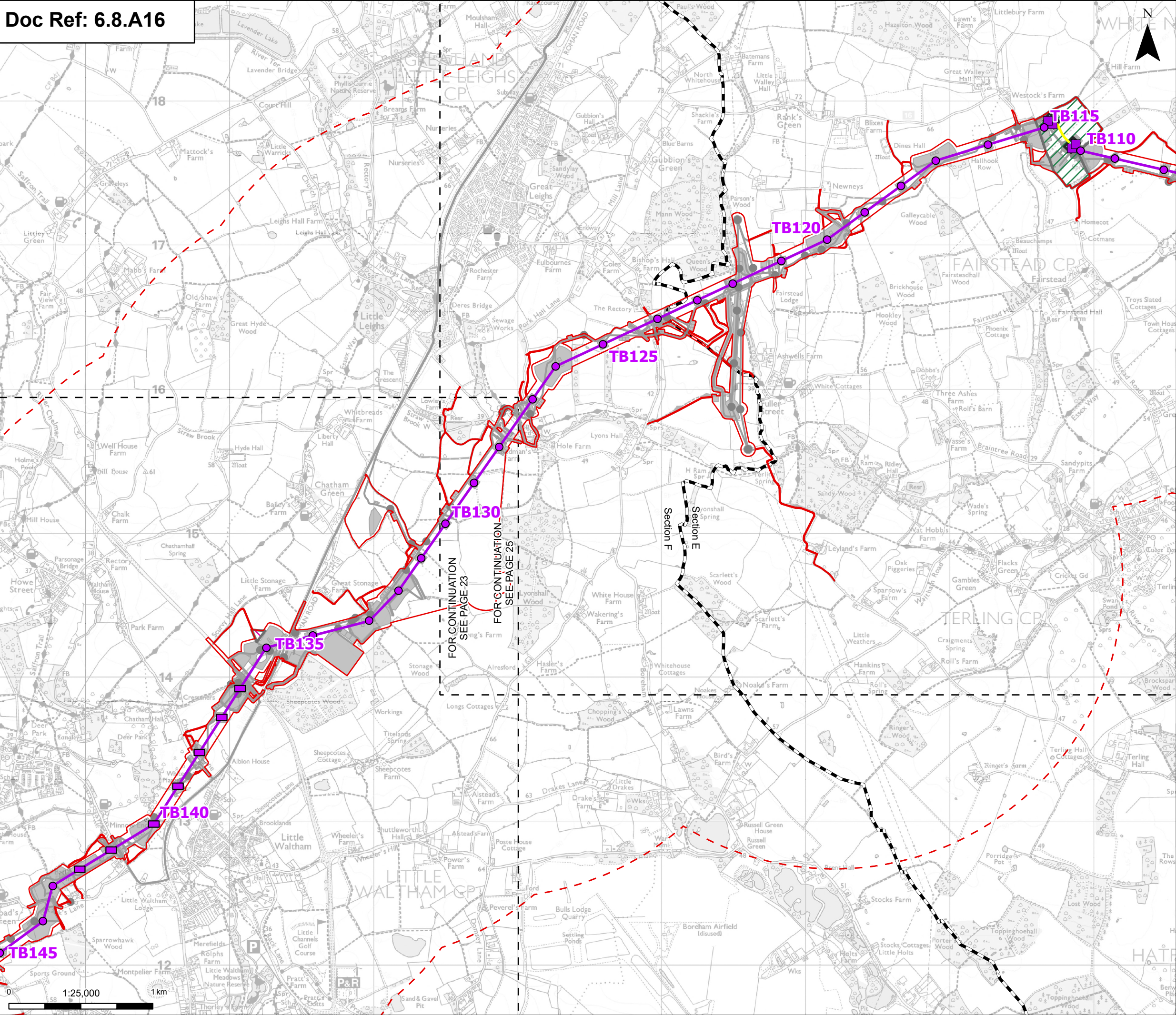
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Proposed low duty gantry

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Proposed standard lattice pylon location

Proposed overhead line alignment

Proposed underground cable alignment

Proposed cable sealing end compound (CSEC)

Environmental area

Environmental mitigation

Other temporary and permanent construction and operational works

Discipline specific constraints

2 km Study Area

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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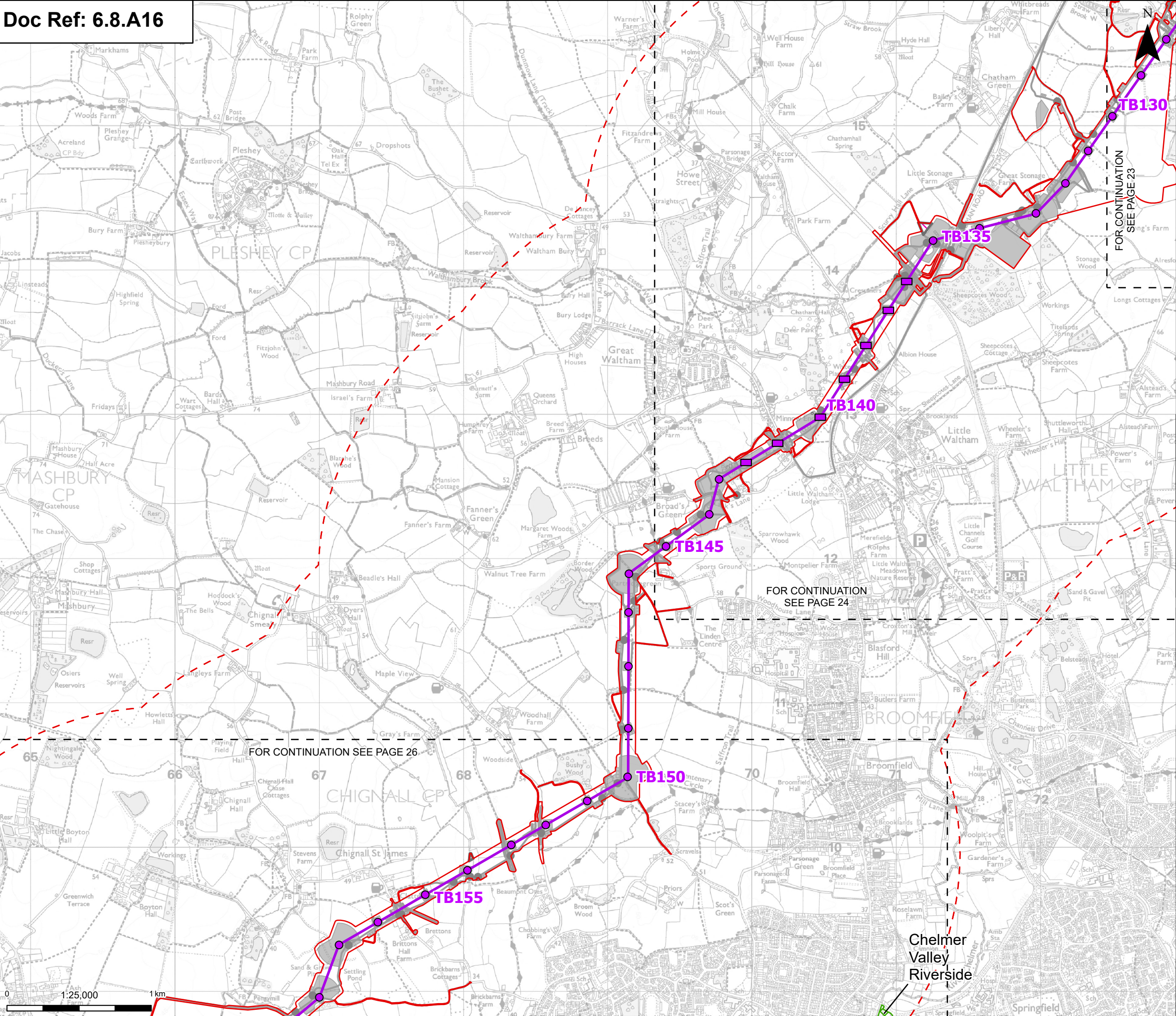
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Other temporary and permanent construction and operational works

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Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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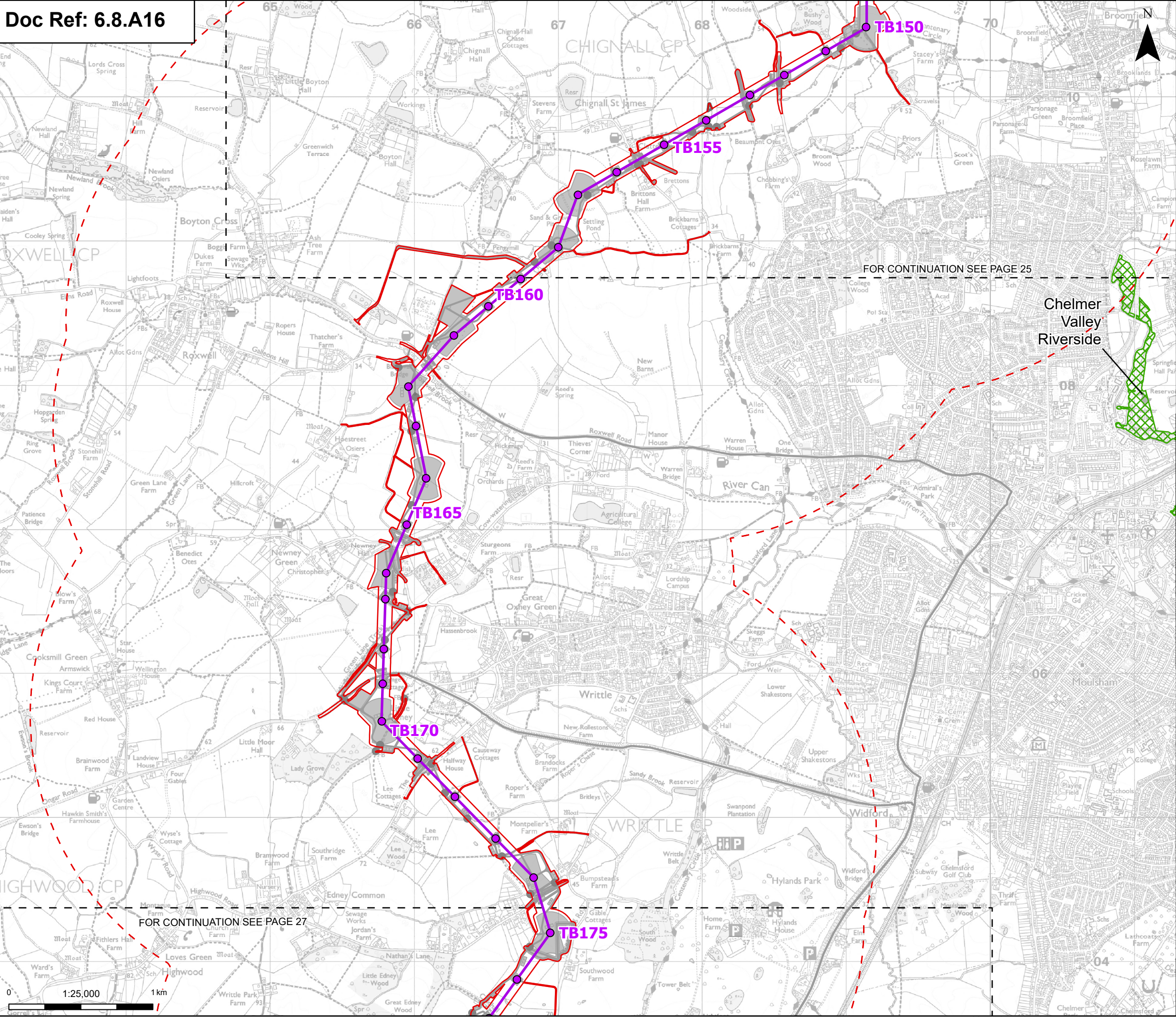
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Proposed standard lattice pylon location

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2 km Study Area

Local Nature Reserves

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



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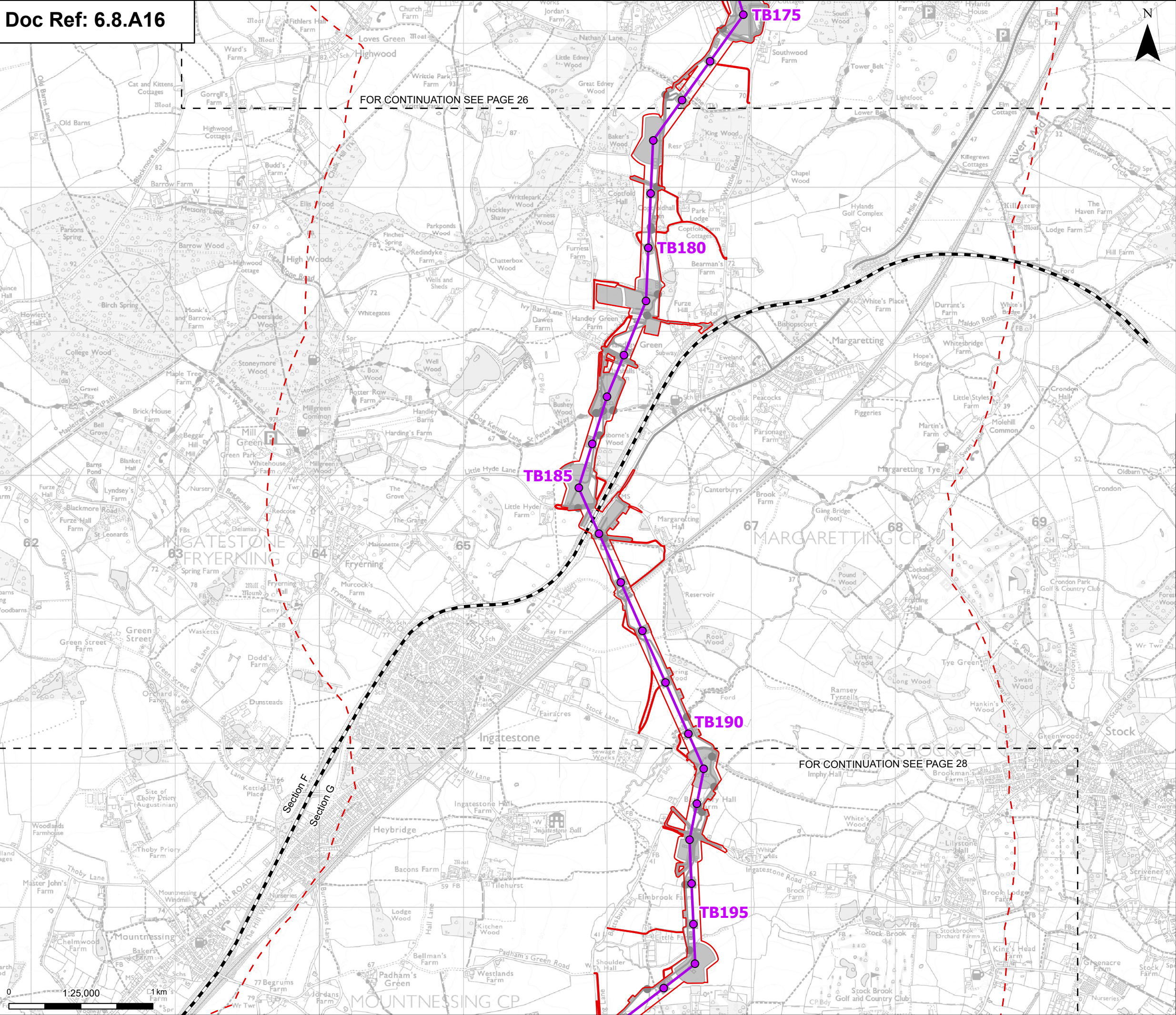
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Proposed overhead line alignment

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Discipline specific constraints

2 km Study Area

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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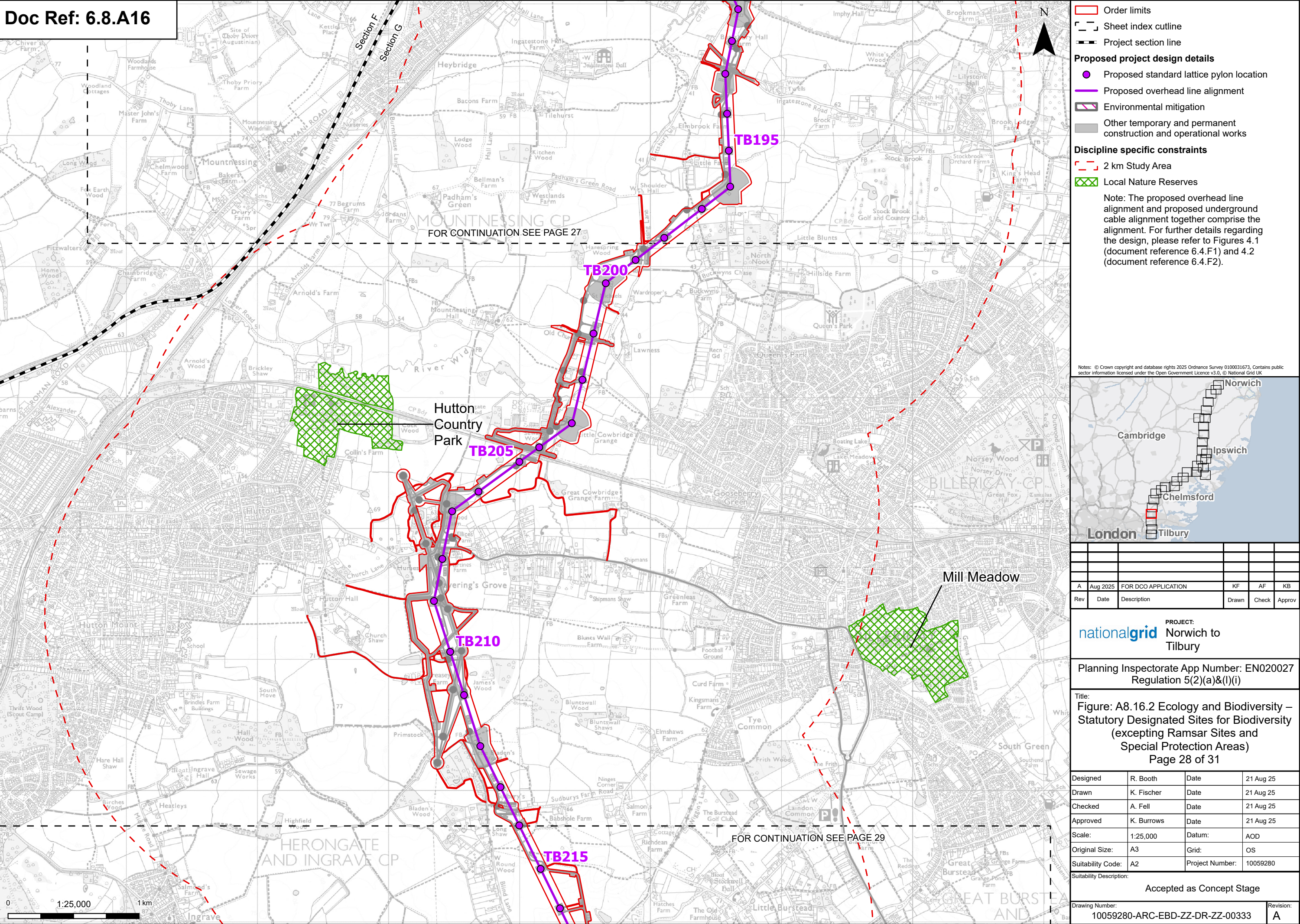
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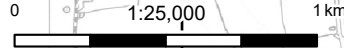
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Park SSSI

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AND INGRAVE CP

Herongate

West Horndon CP

WEST HORNDON CP

Bulphan

TB215

TB220

TB225

TB230

TB235

Langdon Ridge
SSSI

Section G

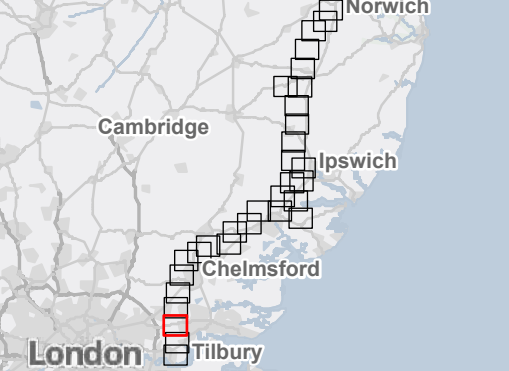
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- Discipline specific constraints**
 - 2 km Study Area
 - Sites of Special Scientific Interest

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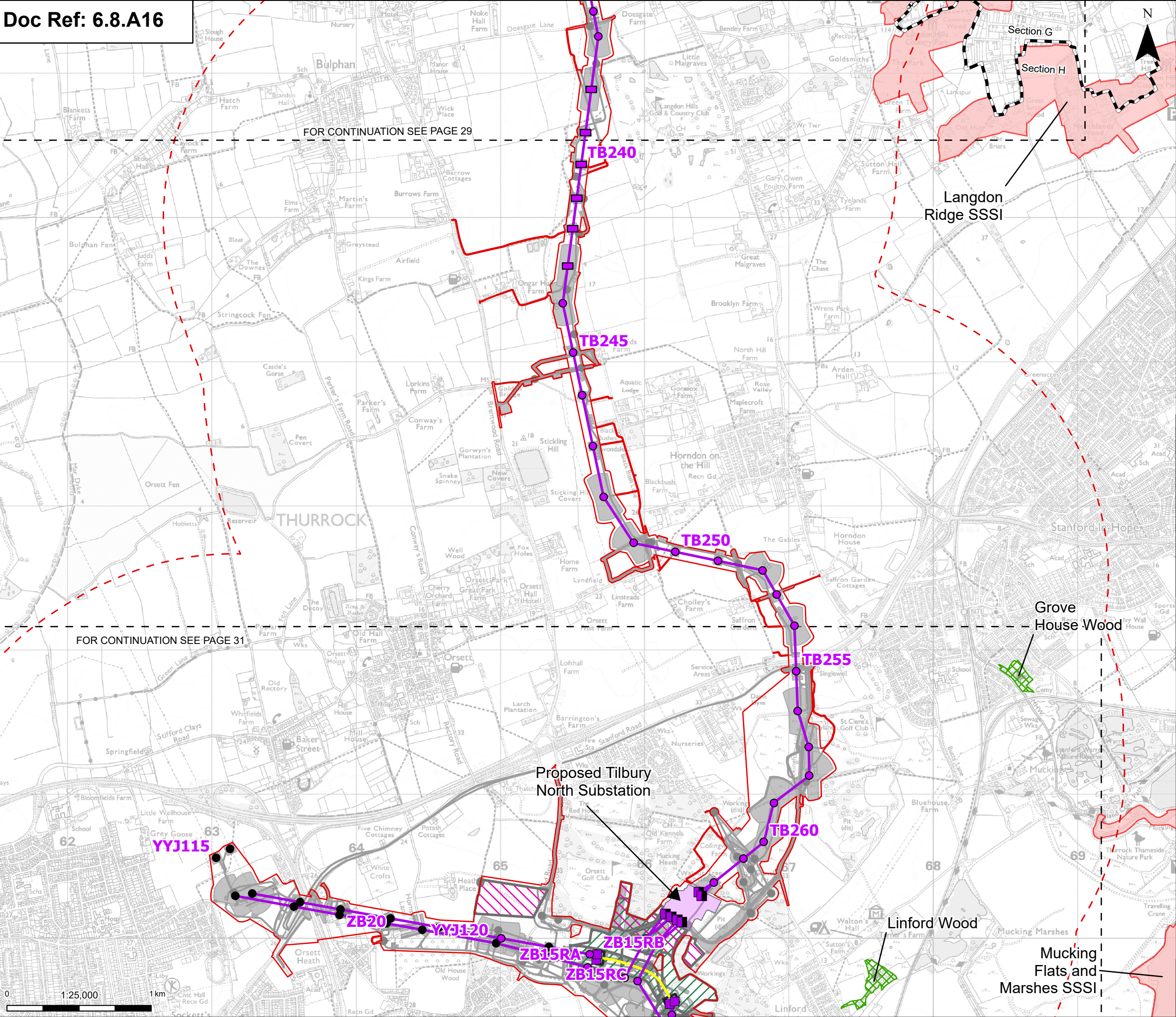
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Environmental area

Environmental mitigation

Other temporary and permanent construction and operational works

Discipline specific constraints

2 km Study Area

Sites of Special Scientific Interest

Local Nature Reserves

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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Title:
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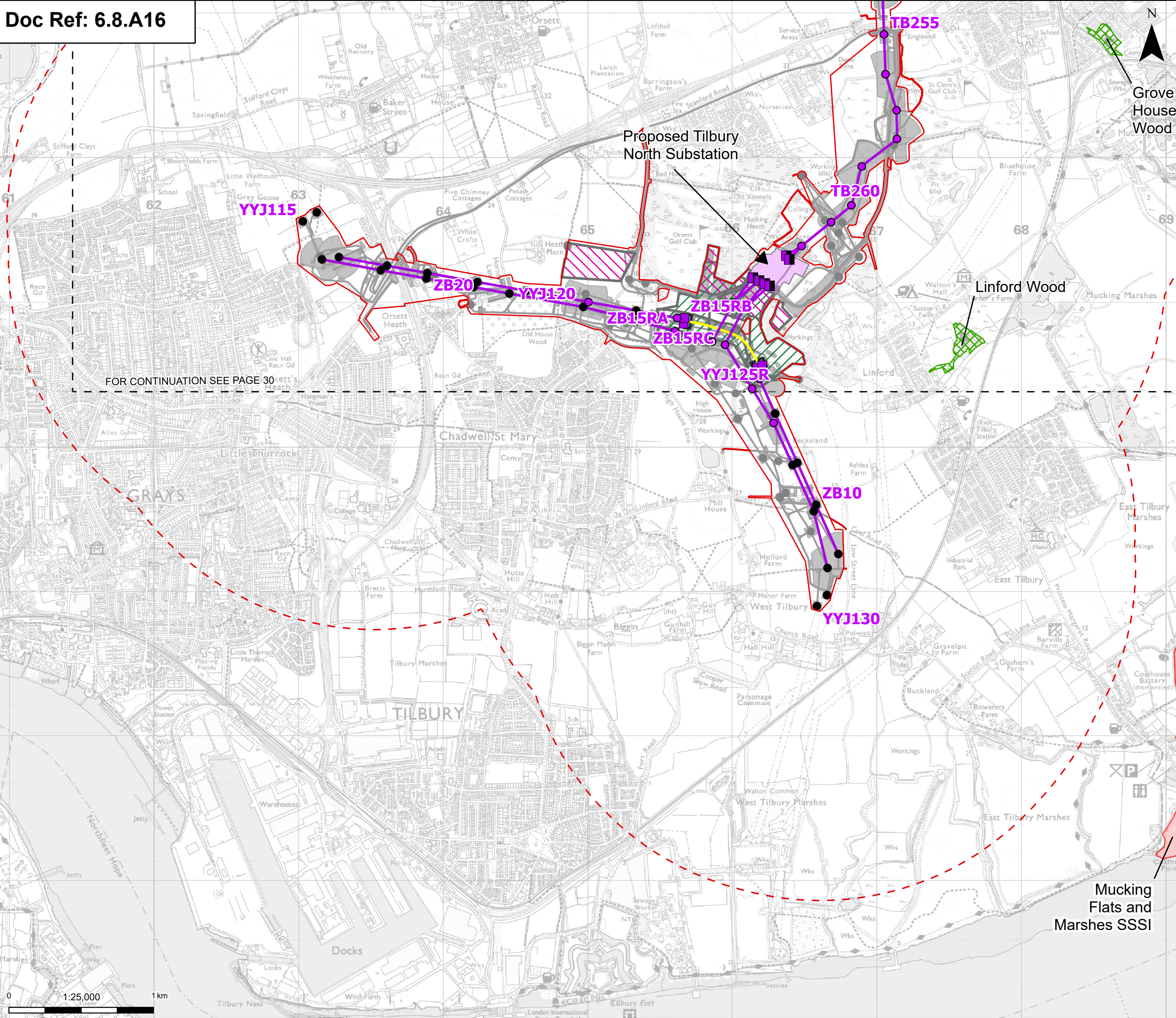
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Environmental area

Environmental mitigation

Other temporary and permanent construction and operational works

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Sites of Special Scientific Interest

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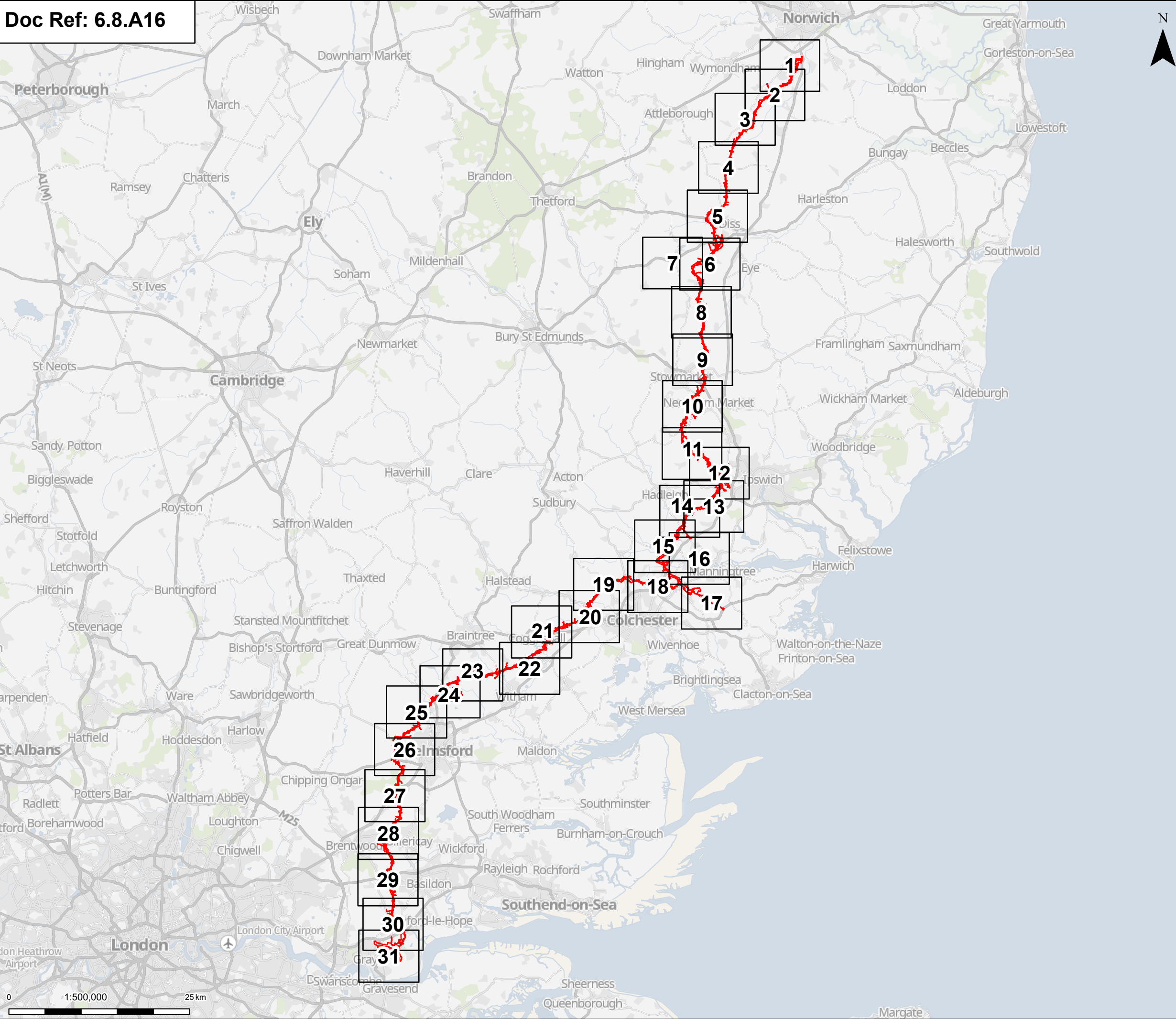
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Title:

Figure A8.16.3 Ecology and Biodiversity –
Non-Statutory Designated Sites for
Biodiversity
Overview

Designed	R. Booth	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
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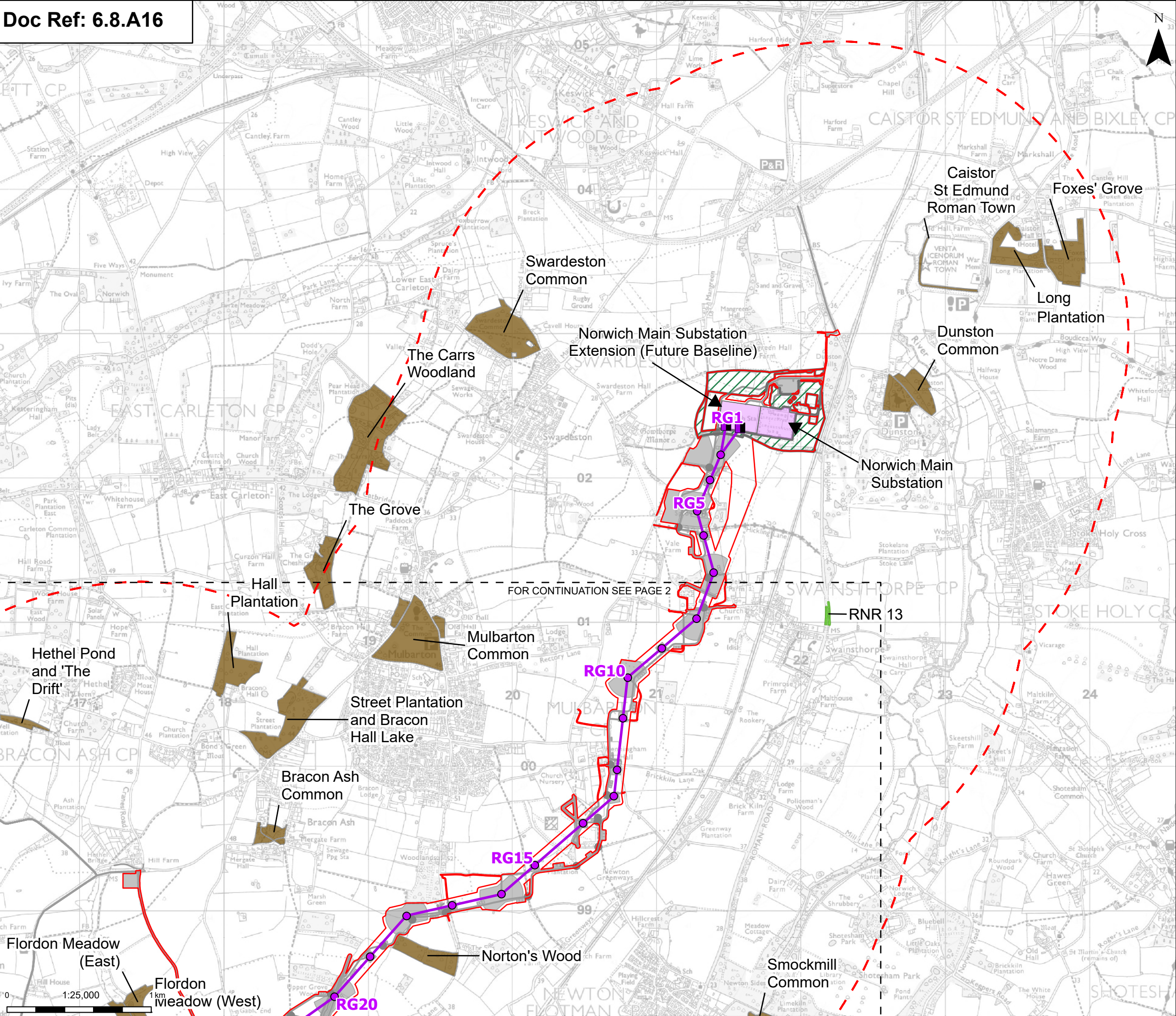
Accepted as Concept Stage

Drawing Number:
10059280-ARC-EBD-ZZ-DR-ZZ-00407

Revision:
A

Print Date: 08-14-25 14:23:35

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Order limits

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Proposed full line tension gantry

Proposed standard lattice pylon location

Proposed overhead line alignment

Norwich Main Substation

Norwich Main Substation Extension (future baseline)

Environmental area

Other temporary and permanent construction and operational works

Discipline specific constraints

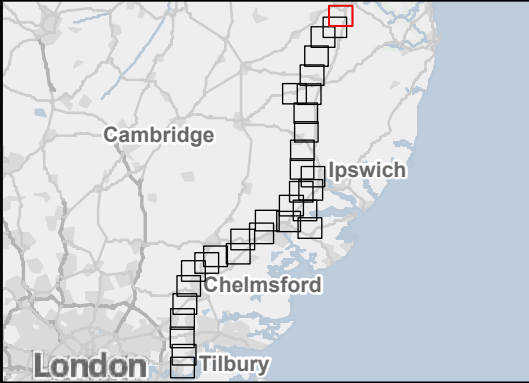
2 km Study Area

County Wildlife Sites

Roadside Nature Reserve

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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Rev	Date	Description	Drawn	Check	Approv

PROJECT:
nationalgrid Norwich to Tilbury

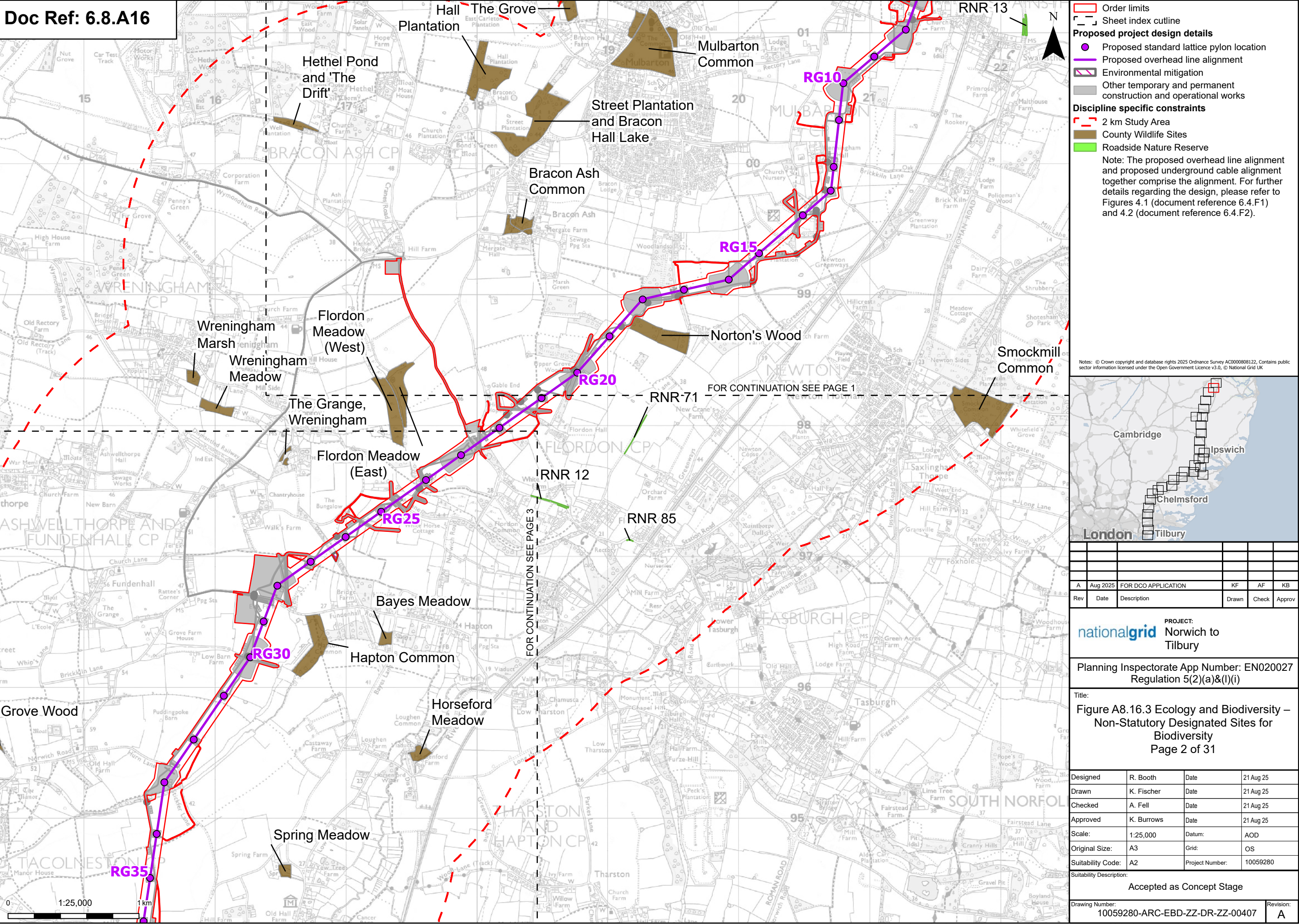
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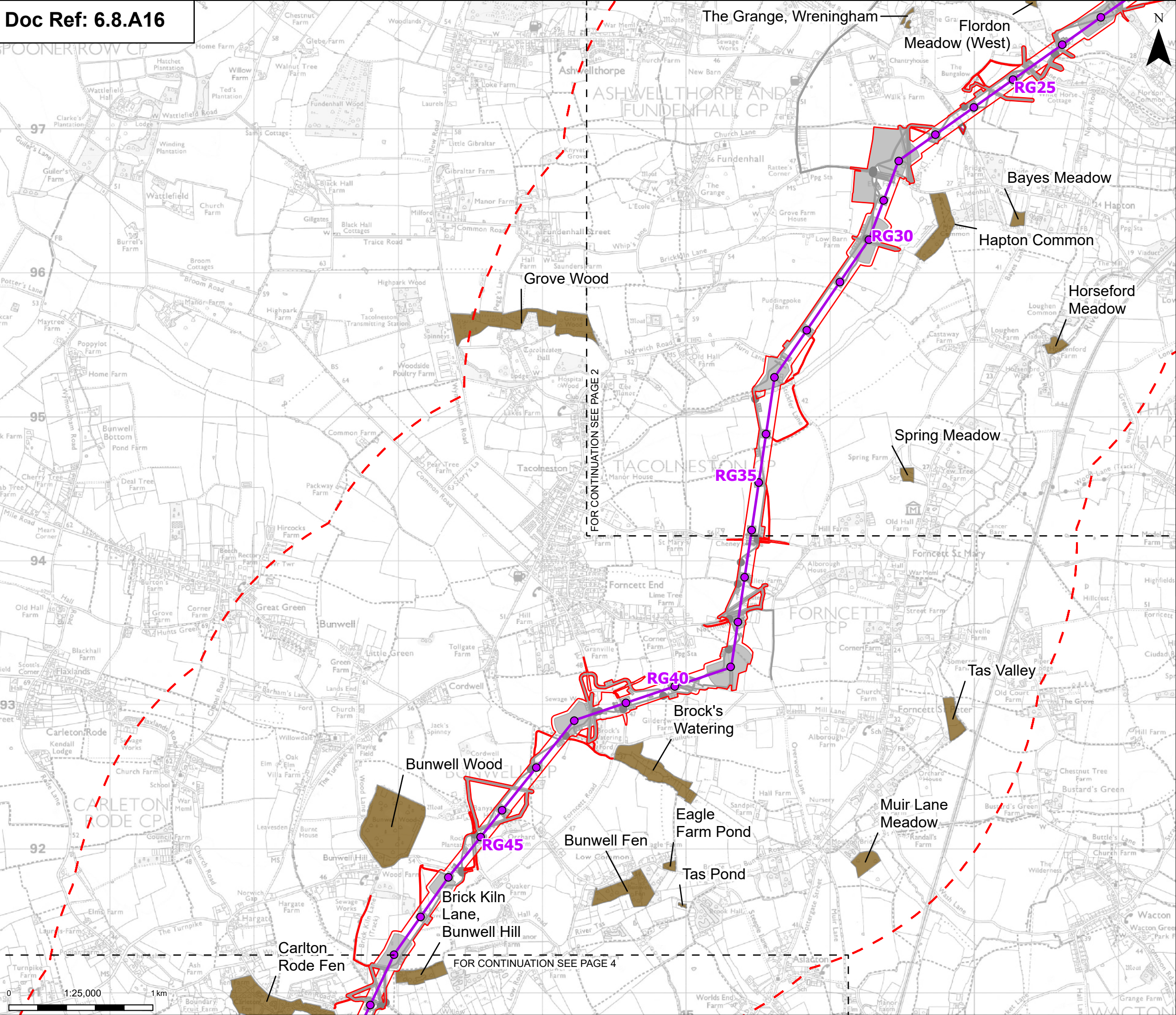
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Figure A8.16.3 Ecology and Biodiversity –
Non-Statutory Designated Sites for
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Approved	K. Burrows	Date	21 Aug 25
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Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00407	Revision: A
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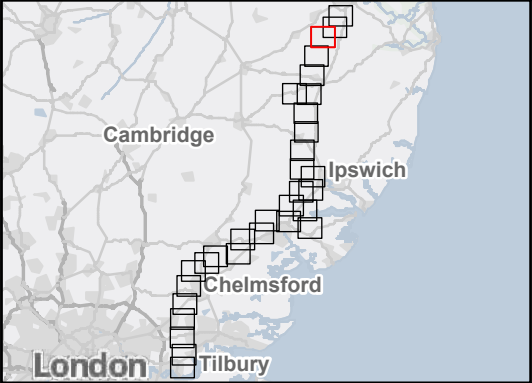
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

- 2 km Study Area
- County Wildlife Sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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PROJECT:
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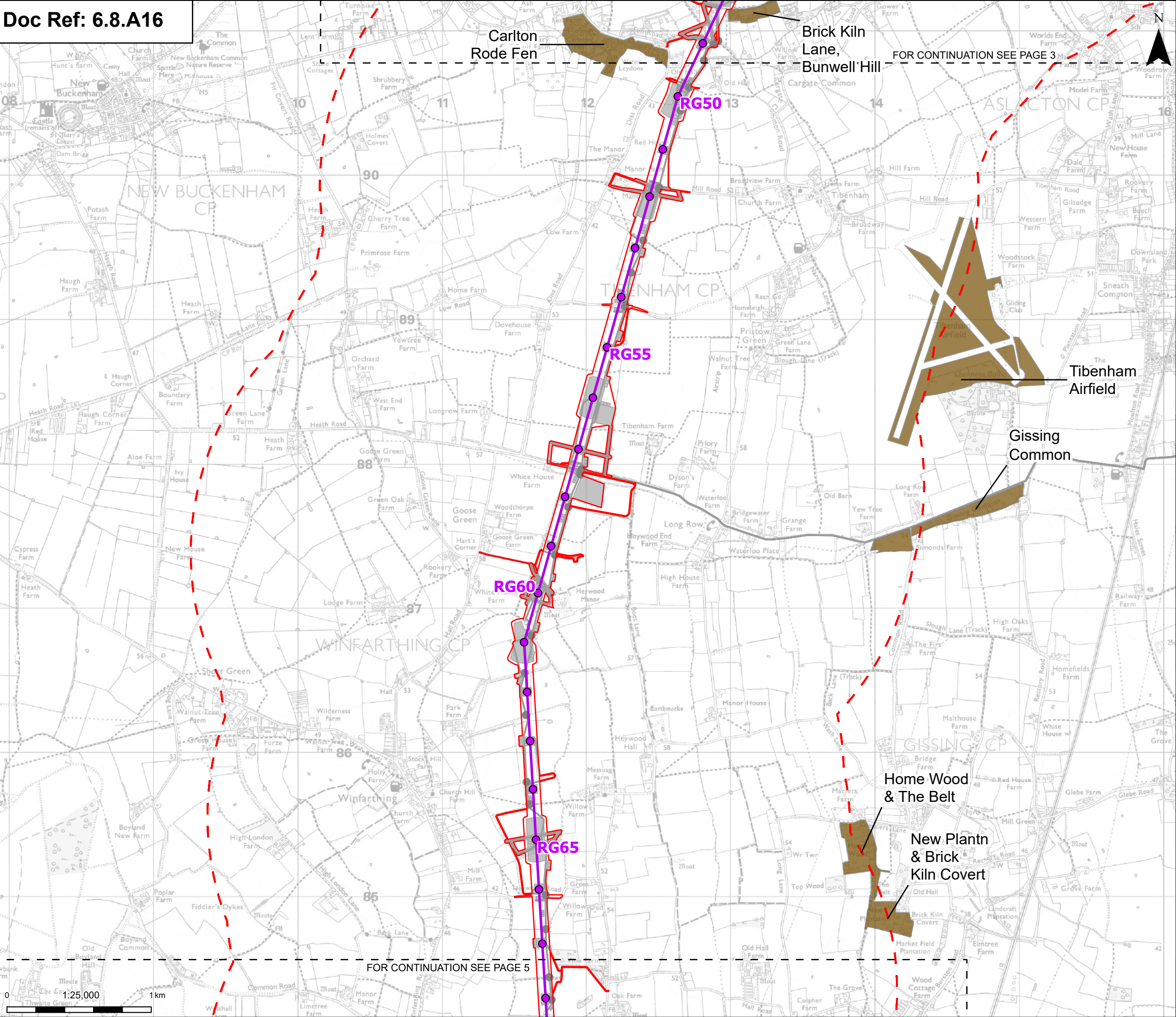
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Regulation 5(2)(a)&(l)(i)

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Figure A8.16.3 Ecology and Biodiversity –
Non-Statutory Designated Sites for
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Approved	K. Burrows	Date	21 Aug 25
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Suitability Code:	A2	Project Number:	10059280

Suitability Description:
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Proposed project design details

Proposed standard lattice pylon location

Proposed overhead line alignment

Other temporary and permanent construction and operational works

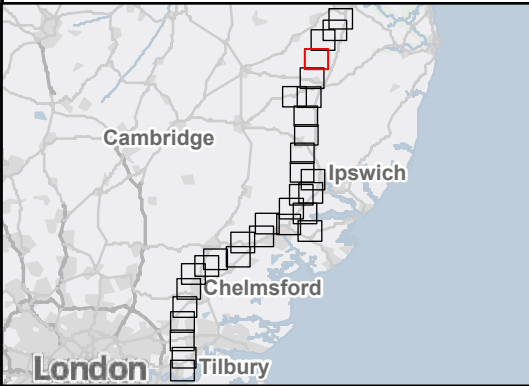
Discipline specific constraints

2 km Study Area

County Wildlife Sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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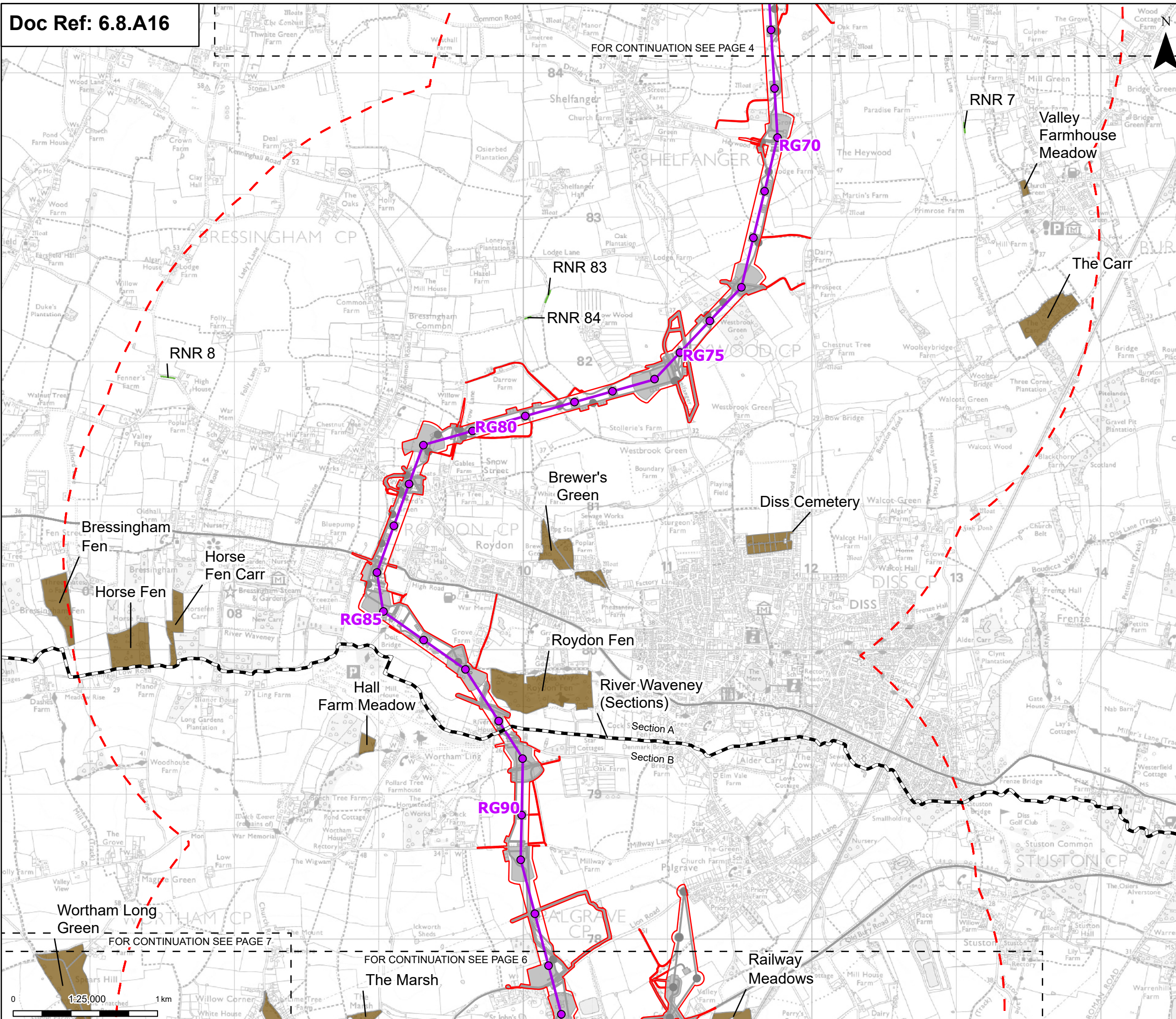
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Regulation 5(2)(a)&(1)(i)











Title:
Figure A8.16.3 Ecology and Biodiversity –
Non-Statutory Designated Sites for
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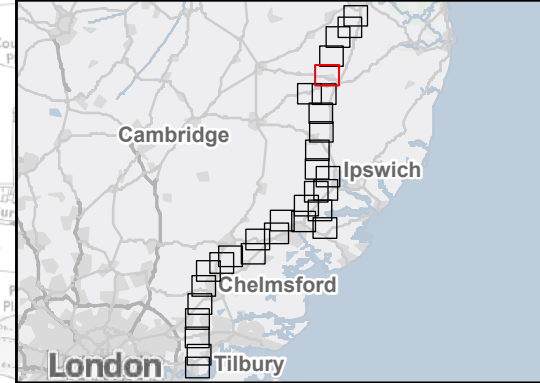
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-  Sheet index cutline
-  Project sections
- Proposed project design details**
-  Proposed standard lattice pylon location
-  Proposed overhead line alignment
-  Environmental mitigation
-  Other temporary and permanent construction and operational works
- Discipline specific constraints**
-  2 km Study Area
-  County Wildlife Sites
-  Roadside Nature Reserve
- Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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Norwich to
Tilbury

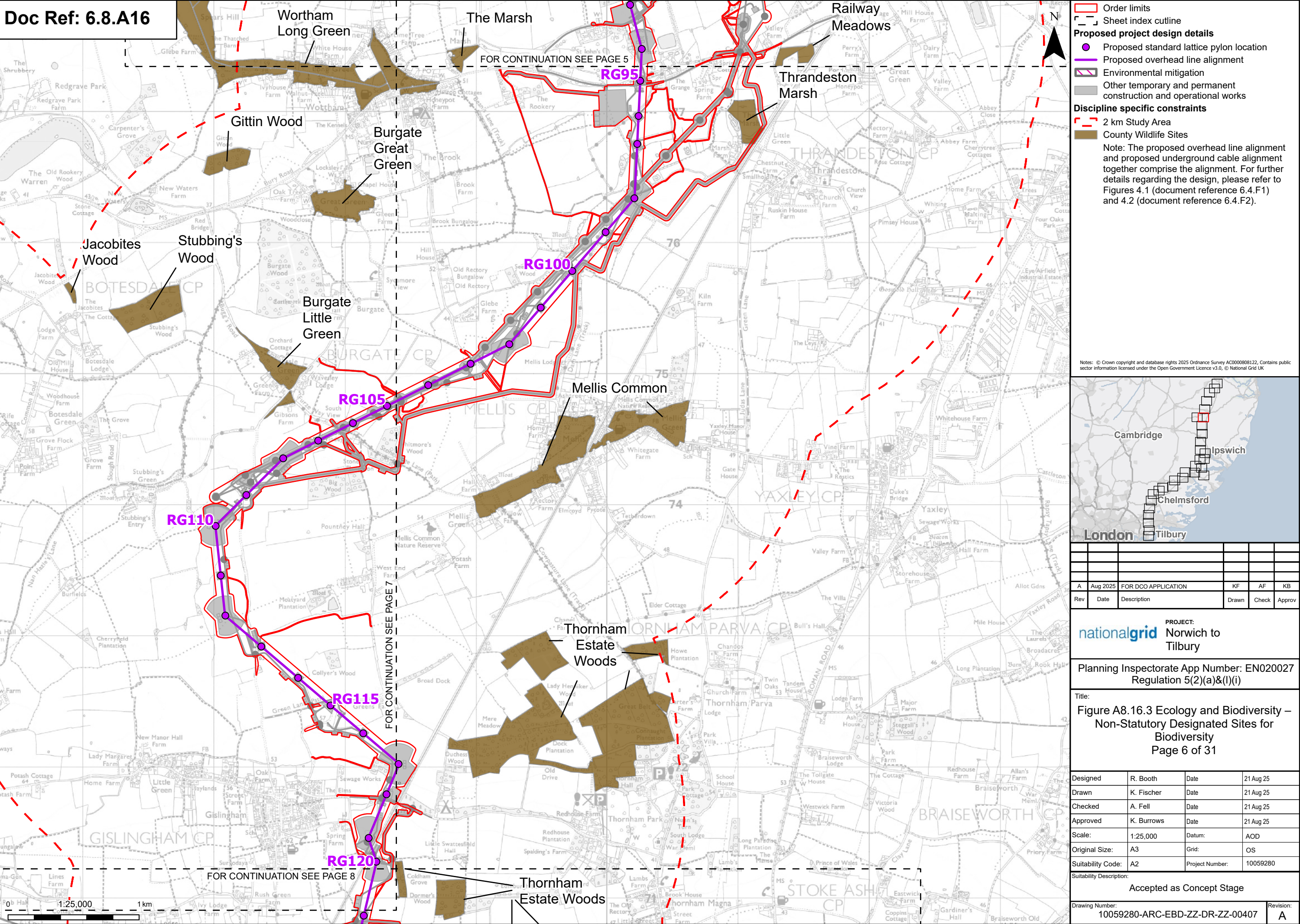
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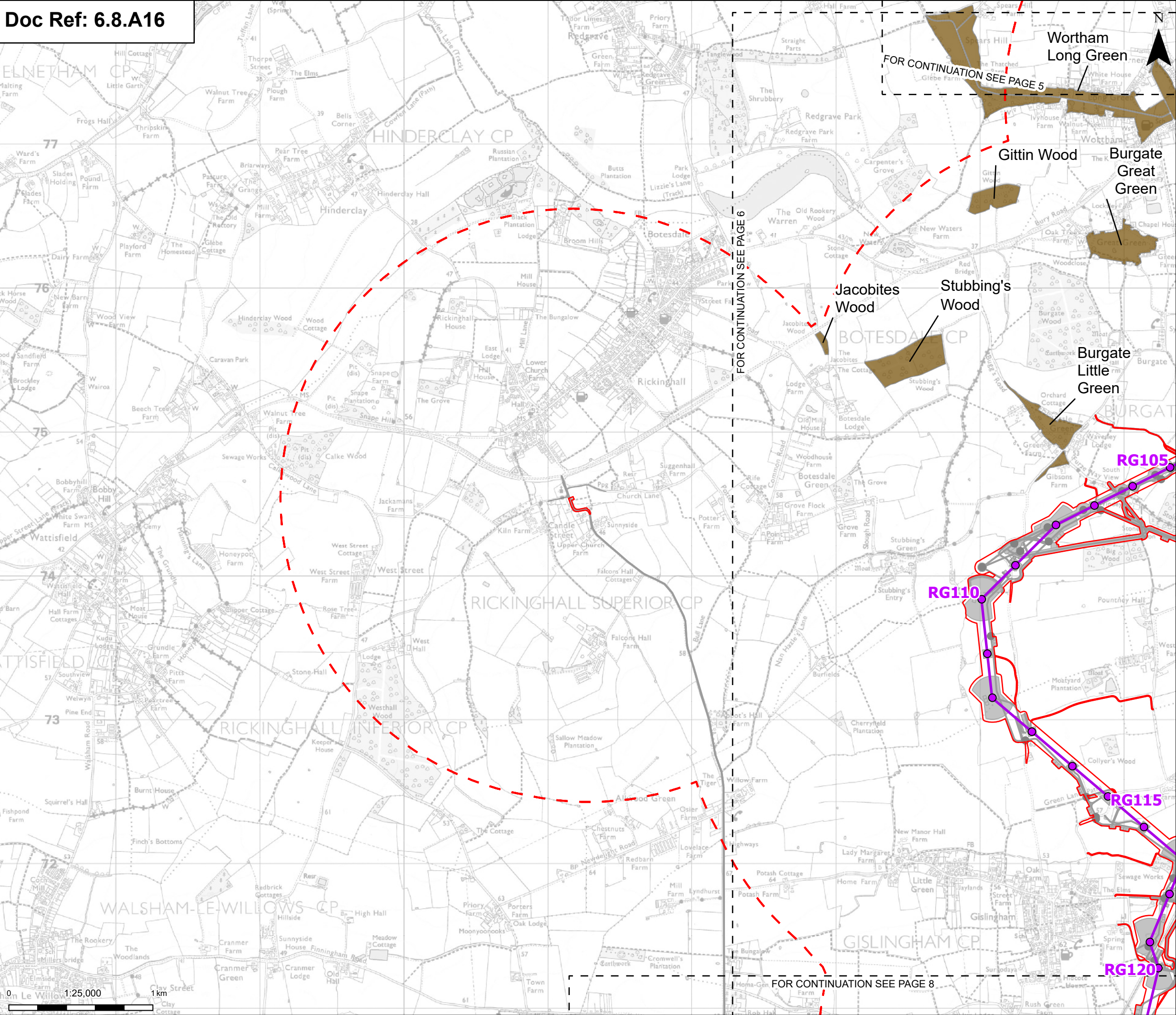
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Approved	K. Burrows	Date	21 Aug 25
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Suitability Code:	A2	Project Number:	10059280

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Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00407	Revision: A
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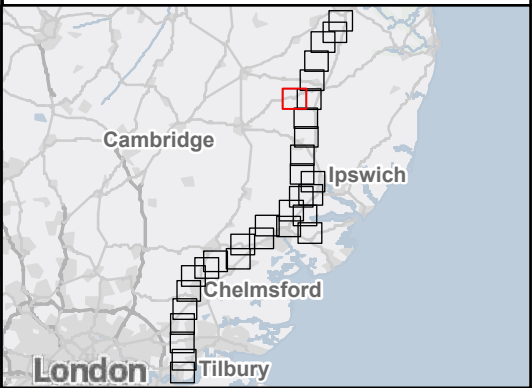
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Other temporary and permanent construction and operational works

Discipline specific constraints

- 2 km Study Area
- County Wildlife Sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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Rev	Date	Description	Drawn	Check	Approv

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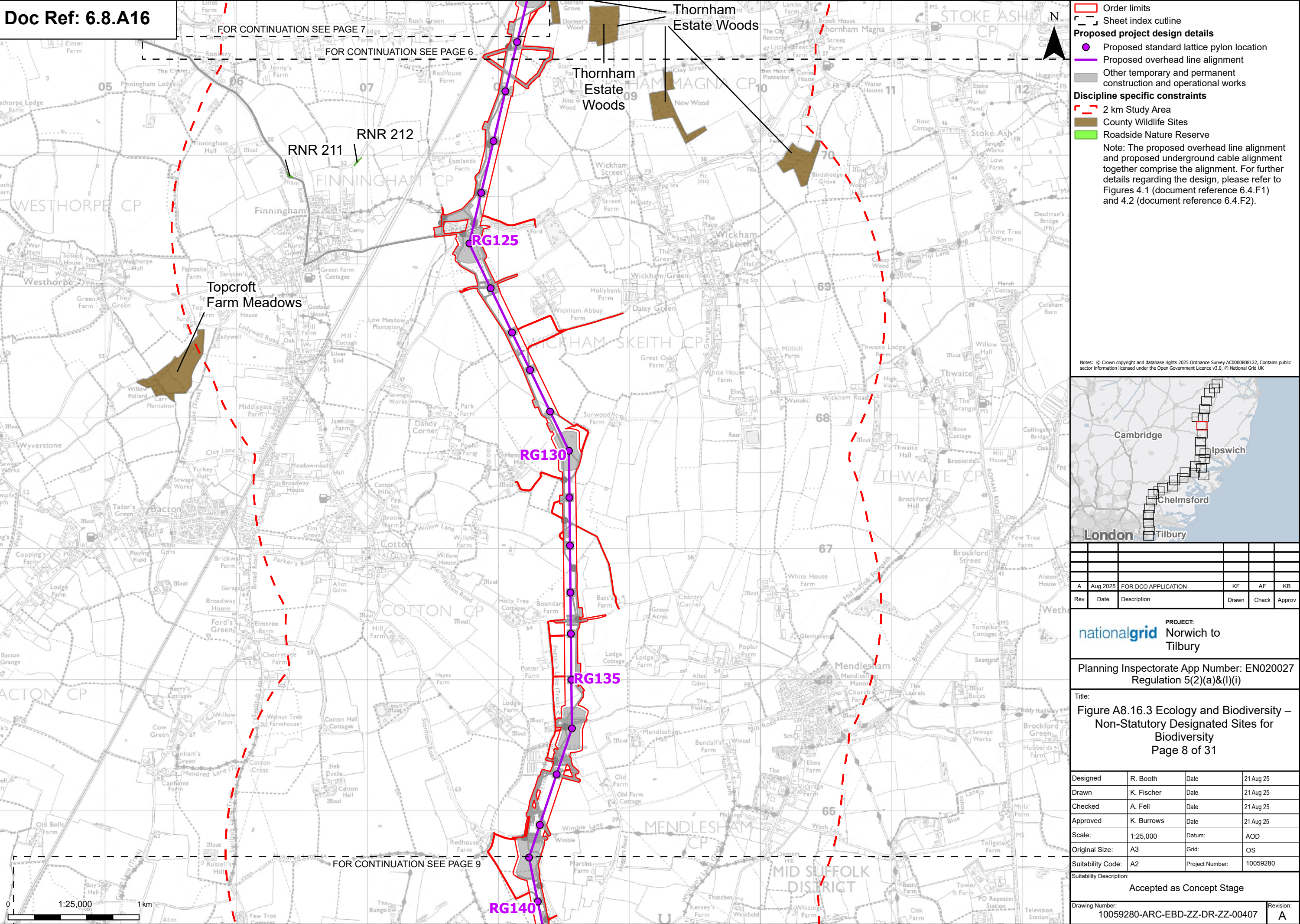
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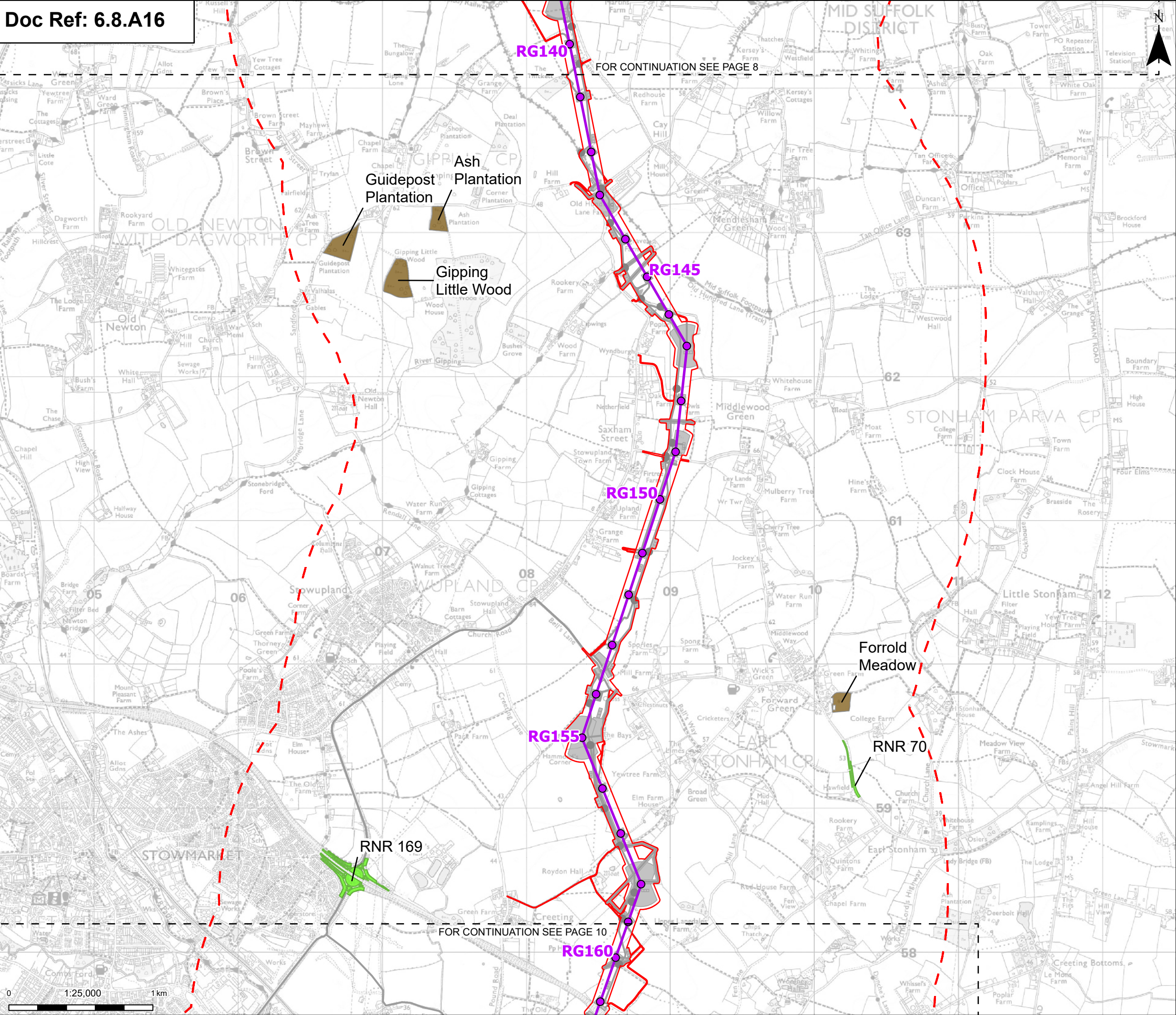
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Non-Statutory Designated Sites for
Biodiversity
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Approved	K. Burrows	Date	21 Aug 25
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Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00407	Revision: A
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Proposed project design details

Proposed standard lattice pylon location

Proposed overhead line alignment

Other temporary and permanent construction and operational works

Discipline specific constraints

2 km Study Area

County Wildlife Sites

Roadside Nature Reserve

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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Regulation 5(2)(a)&(I)(i)

Title:
Figure A8.16.3 Ecology and Biodiversity –
Non-Statutory Designated Sites for
Biodiversity
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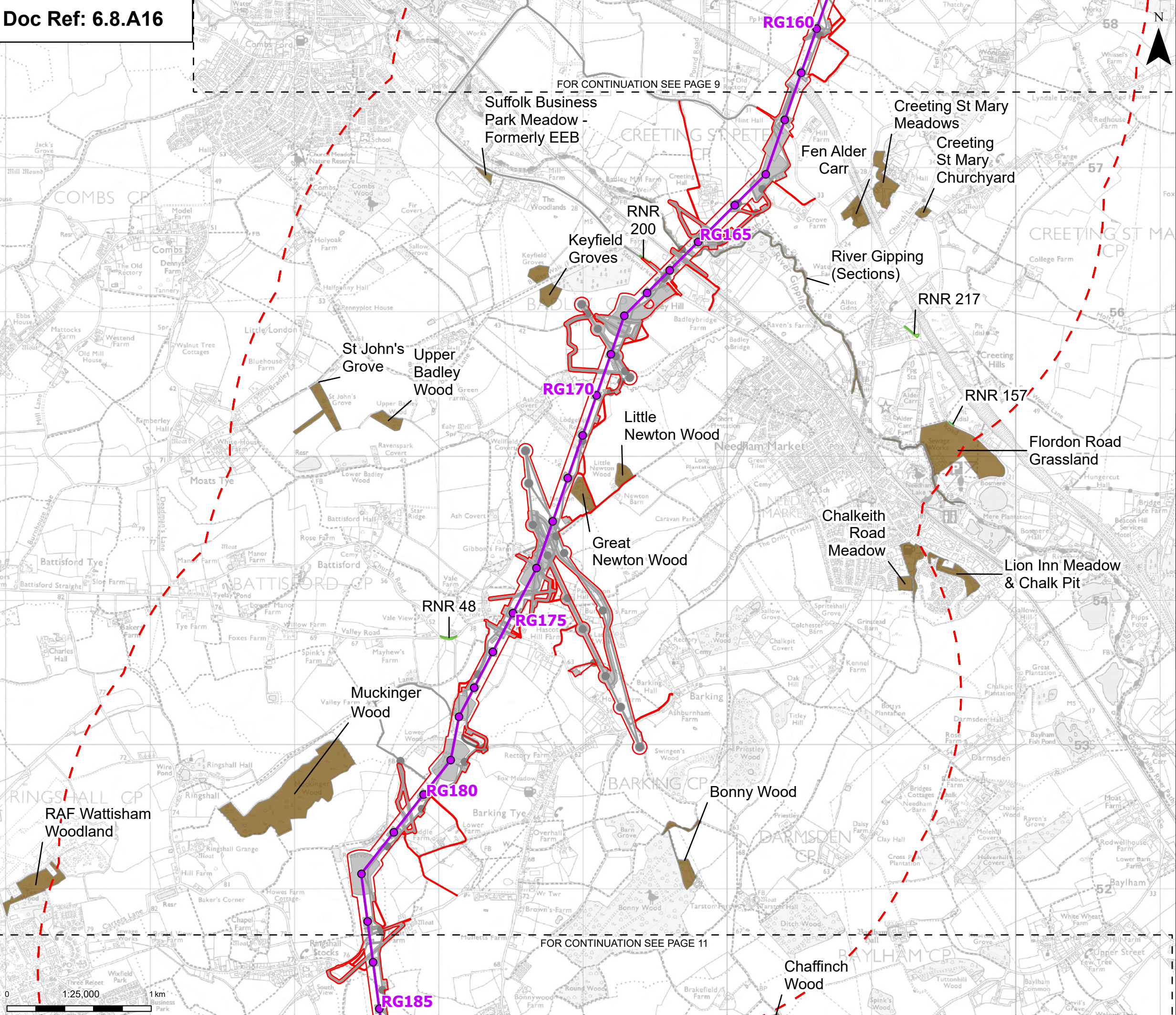
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Suitability Code:	A2	Project Number:	10059280

Suitability Description:
Accepted as Concept Stage

Drawing Number: 10059280-ARC-EBD-ZZ-DR-ZZ-00407	Revision: A
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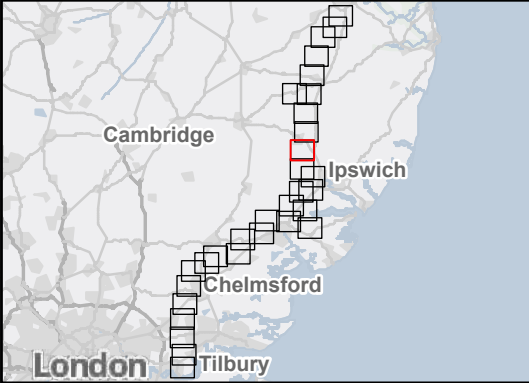
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- Proposed overhead line alignment
- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

- 2 km Study Area
- County Wildlife Sites
- Roadside Nature Reserve

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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Rev	Date	Description	Drawn	Check	Approv

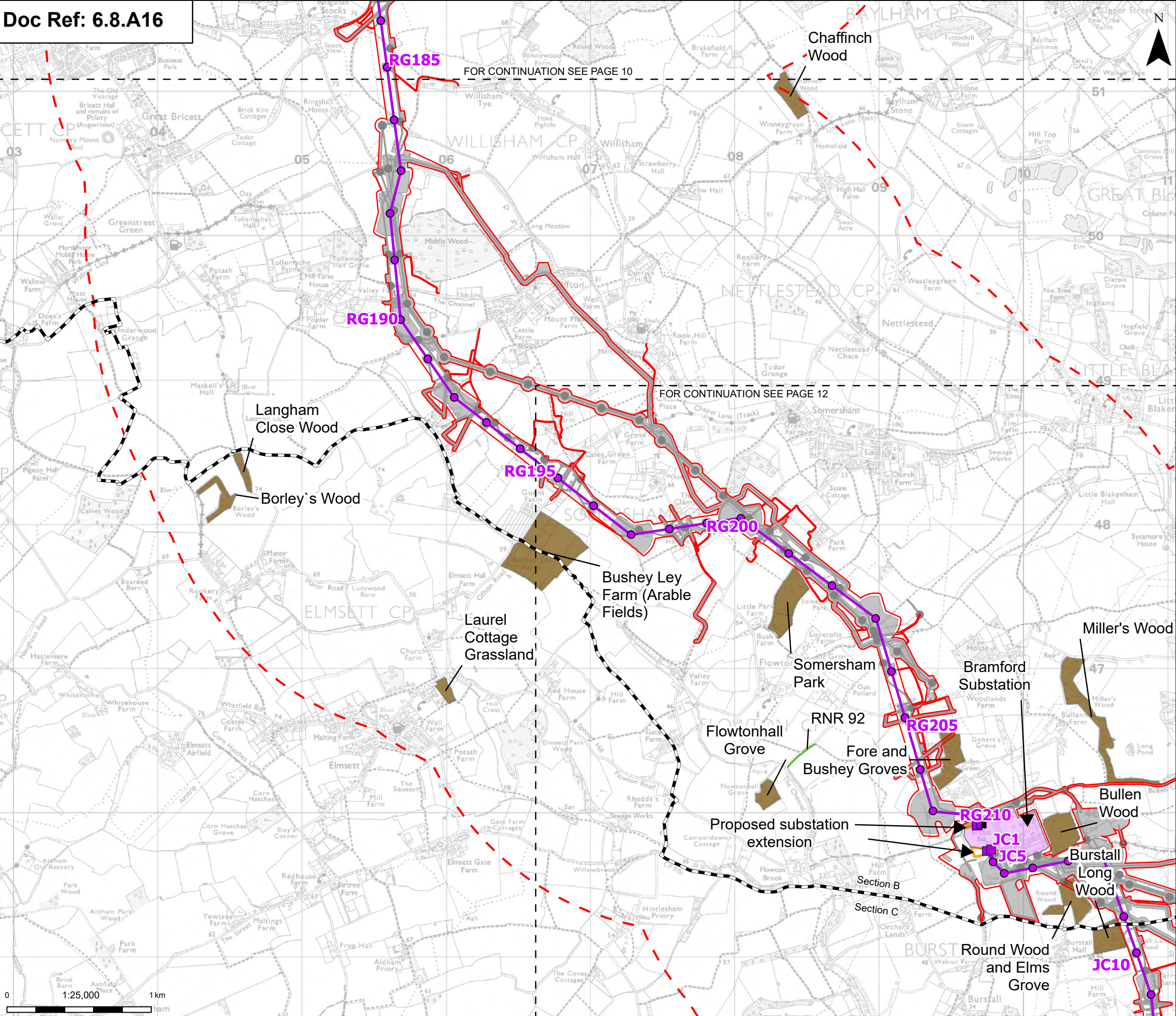
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nationalgrid Norwich to Tilbury

Planning Inspectorate App Number: EN020027
Regulation 5(2)(a)&(l)(i)

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Figure A8.16.3 Ecology and Biodiversity –
Non-Statutory Designated Sites for
Biodiversity
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Designed	R. Booth	Date	21 Aug 25
Drawn	K. Fischer	Date	21 Aug 25
Checked	A. Fell	Date	21 Aug 25
Approved	K. Burrows	Date	21 Aug 25
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Original Size:	A3	Grid:	OS
Suitability Code:	A2	Project Number:	10059280
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Drawing Number:	10059280-ARC-EBD-ZZ-DR-ZZ-00407	Revision:	A
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Proposed project design details

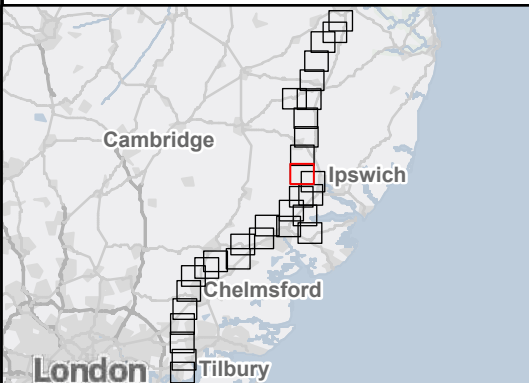
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- Proposed low duty gantry
- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Bramford Substation
- Bramford Substation Extension
- Other temporary and permanent construction and operational works

Discipline specific constraints

- 2 km Study Area
- County Wildlife Sites
- Roadside Nature Reserve

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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A	Aug 2025	FOR DCO APPLICATION	KF	AF	KB
Rev	Date	Description	Drawn	Check	Approv

PROJECT:
nationalgrid Norwich to
 Tilbury

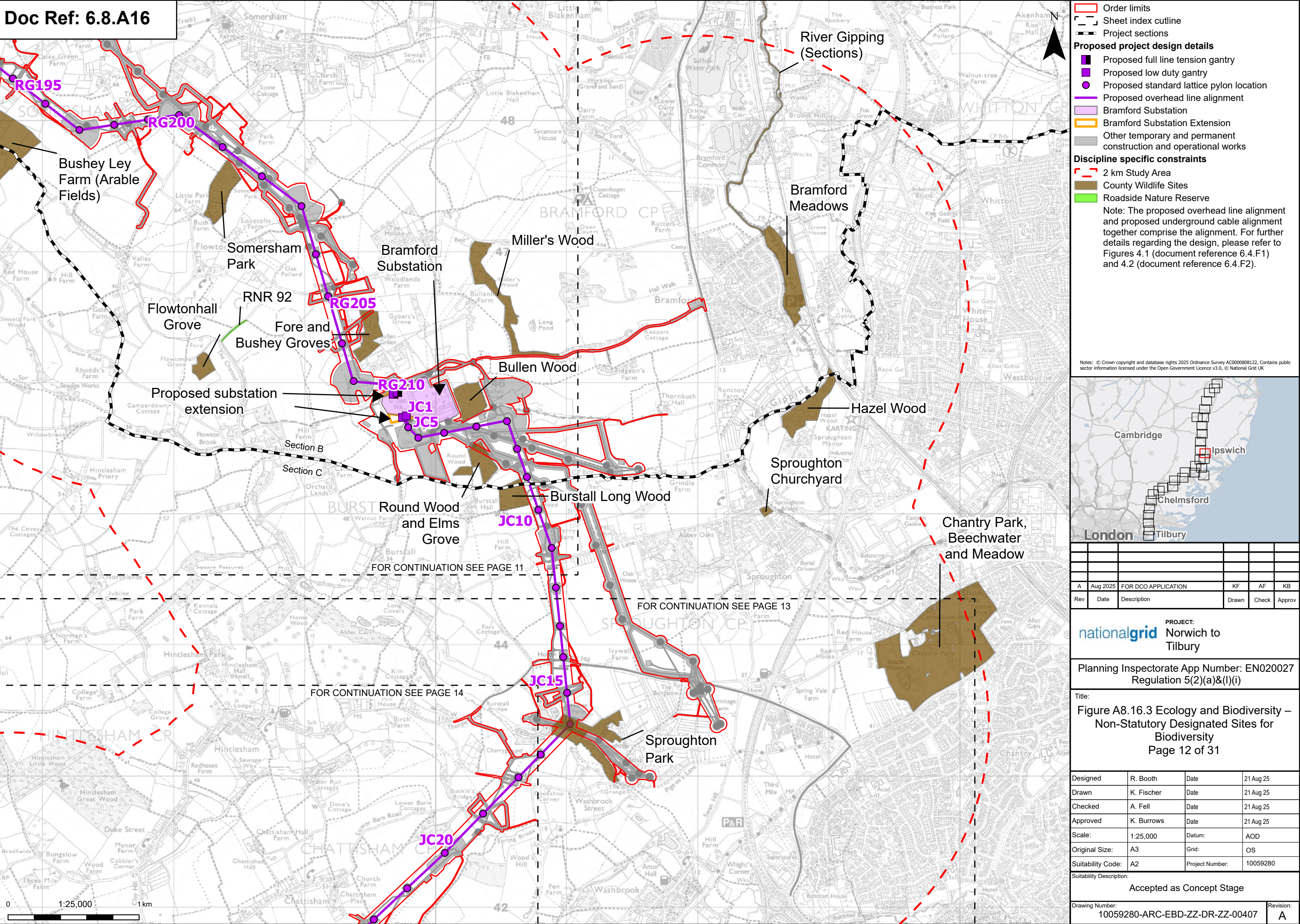
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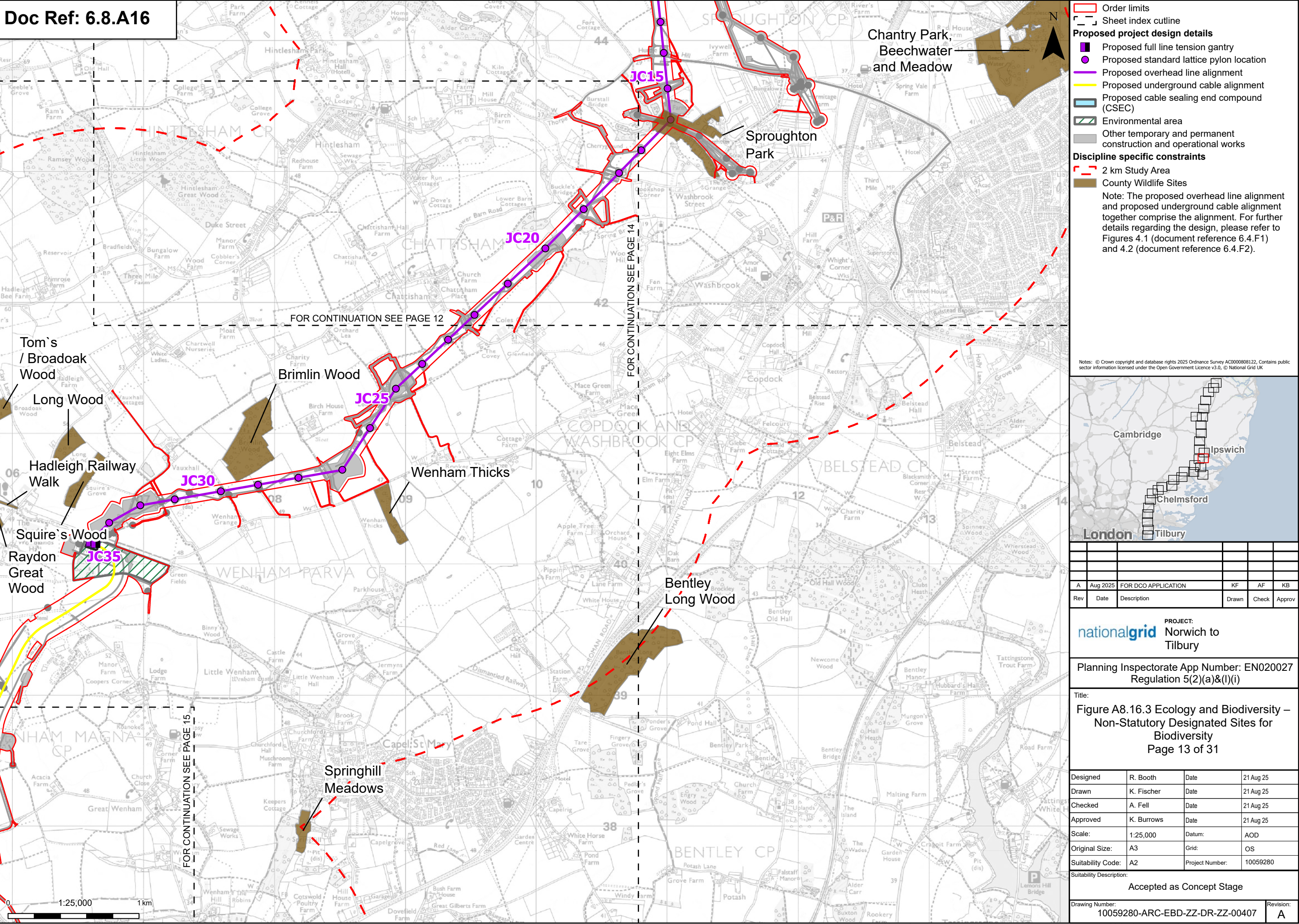
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 Non-Statutory Designated Sites for
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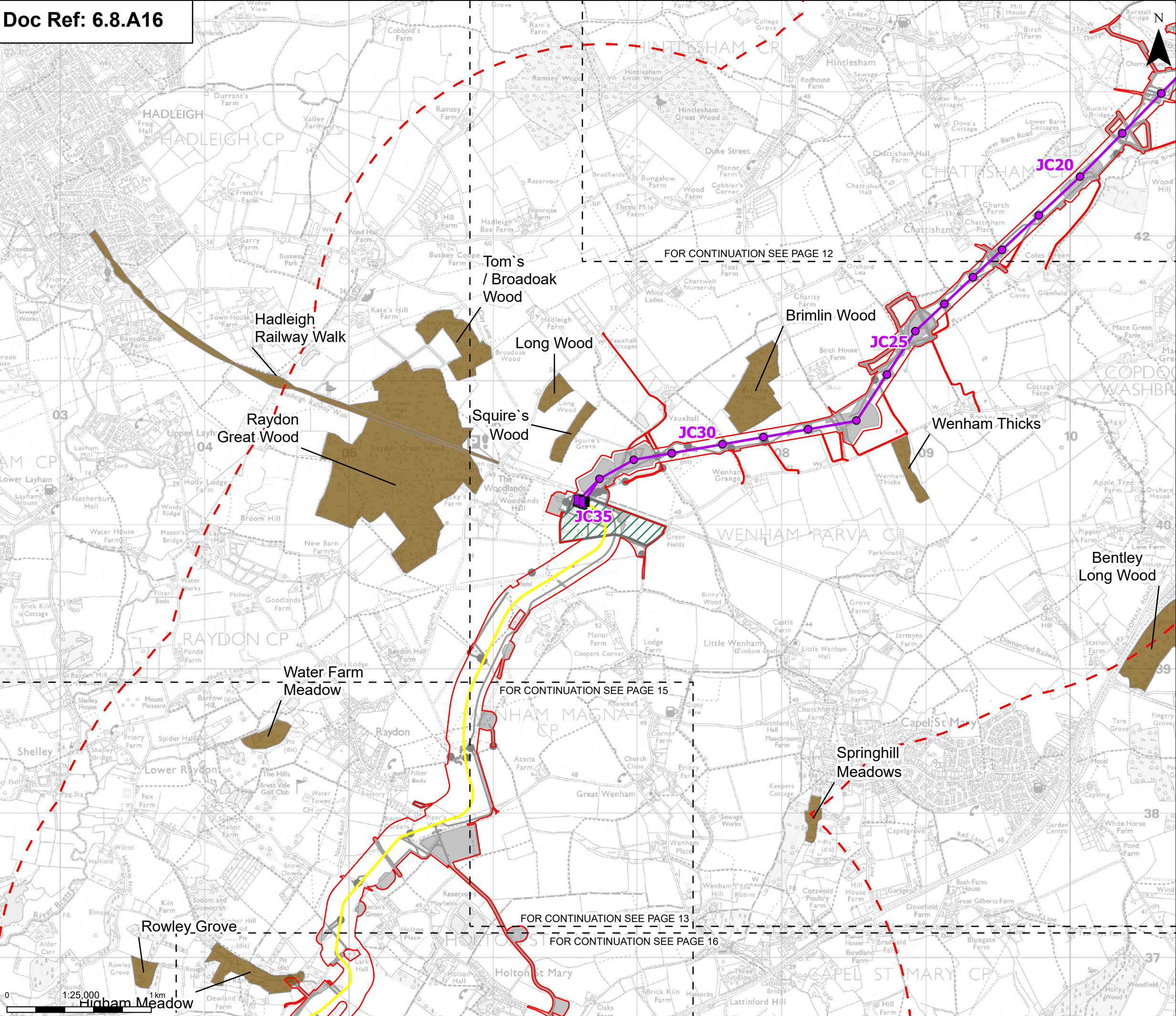
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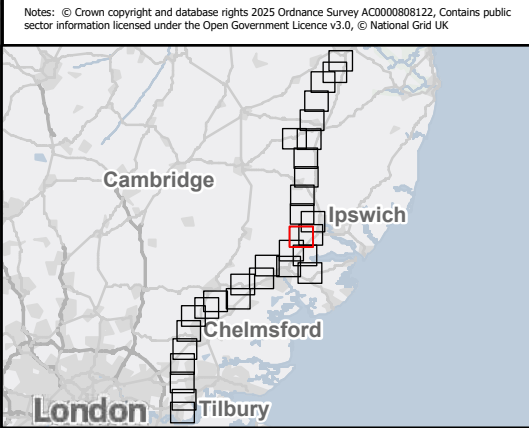
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- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Proposed underground cable alignment
- Proposed cable sealing end compound (CSEC)
- Environmental area
- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

- 2 km Study Area
- County Wildlife Sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).



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PROJECT:
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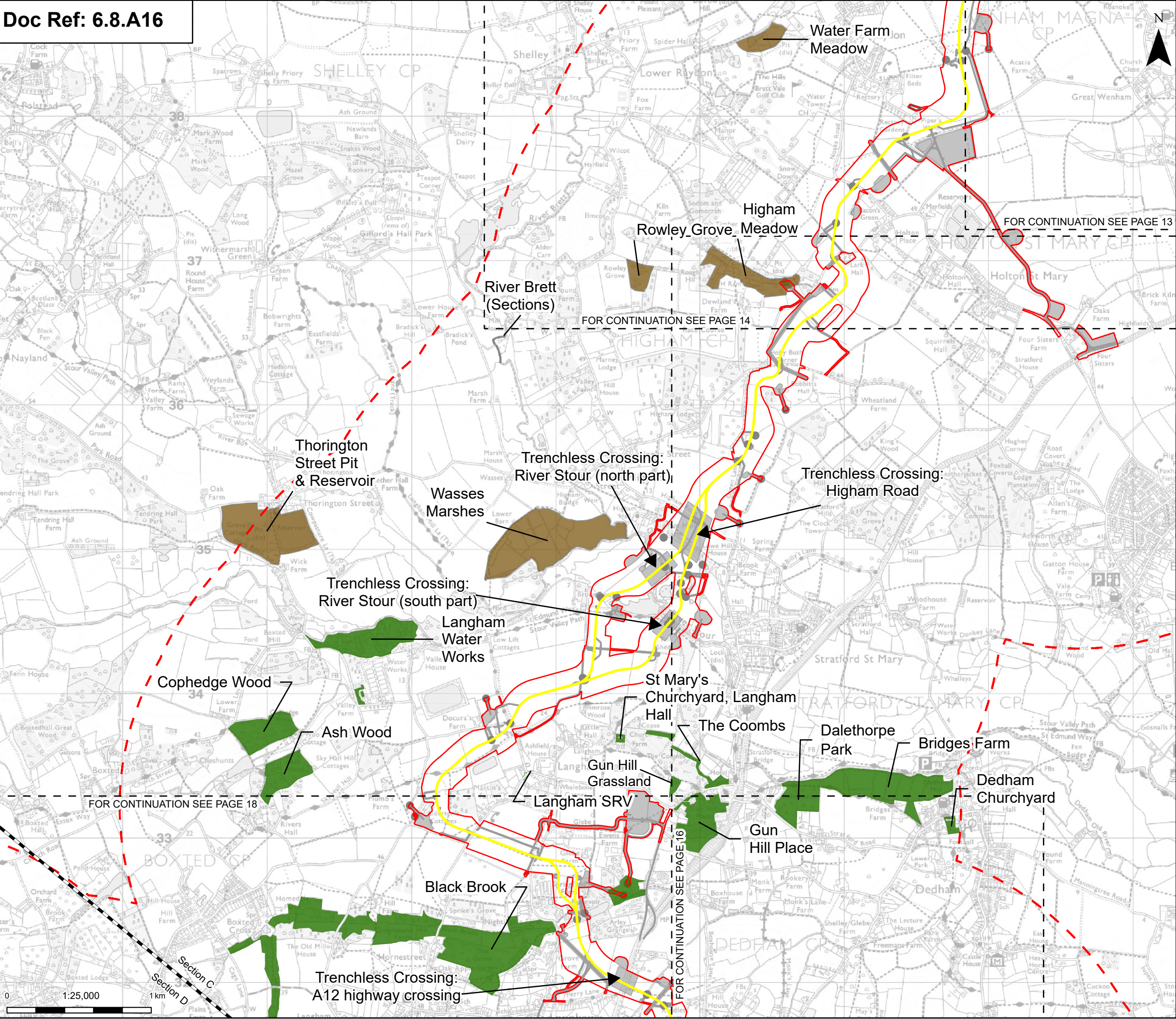
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Proposed underground cable alignment

Environmental mitigation

Other temporary and permanent construction and operational works

Discipline specific constraints

2 km Study Area

Local wildlife sites

County Wildlife Sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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Title:

Figure A8.16.3 Ecology and Biodiversity – Non-Statutory Designated Sites for Biodiversity

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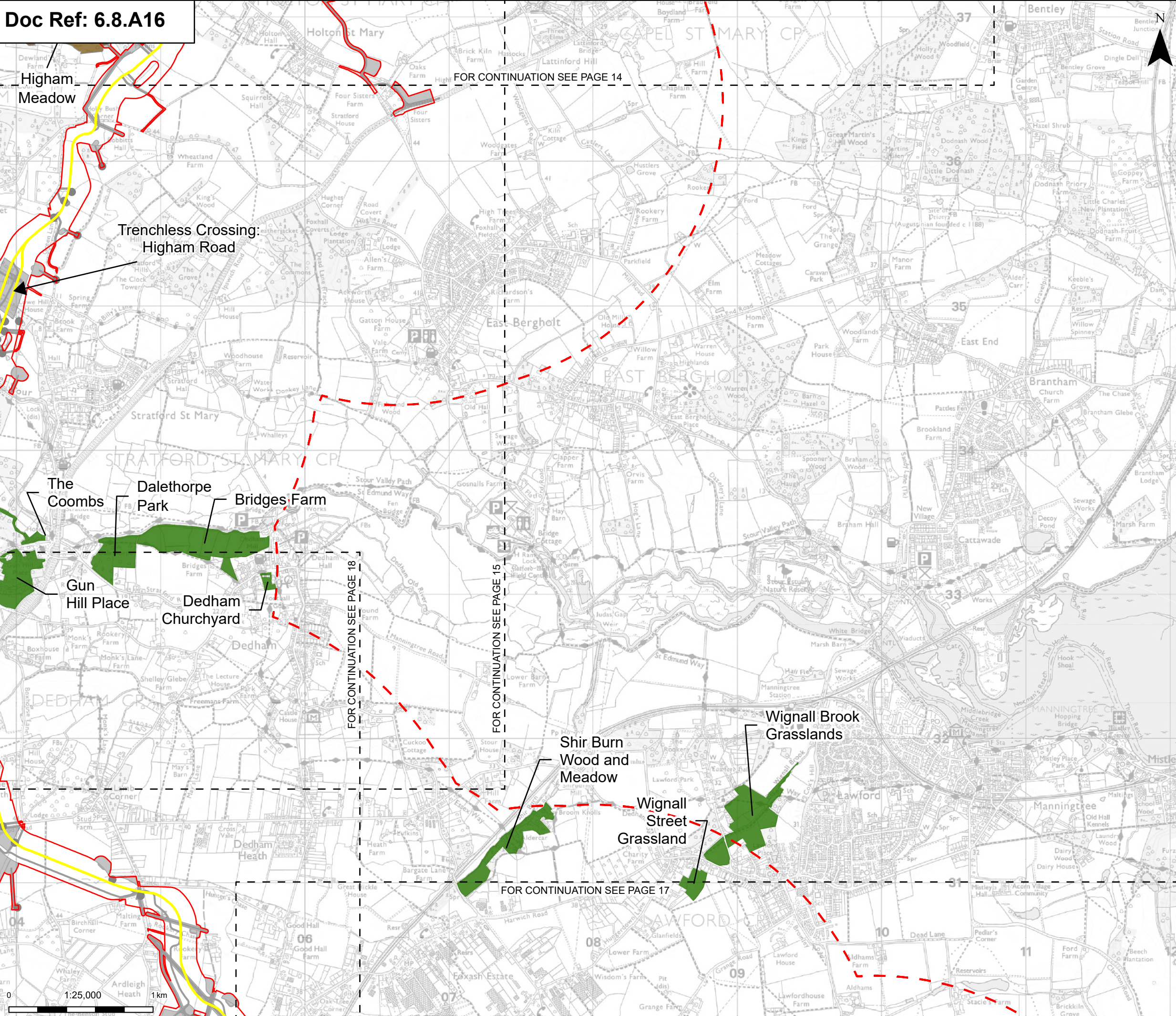
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Proposed standard lattice pylon location

Proposed underground cable alignment

Other temporary and permanent construction and operational works

Discipline specific constraints

2 km Study Area

Local wildlife sites

County Wildlife Sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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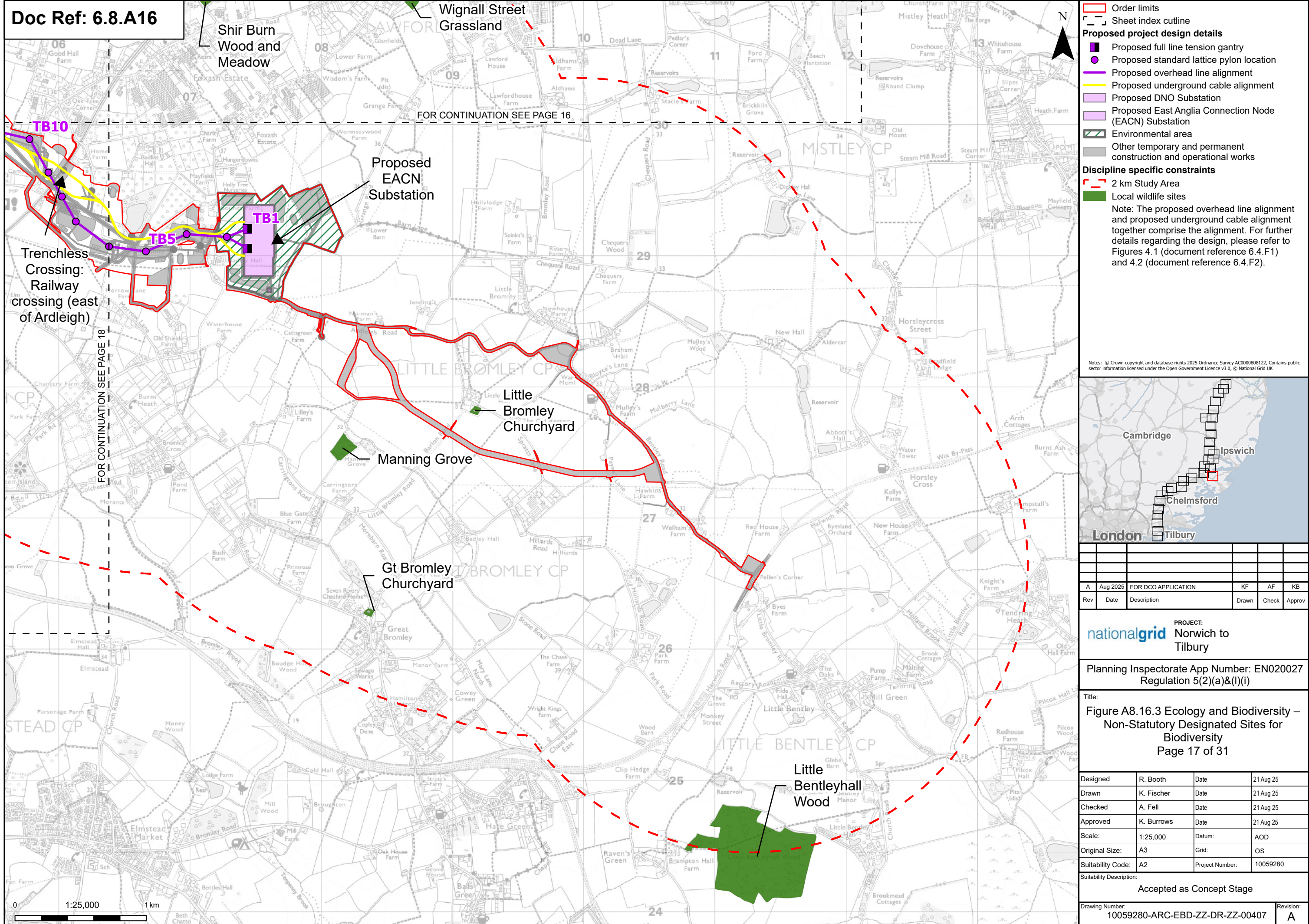
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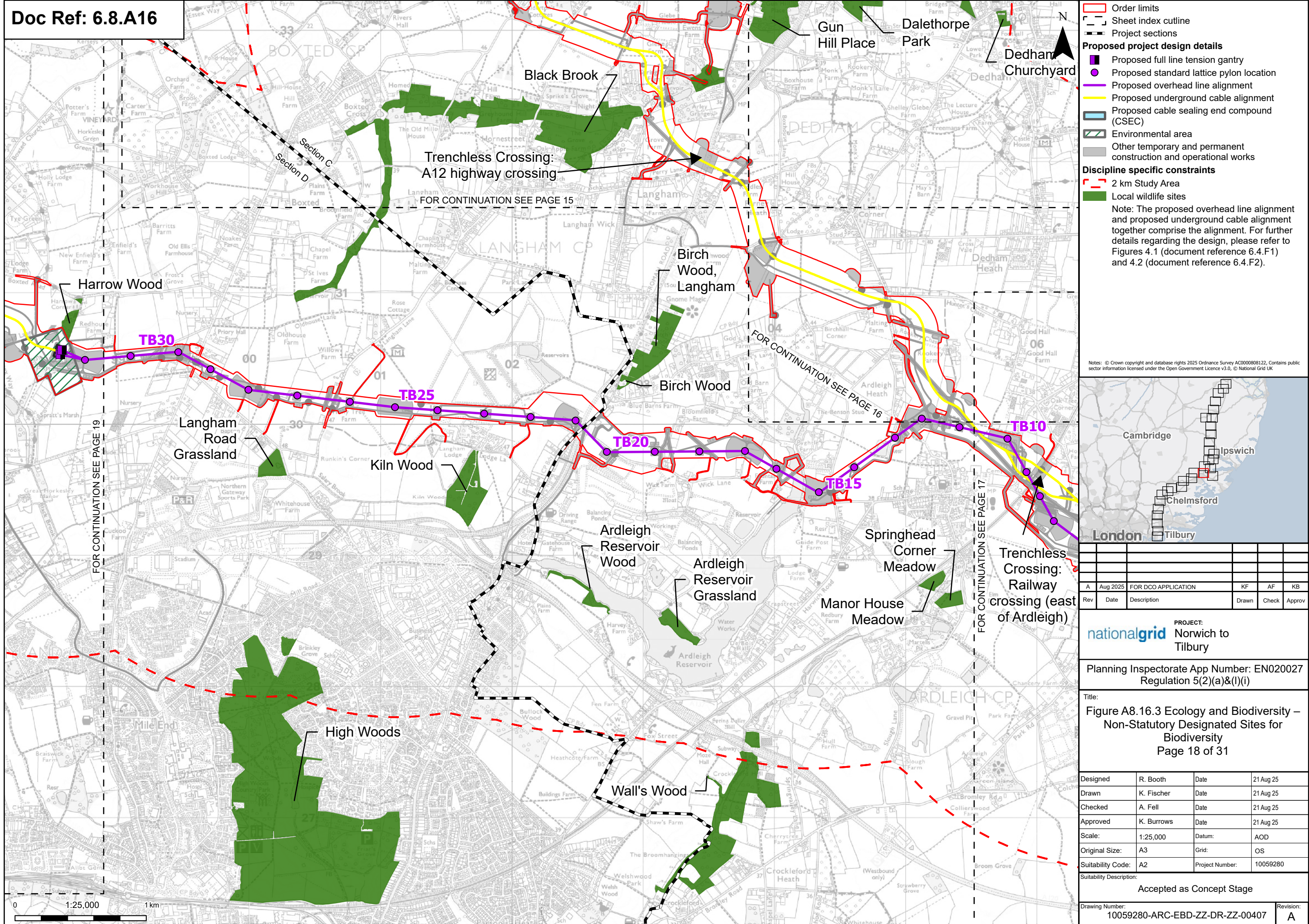
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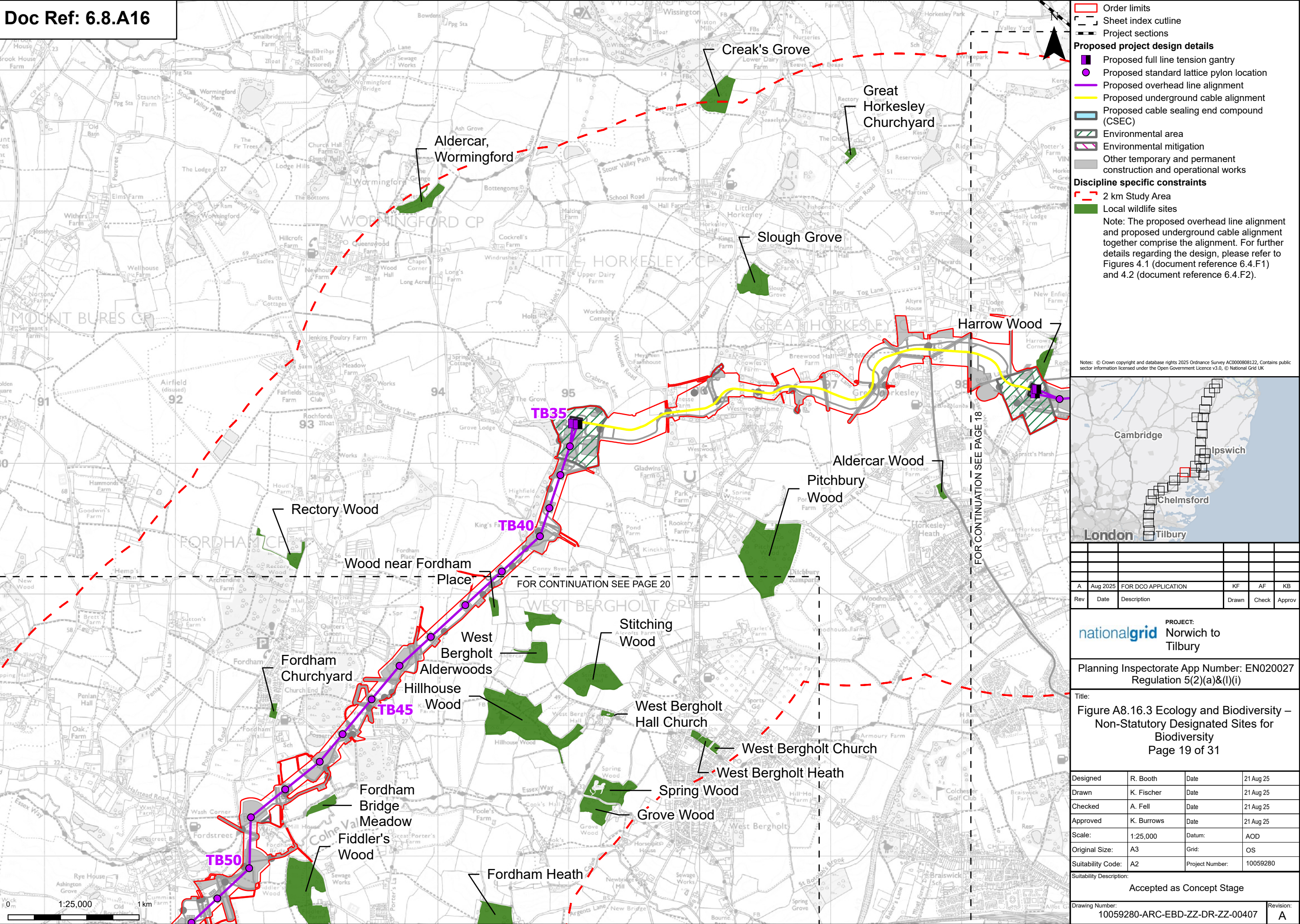
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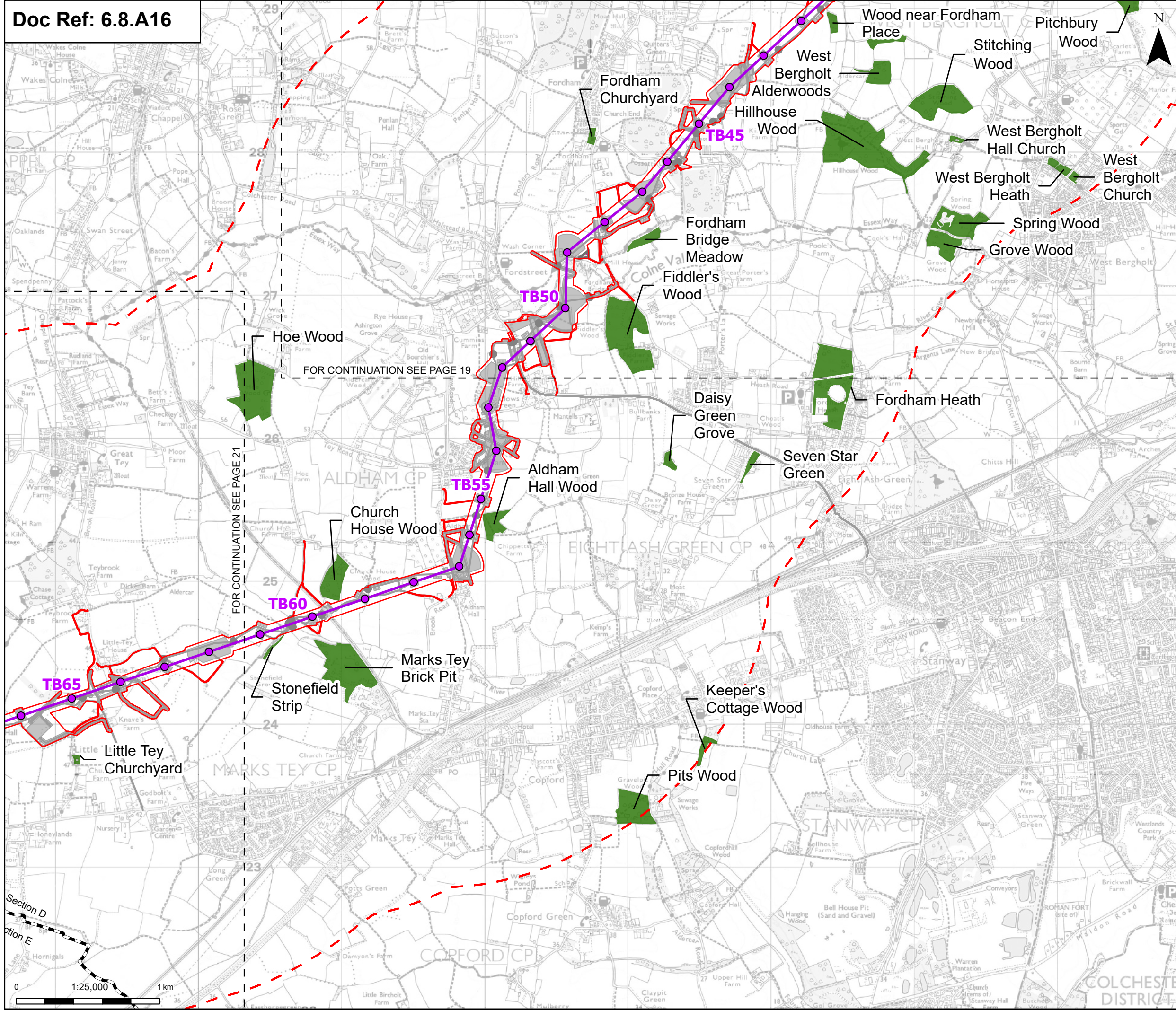
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Order limits

Sheet index outline

Project sections

Proposed project design details

- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

- 2 km Study Area
- Local wildlife sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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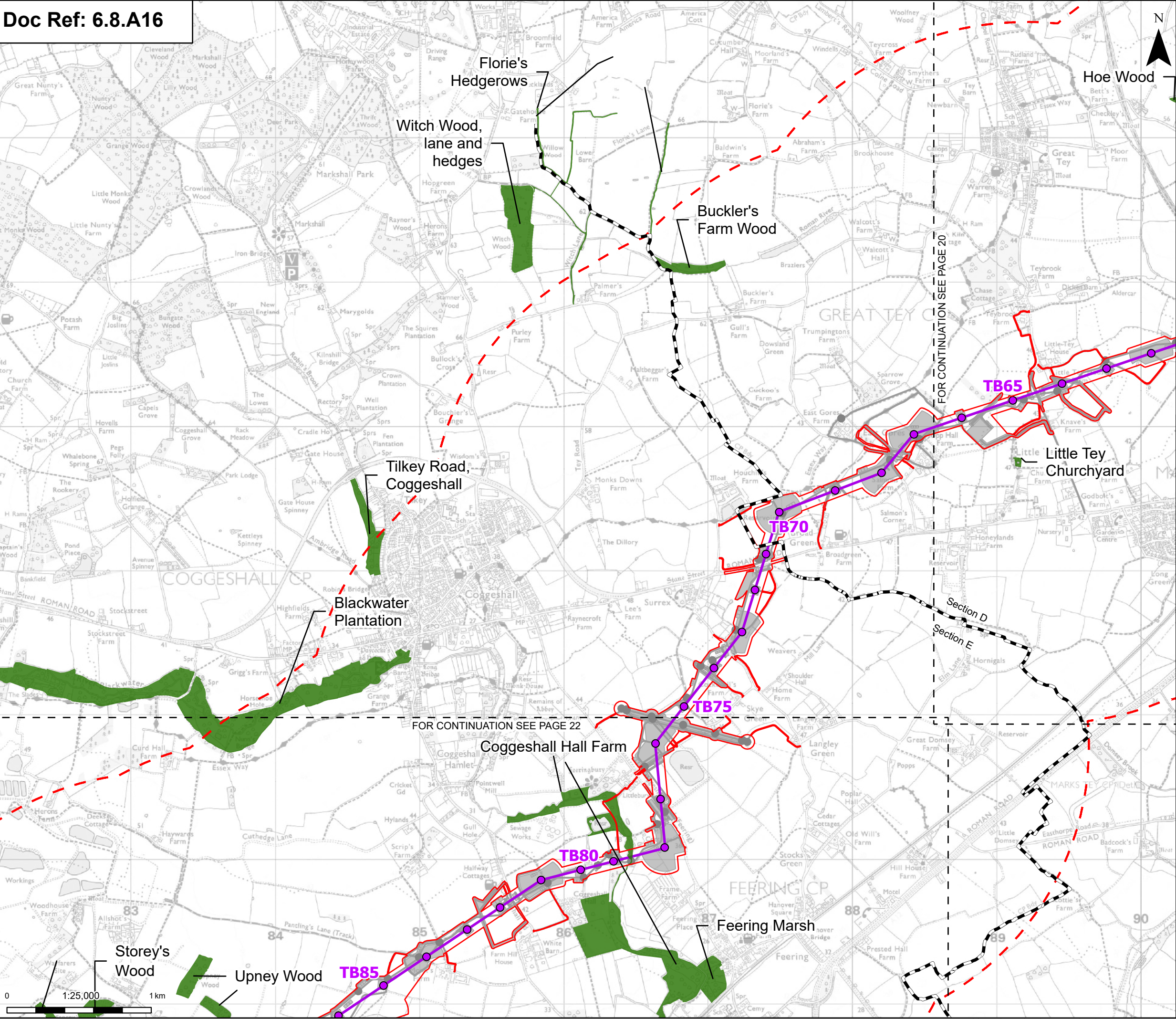
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Figure A8.16.3 Ecology and Biodiversity – Non-Statutory Designated Sites for Biodiversity
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Proposed project design details

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- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

- 2 km Study Area
- Local wildlife sites

Note: The proposed overhead line alignment and proposed underground cable alignment together comprise the alignment. For further details regarding the design, please refer to Figures 4.1 (document reference 6.4.F1) and 4.2 (document reference 6.4.F2).

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PROJECT:

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Regulation 5(2)(a)&(l)(i)

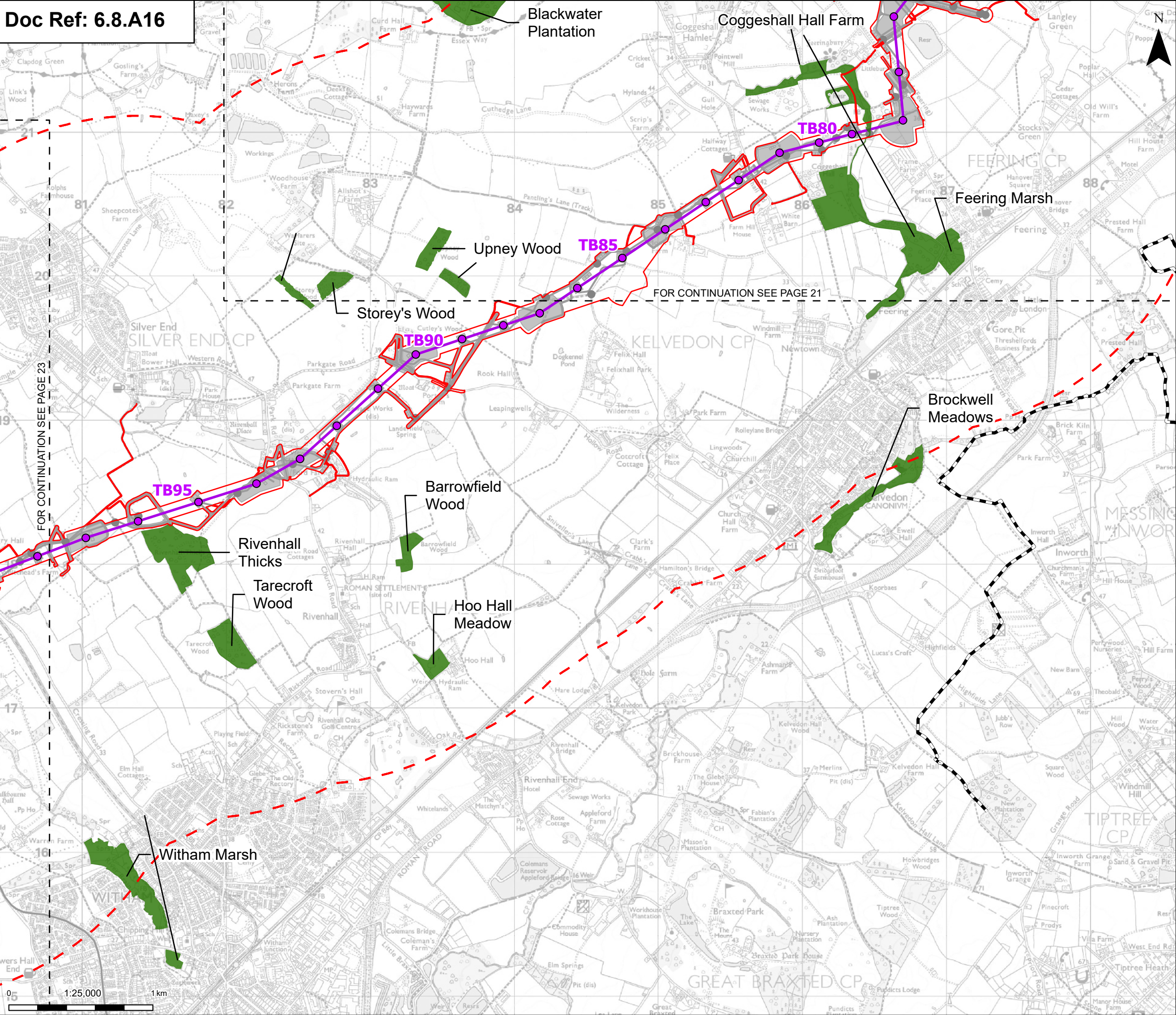
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Figure A8.16.3 Ecology and Biodiversity – Non-Statutory Designated Sites for Biodiversity
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Suitability Code:	A2	Project Number:	10059280

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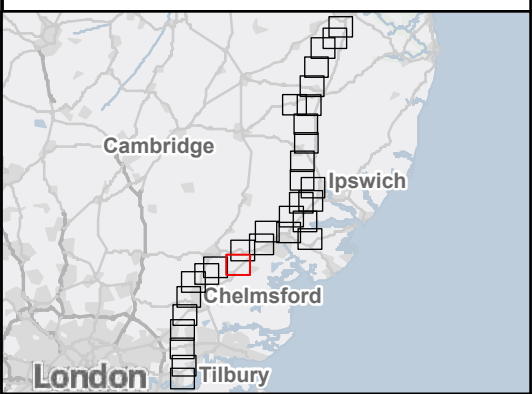
Order limits
Sheet index outline
Project sections

Proposed project design details
Proposed standard lattice pylon location
Proposed overhead line alignment
Environmental mitigation
Other temporary and permanent construction and operational works

Discipline specific constraints
2 km Study Area
Local wildlife sites

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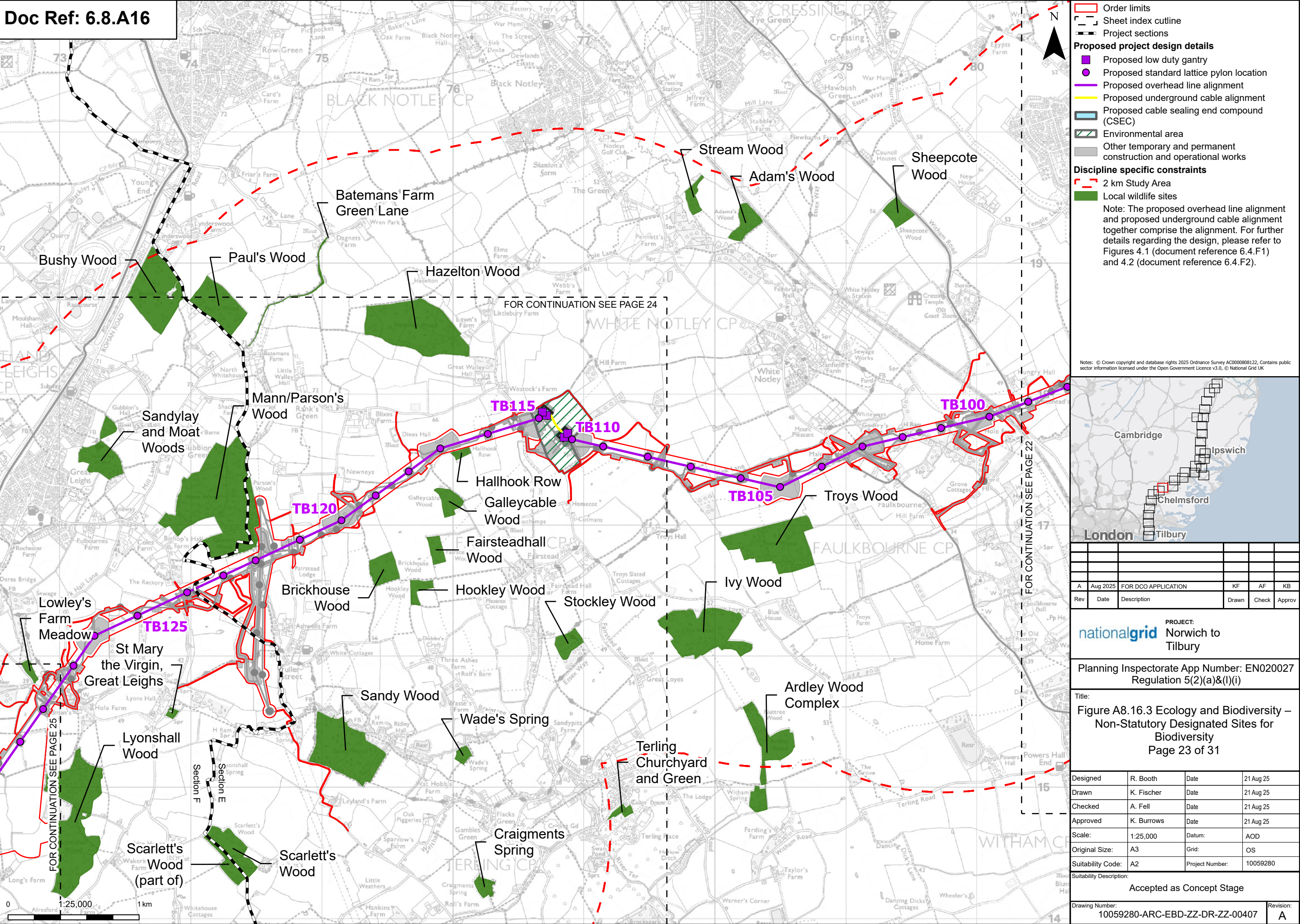
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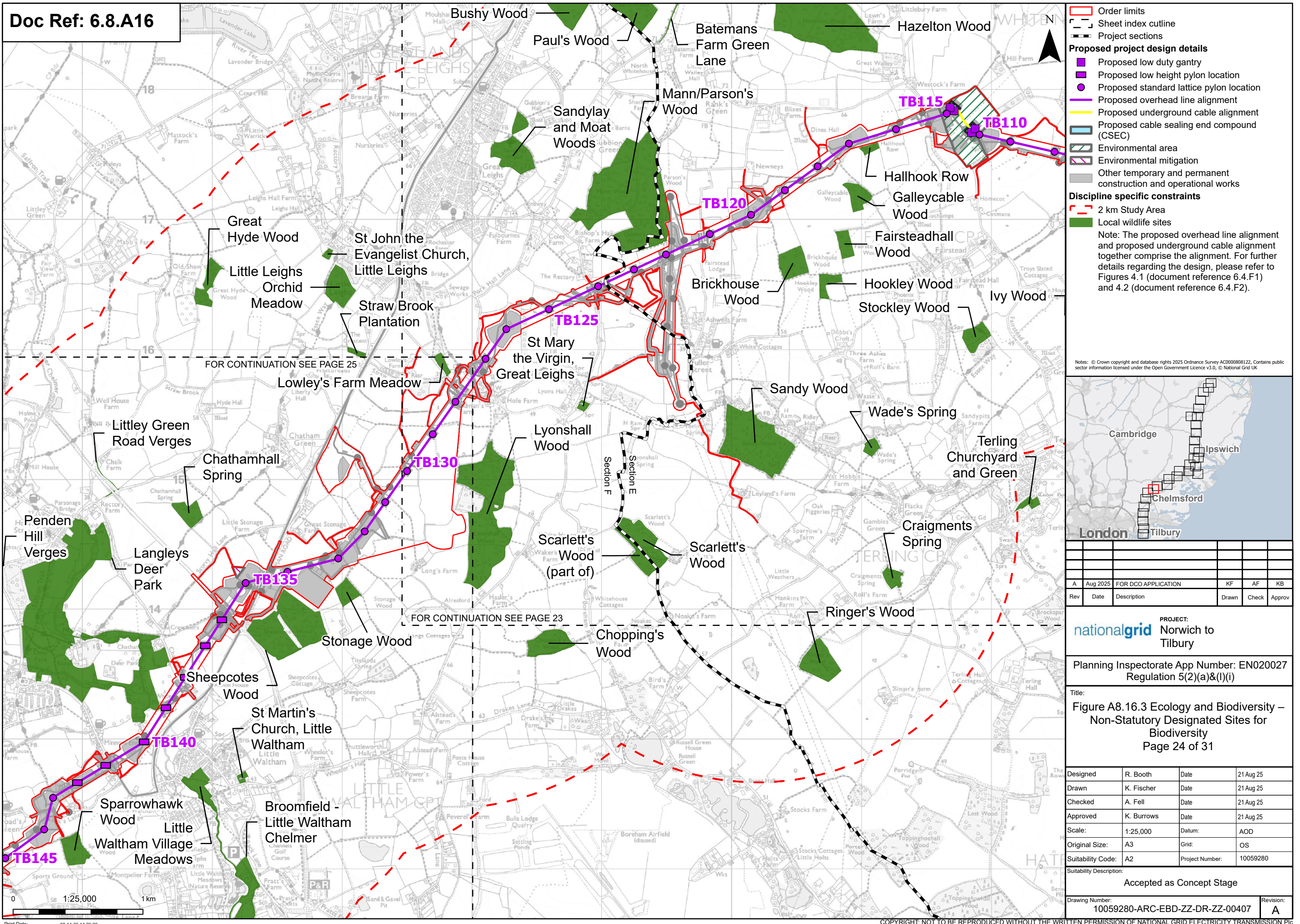
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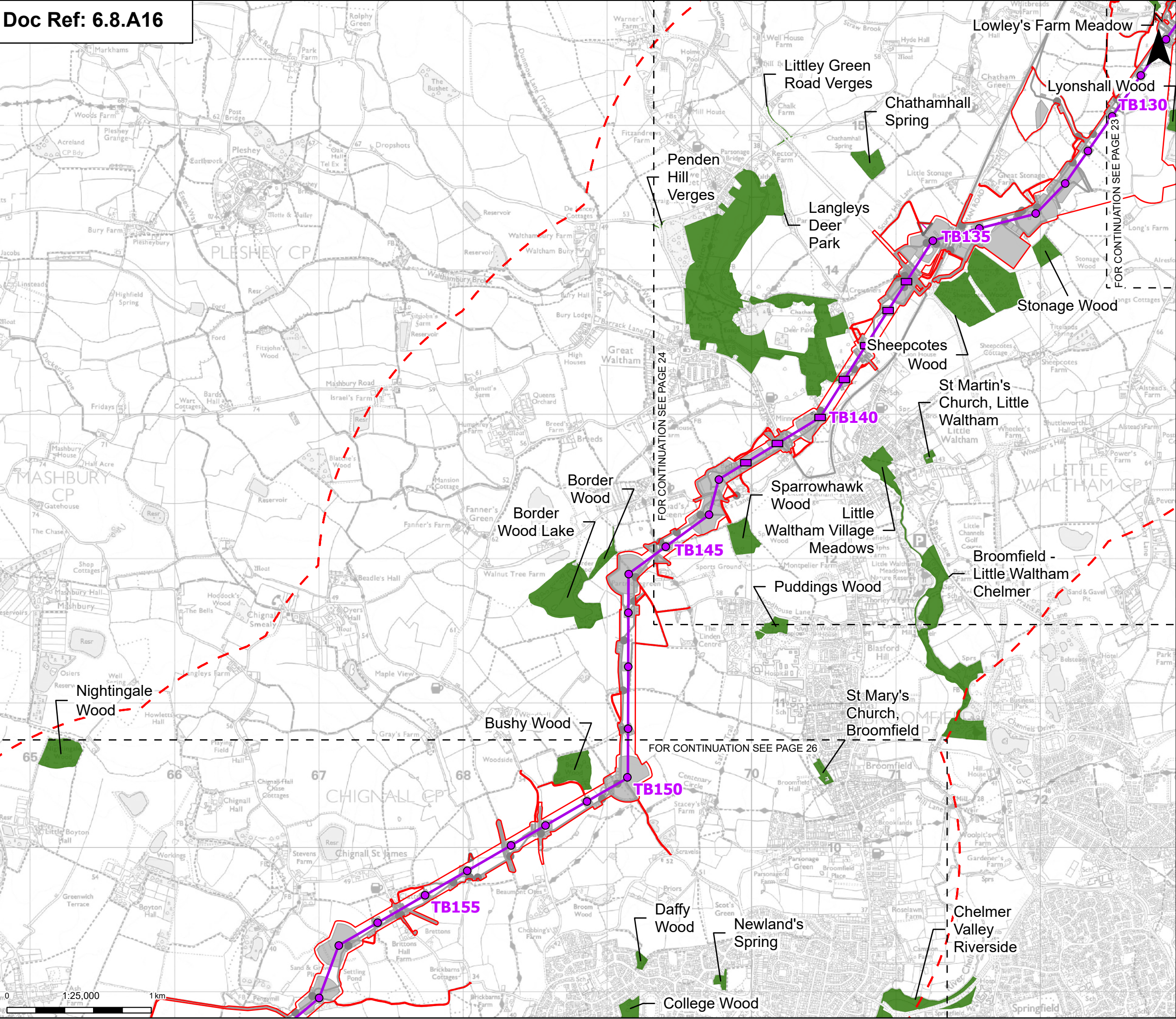
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Proposed overhead line alignment

Environmental mitigation

Other temporary and permanent construction and operational works

Discipline specific constraints

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Local wildlife sites

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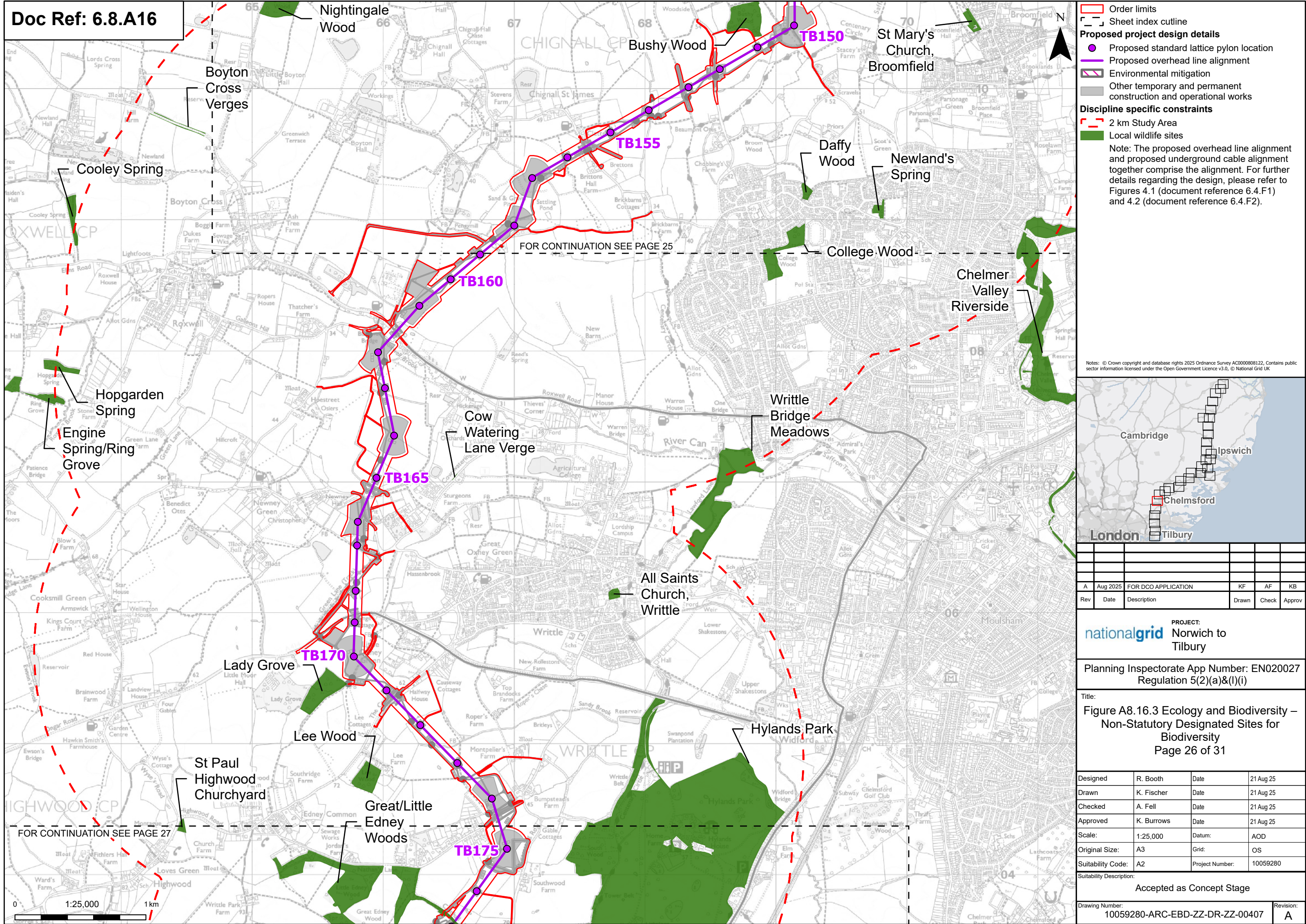
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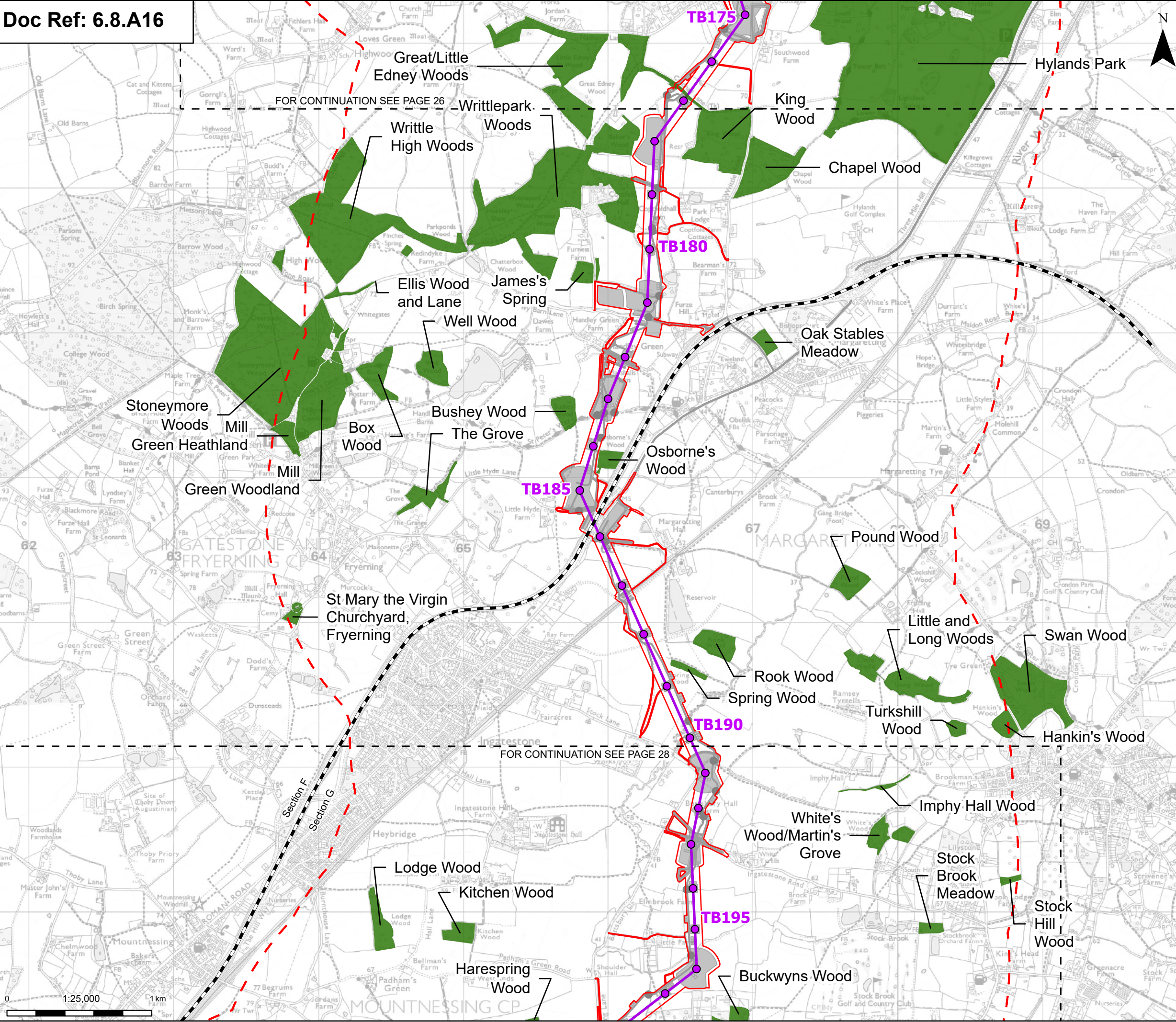
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Title:

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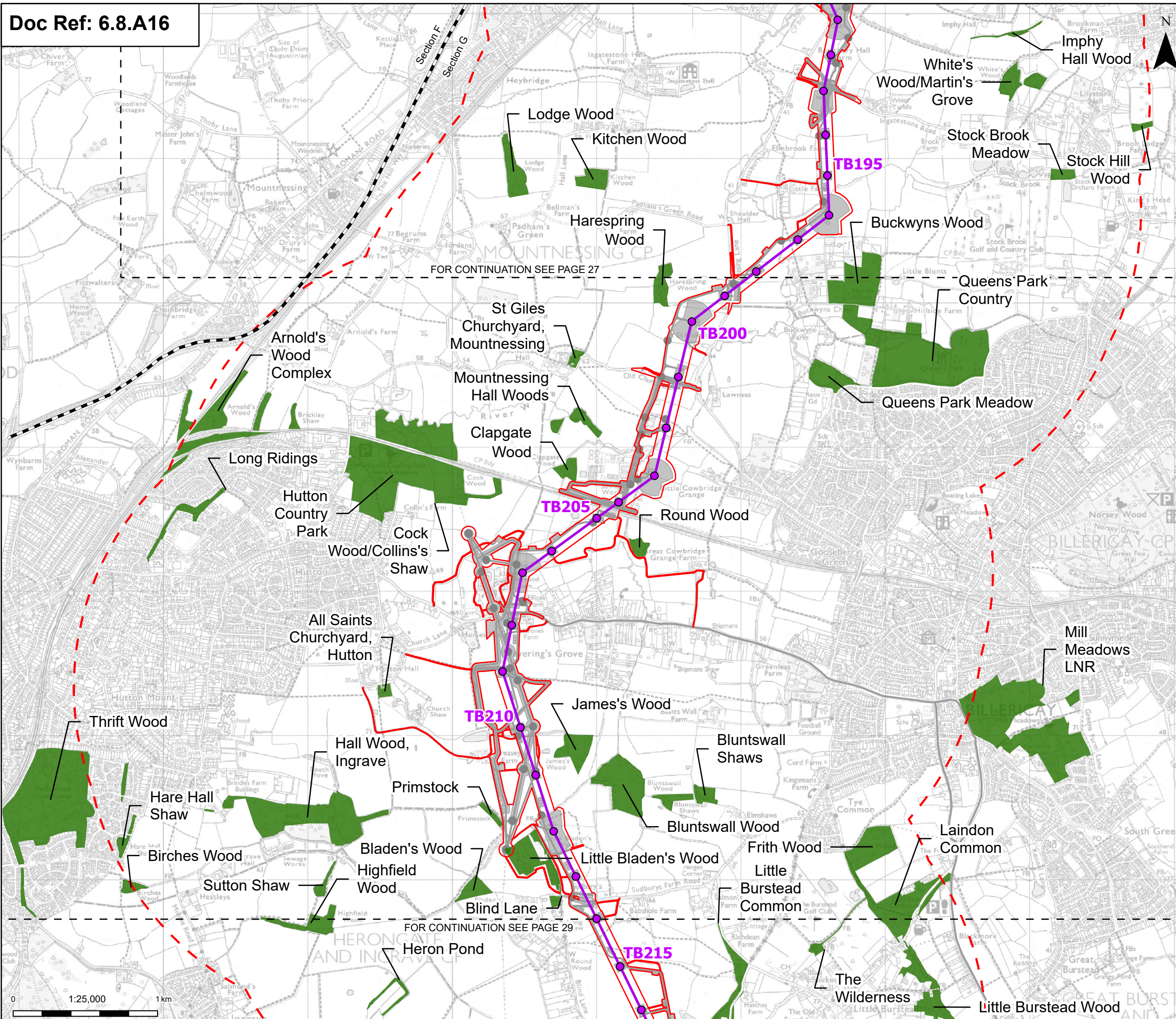
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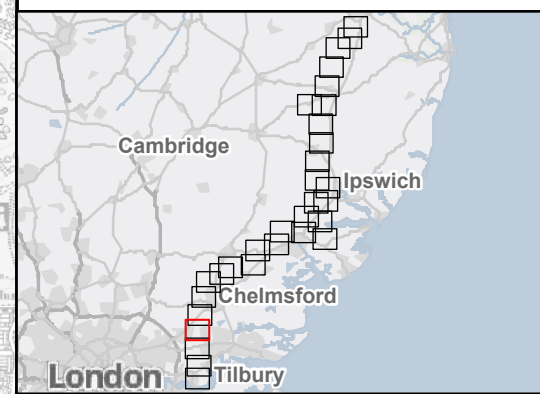
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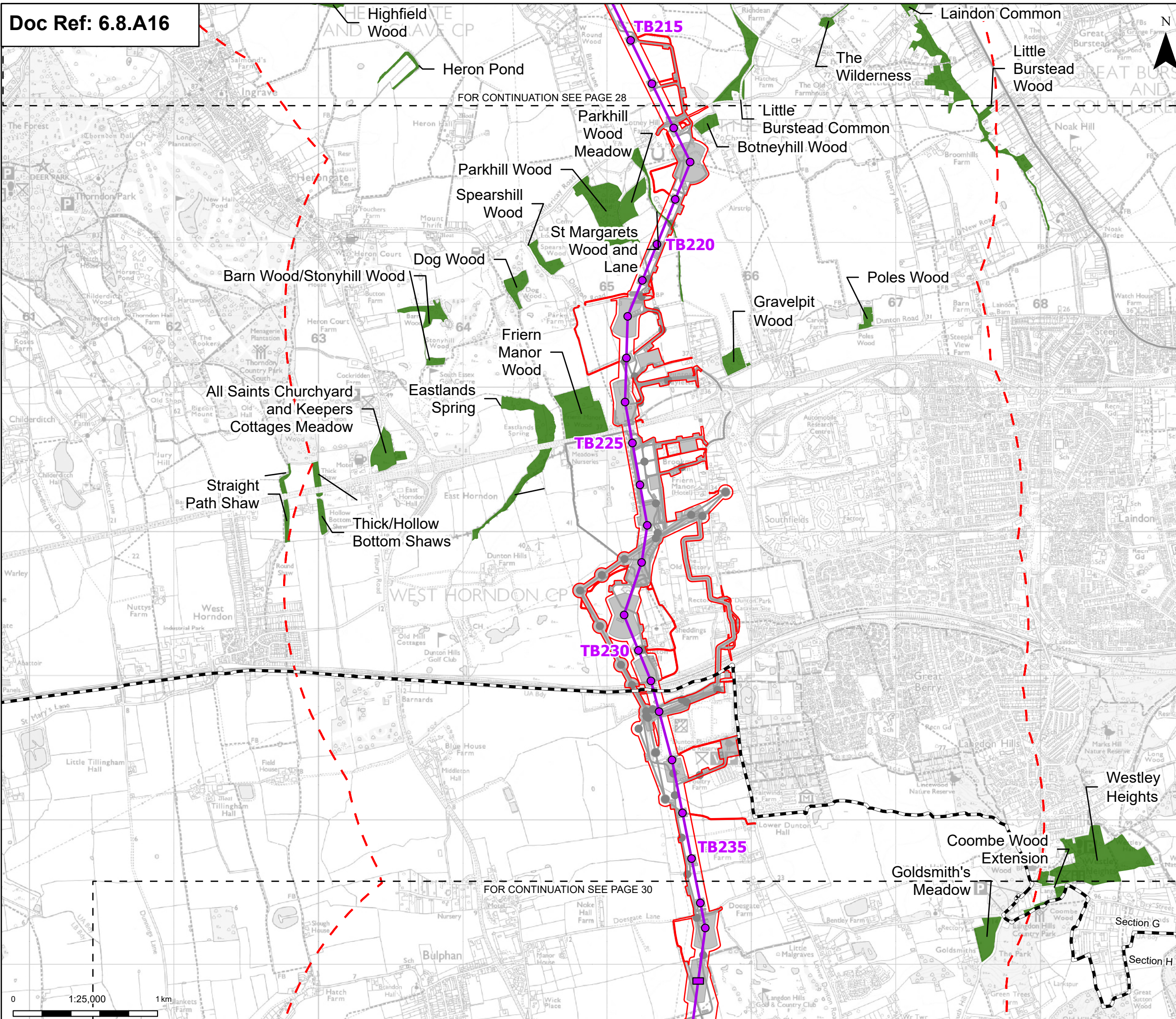
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Suitability Code:	A2	Project Number:	10059280
Suitability Description:			

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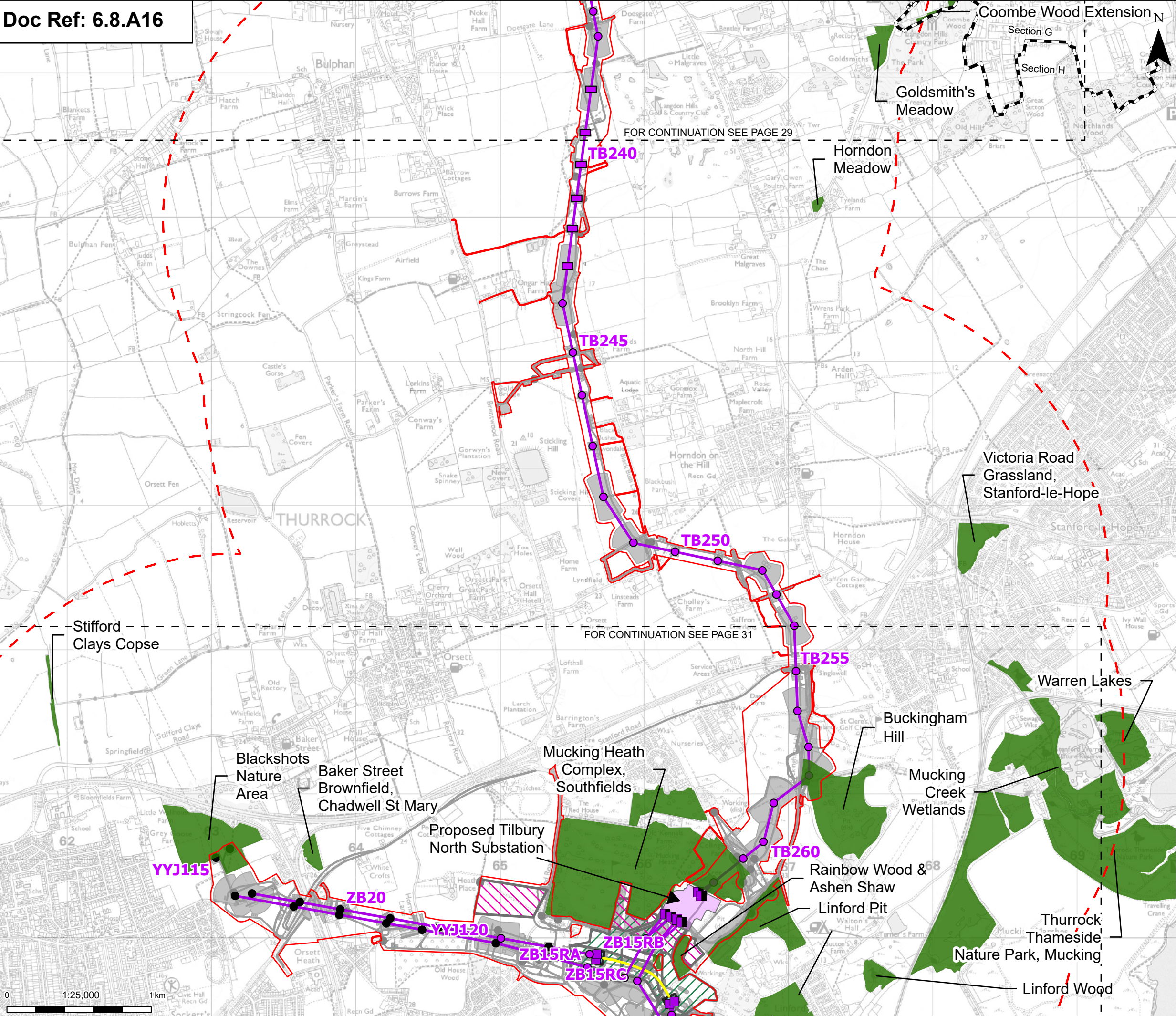
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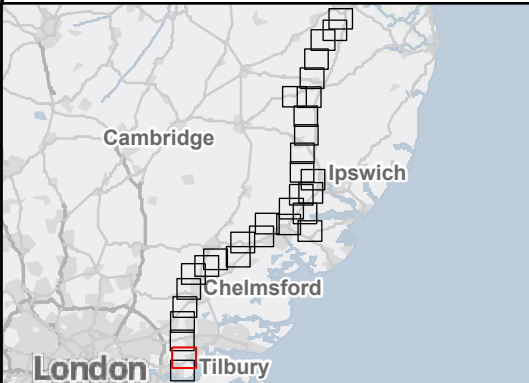
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- Proposed standard lattice pylon location
- Proposed overhead line alignment
- Proposed underground cable alignment
- Proposed Tilbury North Substation
- Proposed cable sealing end compound (CSEC)
- Environmental area
- Environmental mitigation
- Other temporary and permanent construction and operational works

Discipline specific constraints

- 2 km Study Area
- Local wildlife sites

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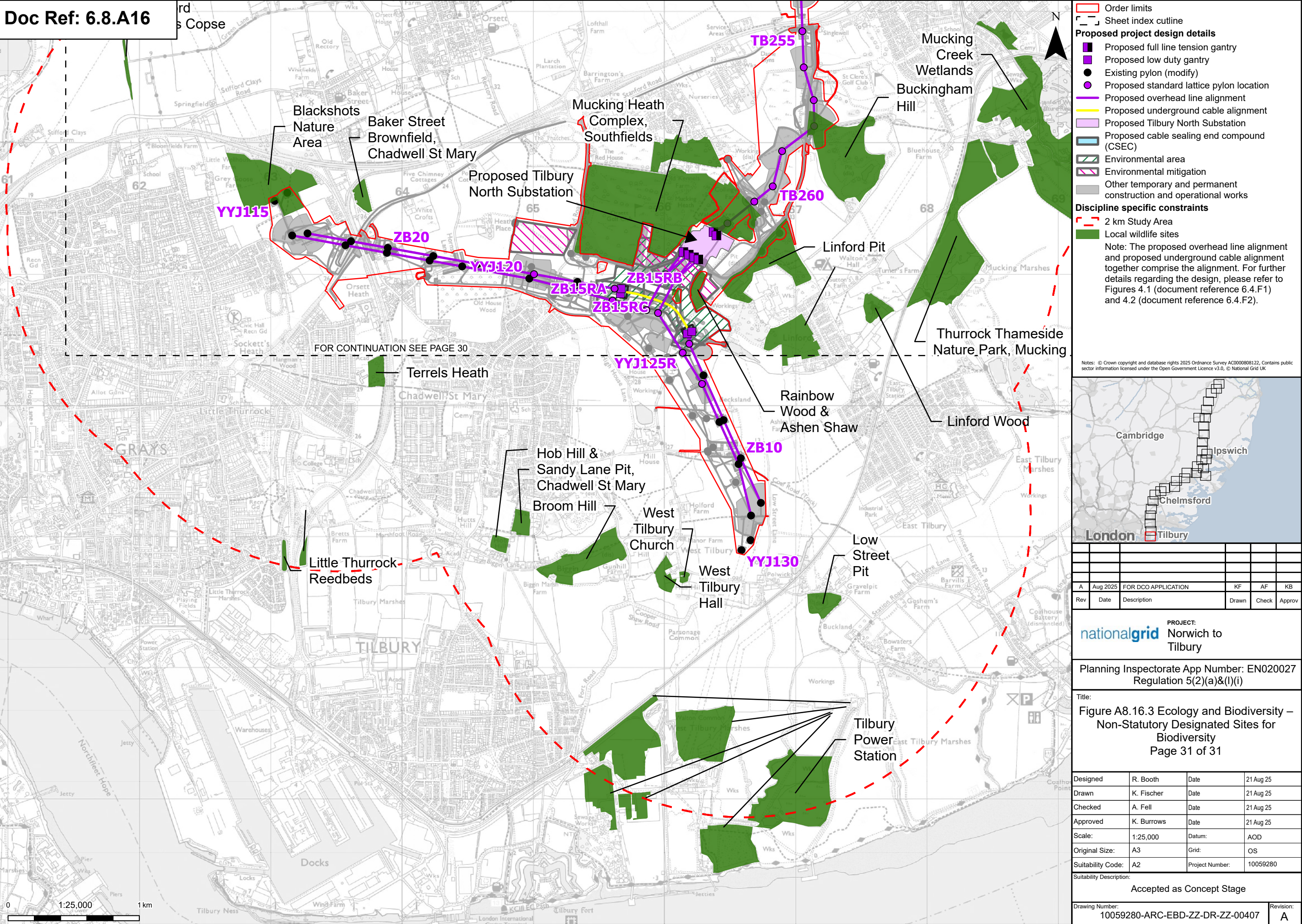
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Annex B. Ramsar Site Designated Site Descriptions

Annex B

Ramsar Site Designated Site Descriptions

Table A8.16.11 Ramsar site designated site descriptions

Project Section	Site Name	Description
A	Redgrave and South Lopham Fens	<p>An example of spring-fed lowland base rich valley, remarkable for its lack of fragmentation.</p> <p>The site is also designated as it supports many rare and scarce invertebrates, including a population of raft spider <i>Dolomedes plantarius</i>.</p>
A	Broadland	<p>A low-lying wetland complex including open water, reedbeds, carr woodland, grazing marsh, and fen meadow, with an extensive complex of flooded medieval peat diggings.</p> <p>The diversity of wetland habitats supports an outstanding assemblage of breeding and wintering wetland bird species, as well as large numbers of rare plants and invertebrates.</p>
B/C	Deben Estuary	<p>A sheltered estuary with areas of saltmarsh and intertidal mudflats displaying the most complete range of saltmarsh community types in Britain.</p> <p>The site is designated as it is one of 14 sites in Britain which supports a population of narrow-mouthed whorl snail <i>Vertigo augustior</i>. It is also designated as it supports internationally important numbers of dark-bellied brent goose, <i>Branta bernicla bernicla</i>. The site also supports nationally important numbers of migratory wildfowl and a notable assemblage of breeding and wetland birds.</p>
C	Stour and Orwell Estuaries	<p>An estuary comprising extensive mudflats, low cliffs, saltmarsh, and areas of vegetated shingle on the lower river reaches.</p> <p>The site is designated as it supports internationally and nationally important numbers of wintering wildfowl and waders. As well as nationally scarce plants and British Red Data Book invertebrates.</p>
C	Hamford Water	<p>An estuarine basin with an extensive network of tidal creeks, scattered islands, substantial intertidal sandflats, mudflats supporting <i>Zostera spp.</i> beds, and associated saltmarsh.</p> <p>The site holds several rare or notable plants, including one of the rarest coastal plants in Britain, hog's fennel <i>Peucedanum officinale</i>. The site is also important for nationally and internationally important numbers of wintering waterbirds including dark-bellied brent goose <i>Branta bernicla bernicla</i>, common ringed plover <i>Charadrius hiaticula</i>, and black-tailed godwit <i>Limosa limosa</i>, and its nationally important nesting birds including nationally important little tern <i>Sterna albifrons</i>.</p>

Project Section	Site Name	Description
C/D	Colne Estuary (Mid-Essex Coast Phase 2)	<p>An extensive complex of estuaries and intertidal sand and silt flats, including several islands, shingle and shell beaches and extensive areas of saltmarsh.</p> <p>The site is designated for its outstanding assemblage of plants and invertebrates including 12 species of nationally scarce plants and at least 38 British Red Data Book invertebrate species. The site supports a full and representative sequences of saltmarsh plant communities covering the range of variation in Britain. It regularly supports over 20,000 waterfowl in winter and supports internationally important numbers of dark-bellied brent goose <i>Branta bernicla bernicla</i> and common redshank <i>Tringa totanus totanus</i>. Also notable are nationally important breeding and wintering bird populations.</p>
D	Abberton Reservoir	<p>A large storage reservoir with three separate basins, located near the coast.</p> <p>The site is an important moulting, passage and wintering site for water birds. Peak counts of wintering water birds regularly exceed 20,000 individuals, including internationally important numbers of gadwall <i>Anas strepera</i>, teal <i>A. crecca</i> and shoveler <i>A. clypeata</i> and nationally important numbers of several other species, notably coot <i>Fulica atra</i>. Moulting concentrations of Anatidae in late summer include nationally important numbers of mute swan <i>Cygnus olor</i>, common pochard <i>Aythya ferina</i> and tufted duck <i>A. fuligula</i>. The damp, unimproved pasture bordering parts of the reservoir support feeding waders in winter, whilst, in other areas, improved grassland is important for grazing wigeon <i>Anas penelope</i>. The site also supports the UK's only tree-nesting colony of great cormorant <i>Phalacrocorax carbo</i>.</p>
D	Dengie (Mid-Essex Coast Phase 1)	<p>It supports rare plant and animal species, including 11 species of nationally scarce plant and Red Data Book invertebrates. This site supports a full and representative sequences of saltmarsh plant communities covering the range of variation in Britain. The site has an internationally important assemblage of waterfowl in winter and supports internationally significant numbers of dark bellied brent goose <i>Branta bernicla bernicla</i>, grey plover <i>Pluvialis squatarola</i> and red knot <i>Calidris canutus islandica</i>.</p>
D/E	Blackwater Estuary (Mid-Essex Coast Phase 4)	<p>The largest estuary in Essex north of the Thames and, is one of the largest estuarine complexes in East Anglia.</p> <p>The site is designated for its extent and diversity of saltmarsh habitat. The site supports a full representative sequence of saltmarsh plant communities covering the range of variation in Britain. The invertebrate fauna is well represented and includes at least 16 British Red Book species. There is also an internationally important assemblage of waterfowl in winter and internationally important populations of grey plover <i>Pluvialis squatarola</i>, dunlin <i>Calidris alpina alpina</i>, black-tailed godwit <i>Limosa limosa islandica</i>.</p>

Project Section	Site Name	Description
G	Crouch and Roach Estuaries (Mid-Essex Coast Phase 3)	<p>A shallow valley between two ridges of London Clay, whilst the River Roach is set predominantly between areas of brick earth and loams with patches of sand and gravel. The intertidal zone along the Rivers Crouch and Roach is 'squeezed' between the sea walls of both banks and the river channel. This leaves a relatively narrow strip of tidal mud unlike other estuaries in the county.</p> <p>The site supports an assemblage of rare, vulnerable or endangered species or subspecies of plant and animal including 13 nationally scarce plant species. Several important invertebrate species are also present on the site. The site also supports an internationally important assemblage of waterfowl in winter and an internationally significant population of dark-bellied brent goose <i>Branta bernicla bernicla</i>.</p>
H	Thames Estuary and Marshes	<p>A complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat.</p> <p>It supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates. The site has an internationally important assemblage of waterfowl in winter including ringed plover <i>Charadrius hiaticula</i>, black-tailed godwit <i>Limosa limosa islandica</i>, grey plover <i>Pluvialis squatarola</i>, red knot <i>Calidris canutus islandica</i>, dunlin <i>Calidris alpina alpina</i> and common redshank <i>Tringa totanus totanus</i>.</p>
H	Benfleet and Southend Marshes	<p>An extensive series of saltmarshes, mudflats, and grassland supporting a diverse flora and fauna.</p> <p>It supports an internationally important assemblage of waterfowl in winter and internationally important populations of grey plover <i>Pluvialis squatarola</i> and red knot <i>Calidris canutus islandica</i>.</p>
H	Medway Estuary and Marshes	<p>A complex of rain-fed, brackish, floodplain grazing marsh with ditches and intertidal marsh and mudflat.</p> <p>It supports a number of species of rare plants and animals. The site holds several nationally scarce plants, at least 12 British Red Data Book species of wetland invertebrates and a significant number of non-wetland British Red Data Book species. The site is also designated for its internationally important assemblage of waterfowl in winter and its internationally important populations of grey plover <i>Pluvialis squatarola</i>, common redshank <i>Tringa totanus totanus</i>, dark bellied brent goose <i>Branta bernicla bernicla</i>, common shelduck <i>Tadorna tadorna</i>, northern pintail <i>Anas acuta</i>, ringed plover <i>Charadrius hiaticula</i>, red knot <i>Calidris canutus islandica</i>, dunlin <i>Calidris alpina alpina</i>, and black-tailed godwit <i>Limosa limosa islandica</i>.</p>

Annex C. Special Protection Areas (SPAs) Designated Site Descriptions

Annex C

Special Protection Areas (SPAs) Designated Site Descriptions

Table A8.16.12 SPA designated site descriptions

Project Section(s)	Site Name	Description
All sections	Outer Thames Estuary	Used regularly by 1% or more of the Great Britain population of the following species listed in Annex I in any season: red-throated diver <i>Gavia stellata</i> , little tern <i>Sternula albifrons</i> and common tern <i>Sterna hirundo</i> .
A	Breckland	Used regularly by 1% or more of the Great Britain population of the following species listed in Annex I in any season: stone curlew <i>Burhinus oedipnemus</i> , nightjar <i>Caprimulgus europaeus</i> , and woodlark <i>Lullula arborea</i> .
A	Broadland	Designated for a variety of wintering and breeding raptors and waterbirds associated with extensive lowland marshes. In particular, the site supports important numbers of Eurasian bittern <i>Botaurus stellaris</i> , Bewick's swan <i>Cygnus columbianus bewickii</i> , whooper swan <i>Cygnus cygnus</i> and Western marsh harrier <i>Circus aeruginosus</i> .
B, C	Deben Estuary	Designated as providing internationally important habitats to a variety of birds listed in Annex I. The site supports 11.4% of the total population of avocet <i>Recurvirostra avosetta</i> , 2.1% of the British and 1.1% of the north-west European population of dark-bellied geese <i>Branta bernicla bernicla</i> and 1.9% of the British population of redshank <i>Tringa totanus</i> .
B, C	Sandlings	The site qualifies under Article 4.1 of the Birds Directive (79/409/EEC) due to its importance for supporting significant populations of Annex I bird species. Specifically, it regularly hosts 3.2% of Great Britain's nightjar <i>Caprimulgus europaeus</i> population and 10.3% of the woodlark <i>Lullula arborea</i> population during their breeding seasons, making it crucial for the conservation of these species at a national level.
C	Hamford Water	Used regularly by 2.1% of the Great Britain population of little tern <i>Sternula albifrons</i> and 7% of the wintering population of pied avocet <i>Recurvirostra avosetta</i> . Additionally, it is an important site for migratory species, hosting 2% of the biogeographic population of dark-bellied brent goose <i>Branta bernicla bernicla</i> , 1% of the Great Britain population of shelduck <i>Tadorna tadorna</i> , and 2% of the wintering teal <i>Anas crecca</i> .
C	Stour and Orwell Estuaries	The site includes extensive mudflats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. In summer, the site supports important numbers of breeding avocet <i>Recurvirostra avosetta</i> (3.6% of the Great British

Project Section(s)	Site Name	Description
		population), while in winter it holds major concentrations of waterbirds, especially geese, ducks and waders. The site supports 2.0% of the British population of redshank <i>Tringa totanus</i> during the autumn passage and 1.2% of the British population of dark-bellied brent goose <i>Branta bernicla bernicla</i> during winter.
C, D	Colne Estuary (Mid-Essex Coast Phase 2)	An extensive complex of estuaries and intertidal sand and silt flats, including several islands, shingle and shell beaches and extensive areas of saltmarsh. It supports nationally important populations of Annex I bird species. Specifically, the site supports 3% of British breeding population of little tern <i>Sterna albifrons</i> and 2% of the British population of hen harrier <i>Circus cyaneus</i> during winter months.
D	Abberton Reservoir	Large water storage reservoir and the most important reservoir in Great Britain for wintering wildfowl. It owes this position to its proximity to the coast. Species of note include cormorant <i>Phalacrocorax carbo</i> , wigeon <i>Anas Penelope</i> , gadwall <i>Anas strepera</i> , great crested grebe <i>Podiceps cristatus</i> and mute swan <i>Cygnus olor</i> .
D	Dengie (Mid-Essex Coast Phase 1)	Qualifies under article 4.1 by regularly supporting a nationally important population (2%) of an Annex I species, the hen harrier <i>Circus cyaneus</i> in winter. Qualifies under Article 4.2 as a wetland of international importance by regularly supporting, in winter, over 20,000 waterfowl including: dark-bellied brent geese <i>Branta bernicla bernicla</i> (1.3% of the total world population, 2.5% of the British wintering population); grey plover <i>Pluvialis squatarola</i> (1% of East Atlantic Flyway (EAF) population, 8.2% of British).
D, E	Blackwater Estuary (Mid-Essex Coast Phase 4)	An extensive complex of estuaries and intertidal sand and silt flats, including several islands, shingle and shell beaches and extensive areas of saltmarsh. Qualifies under Article 4.1 by supporting, in summer, nationally important breeding populations of an Annex I species, the little tern <i>Sterna albifrons</i> (3% of British breeding population) and the hen harrier <i>Circus cyaneus</i> (2% of British population).
G	Crouch and Roach Estuaries (Mid-Essex Coast Phase 3)	Qualifies under Article 4.2 due to its regular use by 1% or more of the biogeographical populations of migratory species (excluding those listed in Annex I). Specifically, it supports dark-bellied. Additionally, under Article 4.2, the site qualifies as it regularly supports over 20,000 waterbirds.
H	Thames Estuary and Marshes	Provides wintering and breeding habitats for important assemblages of wetland bird species, particularly wildfowl and waders as well as supporting migratory birds on passage. The site supports two Annex I species; avocet <i>Recurvirostra avosetta</i> (29% of the British population) and hen harrier <i>Circus cyaneus</i> (1% of the British population).

Project Section(s)	Site Name	Description
H	Benfleet and Southend Marshes	An area of intertidal mudflats, saltmarsh, scrub and grassland. The site qualifies under Article 4.2 as a Wetland of International Importance by regularly supporting over 20,000 waterfowl in winter. The sites also qualifies internationally or nationally important wintering populations of the following species dark-bellied brent geese <i>Branta bernicla bernicla</i> , grey plover <i>Pluvialis squatarola</i> , knot <i>Calidris canutus</i> , ringed plover <i>Charadrius hiticula</i> , Dunlin <i>Calidris alpina</i> .
H	Medway Estuary and Marshes	The site qualifies under article 4.1 by supporting nationally important breeding populations of avocet <i>Recurvirostra avosetta</i> , and little tern <i>Sterna albifrons</i> in summer as well as nationally significant wintering populations of avocet in winter. The site also qualifies under article 4.2 as a Wetland of International Importance by regularly supporting over 20,000 waterfowl in winter. It also qualifies under article 4.2 as it regularly supports a diverse assemblage of breeding migratory wildfowl in summer and of wintering species in winter.

Annex D. Special Areas of Conservation (SACs) Designated Site Descriptions

Annex D

Special Areas of Conservation (SACs) Designated

Site Descriptions

Table A8.16.13 SAC designated site descriptions

Project Section	Site name	Description
A	Norfolk Valley Fens	This site comprises a series of valley-head spring-fed fens. Such spring-fed flush fens are very rare in the lowlands. The spring-heads are dominated by the small sedge fen type, mainly referable to black-bog-rush – blunt-flowered rush <i>Schoenus nigricans</i> – <i>Juncus subnodulosus</i> mire, but there are transitions to reedswamp and other fen and wet grassland types. The site qualifies as an SAC due to the Annex I habitats found at the site including, Alkaline Fens, Alluvial forests with alder <i>Alnus glutinosa</i> and ash <i>Fraxinus excelsior</i> , calcareous fens and European dry heaths.

Annex E. Sites of Special Scientific Interest (SSSIs) Designated Site Descriptions

Annex E

Sites of Special Scientific Interest (SSSIs) Designated

Site Descriptions

Table A8.16.14 SSSI designated site descriptions

Project Section	Site name	Description
A	Flordon Common	<p>Situated in the valley of the River Tas on shallow fenland peats. Springs emerge on the valley-side bearing base-rich waters from the underlying chalk and in these areas' species-rich calcareous fen has developed. The wetter parts of the fen are dominated by bog-rush <i>Schoenus nigricans</i> and blunt-flowered rush <i>Juncus subnodulosus</i> over a carpet of mosses. These species-rich areas contain uncommon plants including butterwort <i>Pinguicula vulgaris</i>, bog pimpernel <i>Anagallis tenella</i>, fragrant orchid <i>Gymnadenia conopsea</i>, marsh helleborine <i>Epipactis palustris</i> and the rare narrow-leaved marsh orchid <i>Dactylorhiza traunsteineri</i>. The drier parts of the fen are dominated by purple moor-grass <i>Molinia caerulea</i>, blunt flowered rush and several species of sedge. Grazed unimproved grassland surrounds the fen.</p> <p>The very rare narrow-mouthed whorl snail <i>Vertigo angustior</i> has been recorded from the site.</p>
A	Aslacton Parish Land	<p>A characteristic example of a type of unimproved spring-line meadow which at one time was widely distributed in the valley of the River Tas.</p> <p>Designated for its range of inter-grading wet and dry grassland types, the flora of which is rich and contains a number of uncommon and declining species. These include a wet marsh grassland, species-rich fen grassland, a short-sward calcareous type grassland and small areas of tall ungrazed vegetation.</p> <p>A few pairs of snipe <i>Gallinago gallinago</i> breed there most years.</p>
A	Forngett Meadows	<p>One of only three examples of unimproved meadow now remaining in the valley of the River Tas. An interesting mosaic of grassland types has developed in response to natural variation in soil type and wetness and to a long period of stable non-intensive grazing management. The upper parts of the valley support a short rabbit-grazed sward with frequent anthills. The lower parts of the valley slope contain marshy grassland.</p>
A	Shelfanger Meadows	<p>One of the most important areas of unimproved grassland in Norfolk, forming an outstanding example of traditionally managed, herb-rich, hay meadows. The damp, neutral grassland is rich in grasses and the more abundant species are crested dog's-tail <i>Cynosurus cristatus</i>, sweet vernal-grass <i>Anthoxanthum odoratum</i>, yorkshire-fog <i>Holcus lanatus</i> and</p>

Project Section	Site name	Description
		smooth meadow-grass <i>Poa pratensis</i> . Marshy grassland occurs in flushed areas and is generally dominated by brown sedge <i>Carex disticha</i> , carnation sedge <i>C. panicea</i> and jointed rush <i>Juncus articulatus</i> .
A, B	Wortham Ling	Important for its lowland dry heath and acid grassland communities which have developed on a sandy, glaciofluvial drift deposit. The heathland community is characterised by an abundance of heather <i>Calluna vulgaris</i> . The site's other major plant community is the dry acid grassland which is dominated by a sward of sheep's fescue <i>Festuca ovina</i> with only scattered clumps of heather. The moss lichen flora is also a significant element, where vegetation is short and open due to intense rabbit grazing. Additional habitat variety is provided by damper areas supporting a dense growth of purple moor-grass <i>Molinia caerulea</i> , several ponds, ditches and hollows. There are also places where the vegetation indicates more base-rich soil. The site also supports a good population of the grayling <i>Hipparchia semele</i> , a characteristic butterfly of open heathlands.
B	Gypsy Camp Meadows, Thrandeston	A large and a smaller species rich wet meadow. The site supports several community types ranging from base rich marsh to wetter alluvial meadow type. Throughout the site there are areas of drier grassland dominated by meadow foxtail <i>Alopecurus pratensis</i> , crested dog's-tail <i>Cynosurus cristatus</i> and yorkshire-fog <i>Holcus lanatus</i> .
B	Burgate Wood	A particularly good example of the type of oak-hornbeam woodland characteristic of this part of north Suffolk. It is ancient, with a coppice-with-standards structure and continues to support entirely semi-natural stands. Many giant coppiced stools are present which indicate its great antiquity. The ground flora is diverse and includes several species that are indicators of ancient woodland. Uncommon species are present including herb-paris <i>Paris quadrifolia</i> , yellow archangel <i>Lamiastrum galeobdolon</i> , hairy woodrush <i>Luzula pilosa</i> and the rare lungwort <i>Pulmonaria officinalis</i> .
B	Westhall Wood and Meadow	An ancient coppice-with-standards pedunculate oak-hornbeam wood which grows on heavy boulder clay overlain by sand and is one of the largest remaining intact hornbeam dominated woodlands in Suffolk. Westhall Meadow is a large unimproved species-rich meadow containing a community of meadow plants with affinities to both calcareous clay and calcareous loam grasslands including red fescue <i>Festuca rubra</i> , yorkshire-fog <i>Holcus lanatus</i> , rough meadow-grass <i>Poa trivialis</i> and glaucous sedge <i>Carex flacca</i> .
B	Gipping Great Wood	An ancient coppice-with-standards wood. A complex mosaic of woodland types is present including extensive areas of acid

Project Section	Site name	Description
		pedunculate oak-hazel-ash woodland and pedunculate oak-hornbeam woodland with patches of wet ash-maple woodland and invasive elm. The ground flora is characteristic of an ancient woodland and includes uncommon thin-spiked wood sedge <i>Carex strigosa</i> and oxlip <i>Primula elatior</i>
B	Combs Wood	<p>An ancient woodland with a well-developed coppice with standards structure, on boulder clay overlain with variable amounts of sand and loess. The range of soil types has led to the development of a variety of woodland types. Pedunculate oak-hornbeam woodland is predominant, with areas of typical ash-maple woodland, this grading into the heavy soil form of pedunculate oak-hazel-ash woodland where the soils are more acid.</p> <p>The rides within the woodland are wet in places. The unimproved grassland of these rides and a small pond provide valuable additional habitat for invertebrates.</p>
B	Barking Woods	<p>An inter-related group of ancient woodlands, the majority of the medieval earth banks still remain and are marked by large pollards of oak and ash. The woodland structure is predominantly coppice-with-standards, composed of a variety of different stand-types. The diverse ground flora is typical of ancient woods and reflects a change in soils from the heavy boulder clay of Priestley and Swingen's Woods to the chalky sand of Titley Hill Wood.</p> <p>Titley Hill Wood is also the site of an active badger <i>Meles meles</i> sett.</p>
B	Middle Wood, Offton	A complete medieval wood with eastern and western extensions of ancient secondary woodland. The wood contains semi-natural stands of several different wood types and is predominantly of coppice-with-standards structure; several hectares to the south are still within a coppice rotation. The main stand-type is ash-maple on wet boulder clay. Oak <i>Quercus robur</i> is the dominant standard and shows an unusually wide range of age structure (from 35–300 years old). The wood has a diverse ground flora with many species typical of ancient woodland, including locally rare grass wood barley <i>Hordelymus europaeus</i> .
B	Creeping St. Mary Pits	Designated for its geological interest.
B	Hascot Hill Pit	Designated for its geological interest.
C	Ardleigh Gravel Pit	Designated for its geological interest.

Project Section	Site name	Description
C	Elmsett Park Wood	<p>A small ancient woodland, considered to be one of the richest small woods in Suffolk due to the wide variety of woodland types and diverse ground flora present.</p> <p>The structure of the wood is coppice-with-standards. Lineage elm wood, an uncommon type is well represented and there are small areas of maple-ash-lime woodland, another scarce type. Wet ash-maple woodland occupies the plateau and grades into acid pedunculate oak-hazel-ash woodland on the slopes. Small stands of pedunculate oak-hornbeam woodland of the ash-maple variant and suckering elm woodland are also present.</p> <p>The ground flora contains indicators of ancient woodland including uncommon spurge laurel <i>Daphne laureola</i>, nettle-leaved bellflower <i>Campanula trachelium</i>, green hellebore <i>Helleborus viridis</i>, wood spurge <i>Euphorbia amygdaloides</i>, herb paris <i>Paris quadrifolia</i> and butterfly orchid <i>Platanthera chlorantha</i>.</p>
C	Hintlesham Woods	<p>One of the largest remaining areas of ancient woodland in Suffolk, having been in existence since the 12th century. The structure of the wood is coppice-with-standards. The mature tree species found in the wood is predominantly oak, with birch and ash common too.</p> <p>The ground flora is dominated by bramble <i>Rubus fruticosus</i> agg with patches of dog's mercury <i>Mercurialis perennis</i>, bluebell <i>Hyacinthoides non-scripta</i> and bracken <i>Pteridium aquilinum</i>. Other plants occurring frequently throughout the woods include enchanter's nightshade <i>Circaea lutetiana</i>, primrose <i>Primula vulgaris</i>, wood sorrel <i>Oxalis acetosella</i> and wood anemone <i>Anemone nemorosa</i>.</p> <p>Many notable bird species breed in the woods including tawny owl <i>Strix aluco</i>, woodcock <i>Scolopax</i> and nightingale <i>Luscinia megarhynchos</i>.</p>
C, D	Bullock Wood	<p>An ancient coppice-with-standards woodland with a wide range of tree species. The principal woodland type is the nationally rare lowland hazel-sessile oak woodland type modified in places by the presence of sweet chestnut <i>Castanea sativa</i>. The wood contains the nationally rare plateau alder and acid sessile oak-hazel-ash woodland types. The ground flora is dominated by bramble <i>Rubus</i> spp. with abundant bracken <i>Pteridium aquilinum</i> and very rare plant species such as Water Avens <i>Geum rivale</i>, have been recorded.</p>
D	Marks Tey Brickpit	Designated for its geological interest.
F	River Ter	Designated for its geological interest.
F	Newney Green Pit	Designated for its geological interest.

Project Section	Site name	Description
G	Thorndon Park	An area of semi-natural broadleaved woodland and ancient parkland supporting a range of habitat types developed over Claygate and Bagshot Beds and gravels to the south of Brentwood. The woodland includes the lowland birch-sessile oak and pedunculate oak hornbeam types, and the site supports a large assemblage of Beetles (Coleoptera) including one species <i>Megapenthes lugens</i> , which is critically endangered.
G, H	Langdon Ridge	Supports a diverse mosaic of semi-natural habitats. It has been designated as an SSSI due to nationally important features that occur within and are supported by the wider habitat mosaic. The site supports nationally important species rich neutral grasslands, fen meadows, ancient woodlands as well as assemblages of invertebrates chiefly associated with open short sward and scrub-heath and populations of the plant Deptford pink <i>Dianthus armeria</i> .
H	Mucking Flats and Marshes	<p>An extensive stretch of mudflats and saltmarsh found together with sea wall grassland. The site supports both nationally and internationally important numbers of wintering wildfowl and waders. Ringed plover <i>Charadrius hiaticula</i> occurs in internationally important numbers, with nationally important populations of shelduck <i>Tadorna tadorna</i>, grey plover <i>Pluvialis squatarola</i>, dunlin <i>Calidris alpina</i>, black-tailed godwit <i>Limosa limosa</i> and redshank <i>Tringa totanus</i>.</p> <p>Additionally, between the sea wall grassland and high-water line lie areas of high-level saltmarsh that are usually uncommon in Essex. These saltmarshes consist of a wide array of vegetation, dominated by sea couch <i>Elymus pycnanthus</i> and sea purslane <i>Halimione portulacoides</i> but also include nationally scarce species such as golden samphire <i>Inula crithmoides</i>.</p>
H	Globe Pit	Designated for its geological interest.
H	Hangman's Wood and Deneholes	<p>Remains of medieval chalk mines at the site provide the most important underground hibernation site for bats in Essex. Three species have been recorded: brown long-eared bat <i>Plecotus auritus</i>, Natterer's bat <i>Myotis nattereri</i> and Daubenton's bat <i>Myotis daubentonii</i>.</p> <p>The wood itself is an area of semi-natural habitat where bats can feed. It is a relict fragment of ancient woodland dominated by pedunculate oak <i>Quercus robur</i>, ash <i>Fraxinus excelsior</i> and sycamore <i>Acer pseudoplatanus</i>.</p>

Annex F. Local Nature Reserves (LNRs) Designated Site Descriptions

Annex F

Local Nature Reserves (LNRs) Designated Site Descriptions

Table A8.16.15 LNR designated site descriptions

Project Section	Site Name	Description
A	Dunston Common	A large open area of grassland to the east and an area of semi-mature woodland to the west. It supports veteran and mature trees with species including birch <i>Betula</i> spp., sycamore <i>Acer pseudoplatanus</i> , hazel <i>Corylus avellana</i> , holly <i>Ilex aquifolium</i> , rowan <i>Sorbus aucuparia</i> and oak <i>Quercus</i> spp.
A	Roydon Fen	A wet woodland and lowland fen of geological importance with deep peat soils.
A	Smockmill Common	The site contains a wide diversity of flora owing to its diverse habitats. To the west of the site lies an area of marsh populated by elder <i>Sambucus nigra</i> , crack-willow <i>Salix fragilis</i> , wild privet <i>Ligustrum vulgare</i> , guelder-rose <i>Viburnum opulus</i> and spindle <i>Euonymus europaeus</i> . The wood on the higher ground to the east mainly consists of oak <i>Quercus</i> sp., ash <i>Fraxinus excelsior</i> , sycamore <i>Acer pseudoplatanus</i> , downy birch <i>Betula pubescens</i> , elder <i>Sambucus nigra</i> , hawthorn <i>Crataegus monogyna</i> and hazel <i>Corylus avellana</i> .
B	Bramford Meadows	A low-lying river grassland and scrub in a linear strip along the River Gipping. Ditch vegetation includes water forget-me-not <i>Myosotis scorpioides</i> , marsh woundwort <i>Stachys palustris</i> , water mint <i>Mentha aquatica</i> , brooklime <i>Veronica beccabunga</i> and water figwort <i>Mentha aquatica</i> .
B	Fen Alder Carr	It supports diverse habitats, ranging from open water and tall fen vegetation to dense alder carr woodland. The alder woodland features many mature, multi-stemmed trees, attracting abundant bird life. Bird species that use the site include siskin <i>Spinus spinus</i> , redpoll <i>Acanthis flammea</i> , and chaffinch <i>Fringilla coelebs</i> .
B	Needham Lake	The site includes a mosaic of aquatic, marsh and scrub vegetation, supporting a diverse flora and fauna.
C	Railway Walk, Hadleigh	The site comprises of several habitats including, scrub, herb-rich grassland, secondary woodland and ancient woodland. The ancient woodland section of the site includes important ancient woodland flora including dog's mercury <i>Mercurialis perennis</i> , wood sorrel <i>Oxalis acetosella</i> and primrose <i>Primula vulgaris</i> . In this section, records also exist of dormouse <i>Muscardinus avellanarius</i> , a European protected species.

Project Section	Site Name	Description
E	Brockwell Meadows	Located on the banks of the River Blackwater in Kelvedon. The site is 11 acres in size and consists of water meadow, hedgerow, woodland and pond habitats.
F	Chelmer Valley Riverside	A 17.6 hectare reserve located along the eastern banks of the River Chelmer. The site includes a mosaic of different habitats including woodland, ponds, the River Chelmer and grassland. The grasslands in the site support slow-worm <i>Anguis fragilis</i> and common lizard <i>Zootoca vivipara</i> .
G	Hutton Country Park	36 hectares, containing a large area of natural grassland, an area of ancient woodland, ponds, wetland and the River Wid, which forms the northerly border. The ponds are extremely valuable for conservation reasons and often support rare species of birds, including kingfisher <i>Alcedo atthis</i> .
G	Mill Meadow	Approximately 7 acres of the site are covered by ancient meadows, regarded as the best-preserved in all of Essex. The site also includes woodland, providing a vital habitat for several bat species. Additionally, the grasslands support important reptile habitats, including the grass snake <i>Natrix helvetica</i> and the common lizard <i>Zootoca vivipara</i> .
H	Grove House Wood	This small woodland in Stanford-le-Hope, owned by Thurrock Council and managed by Essex Wildlife Trust, borders the River Hassenbrooke, which is fringed with reeds and marshy areas. The wood supports a variety of typical woodland birds, and its dead elm <i>Ulmus</i> sp. trees offer valuable nesting sites for woodpecker <i>Picidae</i> .
H	Linford Wood	An ancient woodland that covers 97 acres and provides a vital habitat for a variety of wildlife, including deer, fox <i>Vulpes vulpes</i> , badger <i>Meles meles</i> , and a wide range of bird species. Notable bird species include the green woodpecker <i>Picus viridis</i> , treecreeper <i>Certhia familiaris</i> , willow warbler <i>Phylloscopus trochilus</i> , sparrowhawk <i>Accipiter nisus</i> , and tawny owl <i>Strix aluco</i> . Additionally, the woodland is home to a range of flora including bluebell <i>Hyacinthoides non-scripta</i> and a variety of fungi in winter months.

Annex G. County Wildlife Sites (CWSs) Designated Site Descriptions

Annex G

County Wildlife Sites (CWSs) Designated Site Descriptions

Table A8.16.16 CWS designated site descriptions

Project Section	Site name	Description
A	Bayes Meadow	A small field which is being managed for its botanical interest with a single late summer cut. The site is largely species-rich grassland, damp in places, on a gentle south-north slope. The central area is basic grassland which grades into an area of marshy grassland dominated by meadowsweet <i>Filipendula ulmaria</i> . The whole area is fringed by tall herb vegetation. Species include, moschatel <i>Adoxa moschatellina</i> , opposite-leaved saxifrage <i>Chrysosplenium oppositifolium</i> and hemp agrimony <i>Eupatoria cannabinum</i> .
A	Bracon Ash Common	An area of largely mature woodland frequent trees include pedunculate oak <i>Quercus robur</i> and sycamore <i>Acer pseudoplatanus</i> , there is a wet ditch to the west with trees including veteran field maple <i>Acer campestre</i> , and veteran ash trees. In the centre of the site there is a small pond linked to a larger pond by a short-wet ditch. South of the large pond is an open sunny glade. To the south-east of the site, close to a small lane, the habitat is more open, forming an open, sunny woodland edge. To the south of the small lane a grassy verge has a line of mature trees with a small pond beyond Surveys show good numbers of great crested newt <i>Triturus cristatus</i> . There has also been a sighting of grass snake <i>Natrix helvetica</i> on the site.
A	Bressingham Fen	A wet semi-natural woodland situated adjacent the River Waveney. To the south, near to the river, is an area of carr woodland with abundant grey willow <i>Salix cinerea</i> , young ash <i>Fraxinus excelsior</i> and alder <i>Alnus glutinosa</i> . The canopy to the north is almost entirely alder with some elder <i>Sambucus nigra</i> and silver birch <i>Betula pendula</i> .
A	Brewer's Green	Semi-improved neutral grassland on a loamy soil, divided into three sections by minor roads and an area managed as playing field, which is excluded from the CWS. There are two well vegetated ponds and areas of scrub. The vegetation is broadly similar on all three sections of the site. The site is managed by mowing.
A	Brick Kiln Lane, Bunwell Hill	A mosaic of grassland types with encroaching scrub, on a sloping river valley site north of the River Tas. There is a mosaic

Project Section	Site name	Description
		of moderately heavy and lighter, sandy soils, with areas of impeded drainage in places. Two small ponds have been excavated in marshy grassland during the recent past and the largest pond stocked with coarse fish. There is a gradient of grassland types, with mainly unimproved marshy grassland in the western and southern sections of the site. Parts of the grassland are semi-improved or improved and there has been reseeded with perennial rye-grass <i>Lolium perenne</i> to control rank herbs.
A	Brock's Watering	<p>Two distinct areas of grassland separated by an over-grown hedge and fence.</p> <p>Land to the north-west sits on higher, dry ground and is dominated by various grasses including meadow foxtail <i>Alopecurus pratensis</i>, tall fescue <i>Schedonorus arundinaceous</i>, sweet vernal-grass <i>Anthoxanthum odoratum</i> and tufted hair-grass <i>Deschampsia cespitosa</i>. Moving east the grassland becomes damper supporting a greater variety of herbs and finer grasses. Grasses include yellow oat grass <i>Trisetum flavescens</i>, timothy <i>Phleum pratense</i>, crested dog's-tail <i>Cynosurus cristatus</i> and red fescue <i>Festuca rubra</i> alongside lesser pond sedge <i>Carex acutiformis</i>. To the south of the stream the grassland is dominated by tall grasses with frequent lesser pond sedge and rushes. A stream with a stoney bed traverses the site. It has very steep sides and bramble <i>Rubus fruticosus agg.</i> in some areas.</p>
A	Bunwell Fen	<p>An area of wet woodland, open in nature with a ground flora of fen vegetation.</p> <p>The canopy is dominated largely by ash <i>Fraxinus excelsior</i> with frequent alder <i>Alnus glutinosa</i>, crack-willow <i>Salix fragilis</i> and white willow <i>Salix alba</i>. This includes frequent hawthorn <i>Crataegus monogyna</i>, sallow <i>Salix cinerea</i>, elder <i>Sambucus nigra</i>, guelder-rose <i>Viburnum opulus</i> and almond willow <i>Salix trianda</i>.</p> <p>The ground flora in open clearings has tall fen vegetation or reed <i>Phragmites australis</i> with meadowsweet <i>Filipendula ulmaria</i> and common nettle <i>Urtica dioica</i>. In more shaded areas bare ground and bryophytes occur with a patchy woodland flora of herb-robert <i>Geranium robertianum</i>, dog's mercury <i>Mercurialis perennis</i>, false-brome <i>Brachypodium sylvaticum</i>, hairy brome <i>Bromus ramosus</i> and wood avens <i>Geum urbanum</i>.</p>
A	Bunwell Wood	<p>Ancient woodland site where the trees and diverse flora associated with an ancient woodland remain in a border around the edge of the site, and the area inside has been cleared and re-planted as an arboretum. It is a level site on clay soils.</p> <p>The edge woodland is composed of tall oak <i>Quercus robur</i> with some standard hornbeam <i>Carpinus betulus</i>, ash <i>Fraxinus</i></p>

Project Section	Site name	Description
		<i>excelsior</i> and sycamore <i>Acer pseudoplatanus</i> . The understorey includes, mainly hornbeam, with hazel <i>Corylus avellana</i> in the south, and field maple <i>Acer campestre</i> and hawthorn <i>Crataegus monogyna</i> in the north-east. Small sycamore makes up another part of the understorey. The ground flora includes dog's mercury <i>Mercurialis perennis</i> , but there are also large areas of pignut <i>Conopodium majus</i> , ramsons <i>Allium ursinum</i> , moschatel <i>Adoxa moschatellina</i> and yellow pimpernel <i>Lysimachia nemorum</i>
A	Caistor St Edmund Roman Town	The site consists of the south- and west-facing ramparts only of the Roman town at Caistor St Edmunds, where lime mortar in the walls has encouraged a calcicolous assemblage of plant species growing both on the wall and on the adjacent banks. Species of interest include the nationally scarce clustered clover <i>Trifolium glomeratum</i> , fiddle dock <i>Rumex pulcher</i> , hoary plantain <i>Plantago media</i> , common calamint <i>Clinopodium ascendens</i> , viper's bugloss <i>Echium vulgare</i> , fern grass <i>Catapodium rigidum</i> , small scabious <i>Scabiosa columbaria</i> , wild clary <i>Salvia verbenaca</i> , downy oat grass <i>Avenula pubescens</i> , crested hair-grass <i>Koeleria macrantha</i> and wall pepper <i>Sedum acre</i> . Milk thistle <i>Silybum marianum</i> is frequent on the south rampart.
A	Carlton Rode Fen	An area of river valley dried fen, marshy grassland, woodland and scrub adjacent to the River Tas, which crosses the site. The northeastern section has been extensively modified in the past and converted into a series of landscaped ponds stocked with coarse fish for recreational angling.
A	Diss Cemetery	An area of neutral to basic species-rich grassland, part of which is a wildflower conservation area. Some areas are very closely mown whilst elsewhere is left uncut providing a long sward which is attractive to butterflies and other invertebrates. One of the key features of the site is the presence of tor grass <i>Brachypodium pinnatum</i> which is rare in Norfolk and columbine <i>Aquilegia vulgaris</i> which is scarce in Norfolk
A	Dunston Common	The site is a mosaic of woodland and grassland, lying on mostly acid soils. The canopy of woodland areas is largely birch <i>Betula pendula</i> , oak <i>Quercus robur</i> , sycamore <i>Acer pseudoplatanus</i> , holly <i>Ilex aquifolium</i> and rowan <i>Sorbus aucuparia</i> . The shrub layer includes occasional coppiced hazel <i>Corylus avellana</i> , some hawthorn <i>Crataegus monogyna</i> and low bramble <i>Rubus fruticosus</i> agg. Gorse <i>Ulex europaeus</i> and willow <i>Salix cinerea</i> form an understorey over a damp ground flora. Grassland areas are well drained and dominated by red fescue <i>Festuca rubra</i> , yorkshire-fog <i>Holcus lanatus</i> and common cat's ear <i>Hypochoeris radicata</i> . Sheep's sorrel <i>Rumex acetosella</i> is abundant. A small pond lies to the west and supports soft rush, gipsywort <i>Lycopus europaeus</i> , lesser spearwort <i>Ranunculus</i>

Project Section	Site name	Description
		<i>flammula</i> , bittersweet <i>Solanum dulcamara</i> and the invasive species New Zealand pygmyweed <i>Crassula helmsii</i> .
A	Eagle Farm Pond	This is a large pond stocked with fish and frequented by ducks and moorhen. The pond is clay lined, shallow and fed by precipitation. The water quality is poor and consequently there is no aquatic vegetation.
A	Flordon Meadow (East)	<p>This site is a mosaic of tall fen, marshy grassland and semi-improved meadow. A stream borders the site to the west.</p> <p>The northern and southern ends of the site are semi-improved meadow whilst the marshy grassland is restricted to the centre of the site and two smaller patches near to the stream. The tall fen forms a large stand to the east of the site.</p> <p>The ground has become enriched in places with a sward height of 90cm plus and great willow herb <i>Epilobium hirsutum</i> and nettle <i>Urtica dioica</i> are the dominant vegetation. In meadow areas the habitat appears to be more species rich with abundant sheep sorrel <i>Rumex acetosella</i> and lesser stitchwort <i>Stellaria graminea</i>.</p>
A	Flordon Meadow (West)	<p>This is predominantly an area of marshy grassland with small patches of well-drained unimproved meadow. A stream borders the site to the east.</p> <p>The marshy grassland has a rank sward dominated by meadowsweet <i>Filipendula ulmaria</i> and yorkshire-fog <i>Holcus lanatus</i> whilst well-drained areas are dominated by false oat-grass <i>Arrhenatherum elatius</i>, silverweed <i>Potentilla anserina</i> and nettle <i>Urtica dioica</i>. Gorse <i>Ulex europaeus</i> is scattered.</p>
A	Foxes' Grove	<p>This is an area of plantation woodland with a coppiced understorey. The site is crossed by a drain to the south.</p> <p>The canopy is formed by oak <i>Quercus robur</i>, ash <i>Fraxinus excelsior</i> and birch <i>Betula pendula</i>. The underlying coppice consists of sycamore <i>Acer pseudoplatanus</i>, also ash and hawthorn <i>Crataegus monogyna</i> are also present.</p> <p>The ground is rather wet and thus the flora is dominated by moss but contains abundant nettle <i>Urtica dioica</i>, bramble <i>Rubus fruticosus</i> agg. and ground-ivy <i>Glechoma hederacea</i>.</p>
A	Gissing Common	The site is predominantly unimproved neutral grassland with patches of marshy grassland, boundary scrub and areas of broadleaved woodland and scattered trees. The site is bounded by dry ditches, minor roads and is almost entirely surrounded by arable farmland.
A	Grove Wood	This is an area of well-established, mature plantation woodland which is mainly broadleaved. It is a long, narrow belt of woodland which is fairly level and dry. Yew <i>Taxus baccata</i> , oak <i>Quercus robur</i> and hornbeam <i>Carpinus betulus</i> standards grow

Project Section	Site name	Description
		<p>in the northern part of the wood, with a sparse understorey of hazel <i>Corylus avellana</i>, rare holly <i>Ilex aquifolium</i> and sycamore <i>Acer pseudoplatanus</i> saplings. The ground flora is mainly patches of dog's mercury <i>Mercurialis perennis</i>, herb-robert <i>Geranium robertianum</i>, ground ivy <i>Glechoma hederacea</i> and common nettle <i>Urtica dioica</i>, with leaf litter. Bramble <i>Rubus fruticosus</i> agg. and cleavers <i>Galium aparine</i> mix with these by the northern hedge. The hazel, hornbeam and field maple <i>Acer campestre</i> north of the old ditch regenerate more successfully than elsewhere. The southern part of this half is mainly oak, yew and ash with hazel dominating the understorey. A pheasant feeding area stands among the yews. A small patch of cherry laurel <i>Prunus laurocerasus</i> grows alongside an old ditch.</p>
A	Hall Plantation	<p>This is a moderately sized wood with a diverse canopy of mostly sycamore <i>Acer pseudoplatanus</i>, ash <i>Fraxinus excelsior</i> and occasional oak <i>Quercus robur</i>. A damp area supports a slightly richer ground flora with cuckoo flower <i>Cardamine pratensis</i>, lesser celandine <i>Ficaria Verna</i>, numerous patches of bluebell <i>Hyacinthoides non-scripta</i>, locally abundant winter aconite <i>Eranthis hyemalis</i>, snowdrop <i>Galanthus nivalis</i>, occasional three-nerved sandwort <i>Moehringia trinervia</i>, occasional primrose <i>Primula vulgaris</i>, ransoms <i>Allium ursinum</i> and two large yew trees <i>Taxus baccata</i>.</p> <p>The wood is somewhat disturbed, and a number of non-native species are present. The northern section has been thinned</p>
A	Hapton Common	<p>A wet site notified for its species-rich marshy grassland. It is composed of two fields that lie either side of a small tributary of the River Tas.</p> <p>The northern field is grazed and is the most species rich part of the site. This field is wet throughout, with an artificial pond to the centre and a few small ditches. The vegetation is diverse, with frequent tufted forget-me-not <i>Myosotis laxa</i>, hard rush <i>Juncus inflexus</i>, fleabane <i>Pulicaria dysentrica</i> water mint <i>Mentha aquatica</i> and meadow buttercup <i>Ranunculus acris</i>. Some areas, especially to the south of this field, show signs of poaching. The stream that divides the site is clear and fast flowing, the banks being dominated by willow, alder <i>Alnus glutinosa</i> and hawthorn <i>Crataegus monogyna</i>. The southern field contains an area of mature alder coppice close to the stream, with abundant false oat grass <i>Arrhenatherum elatius</i> and perennial sow thistle <i>Sonchus arvensis</i> beneath.</p> <p>Norfolk Flora Group recorded several scarce species north of the stream including bog pimpernel <i>Anagallis tenella</i> and tawny sedge <i>Carex hostiana</i>.</p>
A	Hethel Pond and 'The Drift'	<p>This site consists of an interesting pond with a rich and varied marginal flora dominated by creeping bent and jointed rush <i>Juncus articulatus</i> with small sweet vernal-grass <i>Glyceria</i></p>

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		<p><i>declinata</i>, water mint <i>Mentha aquatica</i>, fool's water-cress <i>Apium nodiflorum</i>, tufted forget-me-not <i>Myosotis cespitosa</i> and great yellow-cress <i>Rorippa amphibia</i>, plus the adjacent neutral grassland known as 'The Drift', grasses include meadow foxtail <i>Alopecurus pratensis</i>, yorkshire fog <i>Holcus lanatus</i>, cock's-foot <i>Dactylis glomerata</i> and rough meadow-grass <i>Poa Trivialis</i>. A small amount of scrub sits on top of a steep bank to the west of the pond, but elsewhere the banks are gently sloping with little shading and a rich marginal vegetation.</p>
A	Home Wood and The Belt	<p>A varied woodland site which is crossed by numerous ancient boundary banks. The oldest trees are found in strips of woodland running down the eastern and western edges of the site whilst elsewhere the woodland is younger and of less interest. A key feature is the presence of the wild service-tree <i>Sorbus torminalis</i> which is rare in Norfolk. Most of the site is broad-leaved semi-natural woodland. The composition of the canopy varies greatly across the site but generally includes ash <i>Fraxinus excelsior</i>, oak <i>Quercus robur</i>, field maple <i>Acer campestre</i> and hornbeam <i>Carpinus betulus</i>.</p> <p>The north is an area of mixed woodland with about 10- 20% of the trees being planted conifers, mainly sitka spruce <i>Picea sitchensis</i> and Douglas fir <i>Pseudotsuga menziesii</i>. This mixed woodland area is separated from the rest of the site by a thin strip of planted oaks and a large bank with ditches either side.</p>
A	Horse Fen	<p>An area of wet grassland which has been heavily invaded by scrub and is now restricted to small pockets at the northern end of the site. The grassland is generally neutral but with basic influence. Areas of scrub to the west and east of the site have been cleared and flora similar to that of the grassland have developed. There has been a lot of regrowth from the stumps.</p>
A	Horse Fen Carr	<p>Horsefen Carr is an area of semi-natural woodland which is divided into two parts by the River Waveney. Both parts of the wood are very different in character.</p> <p>The northern section has a fairly open canopy dominated by alder <i>Alnus glutinosa</i> and ash <i>Fraxinus excelsior</i> with occasional oak <i>Quercus robur</i>. The shrub layer is variable but dense towards the centre and the western boundary. Regeneration is high and young trees make a significant contribution to the understorey. The ground flora is poor.</p> <p>The southern section is rather neglected. Alder, including old coppice trees, ash and oak form an open canopy over a dense impenetrable understorey of sloe, hawthorn and elder. The ground flora is similar to that found in the north.</p> <p>A population of earth-star fungus <i>Gaestrum</i> sp. is present at the southernmost edge of the site.</p>

Project Section	Site name	Description
A	Horseford Meadow	<p>A small area of grassland flooded by the adjacent river during winter. Creeping bent <i>Agrostis stolonifera</i> and yorkshire-fog <i>Holcus lanatus</i> are the commonest grasses with meadow cat's-tail <i>Phleum pratense</i>, red fescue <i>Festuca rubra</i> and meadow fescue <i>Festuca pratensis</i> present less frequently. The most frequent herbs include creeping buttercup <i>Ranunculus repens</i> and large bird's-foot trefoil <i>Lotus pedunculatus</i>. Along the riverbanks hairy willowherb <i>Epilobium hirsutum</i> and hemp-agrimony <i>Eupatorium cannabinum</i> form tall stands.</p>
A	Long Plantation	<p>This is principally a beech <i>Fagus sylvatica</i> woodland although it contains a wide variety of other trees. A ride crosses the site. Beech constitutes about 30% of the canopy, the rest being a mixture of ash <i>Fraxinus excelsior</i>, oak <i>Quercus robur</i>, lime <i>Tilia</i> sp., birch <i>Betula pendula</i> and horse-chestnut <i>Aesculus hippocastanum</i>. The canopy is open in places. The understorey is of young coppiced hazel <i>Corylus avellana</i> with elder <i>Sambucus nigra</i>, ash and snowberry <i>Symphoricarpos rivularis</i>. The ground flora is largely dog's mercury <i>Mercurialis perennis</i>, nettle <i>Urtica dioica</i> and bramble <i>Rubus fruticosus</i> agg..</p> <p>The ride supports a rank vegetation of ground-ivy <i>Glechoma hederacea</i>, buttercup <i>Ranunculus</i> sp., forget-me-not <i>Myosotis</i> sp. and wood brome <i>Bromus giganteus</i>.</p>
A	Muir Lane Meadow	<p>This is a very small area of tall marshy grassland which is ungrazed. The grassland has very sparse scattered scrub and saplings and is surrounded by tall thick hedgerows. The site is dominated by tall rank growth of false oat-grass <i>Arrhenatherum elatius</i> mixed with hard rush <i>Juncus inflexus</i> and yorkshire-fog <i>Holcus lanatus</i>.</p> <p>Drier areas tend to be species-poor with only common bent <i>Agrostis capillaris</i>, hedge bindweed <i>Calystegia sepium</i> and field bindweed <i>Convolvulus arvensis</i> in addition to the species above. Wetter areas have creeping bent <i>Agrostis stolonifera</i>, red fescue <i>Festuca rubra</i>, false fox-sedge <i>Carex otrubae</i> and spiked sedge <i>Carex spicata</i>. Reed canary-grass <i>Phalaris arundinacea</i> and tall fescue <i>Festuca arundinacea</i> form small stands.</p>
A	Mulbarton Common	<p>This is a very small area of tall marshy grassland which is ungrazed. The grassland has very sparse scattered scrub and saplings and is surrounded by tall thick hedgerows.</p> <p>The site is dominated by tall rank growth of false oat-grass <i>Arrhenatherum elatius</i> mixed with hard rush <i>Juncus inflexus</i> and yorkshire-fog <i>Holcus lanatus</i>. Patches of common fleabane <i>Pulicaria dysentrica</i> occur across the site, particularly in damper areas. Drier areas tend to be species-poor.</p>

Project Section	Site name	Description
A	New Plantation and Brick Kiln Covert	<p>Most this site is semi-natural broadleaved woodland although there is an area of plantation to the east. One of the key features of this site is the presence of a single wild service-tree <i>Sorbus torminalis</i>, a species rare in Norfolk. Ancient woodland banks cross the site and remain intact. The canopy of the semi-natural woodland is largely dominated by ash <i>Fraxinus excelsior</i> with occasional downy birch <i>Betula pubescens</i> and Japanese larch <i>Larix kaempferi</i>.</p> <p>The most interesting area of the woodland is a thin strip along the western edge. Here the canopy is dominated by pedunculate oak <i>Quercus robur</i> with frequent hornbeam <i>Carpinus betulus</i> and field maple <i>Acer campestre</i> throughout and ash to the north. To the east of the site is an area with closely planted saplings in protective tube</p>
A	Norton's Wood	<p>The site consists of a long, rectangular area of broad-leaved woodland on a clay soil, divided into two by an old hedge boundary and ditch, with a ride immediately to the east. The wood has regenerated naturally following the felling of a Norway spruce plantation in 1939. Prior to that, the site was arable. A small, shaded pond is located in the far south-east corner of the woodland, with ditches around the woodland and a channel dug from the adjacent road draining into it.</p> <p>The canopy is composed predominantly of ash <i>Fraxinus excelsior</i> and pedunculate oak <i>Quercus robur</i>, the understorey is composed largely of coppiced hazel <i>Corylus avellana</i> and hawthorn <i>Crataegus monogyna</i>. The ground flora in the woodland is poor.</p>
A	Roydon Fen	<p>Roydon Fen is a mosaic of woodland, scrub and fen habitats which is managed by Suffolk Wildlife Trust. There is a boardwalk along the south-east of the site which is open for the public.</p> <p>Fen areas are largely restricted to the centre of the site and are dominated by great fen-sedge <i>Cladium mariscus</i>. In some areas the habitat is species poor with abundant purple moor-grass <i>Molinia caerulea</i> and scattered hemp-agrimony <i>Eupatorium cannabinum</i>, reed <i>Phragmites australis</i> and blunt-flowered rush <i>Juncus subnodulosus</i>. To the south of the site is an area of fen meadow dominated by purple moor-grass. Scrub is scattered throughout the fen area. Towards the edges this grades into carr woodland with a canopy dominated by alder <i>Alnus glutinosa</i>.</p>
A	Smockmill Common	<p>This is a complex and very rich site with a diversity of species-rich habitats. The site lies over a variable soil which ranges from dry acidic through to water-logged and basic-rich soils. A track runs north-south across the site. The ground rises eastwards from the track and here pedunculate oak <i>Quercus robur</i> dominates a woodland canopy with ash <i>Fraxinus excelsior</i>, sycamore <i>Acer pseudoplatanus</i>, downy birch <i>Betula pubescens</i></p>

Project Section	Site name	Description
		<p>and occasional old beech <i>Fagus sylvatica</i>. In damper areas alder <i>Alnus glutinosa</i> forms a canopy with crack-willow <i>Salix fragilis</i>.</p> <p>Grassland areas are generally damp with hard rush <i>Juncus inflexus</i> and meadowsweet <i>Filipendula ulmaria</i>. Drier areas support yorkshire-fog <i>Holcus lanatus</i>, red fescue <i>Festuca rubra</i>, sweet vernal grass <i>Anthoxanthum odoratum</i>, common dog-violet <i>Viola riviniana</i>, selfheal <i>Prunella vulgaris</i> and creeping cinquefoil <i>Potentilla reptans</i>.</p>
A	Spring Meadow	<p>This is a small but interesting and varied area of grassland with species-rich flushes and elevated drier areas supporting forb-rich neutral to calcareous grassland. The site is surrounded by semi-improved grassland and is lightly grazed by cattle. Most of the site consists of basic marshy grassland with abundant hard rush <i>Juncus inflexus</i>, glaucous sedge <i>Carex flacca</i>, common sedge <i>Carex nigra</i>, and carnation sedge <i>Carex panicea</i>.</p> <p>An area of basic flush lies in the middle of the site. Here grasses are absent, the sward being dominated by bryophytes, small sedges and rushes. An area of basic flush lies in the middle of the site. Drier areas appear to be more neutral with grasses such as rough meadow-grass, crested dog's-tail <i>Cynosurus cristatus</i>, perennial rye-grass <i>Lolium perenne</i>, red fescue <i>Festuca rubra</i>, sweet vernal-grass <i>Anthoxanthum odoratum</i> and quaking grass <i>Briza media</i>.</p>
A	Street Plantation and Bracon Hall Lake	<p>This wood is largely dominated by ash <i>Fraxinus excelsior</i> but also contains areas of wetter woodland and plantation areas as well as a lake to the west. The woodland is somewhat variable in structure although it largely contains semi-mature or mature trees. Most of the area has been thinned in the past resulting in a very open appearance with little deadwood.</p> <p>To the north of the site is an area of hybrid poplar <i>Populus sp.</i> over a wet flora of greater pond sedge <i>Carex riparia</i> and water mint <i>Mentha aquatica</i> and dense scrub growth. To the south and the east are areas of conifer plantings, largely pine <i>Pinus sp.</i> amongst semi-natural trees. The lake has no aquatic or marginal vegetation although amphibious bistort <i>Polygonum amphibium</i> is fairly common.</p>
A	Swardeston Common	<p>Site supports several different habitats including a range of grassland types, scrubland, reed bed and ponds.</p> <p>The predominant habitat on the common is scrub in which nightingales have been recorded breeding.</p> <p>To the west there is an area of poor semi-improved grassland which is currently cut for hay in July. The ground is tussocky in areas, with some bare patches and generally species poor.</p> <p>Central to the site is a patch of semi-improved acid grassland with a short, soft sward with an even mix of grasses and plants</p>

Project Section	Site name	Description
		<p>along with some taller yorkshire-fog <i>Holcus lanatus</i> and scattered stands of rosebay willowherb <i>Chamerion angustifolium</i>.</p> <p>An area of marshy grassland at the northern end of the site shows high diversity with an abundance of flowering plants including abundant butterbur <i>Petasites hybridus</i> and yellow rattle <i>Rhinanthus minor</i>. Directly behind the area of marshy grassland, a strip of swamp is dominated by common reed <i>Phragmites australis</i>.</p> <p>Of the three ponds on site, two are severely affected by run-off from the road but one other shows a healthier abundance of wildlife.</p>
A	Tas Pond	<p>This is a small pond situated within a semi-improved meadow adjacent to the River Tas. The pond is open with well colonised margins and is banked by two mounds.</p> <p>The aquatic vegetation is rather limited but with abundant least water-lily <i>Nuphar pumila</i>. The margins of the pond have lush growth of bulrush <i>Typha latifolia</i>, common reed <i>Phragmites australis</i>, soft-rush <i>Juncus effusus</i>. With other species occurring less frequently.</p>
A	Tas Valley	<p>An area of improved marshy grassland dominated by yorkshire-fog <i>Hocus lanatus</i>, with patches of spring activity which allow for more interesting and diverse flora.</p> <p>The ditches along the edges of the site are relatively diverse although the water quality is poor.</p>
A	The Carr	<p>A mosaic of woodland, grassland and swamp on neutral alkaline soil, situated adjacent to the river Waveney.</p> <p>Most of the site consists of dense osier <i>Salix viminalis</i>, crack-willow <i>Salix fragilis</i> and grey willow <i>Salix cinerea</i> or a mixture of willow <i>Salix</i> spp., elder <i>Sambucus nigra</i> and hawthorn <i>Crataegus monogyna</i> often forming an impenetrable mass, with occasional mature standards. Where the woodland floor is heavily shaded there is no ground flora but there are numerous small, wet, open areas with stands of vegetation.</p> <p>In addition to this there are some patches of scrubby woodland, an area of reed dominated fen in the centre of the site and a small area of forb-rich damp grassland is situated to the north-west.</p>
A	The Carrs Woodland	<p>A diverse site with damp and dry deciduous woodland, mixed woodland, grazed parkland, swamp, marshy grassland, ponds with scrub, ditches including a species-rich chalky ditch and a flowing stream. The stream flows through a valley, with the woodland occurring on the slopes in the southern half, and the north-west of the site.</p>

Project Section	Site name	Description
		Woodland makes up almost half of the site: The far northern woodland is mainly coppiced hazel <i>Corylus avellana</i> . The southern woodland has pedunculate oak <i>Quercus robur</i> , sycamore <i>Acer pseudoplatanus</i> and some ash <i>Fraxinus excelsior</i> . The southwestern woodland is mixed including conifers: European larch <i>Larix decidua</i> , Scots pine <i>Pinus sylvestris</i> and Douglas fir <i>Pseudotsuga menziesii</i> .
A	The Grange, Wreningham	<p>Unimproved basic grassland managed as a meadow and cut once a year in autumn. It is part of a large, privately-owned garden which includes an area of broad-leaved semi-natural woodland.</p> <p>It is enclosed by a beech <i>Fagus sylvatica</i> hedgerow along its western boundary, along the eastern boundary by a large pond. The meadow is damp in places, particularly along the fringes of the pond and at the southern end where it merges with broad-leaved semi-natural woodland.</p>
A	The Grove	The site contains a mosaic of habitats that surround a small artificial lake. The north of the site is a semi-formal area containing woodland (<i>Fraxinus excelsior</i> and crack-willow <i>Salix fragilis</i> over common nettle <i>Urtica dioica</i>), scrub, marshy grassland and fen habitats. In the north of the site there has also been much ornamental planting. The lake is covered by a dense mat of white water-lily <i>Nymphaea alba</i> and yellow water-lily <i>Nuphar lutea</i> and there is a dense margin of lesser pond-sedge <i>Carex acutiformis</i> and patches of bulrush <i>Typha latifolia</i> .
A	Tibenham Airfield	The majority of the site is extensive, moderately species-rich grassland, with areas that are more species rich and occasional patches of scrub. Much of the grassland is managed for silage/hay and the site is notable for the small populations of bee orchid <i>Ophrys apifera</i> scattered across the site. Pyramidal orchids <i>Anacamptis pyramidalis</i> are also present. Grass vetchling <i>Lathyrus nissolia</i> is frequent amongst the grassland. Cowslips <i>Primula veris</i> was noted in the west.
A	Valley Farmhouse Meadow	<p>A single field on light loamy soil which is generally neutral, but slightly basic. The field is generally uniform. There have been records of green-winged orchid <i>Orchis morio</i> have been recorded on the site as well as meadow saxifrage <i>Saxifraga granulata</i>.</p> <p>Broadleaf hedges occur around the field. There is also a wet ditch which runs down the eastern side of the site.</p> <p>There is a section in the south which is different from the rest of the field, having been ploughed in the past and then allowed to revert to grassland.</p>
A	Wreningham Marsh	An area of marshy grassland which contains smaller patches of tall fen and semi-improved wet meadow. A wide drain crosses

Project Section	Site name	Description
		the site. The tall fen vegetation forms a sizable stand to the northeast of the site whilst in the northwest corner is an area of wet meadow.
A	Wreningham Meadow	A natural well drained grassland. The sward is dominated by grasses such as yorkshire-fog <i>Holcus lanatus</i> and cock's-foot <i>Dactylis glomerata</i> . There are also a range of flowering pants.
B	Ash Plantation	<p>A small ancient woodland listed in the England Nature's Ancient Woodland Inventory. The site is partly enclosed by a ditch and a track which runs along the eastern margin separating the wood from the surrounding arable land. The dominant standard trees are oak and ash with frequent sycamore. The shrub layer provides good habitat for nesting birds.</p> <p>Dead wood is abundant and well colonised by woodland invertebrates. The supports a small rookery in the northeastern corner and a tawny owl <i>Strix aluco</i> has been recorded in the wood.</p>
B	Bonny Wood	<p>Two areas of mixed deciduous woodland which borders an ancient woodland SSSI to the north and northeast. The southern section is managed through rotational coppicing, the northern section provides a woodland corridor to another woodland. A number of ancient woodland indicators are present in the ground flora.</p> <p>The wood provides habitat for a wide range of species including hazel dormouse <i>Muscardinus avellanarius</i> bat species, and a number of uncommon butterflies including silver-washed fritillary <i>Argynnis paphia</i>, white admiral <i>Limenitis camilla</i> and purple emperor <i>Apatura iris</i>.</p>
B	Bramford Meadows	<p>A floodplain grazing marsh with a series of low-lying wet meadow crossed and bounded by a network of ditches. The site also includes an area of wet woodland and scattered blocks of ditch and riverside scrub.</p> <p>The ditches are of high-water quality and support a diverse aquatic and emergent flora including flowering-rush <i>Butomus umbellatus</i>, water plantain <i>Alisma plantago-aquatica</i> and purple loosestrife <i>Lythrum salicaria</i>. This habitat supports priority mammals including water vole <i>Arvicola amphibius</i>, otter <i>Lutra lutra</i> and bats (particularly Daubenton's <i>Myotis daubentonii</i>).</p> <p>The site is also of considerable importance to invertebrates (Orthoptera) and birds (Barn owl <i>Tyto alba</i>, reed bunting <i>Emberiza schoeniclus</i>, song thrush <i>Turdus philomelos</i>) and reptiles (grass snake <i>Natrix helvetica</i>, slow-worm <i>Anguis fragilis</i>, common lizard <i>Zootoca vivipara</i>)</p>
B	Bullen Wood	The site is listed in the English Nature's Ancient Woodland Inventory. Developments on the western side of the site have resulted in the clearance of part of the wood. The remaining

Project Section	Site name	Description
		area consists of hazel ash and field maple <i>Acer campestre</i> coppice with mature oak standards. The woodland contains a fair diversity of plant species including Dog's mercury <i>Mercurialis perennis</i> , bluebell <i>Hyacinthoides non-scripta</i> , Twayblade <i>Neottia</i> , early purple orchid <i>Orchis mascula</i> , spurge laurel <i>Daphne mezereum</i> , primrose <i>Primula vulgaris</i> and moschatel <i>Adoxa moschatellina</i> . There is deadwood which provides valuable habitat for hole-nesting birds and deadwood invertebrates.
B	Burgate Great Green	A large common comprised of mainly unimproved acidic grassland with wet winter flushes and some areas of neutral grassland. Three large ponds are located in the southern part of the Green, which additional opportunities for invertebrates and amphibians including great crested newt <i>Triturus cristatus</i>
B	Burgate Little Green	A largely unimproved and species rich grassland, containing species characteristic of ancient grassland ox-eye daisy <i>Leucanthemum vulgare</i> , bird's-foot-trefoil <i>Lotus corniculatus</i> , common knapweed <i>Centaurea nigra</i> , common twayblade <i>Neottia ovata</i> , quaking grass <i>Briza media</i> , pepper saxifrage <i>Silaum silaus</i> , spiny retharrow <i>Ononis repens</i> , lady's bedstraw <i>Galium verum</i> and sulphur clover <i>Trifolium ochroleucon</i> . There is a pond which provides valuable habitats for amphibians and invertebrates. Some patches of mixed scrub provide additional habitat and opportunities for invertebrates and birds, including turtle dove <i>Streptopelia turtur</i> and whitethroat <i>Sylvia communis</i> .
B	Chaffinch Wood	A small fragment of ancient woodland. An unusual historical feature of the woodland is a double Woodbank which runs along the eastern margin. A large proportion of the wood is dominated by pedunculate oak <i>Quercus robur</i> and ash <i>Fraxinus excelsior</i> with a dense understorey of hazel coppice <i>Corylus avellana</i> . Part of the centre area has been cleared for a Scout hut, other management works include the planting of ash trees and the widening of rides throughout the woodland which has enabled species rich-ground flora to develop.
B	Chalkeith Road Meadow	A meadow is situated to the south-east of Needham Market. There has been some planting of Norway Spruce <i>Picea abies</i> , but the meadow still supports a species-rich flora. Many of the plants recorded here are associated with chalky soils, for example yellow-wort <i>Blackstonia perfoliata</i> and carline thistle <i>Carlina vulgaris</i> . Pyramidal orchids <i>Anacamptis pyramidalis</i> and bee orchids <i>Ophrys apifera</i> have also been recorded. The site includes a dense mix of scrub with connectivity to neighbouring CWS Lion Inn Meadow and chalk pit.

Project Section	Site name	Description
B	Creeting St Mary Churchyard	A site which supports a diverse unimproved, herb-rich, dry grassland flora characteristic of the sands and gravels of this part of Suffolk. The lowland meadow includes species such as meadow saxifrage, spring sedge <i>Carex caryophyllea</i> and small scabious <i>Scabiosa columbaria</i> which are only occasionally found in the county. The unimproved grasslands are managed as a variety of sward heights and the ground is uneven with gentle slopes and patches of bare soil providing suitable habitat for a variety of invertebrates with yellow ant mounds also present. Priority species also recorded are yellowhammer <i>Emberiza citrinella</i> , spotted flycatcher <i>Muscicapa striata</i> and slow-worm <i>Anguis fragilis</i> .
B	Creeting St Mary Meadows	Three, low-lying wet meadows enclosed by hedges bordering a tributary of the River Gipping, which have a species mix characteristic of wet grassland with southern marsh orchids <i>Dactylorhiza praetermissa</i> being recorded in abundance, as well as marsh valerian <i>Valeriana dioica</i> , meadow saxifrage <i>Saxifraga granulata</i> and fen bedstraw <i>Galium uliginosum</i> . A population of wood club-rush <i>Scirpus sylvaticus</i> , a scarce species in Suffolk, has been recorded growing in the northernmost meadow.
B	Fen Alder Carr	A mosaic of habitat ranging from open water and tall fen vegetation to dense alder carr. The pond is colonised by a range of aquatic and emergent species and provides valuable breeding habitat for amphibians. The alder plantation contains many mature, multi-stemmed trees. Bird life is abundant in this area of woodland including siskin <i>Spinus spinus</i> , redpoll <i>Acanthis flammea</i> and chaffinch <i>Fringilla coelebs</i> . The most vociferous birds using the alder carr are rooks <i>Corvus frugilegus</i> , occupying a large rookery high up in the tree canopy. Some areas are managed to prevent encroachment into patches of open fen, in these areas tall wetland plants occur. The site also supports good numbers of invertebrates.
B	Flordon Road Grassland	A matrix of grassland, scrub and woodland between the corridor of the River Gipping, Needham Lakes and the Geological SSSI at Creeting St Mary Pits. The soils are a mix of chalk, calcareous clay and more neutral sands. There is a rich flora with chalk grassland species like bee orchids <i>Ophrys apifera</i> and pyramidal orchids <i>Anacamptis pyramidalis</i> in the mown areas and carline thistle <i>Carlina vulgaris</i> , centaury <i>Centaureum erythraea</i> , ploughman's spikenard <i>Pentanema squarrosus</i> and wild liquorice <i>Astragalus glycyphyllos</i> in the taller grassland. The site provides a rich habitat for birds as well as reptiles and amphibians.
B	Flowtonhall Grove	A small ancient woodland composed of almost entirely pedunculate oak <i>Quercus robur</i> , field maple <i>Acer campestre</i> and hazel <i>Corylus avellana</i> coppice, with scattered oak and ash

Project Section	Site name	Description
		<i>Fraxinus excelsior</i> standards throughout. The shrub layer provides a good habitat for nesting birds, particularly warblers. Herb-paris <i>Paris quadrifolia</i> . A scarce ancient woodland indicator has been recorded in the ground layer. A small linear pond situated in the north-eastern corner is silted up and of limited value for wildlife.
B	Fore and Bushey Groves	Two small woods separated by a track and an area of dense scrub, formerly joined together as one larger woodland. Most of the wood has a uniform structure of field maple <i>Acer campestre</i> and hazel coppice <i>Corylus avellana</i> with ash <i>Fraxinus excelsior</i> standards. The southern half is occupied by a plantation of sycamore <i>Acer pseudoplatanus</i> . In addition, a small section has been planted with Scots pine <i>Pinus sylvestris</i> . A notable feature of the wood is the wild service-tree <i>Sorbus torminalis</i> , rare both nationally and regionally. The ground flora is similar in both woodlands and is dominated by dog's mercury <i>Mercurialis perennis</i> . Evidence of woodpecker is found throughout the wood. Sparrowhawk <i>Accipiter nisus</i> have also been observed.
B	Forrold Meadow	A species-rich grassland containing a good assemblage of meadow flora. The grassland supports a wealth of invertebrates and offers refuge for small mammals. Priority species hedgehog is recorded here. The ancient hedgerow and two ponds provide further structural diversity and habitat opportunities for wildlife including Priority species stag beetle <i>Lucanus cervus</i> , great crested newt <i>Triturus cristatus</i> , grass snake <i>Natrix helvetica</i> , dunnock <i>Prunella modularis</i> , house sparrow <i>Passer domesticus</i> and starling <i>Sturnus vulgaris</i> . Spotted flycatcher <i>Muscicapa striata</i> , turtle dove <i>Streptopelia turtur</i> and lesser-spotted woodpecker <i>Dryobates minor</i> have also previously been recorded.
B	Gipping Little Wood	A small ancient woodland enclosed by a ditch and an overgrown hedgerow. The tree canopy is composed of abundant ash and oak standards beneath which is a dense understorey of hazel, field maple, hawthorn and holy. Where there is sufficient light, the ground flora is dominated by dog's mercury <i>Mercurialis perennis</i> , interspersed with common nettle <i>Urtica dioica</i> . The woodland is unmanaged and has been neglected for some time.
B	Gittin Wood	An ancient woodland, the boundary is marked by a ditch and bank which is thought to be medieval in origin and is enclosed by a hedgerow. Tall mature pedunculate oak <i>Quercus robur</i> and neglected ash coppice <i>Fraxinus excelsior</i> form the tree canopy over a large proportion of the wood. One section however is dominated by mature sycamore <i>Acer pseudoplatanus</i> of which some have been coppiced in the past.
B	Great Newton Wood	An area of woodland listed on the English Nature's Ancient Woodland Inventory. The wood has a dense canopy of ash

Project Section	Site name	Description
		<i>Fraxinus excelsior</i> , with some pedunculate oak <i>Quercus robur</i> , field maple coppice <i>Acer campestre</i> and hornbeam <i>Carpinus betulus</i> . Hazel <i>Corylus avellana</i> coppice and occasional elder <i>Sambucus nigra</i> forms the shrub layer. The ground flora is dominated by dog's mercury <i>Mercurialis perennis</i> and contains a number of uncommon ancient woodland indicator species for example wood spurge <i>Euphorbia amygdaloides</i> and wood anemone <i>Anemone nemorosa</i> .
B	Guidepost Plantation	An ancient woodland bordered by a road on its northern and western margins and arable fields on the remaining sides. Pedunculate oak <i>Quercus robur</i> and ash <i>Fraxinus excelsior</i> are the main components of the canopy. Other woody species occur in the shrub layer and provide suitable nesting habitat for woodland birds particularly warblers. Additional bird and invertebrate habitats are provided by abundant deadwood.
B	Hall Farm Meadow	A meadow enclosed by ditches on two sides. The site is wet throughout the year. The northwestern corner of the meadow is dominated by lesser pond sedge <i>Carex acutiformis</i> . It is likely that this area will provide valuable shelter for wintering birds. The remainder of the site consists of species-diverse grassland which supports a wide range of wetland plants. Invertebrates, particularly butterflies are attracted to the numerous wildflowers. Small quantities of scarce species are present, for example fen bedstraw <i>Galium uliginosum</i> , meadow thistle <i>Cirsium dissectum</i> and early marsh-orchid <i>Dactylorhiza incarnata</i> .
B	Jacobites Wood	A small woodland located close to two large ancient woodlands: Burgate wood SSSI and Stubbing's wood. Despite its small size, the wood is noted for a number of scarce woodland species which it supports. These include herb-paris <i>Paris quadrifolia</i> , yellow archangel <i>Lamium galeobdolon</i> and goldilocks buttercup <i>Ranunculus auricomus</i> . Of particular importance is a population of spurge laurel <i>Daphne laureola</i> which is considered one of the largest populations of this species in the county.
B	Keyfield Groves	A small ancient woodland divided into two sections by a wide, shrubby track. The northern woodland is composed of hazel <i>Corylus avellana</i> and hornbeam <i>Carpinus betulus</i> coppice. Midland hawthorn <i>Crataegus laevigata</i> , and elder <i>Sambucus nigra</i> are abundant in the understorey. On the woodland floor, bramble <i>Rubus fruticosus</i> and dog's mercury <i>Mercurialis perennis</i> form a dense layer. The southern woodland consists of field maple <i>Acer campestre</i> , elder <i>Sambucus nigra</i> , rose <i>Rosa</i> sp., elm and hazel <i>Corylus avellana</i> . Large ash <i>Fraxinus excelsior</i> standards dominate the tree canopy. The shrub layer provides valuable habitat for breeding birds. The abundance of dead and dying wood, provides a source of food for invertebrates, fungi and birds.

Project Section	Site name	Description
B	Lion Inn Meadow and Chalk Pit	The site comprises of a mosaic of herb-rich chalky dry grassland and part of a disused chalk pit to the south. The site is bordered to the west by an ancient green lane with ancient hedgerows. The hedges and scrub mosaic of the site provide excellent bird nesting habitat with a number of warbler species and nightingale <i>Luscinia megarhynchos</i> having been recorded. The flora of the open grassland areas reflects the underlying chalk geology, including yellow-wort <i>Blackstonia perfoliata</i> , blue fleabane <i>Erigeron acer</i> , pyramidal orchid <i>Anacamptis pyramidalis</i> carline thistle <i>Carlina vulgaris</i> , fairy flax <i>Linum catharticum</i> , wild basil <i>Clinopodium vulgare</i> and centaury <i>Centaureum</i> sp..
B	Little Newton Wood	An area of ancient woodland, which provides a valuable refuge for wildlife and is an important feature in the intensively farmed surrounding landscape. The tree canopy is dominated by oak <i>Quercus robur</i> and ash <i>Fraxinus excelsior</i> with small amounts of hornbeam <i>Carpinus betulus</i> . Beneath the tree layers, hazel <i>Corylus avellana</i> coppice and elder <i>Sambucus nigra</i> form a dense understorey in places. The woodland floor is carpeted with dog's mercury <i>Mercurialis perennis</i> , bluebell <i>Hyacinthoides non-scripta</i> and wood anemone <i>Anemone nemorosa</i> .
B	Mellis Common	An area of common land partly enclosed by hedgerows. The western part of the site was ploughed during the last war and consequently supports a species-poor community. The remainder of the site is grazed regularly but mostly supports a high diversity of flowering plant. There are small depressions throughout the site which remain waterlogged throughout the year and support a range of wetland plants, whilst the higher areas support a number of old herb-rich grassland indicator species such as quaking grass <i>Briza media</i> and green-winged orchid <i>Anacamptis morio</i> . There are also a large number of ponds, some of which provide valuable habitat for breeding amphibians.
B	Miller's Wood	A patch of ancient woodland enclosed by a woodbank, parts of which were probably of medieval origin. Ditches divide the wood into compartments. The northern section of the wood is typical of ancient woodland and consist of hazel <i>Corylus avellana</i> and field maple <i>Acer campestre</i> coppice with pedunculate oak <i>Quercus robur</i> standards forming the tree layer. Further south, coppiced horse-chestnut <i>Aesculus hippocastanum</i> and sweet chestnut <i>Castanea sativa</i> are abundant. In contrast the remainder of the wood is a recent plantation consisting mainly of sycamore <i>Acer pseudoplatanus</i> with some beech <i>Fagus sylvatica</i> . The ground flora is reasonably varied Sanicle, violet, wood spurge and hairy St John's-wort are amongst the more uncommon plants on the species list

Project Section	Site name	Description
B	Muckinger Wood	A large ancient woodland, with an internal and external ditch bank system. the semi-natural structure of the wood has been altered by the extensive planting of conifers, mainly Scots pine <i>Pinus sylvestris</i> and Norway spruce <i>Picea abies</i> . Native woodland is restricted to the southern corner. Despite the widespread planting of non-native trees, the wood supports a diverse woodland flora, uncommon species include Oxlip <i>Primula elatior</i> , nettle leaved bellflower <i>Campanula trachelium</i> , herb-paris <i>Paris quadrifolia</i> , pale sedge <i>Carex pallescens</i> , stinking iris <i>Iris foetidissima</i> and yellow pimpernel <i>Lysimachia nemorum</i> . A woodland pond colonised by yellow flag provides additional valuable habitat for woodland invertebrate.
B	RAF Wattisham Woodland	Two areas of ancient woodland: Park Wood and Ten Wood. The woodland is of wet ash-field maple stand type, Ash <i>Fraxinus excelsior</i> is the dominant species, with frequent hazel <i>Corylus avellana</i> and field maple <i>Acer campestre</i> coppice and occasional pedunculate oak <i>Quercus robur</i> standards. Ancient woodland indicator plants, for example pendulous sedge <i>Carex pendula</i> can be found in small quantities.
B	Railway Meadows	Low lying meadows which remain wet throughout the year supporting a herb-rich community including a number of locally scarce plants such as yellow rattle <i>Rhinanthus minor</i> , ragged-robin <i>Lychnis flos-cuculi</i> , lesser spearwort <i>Ranunculus flammula</i> and fen bedstraw <i>Galium uliginosum</i> . The higher and drier parts support different plant communities. The meadow is enclosed by species rich hedgerows and bramble <i>Rubus fruticosus</i> agg. encroachment.
B	River Gipping (Sections)	Many stretches of the river Gipping are of high conservation value. Some sections support a diverse emergent fringe which provides suitable habitat for breeding water birds such as moorhen <i>Gallinula chloropus</i> and coot <i>Fulica atra</i> . Channel vegetation is dominated by water-Lilly but contains some uncommon plants such as arrowhead <i>Sagittaria sagittifolia</i> , and spiked water-milfoil <i>Myriophyllum spicatum</i> . Kingfisher <i>Alcedo atthis</i> , reed bunting <i>Emberiza schoeniclus</i> , reed warblers <i>Acrocephalus scirpaceus</i> , sedge warblers <i>Acrocephalus schoenobaenus</i> and tufted duck <i>Aythya fuligula</i> have been recorded breeding on the river. Warblers are also known to breed in structures such as locks. The river also supports a valuable mixed coarse fishery (Class A). Good populations of roach <i>Rutilus rutilus</i> , dace <i>Leuciscus leuciscus</i> , eel, tench <i>Tinca tinca</i> , perch <i>Perca fluviatilis</i> and pike <i>Esox lucius</i> occur in the river.
B	River Waveney (Sections)	Many stretched of the river Waveney are of conservation value. However, five sections have been selected as being of particular importance for aquatic wildlife. These sections have a species

Project Section	Site name	Description
		rich aquatic flora and fringing vegetation which provides suitable habitat for water birds such as, moorhen <i>Gallinula chloropus</i> , mallard <i>Anas platyrhynchos</i> and coot <i>Fulica atra</i> . The river Waveney is also noted for its significant population of breeding kingfisher <i>Alcedo atthis</i> , which are known to breed on at last for of the selected sections.
B	Round Wood and Elms Grove	An ancient woodland bordered by a medieval bank and ditch and hedgerows. Dominant trees include pedunculata oak <i>Quercus robur</i> and ash <i>Fraxinus excelsior</i> with frequent hazel <i>Corylus avellana</i> coppice. There is a good diversity of uncommon woody species including midland hawthorn <i>Crataegus laevigata</i> , guelder-rose <i>Viburnum opulus</i> , crab apple <i>Malus sylvestris</i> , spindle <i>Euonymus europaeus</i> , early-purple orchid <i>Orchis mascula</i> , wood anemone <i>Anemone nemorosa</i> , early dog-violet <i>Viola reichenbachiana</i> , sanicle <i>Sanicula europaea</i> and stinking iris <i>Iris foetidissima</i> . The woodland also supports woodland birds, particularly warblers.
B	Somersham Park	An ancient woodland, enclosed by a medieval ditch and woodbank. Most of the woodland is ash and field maple coppice with oak standards. There is a small area of recent pedunculate oak <i>Quercus robur</i> and ash plantation <i>Fraxinus excelsior</i> in the centre of the woodland. The wood supports breeding birds including cuckoo <i>Cuculus canorus</i> , nightingale <i>Luscinia megarhynchos</i> and warblers. There is also a pond situated on the western boundary which supports a good population of dragonfly and amphibian larvae.
B	St John's Grove	A small ancient woodland, enclosed by a medieval ditch and woodbank and is also bordered by a species rich hedgerow. The woodland is predominantly of hornbeam <i>Carpinus betulus</i> coppice with pedunculate oak <i>Quercus robur</i> and Turkey oak <i>Quercus cerris</i> standards. Small areas of ash <i>Fraxinus excelsior</i> , field maple <i>Acer campestre</i> and hazel <i>Corylus avellana</i> coppice are confined mainly to the edges of the wood. There is a large pond situated in the southern corner which provides valuable habitat, particularly for dragonflies.
B	Stubbing's Wood	An ancient woodland dominated by pedunculate oak <i>Quercus robur</i> standards with tall ash <i>Fraxinus excelsior</i> and field maple <i>Acer campestre</i> coppice, the understorey is made up of hazel <i>Corylus avellana</i> coppice with small amounts of hawthorn <i>Crataegus monogyna</i> and spindle <i>Euonymus europaeus</i> . The ground flora supports woodland plants associated with ancient woodland such as wood anemone <i>Anemone nemorosa</i> and oxlip <i>Anemone nemorosa</i> . There has been lots of management to the wood including the clearing of a wide track to a coppiced area and the clearing of a glade which supports a species-rich plant community, including wetland plants.

Project Section	Site name	Description
B	Suffolk Business Park Meadow - Formerly EEB	A small area of species-rich grassland which contains a high diversity of flowering plants. In addition to many fairly common meadow species, the sites support local scarce species such as, strawberry clover <i>Trifolium fragiferum</i> , stone parsley <i>Sison amomum</i> , fairy flax <i>Linum catharticum</i> and spiny restharrow <i>Ononis spinosa</i> . Pyramidal orchids <i>Anacamptis pyramidalis</i> and varying numbers of bee orchids <i>Ophrys apifera</i> are also present. One plant of greater burnet-saxifrage <i>Pimpinella major</i> has also been found previously on this site.
B	The Marsh	An area of common land comprising of a mosaic of low-lying wet areas, with drier grassland and patches of scrub. The scrub provides structural diversity opportunities for nesting birds, amphibians and invertebrates. The grassland community supports a range of flowing plants. Of particular botanical interest is the presence of adder's-tongue <i>Ophioglossum vulgatum</i> an indication of unimproved grassland which is a priority species.
B	Thornham Estate Woods	An estate made up of several woodlands one of which (Dutchess wood) is ancient, the rest are considered to be secondary woodland planted 100-200 years ago. There are some clearings and rides which support species-rich flora including ragged robin <i>Lychnis flos-cuculi</i> , cowslip <i>Primula veris</i> and common spotted orchid <i>Dactylorhiza fuchsia</i> . Plants associated with ancient woodlands occur in some places on the estate including herb-paris <i>Paris quadrifolia</i> , wild service-tree <i>Sorbus torminalis</i> and wood anemone <i>Anemone nemorosa</i> . The woodland supports a good range of butterflies. Of conservation value is Birdshedge Grove. The waterlogged areas at the base of the slope support a diverse range of plants and birds. Furthermore, three rare species of moss have been recorded here. The ponds on the estate support a valuable refuge for wetland plants, aquatic invertebrates and great crested newt <i>Triturus cristatus</i> .
B	Thrandeston Marsh	An area of common land consisting of a number of plant communities. The site is designated for its important wetland community. The margins of the meadow are species-poor grassland, whilst the remainder of the site remains waterlogged throughout the year and supports a herb-rich plant community including some wetland species. Ditches which enclose the meadow are fringed with sedge and yellow flag.
B	Topcroft Farm Meadows	A large area of herb rich grassland. The sites consist of a mosaic of habitats including wet woodland, species-rich marshy grassland which makes up the majority of the site, drier semi-improved neutral grassland and rush dominated pasture. A number of locally rare species have been recorded including early marsh-orchid <i>Dactylorhiza incarnata</i> , marsh valerian

Project Section	Site name	Description
		<i>Valeriana dioica</i> and tawny sedge <i>Carex hostiana</i> . The meadow has excellent structural diversity through the range of habitats present on site such as wet woodland, tall swards, hedgerows, marshy grassland and scattered scrub.
B	Upper Badley Wood	A small area of ancient woodland enclosed by a ditch, woodland and hedgerow which are possibly of medieval origin. The wood is dominated by ash standards <i>Fraxinus excelsior</i> with abundant hornbeam coppice <i>Carpinus betulus</i> . The understorey is composed of Midland hawthorn <i>Crataegus laevigata</i> , field maple <i>Acer campestre</i> and hazel <i>Corylus avellana</i> . The ground flora is rather impoverished due to the dense shade cast by the hornbeam coppice. Deadwood provides habitat for invertebrates and holes for nesting birds.
B	Wortham Long Green	The site is made of areas with unimproved grassland valued for their flora and areas which kept short for recreational use. There is an area of acidic grassland which is particularly valuable as it supports species such as mouse-ear hawkweed <i>Pilosella officinarum</i> , heath bedstraw <i>Galium saxatile</i> and mat-grass <i>Nardus stricta</i> , a rare and declining Suffolk grass. The rest of the site is neutral grassland with scattered scrub and ponds which support great crested newt <i>Triturus cristatus</i> .
B, C	Bushey Ley Farm (Arable Fields)	A 40 acre organic farm with consisting of good structural diversity. The site contains arable areas, grassland, hedgerows, an orchard and a stream running west-east through the centre of the farm, providing a varied range of habitats. The site contains a diverse range of flora including a large population of corn buttercup <i>Ranunculus arvensis</i> of which represents 90% of the national population.
C	Bentley Long Wood	Situated on a hilltop plateau and forms part of a cluster of interconnected ancient woodland areas. The site is dominated by oak <i>Quercus robur</i> , with abundant ash <i>Fraxinus excelsior</i> , field maple <i>Acer campestre</i> , spindle <i>Euonymus europaeus</i> , wild cherry and hazel <i>Corylus avellana</i> . The woodland supports many bird and invertebrate species, and the abundance of bramble <i>Rubus fruticosus</i> agg., provides habitat for hazel dormouse <i>Muscardinus avellanarius</i> .
C	Borley`s Wood	A small area of ancient woodland that is near Elmsett Park Wood, which has been scheduled as a Site of Special Scientific Interest. The dominant species in the woodland are ash <i>Fraxinus excelsior</i> , field maple <i>Acer campestre</i> and hazel <i>Corylus avellana</i> coppice along with mature standards of pedunculate oak <i>Quercus robur</i> . Spurge laurel <i>Daphne laureola</i> and wood millet <i>Milium effusum</i> , two indicators of ancient woodland, are also present on the site.

Project Section	Site name	Description
C	Brimlin Wood	Listed in English Nature's Ancient Woodland Inventory. Despite this, a large proportion of the site has been altered by modern softwood planting. The remaining areas are characterised by oak <i>Quercus robur</i> , maple <i>Acer campestre</i> and hazel <i>Corylus avellana</i> coppice. A pond is present on the site which provides important habitats for invertebrates and dragonfly larvae.
C	Burstall Long Wood	One of a group of ancient woodlands listed on English Nature's Inventory of Ancient Woodland. The woodland is enclosed by a ditch and a bank, a feature indicative of ancient woodlands. The tree canopy contains wood coppice and ash <i>Fraxinus excelsior</i> , with mature standards of oak <i>Quercus robur</i> . The wood also contains plants indicative of ancient woodlands including wood spurge <i>Euphorbia amygdaloides</i> , spurge laurel <i>Daphne laureola</i> and bluebells <i>Hyacinthoides non-scripta</i> .
C	Chantry Park, Beechwater and Meadow	Chantry Park is a valuable site for wildlife due to its large size and high-quality habitat mosaic. Surveys conducted in 2013 showed the site provided important habitats for a number of priority bird species including s dunnoek <i>Prunella modularis</i> , starling <i>Sturnus vulgaris</i> , song thrush <i>Turdus philomelos</i> and lesser redpoll <i>Acanthis cabaret</i> . The site also provides a good habitat for bats (brown long-eared <i>Plecotus auritus</i> , common pipistrelle <i>Pipistrellus pipistrellus</i> and noctule <i>Nyctalus noctula</i> , hedgehog <i>Erinaceus europaeus</i> and stag beetles <i>Lucanus cervus</i> , all of which are priority species). The site also has an exceptional grass snake <i>Natrix helvetica</i> population, whilst also providing habitats to common lizard <i>Zootoca vivipara</i> and slow-worm <i>Anguis fragilis</i> . The site contains areas of neutral grassland, woodland (with ancient and veteran trees) and a fishing pond which provides habitats for waterbirds and aquatic invertebrates.
C	Hadleigh Railway Walk	The site includes a range of semi-natural habitats along its length including, scrub, herb-rich grassland, secondary woodland and ancient woodland. Of particular conservation concern for the site is the presence of an open chalky boulder clay grassland area. The flora in this area is typical of unimproved grassland with chalky influence, including orchid, quaking grass <i>Briza media</i> and restharrow <i>Ononis repens</i> . The ancient woodland section of the site includes important ancient woodland flora including dog's mercury <i>Mercurialis perennis</i> , wood sorrel <i>Oxalis acetosella</i> and primrose <i>Primula Vulgaris</i> . In this section, records also exist of dormouse <i>Muscardinus avellanarius</i> .

Project Section	Site name	Description
C	Hazel Wood	Has various characteristics associated with old areas of woodland and is surrounded by a river in the north and a railway line in the south. Mature pollards and some areas of old hornbeam <i>Carpinus betulus</i> coppice are present, which are indicative of ancient woodlands. The wood consists of two distinct parcels, in the north is a plantation an area of beech <i>Fagus sylvatica</i> and coppice whilst in the south is an area of hornbeam <i>Carpinus betulus</i> and hazel <i>Corylus avellana</i> coppice with mature Turkey oak <i>Quercus cerris</i> , standards scattered throughout. Diseased elm trees provide valuable dead wood habitats for birds and invertebrates.
C	Higham Meadow	The site is located on either side of a stream which flows northwards towards Timber Hill Wood, an area of mixed woodland. The stream is bordered on both sides by mature alder <i>Alnus glutinosa</i> trees. The site consists of a wet meadow plant community in a waterlogged area, whilst the higher areas of the site are much drier. The site is managed by cattle and sheep grazing.
C	Langham Close Wood	Langham Close Wood is a small remaining area of woodland which was once part of a much larger ancient woodland that has since been felled and converted to farmland. The wood has a uniform structure consisting of oak <i>Quercus</i> spp. and ash <i>Fraxinus excelsior</i> standards. There is a dense area of blackthorn scrub <i>Prunus spinosa</i> which provides valuable habitat for nesting birds. Additionally, bramble <i>Rubus fruticosus</i> agg. and dog's mercury <i>Mercurialis perennis</i> dominate the field layer and there are ancient woodland indicators including St John's-wort <i>Hypericum perforatum</i> .
C	Laurel Cottage Grassland	Laurel Cottage Grassland is a meadow consisting of species rich unimproved grassland which is surrounded by tall, thick, species rich native hedgerows. The hedgerows at the site connect to Elmsett Park Wood's ancient woodlands to the south. The meadows contain a good range of plants including indicators of traditionally managed hay meadows, including adder's tongue <i>Ophioglossum vulgatum</i> . The hedgerows contain small-leaved lime and provide excellent roosting opportunities for roosting and nesting birds.

Project Section	Site name	Description
C	Long Wood	Listed in English Nature's Ancient Woodland Inventory and lies close to several other ancient woodlands including Raydon Great Wood. There is a dense hedge of hazel <i>Corylus avellana</i> , blackthorn <i>Prunus spinosa</i> , hawthorn <i>Crataegus monogyna</i> and field maple <i>Acer campestre</i> separating the wood from an adjacent road. A large area of the woodland was affected by Dutch elm disease and felled, and this area now contains alder <i>Alnus glutinosa</i> , hawthorn <i>Crataegus monogyna</i> , blackthorn <i>Prunus spinosa</i> , ash <i>Fraxinus excelsior</i> and hazel <i>Corylus avellana</i> coppice. Mature oak <i>Quercus</i> sp. and ash trees are situated on the northern edge of the wood. The woodland is thought to provide good habitat for a range of nesting and woodland birds.
C	Raydon Great Wood	Raydon Great Wood is an extensive area of ancient woodland, listed in Natural England's Inventory of Ancient Woodland. The site is dissected by a disused railway line, now open to the public as a local nature reserve. The composition is largely a mix of native broadleaf species including oak <i>Quercus robur</i> , hazel <i>Corylus avellana</i> , lime <i>Tilia x europaea</i> , beech <i>Fagus sylvatica</i> , elm and hawthorn <i>Crataegus monogyna</i> . The shrub layer is dense and there are more than 30 ponds across the wood. The ground flora in the wood is species-rich and includes several indicators for ancient woodlands including yellow pimpernel <i>Lysimachia nemorum</i> , bluebell <i>Hyacinthoides non-scripta</i> , wood spurge <i>Euphorbia amygdaloides</i> , creeping Jenny <i>Lysimachia nummularia</i> and wood melick <i>Melica uniflora</i> . Several priority species are recorded here including grass snake <i>Natrix helvetica</i> , common lizard <i>Zootoca vivipara</i> , bats, nightingale <i>Luscinia megarhynchos</i> , cuckoo <i>Cuculus canorus</i> , song thrush <i>Turdus philomelos</i> , dunnoek <i>Prunella modularis</i> and dormouse <i>Muscardinus avellanarius</i> .
C	River Brett (Sections)	The River Brett flows from Thorpe Morieux through Chelsworth southwards to the west of Hadleigh and finally joins the River Stour at Higham. The river is of high conservation value due to its high-water quality. 5 sections of the river are of particular importance to aquatic wildlife. These sections support a highly diverse wetland flora including flowering-rush <i>Butomus umbellatus</i> , bulrush <i>Typha latifolia</i> , greater pond sedge <i>Carex riparia</i> , starwort <i>Callitriche</i> sp., mare's-tail <i>Equisetum arvense</i> and river water-dropwort <i>Oenanthe fluviatilis</i> .
C	Rowley Grove	An ancient woodland situated on the southern border of Suffolk Wildlife Trust's Arger Fen and Spouse's Vale nature reserve near the villages of Bures, Nayland and Leavenheath.
C	Springhill Meadows	Two meadows located to the south of Chaple St Mary, the meadows consist of three different plant communities. Firstly, small areas are dominated by sedge <i>Carex</i> sp. and

Project Section	Site name	Description
		meadowsweet <i>Filipendula ulmaria</i> . It is likely that they provide valuable shelter for wintering birds, for example snipe <i>Gallinago gallinago</i> . The low-lying peaty area adjacent to the stream remains waterlogged throughout the year, consequently it supports a range of wetland plants. Of particular interest is the sites population of common spotted orchid <i>Dactylorhiza fuchsii</i> and early marsh orchid <i>Dactylorhiza incarnata</i> . Some parts of the meadows, particularly around the edges, have become rather overgrown due to the lack of grazing.
C	Sproughton Churchyard	An unimproved grassland that is a good example of biodiversity priority lowland meadow habitat. The site contains a rich variety of wildflowers including a large population of meadow saxifrage <i>Saxifraga granulata</i> .
C	Sproughton Park	An extensive patchwork of grassland fields, alder carr, dense scrub and hedgerows.
C	Squire`s Wood	An ancient woodland of mature oak <i>Quercus</i> sp. standards scattered throughout the wood. A large portion of the wood has recently been thinned and shrub layer removed. In areas where this is on the case elder <i>Sambucus nigra</i> and hazel <i>Corylus avellana</i> form a dense shrub layer and dog's mercury <i>Mercurialis perennis</i> dominates the ground flora. The site has small quantities of a number of ancient woodland indicators, including wood millet <i>Milium effusum</i> and wood spurge <i>Euphorbia amygdaloides</i> . There is a considerable amount of dead wood providing an important habitat for invertebrates. The wood is connected to neighbouring woodland by a mature hedgerow.
C	Thorington Street Pit and Reservoir	A complex of semi-natural habitat consisting of old gravel-workings colonised by dense scrub, acidic grassland and a steep-sided man-made lake which is leased to a private club for fishing. The willow <i>Salix</i> sp. and birch <i>Betula</i> sp. scrub which supports nesting birds, for example warblers and nightingale <i>Luscinia megarhynchos</i> . The scrub is interspersed with patches of acid grassland which support a good range of flowering plants. The lake, although lacking in marginal vegetation, supports breeding ducks and in winter, the open water attracts large numbers of wintering wildfowl and rarer species such as smew <i>Mergus albellus</i> and goosander <i>Mergus merganser</i> . Furthermore, a pair of kingfisher <i>Alcedo atthis</i> breed annually in the sandy cliff.
C	Tom`s / Broadoak Wood	An area of ancient woodland which has been previously planted with coniferous species. However, broadleaved species such as oak <i>Quercus</i> sp., ash <i>Fraxinus excelsior</i> , field maple <i>Acer campestre</i> , wild cherry <i>Prunus avium</i> and Midland hawthorn <i>Crataegus laevigata</i> are now becoming dominant. Where there is sufficient light a dense shrub layer of hawthorn <i>Crataegus</i>

Project Section	Site name	Description
		<i>monogyna</i> , hazel <i>Corylus avellana</i> , spindle <i>Euonymus europaeus</i> and field maple <i>Acer campestre</i> is present, providing suitable habitat for a range of bird species, including nightingale <i>Luscinia megarhynchos</i> . Typical woodland flora can be found across the site and deadwood provides further opportunities for invertebrates.
C	Wasses Marshes	A complex of low-lying grazing marshes which are grazed by cattle and are enclosed by old hedges. Breeding lapwing <i>Vanellus vanellus</i> , redshank <i>Tringa totanus</i> and yellow wagtail <i>Motacilla flava</i> have been recorded and in winter, when wetter conditions allow, wildfowl and waders have roosted. The hedges provide shelter for wintering birds. The marshes are well connected to surrounding habitats including the River Stour, River Box, and a neighbouring woodland to the south.
C	Water Farm Meadow	The site is designated for its mosaic of valuable habitats including wet meadow, open water, overgrown fen and sallow scrub. The wet meadow is located at the base of a slope and is bordered by a stream, this unimproved grassland remains wet all year round and supports a wide range of wetland plants. An area of open water in the northwest corner of the site is fringed by sedge, reedmace and bullrush which provide suitable nesting habitat for reed warblers <i>Acrocephalus scirpaceus</i> , sedge warblers <i>Acrocephalus schoenobaenus</i> and reed bunting <i>Emberiza schoeniclus</i> . Areas of sallow scrub and tall herb vegetation provide valuable additional habitat for breeding birds, small mammals and invertebrates.
C	Wenham Thicks	A small fragment of ancient woodland enclosed by a ditch which is considered to be of medieval origin and a dense hedgerow. A large proportion of the site has been interplanted with conifers. The ground flora consists of mainly bramble <i>Rubus fruticosus</i> agg. with some dog's mercury <i>Mercurialis perennis</i> . There is a small semi-natural woodland in the southern end of the wood, with deadwood including standing elms which provide suitable habitat for woodpeckers and invertebrates.

Annex H. Local Wildlife Sites (LWSs) Designated Site Descriptions

Annex H

Local Wildlife Sites (LWSs) Designated Site Descriptions

Table A8.16.17 LWS designated site descriptions

Project Section	Site Name	Description
C	Ardleigh Reservoir Grassland	Positioned on the edge of reservoir, this site contains grassland, scrub and a small alder <i>Alnus glutinosa</i> and willow <i>Salix</i> sp. wood. The scrub is mainly young pedunculate oak <i>Quercus robur</i> , willow <i>Salix</i> sp., blackthorn <i>Prunus spinosa</i> , hawthorn <i>Crataegus monogyna</i> , broom <i>Cytisus scoparius</i> , and bramble <i>Rubus fruticosus</i> agg. The grassland site is an acid grassland habitat. Whilst none of the component habitats are of sufficient quality to qualify alone, in combination this is a valuable habitat.
C	Ardleigh Reservoir Wood	The core of this site is two blocks of old woodland reduced in size by the construction of Ardleigh Reservoir and then extended by a combination of planting and natural colonisation. There is no evidence that the site is an ancient woodland, but it conforms to the lowland mixed deciduous woodland Habitat of Principal Importance (HPI) description.
C	Ash Wood	Ash Wood is an area of ancient woodland that displays a varied structure ranging from areas with a high canopy to those predominantly formed of a lower shrub layer. The site has a good mix of broadleaved tree species including oak <i>Quercus</i> spp. standards, ash <i>Fraxinus excelsior</i> , hazel <i>Corylus avellana</i> , silver birch <i>Betula pendula</i> and wild cherry <i>Prunus avium</i> .
C	Birch Wood	An area of ancient woodland that comprises pedunculate oak <i>Quercus robur</i> and sessile oak <i>Quercus petraea</i> standards with hornbeam <i>Carpinus betulus</i> coppice. The ground flora is species poor and includes the invasive non-native species rhododendron.
C	Birch Wood, Langham	An area of ancient woodland composed of pedunculate oak <i>Quercus robur</i> and silver birch <i>Betula pendula</i> with an open understorey featuring scattered hazel <i>Corylus avellana</i> and holly <i>Ilex aquifolium</i> . The ground flora is relatively sparse but has a few ancient woodland indicator species including bluebell <i>Hyacinthoides non-scripta</i> .
C	Black Brook	The woodland between Boxted Cross and Old Mill Road is believed to be ancient due to the indicator plant species present. The Grove, further east, is also very old, but there is no clear evidence to suggest that it is also ancient and so the non-ancient criteria are used for this and other more obviously recent woodland blocks, including areas of wet woodland. The waterlogged ground supports several plant species of interest

Project Section	Site Name	Description
		including marsh-marigold <i>Caltha palustris</i> , common marsh-bedstraw <i>Galium palustre</i> , bog stitchwort <i>Stellaria alsine</i> , lesser spearwort <i>Ranunculus flammula</i> , opposite leaved golden-saxifrage <i>Chrysosplenium oppositifolium</i> and abundant cuckooflower <i>Cardamine pratensis</i> .
C	Bridges Farm	Alluvial floodplain pastures with dissecting ditches and the banks of the River Stour. Whilst the habitats have been disturbed by agricultural improvement, the scarcity of alluvial floodplain habitats makes this site important. An interesting invertebrate fauna is associated with these habitats, including Lister's river snail <i>Viviparus conectus</i> and the water beetle <i>Graptodytes pictus</i> .
C	Cophedge Wood	This wood can be split into two sections, the eastern half, ancient woodland, and the western half which is recent. The ancient section has a mix of sweet chestnut <i>Castanea sativa</i> , pedunculate oak <i>Quercus robur</i> , silver birch <i>Betula pendula</i> and scots pine <i>Pinus sylvestris</i> . The ground flora is dominated by bluebell <i>Hyacinthoides non-scripta</i> and ivy <i>Hedera helix</i> . The non ancient block has a similar composition with sycamore <i>Acer pseudoplatanus</i> , silver birch <i>Betula pendula</i> , sweet chestnut <i>Castanea sativa</i> and oak <i>Quercus</i> sp. The central area has been subject to felling and clearing of trees.
C	Dalethorpe Park	An area of HPI wood pasture and parkland habitats. The site is an area of ornamental planting including oak <i>Quercus robur</i> , ash <i>Fraxinus excelsior</i> , beech <i>Fagus sylvatica</i> , field maple <i>Acer campestre</i> . Some of these trees have attained a girth of 4 metres and are producing dead wood features that are likely to be of importance for saproxylic invertebrates.
C	Dedham Churchyard	Relict acid grassland, of note for the presence of lesser calamint and harebell. Maidenhair spleenwort <i>Clinopodium nepeta</i> and black spleenwort <i>Asplenium adiantum-nigrum</i> occur on the walls. All these species are Essex Red Data List plants.
C	Gt Bromley Churchyard	The site supports a wide range of species in a dry acid grassland sward, including yarrow <i>Achillea millefolium</i> , ribwort plantain <i>Plantago lanceolata</i> , common sorrel <i>Rumex acetosa</i> , cock's-foot <i>Dactylis glomerata</i> , cat's-ear <i>Hypochaeris radicata</i> , red fescue <i>Festuca rubra</i> . The site is important as it represents a small remnant fragment of relatively unimproved acid grassland in a local landscape that is dominated by agriculture, with no other significant areas of grassland.
C	Gun Hill Grassland	This site exhibits a mix of bent-grasses <i>Agrostis</i> spp. and abundant sheep's sorrel <i>Rumex acetosella</i> which are characteristic species of acid grassland. This grassland type is lowland acid grassland HPI and has seen a reduction in area throughout Essex during recent decades.

Project Section	Site Name	Description
C	Gun Hill Place	The large ornamental gardens, with veteran native trees, exotic ornamentals, lake and areas of lowland dry acid grassland (HPI) have been left to nature for many years and now support a wealth of wildlife, including stag beetle <i>Lucanus cervus</i> a Species of Principal Importance (SPI). Other species of interest include grass snake <i>Natrix helvetica</i> , slow-worm <i>Anguis fragilis</i> and adder <i>Vipera berus</i> ; and a diverse bumblebee population.
C	Langham SRV	Hoary cinquefoil <i>Potentilla argentea</i> and lesser calamint <i>Clinopodium calamintha</i> are of interest amongst the flora of this series of verges. Lesser calamint is a Nationally Scarce plant that is of regional importance in north Essex and is included within the Essex Red Data List of plants for the county, as is hoary cinquefoil.
C	Langham Water Works	This site lies largely within the Langham water treatment works. It comprises a mosaic of wet woodland, lakes and other water courses and a small orchard, which has a good population of cuckooflower <i>Cardamine pratensis</i> in the lawn beneath the trees. The main building of the treatment works is also included on account of its county significance for breeding house martin <i>Delichon urbicum</i> , with approximately 50 nests active in recent years.
C	Little Bentleyhall Wood	An ancient woodland dominated by sweet chestnut <i>Castanea sativa</i> and hazel <i>Corylus avellana</i> coppice with pedunculate oak <i>Quercus robur</i> , birch <i>Betula</i> sp. and holly <i>Ilex aquifolium</i> standards. The site supports the HPI lowland mixed deciduous woodland.
C, D	Little Wood	The woodland has an ancient eastern section and a younger western section with no clear boundary. The ancient area has Sweet Chestnut <i>Castanea sativa</i> , Hazel <i>Corylus avellana</i> , Pedunculate Oak <i>Quercus robur</i> , and Field Maple <i>Acer campestre</i> , with abundant Bluebells <i>Hyacinthoides non-scripta</i> and some Climbing Corydalis <i>Ceratocarpus claviculata</i> . A stream in the southeast supports Alder <i>Alnus glutinosa</i> and marshy plants like Opposite-leaved Golden-saxifrage <i>Chrysosplenium oppositifolium</i> , with Moschatel <i>Adoxa moschatellina</i> upslope. The younger section has spindly Sweet Chestnut and fewer Bluebells or Climbing Corydalis.
C	Little Bromley Churchyard	A remnant of the dry acid grassland that would formerly have been widespread on the Tendring plateau. It is now the only such grassland, other than the nearby Great Bromley churchyard, that remains in an otherwise intensively cultivated landscape. The sward is notable for the abundance of pignut <i>Conopodium majus</i> .
C	Manning Grove	An ancient woodland dominated by hazel <i>Corylus avellana</i> coppice and holly <i>Ilex aquifolium</i> scrub with large pedunculate oak <i>Quercus robur</i> and sweet chestnut <i>Castanea sativa</i>

Project Section	Site Name	Description
		standards. The ground flora is mainly bracken <i>Pteridium aquilinum</i> with bluebell <i>Hyacinthoides non-scripta</i> , bramble <i>Rubus fruticosus</i> agg. and climbing corydalis <i>Ceratocarpus claviculata</i> .
C	Manor House Meadow	HPI lowland dry acid grassland. Species-rich grasslands of this type are particularly rare in Tendring district, thus emphasising the need to conserve all remaining sites.
C	Shir Burn Wood and Meadow	A broadleaved woodland that is well managed and comprises coppice-with-standards; the mature trees are alder <i>Alnus glutinosa</i> , pedunculate oak <i>Quercus robur</i> , sweet chestnut <i>Castanea sativa</i> , aspen <i>Populus tremula</i> and silver birch <i>Betula pendula</i> . The meadow is cattle grazed and is a species rich lowland dry acid grassland habitat.
C	Springhead Corner Meadow	This is a remnant tussocky acid grassland, in which rabbit grazing is helping to maintain a short sward. The site is HPI lowland dry acid grassland which is species rich and in good condition. This site has also large colony of minotaur beetles <i>Typhaeus typhoeus</i> , a scarce insect in north-east Essex.
C	St Mary's Churchyard, Langham Hall	This churchyard displays a diverse flora characterised by species associated with light acid soils and includes mouse-ear-hawkweed <i>Pilosella officinarum</i> and sheep's sorrel <i>Rumex acetosella</i> . Lesser calamint <i>Calamintha nepeta</i> , a nationally scarce species and an Essex Red Data List species, is very common along the sunny south side of the church.
C	The Coombs	A very steep wooded bank with Sycamore <i>Acer pseudoplatanus</i> on the slopes and a wet stream valley at the bottom dominated by alder <i>Alnus glutinosa</i> coppice characterises this site. Opposite-leaved golden saxifrage <i>Chrysosplenium oppositifolium</i> , an Essex Red Data List species typical of wet marshy conditions forms localised patches along the stream valley. The site contains the HPI lowland mixed deciduous woodland and wet woodland.
C	Wall's Wood	The presence of indicator species suggests that the woodland along the stream banks is ancient, but most of the woodland is likely to be more recent. The willow <i>Salix</i> sp. and alder <i>Alnus glutinosa</i> woodland of the stream corridor matches the description of the HPI wet woodland, although it is not particularly old. The whole site forms a significant block of linear, semi-natural habitat forming a strong natural corridor on the eastern side of Colchester
C	Wignall Brook Grasslands	An extensive series of stream valley grasslands either side of Wignall Brook, Lawford. The character of the site varies from dry semi-acid, through dry neutral to marshy grassland. In a marshy area near the brook present on the site, bristle club-rush <i>Isolepis</i>

Project Section	Site Name	Description
		<i>setacea</i> , an Essex red data List species is found. The supports the HPI lowland dry acid grassland and lowland meadows.
C	Wignall Street Grassland	The site is an area of lowland dry acid grassland that is bound by thick hedgerows. The sward includes harebell <i>Campanula rotundifolia</i> , a species very scarce in Tendring District and included in the Essex Red Data List of plants
D	Aldercar Wood	The site contains the HPI lowland mixed deciduous woodland. Although the site is not ancient, it has a relatively varied canopy and ground layer.
D	Aldercar, Wormingford	This site contains areas designated as ancient woodland which is characterised by alder <i>Alnus glutinosa</i> , pedunculate oak <i>Quercus robur</i> , crack willow <i>Salix fragilis</i> and old hazel <i>Corylus avellana</i> coppice. The central area of the wood classifies as a wet woodland HPI that contains opposite leaved golden-saxifrage <i>Chrysosplenium oppositifolium</i> and large bittercress <i>Cardamine amara</i> , both Essex Red Data List species.
D	Aldham Hall Wood	A small ancient woodland that represents the remains of once larger woodland, extending south-west now lost to agriculture. It has a mixed canopy of pedunculate oak <i>Quercus robur</i> , sweet chestnut <i>Castanea sativa</i> and ash <i>Fraxinus excelsior</i> with an extensive understorey of hazel <i>Corylus avellana</i> .
D	Buckler's Farm Wood	The woodland straddles the upper reaches of the Roman River and comprises of streamside alder <i>Alnus glutinosa</i> with tall ash <i>Fraxinus excelsior</i> and pedunculate oak <i>Quercus robur</i> standards that are mainly found on the edges of the woodland. The site supports the HPI lowland mixed deciduous woodland.
D	Church House Wood	An area of the HPI lowland mixed deciduous woodland, parts of which are ancient. The woodland appears on the ancient woodland inventory and supports a small number of woodland indicator plants
D	Cook's Lane Lexden	A Mosaic of HPI lowland dry acidic grassland and lowland mixed deciduous woodland. The grassland includes herbs typically of dry acid grassland including whitlow-grass <i>Erophila verna</i> , mouse-ear-hawkweed <i>Pilosella officinarum</i> , common bird's-foot-trefoil <i>Lotus corniculatus</i> and bird's-foot <i>Ornithopus perpusillus</i> . The grassland also supports minotaur beetle <i>Typhaeus typhoeus</i> , an uncommon species in Essex. The woodland appears to be at least part ancient, with large standards and associated ground flora (bluebell <i>Hyacinthoides non-scripta</i> , Moschatel <i>Adoxa moschatellina</i> , lesser celandine <i>Ficaria verna</i> , spindle <i>Euonymus europaeus</i> and three-nerved sandwort <i>Moehringia trinervia</i>).
D	Creak's Grove	A canopy of pedunculate oak <i>Quercus robur</i> , sycamore <i>Acer pseudoplatanus</i> , ash <i>Fraxinus excelsior</i> and horse-chestnut <i>Aesculus hippocastanum</i> . The understorey layer comprises

Project Section	Site Name	Description
		scattered elder <i>Sambucus nigra</i> . Midland hawthorn <i>Crataegus laevigata</i> , a species usually confined to ancient woodland is also present. The site is designated as a LWS as it is an ancient woodland area.
D	Daisy Green Grove	A small ancient woodland remnant comprises mainly pedunculate oak <i>Quercus robur</i> standards. Amongst the ground flora is wood anemone <i>Anemone nemorosa</i> , a plant with a strong affinity to ancient woodland, whilst goldilocks buttercup <i>Ranunculus auricomus</i> , remote sedge <i>Carex remota</i> and wood-sedge <i>Carex sylvatica</i> , additional indicator species, are present. Although it is not listed as an ancient wood on ancient woodland inventory, the structure and the ground flora composition suggest that it is an ancient fragment.
D	Fiddler's Wood	An ancient woodland dominated by pedunculate oak <i>Quercus robur</i> , ash <i>Fraxinus excelsior</i> , silver birch <i>Betula pendula</i> and coppiced hazel <i>Corylus avellana</i> with some planted beech <i>Fagus sylvatica</i> . The ground flora, though largely dominated by bramble <i>Rubus fruticosus</i> agg. includes areas with bluebell <i>Hyacinthoides non-scripta</i> and wood anemone <i>Anemone nemorosa</i> , indicator species of ancient woodlands.
D	Florie's Hedgerows	This series of hedgerows is linked to others that lie within Braintree District and forms an extensive network of species-rich ancient hedgerow, that are not commonly seen in the modern Essex landscape.
D	Fordham Bridge Meadow	The meadow is a grassland by the River Colne which forms part of the extensive Fordham Hall Estate. This site supports swamp habitat within the river floodplain. Of most significance are the large stands of common spike-rush <i>Eleocharis palustris</i> , a notable species which is now uncommon in the Essex countryside due to loss of wetland habitat. The diverse stands of vegetation within this floodplain site represent an increasingly scarce habitat type that is consistent with the lowland fens HPI.
D	Fordham Churchyard	A grassland with floral interest due to the presence of two Essex Red Data List species: lesser calamint <i>Calamintha nepeta</i> and wild clary <i>Salvia verbenaca</i> the latter of which is a species often associated with old churchyard grasslands.
D	Fordham Heath	This site comprises scrubby wood in the northern section and relict acidic grassland and heath to the south. Much of the site supports acid grassland and heathland, although the southern grassland and eastern fringe is more akin to the mesotrophic community specified in the lowland meadows HPI. The woodland areas are not ancient but satisfy the definition of the lowland mixed deciduous woodland HPI. The vascular plant criteria is applied for the presence of populations of two Essex Red Data List species: sneezewort <i>Achillea ptarmica</i> and harebell <i>Campanula rotundifolia</i> .

Project Section	Site Name	Description
D	Great Horkesley Churchyard	A relict acidic grassland sward, which has virtually disappeared from the surrounding countryside. Plants such as sheep's sorrel <i>Rumex acetosella</i> and mouse-ear-hawkweed <i>Pilosella officinarum</i> are frequent in the drier sandy areas near the older graves south of the church. Species of interest recorded from this site include Harebell an Essex Red Data List species, lady's bedstraw <i>Galium verum</i> and pignut <i>Conopodium majus</i> .
D	Grove Wood	This woodland appears on the Ancient Woodland Inventory, containing some large oak <i>Quercus robur</i> standards and a small number of indicator plants including bluebell <i>Hyacinthoides non-scripta</i> which dominate the ground layer.
D	Harrow Wood	A small fragment of broad-leaved woodland comprising mostly Hornbeam <i>Carpinus betulus</i> coppice. The presence of abundant hornbeam coppice and bluebell <i>Hyacinthoides non-scripta</i> is strongly indicative of an ancient woodland site.
D	High Woods	One of the largest areas of ancient woodland in the borough of Colchester. The ground flora is varied, particularly regarding ancient woodland species, including moschatel <i>Adoxa moschatellina</i> , wood anemone <i>Anemone nemorosa</i> , pignut <i>Conopodium majus</i> , remote sedge <i>Carex remota</i> , bluebell <i>Hyacinthoides non-scripta</i> , yellow archangel <i>Lamium galeobdolon</i> . The site also contains grassland habitats that are diverse and of considerable significance to the overall value of the park. The site is one of the most important natural public open spaces in the town and Borough and the use of the Accessible Natural Greenspace criterion reflects this and allows for the whole site to be defined.
D	Hillhouse Wood	This large ancient wood composed predominantly of pedunculate oak <i>Quercus robur</i> standards. The bulk of this woodland appears on the ancient woodland inventory, which is consistent with the presence of several ancient woodland indicator plants including a significant bluebell <i>Hyacinthoides non-scripta</i> population. A more recent woodland compartment provides a valuable buffer and extension, which satisfies the description of the HPI lowland mixed deciduous woodland.
D	Hoe Wood	Comprises oak <i>Quercus robur</i> and ash <i>Fraxinus excelsior</i> standards with hazel <i>Corylus avellana</i> coppice understorey. The presence of wild service-tree <i>Sorbus torminalis</i> and small-leaved lime <i>Tilia cordata</i> is of note. This woodland appears on the ancient woodland inventory and supports several ancient woodland indicator plants.
D	Keeper's Cottage Wood	The canopy of the wood is dominated by ash <i>Fraxinus excelsior</i> whilst the ground flora is unusually rich in ancient woodland indicator species, including moschatel <i>Adoxa moschatellina</i> , ramsons <i>Allium ursinum</i> , wood anemone <i>Anemone nemorosa</i> and many more. Although this woodland does not appear on the

Project Section	Site Name	Description
		ancient woodland inventory, due to its small size, the presence of several key woodland indicator species strongly suggests the site is derived from woodland that is ancient, possibly as a fragment of a previously larger wooded area.
D	Kiln Wood	An area of ancient woodland that has since been subject to human interference during World War 2, where trees were felled. The wood consists of pedunculate oak <i>Quercus robur</i> standards with sweet chestnut <i>Castanea sativa</i> , ash <i>Fraxinus excelsior</i> , alder <i>Alnus glutinosa</i> and hazel <i>Corylus avellana</i> coppice. The felled area of trees has since been replanted with scots pine <i>Pinus sylvestris</i> .
D	Langham Road Grassland	The site consists of varied habitats including dry and damp grassland with a pond on the east side of the site that mostly dries out over the summer months. The presence of waxcap mushrooms <i>Gliophorus psittacinus</i> and club fungi <i>Clavulinopsis laeticolor</i> indicate that this is unimproved grassland. The grasslands are of undoubted interest and apparently unimproved, but do not meet the lowland meadows HPI description. The population of water horsetail <i>Equisetum fluviatile</i> is sufficiently significant to warrant the use of the Vascular Plants criterion.
D	Little Tey Churchyard	A small area of unimproved, flower rich grassland that corresponds with a lowland meadows HPI. Additionally, on the site is the presence of the Nationally Scarce species sulphur clover <i>Trifolium ochroleucon</i> .
D	Marks Tey Brick Pit	The site contains a rich mosaic of brownfield wildlife habitats, including wet willow scrub woodland, marsh, open water habitats and flower-rich, sparsely vegetated ground. The brownfield invertebrate fauna includes the nationally rare small blue carpenter-bee <i>Xylocopa caerulea</i> , which utilises old bramble <i>Rubus fruticosus</i> agg. scrub and the flowers of ragwort <i>Jacobaea vulgaris</i> . Additionally, the numerous other banks of sand and clay across the upper parts of the site provide habitat for many other invertebrate groups. This LWS lies within a larger Geological Site of Special Scientific Interest.
D	Pitchbury Wood	An area of ancient woodland that was historically characterised conifers. However, the central core of the woodland has been replanted with silver birch <i>Betula pendula</i> , pedunculate oak <i>Quercus robur</i> and sweet chestnut <i>Castanea sativa</i> . The woodland appears on the ancient woodland inventory, and this status is supported by the presence of many ancient woodland indicator plants.
D	Pits Wood	The site supports a diverse canopy and scrub composition with pedunculate oak <i>Quercus robur</i> , including some large standards, alongside ash <i>Fraxinus excelsior</i> , hornbeam <i>Carpinus betulus</i> and field maple <i>Acer campestre</i> . Although the

Project Section	Site Name	Description
		site is not an ancient woodland, it qualifies as HPI by satisfying the definition of the Lowland Mixed Deciduous Woodland.
D	Rectory Wood	An area of woodland with characteristics indicative of an ancient woodland. The wood has a high canopy of pedunculate oak <i>Quercus robur</i> standards, with some beech. Whilst the ground flora is bare in places, the ancient woodland indicator plant wood anemone <i>Anemone nemorosa</i> is abundant towards the north of the site.
D	Seven Star Green	This green comprises species-rich grassland with acidic influences and a small pond with surrounding scrub. The site contains two HPI lowland meadow grassland and lowland dry acid grassland.
D	Slough Grove	Most of the site comprises ancient woodland. The ancient section comprises pedunculate oak <i>Quercus robur</i> , ash <i>Fraxinus excelsior</i> and alder <i>Alnus glutinosa</i> over hazel <i>Corylus avellana</i> coppice with scattered elder <i>Sambucus nigra</i> . The site consists of lowland mixed deciduous woodland HPI.
D	Spring Wood (West Bergholt)	<p>Pedunculate oak <i>Quercus robur</i> dominates the high canopy and hazel <i>Corylus avellana</i> forms the shrub layer. A more recent wooded compartment to the east contains some large crack willow <i>Salix fragilis</i> along a central drain that supports a small area of marshy vegetation. On higher ground oak dominates the canopy.</p> <p>A southern meadow compartment supports relatively unimproved freely draining turf with a number of anthills.</p>
D	Stitching Wood	An area of lowland mixed deciduous woodland HPI. The site has a broadleaved canopy of pedunculate oak <i>Quercus robur</i> standards and mature ash <i>Fraxinus excelsior</i> coppice, with hazel <i>Corylus avellana</i> coppice dominating most of the sub-canopy layer. The site also has an abundance of bluebell <i>Hyacinthoides non-scripta</i> at ground level.
D	Stonefield Strip	<p>This narrow strip of woodland is dominated by tall ash <i>Fraxinus excelsior</i> and field maple <i>Acer campestre</i> coppice in the canopy with a scattered shrub layer and ground flora including ancient woodland indicators.</p> <p>Although this strip is too small to be listed on the ancient woodland inventory, a strong wood bank and ditch on the west edge of the wood combined with the general woodland structure and flora allude to this being an ancient wood fragment</p>
D	West Bergholt Alderwoods	<p>Two wet woodlands located close to one another. However, Alder Carr wood to the south is ancient, whilst the northern block is recent wood (less than 130 years old).</p> <p>The southern woodland consists of Tall coppiced Alder <i>Alnus glutinosa</i> with Hazel <i>Corylus avellana</i>, Hawthorn <i>Crataegus monogyna</i> and Honeysuckle <i>Lonicera periclymenum</i> occurring</p>

Project Section	Site Name	Description
		<p>in the shrub layer. The ground flora is very rich, with extensive areas of ramsons <i>Allium ursinum</i> and three Essex Red Data species: Opposite-leaved golden-saxifrage <i>Chrysosplenium oppositifolium</i>, the rarer alternate-leaved golden-saxifrage <i>C.alternifolium</i> and large bitter-cress <i>Cardamine amara</i>.</p> <p>The northern block of woodland consists of alder, ash <i>Fraxinus excelsior</i> and plantation of willow <i>Salix sp.</i> Though recent it has a good structure and a species diverse ground flora possibly surviving due to the topography of the site being a stream valley with wet boggy areas on the lower slopes near the stream.</p>
D	West Bergholt Church	The site supports small areas of acid grassland and relict heathland with the associated specialised plant assemblages, which satisfy the corresponding HPI (lowland dry acid grassland and lowland heathland). The south-eastern grassland portion is more akin to semi-improved neutral grassland. Supports a well-established population of harebell <i>Campanula rotundifolia</i> .
D	West Bergholt Hall Church	The site is an 'other neutral grassland' area that is well mown and species poor but maintains species of interest including pignut <i>Conopodium majus</i> , cuckooflower <i>Cardamine pratensis</i> and waxcap mushrooms in summer.
D	West Bergholt Heath	The site has small areas dominated by heath-grass <i>Danthonia decumbens</i> with other notable indicator species of acid grassland/heathland including harebell <i>Campanula rotundifolia</i> , an Essex Red Data List species and heather <i>Calluna vulgaris</i> . The site was selected as a LWS as it contains priority habitats of lowland dry acid grassland and lowland heathland.
D	Wood near Fordham Place	Pedunculate oak <i>Quercus robur</i> dominates the high canopy, along with ash <i>Fraxinus excelsior</i> and field maple <i>Acer campestre</i> . In addition to the woodland, the site also contains lowland meadow grassland HPI.
E	Adam's Wood	An ancient woodland comprising hazel <i>Corylus avellana</i> coppice with standards of pedunculate oak <i>Quercus robur</i> , ash <i>Fraxinus excelsior</i> and field maple <i>Acer campestre</i> . Despite this, the wood has a sycamore <i>Acer pseudoplatanus</i> invasion which is advanced.
E	Ardley Wood Complex	A complex of three contiguous ancient woods: Ardley Wood, Nuttree Wood and Witham Spring. Ardley and Nuttree Woods are similar in character, having a canopy of pedunculate oak <i>Quercus robur</i> , ash <i>Fraxinus excelsior</i> and field maple <i>Acer campestre</i> over hazel <i>Corylus avellana</i> . Whereas Witham Spring has a greater abundance of hornbeam <i>Carpinus betulus</i> coppice and much elder <i>Sambucus nigra</i> in the understorey, though the composition is otherwise like the other woods. All the sites are designated LWS due to their ancient woodland habitats.

Project Section	Site Name	Description
E	Barrowfield Wood	A woodland with a mix of coppice and oak <i>Quercus robur</i> standards. The ground flora of the wood includes ancient woodland indicator species including bluebell <i>Hyacinthoides non-scripta</i> , primrose <i>Primula vulgaris</i> , wood melic <i>Melica uniflora</i> and wood spurge <i>Euphorbia amygdaloides</i> .
E	Batemans Farm Green Lane	A lengthy green lane that supports a wide variety of grassland and woodland plants and is bounded by thick hedges. The hedges are species rich and comprise ash <i>Fraxinus excelsior</i> , blackthorn <i>Prunus spinosa</i> , elder <i>Sambucus nigra</i> and oak <i>Quercus</i> sp. The field layer includes ancient woodland plants such as primrose <i>Primula vulgaris</i> , pendulous sedge <i>Carex pendula</i> , hairy St. John's-wort <i>Hypericum hirsutum</i> and violets <i>Viola</i> sp.
E	Blackwater Plantation	A white willow <i>Salix alba</i> plantation that forms an important wildlife corridor along the Blackwater valley and comprises a variety of valuable habitats. The ground cover is tall herb marsh that provides a good habitat for invertebrates, especially butterflies. Species recorded include peacock <i>Aglais io</i> , small tortoiseshell <i>Aglais urticae</i> , red admiral <i>Vanessa atalanta</i> , meadow Brown <i>Maniola jurtina</i> , green-veined white <i>Pieris napi</i> , comma <i>Polygonia c-album</i> and hedge brown <i>Pyronia tithonus</i> . The river itself is a valuable feature and supports greater water plantain <i>Plantago major</i> , common club-rush <i>Schoenoplectus lacustris</i> and arrowhead <i>Syngonium podophyllum</i> .
E	Brickhouse Wood	An ancient woodland habitat dominated by hornbeam <i>Carpinus betulus</i> . The ground flora includes indicator species of ancient woodlands including primrose <i>Primula vulgaris</i> and violet <i>Viola</i> sp..
E	Brockwell Meadows	The site comprises former floodplain meadows, designated as part of the Local Nature Reserve, with some areas being managed to improve their wildlife value. The floodplain meadows and grasslands provide important habitats for wildlife in the area.
E	Coggeshall Hall Farm	This river valley site comprises a mosaic of open cricket-bat willow <i>Salix alba caerulea</i> plantations, with some flower-rich grassland and associated hedgerows. Parts of the site have been primarily identified as a key foraging area for the nationally rare bumblebee <i>Bombus ruderatus</i> . The marshy willow plantations also support an interesting and increasingly scarce flora, including blue water-speedwell <i>Veronica anagallis-aquatica</i> , pink water-speedwell <i>Veronica catenata</i> , marsh marigold <i>Caltha palustris</i> and meadowsweet <i>Filipendula ulmaria</i> . The River Blackwater and marshy willow plantation satisfy the criteria for Lowland Fen Vegetation and Complex Riverine Habitats. Additionally, the fauna of the site includes otter <i>Lutra</i>

Project Section	Site Name	Description
		<i>lutra</i> within the river corridor and several breeding populations of Red and Amber-listed birds of conservation concern.
E	Craigments Spring	A small woodland area and pond habitat. The presence of bluebell <i>Hyacinthoides non-scripta</i> , dog's mercury <i>Mercurialis perennis</i> and red campion <i>Silene dioica</i> suggest that the woodland at the site may be ancient and the remnants of a once larger ancient wood.
E	Fairsteadhall Wood	An ancient woodland and one of three remaining fragments of a formerly much larger ancient Galleycable Wood. The canopy comprises neglected coppice of small-leaved Lime <i>Tilia cordata</i> , hazel <i>Corylus avellana</i> and hornbeam <i>Carpinus betulus</i> with standards of ash <i>Fraxinus excelsior</i> and pedunculate oak <i>Quercus robur</i> . The scrub layer includes good stands of blackthorn <i>Prunus spinosa</i> , hawthorn <i>Crataegus monogyna</i> , Midland hawthorn <i>Crataegus laevigata</i> and spindle <i>Euonymus europaeus</i> under which a varied ground flora exists.
E	Feering Marsh	The site consists of two zones: a sedge bed to the south and reed canary-grass <i>Phalaris arundinacea</i> marsh to the north.
E	Galleycable Wood	This ancient woodland remnant is composed of neglected coppice of small-leaved lime <i>Tilia cordata</i> , hornbeam <i>Carpinus betulus</i> and hazel <i>Corylus avellana</i> with ash <i>Fraxinus excelsior</i> and pedunculate oak <i>Quercus robur</i> standards. The understorey is mainly elder <i>Sambucus nigra</i> , hawthorn <i>Crataegus monogyna</i> , elm <i>Ulmus procera</i> and spindle <i>Euonymus europaeus</i> . The ground cover is dominated by Dog's Mercury <i>Mercurialis perennis</i> .
E	Hallhook Row	An ancient woodland that comprises the northernmost fragment of the formerly more extensive ancient Galleycable Wood. Little other information is available, though it is probable that its canopy is not dissimilar to that of Galleycable Wood.
E	Hazelton Wood	A large ancient woodland that has a diverse canopy composition, with much ash <i>Fraxinus excelsior</i> , aspen <i>Populus tremula</i> , hornbeam <i>Carpinus betulus</i> , hazel <i>Corylus avellana</i> and pedunculate oak <i>Quercus robur</i> . The ground flora at the site is rich and contains lots of ancient woodland indicators.
E	Hoo Hall Meadow	An area of lowland meadows HPI. This meadow gently slopes in a south-westerly direction to a marshy area adjacent to a stream channel. The wet marsh is characterised by the presence of sedges and willowherb with species of interest recorded including cuckooflower <i>Cardamine pratensis</i> , cowslip <i>Primula veris</i> and marsh marigold <i>Caltha palustris</i> .
E	Hookley Wood	A small ancient woodland that has a varied canopy and ground flora composition. Whilst ash <i>Fraxinus excelsior</i> predominates, there is also much small-leaved lime <i>Tilia cordata</i> , pedunculate oak <i>Quercus robur</i> , hazel <i>Corylus avellana</i> , field maple <i>Acer</i>

Project Section	Site Name	Description
		<i>campestre</i> and hornbeam <i>Carpinus betulus</i> . The ground flora is dominated by bramble <i>Rubus fruticosus</i> , yet there remains good variability.
E	Ivy Wood	An area of woodland of which the main body comprises old coppice of small-leaved lime <i>Tilia cordata</i> , hornbeam <i>Carpinus betulus</i> and hazel <i>Corylus avellana</i> . The site is an area of ancient woodland.
E	Paul's Wood	An area of woodland that is dominated by old hornbeam coppice with standards of pedunculate oak <i>Quercus robur</i> , birch, ash <i>Fraxinus excelsior</i> , aspen <i>Populus tremula</i> and wild cherry <i>Prunus avium</i> with some small-leaved lime <i>Tilia cordata</i> on the southern boundary. The modest ground flora displays a typical range of woodland species.
E	Ringer's Wood	Neglected hornbeam <i>Carpinus betulus</i> and small-leaved lime <i>Tilia cordata</i> coppice, pedunculate oak <i>Quercus robur</i> and Ash <i>Fraxinus excelsior</i> standards are the main canopy components of Ringer's Wood. The shrub layer comprises hawthorn <i>Crataegus monogyna</i> , Midland hawthorn <i>C. laevigata</i> , blackthorn <i>Prunus spinosa</i> , elder <i>Sambucus nigra</i> and dogwood <i>Cornus sanguinea</i> over a relatively poor ground flora.
E	Rivenhall Thicks	A large, important ancient wood has an exceptionally rich flora. The structure of the wood is primarily old coppiced hazel <i>Corylus avellana</i> and ash <i>Fraxinus excelsior</i> with standards of pedunculate oak <i>Quercus robur</i> . The woodland is extremely diverse, with 28 species of trees and shrubs recorded. There is also a large amount of ancient woodland indicators present in the ground flora.
E	Sandy Wood	A large area of ancient woodland that has been disturbed by storm damage and replanting with both broadleaved and coniferous trees. The native canopy and understorey comprising of small-leaved lime <i>Tilia cordata</i> , ash <i>Fraxinus excelsior</i> , pedunculate oak <i>Quercus robur</i> , hornbeam <i>Carpinus betulus</i> , hazel <i>Corylus avellana</i> and Midland hawthorn <i>Crataegus laevigata</i> . The ground flora is rich with ancient woodland indicators including bluebell <i>Hyacinthoides non-scripta</i> and dog's mercury <i>Mercurialis perennis</i> .
E	Scarlett's Wood	An ancient woodland, comprising neglected hazel <i>Corylus avellana</i> coppice under pedunculate oak <i>Quercus robur</i> and ash <i>Fraxinus excelsior</i> standards. The varied ground flora includes bluebell <i>Hyacinthoides non-scripta</i> , dog's mercury <i>Mercurialis perennis</i> and wood spurge <i>Euphorbia amygdaloides</i> .
E	Sheepcote Wood	A small, neglected woodland comprising pedunculate oak <i>Quercus robur</i> , ash <i>Fraxinus excelsior</i> and field maple <i>Acer campestre</i> , with a hazel <i>Corylus avellana</i> and hawthorn

Project Section	Site Name	Description
		<i>Crataegus monogyna</i> shrub layer. Dog's mercury is abundant in the ground flora.
E	Stockley Wood	An ancient woodland that has undergone extensive replanting with larch <i>Larix decidua</i> and scots pine <i>Pinus sylvestris</i> . The native tree species present here is small-leaved lime <i>Tilia cordata</i> , ash <i>Fraxinus excelsior</i> , hornbeam <i>Carpinus betulus</i> and oak <i>Quercus robur</i> . The ground flora is rich with ancient woodland indicator species including bluebell <i>Hyacinthoides non-scripta</i> , dog's mercury <i>Mercurialis perennis</i> and red campion <i>Silene dioica</i> .
E	Storey's Wood	An ancient woodland area that was once part of a much larger woodland that now exists as two separate copse. Among a variety of tree species found are ash <i>Fraxinus excelsior</i> , pedunculate oak <i>Quercus robur</i> , hornbeam <i>Carpinus betulus</i> and field maple <i>Acer campestre</i> . The ground flora is species poor but contains ancient woodland indicator dog's mercury <i>Mercurialis perennis</i> .
E	Stream Wood	An ancient hedgerow, widened in places to form narrow belts of woodland along a stream, which, beyond its own intrinsic interest, provides a useful ecological link between a cluster of large ancient woods. The site has characteristics of a belt of ancient woodland, but its primary importance is as a strong woodland corridor that connects to several large ancient woods.
E	Tarecroft Wood	A mixed coppice of ash <i>Fraxinus excelsior</i> , hazel <i>Corylus avellana</i> and field maple <i>Acer campestre</i> with lesser quantities of hornbeam <i>Carpinus betulus</i> and small-leaved lime <i>Tilia cordata</i> . Elm <i>Ulmus procera</i> stands occur along the north-eastern border. The ground layer contains the ancient woodland indicators bluebell <i>Hyacinthoides non-scripta</i> , dog's mercury <i>Mercurialis perennis</i> and dog violet <i>Viola riviniana</i> .
E	Terling Churchyard and Green	The light soil here supports a scarce floral assemblage, which is notable for the presence of meadow saxifrage <i>Saxifraga granulata</i> . Other frequent species include field wood-rush <i>Luzula campestris</i> , red fescue <i>Festuca rubra</i> , sweet vernal grass <i>Anthoxanthum odoratum</i> , common bent-grass <i>Agrostis capillaris</i> , meadow foxtail <i>Alopecurus pratensis</i> and mouse-ear hawkweed <i>Hieracium pilosella</i> .
E	Tilkey Road, Coggeshall	This plantation lies adjacent to Robin's Brook, which drains south into the River Blackwater at Coggeshall. The site comprises a willow plantation with streamside alder <i>Alnus glutinosa</i> and mixed scrub over a tall-herb marsh. The sites contain grasslands of importance.
E	Troys Wood	Areas of old hornbeam <i>Carpinus betulus</i> coppice, hazel <i>Corylus avellana</i> , standards of pedunculate oak <i>Quercus robur</i> , ash <i>Fraxinus excelsior</i> and some planted conifers. The ground flora

Project Section	Site Name	Description
		contains primrose <i>Primula vulgaris</i> , an ancient woodland indicator plant.
E	Upney Wood	One of only two fragments of this formerly very extensive ancient woodland remain. The canopy is composed of ash <i>Fraxinus excelsior</i> , field maple <i>Acer campestre</i> and pedunculate oak <i>Quercus robur</i> with some hazel <i>Corylus avellana</i> , amongst which conifers have been planted at a reasonably low density. The ground flora is poor in ancient woodland species, a situation which might be remedied by coppicing and removal of invasive species.
E	Wade's Spring	A small area of woodland that is potentially ancient. The canopy is of ash <i>Fraxinus excelsior</i> and pedunculate oak <i>Quercus robur</i> and the ground flora has some dog's mercury <i>Mercurialis perennis</i> , an ancient woodland indicator species.
E	Witch Wood, lane and hedges	The site is an area of ancient woodland, canopy comprises sycamore <i>Acer pseudoplatanus</i> , downy birch <i>Betula pubescens</i> , ash <i>Fraxinus excelsior</i> , small-leaved lime <i>Tilia cordata</i> and pedunculate oak <i>Quercus robur</i> . The ground flora is diverse and there are multiple ponds in the park that add to the habitat diversity. The woodland is linked to ancient hedgerows, presumably former woodland boundaries and a green lane.
E	Witham Marsh	This site comprises sedge-beds, rough marshy grassland and several springs (which are of considerable geomorphological interest). To the south is a very extensive bed of both greater pond sedge <i>Carex riparia</i> and lesser pond sedge <i>Carex acutiformis</i> . Further north, sedge-beds occur in association with the short streams, which feed into the River Blackwater. Elsewhere, rough grassland and marshy grassland form a complex mosaic of habitats. Casual recreation is placing a degree of pressure on the site causing an alteration in the drainage characteristics and a drying out of the sedge-beds.
E, F	Scarlett's Wood (part of)	A replanted section of Scarlett's Wood. Despite the replanting here, there is much evidence for the ancient origin of this woodland.
F	All Saints Church, Writtle	This church provides an oasis of species diverse grassland that was derived from lowland meadows, an HPI.
F	Border Wood	Comprises two distinct sections: a strip of ancient woodland to the south-east and a band of more recent woodland to the north-west. The canopy of the ancient section is dominated by hornbeam <i>Carpinus betulus</i> coppice with scattered oak <i>Quercus robur</i> standards. The more recent woodland stand provides a useful habitat extension to the ancient stands, within which the old woodland flora and fauna will spread. The site contains lowland mixed deciduous woodland HPI.

Project Section	Site Name	Description
F	Border Wood Lake	The site was formed as the result of quarry extraction, there now remains a lake and flooded willow woodland, with the site now used for recreational fishing. To the west of the lake the land gently slopes to the lakes margin, whilst on the eastern side the lake is bounded by steep slopes where young trees, scrub and low growing plants are now established. These differing gradients are good for wildlife, attracting flora and fauna suited to a particular niche in the ecosystem. In conjunction with the water body, the wet woodland provides sheltered foraging habitat for birds.
F	Box Wood	An ancient woodland comprising mainly overgrown coppice of hornbeam <i>Carpinus betulus</i> and sweet chestnut <i>Castanea sativa</i> with standards of pedunculate oak <i>Quercus robur</i> . The ground flora is sparse under dense shade, but bluebell <i>Hyacinthoides non-scripta</i> (ancient woodland indicators) are present.
F	Boyton Cross Verges	An area of neutral grassland that supports a rich and diverse flora of underlying chalky soil not commonly found in Chelmsford. The site is a road verge and contains flora such as yellow vetchling <i>Lathyrus aphaca</i> which is generally a coastal species, and this is possibly its only location in the Chelmsford City Administrative Area. No habitats of principal importance exist at the site.
F	Broomfield - Little Waltham Chelmer	This site includes two Essex Wildlife Trust reserves, Newland Grove and Little Waltham Meadows, plus areas of associated grassland and riverine habitats. Newland Grove is a mosaic of woodland, scrub and grassy glades. To the north of Newland Grove is an area of wet alder woodland, a scarce and fragile habitat, and consequently a HPI. This site is part of a chain of important wildlife sites, linked by the River Chelmer. The spring-fed wet alder wood represents a scarce, localised habitat that is susceptible to changes in groundwater hydrology. The old floodplain grasslands and cattle pastures on higher ground provide a large extent of contiguous grassland habitat.
F	Bushey Wood	Lowland mixed deciduous woodland comprising of mainly tall Ash <i>Fraxinus excelsior</i> coppice and Pedunculate Oak <i>Quercus robur</i> standards with Hornbeam <i>Carpinus betulus</i> coppice being found towards the southern end of the wood. Hawthorn <i>Crataegus monogyna</i> , Elder <i>Sambucus nigra</i> and Holly <i>Ilex aquifolium</i> are found in a scattered shrub layer. The ground flora is predominantly Bluebell <i>Hyacinthoides non-scripta</i> with Bramble <i>Rubus fruticosus</i> .
F	Bushy Wood (Chignall St James)	Ancient woodland composed of mainly Hornbeam <i>Carpinus betulus</i> , Field Maple <i>Acer campestre</i> and Hazel <i>Corylus avellana</i> coppice. An area in the north-east of the wood has

Project Section	Site Name	Description
		been felled leaving a few scattered coppice and standard trees. The central area of the wood has a lower canopy and here Bramble <i>Rubus fruticosus</i> agg forms dense scrub. Species of interest recorded include Wood Anemone <i>Anemone nemorosa</i> , Primrose <i>Primula vulgaris</i> and Remote Sedge <i>Carex remota</i> , whilst Wood Spurge <i>Euphorbia amygdaloides</i> is found along the north edge of the wood.
F	Bushy Wood (Great Leighs)	A large ancient woodland that features a varied canopy structure with ash <i>Fraxinus excelsior</i> and hornbeam <i>Carpinus betulus</i> coppice forming much of the main canopy. Wild service-tree <i>Sorbus torminalis</i> and small-leaved lime <i>Tilia cordata</i> and are two very noteworthy trees recorded from this woodland, the latter only to be seen in Chelmsford's most northerly area around Great Leighs.
F	Chapel Wood	This site comprises largely ancient wood, with two blocks of more recent woodland to the southeast. The dense canopy is dominated by hornbeam <i>Carpinus betulus</i> coppice with occasional pedunculate oak <i>Quercus robur</i> standards. This is a large block of diverse woodland exhibiting a range of characteristic ancient woodland indicator species. The more recent areas blend well into this matrix of ancient wood, adding to the overall habitat extent.
F	Chathamhall Spring	A lowland mixed deciduous woodland HPI. The woodland contains features that suggest it may be ancient with scattered hornbeam <i>Carpinus betulus</i> , pedunculate oak <i>Quercus robur</i> , ash <i>Fraxinus excelsior</i> with some tall, coppiced field maple <i>Acer campestre</i> . Primrose <i>Primula vulgaris</i> and dog's mercury <i>Mercurialis perennis</i> , ancient woodland indicator species, are abundant in the ground flora.
F	Chelmer Valley Riverside	A mosaic of riverside habitats form a corridor, which penetrates Chelmsford city centre. The various habitats include grassland and scrub, found to the north, contrasting with the wooded plantations further south, where trees such as willows <i>Salix</i> sp., grey poplar <i>Populus x canescens</i> , Lombardy poplar <i>Populus nigra</i> and alder <i>Alnus glutinosa</i> . The site is thought to be an important habitat for water voles that use the river and surrounding vegetation. the site is an important corridor site provides Chelmsford with fine riverine habitat supporting a wide variety of flora and fauna. It provides an invaluable opportunity for the residents and workers of Chelmsford to experience riverine wildlife at close hand.
F	Chopping's Wood	An ancient wood containing a mix of broadleaved species including pedunculate oak <i>Quercus robur</i> , ash <i>Fraxinus excelsior</i> and silver birch <i>Betula pendula</i> standards with old hornbeam <i>Carpinus betulus</i> coppice. The site also has an extensive network of hedgerows that act as corridors to other woodland areas. The structure and composition of this wood

Project Section	Site Name	Description
		supports documentary evidence that it is an ancient site. The adjacent green lane effectively forms a habitat extension to the woodland and is likely to be of a similar antiquity.
F	College Wood	The structure and composition of the wood points to an ancient origin for this site. In addition, it is an important site as an area of accessible natural greenspace for the urban population of Chelmsford.
F	Cooley Spring	A very narrow strip of woodland surrounded by arable land on all sides. Tall ash <i>Fraxinus excelsior</i> coppice and pedunculate oak <i>Quercus robur</i> standards dominate this woodland. Although not formally recorded as being ancient, the structure and flora (e.g. the recording of early-purple orchid <i>Orchis mascula</i> and wood-sedge <i>Carex sylvatica</i>) indicate that this is at least a long-established wooded site.
F	Cow Watering Lane Verge	A small, fenced site is managed to encourage floristic diversity. Much of the old, unimproved grassland resource of the county now lies within small fragments of grassland surviving within road/lane corridors such as this site.
F	Daffy Wood	This woodland has a mix of older and younger pedunculate oak <i>Quercus robur</i> standards as the dominant tree canopy. Bluebell <i>Hyacinthoides non-scripta</i> is abundant towards the south part of the wood. Daffodils <i>Narcissus sp.</i> , found here may be the rare Wild Daffodil <i>Narcissus pseudonarcissus</i> and may have been such a locally significant feature in the distant past as to be the source of the wood's name. This old woodland site may prove to be ancient, but it satisfies the non-ancient woodland criterion with a complex structure and species assemblage, which includes ancient woodland indicators.
F	Ellis Wood and Lane	A narrow strip of woodland comprising pedunculate oak <i>Quercus robur</i> and downy birch <i>Betula pubescens</i> with a small quantity of hornbeam <i>Carpinus betulus</i> . The ground vegetation comprises a mix of typical woodland species, although ancient woodland plants are few. To appreciate the true value of this site, one needs to consider its context within the complex of large ancient woods either side of the borough boundary, of which it is just a small part. The site also helps to form an ecological link between Stoneymore Woods and Ellis Wood within Chelmsford Borough.
F	Engine Spring/Ring Grove	Historically, Engine Spring was located on the eastern edge of Skreens Park, whilst Ring Grove lay just outside the boundary. Although not classified as ancient woodland, these two irregularly shaped blocks exhibit characteristics like that seen in established older woods. These woods have a good, diverse structure and flora, making for high quality woodland habitats. There is some evidence to suggest they are ancient in origin.

Project Section	Site Name	Description
F	Great Hyde Wood	The east side of this ancient woodland is mainly dominated by densely shading hornbeam <i>Carpinus betulus</i> coppice with scattered standards of pedunculate oak <i>Quercus robur</i> over relatively bare ground. The structure and composition of this wood support the documentary evidence that this is an ancient wood.
F	Great/Little Edney Woods	The wood is a surviving remainder of an ancient woodland to the north of the site comprising pedunculate oak <i>Quercus robur</i> standards amongst hornbeam <i>Carpinus betulus</i> and sweet chestnut coppice <i>Castanea sativa</i> . The site has diverse ground flora including various ancient woodland indicator species. The site is a lowland mixed deciduous woodland HPI.
F	Hopgarden Spring	The site is a lowland mixed deciduous woodland HPI. The wood has a varied structure and composition. There is some evidence to suggest it might be ancient including a varied ground flora with bluebell <i>Hyacinthoides non-scripta</i> , dog's mercury <i>Mercurialis perennis</i> and wood sedge <i>Carex sylvatica</i> .
F	Hylands Park	Hylands Park was created during the 18th and 19th centuries, from existing meadow, pasture and coppiced woodland. Hylands Park retains an established mix of ancient woodland, grassland and plantation.
F	James's Spring	A woodland of which the structure and composition suggest is ancient. Hornbeam coppice <i>Carpinus betulus</i> and pedunculate oak <i>Quercus robur</i> standards characterise this small fragment of ancient wood, which now sits in isolation from the larger blocks of woodland within the Writtle forest complex. Other recorded tree species include field maple <i>Acer campestre</i> and silver birch <i>Betula pendula</i> . Bramble <i>Rubus fruticosus</i> dominates much of the woodland ground flora, which is impoverished under the dense hornbeam <i>Carpinus betulus</i> canopy.
F	King Wood	The structure and composition of this wood supports documentary evidence that this is an ancient woodland site. Coldhall Lane is included within the site as a continuation of the lane extending from Great Edney Wood to the west, providing an important wildlife corridor between these large, ancient woods.
F	Lady Grove	An ancient woodland site that retains a good structure with almost pure hornbeam <i>Carpinus betulus</i> coppice. Pedunculate oak <i>Quercus robur</i> and silver birch <i>Betula pendula</i> also occur. Construction of the A12 Chelmsford bypass resulted in the loss of some of this wood towards the north.
F	Langleys Deer Park	Large expanses of open grassland, scattered trees and plantation along the route of the River Chelmer. As such, this large area of non-arable landscape assumes both ecological and historical importance. Some of the grasslands are used for

Project Section	Site Name	Description
		grazing animals, while the river corridor area provides suitable land for tree cultivation. the parklands afford unique opportunities for wildlife with their scattered standard trees and extensive grasslands. Documentary evidence shows that this is an ancient landscape that is likely to be rich in all forms of wildlife, including invertebrates. Other habitats, such as the river corridor and stands of woodland, add to the overall habitat diversity. The site contains a variety of HPI such as coastal and floodplain grazing marsh (in a rather modified form), wood-pasture and parkland and hedgerows.
F	Lee Wood	A woodland that retains a diverse structure and a good suite of indicator species typifying ancient woodland habitat. The wood is characterised by hornbeam <i>Carpinus betulus</i> and some field maple <i>Acer campestre</i> coppice dominating the outer areas of the wood, whilst ash forms a central high canopy with lower growing silver birch <i>Betula pendula</i> . The ground flora is diverse, and species of note include primrose <i>Primula vulgaris</i> , early-purple <i>Orchis mascula</i> orchid, three-nerved sandwort <i>Moehringia trinervia</i> and wood sedge <i>Carex sylvatica</i> .
F	Little Leighs Orchid Meadow	This site is a patchwork of grassland in amongst young trees and shrubs. Whilst the trees and shrubs provide diversity to the sites structure, it is the grassland that gives this site its intrinsic importance. The grassland component supports an enormous population of pyramidal orchid <i>Anacamptis pyramidalis</i> , an Essex Red Data list species, and a smaller, though still sizeable population of bee orchid <i>Ophrys apifera</i> . The vegetation is that of a lowland meadow, HPI.
F	Little Waltham Village Meadows	The meadow displays a wide variety of grass species indicative of older, less disturbed grassland, including sweet vernal-grass <i>Anthoxanthum odoratum</i> , meadow barley <i>Hordeum brachyantherum</i> , fescue <i>Festuca pratensis</i> and bent <i>Agrostis capillaris</i> . The site is a small remnant of (coastal and) floodplain grazing marsh, HPI.
F	Little Green Road Verges	This site comprises several roadside verges close to the junction of Little Green Road and Hyde Hall Lane in Howe Street. The site contains Essex Red Data List species, common broomrape <i>Orobanche minor</i> and bee orchid <i>Ophrys apifera</i> but no HPI.
F	Lowley's Farm Meadow	A small area of horse grazed grassland on the west bank of the River Ter containing a good mix of grass species. The site contains HPI in the form of hedgerows and coastal floodplains.
F	Lyonshall Wood	An ancient woodland displaying a wide mix of tree canopy types. Despite undergoing areas of replanting, this large ancient woodland retains important characteristics of ancient woodland especially with respect to the rich and diverse ground flora that it supports.

Project Section	Site Name	Description
F	Mann/Parson's Wood	An ancient woodland in good condition. The site is split up into compartments, all of which contain sufficient and diverse ground flora indicating a good condition ancient woodland. Mann/Parsons Wood is a mixed deciduous woodland that contains mature hornbeam <i>Carpinus betulus</i> and small-leaved lime <i>Tilia cordata</i> coppice, with some silver birch <i>Betula pendula</i> and sweet chestnut <i>Castanea sativa</i> .
F	Mill Green Heathland	This is the last surviving fragment of open heathland that would formerly have been widespread across Millgreen Common. With the cessation of grazing, the common fell into disuse and has now developed into broadleaved woodland. This scrub woodland succession has occurred around the margin of this site, but there remain good stands of heather <i>Calluna vulgaris</i> and purple moor-grass <i>Molinia caerulea</i> , along with other characteristic heathland species. Although only part of this site comprises good quality heathland, the whole site is included since it is judged that most of the land would not be beyond restoration to heathland habitats. Being a rare habitat in Essex, all such remaining fragments are worthy of identification as LWS.
F	Mill Green Woodland	The site is partially degraded heathland that has now entered a state of woodland. The site has probably evolved over centuries as wood-pasture, combining flora and fauna from both woodland and open heathland ecosystem. The site has two HPI in lowland mixed deciduous woodland and wood-pasture and parkland.
F	Newland's Spring	A small fragment of woodland situated in the urban environs of Chelmsford. The site is thought to be an ancient woodland due to the species present including coppiced hazel <i>Corylus avellana</i> and hornbeam <i>Carpinus betulus</i> with field maple <i>Acer campestre</i> . The ground flora is diverse and includes, bluebell <i>Hyacinthoides non-scripta</i> , three-nerved sandwort <i>Moehringia trinervia</i> and wood-sedge <i>Carex sylvatica</i> , ancient woodland indicators.
F	Nightingale Wood	An ancient woodland site but retaining little of its original canopy. Only the margins of the wood, with coppiced hornbeam <i>Carpinus betulus</i> and ash <i>Fraxinus excelsior</i> stands, resemble the likely ancient structure. The site is still representative of lowland mixed deciduous woodland, HPI.
F	Osborne's Wood	Ancient woodland dominated by hornbeam <i>Carpinus betulus</i> coppice, also containing sweet chestnut <i>Castanea sativa</i> and field maple <i>Acer campestre</i> coppice, pedunculate oak <i>Quercus robur</i> and ash <i>Fraxinus excelsior</i> . The ground flora is diverse with abundant bluebell <i>Hyacinthoides non-scripta</i> but also includes primrose <i>Primula vulgaris</i> and the small shrub spurge-laurel <i>Daphne laureola</i> . There are also ponds within the site that add to the habitat mosaic of the site.

Project Section	Site Name	Description
F	Parson's and Queen's Wood	An area of ancient woodland that mainly comprises hornbeam <i>Carpinus betulus</i> , sweet chestnut <i>Castanea sativa</i> and ash <i>Fraxinus excelsior</i> . The eastern side of the wood suffered disturbance and has since been replanted.
F	Penden Hill Verges	This site incorporates verges identified as Essex County Council Special Roadside Verges. These verges have probably been derived from lowland meadow vegetation, which might once have occupied the surrounding fields long ago. Road verges are becoming an important last refuge for many scarce Essex plants and traditional grassland assemblages that would once have been commonplace in the county. This is a small but valuable relic of such grassland.
F	Puddings Wood	A fine example of lowland mixed deciduous woodland HPI. The woodland exhibits a varied canopy and shrub layer structure with ash <i>Fraxinus excelsior</i> , field maple <i>Acer campestre</i> and hazel <i>Corylus avellana</i> all found as coppice while pedunculate oak <i>Quercus robur</i> is prominent as a high canopy standard tree.
F	Sandylay and Moat Woods	The woods at this site are largely ancient woodlands and comprise a mixed canopy of coppice and standards including hornbeam <i>Carpinus betulus</i> and small-leaved lime <i>Tilia cordata</i> coppice, some stools of which are of great size and age. Within the woodland fungi, <i>Russula carminipes</i> is of note, as a nationally rare species. Documentary evidence shows that most of this woodland is ancient in origin, which is supported by its structure and composition. The small piece of recent woodland provides a good quality extension to this ancient woodland.
F	Sheepcotes Wood	An ancient coppice wood containing a great variety of native and introduced trees. A wide grassy ride separates the wood into two halves. Hornbeam <i>Carpinus betulus</i> , pedunculate oak <i>Quercus robur</i> , field maple <i>Acer campestre</i> , ash <i>Fraxinus excelsior</i> and wild service-tree <i>Sorbus torminalis</i> , a strong indicator of ancient woodland, are among the native tree species to be found. The site is a lowland mixed deciduous woodland, HPI.
F	Sparrowhawk Wood	An ancient woodland which is characterised by coppiced hornbeam <i>Carpinus betulus</i> and hazel <i>Corylus avellana</i> . The ground flora exhibits good species diversity, including ancient woodland indicators such as dog's Mercury <i>Mercurialis perennis</i> , bluebell <i>Hyacinthoides non-scripta</i> , wood anemone <i>Anemone nemorosa</i> and pignut <i>Conopodium majus</i> .
F	St John the Evangelist Church, Little Leighs	Whilst no habitats of principal importance are found at the site, this small area of unimproved churchyard grassland supports a varied and interesting flora including betony <i>Betonica officinalis</i> , large thyme <i>Thymus pulegioides</i> , harebell <i>Campanula rotundifolia</i> (all three being Essex Red Data List species). Seventeen species of fungi have been recorded from this

Project Section	Site Name	Description
		churchyard, including <i>Hygrocybe calyptriformis</i> , a Red Data Book species amongst an unusually diverse assemblage of waxcap fungi.
F	St Martin's Church, Little Waltham	This is a small but very species-rich churchyard that may have affinities with the lowland meadows HPI, although this would need to be established through further survey work. Of particular importance is the presence of meadow saxifrage <i>Saxifraga granulata</i> and harebell <i>Campanula rotundifolia</i> both Essex Red Data List species. Also recorded from this site is lesser calamint <i>Calamintha nepeta</i> a nationally scarce species.
F	St Mary the Virgin Churchyard, Fryerning	The original yard occupies a small sandy knoll, with the resultant acid grassland vegetation including betony <i>Betonica officinalis</i> (a threatened Essex plant included within the county's Red Data List. The churchyard is a lowland dry acid grassland HPI.
F	St Mary the Virgin, Great Leighs	The churchyard may have been derived from lowland dry acid grassland HPI, although it is now modified by decades of management as a churchyard. It is a small rural churchyard is a refuge for several species of interest within Chelmsford including the nationally scarce lesser calamint <i>Calamintha nepeta</i> and wall-rue <i>Asplenium ruta-muraria</i> , an Essex Red Data List species.
F	St Mary's Church, Broomfield	Whilst no HPI exist at the site, there is a floristic diversity that holds value. The nationally scarce lesser calamint <i>Calamintha nepeta</i> grows abundantly at the base of the church wall whilst black spleenwort <i>Asplenium adiantum-nigrum</i> and maidenhair spleenwort <i>Asplenium trichomanes</i> , both Essex Red Data List ferns have colonised the wall.
F	St Paul Highwood Churchyard	Much of the site is shaded by yew <i>Taxus baccata</i> trees limiting floristic diversity in these darker areas. However, where sunlight is plentiful the site has good floristic diversity with quaking grass <i>Briza media</i> present, an Essex Red Data List species now found very infrequently in the Chelmsford area.
F	Stonage Wood	A small wood that may be ancient, regardless of this uncertainty, it is a good example of lowland mixed deciduous woodland HPI.
F	Stonemore Woods	This site comprises the ancient Stonemore Wood along with several recent wood compartments along its eastern margin that have been derived from Millgreen Common, having a wood-pasture origin in places. The physical characteristics and flora support the documentary evidence that Stonemore Wood is ancient. The adjacent sections have evolved from the unenclosed pasture of Millgreen Common and now comprise valuable woodland habitat that complements the ancient site.
F	Straw Brook Plantation	This site consists of an area of cricket-bat willow <i>Salix alba caerulea</i> plantation. The planted trees are well spaced and consequently allow stands of reed canary-grass <i>Phalaris</i>

Project Section	Site Name	Description
		<i>arundinacea</i> and, to a lesser extent, common reed <i>Phragmites australis</i> to have established beneath. The ground vegetation at the site has affinities with lowland fen habitats, which are HPI.
F	The Grove	This site has a varied structure and ground flora providing valuable woodland wildlife habitat. The ground flora includes primrose <i>Primula vulgaris</i> , wood speedwell <i>Veronica montana</i> , wood-sedge <i>Carex sylvatica</i> . Whilst it is uncertain if the wood is ancient or not, the wood is a good example of lowland mixed deciduous woodland HPI.
F	Well Wood	An ancient woodland that is of interest for its population of wood ants and, more particularly, the shining guest ant <i>Formicoxenus nitidulus</i> , which lives within the nests of the wood ant. The shining guest ant is a Species of Principal Importance in England with only two known localities in Essex, both within Chelmsford City Administrative Area.
F	Writtle Bridge Meadows	These meadows form a corridor of habitat on the outskirts of urban Chelmsford. The horse grazed meadow to the north of the River Can has the most varied sward composition and height and exhibits the most floristically diversity assemblage for this corridor site. These floodplain meadows provide accessible wildlife habitat between the built-up areas of Chelmsford and Writtle. It is a remnant of the once extensive floodplain grasslands that would have flanked the rivers Can and Wid.
F	Writtle High Woods	There is good documentary evidence concerning the ancient status of this site, which is supported by the flora and composition. The wood is characterised by hornbeam <i>Carpinus betulus</i> coppice with pedunculate oak <i>Quercus robur</i> standards, hazel <i>Corylus avellana</i> and birch. A small block of recent woodland provides a habitat extension.
F	Writtlepark Woods	The Writtlepark complex consists of Writtlepark Wood, Bosmore Wood, Baker's Wood and Chatterbox Wood. Writtlepark Wood, is dominated by coppiced sweet chestnut <i>Castanea sativa</i> and hornbeam <i>Carpinus betulus</i> . Pedunculate oak <i>Quercus robur</i> standards are found throughout. These woodlands form an integral part of the historic landscape of Writtle Forest. There is good documentary evidence to suggest an ancient status, which is also borne out by the structure and composition.
G	All Saints Churchyard and Keepers Cottages Meadow	Grassland surrounding the church is a tall sward with a diverse range of grasses including false oat-grass <i>Arrhenatherum elatius</i> , meadow barley <i>Hordeum brachyantherum</i> , crested dog's-tail <i>Cynosurus cristatus</i> , red fescue <i>Festuca rubra</i> , yorkshire-fog <i>Holcus lanatus</i> , timothy <i>Phleum pratense</i> and rough meadow-grass <i>Poa trivialis</i> . This semi-improved grassland at All Saints Churchyard retains qualities associated with older, less agriculturally improved grassland habitats that have become scarcer throughout the county in recent decades.

Project Section	Site Name	Description
G	All Saints Churchyard, Hutton	The sward appears to have some affinities with the lowland meadows HPI, although more detailed floristic analysis would be needed to confirm this. This is a small piece of ancient grassland that has been protected from agricultural practices and has largely retained a species-rich sward
G	Arnold's Wood Complex	Comprises mainly of sections of fragmented ancient woodland, with some recent secondary woodland within the network of railway lines. Hornbeam <i>Carpinus betulus</i> and ash <i>Fraxinus excelsior</i> coppice along with pedunculate oak <i>Quercus robur</i> standards provide the general character of the various woodland blocks. Several ancient woodland indicators are found in the ground flora including bluebell <i>Hyacinthoides non-scripta</i> , wood anemone <i>Anemone nemorosa</i> , goldilocks buttercup <i>Ranunculus auricomus</i> , primrose <i>Primula vulgaris</i> and remote Sedge <i>Carex remota</i> .
G	Barn Wood/Stonyhill Wood	Barn Wood is an ancient woodland site and has a canopy dominated by hornbeam <i>Carpinus betulus</i> coppice, occasional ash <i>Fraxinus excelsior</i> , field maple <i>Acer campestre</i> and pedunculate oak <i>Quercus robur</i> standards. Of particular note is the presence of several wild service-trees <i>Sorbus torminalis</i> , a tree largely confined to ancient woodland. The structure and composition of these two woods support documentary evidence that they are ancient woodland sites. The connecting hedgerow is included as a remnant 'ghost outline' of the former northern extension of Stonyhill Wood that now forms an ecological corridor between the two woods.
G	Birches Wood	An area that, although not officially recognised, has a well-developed canopy structure, like that found in many ancient woods throughout the borough and county. The presence of ancient woodland indicator plants suggests that this wood is ancient in origin.
G	Bladen's Wood	The south-east part of the wood is suspected to be ancient and is dominated by ash <i>Fraxinus excelsior</i> and pedunculate oak <i>Quercus robur</i> over an extensive shrub canopy of hawthorn <i>Crataegus monogyna</i> and elder <i>Sambucus nigra</i> with common nettle <i>Urtica dioica</i> dominating the ground flora. Bluebell <i>Hyacinthoides non-scripta</i> and wood meadow-grass <i>Poa nemoralis</i> are found in the ground flora. This site is not listed within the Essex Ancient Woodland Inventory, despite its size, but the structure and floral composition suggests that this is largely, if not completely, ancient woodland.
G	Blind Lane	The wooded green lane has abundant hornbeam <i>Carpinus betulus</i> coppice, prominent earth banks and wild service-tree <i>Sorbus torminalis</i> a tree confined to ancient woodlands. These species all indicate the lane's antiquity.

Project Section	Site Name	Description
G	Bluntswall Shaws	An area of ancient woodland that is largely dominated by pedunculate oak <i>Quercus robur</i> standards with hornbeam <i>Carpinus betulus</i> , ash <i>Fraxinus excelsior</i> and field maple <i>Acer campestre</i> coppice. There are several damp hollows within the woodlands, but only one permanent pond.
G	Bluntswall Wood	An ancient woodland dominated by hornbeam <i>Carpinus betulus</i> coppice with occasional pedunculate oak <i>Quercus robur</i> standards and an understorey including yew and holly <i>Ilex aquifolium</i> . Elsewhere the site's ground flora contains abundant wood anemone <i>Anemone nemorosa</i> and bluebell <i>Hyacinthoides non-scripta</i> (ancient woodland indicators) and a range of other typical woodland species.
G	Botneyhill Wood	Possibly ancient woodland comprises a canopy dominated by neglected hornbeam <i>Carpinus betulus</i> coppice with occasional standards of pedunculate oak <i>Quercus robur</i> and ash <i>Fraxinus excelsior</i> . The site is a LWS as features in the ancient woodland inventory and supports key indicator species.
G	Buckwyns Wood	This complex of semi-natural habitats is derived from an area of plotland development and includes old hedgerows, developing secondary woodland of varying ages and scrub. Site Selection Rationale: the core of the site is recognisably HPI woodland, but it is known to be relatively recent, not appearing on maps until the early 20th Century. The mosaic criterion is applied to define the extent of the site, taking in areas of scrub and grassland that would not meet any of the specific habitat criteria.
G	Clapgate Wood	An area of ancient woodland. Ash <i>Fraxinus excelsior</i> , sweet chestnut <i>Castanea sativa</i> and silver birch <i>Betula pendula</i> form the main structure of this wood, with hazel <i>Corylus avellana</i> in the understorey. The green lane forms a valuable wildlife corridor connecting three ancient woods.
G	Cock Wood/Collins's Shaw	Cock Wood is located to the south of the Community Woodland and is a small ancient woodland formerly identified as a separate LWS. Cock Wood comprises almost pure hornbeam <i>Carpinus betulus</i> coppice with scattered pedunculate oak standards <i>Quercus robur</i> . The structure and composition of Cock Wood supports documentary evidence that this is an ancient woodland site. The creation of a large area of new woodland adjacent to this ancient site should allow for an enriched woodland habitat to be created. The mosaic of grassy rides, meadows and woodland complement the habitats in the adjacent Essex Wildlife Trust nature reserve to the north and provide a place for informal recreation and environmental learning.
G	Coombe Wood Extension	Much of this woodland is included within the Essex Ancient Woodland Inventory. The woodland's diverse habitat structure supports important ancient woodland species including wood

Project Section	Site Name	Description
		anemone <i>Anemone nemorosa</i> , yellow archangel, yellow pimpernel <i>Lysimachia nemorum</i> , dog's mercury <i>Mercurialis perennis</i> and moschatel <i>Adoxa moschatellina</i> . More recent areas of woodland form a natural and contiguous habitat extension.
G	Dog Wood	This site has the structure and species composition typically found in ancient woodland. The wood is dominated by old hornbeam <i>Carpinus betulus</i> coppice, occasional ash <i>Fraxinus excelsior</i> and pedunculate oak <i>Quercus robur</i> standards. Wild service-trees <i>Sorbus torminalis</i> , a species with a very strong affinity with ancient woodland, is also present. Several other herb species characteristic of ancient woodland, are also recorded from this site. These include bluebell <i>Hyacinthoides non-scripta</i> , wood anemone <i>nemorosa</i> and pignut <i>Conopodium majus</i> . Located in the grounds of South Essex Golf Club, this site provides an 'island' of good wildlife habitat between other nearby LWSs.
G	Eastlands Spring	This streamside ancient woodland comprises a mosaic of hornbeam <i>Carpinus betulus</i> coppice, ash <i>Fraxinus excelsior</i> and hazel <i>Corylus avellana</i> . Wild service-tree <i>Sorbus torminalis</i> , a species with a strong affinity to ancient woodland, is found in the northern part of the site. The ground flora has an array of ancient woodland indicators including bluebell <i>Hyacinthoides non-scripta</i> , yellow archangel <i>Lamium galeobdolon</i> , moschatel <i>Adoxa moschatellina</i> , primrose <i>Primula vulgaris</i> , wood millet <i>Milium effusum</i> , wood anemone <i>Anemone nemorosa</i> and wood-sedge <i>Carex sylvatica</i> . The southern tip of this site comprises the scrubbed-up line of an ancient lane (Nightingale Lane), which now forms a contiguous part of the main woodland habitat.
G	Friern Manor Wood	This site comprises two woodland blocks separated by a central west-east ride. The northern section of the site is recent woodland, characterised by pedunculate oak <i>Quercus robur</i> standards dominating the high canopy. The southern section of the site is typical ancient woodland where hornbeam <i>Carpinus betulus</i> coppice dominates. The far south of the woodland has a more varied structure, with tall ash coppice and some young sycamore <i>Acer pseudoplatanus</i> . The main difference between the two sections making up this site is the greater diversity and frequency of the ground flora species found in the southern section. These include wood anemone <i>Anemone nemorosa</i> , bluebell <i>Hyacinthoides non-scripta</i> , yellow archangel <i>Lamium galeobdolon</i> , moschatel <i>Adoxa moschatellina</i> , wood melick <i>Melica uniflora</i> and three-nerved sandwort <i>Moehringia trinervia</i> .
G	Frith Wood	Actively managed ancient woodland of hornbeam <i>Carpinus betulus</i> and sweet chestnut <i>Castanea sativa</i> coppice with standards of silver birch <i>Betula pendula</i> and pedunculate oak

Project Section	Site Name	Description
		<i>Quercus robur</i> . This site forms part of a valuable chain of semi-natural habitats connecting Billericay to Basildon, including Laindon Common immediately to the south.
G	Gravelpit Wood	The site features in the ancient woodland inventory and a modest number of indicator species are present. It supports lowland mixed deciduous woodland HPI. The canopy of this woodland is made up of pedunculate oak <i>Quercus robur</i> standards and coppiced hornbeam <i>Carpinus betulus</i> . A scattered shrub layer of hawthorn <i>Crataegus monogyna</i> and blackthorn <i>Prunus spinosa</i> shades a ground flora including bluebell <i>Hyacinthoides non-scripta</i> , wood millet <i>Milium effusum</i> , wood-sedge <i>Carex sylvatica</i> and more.
G	Hall Wood, Ingrave	A large remnant of ancient wood dominated by hornbeam <i>Carpinus betulus</i> coppice with pedunculate oak <i>Quercus robur</i> and ash <i>Fraxinus excelsior</i> . Ancient Woodland indicators are numerous throughout the wood, reinforcing the sites ancient woodland status.
G	Hankin's Wood	lowland mixed deciduous woodland HPI. The wood is also an ancient woodland mainly of hornbeam <i>Carpinus betulus</i> coppice with pedunculate oak <i>Quercus robur</i> standards.
G	Hare Hall Shaw	It is included within the Essex Ancient Woodland Inventory, with this status confirmed by its structure and composition.
G	Harespring Wood	Dry and wet woodland habitat. The northern half of this site appears on the 1882 Ordnance Survey 6" map and is listed in the Ancient Woodland Inventory for Essex, with a flora that supports this status. The southern half was not woodland in 1882, and whilst not ancient, nevertheless provides additional diverse habitat to the site.
G	Heron Pond	The site of an ancient water body of which only the earthbank dam structures remain. Three contrasting habitat types are found within the site. The north-western limb is a mix of scrub interspersed with small grassland glades. The glades are the most botanically rich areas, with a diverse species composition including Essex red list species betony <i>Betonica officinalis</i> , pepper-saxifrage <i>Silene silaus</i> and dyer's Greenweed <i>Genista tinctoria</i> . In contrast, the south-eastern limb comprises open woodland habitat dominated by pedunculate oak <i>Quercus robur</i> standards. The shorter section that connects these two limbs is mainly dominated by dense blackthorn <i>Prunus spinosa</i> and hawthorn <i>Crataegus monogyna</i> scrub.
G	Highfield Wood	Typical structure and composition found in ancient woodlands of the Essex countryside and is included within the Essex Ancient Woodland Inventory.
G	Hutton Country Park	Comprises two main areas, to the south of the railway line is a series of grassland and scrub habitats, including thick

Project Section	Site Name	Description
		hedgerows. The habitat to the north of the railway line is predominantly dry grassland similar in floral composition to the large meadows to the south. These northern meadows are cattle grazed as opposed to mown. Most of these meadows exhibit a flora typical of dry grassland. The Country Park provides the eastern part of the borough with a substantial area of old grassland, scrub, hedgerows, marshy and wetland habitat forming a Local Nature Reserve that encourages public engagement with the natural world.
G	Imphy Hall Wood	A narrow strip of woodland more than 500 metres in length. The structure and composition allude to this as a remnant piece of ancient woodland. It would have been too small to have been entered on the Essex Ancient Woodland Inventory.
G	James's Wood	Canopy composition comprising mainly hornbeam <i>Carpinus betulus</i> coppice and pedunculate oak <i>Quercus robur</i> standards. However, the central area is dominated by pedunculate oak <i>Quercus robur</i> , whilst the north-east part of the wood has silver birch <i>Betula pendula</i> standards. The main body of James's Wood has a structure and composition that suggests an ancient status, whilst the western extension contributes to lowland mixed deciduous woodland HPI.
G	Kitchen Wood	A small block of ancient woodland that has a canopy mainly comprising hornbeam <i>Carpinus betulus</i> coppice with pedunculate oak <i>Quercus robur</i> . Species of interest in the ground flora include bluebell <i>Hyacinthoides non-scripta</i> and pignut <i>Conopodium majus</i> , both ancient woodland indicator species.
G	Laindon Common	An ancient woodland area, also lowland mixed deciduous woodland HPI on non-ancient sites and heathland and acid grassland HPI.
G	Little and Long Woods	The structure and composition of these woods support documentary evidence that they are ancient woodland sites. The short section of hedge should help woodland fauna move between the two blocks of woodland.
G	Little Bladen's Wood	This site comprises a large but partially grubbed out wood and a detached section to the south. The main wood is almost pure hornbeam <i>Carpinus betulus</i> coppice with very little shrub layer or ground flora beneath. The ground flora contains ancient woodland indicators bluebell <i>Hyacinthoides non-scripta</i> and wood meadow-grass <i>Poa nemoralis</i> . The site is not listed as ancient woodland due to its size, but the structure and floral composition suggests that this is largely, if not completely, ancient woodland.
G	Little Burstead Common	Centrally located within a cluster of important sites stretching from Billericay into Brentwood District and, as such, is an integral part of a valuable wildlife corridor as well as having its

Project Section	Site Name	Description
		own ecological interest. The site is a mosaic of woodland and scrub habitats that have become established over time on what was open common land at the end of the 19th Century. Lowland mixed deciduous woodland HPI, and it is known that this is not an ancient woodland site. The presence of a pond and scrub habitat, of insufficient quality to trigger any individual LWS criterion, allows the use of the mosaic criterion to define the extent of the site.
G	Little Burstead Wood	This site comprises an unusual chain of woodlands on an east-facing slope in a small valley, with a narrow strip of possibly ancient, streamside woodland along the course of the infant River Crouch. Combined, these habitats make up a significant corridor of semi-natural habitat. The woodland community present is included in the HPI description of lowland mixed deciduous woodland. Although there is no firm evidence of it being ancient, the streamside may form the ghost outline of former ancient woodland, and this would be supported by the range of indicator species present including yellow archangel <i>Lamium galeobdolon</i> , primrose <i>Primula vulgaris</i> , moschatel <i>Adoxa moschatellina</i> , wood-sedge <i>Carex sylvatica</i> , wood anemone <i>Anemone nemorosa</i> amongst others.
G	Lodge Wood	This site is an ancient woodland comprising hornbeam <i>Carpinus betulus</i> coppice and pedunculate oak <i>Quercus robur</i> standards with some small-leaved lime <i>Tilia cordata</i> on the wood margin. The understorey of mainly hazel <i>Corylus avellana</i> also includes some Midland hawthorn <i>Crataegus laevigata</i> .
G	Long Ridings	This woodland site provides a significant corridor of ancient woodland habitat in an urban environment. Despite localised disturbance accentuated by its urban location, the wood retains many of the characteristic plants of ancient woodland including bluebell <i>Hyacinthoides non-scripta</i> , pignut <i>Conopodium majus</i> , early dog-violet <i>Viola riviniana</i> and wood millet <i>Milium effusum</i> .
G	Mill Meadows	The site lies largely within a stream valley, comprising well-drained, acid soils on the higher ground and waterlogged neutral soils closer to the stream. The site meets LWS criteria due to the grassland being a mixture of acid grassland and neutral grasslands HPI. Some of the woodland matches the lowland mixed deciduous woodland HPI description, although it is known to be secondary. The population of the rare Essex Red List Species Harebell <i>Campanula rotundifolia</i> is of county importance.
G	Mountnessing Hall Woods	This site is an ancient woodland site characterised by a canopy dominated by hornbeam <i>Carpinus betulus</i> coppice with ash <i>Fraxinus excelsior</i> and pedunculate oak <i>Quercus robur</i> . Bluebell <i>Hyacinthoides non-scripta</i> is abundant in the ground flora, which also includes ramsons <i>Allium ursinum</i> .

Project Section	Site Name	Description
G	Oak Stables Meadow	A well-drained meadow contains a good mix of grass and herb species, including sweet vernal-grass <i>Anthoxanthum odoratum</i> , field wood-rush <i>Luzula campestris</i> , lady's bedstraw <i>Galium verum</i> and pignut <i>Conopodium majus</i> . This latter plant is strongly associated with sites of long-continuity of vegetation cover, be it in a grassland or woodland location. Species diverse grassland sites such as this have declined during recent decades and are consequently valuable assets to the LWS network. The presence of pignut is a good indication that this is an old, relatively unimproved grassland site.
G	Parkhill Wood	An ancient woodland that provides a rich mosaic of habitats. Whilst most of the site is listed as ancient woodland, with a structure and composition to match, the southern section with its ponds is likely the result of extraction workings with a recent woodland habitat now developed over this part of the site. However, the combination of the differing habitat types and the extremely rich flora it supports makes this a natural extension to the broadleaved woodland habitat of the main wood.
G	Parkhill Wood Meadow	This varied site grades from freely draining acid grassland on the eastern slopes to damp, neutral soil sward on the more level section adjacent to Parkhill Wood. This site is lowland acid grassland HPI, indicated by the co-dominance of common bent <i>Agrostis capillaris</i> and sheep's sorrel <i>Rumex acetosella</i> .
G	Poles Wood	An ancient woodland. Whilst the site is too small to appear in the ancient woodland inventory, the presence of bluebell <i>Hyacinthoides non-scripta</i> , wood anemone <i>Anemone nemorosa</i> , three-veined sandwort <i>Moehringia trinervia</i> and wood millet <i>Milium effusum</i> suggest the woodland is ancient. A pond in the north-eastern corner of the wood provides an additional aquatic habitat.
G	Pound Wood	The wood is a lowland mixed deciduous woodland HPI. Additionally, the structure and composition of this wood with characteristic ancient woodland indicator species supports documentary evidence that this is an ancient woodland site.
G	Primstock	The site is a woodland while not ancient, conforms to the HPI lowland mixed deciduous woodland on non-ancient sites. Hornbeam <i>Carpinus betulus</i> coppice and pedunculate oak <i>Quercus robur</i> are found throughout much of this woodland. Certain ancient indicator species including bluebell <i>Hyacinthoides non-scripta</i> and wood millet are present though the wood may have acquired its ground flora from the ancient parish boundary hedge that forms its western margin.
G	Queens Park Country	The woodland along the southern boundary is the last fragment of the Ancient Millhill Wood, triggering the inclusion of the site as a LWS under the ancient woodland criterion, but the remainder of the mature, well-structured woodland is more recent. The

Project Section	Site Name	Description
		grassland of the recreation ground doesn't match the lowland meadows HPI criterion, but its diversity and structure warrant its inclusion under the Other Neutral Grassland criterion. Other habitat blocks would not meet any criterion individually, but in combination provide significant value, and so the mosaic criterion is used to define the extent of the site.
G	Queens Park Meadow	The large meadow is a lowland meadow developing a diversity of wildflowers since it is cut for hay once a year. Green woodpecker <i>Picus viridis</i> are commonly seen in the meadow feeding on ants. The islands of trees and the mature hedgerows offer feeding and nesting opportunities for thrushes, finches and warblers, as well as a host of insect species.
G	Rook Wood	An ancient woodland dominated by hornbeam <i>Carpinus betulus</i> coppice with pedunculate oak <i>Quercus robur</i> standards. The site is lowland mixed deciduous woodland HPI.
G	Round Wood	An ancient woodland site predominantly of hornbeam <i>Carpinus betulus</i> coppice with pedunculate oak <i>Quercus robur</i> standards. Bluebell <i>Hyacinthoides non-scripta</i> is found throughout the wood, whilst other ancient woodland indicators such as yellow archangel <i>Lamium galeobdolon</i> and primrose <i>Primula vulgaris</i> are also found in patches. The wood is lowland mixed deciduous woodland HPI.
G	Spearshill Wood	Spearshill Wood has densely shading hornbeam <i>Carpinus betulus</i> coppice interspersed with small numbers of pedunculate oak <i>Quercus robur</i> standards. Wild service-tree <i>Sorbus torminalis</i> , a tree with a very strong affinity with ancient woodland, is also present, indicating the site is an ancient woodland area.
G	Spring Wood (Brentwood)	The woodland has two distinct stands, the western part of the site is ancient woodland whilst the eastern is plantation woodland. The western part has hornbeam <i>Carpinus betulus</i> coppice with standards with a scattered shrub layer of hawthorn <i>Crataegus monogyna</i> and elder <i>Sambucus nigra</i> . Two other shrub species of interest present are Midland hawthorn <i>Crataegus laevigata</i> and spindle <i>Euonymus europaeus</i> . Bluebell <i>Hyacinthoides non-scripta</i> is abundant beneath this coppiced structure and other ancient woodland indicator species found include pignut <i>Conopodium majus</i> and three-nerved sandwort <i>Moehringia trinervia</i> .
G	St Giles Churchyard, Mountnessing	This churchyard has preserved a small piece of old, unimproved grassland, which still retains a rich and interesting flora. The grassland is lowland meadows HPI.
G	St Margarets Wood and Lane	A small triangle area of ancient woodland, that is likely to be a remnant of a larger ancient woodland, adjacent to a long ancient green lane forming a valuable wildlife corridor to the south.

Project Section	Site Name	Description
G	Stock Brook Meadow	A small damp meadow that is species rich in a variety of grasses and herbs. Plants of particular interest recorded include sneezewort <i>Achillea ptarmica</i> and pepper-saxifrage <i>Silva silaus</i> , both Essex Red Data List species usually restricted to older undisturbed damp grasslands, which have continued to decline in recent decades.
G	Stock Hill Wood	Coppiced hornbeam <i>Carpinus betulus</i> canopy structure with bluebell <i>Hyacinthoides non-scripta</i> as the dominant ground cover, typical of many old Essex woodlands, indicating very old, if not ancient origin. It is classified as a LWS based on its overall structure and composition as lowland mixed deciduous woodland HPI.
G	Straight Path Shaw	A narrow streamside ancient wood. The southern part has a scattered high canopy principally of pedunculate oak <i>Quercus robur</i> standards. Field maple <i>Acer campestre</i> and ash <i>Fraxinus excelsior</i> are found at sub-canopy level whilst hawthorn <i>Crataegus monogyna</i> and blackthorn <i>Prunus spinosa</i> form the shrub layer. There are many ancient woodland indicator species including bluebell <i>Hyacinthoides non-scripta</i> , wood anemone <i>Anemone nemorosa</i> , yellow archangel <i>Lamium galeobdolon</i> , moschatel <i>Adoxa moschatellina</i> and three-nerved sandwort <i>Moehringia trinervia</i> .
G	Sutton Shaw	Sutton Shaw is a lowland mixed deciduous woodland with species present that indicate the woodland is ancient. Ancient Woodland indicators include wild service-tree <i>Sorbus torminalis</i> , bluebell <i>Hyacinthoides non-scripta</i> , wood anemone <i>Anemone nemorosa</i> , wood millet <i>Milium effusum</i> and moschatel <i>Adoxa moschatellina</i> .
G	Swan Wood	Displays a wide variety of stand types due to the undulating topography and consequent changes in soil drainage and types. The resultant drier upper slopes have a mix of pedunculate oak <i>Quercus robur</i> , hornbeam <i>Carpinus betulus</i> and sweet chestnut <i>Castanea sativa</i> , whilst alder occurs in the damp valley zones. The presence of wild service-tree <i>Sorbus torminalis</i> strongly indicates that this is an ancient woodland site.
G	The Wilderness	A streamside wet woodland that has a steep wooded slope on the eastern side that may have ancient origins. The woodland has diverse ground flora with ancient woodland indicators including bluebell <i>Hyacinthoides non-scripta</i> and foxglove <i>Digitalis purpurea</i> . A wet woodlands HPI.
G	Thick/Hollow Bottom Shaws	Ancient woodland that has a scattered high canopy of pedunculate oak <i>Quercus robur</i> standards and ash <i>Fraxinus excelsior</i> coppice. Wild service-tree <i>Sorbus torminalis</i> a strong ancient woodland indicator species is also recorded from this part of the site. The structure and composition of this wood

Project Section	Site Name	Description
		supports documentary evidence that these are ancient woodland sites.
G	Thrift Wood	A large area of ancient woodland that includes numerous small buildings and grassland glades. The structure of the woodland comprises mainly hornbeam coppice with standards of pedunculate oak <i>Quercus robur</i> and sessile oak <i>Quercus petraea</i> . The ground flora has several ancient woodland indicator species including wood-sedge <i>Carex sylvatica</i> , yellow pimpernel <i>Lysimachia nemorum</i> , wood sorrel <i>Oxalis acetosella</i> and wood millet <i>Milium effusum</i> . Several ponds of varying size are also found within the wood.
G	Turkshill Wood	This woodland has the coppiced hornbeam <i>Carpinus betulus</i> canopy structure found with bluebell <i>Hyacinthoides non-scripta</i> as the dominant ground cover typical of many old Essex woodlands, indicating it is of ancient origin.
G	Westley Heights	Part of Langdon Hills Country Park, ancient woodland dating back to prehistoric times with flower-rich grassland meadows.
G	White's Wood/Martin's Grove	An area of lowland mixed deciduous woodland HPI that is presumed to be ancient. Despite this, dense shading has led to poor ground flora in the woodland that is characterised by bramble.
H	Baker Street Brownfield, Chadwell St Mary	An abandoned brown field site with areas of old hard standing, bunds, soil mounds, scrub and rough grassland forming a mosaic of habitats. The site demonstrates the key qualities of open mosaic 'brownfield' sites: it is large, it has a varied topography and soil which shows signs of recent disturbance, creating areas of sparsely vegetated ground as part of a mosaic of different vegetation types.
H	Blackshots Nature Area	Located north-east of Grays, Blackshots Nature Area is a broad, shallow pit which now comprises a large expanse of long sward grassland with scattered scrub. The varied scrub includes many blossoming species, such as apple <i>Malus sp.</i> , Bird Cherry <i>Prunus padus</i> , Gorse <i>Ulex europaeus</i> , Hawthorn <i>Crataegus monogyna</i> , Broom <i>Cytisus scoparius</i> and Wayfaring-tree <i>Viburnum lantana</i> . The grassland comprises abundant False Oat-grass <i>Arrhenatherum elatius</i> and yorkshire-fog <i>Holcus lanatus</i> along with a wide variety of other species. The site supports an important invertebrate assemblage, as well as providing potential nesting habitat for birds such as Skylark <i>Alauda arvensis</i> and Meadow Pipit <i>Anthus pratensis</i> .
H	Broom Hill	This hilltop site, developed partly on shallow sand/gravel workings, is of interest for its ancient acid grassland flora, particularly autumn squill <i>Scilla autumnalis</i> which is only found in one other site in the county. The site is a lowland dry acid grassland HPI.

Project Section	Site Name	Description
H	Buckingham Hill	This site comprises the Tarmac sand pit to the east of Buckingham Hill plus a section of grassland in the adjacent golf course to the north. This site was identified as part of an area with high invertebrate importance and is open mosaic habitat on previously developed land HPI. The site is a large deep quarry and associated sandy, acid grassland has a complex structure, which provides excellent habitat conditions for the large number of invertebrates associated with brownfield quarry sites.
H	Goldsmith's Meadow	This west-facing hill slope site is old grassland that has developed from lowland meadows HPI. It supports threatened Essex plants, and such sites are invariably of importance for their invertebrate populations.
H	Hob Hill and Sandy Lane Pit, Chadwell St Mary	Hob Hill is thought to be a remnant of old, largely unimproved Thanet Sand grassland, comprising a bent-grass <i>Agrostis</i> spp.-dominated sward. To the north-east is an abandoned sandpit, which now bears all the characteristics of a high-quality brownfield site. It was identified as an area with high invertebrate potential as it satisfies the criteria of open mosaic habitat on previously developed land HPI.
H	Horndon Meadow	This unimproved, species-rich meadow is of note for populations of green-winged orchid <i>Anacamptis morio</i> , adder's-tongue fern <i>Ophioglossum vulgatum</i> and yellow rattle <i>Rhinanthus minor</i> , all three being Essex Red Data List species. The site is lowland meadows HPI.
H	Linford Pit	A site that satisfies the criteria of open mosaic habitat on previously developed land HPI. These habitats are very important for invertebrates and the site contains several nationally rare (Red Data Book) species, including the bees <i>Andrena jlorea</i> and <i>Nomada fulvicornis</i> (both RDB3), and the wasps <i>Cerceris quinquefasciata</i> (RDB3 and Species of Principal Importance) and <i>Hedychrum niemelai</i> (also RDB3), as well as several nationally scarce spiders and the nationally rare fly <i>Myopa polystigma</i> .
H	Linford Wood	This wood is part of a Local Nature Reserve, managed in association with the Essex Wildlife Trust, and represents one of the few woods within the low-lying plain between West Tilbury and the Thames estuary. Pedunculate oak <i>Quercus robur</i> and ash <i>Fraxinus excelsior</i> form a very scattered high canopy to the woodland. Whilst not ancient the woodland satisfies the criteria of lowland mixed deciduous woodland and wet woodland both HPI.
H	Little Thurrock Reedbeds	Two reedbed HPI, which support a wide range of species that are partly or wholly dependent upon the environmental conditions they provide. For example, the solitary bee <i>Hylaeus pectoralis</i> nests within old galls in Common Reed <i>Phragmites australis</i> stems and is therefore restricted to this habitat type.

Project Section	Site Name	Description
		The reedbeds provide good conditions for reed-dependent insects and birds.
H	Low Street Pit	This site satisfies the criteria of open mosaic habitat on previously developed land HPI. These habitats are very important for invertebrates with the hornet robberfly <i>Asilus crahrniformis</i> recorded from this site (a Species of Principal Importance); part of a diverse invertebrate fauna.
H	Mucking Creek Wetlands	The site contains a mosaic of habitats that provide an extremely diverse wetland complex for birds, invertebrates, reptiles and plants. Small areas of dry woodland and scrub add to the habitat diversity. On the site there is an area of dense reedbed, a nationally scarce habitat. The reedbed at Stanford Warren (an area on the site) is one of the largest in Essex, with important populations of reed-feeding moths and other insects. The site is also of ornithological interest due to the regular presence of reed <i>Acrocephalus scirpaceus</i> and sedge warbler <i>Acrocephalus schoenobaenus</i> , water rail <i>Rallus aquaticus</i> and bearded tit <i>Panurus biarmicus</i> . Cetti's warbler <i>Cettia cetti</i> breed here. Grass snake <i>Natrix helvetica</i> are to be found particularly in the wetter areas, while drier parts of the site support adder <i>Vipera berus</i> and common lizard <i>Zootoca vivipara</i> . The other wetland habitats present are also a scarce county resource. Taken as a whole, this mosaic of wetland habitats, drier grassland, scrub and woodland, makes for a site rich in wildlife.
H	Mucking Heath Complex, Southfields	Found at a golf course, this site, partly constructed on relict acidic grassland/ heath, of both floristic and invertebrate interest, satisfies the criteria of open mosaic habitat on previously developed land, HPI. These habitats are very important for invertebrates and the site contains 16 Nationally Scarce species of Hymenoptera (bees, ants and wasps). The old Mucking Heath section of the golf course supports one of only two known Essex populations of the plant species Autumn Squill <i>Prospero autumnale</i> and is worthy of conservation for this alone, although there is much additional interest here.
H	Rainbow Wood and Ashen Shaw	Rainbow Wood appears to be a small ancient woodland fragment. It is an overgrown coppice of sweet chestnut <i>Castanea sativa</i> , with hazel <i>Corylus avellana</i> , field maple <i>Acer campestre</i> and a canopy of pedunculate oak <i>Quercus robur</i> , wild cherry <i>Prunus avium</i> and ash <i>Fraxinus excelsior</i> . Ashen Shaw has a canopy mainly comprising pedunculate oak, ash and field maple. Hornbeam <i>Carpinus betulus</i> coppice found on the edge of the wood has old coppice stools that suggest the woodland is equally old. The structure and floristic composition of these woods suggest that they are both ancient in origin. The criterion lowland mixed deciduous woodland HPI on non-ancient sites would be valid, if the ancient status were to be questioned.

Project Section	Site Name	Description
H	Stifford Clays Copse	A lowland mixed deciduous woodland of Pedunculate Oak <i>Quercus robur</i> , coppiced Field Maple <i>Acer campestre</i> and Ash <i>Fraxinus excelsior</i> . Hazel <i>Corylus avellana</i> , Elder <i>Sambucus nigra</i> and Hawthorn <i>Crataegus monogyna</i> are the main components of the shrub layer. Cleavers <i>Galium aparine</i> dominate the ground flora in much of the woodland, however, Bluebell <i>Hyacinthoides non-scripta</i> is found in the southern section.
H	Terrels Heath	Has a high forest structure dominated by pedunculate oak <i>Quercus robur</i> , with some hawthorn <i>Crataegus monogyna</i> and blackthorn <i>Prunus spinosa</i> in the shrub layer. With parish boundaries running around the western and northern sides, this site is clearly an ancient woodland feature. It may once have been a more open site, but with woodland cover for sufficient time for it to be considered ancient, albeit on dry, heathy soils. Regardless of its antiquity, it is a good example of broad-leaved woodland on this soil type. It is one of very few accessible broad-leaved woodlands in this part of Thurrock.
H	Thurrock Thameside Nature Park, Mucking	This site comprises the first phase of a nature reserve development project between Essex Wildlife Trust and owners Cory Environmental, as part of a restoration plan for a large landfill site at Mucking. The site includes the former Local Wildlife Site Gibbons Lake. The site comprises a wide mosaic of habitats including the lake, grassland, reeds, and extensive tree and scrub habitat. The site is of particular importance to reptiles, including a large population of adder <i>Vipera berus</i> and invertebrates, with the site classifying as open mosaic habitat on previously developed land, HPI.
H	Tilbury Power Station	The rough grassland within the Lytag brownfield section of the site is of importance for its reptile populations, with all four Essex species (adder <i>Vipera berus</i> , grass Snake <i>Natrix helvetica</i> common lizard <i>Zootoca vivipara</i> and slow-worm <i>Anguis fragilis</i>) known to occur here in large numbers. The grounds of the former Tilbury Energy and Environment Centre also supports areas of open mosaic habitat on previously developed land HPI, along with a small stand of reed amongst a mosaic of other wetland and grassland habitats. Survey work has confirmed the invertebrate interest of these areas. The surviving fragment of grazing marsh at Walton Common is worthy of conservation and provides additional foraging habitat for invertebrates and reptiles.
H	Victoria Road Grassland, Stanford-le-Hope	This site comprises unimproved grassland and scattered bramble scrub, currently subjected to low-intensity horse grazing. The site is suggested to be the last remaining fragment of a series of floodplain meadows that ran along the adjacent stream. This grassland criterion requires the site to have a long continuity as grassland and/or important invertebrate

Project Section	Site Name	Description
		populations. The site characteristics and other evidence suggest that this is mature grassland, with the flora capable of supporting a diverse invertebrate fauna, including a suite of scarce and threatened bumblebees. The reptile fauna is of importance in this locality.
H	Warren Lakes	Comprises three of the relatively quiet and less used fishing lakes either side of Wharf Road. The lakes represent some of the best examples of the eutrophic standing waters HPI in Thurrock. There is additional interest in the wet woodland habitat HPI that fringes the lakes, along with small pockets of common reed <i>Phragmites australis</i> and the uncommon grey bulrush <i>Schoenoplectus tabernaemontani</i> that diversify the wetland habitat further.
H	West Tilbury Church	Comprises the yard beyond the now privately owned church and is of interest as a piece of ancient grassland and for the presence of meadow saxifrage <i>Saxifraga granulata</i> , wild clary <i>Salvia verbenaca</i> and lesser calamint <i>Clinopodium nepeta</i> , the latter two species being nationally restricted species locally frequent in Essex and both included in the Essex Red Data List of plants.
H	West Tilbury Hall	An area of lowland dry acid grassland HPI that is species rich and supports Essex Red List Species meadow saxifrage <i>Saxifraga granulata</i> and wild clary <i>Salvia verbenaca</i> . This site supports a characteristic river terrace acid grassland sward. These remnant grasslands are renowned for the important invertebrate assemblages they support in south Essex.

Annex I. Roadside Nature Reserve (RNR) Designated Site Descriptions

Annex I

Roadside Nature Reserve (RNR) Designated Site Descriptions

Table A8.16.18 RNR designated site descriptions

Project Section	Site name	Description
A	RNR 7	Mesotrophic grassland with sulphur clover <i>Trifolium ochroleucon</i> , early-purple orchid <i>Orchis mascula</i> , cowslip <i>Primula veris</i> , bugle <i>Auga reptans</i> , barren strawberry <i>Potentilla sterilis</i> , Agrimony <i>Agrimonia eupatoria</i> .
A	RNR 8	Mesotrophic grassland on beccles 1 clay soils with sulphur clover <i>Trifolium ochroleucon</i> , cowslip <i>Primula veris</i> , primrose <i>Primula vulgaris</i> , bush vetch <i>Vicia sepium</i> , bird's-foot trefoil <i>Ranunculus bulbosus</i> .
A	RNR 12	Mesotrophic grassland on burlingham 1 brown earth soil with sulphur clover <i>Trifolium ochroleucon</i> , cowslip <i>Primula veris</i> , spiny restharrow <i>Ononis spinosa</i> , pepper saxifrage <i>Silaum silaus</i> , quaking grass <i>Briza media</i> , common spotted orchid <i>Dactylorhiza fuchsia</i> .
A	RNR 13	A level verge backed by a steeply rising bank. There is a scattering of trees and shrubs on the embankments. The soil type is burlingham 1 brown earth and species of interest include, pyramidal orchid <i>Anacamptis pyramidalis</i> , bee orchid <i>Ophrys apifera</i> , stone parsley <i>Sison amomum</i> , cowslip <i>Primula veris</i> , wild basil <i>Clinopodium vulgare</i> , common broomrape <i>Orobanche minor</i> .
A	RNR 71	Mesotrophic grassland on slow permeable, seasonally wet, basic loam and clay soil. Species of interest include sulphur clover <i>Trifolium ochroleucon</i> , pepper sexfrage <i>Silaum silaus</i> , burnet sexfrage <i>Pimpinella saxifraga</i> , hairy St. John's wort <i>Hypericum hirsutum</i> .
A	RNR 83	Mesotrophic grassland on slowly permeable slightly acid base rich loam and clay soil. Species of interest include sulphur clover <i>Trifolium ochroleucon</i> , dyers greenweed <i>Genista tinctoria</i> , and pepper saxifrage <i>Silaum silaus</i> .
A	RNR 84	Mesotrophic grassland on slowly permeable slightly acid base rich loam and clay soil, with sulphur clover <i>Trifolium ochroleucon</i> .
A	RNR 85	Mesotrophic grassland on slowly permeable slightly acid base rich loam and clay soil. Species of interest include sulphur clover <i>Trifolium ochroleucon</i> , spiny restharrow <i>Ononis spinosa</i> and stone parsley <i>Sison ammonium</i> .

Project Section	Site name	Description
B	RNR 48	Designated for its boulder clay flora
B	RNR 70	Designated for its yellow vetchling <i>Lathyrus aphaca</i> and pyramidal orchids <i>Anacamptis pyramidalis</i>
B	RNR 92	Designated for its sulphur clover <i>Trifolium ochroleucon</i> and man orchid <i>Orchis anthropophora</i>
B	RNR 200	Designated for its chalk flora
B	RNR 211	Designated for its sulphur clover <i>Trifolium ochroleucon</i> , pyramidal orchid <i>Anacamptis pyramidalis</i> , bee orchid <i>Ophrys apifera</i>
B	RNR 212	Designated for its sulphur clover <i>Trifolium ochroleucon</i> , pyramidal orchid <i>Anacamptis pyramidalis</i> , bee orchid <i>Ophrys apifera</i>
B	RNR 217	Designated for its chalk flora

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