

The Drax Power (Generating Stations) Order

Land at, and in the vicinity of, Drax Power Station, near Selby, North Yorkshire

Outline Landscape and Biodiversity Strategy

(Submitted for Deadline 2)



The Planning Act 2008
The Infrastructure Planning (Applications: Prescribed Forms and Procedure)
Regulations 2009 – Regulation 5(2)(a)

Drax Power Limited

Drax Repower Project

Applicant: DRAX POWER LIMITED
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Glossary

Term	Definition
Above Ground Installation (AGI)	<p>The Minimum Offtake Connection (MOC) which will be operated by National Grid Gas and the PIG Trap Launching station (PTF-L) which will be operated by Drax.</p> <p>The AGI is described as Work No. 6 in Schedule 1 of the draft DCO (Examination Library Reference AS-012).</p>
Additional Areas	Additional areas are compensation areas which fall outside the Site Boundary but under Drax ownership identified to compensate and offset landscape / habitats lost as a result of construction, site clearance and/or the construction and retention of permanent infrastructure associated with the Proposed Scheme.
Biodiversity	Abbreviated form of 'biological diversity' referring to variability among living organisms from all sources including, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part.
Biodiversity Action Plan (BAP)	Plans which set specific, measurable, achievable, realistic and time bound conservation targets for species and habitats. The UK BAP is the UK Government's response to the Convention on Biological Diversity (CBD) signed in 1992. More information is available at www.ukbap.org.uk
Breeding Bird Survey (BBS)	The main scheme coordinated by the BTO/JNCC/RSPB for monitoring the population changes of the UK's common breeding birds. Commonly used in commercial ecological consultancy to survey for birds.
Chartered Institute of Ecology and Environmental Management (CIEEM)	The professional membership body representing and supporting Ecologists and Environmental professionals in the UK, Ireland and abroad. Previously known as Institute of Ecology and Environmental Management (IEEM).
Compensation Areas	Parcels of land on and/or off the Power Station Site within the confines of the Site Boundary and outside the Site Boundary but under Drax ownership identified to compensate and offset landscape / habitats lost as a result of construction, site clearance and/or the construction and retention of permanent infrastructure.
Construction Environmental Management Plan (CEMP)	Document setting out methods to avoid, minimise and mitigate environmental impacts on the environment and surrounding area and the protocols to be followed in implementing these measures in accordance with environmental commitments during construction.
Development Parcels	Development areas A to K (as shown on Figure 6.7.3 of this document).
Ecological Impact	A recommended procedure for the ecological component of Environmental Impact Assessment.

Assessment (EcIA)	
Effect	The consequence of an impact on the environment.
Enhancement	Proposals that seek to improve the landscape resource and the visual amenity of the Proposed Scheme and its wider setting, over and above its baseline condition.
Environmental Statement	A statement that includes the information that is reasonably required to assess the environmental effects of a development and which the applicant can, having regard in particular to current knowledge and methods of assessment, reasonably be required to compile, but that includes at least the information required in the EIA Regulations 2017 and which is prepared in accordance with the latest Scoping Opinion adopted by the Secretary of State (where relevant).
Existing Drax Power Station Complex	The facilities comprising the existing Drax Power Station, and the land upon which it is situated.
Feature	Particularly prominent or eye-catching elements in the landscape, such as tree clumps, church towers or wooded skylines OR a particular aspect of the Proposed Scheme.
Gas Pipeline	<p>The approximately 3 km underground pipeline which connects the Gas Receiving Facility to the National Transmission System.</p> <p>The Gas Pipeline is described as Work No. 7 in Schedule 1 of the draft DCO (Examination Library ref AS-012).</p>
Gas Receiving Facility (GRF)	This is required to receive the natural gas from the Gas Pipeline. The GRF is described as Work No. 5 in Schedule 1 of the draft DCO (Examination Library ref AS-012).
Gas turbine	<p>Gas turbines produce electricity. Air is drawn into the compressor of the gas turbine and is compressed. The fuel is then injected into the combustion chamber. The mixture of fuel and compressed air is ignited, producing gases at high temperatures. As the gas expands, it rotates the turbine to produce electricity.</p> <p>The gas turbines form part of Work No. 1A (which includes up to two gas turbines in connection with Unit X) and Work No. 2A (which includes up to two gas turbines in connection with Unit Y) in Schedule 1 of the draft DCO (Examination Library Reference AS-012).</p>
Generating station equipment	Equipment comprising electricity generating stations, battery storage facilities and gas insulated switchgear buildings. The Generating station equipment is described as Work Nos. 1, 2, 3 and 4 in Schedule 1 of the draft DCO (Examination Library ref AS-012).
Habitat	The environment in which populations or individual species live or grow.
Impact	A physical or measurable change to the environment attributable to the Proposed Scheme.

Important Ecological Features	Species and habitats present within the zone of influence of the Proposed Scheme that are of sufficiently high value that an effect upon them as a result of the Proposed Scheme could be considered to be significant.
Invasive Non-Native Species	Non-native UK animal or plant that has the ability to spread causing damage to the environment, the economy, our health and the way we live.
Joint Nature Conservation Committee (JNCC)	A public body that advises the UK Government and devolved administrations on UK-wide and international nature conservation.
Land use	What land is used for, based on broad categories of functional land cover, such as urban and infrastructure use and the different types of agricultural and forestry.
Landscape	An area, as perceived by people, the character of which is a result of the action and interaction of natural and/or human factors.
Landscape and Visual Impact Assessment	A tool used to identify and assess the likely significant effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity.
Landscape Character	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another.
Landscape Character Assessment	The process of identifying and describing variation in the character of the landscape, and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make a landscape distinctive. The process results in the production of a Landscape Character Assessment.
Landscape Character Types	These are distinct types of landscape that are relatively homogenous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement patterns, and perceptual and aesthetic attributes.
Landscape Effects	Effects on the landscape as a resource in its own right.
Landscape Receptors	Defined aspects of the landscape resource that have the potential to be affected by a proposal.
Likely significant effect	An effect is the consequence of an impact or change to the environment. Effects do not have quantifiable values (e.g. opening up of new views as a result of loss of trees/hedgerows), but have significance (e.g. major, moderate or minor). Those effects predicted to have a significance of moderate to major are classified as likely significant effects.
Local Biodiversity Action Plan (LBAP)	A strategy and set of objectives aimed at conserving, monitoring and raising awareness of the fauna, flora and habitats- collectively referred to as biodiversity- usually along local authority boundary lines.

Mitigation Hierarchy	The mitigation hierarchy is to first try to avoid, then prevent and then reduce likely significant adverse effects on the environment and, if possible, offset likely significant adverse effects on the environment.
Mitigation Measures	Actions proposed to avoid, reduce and where possible offset likely significant adverse effects arising from the whole or specific elements of a development.
National Planning Policy Framework (NPPF)	A document that sets out government's planning policies for England and how these are expected to be applied.
National Policy Statements (NPS)	Overarching policy designated under the Planning Act 2008 concerning the planning and consenting of NSIPs in the UK.
Nationally Significant Infrastructure Project (NSIP)	A project meeting the criteria for a "nationally significant infrastructure project" set out in section 14 of the Planning Act 2008, and therefore requiring authorisation under the PA 2008 by way of a DCO. The Proposed Scheme constitutes a Nationally Significant Infrastructure Project (NSIP) by virtue of s.14(1)(a) and s.15 of the PA 2008 as it is an onshore generating station in England of 50 MW capacity or more.
North Yorkshire Council Ecology Service (NYCES)	Ecological department of North Yorkshire County Council, part of the heritage services team. NYCES helps to protect the county's habitats and wildlife by providing ecological planning guidance.
Open Cycle Gas Turbine	An open cycle gas turbine converts heat into mechanical energy. Combustion of a fuel within a gas turbine produces hot gases that expand over a complex series of blades that cause the turbine to rotate which in turn drives an electrical generator.
Phase 1 habitat survey	An ecological survey technique that provides a standardised system to record vegetation and wildlife habitats. It enables a basic assessment of habitat type and its potential importance for nature conservation.
Pipeline Area	The area required in connection with the construction, operation and maintenance of the Gas Pipeline, the AGI and the GRF, comprising the Pipeline Construction Area and the Pipeline Operational Area.
Pipeline Construction Area	The extent of land needed for the construction phase of the Gas Pipeline, the AGI, the GRF and the Rusholme Lane Area.
Preliminary Ecological Appraisal (PEA)	Preliminary ecological surveys have a range of purposes; one key use is to gather data on existing conditions, often with the intention of conducting a preliminary assessment of likely impacts of development schemes or establishing the baseline for future monitoring. As a precursor to a proposed project, some evaluation is usually made within these appraisals of the ecological features present, as well as scoping for notable species or habitats, identification of potential constraints to proposed development schemes and recommendations for mitigation.

<p>Proposed Scheme</p>	<p>Drax Power Limited is proposing to repower up to two existing coal-powered generating units (Units 5 and 6) at the Existing Drax Power Station Complex with new gas turbines that can operate in both combined cycle and open cycle modes. The term "repower" is used as existing infrastructure, such as the steam turbine and cooling towers, that are currently used for the coal fired units would be reutilised for the new gas fired generating units/stations.</p> <p>The repowered units (which each constitute a new gas fired generating station) would have a new combined capacity of up to 3,600 MW in combined cycle mode (1,800 MW each), replacing existing units with a combined capacity to generate up to 1,320 MW (660 MW each). This is explained further below:</p> <p>Each gas generating station would have up to two gas turbines, with each gas turbine powering a dedicated generator of up to 600 MW in capacity. The gas turbines in each generating station (or unit), therefore, would have a combined capacity of up to 1,200 MW. The gas turbines in each generating station (or unit), in combined cycle mode, would provide steam to the existing steam turbine (through Heat Recovery Steam Generators (HRSGs)) which would generate up to 600 MW per unit. Each unit would have up to two HRSGs. This results in a capacity for each generating station of up to 1,800 MW and, should both units be repowered, a combined capacity of up to 3,600 MW. The new gas turbine generating units have been designated the terms "Unit X" and "Unit Y". In OCGT mode, the combined capacity would be up to 2,400MW (as in OCGT mode, there would be no HRSG capacity).</p> <p>Each unit would have (subject to technology and commercial considerations) a battery energy storage facility. The battery units may be stored within a single structure.</p> <p>The total combined capacity of the two gas fired generating stations and two battery storage facilities (i.e. the total combined capacity of the Proposed Scheme) is therefore 3,800 MW.</p> <p>Drax is seeking consent for the flexibility to either:</p> <ul style="list-style-type: none">• Repower one unit (either Unit 5 or 6) and construct Unit X as a gas fired generating station; or• Repower both Units 5 and 6 and construct Unit X and Unit Y as two gas fired generating stations. <p>In the single unit scenario, up to two gas turbines and up to two HRSGs and (subject to technology and commercial considerations) a battery energy storage facility would be constructed. The maximum size of the battery storage cells and any structure built to protect them would not change, as the battery storage cells for one Unit could be one larger battery which would allow the output associated with one Unit to be sustained for a longer duration. However, the fuel gas station and gas insulated switchgear would be smaller.</p>
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	<p>In the event that two units are repowered and two new generating stations are constructed, then construction works would be undertaken consecutively rather than concurrently.</p> <p>In order to repower to gas, a new Gas Pipeline would be constructed from the Existing Drax Power Station Complex to the National Transmission System (NTS) operated by National Grid. Pipeline infrastructure would be the same for both one and two unit scenarios.</p> <p>A gas receiving facility (GRF) comprising Pipeline Inspection Gauge (PIG) Trap Facility (PTF), Pressure Reduction and Metering Station (PRMS) and compressor station is proposed south of woodland to the east of New Road.</p> <p>At the connection to the NTS there will be an AGI comprising - a Pig Trap Launching station (PTF-L) which will be operated by Drax, and a Minimum Offtake Connection (MOC), which will be operated by National Grid.</p> <p>The Proposed Scheme also includes the electrical connection.</p> <p>Drax's Proposed Scheme is described in more detail in Chapter 3 (Site and Project Description) of the ES Volume 1 (Examination Library Reference APP-071).</p> <p>Schedule 1 of the Order (Examination Library Reference AS-012) lists out the elements comprised within the Proposed Scheme.</p>
Receptor	A component of the natural, created or built environment such as a human being, water, air, a building, or a plant that has the potential to be affected by the Proposed Scheme.
Repower	Decommissioning of existing coal-fired units and replacement with newly constructed gas-fired units utilising some of the existing infrastructure.
Residual Effects	Those effects of a development that cannot be mitigated following implementation of mitigation proposals.
Risk	The likelihood of an impact occurring combined with effect or consequence(s) of the impact on a receptor if it does occur.
Rusholme Lane Area	Area required for passing places during the construction of the Gas Pipeline, AGI and GRF (described as Work No. 14 in Schedule 1 to the draft DCO (Examination Library ref AS-012)).
Selby District Core Strategy Local Plan 2013 (CS)	The first part of the replacement for the Selby District Local Plan 2005. This sets out the high level strategic policies for the District for the period 2012 - 2028. The policies in the Core Strategy replace much of the SDLP policies.
Selby District Local Plan 2005 (SDLP)	A suite of local plan policies that was implemented in 2005. Some policies have been saved for joint consideration with the Selby District Core Strategy Local Plan 2013. Others have been deleted and replaced with new policies in the Core Strategy

Significance	A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic.
Site	The Site refers to the Power Station Site, the Carbon capture readiness reserve space (which is also the location of temporary construction laydown described as Work No. 9B in Schedule 1 to the draft DCO (Examination Library ref AS-012)) and the Pipeline Area.
Site Boundary	The Site Boundary refers to the outer perimeter of the Site.
Species	A group of interbreeding organisms that seldom or never interbreed with individuals in other such groups, under natural conditions; most species are made up of subspecies or populations.
Site Reconfiguration Works/Stage 0	<p>The Site Reconfiguration Works or Stage 0 refers to the works described below that are required to prepare the Power Station Site for the construction of the generating station equipment and the electrical connection. The works comprise:</p> <ol style="list-style-type: none"> 1. Demolition of the private squash court (no replacement), Learning Centre (consolidated into existing facilities); and 2. Demolition of and reconstruction of car parking, turbine outage stores, contractor's compounds and welfare facilities. 3. Construction of a cooling water spray screen between relocated facilities and the southern cooling towers. <p>The Site Reconfiguration Works were the subject of a separate planning application under the Town and Country Planning Act 1990 (planning reference 2018/0154/FULM) which was approved by Selby District Council on 24 May 2018. The Applicant has started to carry out the Site Reconfiguration Works by implementing planning permission 2018/0154/FULM. At the time of submitting this document, the Applicant has submitted a non-material amendment application to the Examining Authority to remove these works from the Proposed Scheme being authorised under the DCO. The DCO Application makes it clear that these works may be carried out under either:</p> <ol style="list-style-type: none"> 1. Any TCPA planning permission that may be granted; or 2. The DCO.
Stage 1	<p>This stage assumes that the Site Reconfiguration Works have been completed under the TCPA planning permission.</p> <p>This stage refers to the construction of Unit X, along with the construction of the Gas Pipeline, the GRF, the AGI, the battery storage facility for Unit X, and the building to house the battery storage (for both Units X and Y).</p> <p>During this stage one coal unit (either 5 or 6) continues to operate while Unit X is being constructed.</p>
Stage 2	This stage refers to the operation and maintenance of Unit X, the Gas Pipeline, the GRF, the AGI and the battery storage facility and the construction of Unit Y (including the installation of battery storage capability

	<p>into any structure built to protect the battery storage constructed under Stage 1).</p> <p>The construction of Unit Y is assumed to take place 12 months after Unit X is complete, however this could be longer.</p> <p>If Unit Y is not built then this Stage 2 is a worst-case assessment of the operation of Unit X.</p> <p>The construction laydown areas associated with the construction of the Gas Pipeline, GRF and AGIs will be reinstated during this stage.</p>
Stage 3	<p>This stage refers to the operation and maintenance of Unit X, Unit Y, the Gas Pipeline, the AGI, the GRF and the battery storage facility.</p> <p>The remaining construction laydown/parking areas (associated with the construction of Units X and Y) will be reinstated after Unit Y is built.</p>
Unit X	<p>The construction of a gas fired generating station capable of operating in CCGT and OCGT modes and which would have a generating capacity of up to 1,800 MW. Unit X would be connected to a battery storage facility. Unit X is described in Work No. 1 of Schedule 1 to the draft DCO (Examination Library Reference AS-012).</p>
Unit Y	<p>The construction of a gas fired generating station capable of operating in CCGT and OCGT modes and which would have a generating capacity of up to 1,800 MW. Unit Y would be connected to a battery storage facility. Unit Y is described in Work No. 2 of Schedule 1 to the draft DCO (Examination Library Reference AS-012).</p>
Visual Amenity	<p>The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through the area</p>
Visual Effects	<p>Effects on specific views and on the general visual amenity experienced by people.</p>
Visual Receptors	<p>Individuals and/or defined groups of people who have the potential to be affected by a proposal.</p>
Waterbody	<p>A discrete body of water forming a physical feature.</p>
White Rose Carbon Capture Project	<p>A proposed project to construct and operate a new 448 MW power station (super critical coal-fired with oxygen combustion technology) adjacent to the Existing Drax Power Station Complex</p>
Wildlife and Countryside Act 1981	<p>The principal piece of UK legislation relating to the protection of wildlife.</p>

Abbreviations

Abbreviation	Description
BAP	Biodiversity Action Plan
BBOP	Business and Biodiversity Offsetting Programme
CEMP	Construction Environmental Management Plan
CIRIA	Construction Industry Research and Information Association
CIEEM	Chartered Institute of Ecology and Environmental Management
CCGT	Combined Cycle Gas Turbine
DCO	Development Consent Order
DEFRA	Department of Environment, Farming and Rural Affairs
EA	Environment Agency
ELC	European Landscape Convention
IEMA	Institute of Environmental Management and Assessment
EclA	Ecological Impact Assessment
EN-1	Overarching NPS for Energy
EN-2	NPS for Fossil Fuel Electricity Generating Infrastructure
EN-4	NPS for Gas Supply Infrastructure and Gas Oil Pipelines
ES	Environmental Statement
GCN	Great crested newt
GRF	Gas Receiving Facility
HPI	Habitats of Principal Importance
Ha	Hectare
HRSGs	Heat Recovery Steam Generators
IEF	Important Ecological Features
LBAP	Local Biodiversity Action Plan
LCA	Landscape Character Areas
m	Metres
NE	Natural England
NERC	Natural Environment and Rural Communities
NG	National Grid
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NSIP	National Significant Infrastructure Project
NYCC	North Yorkshire County Council
NYCES	North Yorkshire Council Ecology Service
OCGT	Open Cycle Gas Turbine

OHL	Overhead Line
PEA	Preliminary Ecological Appraisal
PRoW	Public Right of Way
SDC	Selby District Council
SDLP	Selby District Local Plan

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1 INTRODUCTION

1.1 Overview

- 1.1.1. This Outline Landscape and Biodiversity Strategy (the 'Strategy') has been prepared on behalf of Drax Power Limited. It supports an application for a Development Consent Order ("DCO") that has been submitted to the Secretary of State (SoS) ("the Application"). It sets out the optioneering process which has informed a number of on-Site mitigation areas (termed "Compensation Areas") and off-Site mitigation areas (termed "Additional Areas") which fall under Drax's ownership. These areas form part of an overarching Strategy Mitigation Plan.
- 1.1.2. Since submission of the Application in May 2018, the Strategy has been updated and is submitted into the Examination at Deadline 2 (Rev 002).
- 1.1.3. Drax Power Limited is seeking to repower up to two existing coal fired units, and construct up to two new gas fired power generation units and, subject to technology and commercial considerations, battery storage facilities for each new gas fired power generation unit. Each unit, which is a new gas fired generating station in its own right, would comprise of new gas turbines that can operate in both combined cycle gas turbine ("CCGT") and open cycle gas turbine ("OCGT") technology.
- 1.1.4. For the purposes of this Strategy it is assumed that both units are constructed.

Drax Power Limited

- 1.1.5. Drax Power Limited ("Drax") owns and manages Drax Power Station and is part of the Drax Group Plc, one of the UK's largest energy producers.

Existing Drax Power Station Complex

- 1.1.6. Drax Power Station is located near Selby, North Yorkshire.
- 1.1.7. Drax Power Station began generating electricity after its first 660 MW coal fired unit was commissioned in 1974. In 1975, Drax Power Station was officially opened, with three coal fired units and a total generating capacity of just under 2,000 MW. Eleven years later, in 1986, Drax Power Station doubled in size and became the largest power station in the UK.
- 1.1.8. There are now six units at Drax Power Station which include three units converted to biomass (Units 1-3), with the fourth unit recently converted in August 2018. Drax Power Station now has the capacity to meet 8% of the UK's electricity need and employs 830 people directly throughout the year. A further 4,500 jobs depend on Drax throughout Yorkshire and the Humber.
- 1.1.9. Land uses within the Existing Drax Power Station Complex are predominantly associated with the operation of Drax Power Station. This includes a coal stock yard, hard standing, contractors' compounds, car parks, access/service roads and a riverside loading / unloading jetty, which is linked to the River Ouse to the east. Other land uses within the Existing Drax Power Station Complex not directly related

to the operation of Drax Power Station comprise open grassland, scrub, small pockets of woodland and farmland.

- 1.1.10. The area within the Existing Drax Power Station Complex where development is proposed is referred to as the Power Station Site and is approximately 46.01 ha.

Pipeline Area

- 1.1.11. The Gas Pipeline route is approximately 3 km in length and crosses agricultural land to the east of the Existing Drax Power Station Complex. The land within the Pipeline Construction Area is 25.48 ha.
- 1.1.12. An additional area is located on Rusholme Lane to accommodate potential passing places for traffic during construction of the Gas Pipeline. This is considered to be part of the Pipeline Area.
- 1.1.13. The Site on which the Proposed Scheme would be delivered comprises the Power Station Site, the Pipeline Area, and the CCRRS. During the construction of the Proposed Scheme, the CCRRS would be used temporarily as a construction laydown area.
- 1.1.14. Current land uses within the Power Station Site, the CCRRS and the Pipeline Area can be broken down into Development Parcels, and these are described in Table 1.1 below. Chapter 3 (Site and Project Description) (Examination Library Reference [APP-071](#)) and Figure 1.3 of the Environmental Statement (Chapter 1, Examination Library Reference APP-069) for further details.

Table 1-1 - Description of Development Parcels within the Power Station Site, CCRRS and Pipeline Area

Development Parcel	Description
Power Station Site and the CCRRS	
A	Agricultural land owned by the applicant and leased to third parties for agricultural purposes
B	Scrub land within the curtilage of the Existing Drax Power Station Complex
C	Area of hardstanding within the curtilage of the Existing Drax Power Station Complex
D	Roadway from North Gate Entrance
E	Scrub land within the curtilage of the Existing Drax Power Station Complex
F	Units 5 and 6 (including, associated infrastructure), stores, contractor's facilities (including, car park), sludge lagoon and National Grid substation within the curtilage of the Existing Drax Power Station Complex
G	<i>Drax jetty - no longer part of Proposed Scheme</i>

Development Parcel	Description
H	<i>Site of Site Reconfiguration Works – no longer part of the Proposed Scheme</i>
Pipeline Area	
I	Agricultural land
J	Pipeline
K	Agricultural land
L	Agricultural land

1.2 The Proposed Scheme, Programme and Stages and Work Numbers

Proposed Scheme

- 1.2.1. Drax is proposing to repower up to two existing coal-fired units (known as Unit 5 and Unit 6) with gas – this means the existing coal-fired units would be decommissioned and replaced with newly constructed gas-fired units utilising some of the existing infrastructure. Each unit, which is a new gas fired generating station in its own right, would comprise combined cycle gas turbine (“CCGT”) and open cycle gas turbine (“OCGT”) technology. Each new gas generating unit would also use existing infrastructure, including the cooling system and steam turbines, and would each have a capacity of up to 1,800 MW, replacing existing units each with a capacity of up to 660 MW. Each unit would have a battery storage capability (subject to technology and commercial considerations). Should both units be repowered, the new gas-fired units / generating stations would have a total combined capacity of up to 3,800 MW.
- 1.2.2. Drax is seeking consent for the flexibility to construct a single generating station with an 1,800 MW generating capacity or to construct two generating stations each with an 1,800 MW generating capacity. The construction of each new gas fired generating station would repower either one or both of Unit 5 and Unit 6. The decision as to whether Drax constructs one or two gas fired generating stations and when, is a commercial decision that can only be taken post any consent being granted.
- 1.2.3. In order to repower to gas, a new Gas Pipeline needs to be constructed from Drax Power Station to the National Gas Transmission System (“NTS”). In addition, an Above Ground Installation (“AGI”), and Gas Receiving Facility (“GRF”) are required. A connection to the electrical network would be made via the existing National Grid Substation within the Existing Drax Power Station Complex. Other development includes construction laydown areas, a passing place to enable the construction of the Gas Pipeline and a temporary footbridge during construction.
- 1.2.4. The development being applied for is called the "Proposed Scheme" and is more fully described in Schedule 1 of the draft Development Consent Order (where it is

termed the "Authorised Development") (Examination Library Reference [AS-012, a revised version of which is submitted at Deadline 2, Applicant's document ref 3.1 Rev 2](#)).

- 1.2.5. The Proposed Scheme includes the construction of a generating station with a capacity of more than 50 MW and accordingly meets the criteria given in the Planning Act 2008 (as amended) ("PA 2008") for being a Nationally Significant Infrastructure Project ("NSIP").
- 1.2.6. As a NSIP, the Proposed Scheme therefore requires a Development Consent Order ("DCO") from the SoS for Business, Energy and Industrial Strategy.

Programme and Stages of Work

- 1.2.7. The Proposed Scheme would be implemented over a number of stages as summarised below in Table 1-2 and detailed further in Chapter 3 (Site and Project Description) of the Environmental Statement (Examination Library Reference [APP-071](#)).

Table 1-2 - Stages of the Proposed Scheme considered in the ES

Stage	Title	Indicative Programme
Stage 1	Construction of Unit X, the Gas Pipeline, AGI and GRF	<p>Works undertaken over a three year duration would commence in 2019/2020 with OCGT capability by 2021/2022 and CCGT ready by 2022/2023.</p> <p>Existing planting to accommodate Unit X and associated construction areas within the Power Station Site would be removed or disturbed.</p> <p>One disused sludge lagoon would be brought back into operation and the southern sludge lagoon filled in to accommodate a construction laydown.</p>
Stage 2	Operation of Unit X and construction of Unit Y	<p>The construction of Unit Y is assumed to take place 12 months after Unit X is complete.</p> <p>Works on Unit Y would commence 2024 and run to 2027.</p> <p>Existing vegetation to accommodate Unit Y would be removed or disturbed and sludge lagoons relocated.</p>

Stage	Title	Indicative Programme
Stage 3	Operation of Unit X and Y	It is assumed that both Units would be operating by end of 2027. All new mitigation measures would be implemented by 2027.
Stage 4	Decommissioning	The gas pipeline would remain intact and the AGI may remain in place

Work Numbers

- 1.2.8. A list of the main elements of the works associated with the Proposed Scheme and which would be authorised by the DCO is summarised in Table 1-3 below, with the corresponding Work Number from Schedule 1 of the draft DCO in the left column.

Table 1-3 - Description of the works

Work Number (Work No)	Title of the works
Work No. 1	An electricity generating station (Unit X) fuelled by natural gas and with a gross electrical output capacity of up to 1,800 megawatts.
Work No. 2	An electricity generating station (Unit Y) fuelled by natural gas and with a gross electrical output capacity of up to 1,800 megawatts.
Work No. 3	One battery storage facility for both Unit X and Unit Y.
Work No. 4	Up to two new gas insulated switchgear banking buildings.
Work No. 5	A natural gas receiving facility.
Work No. 6	Above ground gas installation.
Work No. 7	A gas pipe line.
Work No. 8	Electrical connections between Work No. 4 and the existing 400 kilovolt National Grid substation.
Work No. 9	Temporary construction laydown areas.
Work No. 10	Carbon capture readiness.
Work No. 11	Retained and enhanced landscaping comprising- (a) soft landscaping including planting; (b) landscape and biodiversity enhancement measures; and (c) security fencing, gates, boundary treatment and other means of enclosure

Work Number (Work No)	Title of the works
Work No. 12	Decommissioning and demolition of sludge lagoons and construction of replacement sludge lagoons.
Work No.13	Removal of existing 132 kilovolt overhead line and associated towers and foundations.
Work No. 14	Passing place on Rusholme Lane

- 1.2.9. All of the above Work Numbers, with the exception of Work Nos. 9, 11, 12, 13 and 14 include works relating to the provision of “hard and soft landscaping, including tree planting, and ecological mitigation”. Work Number 11 relates to the retention and enhancement of existing landscaping situated within the Power Station Site and CCRRS. Schedule 1 of the draft DCO also includes generic allowance for biodiversity measures.

The Purpose and Structure of this Outline Strategy

- 1.2.10. The purpose of this document is to outline, in Section 2, the optioneering process which has informed this Outline Strategy and the identification of mitigation areas (referred to within the remainder of this Outline Strategy as Compensation Areas and Additional Areas). This Outline Strategy is supported by a suite of objectives, targets / indicators with details on the duration of monitoring (over a 25-year period) and responsibilities.
- 1.2.11. This Outline Strategy comprises this document and the following appendices:
- Appendix 1: Ownership Plan, Optioneering Plan, Strategy Mitigation Plan and the Compensation Area Plans
 - Appendix 2: Legislation, policy, strategies, conventions and guidance
 - Appendix 3: Impact avoidance requirements
 - Appendix 4: Proposed planting palette
 - Appendix 5: Detailed proposed mitigation measures linking to compensation areas
 - Appendix 6: Indicative measures for effective management and maintenance of proposed enhancement
 - Appendix 7: Roles and responsibilities
- 1.2.12. The Appendices provide background information, further detail to the Strategy and will be used to inform the Detailed Strategy(ies):
- 1.2.13. This Outline Strategy presents a coordinated approach to landscape and ecological requirements in order to minimise the potential for conflict between each disciplines’ requirements.
- 1.2.14. Following the making of the DCO for the Proposed Scheme and prior to commencement of any part of the numbered works in Stage 1 (being numbered works 1, 3A, 4A, 5, 6, 7, 8A, 9 (only in so far as is applicable to numbered work 1),

11 (only in so far as is applicable to numbered work 1), 12A, 13 and 14) and the numbered works in Stage 2 (being numbered works 2, 3B, 4B, 8B, 9 (only in so far as is applicable to numbered work 2), 11 (only in so far as is applicable to numbered work 2) and 12B), a detailed Landscape and Biodiversity Strategy(ies) which includes an overarching management, maintenance and monitoring plan and detailed mitigation plans, and which is to be prepared substantially in accordance with this Outline Landscape and Biodiversity Strategy, would be submitted for approval in respect of that numbered work.

- 1.2.15. Depending on the build programme, a detailed Strategy could be submitted in respect of part of a numbered work, in respect of a numbered work or in respect of more than one numbered work.
- 1.2.16. The detailed Strategy(ies) applicable to the work number in question, would provide specific information on proposed hard and soft landscaping works and ecological measures for each Compensation Area and Additional Area. It would also include mitigation measures for locations where the exact detailed site design has yet to be determined and for which internal design objectives have been agreed.
- 1.2.17. The overarching management, maintenance and monitoring would cover a 25-year period and tie into the objectives, targets / indicators, duration and responsibilities set out in this Outline Strategy, giving the local planning authority, Selby District Council, the confidence that Drax Power Limited will achieve the objectives defined in this document. It should be noted that the management, maintenance and monitoring would allow for some flexibility as planting matures to respond to unforeseen events such as climate change, and flooding.
- 1.2.18. Mitigation measures would be secured through requirement 7 in Schedule 2 of the draft DCO (Examination Library Reference [AS-012, a revised version of which is submitted at this Deadline 2, Applicant's document ref 3.1 Rev 2](#)) which states that:

Provision of landscape and biodiversity mitigation

7 – (1) No part of the numbered works comprising stage 1 must be commenced until, for those numbered works, a written strategy which is substantially in accordance with the outline landscape and biodiversity strategy and chapter 9 (biodiversity) of the environmental statement (as each is relevant for that numbered work) has been submitted to and, after consultation with North Yorkshire County Council, approved by the relevant planning authority.

(2) No part of the numbered works comprising stage 2 must be commenced until, for those numbered works, a written strategy which is substantially in accordance with the outline landscape and biodiversity strategy and chapter 9 (biodiversity) of the environmental statement (as each is relevant for that numbered work) has been submitted to and, after consultation with North Yorkshire County Council, approved by the relevant planning authority.

(3) The strategies submitted and approved pursuant to sub-paragraphs (1) and (2) (as applicable) must include details of all proposed hard and soft landscaping works and ecological mitigation measures (as applicable for the relevant numbered work) and, where applicable, -

- (a) the location, number, species, size and planting density of any proposed planting including details of any proposed tree planting and the proposed times of such planting;
 - (b) cultivation, importing of materials and other operations to ensure plant establishment;
 - (c) hard surfacing materials;
 - (d) an implementation timetable;
 - (e) annual landscaping and biodiversity management and maintenance; and
 - (f) the ecological surveys required to be carried out prior to commencement of a numbered work, or following completion of a numbered work in order to monitor the effect of the ecological mitigation measures.
- (4) Any shrub or tree planted as part of the approved strategy that, within a period of five years after planting, is removed, dies or becomes, in the opinion of the relevant planning authority, seriously damaged or diseased, must be replaced in the first available planting seasons with a specimen of the same species and size as that originally planted.
- (5) The strategies must be implemented and maintained in accordance with the implementation timetable in the strategy submitted and approved pursuant to subparagraphs (1) and (2).

2 THE OPTIONEERING PROCESS TO DETERMINE MITIGATION AREAS

2.1 Introduction

- 2.1.1. This section summarises the conclusions (including the key impacts) from the Landscape and Visual Impact Assessment (LVIA) and Biodiversity Chapters of the Environmental Statement (Examination Library References [APP-077](#) and [APP-078](#)). It also sets out the optioneering process which informed the selection of on-Site mitigation areas, the 'Compensation Areas', and off-Site mitigation areas, the 'Additional Areas'.

2.2 Conclusions from the LVIA and Biodiversity Chapters

Landscape, Visual and Biodiversity Impacts

- 2.2.1. The likely principal construction impacts on the landscape resource, visual receptors and biodiversity associated with the Proposed Scheme would include:
- Erection of tree protection measures in accordance with BS 5837:2012 prior to commencement of ground works.
 - Site clearance, removal of vegetation and topsoil stripping from parts of the Power Station Site, the Carbon Capture Reserve Space and the Pipeline Area and temporary stockpiling of turf, earth and storage of materials.
 - Movement of construction related traffic, plant and machinery including the delivery of materials to and from the Site, off site road traffic including workers travelling to and from the Site.
 - General construction activities including the movement of large scale construction equipment, creation of site compounds to include construction offices, warehouses, workshops, open air storage areas and car parking as well as Laydown Areas and the presence of temporary hoardings and signage.
 - Erection of a temporary pedestrian bridge across New Road and between Development Parcels A and B.
 - Presence of four cranes including two main cranes, a 200-tonne mobile crane and an offloading and positioning crane to assist in the large scale structures.
 - Construction site lighting to illuminate site operation, in particular the winter months.
 - Construction of the Proposed Scheme including Units X and Y, battery storage facility, GRF, laying of the pipeline and two AGIs, other smaller structures and associated infrastructure (including site hoarding) and construction laydown areas.
- 2.2.2. The likely principal operational or permanent impacts on the landscape resource, visual receptors and biodiversity associated with the Proposed Scheme would include:
- Introduction of permanent large-scale structures including up to four gas turbines that would operate in both combined cycle and open cycle modes and

- up to four heat recovery steam generators (HRSGs) with up to 4 associated stacks, and up to 4 emissions stacks.
- Construction of a battery storage facility for each of Unit X and Unit Y within Development Parcels C / E. This may include one structure to protect both units. The maximum size of the battery storage cells and any structure built to protect them would not change if only Unit X or both Unit X and Unit Y are built.
- A GRF / gas compressor building on land to the east of New Road (Development Parcel I) with associated stacks – up to four stacks in two pairs at 10 m high for the GRF and one stack at 10 m high for the compressor building.
- Introduction of a permanent car parking areas.
- Gas pipeline and two AGIs one housing a Minimum Offtake Connection (MOC) and the other a Pipeline Trap facility (PTF-L)
- The creation of new and soft landscaping elements associated with the Proposed Scheme.
- Increased vegetation cover following tree and shrub mitigation planting.
- Operational traffic.
- Lighting.

Landscape and Visual Impact Assessment Chapter

- 2.2.3. The LVIA concluded that there would be significant effects on specific landscape character types and areas, on the Lower Derwent Important Local Area and on local landscape features. Equally, adverse effects would be experienced by a variety of local visual receptors within 3 km of the Proposed Scheme subject to their proximity, orientation and the presence or absence of intervening vegetation and built form.
- 2.2.4. The nature of significant effects on the landscape resource and visual receptors is summarised in Table 2-1 below. For details of the full assessment, summary and details of decommissioning please refer to Chapter 10 (Landscape and Visual Impact Assessment) (Examination Library Reference [APP-078](#)) and Table 10.15. It should be noted that the Table below only includes significant effects (i.e. effects which were moderate or more and focused on a worst-case scenario). It also summarises where relevant any change in effect as a consequence of mitigation measures which would only be effective 15 years after the completion of planting in Stage 2. Stage 3 therefore covers effects based on planting established on completion at year 0 and 15 years later when maturation of planting is realised.

Table 2-1 - Significant effects on the landscape resource and visual receptors

Landscape Resource and Visual Receptors	Nature of effect during each stage of development		
	Stage 1	Stage 2	Stage 3
Landscape			
Landscape character:		Moderate adverse	Moderate adverse

Landscape Resource and Visual Receptors	Nature of effect during each stage of development		
	Stage 1	Stage 2	Stage 3
(LCT23 Levels Farmland) (LCT 24 River Floodplain) (LCT 4 River Corridors) (LCT 4A Derwent Valley) (LCT 4B River Ouse) (LCT 4D River Aire)			
Local landscape designation (Lower Derwent Important Landscape Area)		Moderate -major adverse	Moderate -major adverse
Local landscape character (Combination of local features)	Moderate adverse	Moderate adverse	Y0: Moderate adverse Y15: Minor beneficial
Visual			
Residential receptors within 1 km of the Site	Moderate -major adverse	Major and Moderate – major adverse	Y0: Major and Moderate – major adverse Y15: Major, Moderate – major and minor - moderate adverse
Residential receptors between 1 & 3 km of the Site	Moderate -major adverse	Moderate – major adverse	Y0: Moderate-major adverse Y15: Moderate-major adverse
Recreational receptors within 1 km of the Site (TPT and NCN)	Moderate -major adverse	Moderate – major adverse	Y0: Moderate-major adverse Y15: Moderate-major adverse

Landscape Resource and Visual Receptors	Nature of effect during each stage of development		
	Stage 1	Stage 2	Stage 3
Recreational receptors between 1 & 3 km of the Site (TPT and NCN)	Moderate -major adverse	Moderate – major adverse	Y0: Moderate-major adverse Y15: Moderate-major adverse
Recreational users (PRoW and other facilities) within 1 km of the Site	Moderate adverse	Moderate – major and moderate adverse	Y0: Moderate-major and moderate adverse Y15: Moderate-major, moderate and minor adverse
Recreational receptors between 1 & 3 km of the Site (PRoW and other facilities)	Moderate adverse	Moderate adverse	Y0: Moderate-major adverse Y15: Moderate and minor adverse
Local transport users within 1 km of the Site	Moderate adverse	Moderate – major and moderate adverse	Y0: Moderate -major and moderate adverse Y15: Moderate-major, moderate and minor adverse
Local transport users between 1 & 3 km of the Site	Moderate adverse	Moderate adverse	Y0: Moderate adverse Y15: Moderate and minor adverse
Users of education facilities / places of worship within 1km of the Site	Moderate adverse	Moderate adverse	Y0 & Y15 Moderate adverse

Biodiversity Chapter

- 2.2.5. The Biodiversity Chapter's Ecological Impact Assessment (EclA) concluded that there would be likely significant effects on a number of ecological receptors. The following were assessed as being ecological features subject to potentially significant impacts and effects in the absence of mitigation:
- Designated sites;
 - Habitats, including Habitats of Principal Importance (HPI);
 - Otter;
 - Water vole;
 - Breeding and wintering birds;
 - Foraging and commuting bats; and
 - Reptiles.
- 2.2.6. For details of the full assessment of ecological features see Chapter 9, section 9.7 and Table 9-17 of the Environmental Statement (Examination Library Reference [APP-077](#)).

Optioneering Process

- 2.2.7. To determine the potential location of compensation areas an optioneering process was undertaken with Drax Power Limited. Key constraints associated with site selection, areas considered and reasons why specific areas were discounted are summarised below.

Key Constraints on Proposed Scheme Location and Layout

- 2.2.8. The siting of the Proposed Scheme and its design has been influenced by a number of environmental and technological constraints:
- 2.2.9. **Location:** Units X and Y have been positioned as close as possible to the existing steam turbines to meet the Applicant's objective of re-using existing infrastructure, maximising efficiency and enabling ongoing operations of Drax's coal units until such time as they are decommissioned. Only areas not currently occupied or that could accommodate the units were considered as locations for the units. Alternative development sites or layouts were not considered feasible nor in accordance with the objectives of the Proposed Scheme in relation to maximising Drax Power Station's generation efficiency and utilising existing operational land. The proposals sit within the existing Power Station Complex and therefore seek to reduce the extension of buildings into the wider landscape.
- 2.2.10. **Technology:** Gas Turbine selection was based on achieving higher efficiency electricity production and lower emissions of CO₂ per MW. High efficiency combined cycle plants are required to support the grid to maintain stability and fast ramp rates are required to balance out the instability of intermittent renewables.
- 2.2.11. The Proposed Scheme uses vertical Heat Recovery Steam Generators (HRSGs), and for this type of design the combined cycle stack is mounted on top of the HRSG. The primary benefit of vertical HSRGs is that a vertical boiler is compact and covers a smaller footprint than a horizontal type of unit. This is beneficial for the Proposed

Scheme given the space restrictions and the drive toward maximising efficiency by generating shorter steam pipe runs.

- 2.2.12. **Stack Heights:** Stack heights associated with Units X and Y would have a minimum height of 120 m (126 m AOD) in response to air quality impacts and associated stack height sensitivity modelling. Consideration was given to connecting the new units into the existing 259 m (265 m AOD) main stack, however this was not viable with the proposed vertical HRSG.
- 2.2.13. **Materials:** Suitable materials would be used, where possible, in the construction of structures to reduce reflection and glare and to assist with breaking up the mass of the buildings and structures. Materials include Glass Fibre Reinforced Plastic (GRP) or brick for the PTF, PRMS and compressor building and all other buildings are likely to be steel structures with concrete walls or metal / GRP cladding. The stacks are likely to be steel frame with a reinforced concrete shell.
- 2.2.14. Requirement 6 in Schedule 2 of the draft DCO (Examination Library Reference [AS-012](#), a revised version of which is submitted at this [Deadline 2](#), Applicant's document ref 3.1 Rev 2) requires the approval by the relevant LPA of the details of the external appearance of Units X and Y, the gas insulated switchgear banking buildings, the gas receiving facility and the above ground installation, including colour, materials and surface finishes of all new permanent buildings and structures, prior to commencement of that part of the development.
- 2.2.15. **Extent of land holdings:** Development of the generating elements of the Proposed Development is concentrated within the Existing Drax Power Station Complex. Third party negotiations have taken place with landowners in relation to temporary possession to facilitate construction works associated with the Gas Pipeline, GRF and AGI, as well as permanent rights for the retention of the Gas Pipeline, GRF, AGI and associated works such as access, fencing and some planting. Drax Power Limited does not have the extent of landholdings that was available in the 1960's and is constrained by the Existing Drax Power Station Complex boundary. Extensive off-Site mitigation was deemed unfeasible since it would result in the loss of Best and Most Versatile (BMV) agricultural land (Grade 1 and 2). All of the mitigation proposed is concentrated on land either within the Existing Drax Power Station Complex boundary or under Drax's ownership and of limited agricultural value (refer to Figure 6.7.1 Land Ownership Plan of this Strategy).
- 2.2.16. There is further discussion of these constraints in Chapter 4 – Consideration of Alternatives, of the ES (Examination Library Reference [APP-072](#)) and within a paper The Applicant has produced a entitled Landscape and Visual Amenity Effects – Appropriateness of Proposed Mitigation, which is submitted at this [Deadline 2](#) (Applicant's document ref 8.4.7).

Justification

- 2.2.17. During the optioneering process a number of areas were considered for mitigation. Initial areas which lie within Drax Power Limited's ownership were proposed by Drax Power Limited and reviewed following a site visit by the Applicant's landscape

architect and ecologist to determine their feasibility. Other options outside of Drax ownership and beyond the Existing Drax Power Station Complex boundary were suggested by the landscape architect and ecologist following the field visit. These areas were considered where, despite not being within Drax's ownership, they had the potential to support landscape and biodiversity objectives.

2.2.18. A summary of each of the areas and the reasons why these were included or discounted is outlined in Table 2-2 below accompanied by **Figure 6.7.2 Optioneering Plan** appended to this Strategy. It should be noted that for some areas, land identified for mitigation is reserved for carbon capture and storage. Whilst such areas can be used on a temporary basis for construction laydown they would be unsuitable for long term mitigation as they need to remain available for potential future changes in land use.

2.2.19. Land discounted for use as Compensation Areas included the following (numbering reflects the blue hatched land areas on **Figure 6.7.2**):

Table 2-2 - Discounted Compensation Areas

Land Parcel Title	Description	Reason for Discounting
Land to the south of Pear Tree Avenue	The land is low lying and provides landscape enhancement and ecological opportunities. Measures could be introduced to achieve some low level visual screening for receptors using the road whilst respecting Weddle's existing avenue of trees, improve connectivity, soften and integrate the Proposed Scheme into its surroundings and achieve ecological gains through new habitat creation.	The land lies outside Drax Power Limited ownership and is considered important to retain as high quality farmland.
Land to the west of Main Road	Proposals sought to provide a continuous deciduous tree belt linking with trees further south and east. This would improve connectivity and provide partial visual screening to the front of properties east of Main Road, namely Baxter Hall as well as offering some ecological gains through the creation of habitat corridors.	The land would have been off-Site mitigation (not within Drax's ownership) and was considered important to retain as high quality farmland.

Land Parcel Title	Description	Reason for Discounting
Entrance Coppice	This area, on land owned by Drax Power Limited, was identified in Weddle's original landscape plan as being managed to achieve coppice woodland and wildflower meadow. It already has existing mitigation commitments associated with it and as a result has limited scope to deliver additional landscape or ecological mitigation/compensation.	The area was considered unsuitable on the basis that it provided agreed mitigation associated with the original Power Station design and altering it for current proposals may negate the existing agreed mitigation.
Land to the south of Barlow Mound	This area, on land owned by Drax Power Limited, lies adjacent to a watercourse feeding into the River Ouse and includes a linear native tree belt and a mown access strip of managed/rough grassland. The area is within a double fence, with the Power Station on one side and Barlow Mound on the other, and is overlooked by CCTV cameras. This area already has some inherent ecological value and landscape features in the form of trees, grassland and water. Whilst minor enhancements could be delivered, these would be constrained by security / watercourse management requirements.	It was considered unlikely that this area could deliver ecological or landscape mitigation/compensation substantial enough to warrant its use.
Land adjacent to Old Wood Yard	This area, on land owned by Drax Power Limited, was proposed to form part of Additional Area 1 - The Old Wood Yard outlined in Table 2.3. The inclusion of the area would have improved visual connectivity with existing tree belts edging the northern boundary of Development Parcel B and formed a strong visual connection with Barlow Mound to the west.	Due to presence of existing infrastructure which may be utilised by Drax Power Limited in future it was considered unsuitable for development.

2.2.20. The following table, Table 2.3, summarises the proposed Compensation Areas and Additional Areas which have been confirmed. The numbering reflects the red hatched land areas on **Figure 6.7.2** and where applicable to the Development Parcels referred to in Chapter 3 Site and Project Description and Figure 1.3. For each of the areas any mitigation measures that were considered but which ultimately could not be included are also set out.

Table 2-3 - Compensation Areas Considered

Compensation Area	Mitigation Measures	Other Mitigation Measures Proposed but Discounted	Figure Reference
A	Measures seek to reinstate hedgerow and hedgerow trees lost to create new temporary access points / pedestrian footbridge. New opportunities would be introduced to enhance existing hedgerows through gapping up and infilling with hedgerow trees providing partial screening from Pear Tree Avenue and PRow 35.47/1/1, 35.47/1/2 and 35.47/8/1 at a low elevation. Offset areas of land would support a more diverse ecological field margin	These included the triangle of land to the north and east of the PRow 35.47/1/1 which would provide ecological and landscape enhancement opportunities. Measures included low level visual screening for receptors using Pear Tree Avenue and PRow, improving connectivity, softening and integrating the development into its surroundings and achieving ecological gains through new habitat creation. The land has been set aside as part of the CCRRS therefore excluded from further consideration.	6.7.5
B	Proposals seek to reinstate some of Weddle's original aspirations in the form of a semi improved species-rich wildflower meadow and hedgerows. New	Other mitigation measures were considered and discounted on land in the north-eastern corner of Development Parcel B. Measures included enhancing	6.7.6

Compensation Area	Mitigation Measures	Other Mitigation Measures Proposed but Discounted	Figure Reference
	hedgerow planting would improve connectivity and reduce visual clutter. A 15 m buffer is proposed around woodlands to offset construction activities. This includes North Station Wood and the strip of woodland to the north of Development Parcel B.	visual screening south of the PRow 35.47/6/1 however such land has been set aside for the CCRRS and not considered suitable for mitigation. It should be noted that a 20m wide tree belt would be proposed as part of works associated with CCRRS but outside of this application	
C	Planting would be retained and enhanced and new opportunities created for formal and informal planting and water features to replace existing areas of hard standing set aside for car parking. Proposals would provide low level screening of some of the Proposed Scheme and an attractive environment for the benefit of on-site workers, reduce visual clutter and improve connectivity through hedgerow planting. The variety of planting would create additional habitats for wildlife.	No further mitigation was proposed that could be included. Once the exact detailed site design has been determined, further mitigation in line with the internal design objectives, will be considered.	6.7.7
F	Proposals seek to reinstate and strengthen ornamental planting lost as a consequence of the temporary pedestrian footbridge. Planting would provide a low-	Other mitigation measures considered included reinstating tree planting along the western edge of New Road. Such measures however were discounted as the land	6.7.8

Compensation Area	Mitigation Measures	Other Mitigation Measures Proposed but Discounted	Figure Reference
	level screen to reduce visual clutter and to reinforce Weddle's aspirations	falls under third party ownership (National Grid) and overhead lines restrict planting opportunities.	
J (Wren Hall Lane)	<p>New infill tree planting and gapping up of existing hedgerows would provide low level visual screening for immediate visual receptors namely Wren Hall and users of Wren Hall Lane. Additional planting would provide further nesting and foraging resources for local bird populations.</p> <p>A 10 m buffer is proposed around the north and west to Woodcock Wood to protect against construction activities.</p>	Other mitigation measures were considered along the lane including a belt of trees on either side of the lane or a double row of avenue trees beyond the existing hedgerows. Both options were discounted on the basis that this was high quality farmland outside of Drax's ownership.	6.7.9
J and K (South of Rusholme Lane/AGIs)	New planting would mitigate against views from the Diamond Cottage to the west, views from Selby to the east and properties to the south and south-east. Avenue tree planting would also partially screen views from the Trans Pennine Trail along the northern bank of the River Ouse. Planting would improve habitat diversity, provide	No further mitigation was proposed that could be included.	6.7.10

Compensation Area	Mitigation Measures	Other Mitigation Measures Proposed but Discounted	Figure Reference
	additional nesting and foraging resources for local bird populations and additional foraging and commuting habitats for the local bat populations. It would also impede water flows into the River Ouse through riparian and floodplain woodland planting.		
Additional Area 1 – Old Wood Yard	<p>The area was considered to have potential for ecological gains and is located close to the Site. It is of low existing ecological value and provides opportunities for diverse habitat creation.</p> <p>There would be opportunities to tie the landscape in visually with Barlow Mound to the west and provide visual screening of the Proposed Scheme from adjacent PRoW. Included within this area is an existing tree belt which is now semi-mature – mature. Opportunities would be sought to re-plant specific areas where an open canopy allows to improve low level visual screening and provide habitat diversity. This area is close to Barlow Mound</p>	No further mitigation was proposed.	6.7.11

Compensation Area	Mitigation Measures	Other Mitigation Measures Proposed but Discounted	Figure Reference
	(which lies to the west) and could therefore provide habitat connectivity creating opportunities for commuting and dispersal routes.		
Additional Area 2 – Peat Storage Area	<p>This area supports a mosaic of wet habitats including reedbeds and marshy grassland, with large sections of semi improved grassland and parcels of scattered trees and scrub.</p> <p>The area also comprises a pond and species-rich hedgerows along the southern boundary. Although the area offers moderate ecological value it would be necessary to enhance current habitats with management to provide visual screening as well as linking visually with Barlow Mound and reducing views across the Lytag plant, strengthening the extent of woodland planting around the Proposed Scheme, improving habitat connectivity and diversity and impeding flood water into the River Ouse through</p>	No further mitigation was proposed.	6.7.11

Compensation Area	Mitigation Measures	Other Mitigation Measures Proposed but Discounted	Figure Reference
	the management of existing habitats.		
Additional Area 3 – Skylark Reserve	This is an area of short, rough grassland mown on an annual basis. It would be enhanced to deliver some ecological benefits by reducing the intensity of mowing, potentially to a rotational biennial cut. Landscape objectives are limited.	No further mitigation was proposed	6.7.11

3 THE STRATEGY

3.1 Introduction

Existing Baseline (Landscape and Biodiversity Features)

- 3.1.1. Existing landscaping and habitats associated with the Existing Drax Power Station Complex include a wide variety of planting. The following habitats are based on Phase 1 habitat types as per the Joint Nature Conservation Committee's (JNCC) Phase 1 Handbook (Ref 1.26):
- Broadleaved woodland (planted and semi-natural);
 - Broadleaved parkland / scattered trees (ornamental tree planting and avenue tree planting);
 - Mixed woodland;
 - Coppice woodland;
 - Ornamental shrub planting;
 - Scrub (dense and scattered) and ruderal;
 - Native hedgerows (including species-rich, species poor and defunct);
 - Semi improved, marshy and amenity grassland;
 - Ephemeral planting;
 - Arable farmland; and
 - Riparian planting and water bodies (including dry ditches, reedbeds, ponds and water courses)
- 3.1.2. In addition to the above, large extents of hard-standing and buildings have been recorded within the Existing Drax Power Station Complex. Habitats are shown on Figure 9.3 of the ES Biodiversity Chapter (Examination Library Reference [APP-077](#)) and the different type of landscaping (local landscape features) under the assessment of effects in Chapter 10 (Examination Library Reference [APP-078](#)) and in Appendix 10.4 Landscape and Visual Baseline (Examination Library Reference [APP-120](#)).
- 3.1.3. The planting is of varying condition ranging from poor to moderate. Management appears to be variable across the Site and much of the existing woodland lacks diverse understorey planting and ground flora; trees are either semi mature or mature.
- 3.1.4. The original planting scheme was designed by A. Weddle in the 1960's and is supported by a number of plans, reports and a landscape management report dating from July 1987 / Revised July 1990.
- 3.1.5. Externally, planting sought to screen open views from main roads and villages and improve connectivity creating the illusion of an extensive woodland by linking existing areas of planting (woodland, hedgerows and trees) and creating, where feasible, large scale areas of woodland. The scale of planting sought to replicate the size of the original Drax Power Station.
- 3.1.6. Internally, planting aimed to provide a high-quality landscape, reduce visual clutter and create a neat and tidy impression as well as provide a transition between the

original Drax Power Station and surrounding landscape. Extensive lengths of hedgerow planting provided visual screening at a low level and areas of amenity or wildflower grassland served a function in integrating the Power Station into the surrounding landscape.

3.1.7. On and off-site planting sought to achieve the following objectives:

- Maximise benefits of screening from critical viewpoints;
- Harmonise and integrate the large-scale man made constructional elements within the small-scale landscape;
- Establish a new landscape framework of small woodlands of indigenous species and productive farmland;
- Encourage agricultural use of land within the power station ownership;
- Create an attractive working environment within the confines of the station;
- Provide a landscape structure capable of incorporating continuing development of ancillary industry; and
- Use ecological principles to create and maintain a mosaic of diverse habitat.

3.1.8. Whilst the original design has been modified internally as a result of further on-site development, external off-site planting remains intact, and woodland forming part of Weddle's original design will remain undisturbed as a consequence of the Proposed Scheme.

3.1.9. Some habitats recorded within the Site are identified as Habitats of Principal Importance (HPIs) via the provisions of Section 41 of the Natural Environment and Rural Communities Act 2006 and some are identified as locally important habitats in the Selby Local Biodiversity Action Plan (LBAP).

3.1.10. The habitats listed above provide suitable conditions for a range of protected and notable species which include:

- Badger (*Meles meles*);
- Bats;
- Otter (*Lutra lutra*);
- Water vole (*Arvicola amphibious*);
- Breeding and wintering birds;
- Reptiles; and
- Amphibians

3.1.11. Badger latrines and setts have been recorded within the Existing Power Station Complex and the Pipeline Area. Similarly, otter spraints have also been identified with evidence being found along Carr Dyke, just north of the Existing Power Station Complex and the Pipeline Area. Presence of water vole has been confirmed within the Pipeline Area, specifically within an unnamed road alongside Main Road. Otter and water vole are likely to be using the ditch network.

3.1.12. Habitats within and adjacent to the Site provide suitable conditions for commuting and foraging bats. No roosts have been recorded within or adjacent to the Site. Common pipistrelle (*Pipistrellus pipistrellus*) soprano pipistrelle, (*Pipistrellus pygmaeus*), *Myotis* sp., brown long-eared (*Plecotus auritus*) and noctule (*Nyctalus*

noctula) have been recorded during activity surveys in 2018. These species were also recorded using habitats within 2 km of the Site during ecological surveys carried out for the White Rose Carbon Capture and Storage (WRCCS) (Ref 1.24) Project and Barlow Ash Mound ecological monitoring surveys (Ref 1.25).

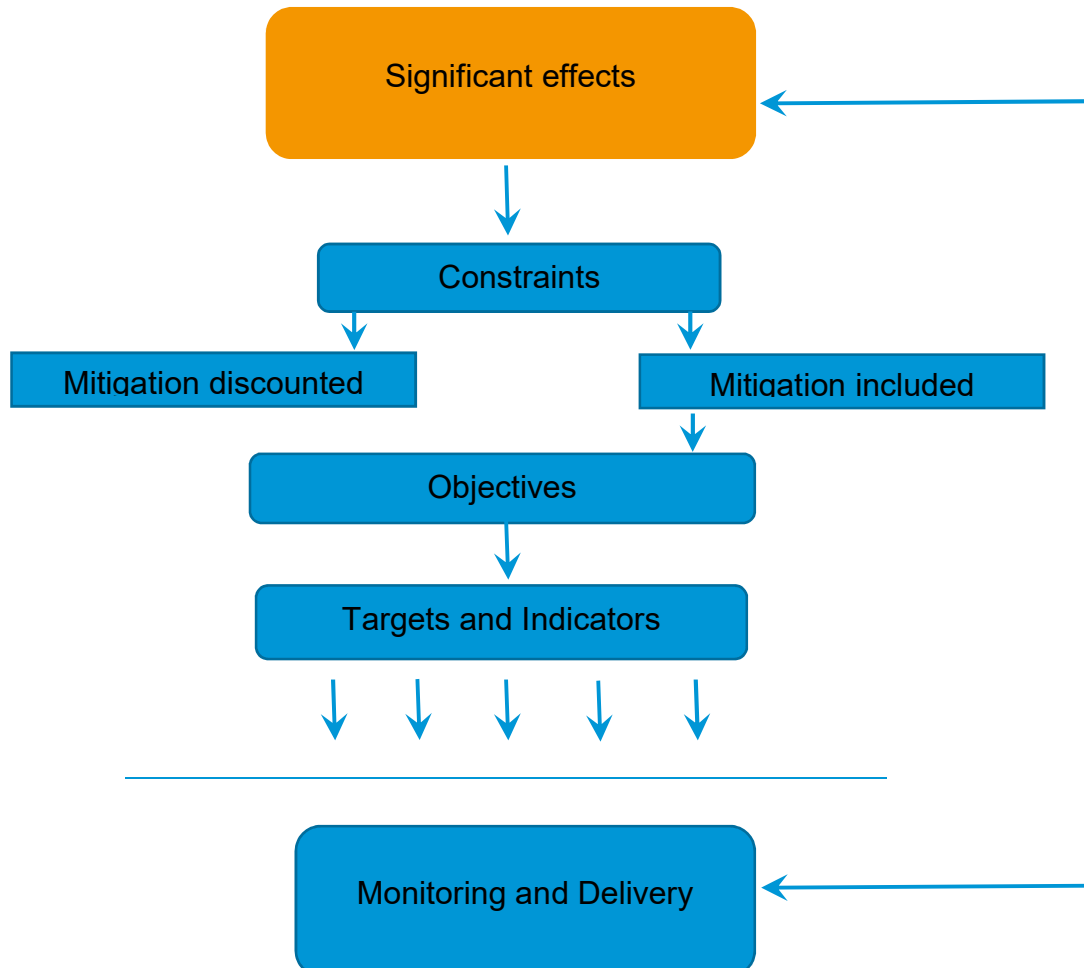
- 3.1.13. Some habitats within the Power Station Site provide suitable conditions for native UK reptiles. No reptiles were recorded within the Site during targeted surveys between early April and June in 2018. A small population of grass snake (*Natrix helvetica*) was recorded previously within Barlow Ash Mound (Ref 1.25).
- 3.1.14. The Site supports wintering and breeding birds. Further details of the species recorded are provided in the Biodiversity Chapter of the ES (Examination Library Reference [APP-077](#)) and accompanying Appendix 9.7 (Examination Library Reference [APP-113](#)). Targeted wintering bird surveys were completed for the Proposed Scheme between November and March 2018, with breeding bird surveys being completed between April and June 2018. Some of the species recorded during the surveys are included on Schedule 1 of the WCA 1981 (as amended). Other species are identified as Species of Principal Importance via the provisions of the Natural Environment and Rural Communities Act 2006 or are listed on the Selby BAP.
- 3.1.15. Indian balsam (*Impatiens glandulifera*) and wall cotoneaster (*Cotoneaster horizontalis*) have been recorded in various parts of the Power Station. Indian balsam has been recorded in Development Parcel C. Cotoneaster has been recorded in Development Parcel C.
- 3.1.16. Condition Assessment surveys to facilitate Biodiversity Net Gain (BNG) calculations were undertaken within Additional Areas 1, 2 and 3 (located within the Existing Power Station Complex but beyond the Red Line Boundary for the DCO Application). The Additional Areas are displayed on Figure 6.7.11. Stands of Indian balsam were recorded to the North of Additional Area 1 (the Old Wood Yard) and to the South of Additional Area 2 (The Peat Storage Area). Additionally, New Zealand pygmy weed (*Crassula helmsii*) was located in the centre of Additional Area 2. These are invasive non-native species, included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Precautionary working methods outlined in the Strategy and alongside measures in the CEMP should be used to control the spread of these invasive non-native species

Strategy Mitigation Plan

- 3.1.17. The Strategy Mitigation Process (presented in the diagram below) outlines how measures to mitigate (where feasible) significant effects and deliver enhancements have been identified.
- 3.1.18. The Plan seeks to summarise:
- The key significant effects;
 - The constraints which have limited possible mitigation measures;
 - The mitigation measures discounted and included and the reasons why;
 - The overarching objectives;

- The key targets / indicators to show these objectives have been met; and
- Indicative monitoring and maintenance proposals and associated responsibilities.

Diagram 3 -1 – Strategy Mitigation Process



3.1.19. Natural England’s Landscape Character Topic Paper 2 “Links to other sustainability tools”, 2014 informed the targets and indicators. The document states that key landscape characteristics are too general to act as indicators in their own right and therefore specific features or attributes need to be identified. These should be:

- *“Central to the distinctive character of the landscape character type or area;*
- *Liable to experience change either in extent or their condition; and*
- *Capable of measuring the key landscape objectives or targets for individual character types / areas.”*

3.1.20. In the case of this Strategy the indicators / targets for landscape focused on specific landscape features, their condition and extent as well as key factors affecting the experience, namely in this case the attractiveness of the workplace environment.

- 3.1.21. The UK Post-2010 Biodiversity Framework has also been reviewed where applicable to inform targets for biodiversity, specifically habitat restoration.
- 3.1.22. For biodiversity, indicators / targets were centred around reinstatement and enhancement of impacted habitats including the replanting of important habitats and the introduction of ecological features to benefit terrestrial and aquatic fauna. Targets also include maintaining the favourable conservation status of protected and notable species affected indirectly as a result of habitat loss and the habitat niches that they occupy. The aim of habitat compensation being to achieve a biodiversity net gain.
- 3.1.23. The overarching objectives of the Strategy are outlined below followed by the Strategy Mitigation Plan (Table 1.5). Also refer to Figure 6.7.3. which illustrates the areas of mitigation / compensation and their overarching objectives. Note whilst Figure 6.7.3 shows the areas of mitigation / compensation it does not show the extent of arable land within Development Parcel J which will be lost temporarily and reinstated within the first year of construction.

Strategy Objectives and Strategy Mitigation Plan Table

- 3.1.24. The Strategy Mitigation Plan is supported by a set of strategy objectives which relate specifically to the mitigation measures proposed in this Strategy. A further set of internal design objectives are outlined in the following section of this chapter:
- Protect existing woodland, trees and hedgerows.
 - Improve the age structure of existing woodland.
 - Reinstatement and enhance vegetation temporarily lost as a result of the Proposed Scheme.
 - Reduce visual clutter on site through low level screening.
 - Provide visual screening for some low level filtered views.
 - Visually screen additional development within Drax's footprint.
 - Create a diversity of habitats and support associated species.
 - Improve ecological and visual connectivity across the Site and beyond.
 - Soften and integrate the development within the surrounding landscape.
 - Create an attractive working environment within the confines of the station (covered by detailed mitigation plans) through high quality landscaping.
 - Use native and indigenous species of local provenance.
 - Introduce riparian vegetation to impede flood water
 - Introduce floodplain woodland planting to impede flood water.

Assumptions Relating to the Objectives Outlined Above

- 3.1.25. It is assumed that unless otherwise stated all existing trees and hedgerows would be protected and native and indigenous planting would be introduced throughout all Compensation Areas including Additional Area 1 and 3. Additional Area 2 would entail the management and enhancement of existing habitats rather than the creation of new habitats.
- 3.1.26. Some of the objectives stemming from the Ouse Catchment Management Plan prepared by the Dales and Vales River Network Catchment Partnership (Ref 1.16)

have been included. It should be noted that proposals to introduce riparian vegetation are limited by watercourse management requirements.

- 3.1.27. It should be noted that the Strategy Mitigation Plan allows for some flexibility as planting matures to respond to unforeseen events such as climate change, disease, flooding, contamination and future planning applications. Equally changes noted through regular on-site monitoring will be carefully considered against the Plan's objectives to determine whether such a change can be accommodated i.e. the introduction of new habitats and species.
- 3.1.28. The enhancement of existing habitats will alter the condition of the baseline. This adheres to BNG principles on determining significance of habitat enhancement.

Table 3-1 - Strategy Mitigation Table (of significant adverse effects and proposed mitigation measures)

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
Landscape						
Landscape Character	Limited extent of offsite land holding and high value farmland	None proposed	None proposed	NA	NA	NA
Local landscape designation	As above	None proposed	None proposed	NA	NA	NA
Local landscape character	As above	Area 1 and 4 considered but discounted – refer to Figure 6.7.2 (blue hatched areas)	Throughout the red line boundary	<ul style="list-style-type: none"> Retain and protect existing woodland, trees and hedgerows 	<ul style="list-style-type: none"> No loss of existing trees and hedgerows on site 	<p>Contractor during construction – 2018 to 2027:</p> <ul style="list-style-type: none"> Ensure existing trees and hedgerows are protected in accordance with BS 5837:2012. Arboricultural method statement and protection of Root Protection Areas from construction activities. Ensure that there is a 15 m buffer around North Station Wood and woodland strip to the north west of Development Parcel B during construction. Ensure that there is a 10 m exclusion zone around Woodcock Wood to protect against excavation and construction of the Pipeline. <p>Drax onS-site maintenance contractor – over 25-year period:</p>

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
						<ul style="list-style-type: none"> Prepare as part of the management, monitoring and maintenance programme a woodland management plan which includes a replacement strategy for mature and over mature trees.
			Compensation Area - B & Additional Area 1	<ul style="list-style-type: none"> Improve the age structure of existing woodland. 	<ul style="list-style-type: none"> Achieve through sympathetic management a diverse age, structure and habitats considering the proportion of woodland trees, understorey and ground flora - a mix of 65% tree cover, 25% understorey and 15% ground flora. Replace over-mature / fallen or diseased trees where the canopy is 1 1/2 times the height of surrounding trees. Initial works to be completed within 12 years of commencement of 	<p>Drax on-Site maintenance contractor – over 25-year period:</p> <ul style="list-style-type: none"> Prepare as part of the management, monitoring and maintenance programme a woodland management plan which includes a replacement strategy for mature and over mature trees. Review the woodland management plan on a five-yearly basis over a 25 year duration giving consideration to the condition and quality of trees. Reassess on a five-yearly basis over 25 years whether changes need to be made to the planting mix, species, density and structure to respond to unforeseen events and monitoring data.

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
					the construction works.	
Local landscape character	As above	Area 1 considered but discounted – refer to Figure 6.7.2 (blue hatched area)	Compensation Area - A, B, C, F and J Additional Area 2	<ul style="list-style-type: none"> Reinstate and enhance vegetation temporarily lost as a result of the Proposed Scheme. Manage existing vegetation 	<ul style="list-style-type: none"> Improve diversity and density (including coverage) through replacement and enhancement planting, achieving 90% ground coverage in planting of areas lost and reinstated within five years of completion. Improve diversity and density through ongoing management and enhancement managing scrub and emerging woodland up to a height of 10m. 	<p>Landscape sub-contractor during construction – 2018 – 2027:</p> <ul style="list-style-type: none"> Implementation of new planting areas in accordance with the detailed mitigation strategies. Under regular defect checks review the quality and condition of planting and replace within the agreed defects liability period. <p>Drax on-Site maintenance contractor – over 25-year period:</p> <ul style="list-style-type: none"> Oversee the quality and condition of the planting and replace where appropriate to achieve the targets specified. Reassess on a five-yearly basis over 25 years whether changes need to be made to the planting mix, species, density and structure to respond to unforeseen events and monitoring data.
Local landscape character	As above	Area 1. considered but discounted – refer to Figure 6.7.2 (blue	Compensation Area – C Additional Area 1 and 2.	<ul style="list-style-type: none"> Soften and integrate the development within the surrounding landscape. 	<ul style="list-style-type: none"> Achieve 100% of woodland planting proposed (broadleaved, coppice / scrub, woodland carr and broadleaved 	<p>Landscape sub-contractor during construction – 2018 – 2027:</p> <ul style="list-style-type: none"> Implementation of new planting areas in accordance with the detailed mitigation strategies.

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
		<p>hatched areas)</p> <p>Detailed mitigation strategies were proposed for internal areas of the Proposed Scheme once the footprint has been finalised</p>			<p>scattered parkland trees) within areas identified during construction and ensure plants remain in good condition and the mix of species is diverse.</p> <ul style="list-style-type: none"> • Ensure edges of planting are not regimented and blend into each other. • Improve diversity and density through ongoing management and enhancement managing scrub and emerging woodland up to a height of 10m. 	<ul style="list-style-type: none"> • Under regular defect checks review the quality and condition of planting and replace within the agreed defects liability period. <p>Drax on-Site maintenance contractor – over 25-year period:</p> <ul style="list-style-type: none"> • Oversee the quality and condition of the planting and replace where appropriate to achieve the targets specified. • Reassess on a five-yearly basis over 25 years whether changes need to be made to the planting mix, species, density and structure to respond to unforeseen events and monitoring data.
Local landscape character	As above	Area 1 considered but discounted – refer to Figure 6.7.2 (blue	Compensation Area - B, C & F	<ul style="list-style-type: none"> • Reduce visual clutter through low level screening 	<ul style="list-style-type: none"> • Achieve 100% of hedgerow planting within areas specified and maintain to a height of 2.5m with a tapered profile and flat top throughout 	<p>Landscape sub-contractor during construction – 2018 – 2027:</p> <ul style="list-style-type: none"> • Implementation of new hedgerow in accordance with the detailed mitigation strategies. • Under regular defect checks review the quality and condition of planting and replace within the agreed defects liability period.

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
		hatched areas). Detailed mitigation strategies are proposed for internal areas of the Proposed Scheme once the footprint has been finalised			the 25-year period of the management plan. <ul style="list-style-type: none">Maintain areas of amenity grassland to a low mowing height of 30-50mm to create a neat tidy impression.	Drax on-Site maintenance contractor – over 25-year period: <ul style="list-style-type: none">Oversee the quality and condition of the planting and replace where appropriate to achieve the targets specified.Reassess on a five-yearly basis over 25 years whether changes need to be made to the planting mix, species, density and structure to respond to unforeseen events and monitoring data.
Local landscape character	As above	Other mitigation measures discounted within Compensation Area F. Detailed mitigation strategies are proposed for internal areas of the Proposed Scheme once the	Compensation Area – C Additional Area 1 and 2.	<ul style="list-style-type: none">Create an attractive working environment within the confines of the station (covered by detailed mitigation plans) through high quality landscaping.Visually screening	<ul style="list-style-type: none">Ensure 100% planting proposed through detailed mitigation plans are implemented during the construction period 2018-2017.Achieve woodland planting (broadleaved and woodland carr) reaching a height of 10m.Achieve coppice woodland planting up to 5m height	Landscape sub-contractor during construction – 2018 – 2027: <ul style="list-style-type: none">Implementation of new planting areas in accordance with the detailed mitigation strategies.Under regular defect checks review the quality and condition of planting and replace within the agreed defects liability period. Drax on-Site maintenance contractor – over 25-year period: <ul style="list-style-type: none">Oversee the quality and condition of the planting and replace where appropriate to achieve the targets specified.Reassess on a five-yearly basis over 25 years whether changes need to be made to the

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
		footprint has been finalised		additional development with Drax's footprint.	<p>within 8 years and increase density of screening through cutting on a five-year rotation (Additional Area 1 and Compensation Areas J and K).</p> <ul style="list-style-type: none"> Undertake a survey to determine what on site workers desire in terms of outdoor space / facilities. Observe an increase in use of outdoor space for lunch or rest breaks. 	planting mix, species, density and structure to respond to unforeseen events and monitoring data.
Local landscape character	As above	Area 1, 2, 4 and 5 considered but discounted – refer to Figure 6.7.2 (blue hatched areas)	Compensation Area - A, B, C, J / K Additional Area 1 and 2	<ul style="list-style-type: none"> Improve visual connectivity across the Site and beyond to increase the perception of extensive woodland areas and scrub. 	<ul style="list-style-type: none"> Achieve woodland planting (broadleaved and woodland carr) reaching a height of up to 10m. Achieve coppice woodland planting up to 5m height within 8 years and increase density of screening through cutting on a five- 	<p>Landscape sub-contractor during construction – 2018 – 2027:</p> <ul style="list-style-type: none"> Implement new planting areas in accordance with the detailed mitigation strategies. Under regular defect checks review the quality and condition of planting and replace within the agreed defects liability period. <p>Drax on-Site maintenance contractor – over 25-year period:</p> <ul style="list-style-type: none"> Oversee the quality and condition of the planting and replace where appropriate to achieve the targets specified.

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
					<p>year rotation (Additional Area 1 and Compensation Area J and K).</p> <ul style="list-style-type: none"> • Within every 100m length of hedgerow introduce hedgerow trees to achieve 50% screening. • Manage scrub and emerging woodland to a height of up to 10 m improve diversity and density and achieve 50% screening. 	<ul style="list-style-type: none"> • Undertake coppicing on rotation every 5 years to achieve a dense coverage. • Reassess on a five-yearly basis over 25 years whether changes need to be made to the planting mix, species, density and structure to respond to unforeseen events and monitoring data.
Local landscape character	As above	Area 1 and 2 considered but discounted – refer to Figure 6.7.2 (blue hatched areas)	Compensation Area - K and Additional Area 2	<ul style="list-style-type: none"> • Introduce and manage riparian and floodplain vegetation to impede flood water* 	<ul style="list-style-type: none"> • Manage scrub to a height of up to 10m (Additional Area 2 and Compensation Area K). Achieve coppice woodland planting up to 5m height within 8 years and increase density of screening through cutting on a five-year rotation (Compensation Area J and K). 	<p>Landscape sub-contractor during construction – 2018 – 2027:</p> <ul style="list-style-type: none"> • Implement new planting areas in accordance with the detailed mitigation strategies. • Under regular defect checks review the quality and condition of planting and replace within the agreed defects liability period. <p>Drax on-Site maintenance contractor – over 25-year period:</p> <ul style="list-style-type: none"> • Oversee the quality and condition of the planting and replace where appropriate to achieve the targets specified.

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
						<ul style="list-style-type: none"> Undertake coppicing on rotation every 5 years to achieve a dense coverage. Liaise with Ouse Catchment Partnership over monitoring objectives.
Visual						
Residential receptors within 1 km of the Site	Limited extent of off site land holding, high value farmland and associated off site agreements	Area 1 and 2 (blue hatched areas on Figure 6.7.2) as well as other mitigation measures discounted within Compensation Area F and J	Compensation Area - J and K – Wren Lane and AGIs	<ul style="list-style-type: none"> Provide visual screening for some low level filtered views 	<ul style="list-style-type: none"> Within every 100m length of hedgerow introduce hedgerow trees to achieve 50% screening. Maintain hedgerows on a three-year rotation to achieve a dense screen with a “A” profile top and a height of 2.5m. Achieve coppice woodland planting up to 5m height within 8 years and increase density of screening through cutting on a five-year rotation (Compensation Area J and K). Ensure that avenue broadleaved tree planting achieves at 	<p>Landscape sub-contractor during construction – 2018 – 2027:</p> <ul style="list-style-type: none"> Implement new planting areas in accordance with the detailed mitigation strategies. Under regular defect checks review the quality and condition of planting and replace within the agreed defects liability period. <p>Drax on-Site maintenance contractor – over 25-year period:</p> <ul style="list-style-type: none"> Oversee the quality and condition of the planting and replace where appropriate to achieve the targets specified. Undertake coppicing on rotation every 5 years to achieve a dense coverage.

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
					least 75% partial screening where introduced (Compensation Area J and K).	
Residential receptors between 1 & 3 km of the Site	As above	None considered	Compensation Area - J and K –AGIs	<ul style="list-style-type: none"> Provide visual screening for some low level filtered views 	<ul style="list-style-type: none"> Achieve coppice woodland planting up to 5m height within 8 years and increase density of screening through cutting on a five-year rotation (Compensation Area J and K). Ensure that avenue broadleaved tree planting achieves at least 75% partially screening where introduced (Compensation Area J and K). 	<p>Landscape sub-contractor during construction – 2018 – 2027:</p> <ul style="list-style-type: none"> Implement new planting areas in accordance with the detailed mitigation strategies. Through regular defect checks review the quality and condition of planting and replace within the agreed defects liability period. <p>Drax on-Site maintenance contractor – over 25-year period:</p> <ul style="list-style-type: none"> Oversee the quality and condition of the planting and replace where appropriate to achieve the targets specified. Undertake coppicing on rotation every 5 years to achieve a dense coverage.
Recreational receptors within 1 km of the Site (TPT, NCN, PRoW and other facilities)	As above	Area 1– refer to Figure 6.7.2 (blue hatched area) as well as other mitigation measures	Compensation Area - A, B J and K – Wren Hall Lane and AGIs and	<ul style="list-style-type: none"> Provide visual screening for some low level filtered views 	<ul style="list-style-type: none"> Within every 100m length of hedgerow introduce hedgerow trees to achieve 50% screening. Maintain hedgerows on a three-year rotation to achieve a 	<p>Landscape sub-contractor during construction – 2018 – 2027:</p> <ul style="list-style-type: none"> Implement new planting areas in accordance with the detailed mitigation strategies. Through regular defect checks review the quality and condition of planting and replace within the agreed defects liability period.

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
		discounted within Compensation Area A, B, F and J	Additional Area 1		<p>dense screen with a "A" profile top and a height of 2.5m</p> <ul style="list-style-type: none"> Achieve coppice woodland planting up to 5m height within 8 years and increase density of screening through cutting on a five-year rotation (Compensation Area J and K). Ensure that avenue broadleaved tree planting achieves at least 75% partial screening where introduced. 	<p>Drax on-Site maintenance contractor – over 25-year period:</p> <ul style="list-style-type: none"> Oversee the quality and condition of the planting and replace where appropriate to achieve the targets specified. Undertake coppicing on rotation every 5 years to achieve a dense coverage.
Recreational receptors between 1 -3 km of the Site (TPT, NCN, PRoW and other facilities)	As above	None considered	Compensation Area - J and K –AGIs	<ul style="list-style-type: none"> Provide visual screening for some low level filtered views Soften and integrate the development within the surrounding landscape. 	<ul style="list-style-type: none"> Achieve coppice woodland planting up to 5m height within 8 years and increase density of screening through cutting on a five-year rotation. (Compensation Area J and K). Ensure that avenue broadleaved tree 	<p>Landscape sub-contractor during construction – 2018 – 2027:</p> <ul style="list-style-type: none"> Implement new planting areas in accordance with the detailed mitigation strategies. Through regular defect checks review the quality and condition of planting and replace within the agreed defects liability period. <p>Drax on-Site maintenance contractor – over 25-year period:</p>

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
					planting achieves at least 75% partial screening where introduced.	<ul style="list-style-type: none"> Oversee the quality and condition of the planting and replace where appropriate to achieve the targets specified. Undertake coppicing on rotation every 5 years to achieve a dense coverage.
Local transport users within 1 km of the Site	As above	Area 1 considered but discounted – refer to Figure 6.7.2 (blue hatched area)	Compensation Area - A, J and K	<ul style="list-style-type: none"> Provide visual screening for some low level filtered views. 	<ul style="list-style-type: none"> Within every 100m length of hedgerow introduce hedgerow trees to achieve 50% screening. Maintain hedgerows on a three-year rotation to achieve a dense screen with a “A” profile top and a height of 2.5m Achieve coppice woodland planting up to 5m height within 8 years and increase density of screening through cutting on a five-year rotation. (Compensation Area J and K). Ensure that avenue broadleaved tree planting achieves at least 75% partial 	<p>Landscape sub-contractor during construction – 2018 – 2027:</p> <ul style="list-style-type: none"> Implement new planting areas in accordance with the detailed mitigation strategies. Through regular defect checks review the quality and condition of planting and replace within the agreed defects liability period. <p>Drax on-Site maintenance contractor – over 25-year period:</p> <ul style="list-style-type: none"> Oversee the quality and condition of the planting and replace where appropriate to achieve the targets specified. Undertake coppicing on rotation every 5 years to achieve a dense coverage.

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
					screening where introduced.	
Local transport users between 1 to 3 km of the Site	As above	NA	NA	NA	NA	NA
Users of education facilities / places of worship	As above	NA	NA	NA	NA	NA
Biodiversity						
Habitats (including Habitats of Principal Importance and Local BAP habitats)	Limited extent of offsite land holding, high value farmland and off-site agreements	Area 1 – 5 considered but discounted – refer to Figure 6.7.2 (blue hatched areas)	All Compensation Areas as per Strategic Strategy Mitigation Plan	<ul style="list-style-type: none"> Existing baseline habitats reinstated and enhanced and LBAP habitats Additional habitats to provide new opportunities for biodiversity protected and notable species Retain and protect important 	<ul style="list-style-type: none"> Achieve a biodiversity net gain using the DEFRA metric Where habitats are lost through the Proposed Scheme these are replaced like for like within on and off-Site compensation area Achieve 100% of all proposed habitats and vegetation including woodland, species-rich grassland, 	<p>Landscape sub-contractor during construction – 2018 – 2027:</p> <ul style="list-style-type: none"> Implement new planting areas in accordance with the detailed mitigation strategies. Through regular defect checks review the quality and condition of planting and replace within the agreed defects liability period. <p>Drax on-Site maintenance contractor – over 25-year period:</p> <ul style="list-style-type: none"> Oversee the quality and condition of the planting and replace where appropriate to achieve the targets specified Reassess on a five-yearly basis over 25 years whether changes need to be made to the planting mix, species, density and

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
				habitat features <ul style="list-style-type: none"> Maintain an ecological network between existing habitats within the Power Station and new habitats within Compensation Areas 	hedgerows, waterbodies planting proposed within areas identified during construction and ensure plants and habitats remain in good condition with a mix of diverse, native species. <ul style="list-style-type: none"> No loss of existing trees and hedgerows on site which would remain unaffected by the Proposed Scheme 	structure to respond to unforeseen events and monitoring data. <ul style="list-style-type: none"> Ecological/Environmental Clerk of Works to monitor retained habitats during construction period and to assess the success of habitat creation throughout the implementation of habitats period. Arboricultural method statement and protection of Root Protection Areas from construction activities.
Reptiles		Land adjacent to Additional Area 1 – The Old Wood Yard considered but discounted – refer to Figure 6.7.2 (blue hatched area)	Additional Area 1, 2 and 3	<ul style="list-style-type: none"> Maintain and introduce ecological features for reptiles Prevent killing and injury during construction through avoidance and precautionary measures 	<ul style="list-style-type: none"> Provide reptile hibernation sites, earth bunds, south facing slopes and waterbodies within off-site compensation areas 	<ul style="list-style-type: none"> Ecological Clerk of Works to carry out pre-construction checks and to be present regularly throughout the construction period Walkover surveys and visual searches will be combined with other post-construction species surveys to monitor suitable habitat for its usage by reptiles

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
Breeding and wintering birds	Limited extent of off-site land holding, high value farmland and associated off site agreements	Compensation Areas 1 - 5	Additional Areas 1, 2 and 3. Habitat reinstatement within all Compensation Areas	<ul style="list-style-type: none"> Ensure the favourable conservation status of breeding and wintering birds is maintained Conserve, replace and introduce new opportunities for nesting birds and roosting areas for wintering birds 	<ul style="list-style-type: none"> Achieve successful generation of habitat within Compensation Area C adjacent to the battery storage area to ensure connectivity to baseline breeding bird habitat is linked Retain 100% of all important field boundaries (those that have been proposed for retainment) and woodland/scrub habitats with a buffer 	<ul style="list-style-type: none"> Ecological Clerk of Works to carry out pre-construction checks and to be present regularly throughout the construction period Walkover survey of landscape and habitat creation areas to assess suitability of these for breeding and wintering birds (completed in years 1, 3, 5 and 10 following completion of Stage 2). Targeted breeding bird surveys of landscape and habitat creation areas between April and June in years 1, 3, 5 and 10 following completion of Stage 2. Targeted wintering bird surveys of landscape and habitat creation areas between September and March in the winter of years 1, 3, 5 and 10 following completion of Stage 2.
Water vole	Drilling technique within Pipeline Area	None	Additional Area 2, Compensation Area K, avoidance measures and use of trenchless techniques	<ul style="list-style-type: none"> Ensure the favourable conservation status of water vole populations 	<ul style="list-style-type: none"> Trenchless techniques to be prioritised alongside Main Road. Trenches and excavations near Main Road must be at least two metres deep Ecologically sensitive methods applied to construction access 	<ul style="list-style-type: none"> Ecological Clerk of Works to carry out pre-construction checks and to be present regularly throughout the construction period of the Gas Pipeline. Walkover survey of watercourses and waterbodies within the Proposed Scheme footprint to assess their suitability for water voles has not been decreased as a result of the Proposed Scheme (completed between in years 1 and 3 following completion of Stage

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
					throughout Pipeline Construction period <ul style="list-style-type: none"> Introduction of riparian plant species along Dickon Field Drain 	2). <ul style="list-style-type: none"> Targeted water vole surveys completed in years 1 and 3 following completion of Stage 2, including watercourses and waterbodies within and up to 50 m from the Proposed Scheme where practicable.
Otters	None	None	Additional Area 2, Compensation Area K	<ul style="list-style-type: none"> Provide resting place opportunities 	<ul style="list-style-type: none"> Introduction of woodland carr and scrub within Additional Area 2 to provide alternative opportunities for otter resting places Avoidance of otter path obstruction Reduction in light spill during construction in proximity to otter habitat 	<ul style="list-style-type: none"> Ecological Clerk of Works to carry out pre-construction checks and to be present regularly throughout the construction period of the Gas Pipeline Walkover survey of watercourses and waterbodies within the Proposed Scheme footprint to assess their suitability for otters has not been decreased as a result of the Proposed Scheme (completed in years 1 and 3 following completion of Stage 2). Targeted otter surveys completed in years 1 and 3 following completion of Stage 2, including watercourses and waterbodies within and up to 250 m from the Proposed Scheme where practicable.
Foraging and Commuting Bats	Limited extent of offsite land holding, high value farmland and associated off	None	Additional foraging and commuting habitat features within	<ul style="list-style-type: none"> Retain important ecological features through the maintenance 	<ul style="list-style-type: none"> Achieving 100% of all woodland, hedgerow and scrub habitats to provide commuting 	<ul style="list-style-type: none"> Ecological Clerk of Works to carry out pre-construction checks and to be present regularly throughout the construction period of the Gas Pipeline Walkover survey of landscape and habitat creation areas under Drax

Landscape or biodiversity effect	Constraints (preventing mitigation measures)	Mitigation considered and discounted (Figure 6.7.2)	Mitigation considered and included (Figure 6.7.3)	Associated long term landscape / biodiversity objectives	Targets / Indicators (extent of area, condition and duration)	Duration of monitoring and responsibilities
	site agreements		Additional Area 1 and 2 and all compensation areas including retaining of field boundaries and tree lines	<ul style="list-style-type: none"> of existing flight lines and foraging areas Introduce new ecological features for bats that are connected to baseline habitats Provide additional roosting opportunities 	<ul style="list-style-type: none"> routes that are connected to the wider landscape within all Compensation Areas Achieving successful pond implementation for additional foraging opportunities Protection of the eastern and western field boundaries of Compensation Area A to retain flight lines 	<p>ownership to assess suitability for foraging and commuting bats (completed between May and September in years 1, 3, 5 and 10 following completion of Stage 2).</p> <ul style="list-style-type: none"> Bat activity transect surveys of landscape and habitat creation areas between May and September in years 1, 3, 5 and 10 following completion of Stage 2.
Invasive non-native species	N/A	None	Avoidance and precautionary construction measures to limit spread	<ul style="list-style-type: none"> Eliminate the spread and dispersal of Himalayan balsam and wall cotoneaster 		Ecological Clerk of Works to carry out pre-construction checks and to be present regularly throughout the construction period to ensure invasive-non-native species are not spread

Internal Design Objectives

- 3.1.29. A suite of internal design objectives is proposed where the exact detailed site design has yet to be determined (within Development Parcels C, E, F and I).
- 3.1.30. The objectives outlined below will form the basis for detailed mitigation plans for these Development Parcels. Some of these objectives reiterate the landscape design objectives reflected in Weddle's landscape management report whilst others repeat objectives defined for the Compensation Areas and Additional Areas described in paragraph 3.1.24 above.
- 3.1.31. The internal design objectives should be considered against the operational requirements and constraints of the Power Station. Where an objective cannot be met for whatever reason, then the detailed Strategy(ies) should explain why.

Overarching Objectives:

- Achieve low level visual screening from key viewpoints namely New Road, Carr Lane, Wren Hall Lane and Pear Tree Avenue and PRoW 35.47/1/1, 35.47/1/2, 35.47/8/1 to the east of New Road and PRoW 35.47/10/1 and 35.6/12/1 north of Additional Area 1 and 2.
- Create an attractive working environment within the confines of the Power Station.
- Use ecological principles to create and maintain a mosaic of diverse habitats using native species.
- Provide opportunities for new resting places for protected species.
- Control spread of invasive non-native species.
- Achieve a net gain for biodiversity and improve connectivity to the wider environment through a network of habitat mosaics.
- Provide a bold, simple landscape structure to connect and unify large scale structures as well as linking physically and visually with surrounding off site planting. Planting should be drawn from a small planting palette.
- Introduce small scale planting with a "varied" planting palette where the scale of the built form becomes more intimate and enclosed.
- Reduce visual clutter and introduce a low-level screening internally through new hedgerows and shrub planting where feasible.
- Maintain existing trees and shrubs and where appropriate substitute and introduce further planting to provide greater interest, increase density and spread.
- Give consideration to safe construction and maintenance through design i.e.
 - ensure mown grass areas are of a size and shape that facilitate ease of maintenance and allow machinery room to manoeuvre.
 - ensure where planting under overhead cables that shrub planting is maintained to a height in accordance with National Grid guidelines.

Site Specific Objectives:

Open space:

- Consider the form and layout of any open space provided as an integral part of the overall site design and layout, and allow for open space to be multi-functional.
- Create formal and informal areas with open space providing variety and interest.
- Allow for coppice woodland / shrubs to be regularly coppiced to enable regeneration and provide long term continuous screening.
- Include small copses of trees to break up large scale planting.

- Introduce hedgerows which would achieve a continuous link planted in a double staggered row and at recommended densities subject to species size.
- Maintain species-rich hedgerows to a height of 2.5m, sides and top cut perpendicular to each other.
- Ensure mixes of ornamental shrub and ground cover planting are grouped with a minimum of six plants to provide a bold effect and planted at recommended densities subject to species size.
- Ensure the density of planting is appropriate to species size and on maturity all topsoil is hidden to avoid visual clutter and create the impression of a neat and tidy site.
- Create swathes of wildflower grassland where space allows to replicate the scale of the Proposed Scheme and achieve habitat diversity.
- Introduce new areas of amenity grassland to offset planting and unify the Proposed Scheme.
- Introduce waterbodies to promote habitat diversity with subtle ground modelling where appropriate.
- Introduce species rich grassland as a temporary measure between Stages 1 and 2 on land allocated for the extension to the battery storage facility to support Unit Y.

Infrastructure (new proposed structures – Unit X and Y and associated facilities):

- Allow for deciduous woodland planting adjacent to battery storage facility, GRF and north of Unit Y to provide further visual screening at low elevation from New Road, Wren Hall Lane and Pear Tree Avenue.
- Ensure woodland and understorey planting is a combination of heights (transplants, whips, feathered and standards), grouped in the same species of three or more and reflective of current species on site.
- Allow for coppice/ scrub planting adjacent to the edges of proposed sludge lagoons if the lagoons are to be relocated to Development Parcel E to provide visual screening at a low elevation.
- Ensure coppice woodland / scrub is regularly coppiced to enable regeneration and provide long term continuous screening.
- Introduce new areas of specific rich wildflower grassland and amenity grassland to offset planting and unify the Proposed Scheme.

Site entrances, new road and margins:

- Introduce further avenue planting along the eastern edge of New Road to provide visual screening to the GRF.
- Introduce avenue planting east of New Road to replicate existing tree planting along the western edge of New Road providing uniformity in terms of species, depth and spacing of planting
- Ensure hedgerows are a minimum of 2 metres wide, planted in a double staggered row and at recommended densities subject to species size.
- Ensure hedgerows introduced are maintained to a height of 3m with an “A” shaped profile top.
- Ensure coppice woodland / scrub is regular coppiced to enable regeneration and provide long term continuous screening.
- Create strong markers defined through planting of key entrances and exits for both vehicular and pedestrian users.

- Allow for good visibility at pinch points especially at entrances and junctions with footpaths.
- Reduce conflict between different users by using low level planting – ground cover and grass.
- Ensure mixes of ornamental shrub and ground cover planting are grouped with a minimum of six plants to provide a bold effect and are planted at recommended densities subject to species size.
- Ensure the density of planting is appropriate to species size and on maturity all topsoil is hidden to avoid visual clutter and create the impression of a neat and tidy site.
- Ensure there is a setback in ground cover or shrub planting of 1 m from road edges to allow clearance for vehicles and this is infilled with amenity grassland.
- Where margins of amenity grass are introduced ensure such margins are no less than 1m wide.
- Kerbs should be to a specification and at a height above ground level equivalent to the remainder of the site.
- Security fencing should be of a material, height and colour equivalent to the remainder of the site.

Site car parks (where these form part of the Proposed Scheme):

- Provide a tiered effect for planting edging car parking areas of medium to low level screening in the form of trees, hedgerows, shrubs and ground cover using a small planting palette.
- Introduce a mix of trees (a combination of standards and feathered), a maximum of four species, grouped in the same species of three or more and are reflective of current species on site. Tree planting will provide medium level screening with trees growing to a height of 20m.
- Introduce single species hedgerows alongside edges of car parks to provide a low level visual screen and reduce visual clutter, creating a neat and tidy impression.
- Ensure hedgerows are planted in a double staggered row and planted at recommended densities subject to species size.
- Maintain hedgerows to a height of 2.5 m, sides and top cut perpendicular to each other.
- Ensure plant mixes of ornamental shrub and ground cover planting are grouped with a minimum of six plants to provide a bold effect and planted at recommended densities subject to species size.
- Ensure the density of planting is appropriate to species size and on maturity all topsoil is hidden to avoid visual clutter and create the impression of a neat and tidy site.
- Create strong markers defined through planting of key entrances and exits for both vehicular and pedestrian users.
- Ensure all car parks are surfaced in a material equivalent to the remainder of the site.
- Kerbs should be at a specification and height above ground level equivalent to the remainder of the site.
- Security fencing should be of a material, height and colour equivalent to the remainder of the site.

Biodiversity Offsetting

3.1.32. A biodiversity offsetting assessment was undertaken prior to the DCO submission. An interim report (the Biodiversity Net Gain report; Applicant's document reference 9.6.5, Examination

Library Reference [APP-116](#)) detailed the outcome of the temporary and permanent land take resulting from the Proposed Scheme versus the mitigation, compensation and enhancement proposed. Using the DEFRA metric, the biodiversity offsetting assessment calculated how much additional habitat was required in relation to the loss of habitats. The areas of habitat creation including enhancement proposed was required to surpass the calculated area of habitat to confirm if a biodiversity net gain was achieved.

- 3.1.33. Prior to DCO submission, the biodiversity offsetting assessment concluded a biodiversity net gain for area-based habitats and recorded a net loss for linear habitats such as hedgerows and ditches.
- 3.1.34. Since the DCO submission; mitigation, compensation and enhancement has altered slightly in design and placement. As a result, an updated Biodiversity Net Gain Assessment (now Rev 002) has been submitted for Deadline 2 to analyse the new mitigation designs..

Conclusions

- 3.1.35. This Outline Strategy has sought to address through a clear set of objectives, targets and indicators as well as monitoring measures and responsibilities some of the significant effects identified in the LVIA and Biodiversity chapters. In addition, internal design objectives have been defined which will guide the more detailed mitigation strategies for Development Parcel C, E, F and I. Initial proposals for each of the Compensation Areas and Additional Areas are set out in Figures 6.7.4 to 6.7.11 with expected timings for delivery in Table A5.1 in Appendix 5.
- 3.1.36. The Strategy has also considered the context of the Proposed Scheme as well as opportunities to improve connectivity to the green infrastructure network linking with adjacent landscape features as well as visually with extensive blocks of planting on Barlow Mound to the west. Opportunities to meet the objectives defined in the Leeds City Green Infrastructure Strategy (Ref 1.15), and more specifically the Ouse Catchment Management Plan (Ref 1.16), have also been reviewed and the Strategy has sought to support management of flood water flows into the River Ouse through the introduction of both riparian and floodplain woodland planting where feasible
- 3.1.37. Proposed new and enhanced habitats would replace those lost as a result of the Proposed Scheme. The new habitats will provide suitable conditions for protected and notable species. The habitat creation principles aim to introduce greater habitat and landscape connectivity with the wider landscape including important areas such as Barlow Mound. This would increase the opportunities available for dispersal to a range of terrestrial species seeking alternative habitat.
- 3.1.38. The implementation of new habitat mosaics combined with the retention and protection of existing and important habitat features such as hedgerows, tree lines and woodlands provides a mechanism to reduce the negative impact on biodiversity. Along with the strengthening of existing habitats through enhancement and the newly proposed 'Compensation Areas and Additional Areas', pre-works surveys and an ecological clerk of works will be present before, during and after the construction stage to ensure legislation and policy is adhered to and to maintain the Strategy from a biodiversity perspective.

- 3.1.39. An updated biodiversity offsetting assessment is being prepared to re-calculate and re-assess updated mitigation proposals to determine the extent of net gain for biodiversity.
- 3.1.40. As outlined in Chapter 2 proposals are constrained by a number of technological and environmental constraints including the extent of landholdings and the quality of surrounding farmland. As such significant landscape and visual effects will inevitably remain despite the measures proposed.
- 3.1.41. It should be noted that in terms of landscape and visual amenity all NSIP energy projects will have impacts on the landscape. Paragraph 5.9.8 of NPS EN-1 states that projects should be designed carefully with the aim being to “minimise harm to the landscape providing reasonable mitigation where possible and appropriate”. Paragraph 2.6.5 and 2.6.6 NPS EN-2 adds that it is not possible to eliminate the visual impacts associated with a fossil fuel generating station and that mitigation should reduce the visual intrusion of the buildings in the landscape and minimise impacts on visual amenity as far as reasonably practicable.
- 3.1.42. It is considered that, given the constraints outlined above, the Strategy addresses the key landscape and visual amenity effects as far as reasonably practicable. It should be noted that in reaching a judgement the Secretary of State will need to determine whether the landscape and visual effects outweigh the benefits (including need) for the project as set out in paragraphs 5.9.15 and 5.9.18 of NPS EN1.

4 REFERENCES

- Ref. 1.1: Department for Environment, Food and Rural Affairs (Defra), 2017, Conservation of Habitats and Species Regulations, HMSO.
- Ref. 1.2: Department for Environment, Food and Rural Affairs (Defra) The Wildlife and Countryside Act 1981 (as amended), HMSO.
- Ref. 1.3: Department for Environment, Food and Rural Affairs (Defra), 2006, The Natural Environment and Rural Communities (NERC) Act, HMSO.
- Ref. 1.4: Department for Environment and Rural Affairs, 2000, Countryside and Rights of Way Act, HMSO.
- Ref. 1.5: Department for Environment, Food and Rural Affairs (Defra), 1997, No 1160 Countryside - Hedgerow Regulations, 1997, HMSO.
- Ref. 1.6: Department for Energy and Climate Change (DECC), 2011, National Policy Statement for Energy EN-1, HMSO.
- Ref. 1.7: Department for Energy and Climate Change (DECC), 2011b, National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2), HMSO.
- Ref. 1.8: Department for Energy and Climate Change (DECC), 2011b, National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4), HMSO.
- Ref. 1.9: Ministry of Housing, Communities and Local Government, 2018, National Policy Framework, HMSO.
- Ref. 1.10: Selby District Council, 2005, Selby District Local Plan, adopted February 2005, saved policies.
- Ref. 1.11: Selby District Council, 2013, Selby District Core Strategy Local Plan, adopted October 2013.
- Ref. 1.12: East Riding of Yorkshire Council, East Riding Local Plan Strategy Document 2012-2029, adopted April 2016.
- Ref. 1.13: Doncaster Metropolitan Borough Council, Core Strategy Development Plan Document, adopted May 2012.
- Ref. 1.14: Leeds City Region Enterprise Partnership, 29 March 2018 Leeds City Regional Green Infrastructure Strategy 2017-2036, Version Draft Final
- Ref. 1.15: Dales to Vale Rivers Network Catchment Partnership (<http://dvrn.co.uk>)
- Ref. 1.16: Council of Europe, 2000, The European Landscape Convention.
- Ref. 1.17: Ministry of Housing, Communities and Local Government, National Planning Practice Guidance, Section Natural Environment, 21 January 2016.
- Ref. 1.18: North Yorkshire County Council, Selby District Council and the Selby BAP Partnership, Selby Local Biodiversity Action Plan, August 2004.
- Ref. 1.19: Department for Environment, Food and Rural Affairs (Defra), 2012 a, b and c, Biodiversity Offsetting Pilots: Technical Paper- the Metric for the Biodiversity Offsetting Pilots in England, Guidance for Developers and Guidance for Offset Providers.
- Ref. 1.20: Business and Biodiversity Offsetting Programme (2012) Standard on Biodiversity Offsets
- Ref. 1.21: British Standard Publication, BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations.
- Ref. 1.22: The National Joint Utilities Group, NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity of Trees, 16 November 2007.
- Ref. 1.23: Energy Network Association Technical Specification 43-8, Issue 4 2015.

- Ref. 1.24: Forestry Commission, 2017, The UK Forestry Standard - The governments' approach to sustainable forestry.
- Ref. 1.25: Capture Power (2014) White Rose Carbon Capture and Storage Project. Drax Power Station.
- Ref. 1.26: AB Ecology (2017) Ecological Monitoring Report 2017. Drax Power Station, Barlow Ash Mound.
- Ref. 1.27: Joint Nature Conservation Committee (JNCC) (2010). Handbook for Phase 1 habitat survey – a technique for environmental audit. JNCC, Peterborough
- Ref 1.28: Forestry Commission template management plan: Create a woodland management plan. www.forestry.gov.uk.
- Ref 1.29: Ecological Site Classification Decision Support System (ESC-DSS)

APPENDICES

APPENDIX 1 - SUPPORTING PLANS

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Key

Site Boundary

Drax Power Ltd Land Ownership

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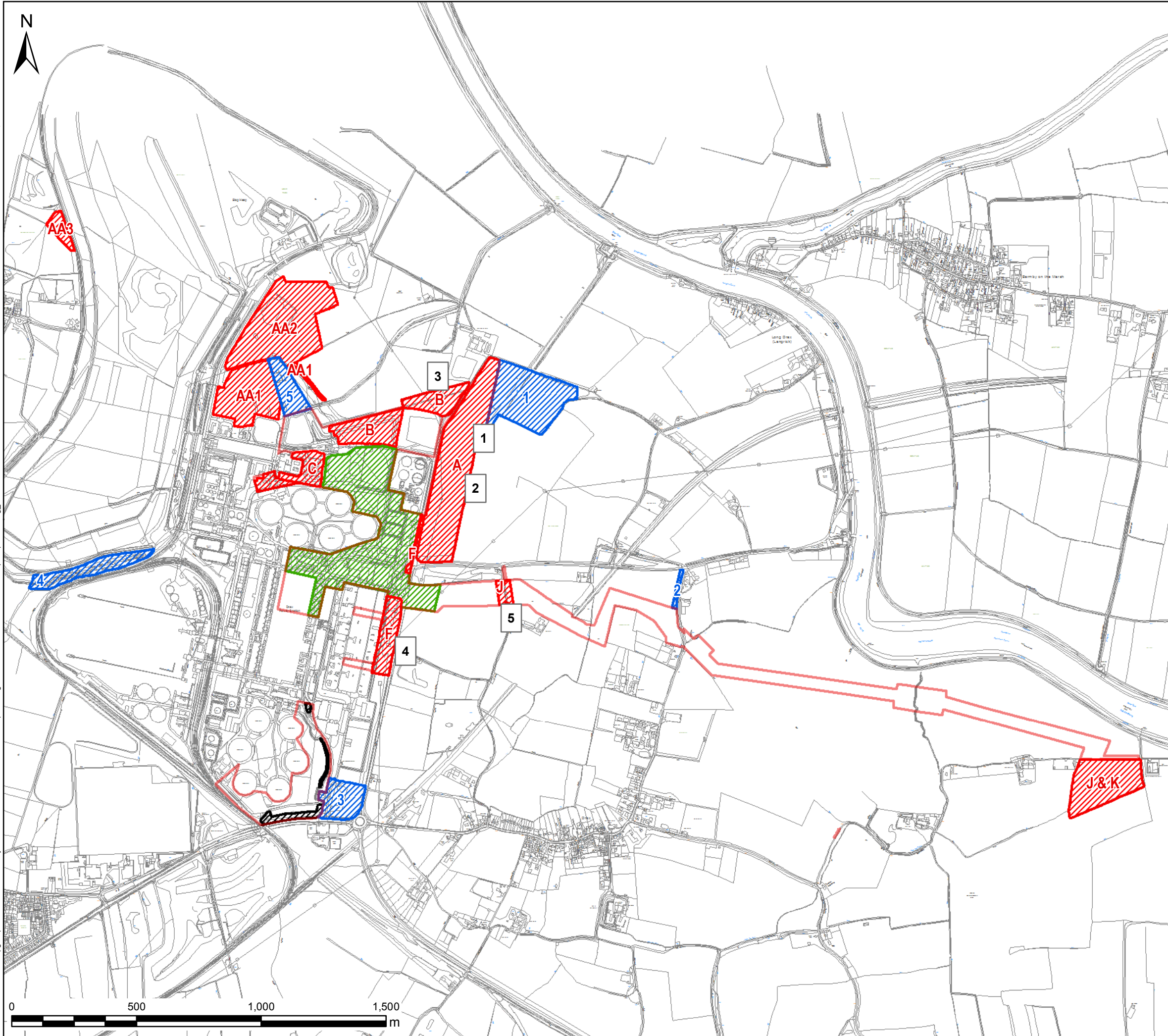
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TITLE:

Figure 6.7.1
Land Ownership

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PROJECT No: <div>70037047</div>	DESIGNED: <div>MB</div>	DRAWN: <div>RMcC</div>
DRAWING No: <div>70037047-6.7.1</div>		REV: <div>01</div>

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Key

- Site Boundary
- Areas included
- Areas considered but discounted
- Areas to be considered through the detailed design process and following confirmation of the proposed scheme footprint
- CA H has been removed as planning permission has been granted under a separate condition

Note:

1. Compensation Area A - Mitigation measures were proposed and discounted on land north / east of PRoW.
2. Compensation Area A - Land reinstated following use as construction laydown. Mitigation focuses on field margins and boundaries.
3. Compensation Area B - Potential mitigation measures were proposed and discounted on land north of North Station Wood.
4. Compensation Area F - Some mitigation measures were proposed and discounted on land west of New Road.
5. Compensation Area J - Some mitigation measures were proposed and discounted on land either side of Wren Hall Lane.

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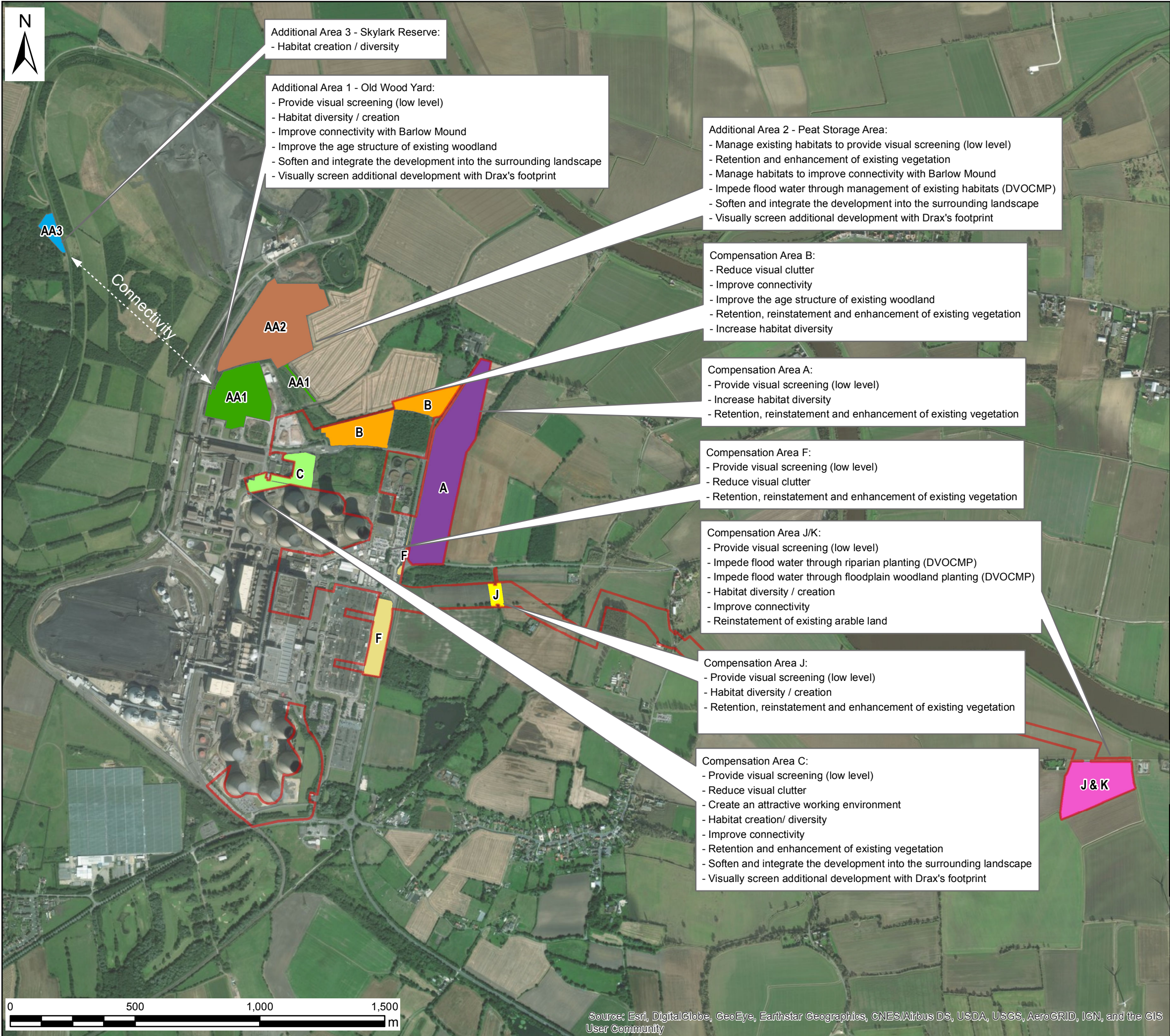
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Key
Site Boundary
Compensation Areas
A
B
C
F
J
J & K
AA1 - Old Wood Yard
AA2 - Peat Storage Area
AA3 - Skylark Reserve

Note:
DVOCMP = Dales and Vales Ouse Catchment Management Plan
CA H has been removed as planning permission has been granted under a separate condition

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TITLE: **Figure 6.7.3
Strategy Mitigation Plan**

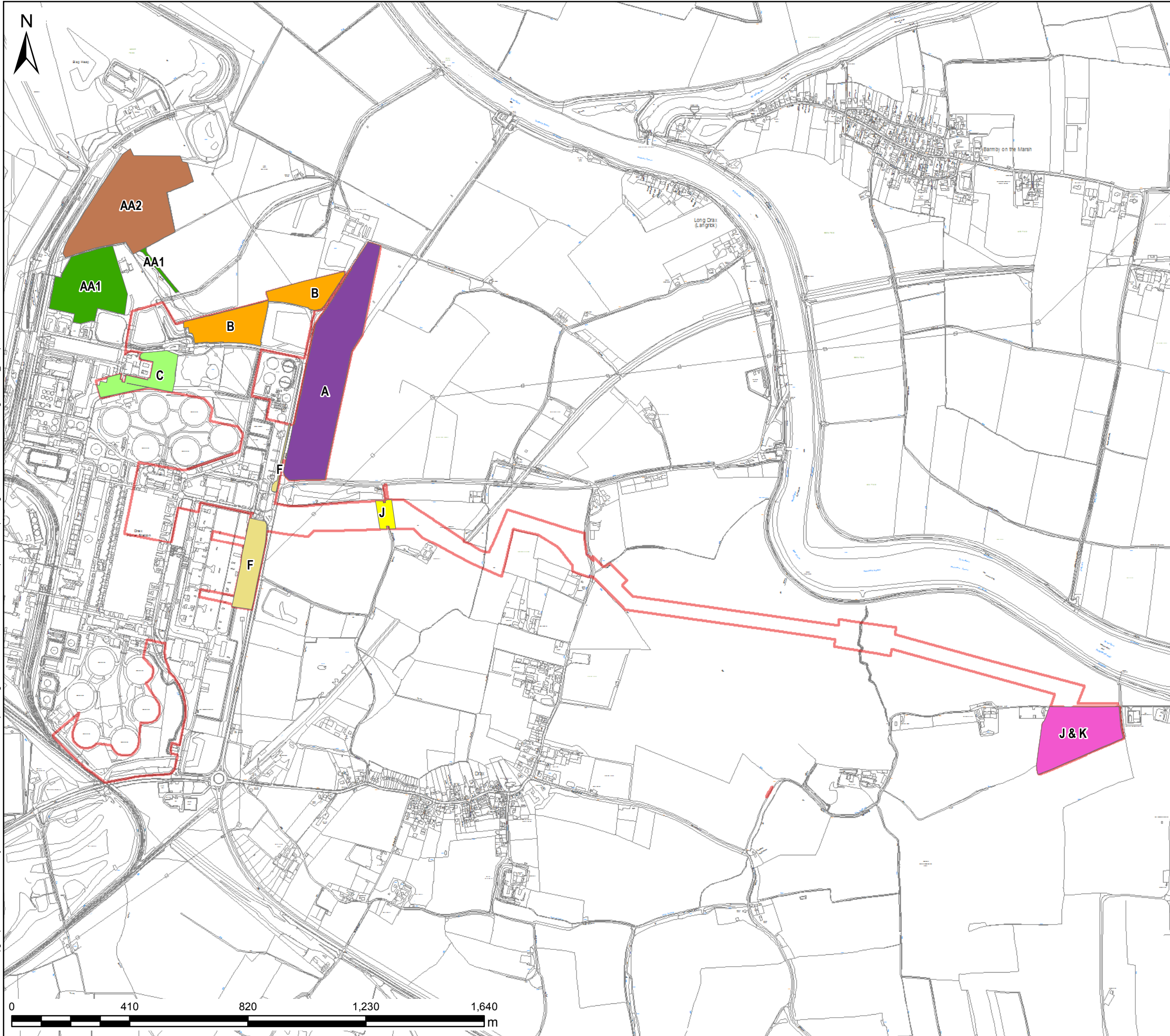
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Key

Site Boundary

Compensation Areas

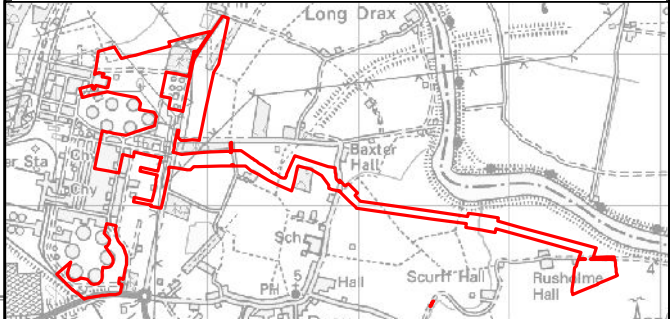
- A
- B
- C
- F
- J
- J & K

Additional Areas

- AA2 - Peat Storage Area
- AA3 - Skylark Reserve
- AA1 - Old Wood Yard

Note:
CA H has been removed as planning permission has been granted under a separate condition


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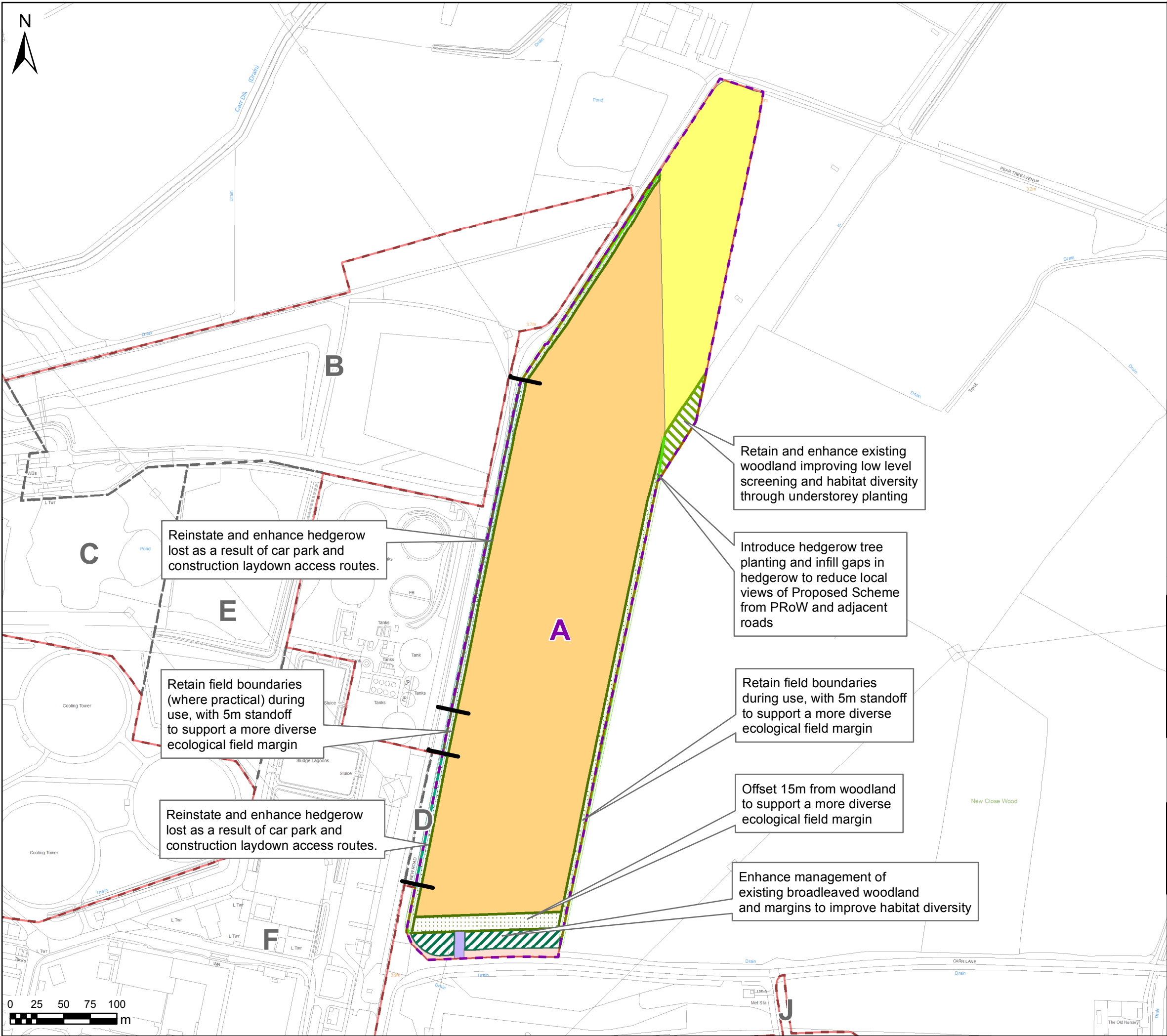
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TITLE:

Figure 6.7.4: Compensation Areas Overview Plan

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PROJECT No: 70037047	DESIGNED: MB	DRAWN: RMcc
DRAWING No: Figure 6.7.4_Compensation Areas Overview Plan.mxd		REV: -

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Key

- Site Boundary
- Development Parcel A
- Other Development Parcels

Existing

- Arable land undisturbed

Existing (retained with management and/or enhancement)

- Hedgerow (enhanced with infill hedgerow trees)
- Arable land (enhanced to semi improved grassland)
- Broadleaved parkland/scattered trees
- Broadleaved woodland
- Improved grassland
- Other tall herb and fern - ruderal

Reinstated

- Hedgerow (enhanced with infill hedgerow trees)
- Arable land

Note:

This break indicates a potential change from existing to reinstated hedgerow to accommodate new temporary access points, the exact location of which will be determined post DCO consent.

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Figure 6.7.5: Compensation Area - Development Parcel A

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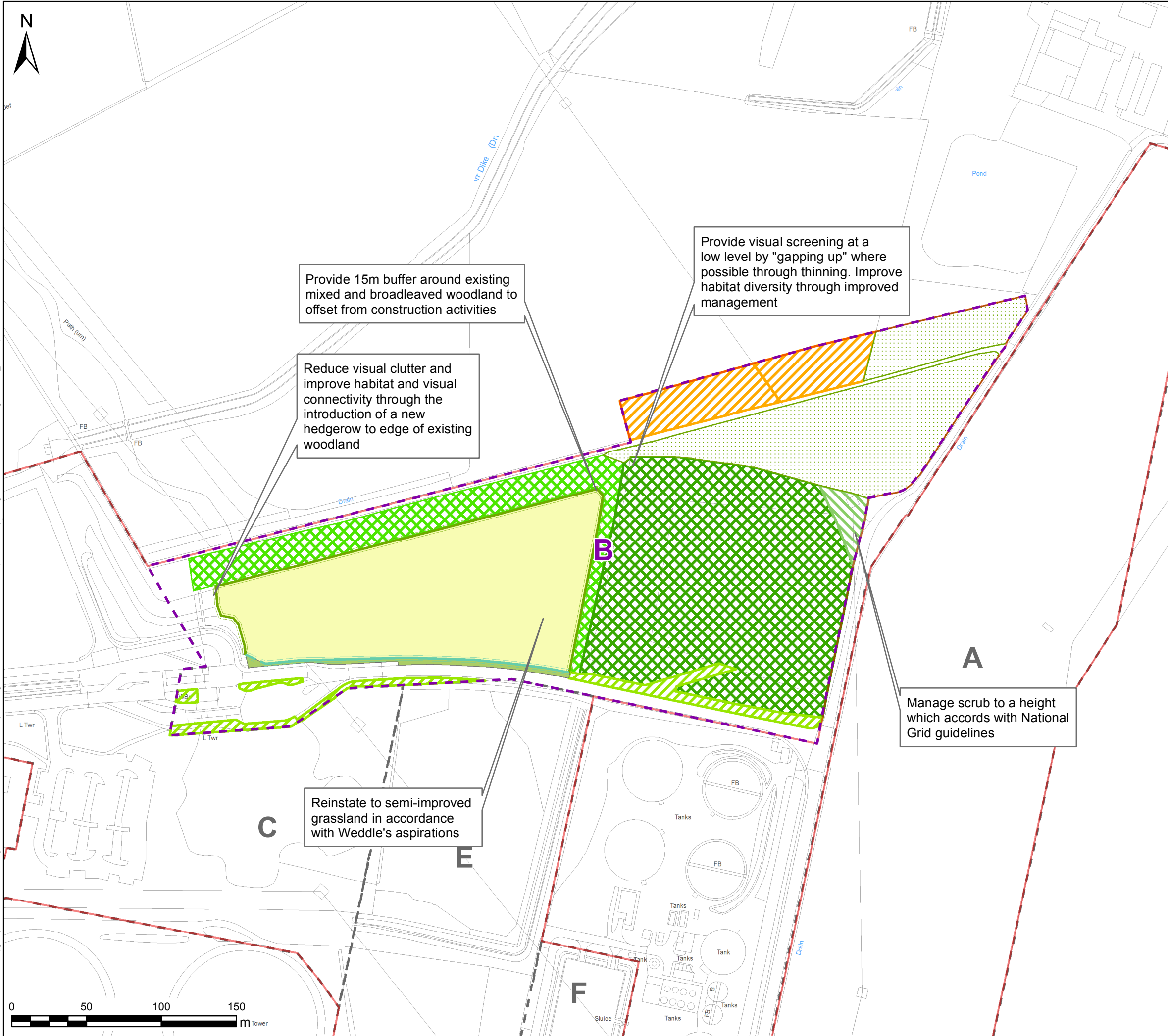
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23/08/2018

DRAWING No:
70037047 - Figure 6.7.5_Development Parcel A.mxd

REV:
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Key

- Site Boundary
- Development Parcel B
- Other Development Parcels

Existing

- Semi-improved species rich grassland
- Arable land
- Amenity grassland

Existing (retained with management and/or enhancement)

- Broadleaved woodland
- Mixed woodland
- Scrub
- Improved grassland

Reinstated

- Amenity grassland
- Hedgerow

Proposed

- Hedgerow

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CLIENT: **drax**

PROJECT: The Drax Power (Generating Stations) Order

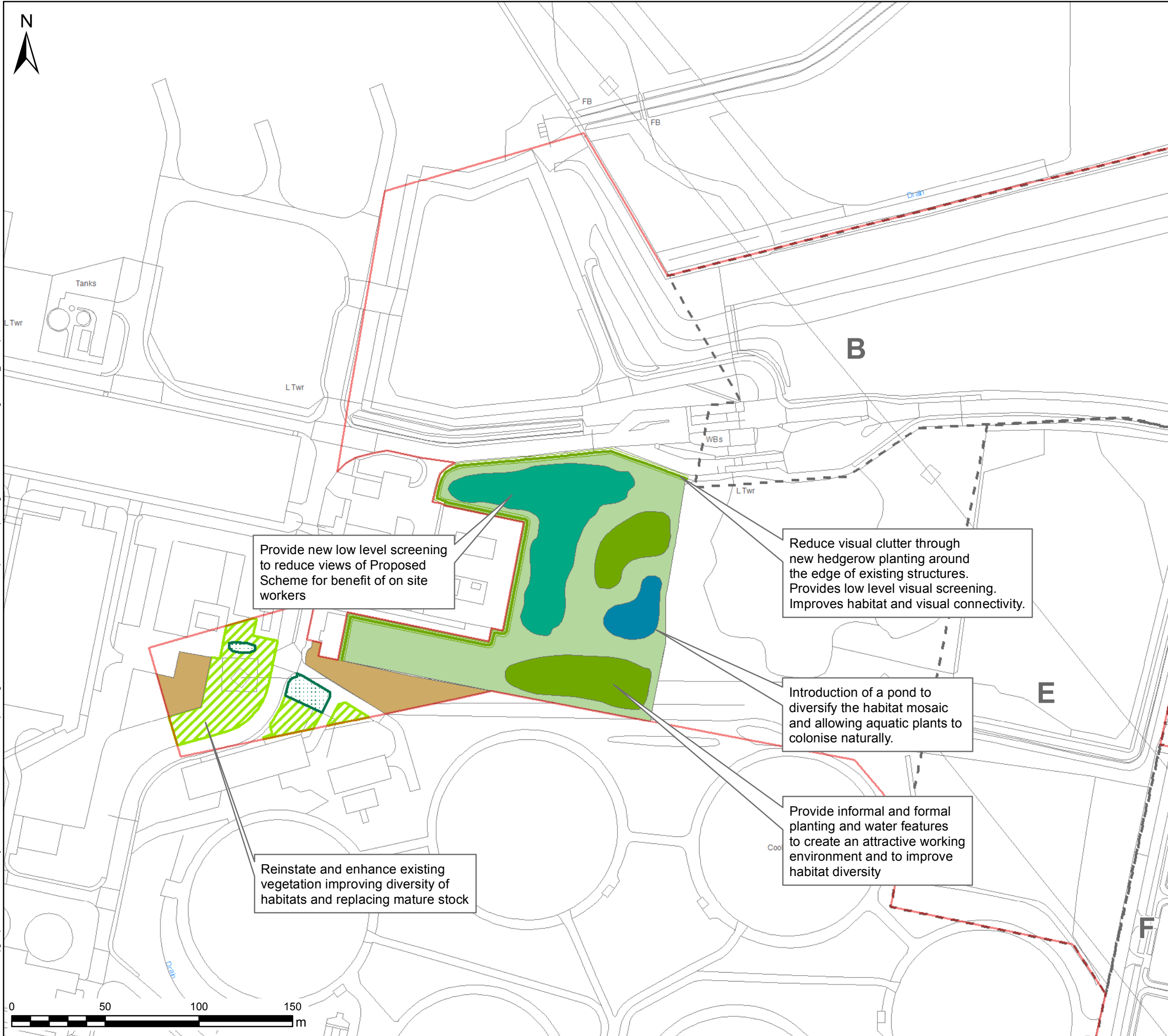
TITLE: Figure 6.7.6: Compensation Area - Development Parcel B

SCALE @ A3:	CHECKED:	APPROVED:
2,500 @ A3	MB	CT

PROJECT No:	DESIGNED:	DRAWN:	DATE:
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Key

- Site Boundary
- Other Development Parcels
- Existing (retained with management and/or enhancement)
 - Amenity grassland
 - Ornamental shrub planting
 - Semi-improved grassland
- Proposed
 - Hedgerow
 - Coppice woodland / scrub
 - Pond
 - Broadleaved parkland / scattered trees
 - Semi-improved species rich grassland

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




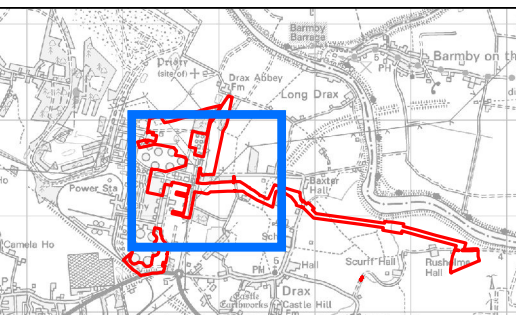


TITLE: Figure 6.7.7: Compensation Area - Development Parcel C

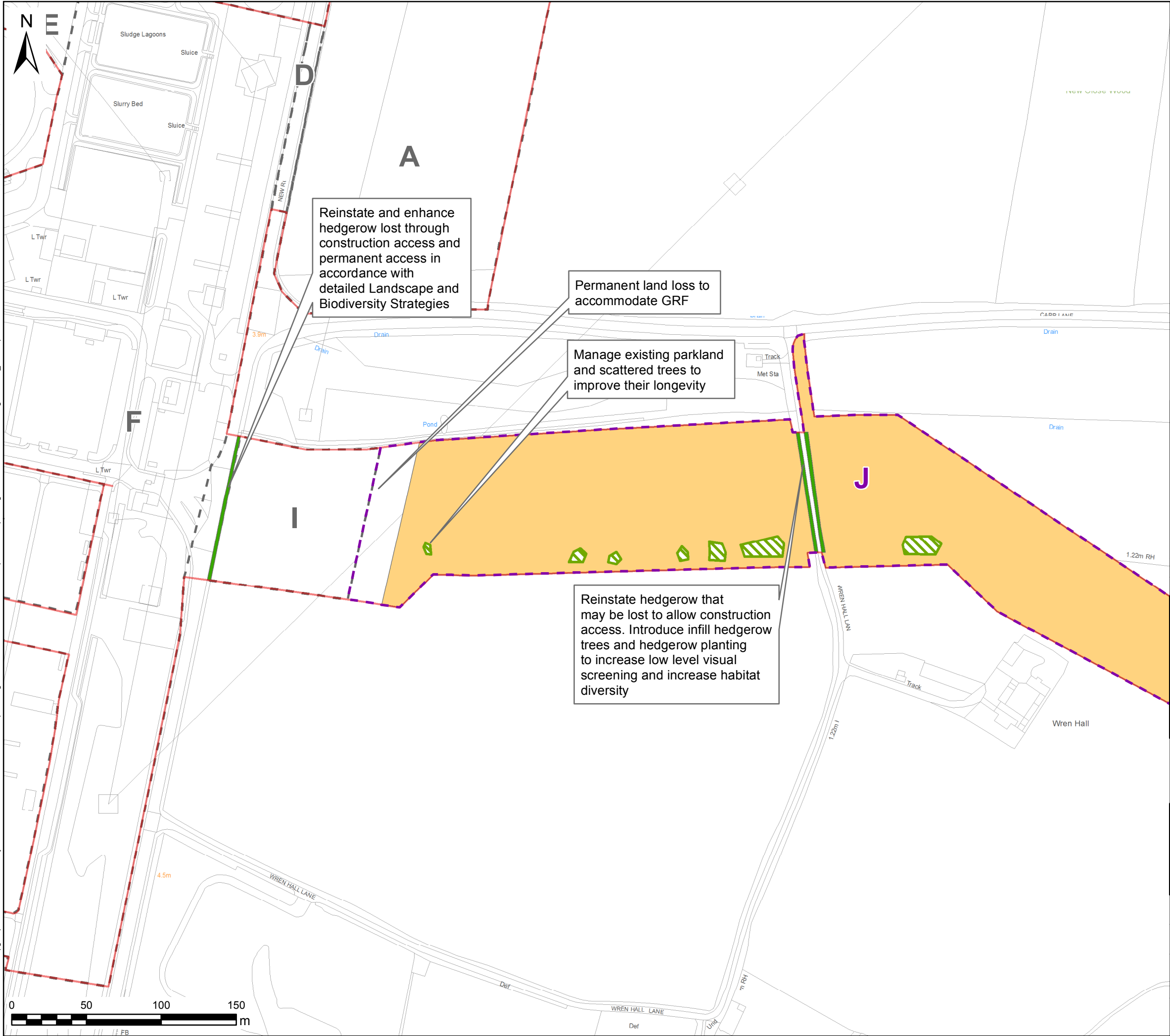
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Key  Site Boundary  Development Parcel F  Other Development Parcels Existing (retained with management and/or enhancement)  Ornamental hedgerow and hedgerow trees  Ornamental planting (enhanced with further tree planting and shrubs) Reinstated  Ornamental hedgerow and hedgerow trees  Marshy grassland  Amenity grassland					
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PROJECT:					
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TITLE:					
Figure 6.7.8: Compensation Area - Development Parcel F					
SCALE @ A3: 5,000 @ A3		CHECKED: MB		APPROVED: CT	
PROJECT No: 70037047		DESIGNED: MB	DRAWN: RMcc	DATE: 23/08/2018	
DRAWING No: 70037047 - Figure 6.7.8_Development Parcel F.mxd					REV: -
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Key

- Site Boundary
- Development Parcel J
- Other Development Parcels

Existing (retained with management and/or enhancement)

- Hedgerow (enhanced with infill planting and hedgerow trees)
- Broadleaved parkland/scattered trees

Reinstated

- Arable land

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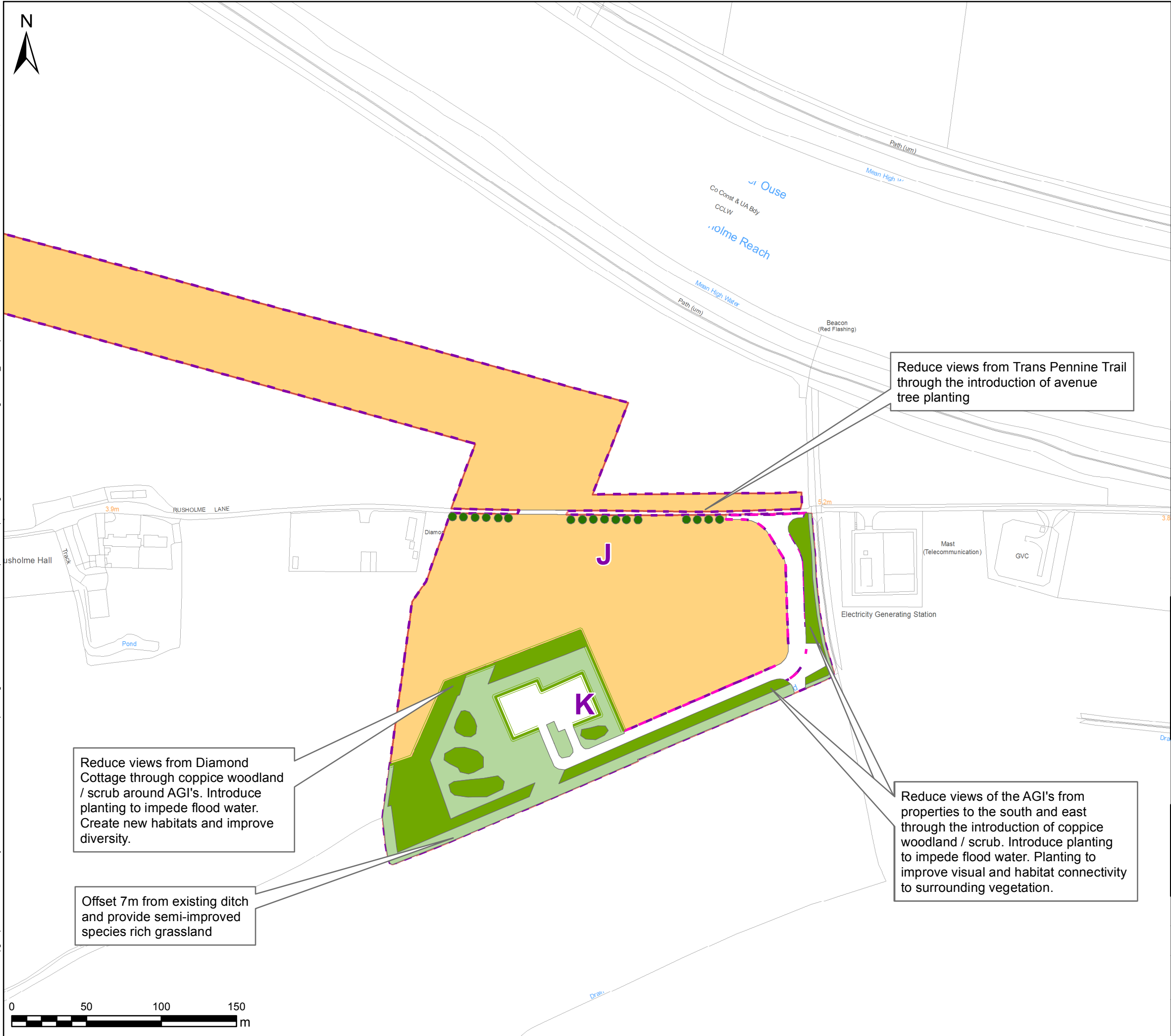
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TITLE:

Figure 6.7.9: Compensation Area - Development Parcel J

SCALE @ A3:	CHECKED:	APPROVED:		
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Key

- Site Boundary
- Development Parcel J
- Development Parcel K

Reinstated

- Arable land

Proposed

- Avenue of broadleaved trees
- Coppice woodland / scrub
- Semi-improved species rich grassland
- Hedgerow

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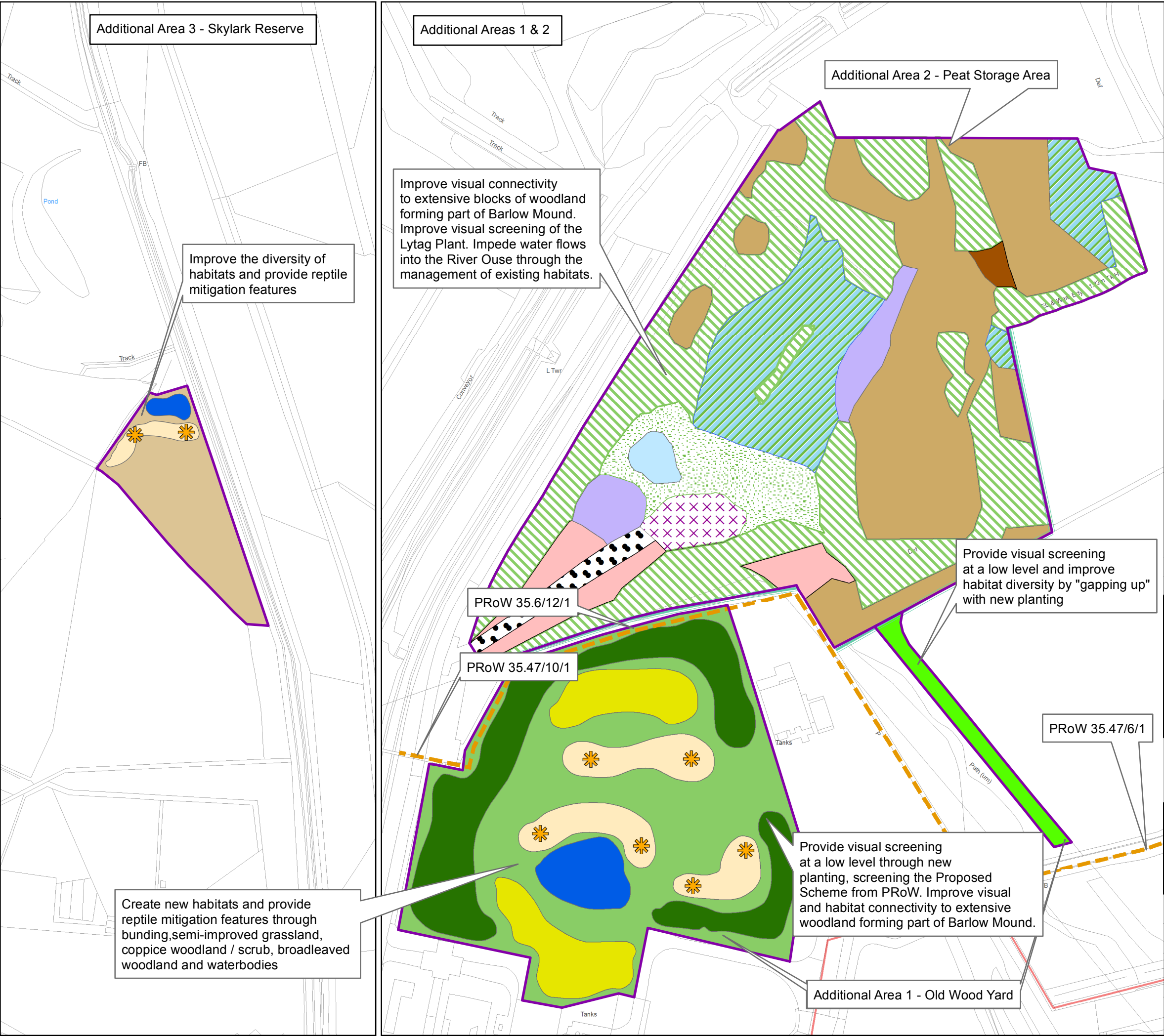
PROJECT:
The Drax Power (Generating Stations) Order

TITLE:
Figure 6.7.10: Compensation Area - Development Parcel J and K

SCALE @ A3: 2,500 @ A3	CHECKED: MB	APPROVED: CT
PROJECT No: 70037047	DESIGNED: MB	DRAWN: RMCC
DATE: 23/08/2018		REV: -

DRAWING No:
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Key

- Site Boundary
- Additional Areas
- Existing (retained with management and/or enhancement)
 - Hedgerow
 - Scrub
 - Semi-improved grassland
 - Marshy grassland
 - Bracken
 - Other tall herb and fern - ruderal
 - Peat mound
 - Reedbed
 - Pond
 - Ephemeral planting
 - Bare ground
 - Public Right of Way
 - Broadleaved woodland (enhanced with understorey planting)
- Proposed
 - Semi-improved species rich grassland
 - Bunding
 - Broadleaved woodland
 - Coppice woodland / scrub
 - Pond
 - Woodland carr
 - Scrapes
 - Marshy grassland
 - Proposed reptile hibernation site

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CLIENT: **drax**

PROJECT: **The Drax Power (Generating Stations) Order**

TITLE: **Figure 6.7.11: Compensation Area - Additional Areas 1, 2 and 3**

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2,500 @ A3	MB	CT

PROJECT No:	DESIGNED:	DRAWN:	DATE:
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70037047 - Figure 6.7.11_Additional Areas 1 2 and 3.mxd	-

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APPENDIX 2 - LEGISLATION, POLICY, STRATEGIES, CONVENTIONS AND GUIDANCE

LEGISLATION

The following legislation has been considered in the preparation of this Strategy:

- Conservation of Habitats and Species Regulations (Habitats Regulations) 2017 (Ref. 1.1).
- Wildlife and Countryside Act 1981 (as amended) (Ref. 1.2).
- Natural Environment and Rural Communities Act 2006 (Ref. 1.3).
- Countryside and Rights of Way Act, 2000 (as amended) (Ref. 1.4).
- Hedgerow Regulations, 1997 (Ref. 1.5).

NATIONAL PLANNING POLICY

Relevant national planning policy that has been considered in relation to landscape and biodiversity impact avoidance and enhancement is as follows:

- Overarching National Policy Statement (NPS) for Energy (EN-1) (Ref. 1.6).
- National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2) (Ref. 1.7).
- National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) (Ref. 1.8).
- National Planning Policy Framework, 2018 (Ref. 1.9).

National Policy Statements

Overarching National Policy Statement for Energy (EN-1): In terms of landscape Policy, EN1 paragraph 5.9.8 accepts that nationally significant energy infrastructure will have effects on the landscape. Projects should be designed carefully, the aim being to “*minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.*” Paragraphs 5.9.21 to 5.9.23 encourages the preparation of landscape schemes to mitigate adverse landscape and visual impacts including landscaping off site. Works may include filling in gaps in existing tree and hedge lines to mitigate against impacts from a more distant vista.

Section 5.3 of the overarching National Policy Statement (NPS) for Energy (EN-1) (Ref 9.2) refers to biodiversity and states that the Applicant should clearly set out any effects of the development on internationally, nationally and locally designated sites of nature conservation importance, on protected species and habitats and other species identified as being of principal importance for the conservation of biodiversity. The Applicant should also demonstrate how the development has taken measures to conserve and enhance biodiversity.

Reference is also made to green infrastructure and connectivity (paragraph 5.10.20) and the need to impose requirements to ensure the connectivity of green infrastructure network is maintained within the vicinity of the development and that any necessary works are undertaken, where possible, to mitigate any adverse effect.

The NPS for Fossil Fuel Electricity Generating Infrastructure (EN-2) acknowledges that *“it is not possible to eliminate the visual impacts associated with a fossil fuel generating station. Mitigation is therefore to reduce the visual intrusion of the buildings in the landscape and minimise impact on visual amenity as far as reasonably practicable”* (paragraph 2.6.5). Paragraph 2.6.7 goes on to state that *“earth bunds and mounds, tree planting, or both may be used for softening the visual intrusion”*.

The NPS for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4), section 2.21 refers to biodiversity, landscape and visual impacts and considers effects on *“specific landscape elements within and adjacent to the pipeline route, such as grasslands, field boundaries (hedgerows, hedgebanks, drystone walls, fences), trees, woodlands, and watercourses, all of which are important biodiversity and landscape components.*

National Planning Policy Framework and Planning Practice Guidance

The National Planning Policy Framework (NPPF) was recently updated in July 2018. The following paragraphs are of relevance to the Proposed Scheme:

Section 12: Achieving well-designed places:

Paragraph 124 states that *“The creation of high quality buildings and places is fundamental to what the planning and development process should achieve”*.

Paragraph 127 Planning policies and decisions should ensure that developments:

- b) Are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;*
- c) are sympathetic to the local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change.”*

Section 15: Conserving and enhancing the natural environment:

Paragraph 170 a, b and d states that *“Planning policies and decisions should contribute to and enhance the natural and local environment by:*

- a) Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory state or identified quality in the development plan.*
- b) Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland.*
- d) Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*
- e) Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable level of soil, air water or noise pollution or land instability. Development should wherever possible,*

help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans.”

Paragraph 174 a and b which states “*To protect and enhance biodiversity and geodiversity, plans should:*

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks including the hierarchy of international, national and locally designates site of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*
- b) Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species, and identify and pursue opportunities of securing measurable net gains for biodiversity.”*

LOCAL PLANNING POLICY

The local planning policies that are relevant to the Site are set out in the following documents:

- ‘Saved’ policies of the Selby District Local Plan (Ref.1.10).
- Selby District Core Strategy Local Plan (Ref. 1.11).
- East Riding Local Plan Strategy document (Ref. 1.12).
- Doncaster’s Core Strategy 2011- 2028 (Ref. 1.13).

Policies of relevance to the need for landscape and biodiversity mitigation and enhancement for the Proposed Development are as follows:

Selby District Council

Policies of relevance in landscape and visual terms to the Proposed Scheme are as follows:

Selby District Core Strategy Local Plan:

- SP15 Sustainable Development and Climate Change.
- SP 18 Protecting and Enhancing the Environment.
- SP 19 Design Quality.

“Saved” policies from Selby District Local Plan:

- ENV 1 Control of Development.
- ENV 14 Protected Species
- ENV 15 Locally Important Landscape Area (Magnesian Limestone Ridge, Brayton Barff and Hambleton Hough).
- ENV21 Landscaping Requirements.
- EMP 10 Additional Industrial Development at Drax and Eggborough Power Stations.

East Riding of Yorkshire

The following policies were considered of relevance to the Site and drawn from the East Riding Local Plan Strategy document, adopted 2016 (Ref. 1.12):

- Policy EC5 Supporting the Energy Sector.
- Policy ENV1 Integrating High Quality Design.
- Policy ENV2 Promoting a High-Quality Landscape.
- Policy ENV3 Valuing Our Heritage.
- Policy ENV4 Conserving and Enhancing Biodiversity and Geodiversity.
- Policy ENV5 Strengthening Green Infrastructure.

Doncaster Metropolitan Council

Doncaster's Core Strategy 2011- 2028 was adopted in 2012 (Ref. 1.13). Policies of relevance to the Proposed Scheme and Study Area are as follows:

- Policy CS3 Countryside.
- Policy CS14 Design and Sustainable Construction.
- Policy CS15 Valuing our Historic Environment.
- Policy CS16 Valuing our Natural Environment Policy CS17 Providing Green Infrastructure.

LOCAL STRATEGIES / PARTNERSHIPS

Two specific strategies/partnerships were considered as part of the revised outline strategy:

- Leeds City Regional Green Infrastructure Strategy 2017-2036, Version Draft Final, 29 March 2018 (Ref 1.14)
- Dales to Vale Rivers Network Catchment Partnership (<http://dvrn.co.uk>) (Ref 1.15)

Leeds City Regional Green Infrastructure Strategy 2017-2036

Leeds City Region Green Infrastructure Strategy was prepared by the Leeds City Region Enterprise Partnership and seeks to expand green infrastructure to enable everyone within the region to be *"within easy access to an outstanding and well used network of green infrastructure that reduces flood risks and supports health, the economic, the environment and a superb quality of life."*

The document identifies seven headline outcomes:

- *"Become a UK trailblazer in catchment planning and natural flood management.*
- *Make quality green infrastructure a defining feature of the way the City Region does development.*
- *1,000 miles of green infrastructure rich corridors, including canals, rail, road, and a City Region cycle route network.*
- *Everybody within easy reach (1km) of an outstanding, diverse, well used green infrastructure network.*
- *Create a White Rose Forest and increase tree cover by a third.*
- *Flourishing uplands that manage water, store carbon and support wildlife, with peatlands in good condition trebled to over 50 percent.*
- *A big rise in green infrastructure based businesses, innovation, jobs and apprenticeships."*

The Strategy covers all of the Leeds City Region and seeks to make connections to areas beyond which impact upon it, for instance river catchments. Linked to this core purpose are five interconnected aims:

- Quality place (for people and investment)
- Health and well being
- Flood risk reduction
- Wildlife and habitats
- Climate change, air and water quality

The aims seek to connect people and the economy to the natural environment and will reduce social, economic and health inequalities.

Seven priority areas have been identified where “*tangible and impactful action can be delivered*” through a detailed Delivery Plan. The Strategy goes on to state that all priorities are interconnected and each priority will deliver multiple benefits as well as contributing to the above aims. Priorities include:

1. Effective water management and flood risk reduction
2. Build green and blue infrastructure into physical development and housing
3. Enhance green and blue corridors and networks
4. Heighten community access to / enjoyment of green and blue infrastructure
5. Plant and manage more trees and woodlands
6. Restore the uplands and manage them sustainably
7. Business growth, jobs, skills, and education

Specific reference is made in the Strategy to the Lower and Upper Ouse and the need to increase tree cover by more than a third in line with Priority 5 above.

[Dales to Vale Rivers Network Catchment Partnership \(Ref 1.15\)](#)

The Dales to Vales River Network (DVRN) is a catchment partnership which brings together local people, communities, organisations and businesses to make decisions on managing the rivers, becks and lakes in the Swale, Ure, Nidd, Ouse and Wharfe Catchment. The network has highlighted a number of issues which need addressing including water quality, enhancing biodiversity, heavy metals and flooding,

The Proposed Scheme lies within the Ouse Catchment Management Plan. Plans which accompany the Catchment Management Plan indicate the extent of existing “green areas” in terms of woodland / forestry and areas of “floodplain woodland potential” and “riparian woodland potential”. The Plans highlight the importance of the area in terms of shading and fluvial flooding. The former, through riparian trees, can provide shading for aquatic species, whilst fluvial flooding can be impeded through the introduction of more wetland woodland habitat to store water.

CONVENTIONS AND GUIDANCE

The following conventions and guidance documents have been referred to within this Strategy:

- European Landscape Convention (Ref. 10.16).
- National Planning Policy Guidance (Ref. 10.17).
- Selby Local BAP (Ref. 10.18).
- Department for Environment, Food and Rural Affairs (DEFRA) - Offsetting Pilot (Ref. 10.19).
- Business and Biodiversity Offsetting Programme (BBOP) (Ref. 10.20).

European Landscape Convention

The landscape and visual impact assessment takes account of legislation relevant to landscape and visual issues, including the European Landscape Convention (ELC) which was ratified in the UK on the 21 November 2006. The ELC became binding on 1 March 2007 and provides a basis for closer co-operation on landscape issues across Europe. The Convention highlights the need to recognise landscape in law, to develop landscape policies dedicated to the protection, management and creation of landscapes, and to establish procedures for the participation of the general public and other stakeholders in the creation and implementation of landscape policies. It also encourages the integration of landscape into all relevant areas of policy, including cultural, economic and social policies. The ELC defines landscapes as:

“An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.”

The ELC applies to natural, rural, urban and peri-urban areas including land, inland water and marine areas. Its purpose is to promote landscape protection, management and planning in relation to all landscapes regardless of whether their quality and condition is considered outstanding, ordinary or degraded. The UK is recognised as already putting many of the principles of the ELC into practice. The importance of landscapes in contributing to local identity and in reflecting local cultural influences and ecological diversity is shown through the use of Landscape Character Assessments and Natural England's National Character Areas Project.

Government's National Planning Practice Guidance - Section Natural Environment

In addition, this Chapter has been prepared in accordance with the Government's National Planning Practice Guidance Section Natural Environment – Landscape (Ref 10.16) which contains the following relevant paragraph:

Paragraph: 001 Reference ID: 8-001-20140306. This section states that:

“One of the core principles in the National Planning Policy Framework is that planning should recognise the intrinsic character and beauty of the countryside. Local plans should include strategic policies for the conservation and enhancement of the natural environment, including landscape. This includes designated landscapes but also the wider countryside”.

Local Biodiversity Action Plan, Offsetting and Pilot Programme

The Proposed Scheme has adopted the Defra metric and the biodiversity net gain (BNG) process. This has been used to quantify the biodiversity which will be lost due to the Proposed Scheme and provide an indication of the biodiversity which will be replaced once the Proposed Scheme has been built (Ref 1.21). The BNG process uses the offsetting metric by DEFRA and draws further influence from a range of other best practice guidance produced by BBOP, CIRIA, CIEEM and IEMA to ascertain what is needed to offset losses sustained from development.

The DEFRA metric calculates the number of 'biodiversity units' that need to be provided by a developer to offset losses. BNG is definitively achieved by adding more habitat with a greater biodiversity value to the environment than that was lost by the Proposed Scheme. This Landscape and Biodiversity Strategy adheres to BBOP's Mitigation Hierarchy (Ref

1.20) by avoiding and minimising loss of certain areas of habitats on site and reinstating lost habitat as far as possible. Biodiversity offsets would also be delivered through enhancement of habitats outside the Site and through targeted management of reinstated habitats within the Site have been included where avoidance and minimisation would not fully avoid impacts.

Forestry Commission Guidance

The UK Forestry Standard (UKFS) (Ref 1.24) is a tool used to guide the implementation of sustainable forest management across all types of woodlands throughout the UK. This guidance applies to all woodland environments (not individual trees) and is applied to all varieties and scales of forestry activities.

Construction activities and site clearance works as part of the Proposed Scheme does not involve removal of woodlands or works within a woodland that would be considered a forestry activity as part of the UKFS. However, as the UKFS incorporates landscape and biodiversity elements into the guidance and given the habitat creation and landscape proposals set out in this document (such as coppice woodland, woodland carr etc.), the UKFS will be used as a guide (where necessary) to outline the implementation of such habitats and how they will be monitored within the detailed Landscape and Biodiversity Strategy(ies).

Principles set out in the 'Forestry Commission template management plan: Create a woodland management plan' (Ref 1.28) will be given due regard within the detailed Landscape and Biodiversity Strategy(ies), notably woodland planting and post-construction monitoring. Due to the variety of landscape and biodiversity proposals, not all elements of the Forestry Commission template management plan will be relevant to the planting and habitat creation associated with the Proposed Scheme due to variety of non-woodland habitats being proposed.

The Ecological Site Classification Decision Support System (ESC-DSS) (Ref 1.29) is a tool used to assess sites based on soil types and climate data and provides a mechanism on how this data can be used evaluate the suitability of different tree species and woodland communities. This tool will be given due regard in the detailed Landscape and Biodiversity Strategy(ies) to shape the planting palette for woodland and tree planting.

APPENDIX 3 - IMPACT AVOIDANCE REQUIREMENTS

OVERVIEW

The impact avoidance measures outlined below would be implemented, as relevant and appropriate, prior to and during the construction phase of each Work Number. The purpose being to minimise the work's impact on landscape features and associated habitats and to comply with legislation.

Pre-construction Surveys

An ecologist would complete a pre-construction/site clearance walkover at least three months ahead of commencement (for relevant work numbers) where there could be an impact on the biodiversity interest of the Site. The aim of this advanced Site visit would be to re-assess the ecological baseline and to determine if any additional ecological mitigation is required beyond that specified in this Strategy and the ES. These pre-construction surveys would be secured through the detailed Landscape and Biodiversity Strategy(ies) which would be approved by Drax, NYCC and SDC.

The scope of each walkover would be defined on a case by case basis in consultation and with the agreement of Drax, NYCC and SDC, and informed by the results of the site walkover described above. The results of the pre-construction walkovers would inform the detailed delivery of construction phase ecological mitigation.

Existing or potential landscape and biodiversity constraints to be reassessed and / or monitored during updated surveys would include, as a minimum:

- Badger setts.
- Otters and water voles (where works would take place within 50 m of a watercourse or suitable ditch).
- Breeding birds (if clearance works were proposed during the bird breeding season).
- Invasive non-native plant species.
- Trees including their suitability to support protected species.
- Any changes in habitat condition or other evidence indicating previously unrecorded protected species could be present.

Should any new constraints arise these would be identified in the detailed Landscape and Biodiversity Strategy which would be submitted to cover specific work numbers.

Invasive Non-Native Species

Stands of Indian balsam and wall cotoneaster were identified in Development Parcel C as per section 9.5.58 of the Biodiversity Chapter and ES Figure 9.3. In order to control the spread of these species a method statement would be produced in receipt of the specific Site construction works and this would form part of the detailed and approved Landscape and Biodiversity Strategy

Indian balsam and New Zealand pygmy weed have been recorded within Additional Area 2. Invasive non-native species control, specific to each plant, should be incorporated into the management of this area.

Clerk of Works and Toolbox Talks

The necessity for a Clerk of Works and Toolbox Talks during works would be advised by the landscape architect and ecologist based on relevant and appropriate environmental commitments in receipt of the specific Site construction works. The need for Ecological Clerk of Works (ECoW) would also be informed by the findings of the pre-construction surveys, with this forming part of the detailed approved Landscape and Biodiversity Strategy where specified.

All Site staff involved with Proposed Scheme works will receive Toolbox Talks on the relevant ecological risks, legal requirements and working requirements to comply with legislation and the detailed approved Landscape and Biodiversity Strategy. Toolbox Talks would be repeated as necessary over the duration of the construction works for Stage 1 to 2.

Tree Works

Existing trees would be lost within the Existing Drax Power Station Complex as a consequence of the Proposed Scheme. Where works would be undertaken in close proximity to retained trees, such works would be in accordance with best practice:

- British Standard (BS) 5837:2012 trees in relation to design, demolition and construction – recommendations (Ref. 1.21).
- National Joint Utilities Group (NJUG) Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Ref. 1.22).

Access for construction works would be required in close proximity to trees and woodland. Construction works required within the Root Protection Area (RPA) and / or crown spread of retained trees would be carefully controlled through the use of temporary tree protection measures, ground protection measures and by adopting working methods including the storage and management of materials. Methods would be set out in an Arboricultural Method Statement and associated RPA Plans which would be prepared in advance of the works and to accompany the detailed Landscape and Biodiversity Strategy(ies). Specific offsets have been defined to protect existing woodland outlined below.

Temporary tree protection fencing in accordance with BS 5837:2012 would be installed before works commence and also for the duration of the works to protect the RPAs of retained trees. Suitable ground protection measures would be implemented to prevent the distortion or compaction of underlying soil.

Impact Avoidance Measures for Hedgerows, Hedgerow Trees and Woodland

Trenchless construction techniques would be used where possible for the installation of the Gas Pipeline, to avoid the removal of existing vegetation in the form of hedgerows and hedgerow trees.

Otter Mitigation

Should any evidence of otter or be recorded during pre-construction site clearance surveys along suitable waterbodies, the following measures should be implemented to ensure the impact is reduced

- Avoidance of any obstructions to established otter paths and access to open water.

- Avoidance of work in the vicinity of otter habitat during the hours of darkness and within the period two hours after sunrise and two hours before sunset March to October (inclusive) and due to the more limited daylight between one hour after sunrise and one hour before sunset November to February (inclusive).
- The marking of, and adherence to, 30 m exclusion zones around any holts and shelters identified as a result of updated survey prior to site clearance and construction activities occurring. If otters are known or suspected to be breeding, the exclusion zone could be extended to at least a 200 m radius. However, it could be reduced to 100 m depending on the nature of the works, topography and natural screening. This will require judgement from an experienced ecologist.
- If breeding was confirmed and exclusion zones of the size set out above were not possible, works would be undertaken in accordance with a European Protected Species (EPS) Mitigation licence to derogate the legislation protecting otter (except during periods of active breeding). As part of the licence, appropriate compensation would be provided to ensure that alternative habitat is provided in advance of the impact occurring. This would ensure no net loss in available habitat that may be considered to provide functional linkage for the Lower Derwent Valley and River Derwent SACs, of which otter is a qualifying feature.
- As a minimum, light spill will be minimised and dark corridors will be maintained to ensure that otters can continue to commute and forage without undue disturbance during construction. In addition, defined site compounds and access roads with slow speed limits, will limit the risk of otter collisions during construction.
- Screening with fencing or planting of thicket-type vegetation to reduce noise and visual disturbance to otter commuting routes during operation, as per the outline Landscape and Biodiversity Strategy;
- The use of trenchless techniques where practicable when cutting through watercourses suitable for commuting otter within the Pipeline Area. Update surveys will be completed prior to any open-cut techniques being employed. These surveys will determine the need for further mitigation to be implemented for otters (which may include measures to mitigate against the destruction of newly created otter resting sites which would need to be conducted under an EPS mitigation licence)
- The capping of any exposed pipe systems when contractors are off site, and providing exit ramps from any exposed trenches or holes (to prevent otters entering and becoming trapped);
- Screening with fencing or planting of thicket-type vegetation to reduce noise, lighting and visual disturbance to otter commuting routes;
- Existing drainage measures during operation have been proposed in ES Chapter 12 as appropriate for the Power Station Site. The Above Ground Installation area and associated access road will be routed through an appropriate oil separator prior to discharge. Such measures have been assessed as appropriate to negate potential drainage-related water quality impacts (ES Chapter 12, Sections 12.6.51 – 12.6.53).
- The use of construction best practice measures to avoid pollution including pollution prevention guidance (DEFRA 2016; Ref 23,) would be followed to prevent pollution of water courses by silt or chemicals.

Water Vole Mitigation

Water voles including a series of water vole burrows have been recorded within a ditch running parallel to Main Road. Water voles could also use the ditch network should suitable

conditions be present. Trenchless techniques for the construction of the Gas Pipeline along Main Road have been confirmed.

Sensitive construction methods for construction access in proximity to the ditch along Main Road should be employed. An appropriate exclusion zone should be deployed around the water vole burrows and a temporary bridge should be built outside of this zone further up the ditch to minimise any residual disturbance from vehicular crossing. Any vehicular crossing will be short-term.

However, should evidence of water vole be located in other ditches within the Pipeline Construction Area that are not planned to undergo trenchless techniques, the following measures should be implemented:

- Minimising the working footprint in areas close to water vole burrows
- Should new water vole burrows be discovered within proximity to Pipeline Construction and can't be avoided, manipulation of riparian habitats to displace water voles using a water vole displacement licence (WML – CL31) from NE will be needed.

OFFSETS AND EASEMENTS

Offsets

Working areas would be offset from existing and retained landscape features and associated habitats to minimise the risk of accidental damage, these have been defined as minimum distances of:

- Hedgerows - 5 m offset.
- All woodland within the Proposed Scheme (North Station Wood, woodland strip to north of Development Parcel B and woodland to south of Development Parcel A) - 15 m offset.
- Woodcock Wood – 10 m exclusion zone to protect against excavation and construction of the Pipeline.
- Existing ditches and buildings – 2 m to allow maintenance access.

Easements (Pipeline and overhead lines)

Areas of planting would be constrained by easements associated with the Gas Pipeline and overhead cables.

Pipeline:

Hedgerows may be planted only where a hedge is necessary either for screening purposes or to indicate a field boundary using hardwood plants such as blackthorn.

Individual tree species can be planted in a single row between 6 to 10 m of the Gas Pipeline, whilst dense tree planting can be undertaken only beyond 10 m of a pipeline, (The Applicant would follow the species drawn from National Grid's approved list of suitable species) (Ref 1.22).

Overhead Lines:

Landscaping schemes should only introduce slow and low-growing species of trees and shrubs beneath and adjacent to existing overhead lines to reduce the risk of growth to a height which compromises statutory safety clearances.

Tree planting can be undertaken beyond a specified distance of any overhead cables subject to the voltage as detailed in Energy Network Association Technical Specification 43-8, Issue 4 2015 (Ref. 1.23).

PRECAUTIONARY WORKING METHODS

Precautionary working methods would be employed to minimise potential adverse impacts on protected species prior to and during construction. Detailed information on the following precautionary measures would be included in the CEMP:

- Clear demarcations to fence off construction footprints to prevent plant machinery and personnel damaging or disturbing retained habitats and/or areas that may support protected species;
- Sheer sided excavations greater than 50cm deep to be securely fenced and escape ramps fitted to minimise the likelihood of incidental capture of mammals such as badger and otter.
- Sensitive vegetation clearance methodologies would be followed to minimise the risk of incidental mortality of small mammals, birds and widespread amphibian and reptile species. Similar methodologies should be employed to control the spread of invasive non-native plant species.
- Avoidance of any obstructions to established otter paths and access to open water.
- The marking of, and adherence to, 30 m exclusion zones around any holts and shelters identified as a result of updated survey. If otters are known or suspected to be breeding, the exclusion zone would be extended to at least a 200 m radius. However, it could be reduced to 100 m depending on the nature of the works, topography and natural screening (for example flood defence bunding along the banks of the River Ouse. This will require judgement from an experienced ecologist.
- Screening with fencing or planting of thicket-type vegetation to reduce noise and visual disturbance to otter commuting routes during operation.
- The capping of any exposed pipe systems when contractors are off site, and providing exit ramps from any exposed trenches or holes (to prevent otters entering and becoming trapped).
- Screening with fencing or planting of thicket-type vegetation to reduce noise and visual disturbance to otter commuting routes.
- In the event that trenchless crossings would not be used for watercourse crossings, detailed proposals for retaining habitat connectivity for otters and avoiding the incidental mortality of water voles would be developed based on construction proposals and included in the detailed Landscape and Biodiversity Strategy(ies).

APPENDIX 4 - PROPOSED PLANTING PALETTE

The proposed planting palette would be drawn from species outlined in the two Tables below and informed by the extended Phase 1 habitat surveys, landscape field visits and Weddle's Landscape Management Report 1987 / Revised July 1990. The lists below are not comprehensive but do identify species which have an abundant, frequent or occasional presence. Additional species may be added / substituted Ash (*Fraxinus excelsior*) may be substituted with an alternative native species) to the list in consultation with NYCC, SDC, and Yorkshire Wildlife Trust post DCO submission.

Table A4–1 – Indicative proposed planting associated with the On-site Compensation Areas and Additional Areas

Power Station Site	
Habitat types	Indicative Species
Woodland (Broadleaved semi natural woodland) and understorey	Silver birch (<i>Betula pendula</i>) English / Pedunculate oak (<i>Quercus robur</i>) Rowan (<i>Sorbus acuparia</i>) Bird cherry (<i>Prunus padus</i>) Guelder rose (<i>Viburnum opulus</i>) Dog rose (<i>Rosa canina</i>) Dogwood (<i>Cornus sanguinea</i>) Hawthorn (<i>Crataegus monogyna</i>) Hazel (<i>Corylus avellana</i>) Elder (<i>Sambucus nigra</i>) Field Maple (<i>Acer campestre</i>) Holly (<i>Ilex aquifolium</i>)
Coppice woodland / scrub	Hazel English / Pedunculate oak Hawthorn Guelder rose
Woodland carr	Alder (<i>Alnus glutinosa</i>) Silver birch Goat willow (<i>Salix caprea</i>)
Broadleaved Parkland / Scattered Trees (Ornamental Tree Planting)	Aspen (<i>Populus tremula</i>) Alder Ash (<i>Fraxinus excelsior</i>)* Field maple (<i>Acer campestre</i>) Grey willow (<i>Salix cinerea</i>) Hornbeam (<i>Carpinus betulus</i>) English / Pedunculate oak Scots pine (<i>Pinus sylvestris</i>) Rowan Silver birch Lime (<i>Tilia cordata / euchlora</i>) Wild cherry (<i>Prunus avium</i>)
Scrub	Blackthorn (<i>Prunus spinosa</i>) Hawthorn

Power Station Site	
Habitat types	Indicative Species
	Field maple Hazel Holly Wayfaring tree (<i>Viburnum lantana</i>)
Hedgerow trees and hedgerows	English / Pedunculate oak Ash Blackthorn Field maple Hawthorn Dog rose (<i>Rosa Canina</i>) Hazel Wild cherry
Ornamental Shrubs	<i>Cotoneaster microphylus</i> <i>Cornus</i> var <i>Hypericum</i> var Lavender Rose var Rosemary <i>Santolina</i> var <i>Senecio</i> var
Ground Flora (from Barlow mound)	Bluebell (<i>Hyacinthoides non scripta</i>) Lesser celandine (<i>Ficaria verna</i>) Wood avens (<i>Geum urbanum</i>) Lords and ladies (<i>Arum maculatum</i>) Herb Robert (<i>Geranium robertianum</i>) Wood forget-me-not (<i>Myosotis sylvatica</i>)

Table A4–2 – Indicative proposed planting associated with the Gas Pipeline

Gas Pipeline	
Habitat types	Indicative Species
Hedgerow trees	Ash Field maple Hawthorn English / Pedunculate oak Rowan
Species-rich hedgerows	Blackthorn Hawthorn Elder Field maple Common osier (<i>Salix viminalis</i>) Crack willow (<i>Salix fragilis</i>) Dog rose (<i>Rosa Canina</i>)
Coppice woodland / scrub	Hazel English / Pedunculate Oak Hawthorn Guelder rose

Gas Pipeline	
Habitat types	Indicative Species

* A suitable substitute needs to be considered for ash based on restrictions associated with ash dieback (*Hymenoscyphus fraxineus*).

HABITAT CREATION PRINCIPLES

It should be noted that where planting and the creation of new habitats is undertaken the following principles would apply:

- Consultation would take place pre- construction with NYCES and SDC to agree the indicative planting palette including seed mixes and sourcing of material.
- All seed mixes and planting stock would be ordered as early as possible to ensure that the supply does not risk substitution.
- All seed mixes and tree and shrub stock would be sourced from a specialist producer of British native plants and who can identify all stock.
- Native trees and shrubs would be sourced from a supplier which follows the Forestry Commission's Voluntary Identification Scheme for British Native trees and Shrubs;
- Grassland wildflower mixes would be approved by Defra under the Seed (Registration, Licensing and Enforcement) (England) Regulations 2002.
- Terms of supply would include a condition that no part of the order should be substituted with alternative stock or of unapproved origin and that any change must be mutually agreed.

The above requirements would be incorporated into contractors' specifications and contracts as appropriate to deliver agreed planting stock in accordance with the aims and objectives of this outline Strategy.

Tree protection measures would either be through the use of standard tree or shrub shelters or through the erection of appropriate post and wire fencing with rabbit proof netting. This would be determined through the detailed applications and would depend on the specific areas of planting proposed and associated site conditions.

APPENDIX 5 - DETAILED PROPOSED MITIGATION MEASURES LINKING TO COMPENSATION AREAS

This appendix summarises in general terms the landscape features / ecological habitats which would be reinstated, enhanced, managed and created and should be read in conjunction with the proposed planting palette (Appendix 4). The appendix then sets out the broad proposals for each specific compensation area (refer to Figure 6.7.4 to 6.7.11 in Appendix 1).

FEATURES TO BE REINSTATED, ENHANCED, MANAGED AND CREATED

Landscape and habitat reinstatement, enhancement and mitigation measures would be delivered within the Compensation Areas covering:

- On site Compensation Areas which lie within the red line boundary; and
- Additional areas of land outside of the red line boundary but which fall under Drax's ownership.

Compensation Areas which lie within the red line boundary and on Drax's land would be secured under the DCO and associated consent procedure via the approval of the detailed Landscape and Biodiversity Strategies.

Landscape and biodiversity measures associated with the Proposed Scheme would seek to meet the objectives defined in Chapter 3

The nature of such landscape and associated habitats is summarised below.

Existing and Proposed Woodland

Existing areas of broadleaved and mixed woodland which fall within the Compensation Areas or additional areas would be managed and enhanced to improve their longevity and diversity. Investigations would be undertaken prior to submission of a detailed Strategy to determine the condition of trees and whether appropriate replacement planting should be introduced where there are suitable gaps in the woodland and where trees have failed and gaps are evident.

Soil samples would be taken to inform species selection and soil remediation works undertaken if required. Refer to Appendix 4 for proposed species.

New broadleaved, coppice woodland / scrub and woodland carr would be planted at a range of densities. The distribution of species and sizes (a mix of transplants, whips and feathered trees) would seek to maximise habitat diversity, cover and connectivity as well as provide a screening function, reduce visual clutter, enhance local landscape features and impede flood water into River Ouse. Straight lines and regular spacing would be avoided to create a natural structure and edges would vary between tree groups and understorey planting. Trees would be distributed in small groups with gaps to allow for natural regeneration.

Small gaps in both coppice woodland and woodland carr would be created to achieve species diversity and enable natural regeneration. Coppice woodland would be managed on a 5 to 20-year rotation.

All trees would be notch planted into cultivated ground and supported by an appropriate timber stake and tree shelter (fitted in accordance with manufacturer's instructions). Protective fencing would be introduced for a minimum of three years until growth is taller than 1.5 m to prevent deer and rabbit damage.

Broadleaved Parkland / Scattered Trees (Ornamental Tree Planting)

New broadleaved parkland / scattered / ornamental tree planting would be introduced to provide low level visual screening, improve connectivity and reduce perceptions of visual clutter. Tree species would be drawn from the planting palette (Appendix 4).

All trees would be a mix of standards, whips and feathers, planted into tree pits to a depth which will be specified in the detailed Strategy and backfilled with a mix of screened excavated material, a slow release fertiliser and soil conditioner if appropriate. In locations where there is poor drainage a layer of gravel covered with a suitable geotextile membrane would be added to the base of the pits.

All trees would be supported by an appropriate timber stake and tree shelter (fitted in accordance with manufactures instructions).

Existing and Proposed Scrub (including coppice woodland)

Scrub planting would enhance the habitat mosaic associated with the woodland areas and form a new understorey within and edging proposed woodlands providing further low level screening, improving habitat cover and connectivity for local wildlife, impeding flood water into the River Ouse and achieving a greater diversity of species and habitats.

The location of proposed planting within existing woodland would be determined on site and would be dependent on availability of light and space. Proposed planting within new woodlands or forming part of a coppice woodland would be planted at a range of densities and sizes to maximise habitat diversity. This would be specified in detail in the detailed Strategy.

All scrub planting would be notch planted into cultivated ground at centres to be agreed and supported by an appropriate timber stake and shrub shelter (fitted in accordance with manufacturer's instructions). The shrub mix would reflect native species identified on site in addition to some holly for evergreen screening. Refer to Appendix 4 for proposed species.

Existing and Proposed Ornamental Shrubs

Existing ornamental shrub planting would be maintained and enhanced through additional planting introduced where appropriate to increase coverage. All shrubs would be sourced from local certified suppliers and drawn from the list in Appendix 4.

The depth of shrub pits would be specified in the detailed Strategy and backfilled with a mix of screened excavated material, a slow release fertiliser and soil conditioner if appropriate. In locations where there is poor drainage a layer of gravel covered with a suitable geotextile membrane would be added to the base of the pits.

Existing and Proposed Hedgerows

Existing hedgerows would be infilled where gappy with hedgerow planting and new hedgerow trees. Species would replicate those within the immediate vicinity and be drawn from Appendix 4.

Proposed edgerows would be notch planted in cultivated ground at 500 mm spacings in a double staggered row and supported by an appropriate timber stake and guard (fitted in accordance with manufactures instructions). Hedgerow trees would be introduced in specific locations to provide further visual screening at low elevations.

Grassland (Species-rich, Marsh and Amenity)

Species-rich grassland habitats would be established following topsoil removal or inversion and ground preparation. New neutral /acidic grassland would replace grassland lost and new areas would be provided within the Additional Areas.

The wildflower grassland seed mix sown would be appropriate to the local geographic context and consultations would take place with Yorkshire Wildlife Trust to determine where suitable seed could be harvested or green hay gathered for subsequent sowing. Seed would be wild native species (i.e. no cultivars) of UK provenance.

New marshy grassland would replace grassland lost with a species mix to match species identified through the Phase 1 habitat survey and in consultations with NYCES.

Amenity grassland would be introduced where the grassland abuts access roads or other hard surfacing and where it is deemed appropriate to maintain a short verge. Germinal Seed A4 Low maintenance grass mix (or similar agreed) sown at a density of 35/gm² would be used.

New Ponds

New ponds would be introduced to replace those lost during construction and to support wider habitat enhancement. The ponds would be designed to provide habitat for a range of freshwater and wetland flora and fauna. Planting of waterbodies with planting stock is not proposed, as it is considered most appropriate to allow native, locally occurring wetland species to colonise new water features. Where existing ponds are lost, consideration would be given to translocating plants and soil from the existing pond to the new pond, to support establishment of the new pond. No topsoil would be placed into new ponds, to avoid introducing excess nutrients.

Ground Flora Planting

Opportunities for plug planting of woodland ground cover would be identified within existing areas of woodland to provide increased cover and diversity of vegetation. Suitable locations are more likely to be on the woodland edges where there is a partial canopy and more light is available, and where the screening function of the woodland is not a priority, refer to Appendix 4 for an indicative planting list

Appropriate fencing would be erected around areas of new ground flora planting to prevent grazing damage by rabbits and deer.

Dead wood habitat piles would also be provided within retained woodland areas to benefit invertebrates, and other wildlife such as birds and small mammals. Wood taken from trees felled as a result of the Proposed Scheme would be available to provide habitat piles.

COMPENSATION AREAS

The proposed Compensation Areas are summarised under the following stages and should be read in conjunction with Figures 6.7.4 to 6.7.11 in Appendix 1 for further details. Works

associated with each Compensation Area fall under the following Work Numbers in accordance with the DCO Application and as summarised in Table A5-1 below.

Table A5-1 – Compensation Areas, timing of their implementation and associated work numbers

Compensation Area (based on Development Parcels and Work Numbers)	Stage	Area (Ha)	Work Number (WN)
Development Parcel A	2	11.11	WN 11 and, generally, Schedule 1
Development Parcel B	2	8.41	WN 11 and, generally, Schedule 1
Development Parcel C	2	7.19	WN 11 and, generally Schedule 1
Development Parcel F	2	15.55	WN 2D and 11, and generally, Schedule 1
Additional Area 1: Old Wood Yard	1	5.16	NA
Additional Area 2: Peat Storage Area	1	9.45	NA
Additional Area 3: Skylark Reserve	1	0.76	NA
Development Parcel J <ul style="list-style-type: none"> • Along Wren Hall Lane • South of Rusholme Lane • Close to and around the AGIs 	1	22.36 163.06 m (linear) 157.57m (linear) 0.44	WN7A
Development Parcel K: AGIs	1	0.89	WN 6A and 6B

STAGE 1

Additional Area 1: The Old Wood Yard

Additional Area 1, The Old Wood Yard is located immediately north west of the Proposed Scheme and comprises buildings, bare ground, hard standing and areas of equipment storage refer to Appendix 1 Figure 6.7.11. Pockets of naturally regenerated birch on old stocks on biomass material are present on its periphery. A Public Right of Way (PRoW) (PRoW 35.6/12/1) runs around the northern edge of the area) and links with two other PRoWs on either side of the Old Wood Yard. New planting would be implemented during Stage 1.

The area is of low ecological value and provides opportunities for diverse habitat creation and enhancement. Due to its proximity to the Proposed Scheme, it is the most suitable area in terms of reducing the displacement of protected/notable species and for providing compensatory habitat close to the point of loss.

In terms of the LVIA, the area provides the opportunity to connect visually with the extensive blocks of planting on Barlow Mound to the west, strengthen and increase the woodland edge along the Site's northern boundary, improve connectivity with Additional Area 2 and provide some low level screening for visual receptors utilising the PRoWs. The area also provides the opportunity to screen other development within Drax's footprint and soften and integrate development into the surrounding landscape.

Additional Area 1 provides the opportunity to introduce a range of planting, achieving a varied habitat mosaic. Planting would include native broadleaved woodland, coppice / woodland and semi improved grassland as well as riparian vegetation associated with a new pond.

The area would also benefit from the management of vegetation to allow for the creation of a semi-improved grassland enriched with a mix of species characteristic of neutral grassland. The space available in Additional Area 1 provides the opportunity to amend the topography creating bunds, which would provide suitable basking sites for reptiles. Proposed bunds would also include artificial hibernation sites for reptiles and amphibians. The created habitats would also provide suitable conditions for breeding and wintering birds and foraging and commuting bats.

To the east of this area of the Old Wood Yard (and forming part of Additional Area 1) it is proposed that an existing broadleaved woodland would be "gapped up" with new understorey planting to diversify the existing structure and reduce views.

Total area of planting would be approximately 5.16 ha. Works would be implemented during Stages 1. A breakdown of the proposed and existing landscape / habitat types is summarised in Table A5-3 below:

Table A5-3 – Table of Proposed and Existing Landscape / Habitat Types in Additional Area 1

Landscape / Habitat types	Predicted extent of area (ha)
Proposed	
Proposed semi-improved grassland	2.28
Proposed pond	0.23
Proposed bunding	0.58

Landscape / Habitat types	Predicted extent of area (ha)
Proposed broadleaf woodland	1.24
Proposed coppice woodland / scrub	0.62
Existing (retained with management and or enhancement)	
Existing broadleaved woodland enhanced with understorey planting	0.21

Additional Area 3: Skylark Reserve

Additional Area 3 is situated to the west of Barlow Mound and within the Skylark Reserve (Area G1/23 on Figure with Drax Unique No. 116745) refer to Appendix 1 Figure 6.7.11.

This is an area of short, rough grassland mown on an annual basis. There are opportunities for ecological benefits by reducing the intensity of mowing, potentially to a rotational biennial cut. This area is adjacent to reptile mitigation features to the west, and would therefore be particularly suitable as a receptor site for reptiles, if translocation of species needs to take place in advance of site clearance. Some south-facing basking banks/hibernacula and a small pond would be created alongside a reduction in intensity and sensitive timing of grassland management.

The proposed area serves a limited landscape function other than providing a variety of interest within a very localised area.

The total area of planting would be approximately 0.86 ha and works would be undertaken during Stages 1. A breakdown of the proposed and existing landscape / habitat types is summarised in Table A5-4 below:

Table A5-4 – Table of Proposed and Existing Landscape / Habitat Types in Additional Area 3

Landscape / Habitat types	Predicted extent of area (ha)
Proposed	
Proposed pond	0.04
Proposed bunding	0.07
Existing (retained with management and or enhancement)	
Existing semi-improved grassland	0.75

STAGE 1

Development Parcel C / E – Battery Storage Facility

The battery storage facility is expected to be constructed in two phases to align with the construction of Unit X and Unit Y, with Phase 1 expected to take place in Stage 1 in association with Unit X, and Phase 2 expected to take place in Stage 2, in association with Unit Y. If the development of Unit Y is not pursued, and land is available that would otherwise have been used for the battery storage facility, then further planting in the form of a semi improved grassland mix and the introduction of scrub would be introduced. Planting around the edge of the battery storage facility would be covered in the detailed Landscape and Biodiversity Strategy(ies) and align with the interim detailed objectives.

Additional Area 2: Peat Storage Area

Additional Area 2, The Peat Storage Area is situated to the north of the Old Wood Yard and north west of the Proposed Scheme refer to Appendix 1 Figure 6.7.11. The area supports a mosaic of wet habitats including reedbeds and marshy grassland, with semi-improved grassland, scattered trees and scrub dominating the area. The Peat Storage Area also comprises stands of willow scrub with an existing pond and species-rich hedgerows that form the southern boundary. The area already contains some moderate landscape / ecological value and would benefit from enhancement and management measures rather than creating new habitats which would maximise net gains for biodiversity.

In terms of the LVIA, the area provides the opportunity to connect visually with extensive blocks of planting on Barlow Mound to the west, strengthen and increase the scrub / woodland to enhance visual screening at a low level of the existing Lytag plant to the north west of the Site and impede flood water into the River Ouse. The area also provides the opportunity to soften and integrate development into the surrounding landscape.

Enhancement measures would include rotational management to increase the diversity of both young and mature scrub species combining low intensity management regularly rather than allowing the site to grow over a period of several years. Some of the dense scrub within the area (specifically to the south and north west) has almost reached maturity and could be managed to reach woodland status providing landscape features and opportunities for breeding birds. Similarly, grassland habitats within the area would be managed to provide diversity to sward lengths to create tussocks which infused rough grassland elements. This would provide opportunities for reptiles and small mammals.

The area currently supports a variety of ecotones (where two different habitats crossover) that could be managed and maintained to increase ecological value of the habitat mosaic and ensure a clear distinction between some of the habitats; such as preventing scrub and tree saplings from encroaching grasslands.

A section of reedbeds within the centre of Additional Area 2 is currently dominated by New Zealand pygmy weed, an invasive non-native species. As per section 3.1.6, elements of control specific to this species should be incorporated into the enhancement and management of the area to remove the extent of the weed and disposal off site. This would allow the reedbed habitat to regenerate, allowing the condition to improve naturally. Careful monitoring of the immediate area and its surrounds should be carried out to ensure spread of the species has not taken place. Himalayan balsam (*Impatiens glandulifera*) another invasive non-native plant species has also been recorded close to the southern boundary. To eliminate the spread and encroachment of this species, appropriate management and control methods such as herbicide spraying and cutting should be employed, this will be documented in the CEMP and would be provided in more detailed in the detailed Landscape and Biodiversity Strategy(ies).

All enhancement and management measured would be undertaken during Stage 1. A breakdown of the proposed enhancement measures and existing landscape / habitat types is summarised in Table A5-5 below:

Table A5–5 – Table of Proposed and Existing Landscape / Habitat Types in Additional Area 2

Landscape / Habitat types	Predicted extent of area (ha)
Existing (retained with management and or enhancement)	

Landscape / Habitat types	Predicted extent of area (ha)
Hedgerow	523 (linear m)
Scrub	3.54
Reedbed	1.33
Semi-improved grassland	2.7
Bracken	0.05
Ephemeral planting	0.45
Other tall herb and fern - ruderal	0.34
Bare ground	0.17
Peat mound	0.2
Marshy grassland	0.57
Pond	0.09

Development Parcel J - Reinstatement of arable land associated with the Gas Pipeline

Arable land along the entire Gas Pipeline would be reinstated following the completion of the Gas Pipeline installation during Stage 1 refer to Appendix 1 Figure 6.7.9 and 10 and Work Number 7A.

Micro-siting of the Gas Pipeline would be undertaken to avoid significant trees and hedge lines, the soil stripped and a trench dug along the route. A temporary haul road would be constructed along the route corridor to provide access for pipe laying. Temporary storage areas for soil and subsoil would run adjacent to the haul route and occasional traffic and storage of vehicles would be visible along the route. Overall it is assumed that a 30-m corridor may be required to accommodate the laying of the pipeline, haul route and storage areas.

Due to constraints on planting over pipelines, the reinstatement of the land once the pipeline has been installed would be with existing turf, shallow rooting native shrubs and/or small trees. Where possible, reinstatement would involve the careful handling of soils and a return to the existing habitat type.

A 10 m buffer should be provided along the north and west corner of Woodcock Wood to protect the woodland from construction activities including excavation damage that may affect tree roots. Woodcock Wood is located outside of the Proposed Scheme but in close proximity to part of the Pipeline Area, to the west of Main Road. Total area of arable land reinstatement would be approximately 21.81 ha. Works would be undertaken within 12 months of completion of the Gas Pipeline and it is expected that such works would be phased, with land reinstated immediately after completion of specific sections of the pipeline during Stage 1. A breakdown of the proposed and existing landscape / habitat types is summarised in Table A5-6 below:

Development Parcel J - Planting on either side of Wren Hall Lane

A maximum of 30 metres of hedgerow along Wren Hall lane (15 metres either side of the road) could be cleared to facilitate construction access to enable Pipeline Construction (worst case scenario). Work would endeavour to utilise gaps between existing hedgerows where feasible. Any removal of hedgerows would be reinstated following the laying of the Gas Pipeline.

Existing hedgerows with occasional broadleaved trees (largely English oaks) on either side of Wren Hall Lane would be enhanced through infill native hedgerow planting and hedgerow trees refer to Appendix 1 Figure 6.7.9 and Work Number 7A.

Proposals would provide visual benefits to the landscape and mitigate some effects on local visual receptors, namely Wren Hall and users of Wren Hall Lane. The proposed planting would also provide additional nesting and foraging resources for local bird populations, and additional foraging and commuting habitat for local bat populations. The addition of avenue trees will also provide opportunities for invertebrates.

. Works would be implemented during Stage 1. A breakdown of the proposed and existing landscape / habitat types is summarised in Table A5-6 below.

Development Parcel J - Planting south of Rusholme Lane and around the AGIs

A new single avenue of native broadleaved tree planting would be introduced south of Rusholme Lane to screen the AGIs from the Trans Pennine Trail which runs along the top of the northern levee of the River Ouse. Planting would need to be offset from both the proposed pipeline associated with the Proposed Scheme and Feeder Pipe 29 linked to National Grid's AGI.

Total area of planting would be approximately 157.57 linear metres. Works would be implemented during Stage 1.

Coppice woodland / scrub would be planted to mitigate the visual impact of the AGIs. from the south, east, Trans Pennine Trail and Diamond Cottage south of Rusholme Lane. New planting would consist of small pockets of coppice woodland around the AGIs to the west and east of the AGIs edging the access road. Coppice woodland planting would be set back by 7m from the edge of the ditch (the Dickon Field Drain) to allow for access, and the 7m margin would be planted as semi improved species-rich grassland. The proposed planting would provide additional nesting and foraging resources for a range of local bird populations including ground nesting species. The introduction of a copse / scrub mosaic would provide additional foraging and commuting opportunities for local bat species. Additional woodland planting would also impede floodwater flows into the River Ouse.

Total area of planting would be approximately 0.52 ha (refer to Appendix 1 Figure 6.7.10 and Work Number 6B and 7A). Works would be implemented during Stage 1. A breakdown of the proposed and existing landscape / habitat types is summarised in Table A5-6 below:

Table A5-6 – Table of Proposed and Existing Landscape / Habitat Types in Development Parcel J

Landscape / Habitat types	Predicted extent of area (ha)
Reinstated	
Arable land	21.81
Hedgerow	30 linear m
Proposed	
Proposed avenue of broadleaved trees	157.57 m (linear)
Proposed coppice woodland / scrub	0.34
Semi-improved species-rich grassland	0.1

Landscape / Habitat types	Predicted extent of area (ha)
Existing (retained with management and or enhancement)	
Broadleaved parkland/scattered trees	0.08
Proposed enhanced hedgerow with infill planting and hedgerow trees	132.59 m (linear)

Development Parcel K- AGIs

New coppice woodland/scrub planting would be introduced to mitigate the visual impact of the AGIs. New planting would consist of small pockets of coppice woodland around the AGIs and along the southern boundary of the site allowing for a 7-m offset from the edge of the ditch of the field which would accommodate semi improved species-rich grassland refer to Appendix 1 Figure 6.7.10 and Work Number 6A. Scrub planting and semi-improved grassland would also be introduced to the south and west of the AGIs and a native species rich hedge would wrap around the AGIs defining the boundary between this area and surrounding arable land.

Planting proposals would mitigate against views from the Diamond Cottage to the west, views from Asselby to the east and from properties to the south and south-east. Screening would also reduce visual impacts from the Trans Pennine Trail which runs along the top of the northern levee of the River Ouse. The proposed planting would improve habitat diversity and also provide additional nesting and foraging resources for local bird populations, and additional foraging and commuting habitat for local bat populations. Additional woodland planting would also impede water into the River Ouse.

Total area of planting would be approximately 0.89 ha and works would be undertaken during Stage 1 following completion of the construction of the AGIs. A breakdown of the proposed and existing landscape / habitat types is summarised in Table A5-7 below:

Table A5-7 – Table of Proposed and Existing Landscape / Habitat Types in Development Parcel K

Landscape / Habitat types	Predicted extent of area (ha)
Proposed	
Proposed coppice woodland / scrub	0.39
Semi-improved species rich grassland	0.5
Hedgerow	240 linear m

STAGE 2

Development Parcel A

Development Parcel A covers the reinstatement of hedgerow planting and some hedgerow trees lost as a consequence of the creation of two temporary access points into Development Parcel A (for construction laydown and car park access during Stage 1 and Stage 2) and a temporary footbridge linking Development Parcel A and F refer to Appendix 1 Figure 6.7.5. Work Number 11 and, generally Schedule 1. The visibility splays for each access is 430 m. The width of each access (bellmouth at kerb line) is approximately 49 m. To facilitate the two access points a total of 224 m of hedgerow would be removed. Planting

would include the reinstatement of hedgerow planting and enhancement including the “gapping up” of existing hedgerows and introduction of infill hedgerow tree planting with native trees.

Construction land would be offset by 15 m to the south to protect existing broadleaved woodland and 5 m from the inner boundary of the existing hedgerows on either side of the development parcel. Offset areas of land would be enhanced by sowing with an agreed species-rich grassland mix. This would be achieved through the stripping of topsoil and appropriate management to achieve a diverse ecological edge and encourage the establishment of a more ecologically diverse field margin.

The proposed landscaping and enhancements will be carried out in Stage 2 once Unit Y has been completed. A breakdown of the proposed and existing landscape / habitat types is summarised in Table A5-8 below:

Table A5–8 – Table of Proposed and Existing Landscape / Habitat Types in Development Parcel A

Landscape / Habitat types	Predicted extent of area (ha)
<i>Existing (Undisturbed)</i>	
Arable land	1.78
<i>Reinstated</i>	
Hedgerow reinstated and enhanced with infill planting and hedgerow trees	351m (linear)
Arable land (reinstated only)	8.04
<i>Existing (retained with management and or enhancement)</i>	
Hedgerow enhanced with infill hedgerow trees	900.28 m (linear)
Arable (enhanced to semi improved grassland)	0.83
Broadleaved woodland - semi-natural	0.24
Broadleaved parkland/scattered trees	0.12
Improved grassland	0.08
Other tall herb and fern - ruderal	0.02

Development Parcel B

A new native hedgerow would be introduced wrapping around existing broadleaved and mixed woodland. Semi improved species-rich grassland and native hedgerow would be reinstated within Development Parcel B lost as a consequence of Stage 2 when land is set aside as a construction area. Planting would be reinstated / introduced to reduce visual clutter and reflect Weddle’s original aspirations of a transitional landscape refer to Appendix 1 Figure 6.7.6 and Work Number 11 and, generally Schedule 1.

A 15 m buffer should be provided along the western perimeter of North Station Wood, offsetting this mixed woodland habitat from construction activities within the laydown area. The 15 m buffer would continue along the strip of woodland to the north (Figure 6.7.6 refer). Total area of planting would be approximately 2.24 ha and implemented during Stage 2 once Unit Y has been constructed. A breakdown of the proposed and existing landscape / habitat types is summarised in Table A5-9 below:

Table A5– 9 – Table of Proposed and Existing Landscape / Habitat Types in Development Parcel B

Landscape / Habitat types	Predicted extent of area (ha)
Proposed	
Hedgerow	443.51 m (linear)
Reinstated	
Hedgerow	214.95 m (linear)
Semi-improved species-rich grassland	1.97
Amenity grassland	0.07
Existing (retained with management and or enhancement)	
Broadleaved woodland - plantation	0.072
Mixed woodland - plantation	2.40
Scrub - dense/continuous	0.08
Existing undisturbed	
Improved grassland	1.35
Cultivated/disturbed land - arable	0.48
Cultivated/disturbed land - amenity grassland	0.25

Development Parcel C

Retention, reinstatement and enhancement of planting west of a proposed flood alleviation channel and the battery storage facility (much of which is a former car park) in the form of broadleaved parkland / scattered trees (ornamental) / coppice woodland / scrub, hedgerows and semi improved species-rich grassland. A new pond would be introduced to replace the pond lost during construction laydown. Marginal plants will be introduced to the banksides with the majority of the area left unplanted to allow aquatic plants to colonise naturally. The vegetation would provide an attractive environment for on site workers, serve a low level screening function, reduce visual clutter, soften and integrate development into the surrounding landscape and improve habitat diversity on site refer to Appendix 1 Figure 6.7.7 and Work Number 11 and, generally Schedule 1.

In addition to compensating for the habitat loss associated with the Proposed Scheme, the proposed planting would provide suitable habitats for amphibians, reptiles, breeding and wintering birds and bats. The proposed wetland areas could potentially also benefit local water vole and otter populations. Given the limited connectivity with watercourses in the wider locality, regular usage by otters or water voles in future is considered unlikely.

Proposals would be implemented on completion of Stage 2, once Unit Y has been constructed. A breakdown of the proposed and existing landscape / habitat types is summarised in Table A5-10 below:

Table A5– 10 – Table of Proposed and Existing Landscape / Habitat Types in Development Parcel C

Landscape / Habitat types	Predicted extent of area (ha)
Proposed	

Landscape / Habitat types	Predicted extent of area (ha)
Proposed hedgerow	373.11 m (linear)
Proposed semi-improved grassland	1.59
Proposed broadleaved parkland / scattered trees	0.34
Proposed coppice woodland / scrub	0.29
Pond	0.07
Existing (retained with management and or enhancement)	
Poor semi-improved grassland	0.19
Cultivated/disturbed land - amenity grassland	0.24
Introduced shrub	0.04

Development Parcel F

Ornamental trees, hedgerow and amenity grassland lost as a consequence of the temporary pedestrian footbridge to provide a link between Development Parcels A and F would be reinstated and enhanced. Replacement trees and hedgerow would provide a low-level screen reducing visual clutter internally refer to Appendix 1 Figure 6.7.8 and Work Number 2D, 11 and, generally Schedule 1. The species, depth and spacing of planting would replicate existing planting on site; a mix of hawthorn, cherry, field maple and dog rose with ash forming an avenue of trees. Discussions would need to take place over a suitable substitute to ash based on restrictions associated with ash dieback (*Hymenoscyphus fraxineus*)

In addition to reinstated planting, new ornamental trees and shrub planting would be added to the existing vegetation further south along the western edge of New Road. The condition of ornamental shrub planting is poor and ground coverage is limited. Further planting would improve overall ground coverage and create a unified appearance.

Marshy grassland lost during the construction of Units X and Y and associated cable routes would be reinstated, ground prepared and seed sown with same graminoid species.

Total area of planting would be approximately 1.97 ha and implemented during Stage 2, after Unit Y has been constructed. A breakdown of the proposed and existing landscape / habitat types is summarised in Table A5-11 below:

Table A5-11 – Table of Proposed and Existing Landscape / Habitat Types in Development Parcel F

Landscape / Habitat types	Predicted extent of area (ha)
Reinstated	
Ornamental hedgerow and hedgerow trees (reinstated and enhanced)	136.32 m (linear)
Amenity grassland reinstated	0.09
Marsh/marshy grassland	1.48
Existing (retained with management and or enhancement)	
Ornamental hedgerow and hedgerow trees	76.51 m (linear)
Ornamental planting enhanced with further tree planting	0.05

Development Parcel I – Gas Receiving Facility Access

Approximately 47 m of hedgerow would be removed from the western boundary of Development I to facilitate construction and maintenance access of the GRF (see Figure 6.7.9). The total visibility splay for the access is 430 m and the width of the junction (bellmouth at kerb line) is 37 m. A permanent access point would be created to allow for the maintenance of the GRF. The exact location and nature of the reinstated hedgerows on either side of the new access point would be covered within the detailed Landscape and Biodiversity Strateg(ies).

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APPENDIX 6 - INDICATIVE MEASURES FOR EFFECTIVE MANAGEMENT AND MAINTENANCE OF PROPOSED ENHANCEMENT

OVERVIEW

All new landscape/habitat creation and enhancement works would be subject to a long term (25 year) management, maintenance and monitoring plan to ensure the full and successful establishment of the planting. The plan would form part of the detailed approved landscape and biodiversity strategy. The plan would prescribe the maintenance regimes for all different landscape / habitats considering the aims, objectives and functions of each area of planting / habitat. Further details would be agreed with NYCC and SDC prior to construction of works associated with each Work Number.

New planting would be subject to a five year defects liability period, secured by a requirement in Schedule 2 of the draft DCO (Examination Library Reference [AS-012](#)). This period would commence on completion of landscaping works associated with each Work Number. All plants found dead or dying would be replaced within the first available planting season.

If areas of planting are seen to be failing, soil samples would be taken to identify potential soil issues affecting plant health and soil remediation considered and / or alternative more suitable plants chosen to maintain proposed features.

An approved contractor would undertake a number of operations including weed control, checking plants, pruning and replacement planting as well as watering.

The plan would consider the management of the following elements in further detail:

EXISTING AND PROPOSED WOODLAND AND TREES

The management, maintenance and monitoring plan as well as the detailed plans of each compensation area would draw on the UK Forest Standards (Ref. 1.24) and consider opportunities to:

- Create a diverse structure where opportunities arise to improve habitat diversity and encourage natural regeneration.
- Retain a proportion of fallen or standing deadwood to improve ecological value;
- Explore opportunities to enhance the woodland edge where light and space is available through the introduction of ground flora and understorey planting.
- Create the opportunities for glades through the felling of single trees or groups of trees where this does not contradict visual screening objectives.
- Undertake woodland and hedgerow management outside of the breeding bird season.
- Consider risk and opportunities for climate change in the selection of new woodlands and restocking.

EXISTING AND PROPOSED COPPICE WOODLAND / SCRUB

The following would be considered for existing and proposed coppice woodland / scrub:

- Thinning and coppicing of trees and shrubs would achieve a diverse form and habitats undertaken on rotation in specific blocks;

- Coppice stools would be protected from deer/ rabbit browsing by piling brashing; and
- Coppice stools would be monitored for regrowth and replanted where appropriate.

EXISTING AND PROPOSED HEDGEROWS

The following issues would be considered for existing and proposed hedgerows:

- In order to maintain a natural profile, hedgerows would be cut at an appropriate time of year to avoid impacting on breeding birds.
- Hedgerows would be cut on a rotational basis, allowing the growth of individual hedgerow trees.
- Dead / diseased wood would be pruned back and material removed except where its retention would have ecological benefit.
- Consideration would be given to coppicing or laying.

Ground flora beneath the hedge line would be allowed to develop and herbicides / pesticides avoided.

EXISTING AND PROPOSED GRASSLAND

An appropriate management regime for grassland would be defined and agreed with NYCC and SDC prior to the construction of each Work Number. Specific mowing regimes for different types of grassland would be agreed and arisings either removed or left for a period of time to allow seed and invertebrates to drop out.

NEW ORNAMENTAL TREES AND SHRUB PLANTING

An appropriate management regime for existing and new ornamental trees and shrubs would be defined and agreed with NYCC and SDC prior to the construction of each Work Number.

NEW WATERBODIES

Appropriate management regimes for new water bodies would be defined and agreed with NYCC and SDC prior to the construction of each Work Number. Consideration would be given to the desilting of ponds and management of vegetation with any necessary thinning of wetland vegetation.

Inspection of wetland planting would be carried out to assess weeds and pests and disease control, and any required litter picking. Access in and out of the water bodies would also be assessed prior to each survey to ensure safe and easy means of escape from the water are maintained.

APPENDIX 7 - ROLES AND RESPONSIBILITIES

Drax Power Limited or its appointed contractor would be responsible for:

- Correct instruction of all parties contributing to delivery of the detailed approved Landscape and Biodiversity Strategy (including but not restricted to Drax staff, ecologists, arboriculturalists, landscape architects, landscape contractors, construction contractors and management organisations).
- Compliance with the detailed approved Landscape and Biodiversity Strategy, relevant legislation and any related planning commitments.
- Keeping the appointed ecologist/ landscape architect/ arboriculturalist informed of work activities that require support and supervision, so that it is clear when attendance at site is required.
- Enacting/ enforcing recommendations made by the ecologist/ landscape architect / arboriculturalist, or otherwise agreeing an appropriate alternative course of action if it is subsequently determined that previous advice is not practicable or is out of date.
- Keeping a record of measures taken to deliver the requirements of the detailed approved Landscape and Biodiversity Strategy to provide an auditable record of compliance.

The appointed ecologist would be responsible for:

- Advising Drax on ecological matters and requirements for compliance legislation, providing support as instructed, and monitoring compliance on the detailed approved Landscape and Biodiversity Strategy.
- Providing Drax with survey reports and other written evidence required by accordance with the agreed scope of work and contractual obligations.
- Planning and undertaking ecological monitoring surveys (where necessary) which will be outlined in detail within the overarching management, maintenance and monitoring plan as part of the detailed Landscape and Biodiversity Strategy.

The appointed landscape architect / arboriculturalist would be responsible for:

- Providing specialist site supervision in the form of walk over assessments relating to relevant landscape areas. This will be to assess landscape components and their condition and identify the need for landscape enhancement as instructed and in accordance with the agreed scope of work and contractual obligations, once the proposed scheme has been completed;
- Monitoring and assessing the landscape related elements of the detailed approved strategy for their effectiveness on an annual basis for the first five years following the completion of the development, informed by the management, maintenance and monitoring plan within the detailed landscape and biodiversity strategy (ies);
- Ensuring that the landscape related elements of the detailed approved strategy are reviewed every five years beyond the initial monitoring and assessment stage. The strategy shall be amended accordingly to suit any changing landscape conditions and ultimately inform the landscape maintenance operations associated with the development throughout the operational life of the proposed scheme; and
- Ensuring that any reviews associated with landscape related elements of the detailed approved strategy clearly identifies any changes to site conditions and circumstances, whether the aims and objectives of the detailed approved Strategy are being met, and where identified changes are needed to existing management practices and timeframes.