

Heckington Fen Solar Park

EN010123

Figure 6.2 Landscape Strategy

Applicant: Ecotricity (Heck Fen Solar) Limited

Document Reference: 6.2.6

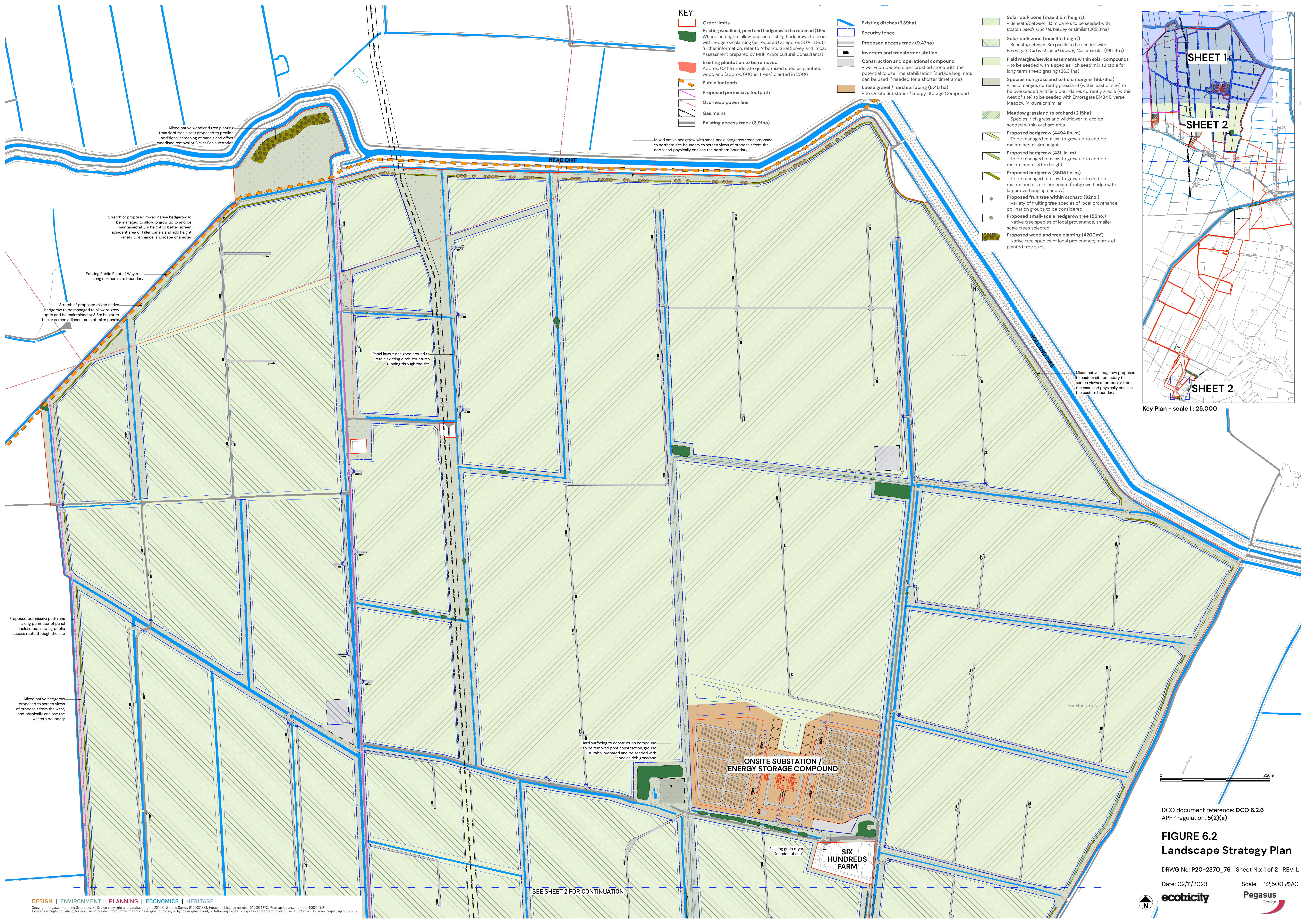
Pursuant to: APFP Regulation 5(2)(a)

Deadline 2: 7th November 2023

Document Revision: 3

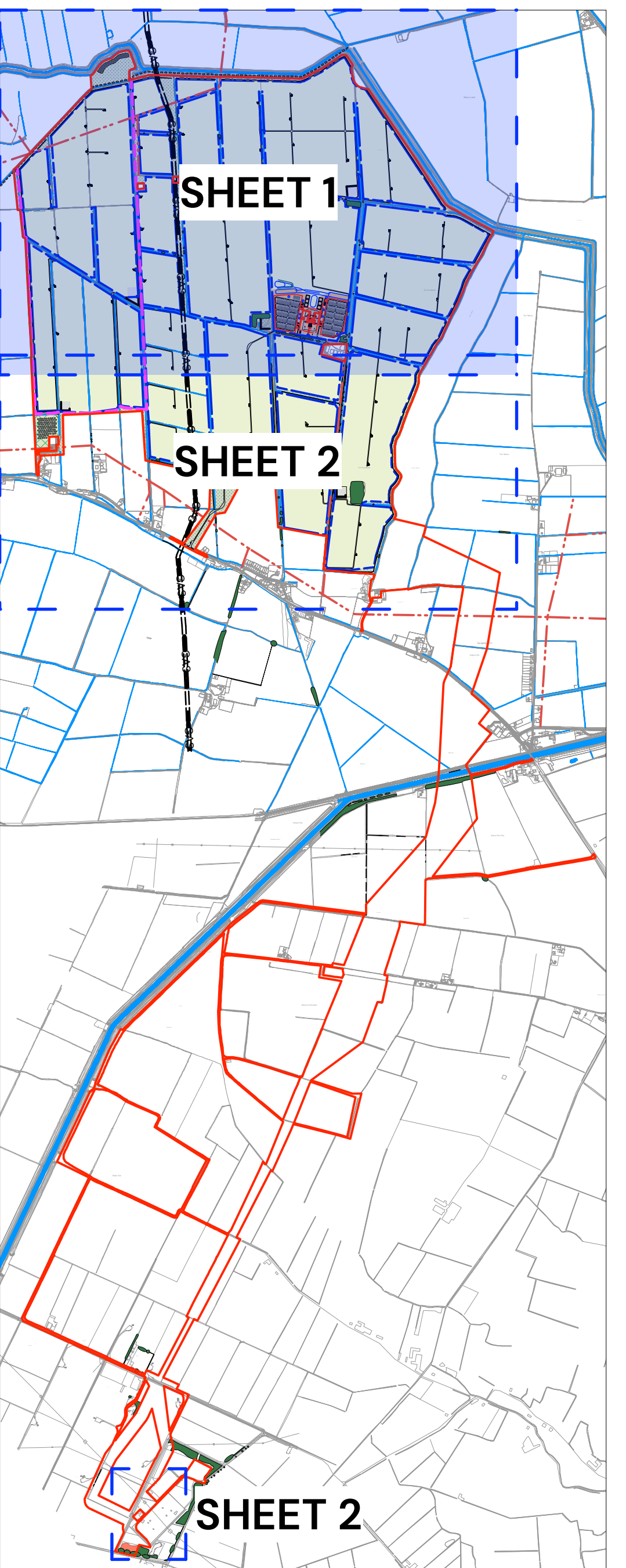
November 2023





- KEY**
- Order limits
 - Existing woodland, pond and hedgerow to be retained (16ha)
 - Where land rights allow, gaps in existing hedgerows to be in with hedgerow planting (as required) at approx 30% rate. (For further information, refer to Arboricultural Survey and Impact Assessment prepared by MHP Arboricultural Consultants)
 - Existing plantation to be removed
 - Approx. 0.4ha moderate quality mixed species plantation woodland (approx. 600no. trees) planted in 2006
 - Public footpath
 - Proposed permissive footpath
 - Overhead power line
 - Gas mains
 - Existing access track (3.91ha)

- Existing ditches (7.39ha)
- Security fence
- Proposed access track (9.47ha)
- Inverters and transformer station
- Construction and operational compound
 - well-compacted clean crushed stone with the potential to use lime stabilisation (surface bog mats can be used if needed for a shorter timeframe)
- Loose gravel / hard surfacing (8.45 ha)
 - to Onsite Substation/Energy Storage Compound
- Solar park zone (max 3.5m height)
 - Beneath/between 3.5m panels to be seeded with Boston Seeds GS4 Herbal Ley or similar (202.31ha)
- Solar park zone (max 3m height)
 - Beneath/between 3m panels to be seeded with Emorgate Old Fashioned Grazing Mix or similar (196.14ha)
- Field margins/service easements within solar compounds
 - to be seeded with a species rich seed mix suitable for long term sheep grazing (26.34ha)
- Species rich grassland to field margins (66.73ha)
 - Field margins currently grassland (within east of site) to be overseeded and field boundaries currently arable (within west of site) to be seeded with Emorgate EM34 Diverse Meadow Mixture or similar
- Meadow grassland to orchard (2.15ha)
 - Species-rich grass and wildflower mix to be seeded within orchard area
- Proposed hedgerow (4494 lin. m)
 - To be managed to allow to grow up to and be maintained at 3m height
- Proposed hedgerow (431 lin. m)
 - To be managed to allow to grow up to and be maintained at 3.5m height
- Proposed hedgerow (3605 lin. m)
 - To be managed to allow to grow up to and be maintained at min. 5m height (outgrown hedge with larger overhanging canopy)
- Proposed fruit tree within orchard (92no.)
 - Variety of fruiting tree species of local provenance, pollination groups to be considered
- Proposed small-scale hedgerow tree (55no.)
 - Native tree species of local provenance, smaller scale trees selected
- Proposed woodland tree planting (4200m²)
 - Native tree species of local provenance; matrix of planted tree sizes



Key Plan - scale 1: 25,000

Mixed native woodland tree planting (matrix of tree sizes) proposed to provide additional screening of panels and offset woodland removal at Bicker Fen substation

Stretch of proposed mixed native hedgerow to be managed to allow to grow up to and be maintained at 5m height to better screen adjacent area of taller panels and add height variety to enhance landscape character

Existing Public Right of Way runs along northern site boundary

Stretch of proposed mixed native hedgerow to be managed to allow to grow up to and be maintained at 3.5m height to better screen adjacent area of taller panels

Panel layout designed around to retain existing ditch structures running through the site

Mixed native hedgerow with small-scale hedgerow trees proposed to northern site boundary to screen views of proposals from the north, and physically enclose the northern boundary

Mixed native hedgerow proposed to eastern site boundary to screen views of proposals from the east, and physically enclose the eastern boundary

Proposed permissive path runs along perimeter of panel enclosures, allowing public access route through the site

Mixed native hedgerow proposed to screen views of proposals from the west, and physically enclose the western boundary

Hard surfacing to construction compound to be removed post construction, ground suitably prepared and be seeded with species rich grassland

ONSITE SUBSTATION / ENERGY STORAGE COMPOUND

Existing grain dryer (outside of site)

SIX HUNDREDS FARM

SEE SHEET 2 FOR CONTINUATION

DCO document reference: DCO 6.2.6
APFP regulation: 5(2)(a)

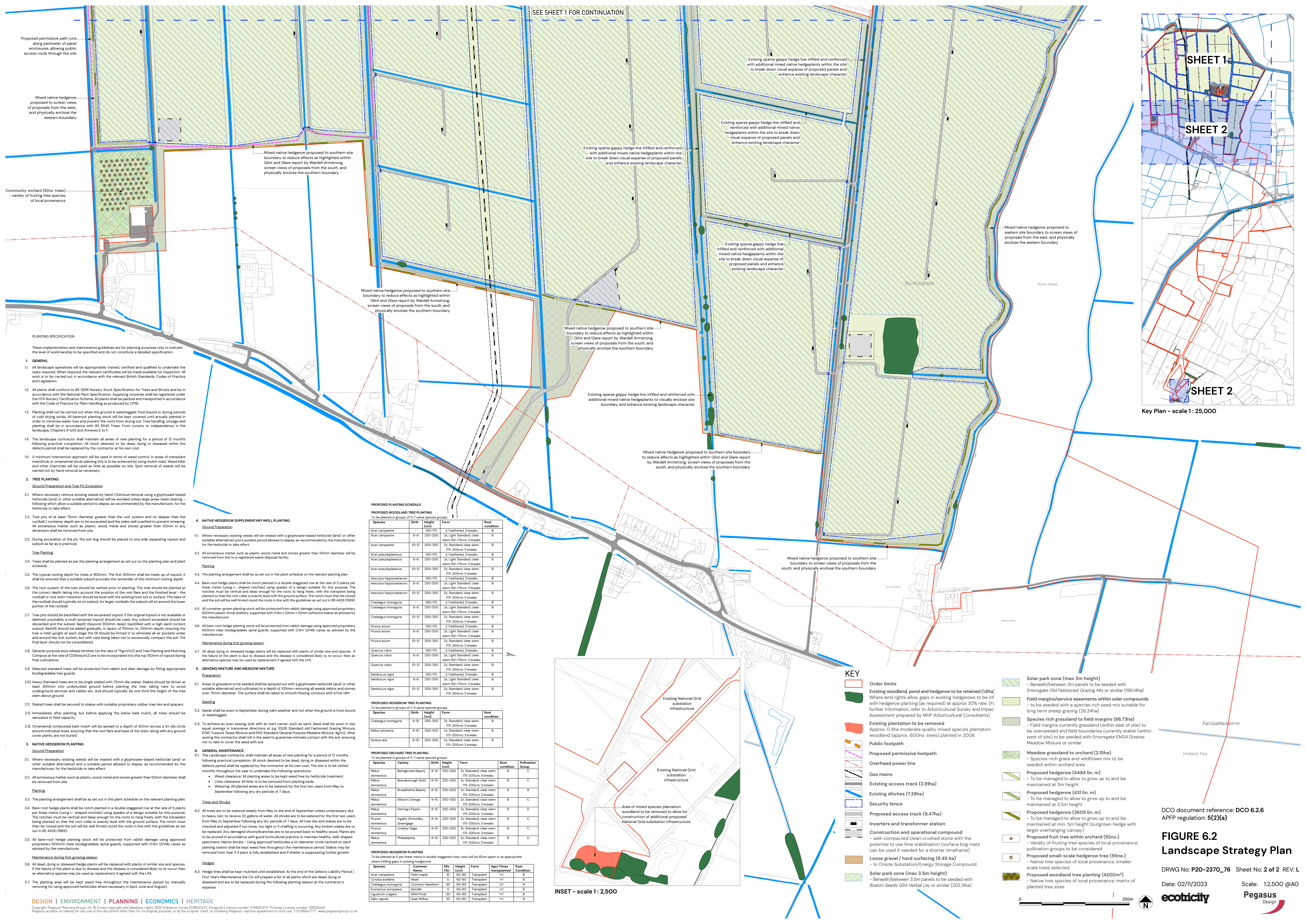
FIGURE 6.2
Landscape Strategy Plan

DRWG No: P20-2370_76 Sheet No: 1 of 2 REV: L

Date: 02/11/2023

Scale: 1:2,500 @A0





Proposed permissive path runs along perimeter of panel enclosures, allowing public access route through the site

Mixed native hedgerow proposed to screen views of proposals from the west, and physically enclose the western boundary

Mixed native hedgerow proposed to southern site boundary to reduce effects as highlighted within Gint and Glare report by Wardell Armstrong, screen views of proposals from the south, and physically enclose the southern boundary

Community orchard (92no. trees) - variety of fruiting tree species of local provenance

PLANTING SPECIFICATION
These implementation and maintenance guidelines are for planning purposes only to indicate the level of workmanship to be specified and do not constitute a detailed specification.

- GENERAL**
- All landscape operatives will be appropriately trained, certified and qualified to undertake the tasks required. When required, the relevant certificates will be made available for inspection. All work is to be carried out in accordance with the relevant British Standards, Codes of Practice and Legislation.
- All plants shall conform to BS 3936 Nursery Stock Specification for Trees and Shrubs and be in accordance with the National Plant Specification. Supplying nurseries shall be registered under the NTA Nursery Certification Scheme. All plants shall be packed and transported in accordance with the Code of Practice for Plant Handling as produced by CPSE.
- Planting shall not be carried out when the ground is waterlogged, frost bound or during periods of cold drying winds. All bareroot planting stock will be kept covered until actually planted in order to minimise water-loss and prevent the roots from drying out. Tree handling, storage and planting shall be in accordance with BS 5545: Trees From nurseries to independence in the landscape, Chapters 9 to 10 and Annexes E to F.
- The landscape contractor shall maintain all areas of new planting for a period of 12 months following practical completion. All stock deemed to be dead, dying or diseased within the defects period shall be replaced by the contractor at his own cost.
- A minimum intervention approach will be used in terms of weed control. In areas of transplant trees and/or ornamental shrub planting this is to be achieved by using mulch mats. Weed killer and other chemicals will be used as little as possible on site. Spot removal of weeds will be carried out by hand removal as necessary.

2. TREE PLANTING
Ground Preparation and Tree Pit Excavation

- Where necessary remove existing weeds by hand. Chemical removal using a glyphosate based herbicide (and/ or other suitable alternative) will be avoided unless large areas need clearing - following which allow a suitable period to elapse, as recommended by the manufacturer, for the herbicide to take effect.

- Tree pits of at least 75mm diameter greater than the root system and no deeper than the rootball / container depth are to be excavated and the sides well scarified to prevent smearing. All extraneous matter such as plastic, wood, metal and stones greater than 50mm in any dimension shall be removed from site.
- During excavation of the pit, the soil dug should be placed to one side separating topsoil and subsoil as far as practical.

Tree Planting

- Trees shall be planted as per the planting arrangement as set out on the planting plan and plant schedule.
- The typical rooting depth for trees is 900mm. The first 300mm shall be made up of topsoil, it shall be ensured that a suitable subsoil provides the remainder of the minimum rooting depth.
- The root system of the tree should be vetted prior to planting. The tree should be planted at the correct depth taking into account the position of the root flare and the finished level - the rootball or root stem transition should be level with the existing host soil or surface. The base of the rootball should typically sit on subsoil for larger rootballs the subsoil will sit around the lower portion of the rootball.
- Tree pits should be backfilled with the excavated topsoil, if the original topsoil is not available or deemed unsuitable, a multi-purpose topsoil should be used. Any subsoil excavated should be discarded and the subsoil depth (beyond 300mm deep) backfilled with a high sand content subsoil. Backfill should be added gradually, in layers of 150mm to 200mm depth, ensuring the tree is held upright at each stage the fill should be firmed in to eliminate all air pockets under and around the root system. But with care being taken not to excessively compact the soil. The final layer should not be consolidated.
- General-purpose slow release fertiliser (at the rate of 75g/m²) and Tree Planting and Mulching Compound at the rate of 200g/m² are to be incorporated into the top 150mm of topsoil during final cultivations.

- Selected standard trees will be protected from rabbit and deer damage by fitting appropriate biodegradable tree guards.
- Heavy standard trees are to be single staked with 75mm dia stakes. Stakes should be driven at least 300mm into undisturbed ground before planting the tree, taking care to avoid underground services and cables etc. and should typically be one third the height of the tree stem above ground.
- Staked trees shall be secured to stakes with suitable proprietary rubber tree ties and spacers.
- Immediately after planting, but before applying the below bark mulch, all trees should be saturated to field capacity.
- Ornamental composted bark mulch will be spread to a depth of 50mm across a 1m dia circle around individual trees, ensuring that the root flare and base of the stem, along with any ground cover plants, are not buried.

3. NATIVE HEDGEROW PLANTING
Ground Preparation

- Where necessary existing weeds will be treated with a glyphosate-based herbicide (and/ or other suitable alternative) and a suitable period allowed to elapse, as recommended by the manufacturer, for the herbicide to take effect.
- All extraneous matter such as plastic, wood, metal and stones greater than 50mm diameter shall be removed from site.

Planting

- The planting arrangement shall be as set out in the plant schedule on the relevant planting plan.
- Bare-root hedge plants shall be notch planted in a double staggered row at the rate of 5 plants per linear metre (using L-shaped notches) using spades of a design suitable for this purpose. The notches must be vertical and deep enough for the roots to hang freely, with the transplant being planted so that the root collar is exactly level with the ground surface. The notch must then be closed and the soil will be well firmed round the roots in line with the guidelines as set out in BS 4428 (1989).
- All bare-root hedge planting stock will be protected from rabbit damage using approved proprietary 600mm clear biodegradable spiral guards, supported with 0.9m 12/14lb canes as advised by the manufacturer.

Maintenance during first growing season

- All dead, dying or diseased hedge plants will be replaced with plants of similar size and species. If the failure of the plant is due to disease and the disease is considered likely to re-occur then an alternative species may be used as replacement if agreed with the LPA.
- The planting area will be kept weed free throughout the maintenance period by manually removing (or using approved herbicides where necessary in April, June and August).

PROPOSED PLANTING SCHEDULE

PROPOSED WOODLAND TREE PLANTING
To be planted in groups of 3-5 same species groups

Species	Girth (cm)	Height (cm)	Form	Root condition
Acer campestre	-	250-300	2: Feathered; 3 breaks	B
Acer campestre	6-8	250-300	2x Light Standard; clear stem 150-175cm; 3 breaks	B
Acer campestre	10-12	300-350	2x Standard; clear stem 175-200cm; 3 breaks	B
Acer pseudoplatanus	-	150-175	2: Feathered; 3 breaks	B
Acer pseudoplatanus	6-8	250-300	2x Light Standard; clear stem 150-175cm; 3 breaks	B
Acer pseudoplatanus	10-12	300-350	2x Standard; clear stem 175-200cm; 3 breaks	B
Aesculus hippocastanum	-	150-175	2: Feathered; 3 breaks	B
Aesculus hippocastanum	6-8	250-300	2x Light Standard; clear stem 150-175cm; 3 breaks	B
Aesculus hippocastanum	10-12	300-350	2x Standard; clear stem 175-200cm; 3 breaks	B
Crataegus monogyna	-	150-175	2: Feathered; 3 breaks	B
Crataegus monogyna	6-8	250-300	2x Light Standard; clear stem 150-175cm; 3 breaks	B
Crataegus monogyna	10-12	300-350	2x Standard; clear stem 175-200cm; 3 breaks	B
Prunus avium	-	150-175	2: Feathered; 3 breaks	B
Prunus avium	6-8	250-300	2x Light Standard; clear stem 150-175cm; 3 breaks	B
Prunus avium	10-12	300-350	2x Standard; clear stem 175-200cm; 3 breaks	B
Quercus robur	-	150-175	2: Feathered; 3 breaks	B
Quercus robur	6-8	250-300	2x Light Standard; clear stem 150-175cm; 3 breaks	B
Quercus robur	10-12	300-350	2x Standard; clear stem 175-200cm; 3 breaks	B
Sambucus nigra	-	150-175	2: Feathered; 3 breaks	B
Sambucus nigra	6-8	250-300	2x Light Standard; clear stem 150-175cm; 3 breaks	B
Sambucus nigra	10-12	300-350	2x Standard; clear stem 175-200cm; 3 breaks	B

PROPOSED HEDGEROW TREE PLANTING
To be planted in groups of 3-5 same species groups

Species	Girth (cm)	Height (cm)	Form	Root condition
Crataegus monogyna	6-8	250-300	2x Standard; clear stem 175-200cm; 3 breaks	B
Malus sylvestris	6-8	250-300	2x Standard; clear stem 175-200cm; 3 breaks	B
Sorbus aria	6-8	250-300	2x Standard; clear stem 175-200cm; 3 breaks	B

PROPOSED ORCHARD TREE PLANTING
To be planted in groups of 5-7 same species groups

Species	Variety	Girth (cm)	Height (cm)	Form	Root condition	Pollination Group
Malus domestica	Bolingbroke Beauty	6-8	250-300	2x Standard; clear stem 175-200cm; 3 breaks	B	C
Malus domestica	Breaceborough Gold	6-8	250-300	2x Standard; clear stem 175-200cm; 3 breaks	B	C
Malus domestica	Broadbottle Beauty	6-8	250-300	2x Standard; clear stem 175-200cm; 3 breaks	B	B
Malus domestica	Elison's Orange	6-8	250-300	2x Standard; clear stem 175-200cm; 3 breaks	B	C
Malus domestica	Herring's Pipin	6-8	250-300	2x Standard; clear stem 175-200cm; 3 breaks	B	D
Malus domestica	Heega's Grimoldby	6-8	250-300	2x Standard; clear stem 175-200cm; 3 breaks	B	C
Malus domestica	Lindsay Gage	6-8	250-300	2x Standard; clear stem 175-200cm; 3 breaks	B	C
Malus domestica	Phildelphia	6-8	250-300	2x Standard; clear stem 175-200cm; 3 breaks	B	D

PROPOSED HEDGEROW PLANTING
To be planted at 5 per linear metre in double staggered rows, rows will be 40cm apart or as appropriate where infilling gaps in existing hedgerows

Species	Common Name	Mix (%)	Height (cm)	Form	Age/ Times Transplanted	Root Condition
Acer campestre	Hornbeam	5	150-300	Transplant	1H	B
Corylus avellana	Hazel	5	150-300	Transplant	1H	B
Crataegus monogyna	Common Hawthorn	40	150-300	Transplant	1H	B
Euonymus europaeus	Spiraea	5	60-80	Transplant	1H	B
Ligustrum vulgare	Willy Privet	20	150-300	Transplant	1H	B
Salix caprea	Goat Willow	20	60-80	Transplant	1H	B

SEE SHEET 1 FOR CONTINUATION

Existing sparse gappy hedge line infilled and reinforced with additional mixed native hedgerows within the site to break down visual expanse of proposed panels and enhance existing landscape character

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INSET - scale 1: 2,500

SHEET 1

SHEET 2

SHEET 2

Key Plan - scale 1: 25,000

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DCO document reference: DCO 6.2.6
AFPP regulation: 5(2)(a)

FIGURE 6.2
Landscape Strategy Plan

DRWG No: P20-2370_76 Sheet No: 2 of 2 REV: L

Date: 02/11/2023 Scale: 1:2,500 @AO

