



North Ely Country Park

Concept design - Stage 1 report

24 March 2014

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Please refer to separate report - North Ely Country Park: Order of Cost Estimate - Stage 1 (Rev A), WT Partnership, 21 March 2014	



1.1 Project scope

Sheils Flynn has been appointed to develop and deliver a vision for a new country park as part of housing development in North Ely.

The project will explore how the new country park can contribute to the development of an attractive and distinctive landscape setting for Ely as a whole, reinforcing historic patterns of land use on the Isle of Ely and the surrounding fenland and knitting the new country park into existing green infrastructure (GI) networks so that it extends and enhances connections across and onto the fringes of the fen island.

Figure 1 shows the context for North Ely Country Park in relation to existing settlement and the planned new developments in North Ely led by developers, Endurance Estates and the Church Commissioners. It also shows the extent of the first phase of the housing development, which influences the phased delivery of North Ely Country Park.

Figure 1 defines the topographic margins of the Isle of Ely, which extend beyond the railway line to the north-east of the fen island. The farmland on the higher land of the Isle of Ely is incorporated within the vision for North Ely Country Park, even though parts of this land do not fall within the site boundary. This is because this higher land has a potentially important role in defining the landscape setting for the country park and the housing developments on the northern flank of the fen island.

The project for the design of North Ely Country Park has two stages. Stage 1 focuses on developing an over-arching vision for the country park, balancing priorities, establishing creative design principles and developing a concept design which can be costed. The concept design and cost plan that result from Stage 1 will be used to inform the ongoing viability work and Section 106 negotiations.

Stage 2 will incorporate more extensive consultation, so that the emerging design can be shaped by discussion with developers, landowners, stakeholders and local communities. The output will be a phased Delivery Plan showing balanced proposals for a mix of uses and a strategy for the implementation and long term sustainable management and maintenance of the park. The report will incorporate a capital cost plan and an estimate of future maintenance costs.

1.2 Progress update

This report provides a progress update on the concept design proposals for North Ely Country Park. The design process is ongoing and this report provides a snapshot of a scheme that is evolving and which will continue to evolve in response to comment from stakeholders and the developers of the adjacent sites.

The concept design proposals are based on a detailed site appraisal and a review of the extensive work already completed by the

developers, Endurance Estates and the Church Commissioners. Sheils Flynn has also considered the wider relationships between this North Ely site and other parts of the Isle of Ely and between the site and the surrounding fen.

The concept design proposals have been developed in consultation with East Cambridgeshire District Council (ECDC) and Cambridgeshire County Council. An initial consultation with the drainage engineers for the Highflyers Farm scheme (Church Commissioners' land) has confirmed that the drainage strategy presented on these concept design drawings is broadly correct, but further evaluation will be required to test this important issue as the design is developed.

The Sheils Flynn team includes quantity surveyors, WT Partnership and landscape management consultants, Land Management Services; both have contributed to the development of the concept design proposals.

Following this introduction, the report has the following structure:

- **Section 2** - sets out the context for the site in relation to the landscape character and green infrastructure of the Isle of Ely as a whole;
- **Section 3** - explains the evolution of the concept design and presents the scheme in its current form

A preliminary assessment of anticipated costs is provided as a separate report by quantity surveyors, WT Partnership.

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-  Proposed North Ely Country Park
-  A' roads
-  'B' roads
-  Water/river



Figure 1 - North Ely Country Park - site context



The slopes of the Isle of Ely form a backdrop to views from Kettleworth Drove, on the edge of the fenland to the north. The water tower is a striking landmark

2 Landscape context

2.1 Green infrastructure

Figure 2 shows how the site for North Ely Country Park fits within the wider GI context for the Isle of Ely at a sub-regional scale.

The existing Ely Country Park is a popular riverside destination to the east of the Isle of Ely. The newly refurbished play area and adjacent meadow off Willow Lane are fully accessible, but public access to the more extensive wetlands and water meadows to the east is limited because of their exceptionally high nature conservation value.

The relatively limited extent of existing public open space means that the new country park to the north of Ely is much needed and will provide a valuable addition to the GI network. Footpath and cycleway connections between the greenspaces provide important recreational opportunities for more extensive outings and ECDC's wider vision is to enable footpath access right around the perimeter of the Isle of Ely.

Figure 3 shows the local GI context for North Ely Country Park. In particular it highlights the important local public rights of way - Clayway Drove along the eastern margins of the site, and Kettlesworth Drove to the north. Both routes are historic rights of way which run alongside the catchwater drains which define the outer margins of the Isle of Ely. The drawing also highlights the potential for an expanded country park on land to the north and east of the existing site. This idea is explained further in Section 3.

Views to Ely Cathedral from footpaths within Ely Country Park, to the east of the Isle of Ely.



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-  Proposed North Ely Country Park
-  Ely Country Park (phase 1)
-  County Wildlife Sites and SSSIs
-  Important open spaces
-  'A' roads
-  'B' roads
-  Public right of way
-  National trail/promoted long distance route
-  Proposed green corridor
-  Water/river
-  Ely Cathedral

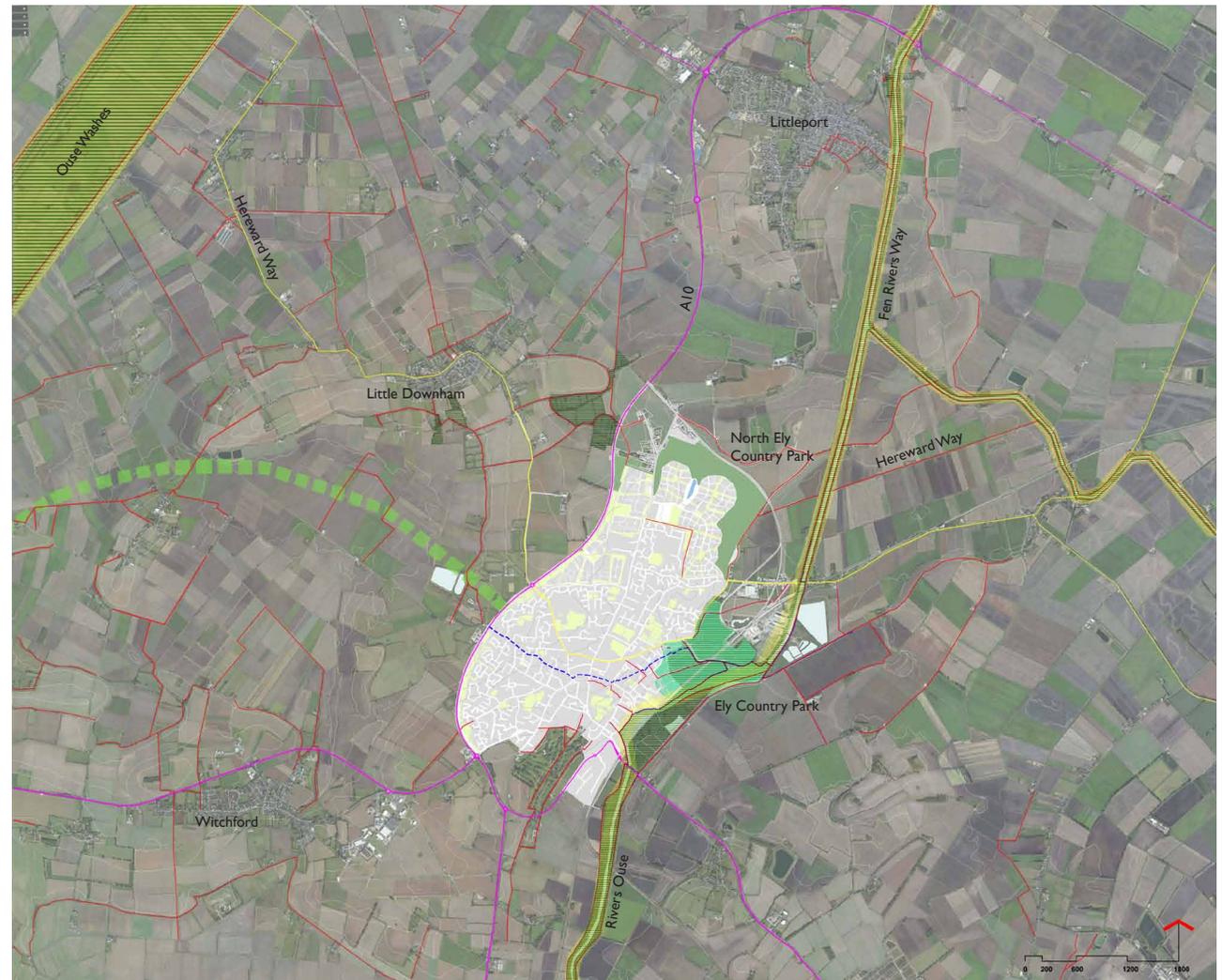
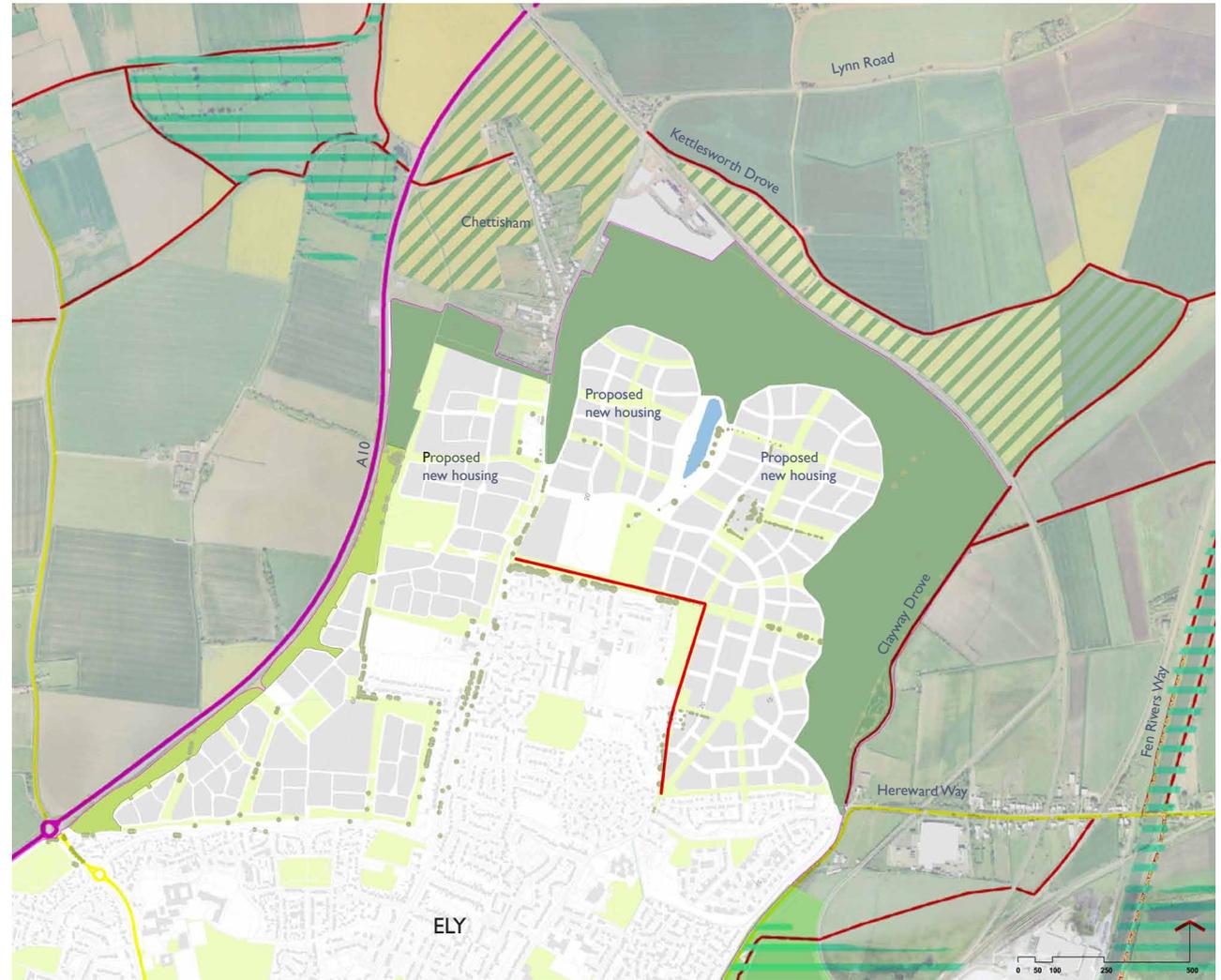


Figure 2 - Strategic green infrastructure context

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-  Ely Country Park (North Country Park)
-  Ely Country Park (phase 1)
-  County Wildlife Sites and SSSIs
-  Important open spaces
-  'A' roads
-  'B' roads
-  Public right of way
-  National trail/long distance route
-  Water/river
-  West margin of country park along A10
-  Possible future country park expansion



¹ This part of North Ely Country Park will be delivered in accordance with the proposals in the Endurance Estates application. It has not been included in the preliminary costing for the concept design at this stage.

Figure 3 - Local green infrastructure context

2.2 Landscape character

The distinctive landscape character of the Isle of Ely reflects the landform of the fen island, one of the largest islands of higher land in the fen basin. The Isle of Ely is capped by Boulder Clay left by ice age glaciers, so the historic settlements that developed on the higher land was supported by agricultural land with very different soils to those of the surrounding waterlogged fen.

The drawing opposite is taken from the Environmental Impact Assessment for the housing development to the north-west of Ely. It highlights local variations in landscape character at the scale of the Isle of Ely, which reflect the higher land and the underlying soils. To the north-west of the Isle of Ely, the historic village of Little Downham is also sited on an 'island' of slightly higher land overlooking the fen.

Figure 4 shows variations in local landscape character in the vicinity of the North Ely Country Park site. The local landscape character area classification shown on Figure 4 is based on the broader scale classification shown on the extract from the EIA (which shows 'Ely Island' in dark green; 'Transition Island' in a mid green colour and 'Fenland' in light green) but shows variations in landscape character within and adjacent to the Country Park site at a finer grain.

The band of dense, mature vegetation along Clayway Drove gives the landscape to the east a relatively enclosed character, but the landscape

becomes more open to the north and east, with long views out across the railway line (which is in cutting here) to Waterden Fen.

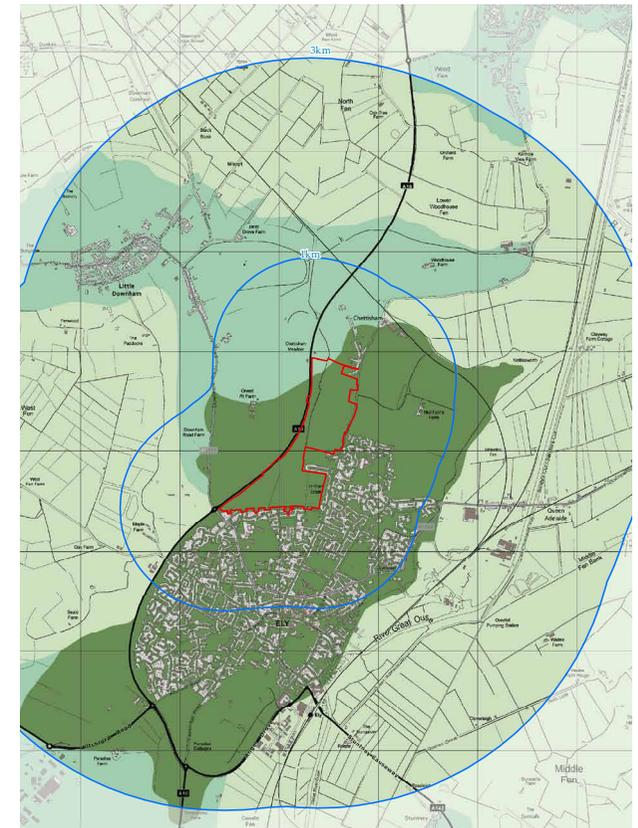
The existing industrial development at Chettisham, influences the character of the landscape to the north west of the site. Here it is relatively enclosed, as a mix of buildings and hedgerow trees provide a backdrop to local views.

Over-scaled industrial structures, such as the animal feed factory at Chettisham and Ely water tower are typical fen landmarks.

In the centre of the site, a minor valley containing a narrow reservoir is enclosed by existing mature trees.

To the west, there is a transitional landscape on the fringes of the Isle of Ely and the lower fen island on which the historic village of Little Downham is sited. Little Downham was the site of the Bishop of Ely's Summer Palace and deer park in the Middle Ages and the landscape here has a smaller scale than the surrounding fens, with hedged fields, scattered trees and remnant orchards.

The vast, open and expansive arable landscape of the fens surrounds the Isle of Ely, creating striking contrasts in scale, landscape pattern and landscape character.



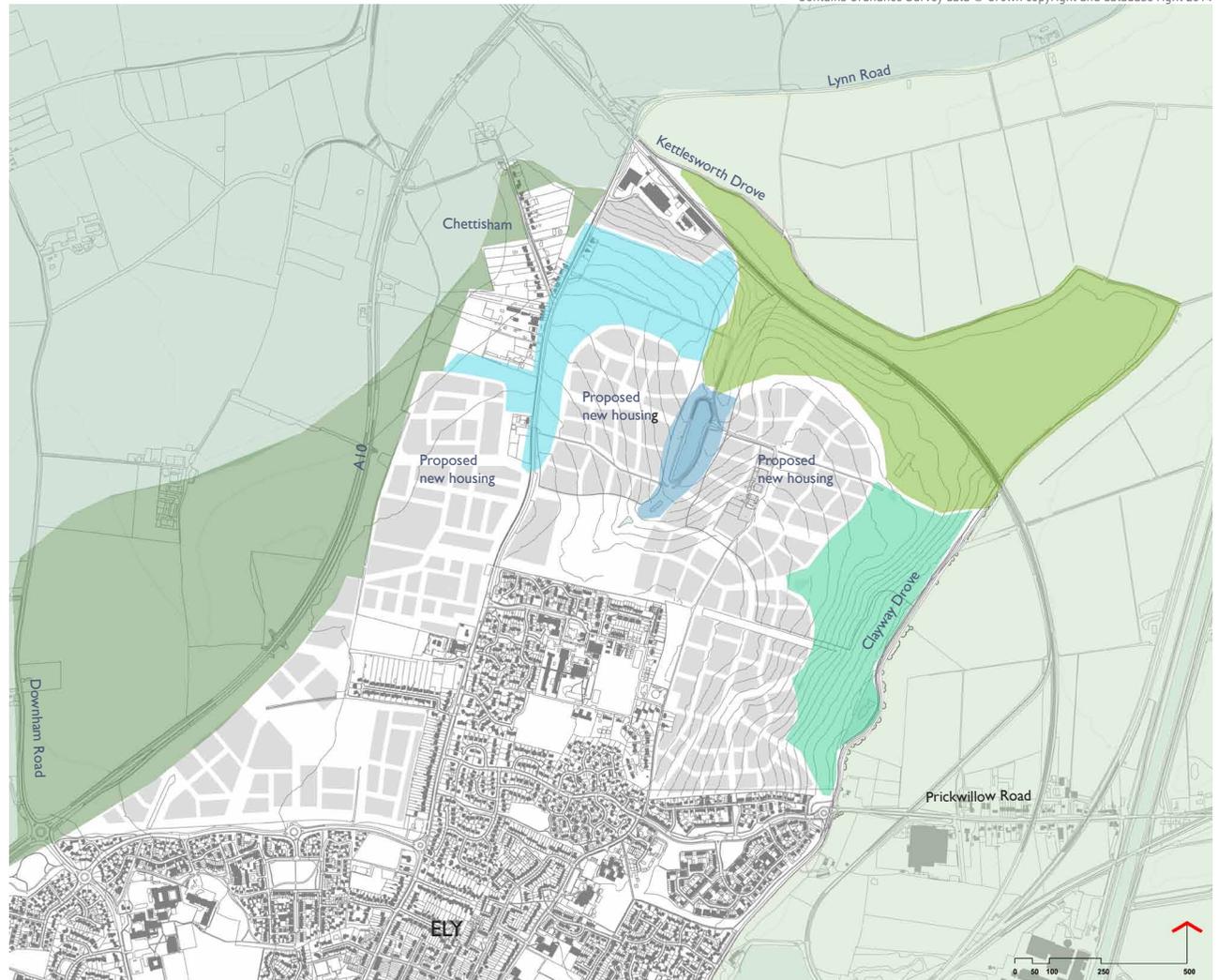
**Settlement Scale
Landscape Character**
Extract from North Ely
Environmental Impact
Assessment (Fig. 6.6),
LDA Design, Feb. 2012

Broad scale landscape character (based on the EIA extract)

- Ely Island
- Transition Island
- Fenland

Local landscape character in the vicinity of the Country Park

- Ely Island Open/North
- Ely Island Enclosed/West
- Ely Island Enclosed/Centre
- Ely Island Semi-Open/east



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Figure 4 - Local landscape character



Ely Island Enclosed/West

Views towards the industrial site at Chettisham, to the north west of North Ely Country Park



Ely Island Semi-Open/East

Views to the east are partially contained by the band of existing mature trees along Clayway Drove



Ely Island Enclosed/Centre

The reservoir, which occupies the minor valley in the centre of the North Ely Country Park site is surrounded by mature vegetation

3 Concept design

3.1 Design evolution

The following sequence of diagrams explains how the concept design for North Ely Country Park has evolved.

3.1.1 Defining the margins of the country park

The outer margins of the fen islands are typically defined by curving catchwater drains, which follow the contour at the break of slope, emphasising the local landform and often marking the historic boundary between the relatively small-scale farmland on the fen islands and the expansive, geometric pattern of arable fields in the surrounding fen.

The margins of the north part of the Isle of Ely are defined by the catchwater drains along Clayway Drove to the east and Kettlesworth Drove to the north. The island edge landform extends beyond the railway line, which is hidden in cutting to the north-east but visible and at grade as it curves to the north on the approach to Chettisham.

Given the natural topography of the Isle of Ely and the importance of the open views across Waterden Fen to the north-east, the landscape vision for North Ely Country Park extends beyond the railway line to encompass the farmland on the toe of higher land. It is defined by the natural boundary of the fen island - the historic droves and catchwater drains.



3.1.2 Surface water attenuation

New development to the north of Ely will require extensive surface water attenuation. Following the logic of the historic island edge, which is defined by catchwater drains along the break of slope, the new surface water attenuation should be accommodated by a new catchwater drain along the 8m contour, which is associated with water storage and a new fen landscape.



The catchwater drains define the island edge



A new island edge - a new catchwater drain



New wetlands - new fenland

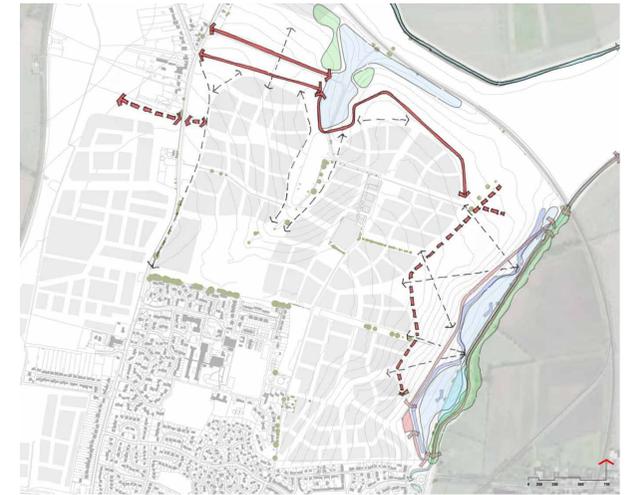
3.1.3 Routes

The focus of the first phase of the new country park will be to the east, where a new island edge pathway will follow the edge of the new wetlands, connecting to a car park to the south and to Clayway Drove and creating a new circular walk.

Other routes will connect to the edge of the new housing on the slopes to the west. The masterplans for the new housing at Highflyer Farm suggest that there will be perimeter routes along the outer edge of the new development so the connections to the country park can be aligned to link with routes and views within the new developments.



A new island edge route connecting with the existing Clayway Drove



New housing edge routes and connections between

3.1.4 Landscape structure

The new housing will be quite exposed and the housing edge will benefit from an interface of orchards and groups of trees, which will help to manage climatic issues while also softening the profile of the new buildings and preventing a stark built skyline in views from the lower margins of the country park and from Clayway Drove and Kettlesworth Drove to the east and north.

The orchards and connecting routes at the housing edge will be stepped slightly above the slope, with framed views across the country park.

New woodlands will define the small swales that channel surface water run-off from the housing to the wetlands on the lower slopes. Between the woodlands, the slopes of the country park will be flanked by a mosaic of meadow habitats. To the north east, a more extensive meadow reflects the open character of the landscape in this area and provides a foreground to the gateway views out from and back to the Isle of Ely from Waterden Fen. The railway line acts as a ha ha in this area, as trains are hidden from view within a cutting. This extensive meadow might be a less accessible part of the country park so that the risks of the railway are minimised and there are opportunities for enhanced biodiversity.



A new housing edge buffer - orchards, parks and woodland



New connecting woodlands



A mosaic of amenity space with meadow



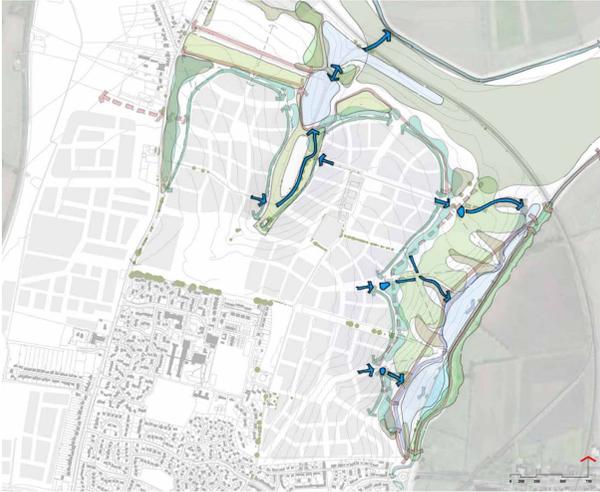
More inaccessible meadows to the north

To the north east the character of the landscape will seem more manicured - more like an urban park, with avenues of trees, a small car park, playing fields and allotments.

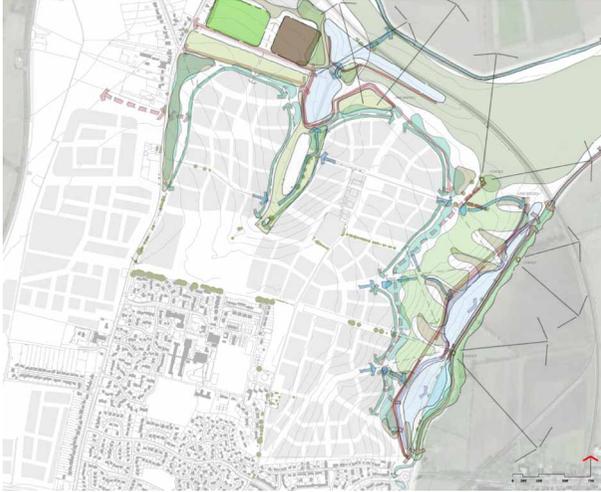
There will be opportunities for small-scale interventions that heighten people's appreciation of the landscape. Examples are lookouts and land piers that provide elevated viewpoints.



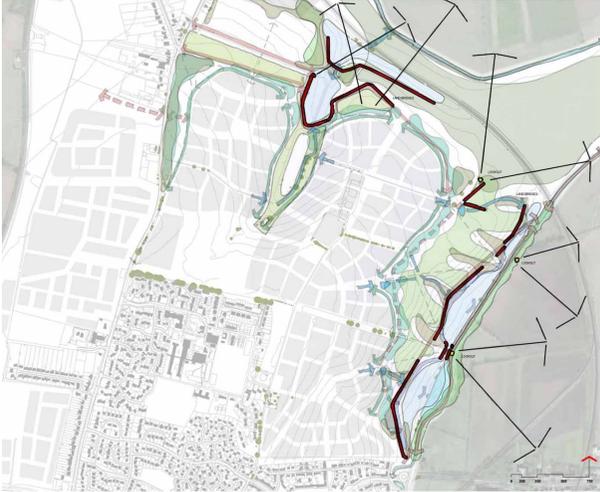
Secluded (elevated) greens



SUDS - connecting to wider masterplan strategies



Playing fields and allotments



Landmarks - edges, bridges, piers and lookouts

3.2 Concept design

The drawings on pages 18-23 show the concept design proposals in their current form. This is a work in progress and the design will continue to evolve in response to comment over the next few weeks.

The drawings are:

Figure 5 - Landscape masterplan

Figure 5 shows how the individual strands of design thinking (in Section 3.1) - enhancing Ely's landscape setting; attenuating a significant amount of surface water runoff from the adjacent housing developments; creating and improving connections to new and existing residential areas; enhancing the wider GI for the Isle of Ely; and creating a distinctive a landscape character - come together in the overall landscape masterplan for North Ely Country Park.

Figure 6 - Landscape masterplan - detail north-west

This part of the Country Park has a relatively formal character, with axial tree-lined paths, playing fields, extensive open lawns, allotments and a small car park. The meadows and grasslands on the fringes of the housing areas are partially enclosed by new woodland planting which also softens and integrates the built edge in the wider views. A community orchard provides a focus for activity and reflects the historic pattern of land use on the fringes of Ely.

In the centre of the housing area, the existing reservoir (Highflyers Lake) is sited within a steep-sided valley. Groups of native trees will supplement the existing mature trees that are retained on the valley slopes. A path around the lake will connect to routes within the adjacent residential areas, as well as linking to the principal network of routes within the country park.

Figure 7 - Landscape masterplan - detail north

Views to the Chettisham industrial area are partially screened by woodland planting, which also shelters the allotments. Two large shallow attenuation areas will be dramatic, sculpted damp meadows with seasonally fluctuating water levels. The form of these low-lying meadows follows and accentuates the natural topography of the central valley before extending along part of the railway line. They act as a buffer, preventing access to the section of the railway that is at grade.

To the north east, the ridge of higher land extends beyond the railway line, which is cut into the north east flank of the Isle of Ely. The railway is hidden from view at this point and a broad, sweeping meadow forms a key component of the city's landscape setting. It reflects the expansive scale of the landscape and provides a sense of proportion, contrasting with the housing and trees on the skyline and the smaller scale landscapes on the slopes of the island to the north east and west. This meadow may be grazed and only partially accessible, but there will be long views across Waterden Fen from land piers and lookouts

at the housing edge.

A pathway leads around the perimeter of the new residential areas, defining the margins of a lively neighbourhood zone, where allotments and orchards are a focus for communal activity. The pathway may be stepped so that it is slightly elevated above the slope. Groups of orchard trees and some larger woodlands will shelter the housing edge, softening the skyline silhouette of the buildings in views from the fens and framing views out from the island.

Figure 8 - Landscape masterplan - detail east

The principal entrance to the country park will be from the south east, where a car park will provide dramatic gateway views across the new wetlands and existing reedbed. This is a more intimate part of the country park, where circular walks follow the margins of the wetlands, with connections across to Clayway Drove to the east and the new residential neighbourhoods on the slopes to the west. Small woodlands define and screen the swales that facilitate surface water run-off from the housing edge to the wetlands and new catchwater drain along the foot of the slope to the east. A new shared space crossing over Prickwillow Road at Thistle Crossing provides an a pedestrian-friendly connection to Ely Country Park to the south.

Figure 9 - Sections D, E and F

Figure 10 - Sections D, E and F - detail

-  North Ely Country Park
- EXISTING
-  Rivers and drains
-  Buildings
-  Trees
-  Contours
-  Important public open space
-  Hedge
- PROPOSED
-  Woodland trees
-  Avenue trees
-  Orchard trees
-  Parkland trees
-  Contours
-  Lookout structure
-  Landpier
-  Gabion wall
-  Buildings
-  Flood Storage Reservoir
-  Amenity grass
-  Meadow
-  Attenuation ponds
-  New catch drains
-  Allotments/community gardens
-  West margin of country park along the A10¹



¹ This part of North Ely Country Park will be delivered in accordance with the proposals in the Endurance Estates application. It has not been included in the preliminary costing for the concept design at this stage.

Figure 5 - Landscape masterplan

-  North Ely Country Park
- EXISTING
-  Rivers and drains
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-  Trees
-  Contours
-  Important public open space
-  Hedge
- PROPOSED
-  Woodland trees
-  Avenue trees
-  Orchard trees
-  Parkland trees
-  Contours
-  Lookout structure
-  Landpier
-  Gabion wall
-  Buildings
-  Shared space
-  Amenity grass
-  Meadow
-  Allotments/community gardens
-  West margin of country park along the A10¹



¹ This part of North Ely Country Park will be delivered in accordance with the proposals in the Endurance Estates application. It has not been included in the preliminary costing for the concept design at this stage.

Figure 6 - Landscape masterplan - detail north-west

-  North Ely Country Park
- EXISTING
-  Rivers and drains
-  Buildings
-  Trees
-  Contours
-  Important public open space
-  Hedge
- PROPOSED
-  Woodland trees
-  Avenue trees
-  Orchard trees
-  Parkland trees
-  Contours
-  Lookout structure
-  Landpier
-  Gabion wall
-  Buildings
-  Amenity grass
-  Meadow
-  Attenuation ponds
-  Flood storage reservoir
-  New catch drains
-  Allotments/community gardens



Figure 7 - Landscape masterplan - detail north

-  North Ely Country Park
- EXISTING
-  Rivers and drains
 -  Buildings
 -  Trees
 -  Contours
 -  Important public open space
 -  Hedge
- PROPOSED
-  Woodland trees
 -  Avenue trees
 -  Orchard trees
 -  Parkland trees
 -  Contours
 -  Lookout structure
 -  Play
 -  Gabion wall
 -  Landpier
 -  Buildings
 -  Shared space crossing
 -  Amenity grass
 -  Meadow
 -  Attenuation ponds
 -  New catch drains
 -  Allotments/community gardens



Figure 8 - Landscape masterplan - detail east

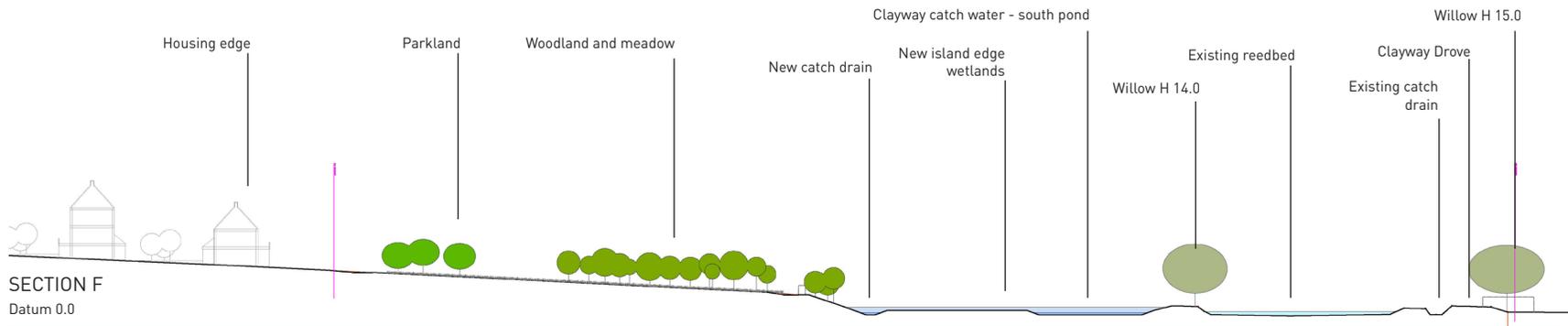
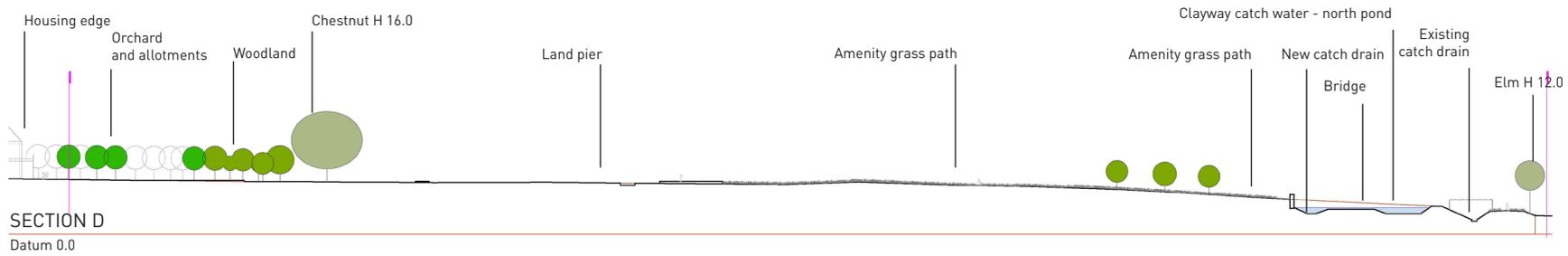


Figure 9 - Sections D, E and F

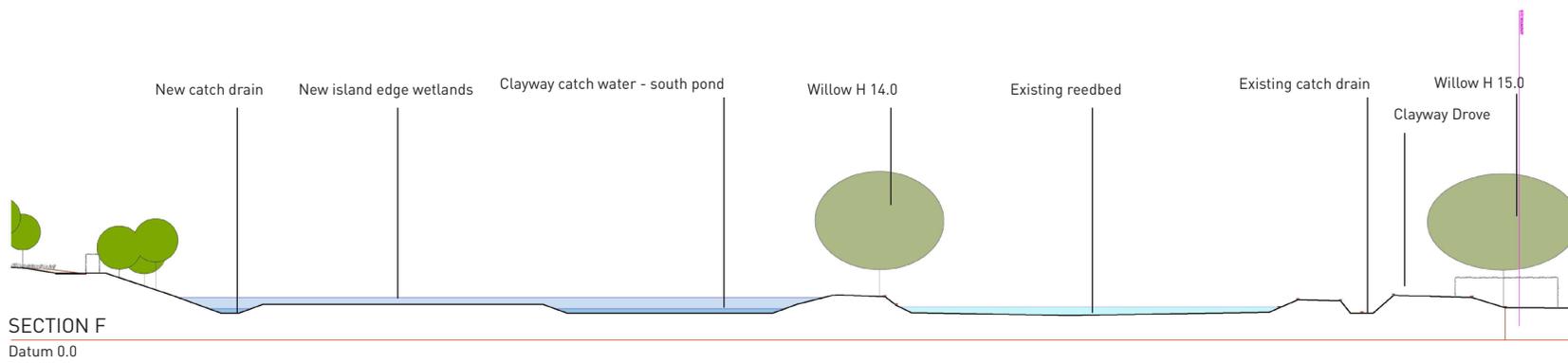
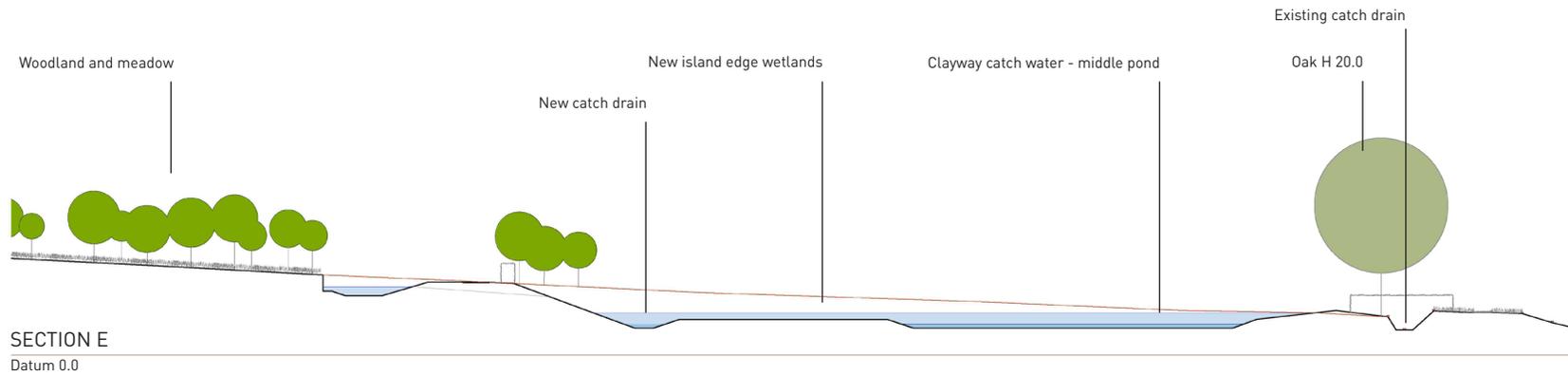
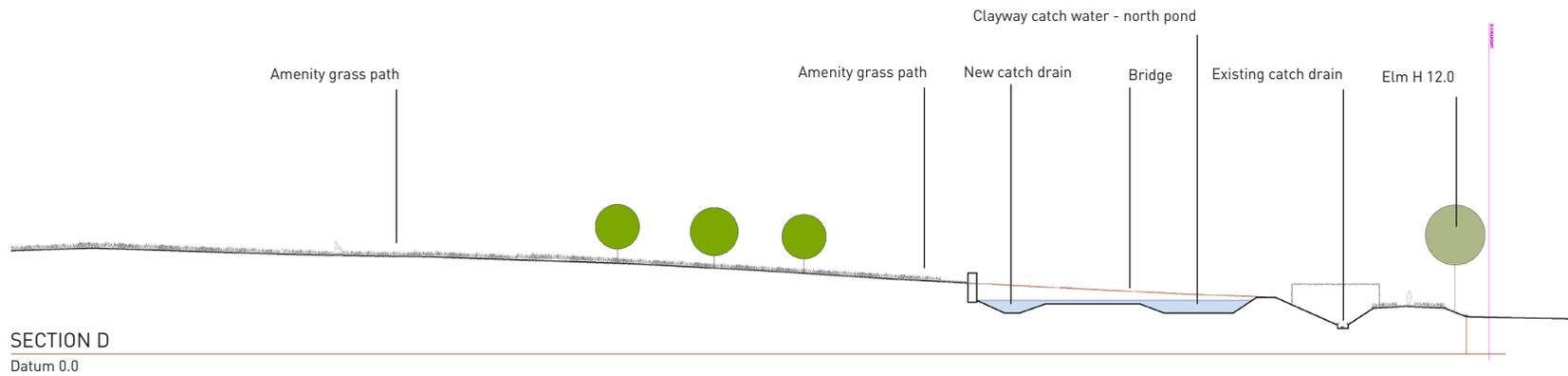


Figure 10 - Sections D, E and F - detail

3.3 Preliminary Costs

The concept design drawings presented in this report have been developed using AutoCAD, so that they can be measured by our quantity surveyors, WT Partnership, and used to provide a preliminary cost estimate.

The cost estimate is available as a separate report - North Ely Country Park - Order of Cost Estimate Stage 1².

Figure 11 shows the subdivision of the North Ely Country Park site into the four areas referenced in the Order of Cost Estimate Stage 1 Report. The four areas are:

- Northwest Corner
- Northwest to Kettlesworth
- Northeast of Kettlesworth
- East Side

² North Ely Country Park Order of Cost Estimate Stage 1 (Rev A), WT Partnership, March 21 2014



Figure 11 - Areas referenced in the Order of Cost Estimate Stage 1 Report

