

- White campion *Silene latifolia*
- Thyme-leaved sandwort *Arenaria serpyllifolia*
- Scentless mayweed *Tripleurospermum inodorum*
- Shepherd's purse *Capsella bursa-pastoris*
- Scarlet pimpernel *Anagallis arvensis*
- Black bindweed *Fallopia convolvulus*
- Round-leaved fluellen *Kickxia spuria*
- Black nightshade *Solanum nigrum*

### Grassland

- 2.3.27 Grassland is present throughout the Study Area. However, there are concentrations around settlements and residential properties, much of it comprising horse paddocks, amenity grassland or unmanaged fields and alongside watercourses such as the Roman River and Domsey Brook. In some areas there are also narrow strips of grassland along field boundaries. Much of the grassland is species poor, comprising coarse swards dominated by false oat-grass *Arrhenatherum elatius* and other bulky grasses, but species such as common knapweed *cerntaurea nigra* and field scabious *Knautia arvensis* are locally frequent.
- 2.3.28 There is one small area of more species-rich grassland at Seven Star Green LWS (TN50), which includes a range of species characteristic of 'unimproved' neutral or acid grassland, such as bird's-foot trefoil *Lotus corniculatus*, meadow vetchling *Lathyrus pratensis*, sorrel *Rumex acetosa*, cat's ear *Hypochaeris radicata*, and the Essex Red List species yellow rattle *Rhinanthus minor*. A number of other species are also noted in the LWS citation.
- 2.3.29 Beside the Domsey brook in the south west of the Study Area at TN8 and TN13 cricket bat willow plantations (see mellow) stand among marsh or marshy grassland, with species such as meadowsweet *Filipendula ulmaria*, great willowhebe *Epilobium hirsutum* and stands of sedges *Carex* spp. Marshy grassland also adjoins the pond at TN9 with meadowsweet, fleabane *Pulicaria dysenterica*, meadow vetchling and glaucous sedge *Carex flacca*.

### Ruderal Vegetation

- 2.3.30 Stands of tall ruderal vegetation, including species such as thistles *Cirsium* spp., nettle *Urtica dioica* and docks are scattered across the Study Area. This is often associated with unmanaged areas and spoil heaps, such as at TN3, probable ex-arable at TN5, TN21 and TN34 and unmanaged field at TN48.
- 2.3.31 Some areas of what appears to be fallow arable, for example near TN1, support ephemeral/short perennial vegetation. This includes a range of arable weeds, other ruderal and grassland species.

## Woodland and Scrub

- 2.3.32 Woodland is relatively scarce in the Study Area and comprises largely of small scattered woods and plantations. Only one woodland, Church House Wood (TN34), is identified as Ancient Woodland, although Stonefield Strip (TN27) is also considered likely to be an Ancient Woodland fragment. Church House Wood and Choat's Wood in the north east of the Study Area (TN48) are the largest woodlands in the Study Area, although both would be considered small. Elsewhere, small woods such as those at TN14, TN15, TN26 and TN55 are generally set within the arable-dominated landscape, although they are connected to and by hedgerow networks. Some of the woods are likely to have originated as plantations, often incorporating sections of adjoining hedgerows, and in some cases include conifer species. A relatively large maturing broadleaved plantation is present at TN67, on either side of the Roman River in the north of the Study Area.
- 2.3.33 There are also a number of linear wooded features, for example associated with the Roman River, where willows *Salix* spp. and alder *Alnus glutinosa* are frequent, and along parts of the transport corridors, including the A12 and railway lines. There are also a number of green lane-like features with large double hedges.
- 2.3.34 Canopy species typically comprise ash *Fraxinus excelsior*, field maple *Acer campestre* and pedunculate oak *Quercus robur* and more rarely silver birch *Betula pendula*, sycamore *Acer pseudoplatanus* and sweet chestnut *Castanea sativa*. Hawthorn *Crataegus monogyna*, hazel *Corylus avellana* and elm *Ulmus* sp. are the most frequent and abundant shrub species but blackthorn *Prunus spinosa*, willows and holly *Ilex aquifolium* are locally frequent. The field layer in the larger woods (Church House Wood and Choat's Wood) appeared dominated by bracken and bramble. Several woods in the west of the Study Area had large stands of dog's mercury *Mercurialis perennis* as well as false brome *Brachypodium sylvaticum* and red campion *Silene dioica*. Bluebell is frequent or abundant in some (e.g. Stonefield Strip TN27).
- 2.3.35 A distinctive feature along the line of the Domsey Brook in the south west of the Study Area is a series of cricket bat willow plantations (TN8, TN10, TN11 and TN13). These are quite open, with widely spaced trees. As noted above, at TN8 and TN13 the willows stand among marsh or marshy grassland. A similar plantation also forms a part of the larger plantation at TN67, beside the Roman River.
- 2.3.36 Dense and scattered scrub, including hawthorn, blackthorn, willow, rose *Rosa* spp. elm, elder *Sambucus nigra* and stands of bramble *Rubus fruticosus*, is scattered throughout the Study Area, for example along field boundaries and as remnants of derelict hedges, along transport corridors, in unmanaged fields at TN19 and among a derelict orchard at TN47.

## Hedgerows

- 2.3.37 There is a network of hedgerows throughout the Study Area. Many are moderately species-rich in woody species, with frequent hawthorn, blackthorn, elm and field maple as well as ash, pedunculate oak, hazel, rose, willows, dogwood *Cornus sanguinea* and spindle. Many of the hedges have mature trees, especially ash, field maple and pedunculate oak, but also locally willow and alder in wetter areas.
- 2.3.38 Management and condition is very variable. Some hedges are clearly regularly cut, such as many of those beside roads or between arable fields, while others appear to have been unmanaged for some time. Again, some hedges are dense and continuous while others are quite gappy.
- 2.3.39 Many of the hedges also have associated land drains or ditches. Most of these were dry at the time of the survey, though some did still carry small amounts of water.

## Orchards

- 2.3.40 There are two traditional orchards in the north of the Study Area beside Rectory Lane (TN35 and TN36). These include a range of fruit trees, structurally diverse grassland and hedgerows. There is also what appears to be a derelict orchard at Seven Star Green (TN47). Much of this now appears to be occupied by dense and scattered scrub with structurally diverse grassland but fruit trees are still present in at least part of the area.

## Wetland

### Running Water

- 2.3.41 There are three small watercourses in the Study Area all of which run broadly west to east. The Domsey Brook in the south west is a small stream, although it is reported that it can seasonally inundate adjoining areas during the winter, and this is reflected in the presence of associated habitats such as marshy grassland.
- 2.3.42 The Roman River is a small watercourse which retains, in parts, relatively natural features such as riffle and pool. The bed is variable, with sand and gravel and silt in different parts. Much of it is shaded by trees and scrub, including frequent willow and alder. Parts of the wider corridor of the Roman River includes relatively small fields with substantial hedgerows.

- 2.3.43 A third small stream runs along the southern edge of Choats Wood (TN49) and between gardens (TN51) at Eight Ash Green in the North East of the Study Area.

### **Open Water**

- 2.3.44 Ponds are scattered throughout the Study Area, e.g. TN3, TN9, TN22, TN23, TN32, TN41, TN45, TN56, TN57, TN62 and TN69. Most have adjoining habitats such as structurally variable grassland, tall ruderal, scrub, hedgerows and woodland.
- 2.3.45 The Ordnance Survey maps indicate the presence of quite a number of small ponds within or along the line of hedgerows throughout the Study Area. A number of these (e.g. TN23 and TN41) did contain water or the vegetation clearly indicated that they did for a significant part of the year. However, in many cases the features comprised dry depressions with no clear indication, such as emergent or marginal vegetation, that they hold water for any length of time, although they may do seasonally.
- 2.3.46 The survey, as well as Ordnance Survey maps and aerial images, indicate the presence of ponds associated with houses and gardens throughout the Study Area, such as at Marks Tey Hall (TN20).

### **Swamp**

- 2.3.47 Several of the ponds support small amounts of swamp or emergent vegetation. However, the pond at TN9 supports the most extensive stands, including reedmace, *Typha* sp. cyperus sedge *Carex pseudocyperus*, water mint *Mentha aquatica*, and sea club-rush *Bolboschoenus maritimus*. Marginal vegetation includes rushes *Juncus* spp. and gypsywort *Lycopus eurpaeus*.

### **Protected Species**

#### **Great crested newts**

- 2.3.48 Great crested newts, and their breeding sites are protected under the Habitats Regulations and the Wildlife and Countryside Act (as amended) 1981. Ponds are scattered throughout the Study Area, particularly in association with hedgerows and residential gardens, and these offer potentially suitable breeding habitat for great crested newts. In many cases the ponds are also adjoined by terrestrial habitat suitable for great crested newts, including hedgerows, scrub, woodland, structurally diverse grassland and tall ruderal.

2.3.49 However, there are no records of great crested newts from within the Site, although there are records from within the 2km Study Area. Many of the ponds and nearby terrestrial habitat are set within a landscape of intensive arable agriculture, although the hedgerow network and other semi-natural habitat do provide some level of habitat connectivity.

### **Reptiles**

2.3.50 All British reptiles are protected from deliberate killing and injuring under the Wildlife and Countryside Act (as amended) 1981. Suitable habitat for reptiles, comprising tall, tussocky grassland or grassland of varied structure and tall ruderal vegetation accompanied by scrub (including bramble) or hedges and features such as spoil, rubble or wood piles, streams and ponds, is distributed throughout the Site, particularly within and around the edges settlements. A number of locations with such habitats and features are identified in the Target Notes (**Table 2.1**), but this is not exhaustive and further areas of suitable habitat are present elsewhere. Although records of reptiles within the Site are scarce this may reflect survey effort rather than genuine presence or absence.

### **Birds**

2.3.51 Bird species, their nests and eggs are protected from killing and injuring under the Wildlife and Countryside Act (as amended) 1981. In addition, some species listed in Schedule 1 of the Act are protected from deliberate disturbance at all times. Arable, fallow and grassland may support ground nesting birds such as skylark and may to be used for foraging by a wide range of species. Hedgerows, scrub, trees and woodland are likely to comprise important breeding and foraging habitat for farmland and woodland species.

### **Dormice**

2.3.52 Dormice and their breeding and resting places are protected under the Habitats Regulations and the Wildlife and Countryside Act (as amended) 1981. There are no records of dormice from within the Site and records from the 2km Study Area are also relatively scarce. The Site itself, due especially to the relative scarcity of woodland, would be considered less than ideal for dormice. However, dormice have been found in scrub and hedgerows and these are present throughout the Site.

### **Water voles**

2.3.53 Water voles are protected from deliberate killing and injuring under the Wildlife and Countryside Act (as amended) 1981. Water voles have not been recorded from with the Site

but they have been recorded on the Roman River just up and downstream of it, and this watercourse offers suitable habitat for water voles. The Domsey Brook and the small stream in the north east of the Site may also be suitable for water voles.

### **Bats**

- 2.3.54 Bats and their breeding and resting places are protected under the Habitats Regulations and the Wildlife and Countryside Act (as amended) 1981. Trees with features such as cracks and cavities and heavy growths of ivy, of which there are many within the Site, as well as buildings with features such as tiled roofs, and internal cavities such as roof spaces, may be used as roosts by bats. In addition, habitats and features such as woodland, hedgerows, grassland, watercourses, waterbodies and other wetland areas are likely to be important for foraging and commuting.

### **Otters**

- 2.3.55 Otters and their breeding and resting places are protected under the Habitats Regulations and the Wildlife and Countryside Act (as amended) 1981. Although otters have not been recorded from within the Site there are records from the Rivers Colne and Blackwater nearby. The Roman River as well as the smaller Domsey Brook and the small stream in the north east of the Site may be used by otters.

### **Badgers**

- 2.3.56 Badgers and their setts are protected from interference under the Protection of Badgers Act 1992. Badger setts tend to be found in woodlands, amongst scrub, on banks and in hedgerows. Activity can take place in a wide range of habitats, including woodland, scrub, along hedgerows, grassland, arable and gardens. Suitable habitat for badgers is widespread throughout the Site, as are records of them.

## **Other Notable Species**

### **Essex BAP Species**

2.3.57 The following Essex BAP species have the potential to occur within the Site.

- Bat spp.;
- Pipistrelle bat;
- Dormouse;
- Brown hare;
- Grey partridge;
- Skylark;
- Song thrush;
- Great crested newt;
- Stag beetle; and
- Bees.

## **2.4 Constraints and Opportunities**

2.4.1 The habitats of greatest nature conservation importance within the Site are the:

- woodlands, especially Ancient/probable Ancient Woodland (Church House Wood LWS (TN34) and Stonefield Strip LWS (TN27));
- hedgerow network, especially where this is in relatively good condition, well connected and where it includes mature trees;
- more species-rich grassland, such as that at Seven Star Green LWS (TN50);
- wetland habitats, including the Roman River and Domsey Brook and associated marsh/marshy grassland, pond and swamp; and
- traditional orchards, such as those at TN35, TN36 and TN47.

2.4.2 Other habitats, such as the species-poor grassland, ruderal and arable are of less importance, although locally they may have significance for some species, such reptiles and skylark.

2.4.3 Based on the distribution of habitats within the Site the most important areas are considered to be:

- the Domsey Brook corridor, including the associated marsh/marshy grassland pond/swamp, hedgerows and woodland/plantation; and
- the Roman River corridor, including adjoining grassland and hedgerows (e.g. TN37), the broadleaved plantation and grassland at TN67 and TN68, wet woodland at TN70, nearby Church House Wood Ancient Woodland and LWS (TN34) and Stonefield Strip LWS (TN27),

other small wooded areas (e.g. TN 26) and traditional orchards (TN35 and TN36) and Marks Tey Pit SSSI and LWS (TN29).

2.4.4 The cluster of habitats in the Seven Star Green area, including Choats Wood (TN49), the grassland of Seven Star Green LWS (TN50) and the (derelict?) traditional orchard with scrub and grassland (TN47) is also of importance.

2.4.5 Recommendations regarding the consideration of ecological aspects of potential development, including opportunities for ecological enhancements, within the Site are set out below:

- Retain and safeguard important habitats and areas, including those identified in Section 2.3 above.
- Buffer sensitive habitats, such as woodland and wetland, from any proposed development using strips of undeveloped land between the relevant habitats and proposed development.
- Retain wide green corridors, for example building upon the existing hedgerow network, especially where this includes mature trees, within and through developed areas, and linking other retained (and created) areas of habitat, both within and outside any development.
- Retain mature trees (including or especially those in hedgerows), within any proposed development, preferably as part of wider areas of semi-natural habitat or green corridors.
- Enhance retained habitats by appropriate positive management, such as coppicing, grazing etc.
- Create new areas of habitat, such as woodland, scrub, grassland and wetland, including ponds, targeted especially adjacent to or between retained existing habitats in order to expand and link them, thus making them more resilient.
- Retain and enhance (through habitat creation and management) habitat links to the wider landscape, for example to the valleys or corridors of the River Blackwater (e.g. along the Domsey Brook corridor), Roman River (to the west and south east) and River Colne (to the north).

2.4.6 The above principles are consistent with, and would help in the delivery of, the recommendations for creation of ecological networks and links identified in the Colchester Borough Green Infrastructure Strategy.

#### **Further Work Recommendations**

2.4.7 On the basis of the scoping survey work undertaken as part of this Environmental Audit, the following more detailed ecological surveys are recommended for specific species and/or



species groups to inform the masterplanning, environmental assessment and mitigation for development on the Site:

- Botanical;
- Terrestrial and freshwater invertebrates;
- Amphibians, including great crested newts;
- Reptiles;
- Breeding birds;
- Dormice;
- Water voles;
- Bats, including roosts and activity; and
- Badgers.

## **2.5 Summary**

2.5.1 Much of the Site consists of arable fields set within a more or less intact hedgerow network, which includes mature and veteran trees. There are concentrations of important habitat along and adjoining the corridors of the Domsey Brook and Roman River, as well as around Seven Star Green, and it is recommended that habitats in these areas in particular are retained and enhanced in relation to any potential or proposed development within the Site. The Site also has the potential to support a number of protected species and other species of conservation importance and more detailed surveys will be required for these, as appropriate, in relation to any proposed development.

## **3.0 LANDSCAPE/TOWNSCAPE CHARACTER AND VISUAL AMENITY**

### **3.1 General**

3.1.1 The purpose of this section is to identify potential constraints and opportunities for development of the Site in landscape and visual terms.

3.1.2 The European Landscape Convention (ELC) aims to promote co-operation on improving approaches to the planning, management and protection of landscapes throughout Europe. The ELC states that 'landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'. This appraisal adopts the broad and inclusive ELC definition of landscape embracing townscapes and riverscapes, as well as all forms of rural landscape.

### **3.2 Audit Methodology**

3.2.1 Potential landscape/townscape character and visual amenity effects that could result from development of the Site have been determined by assessing the degree of change to the existing landscape character and amenity of sensitive visual receptors within the Study Area. The methodology used for the appraisal is based on the guidance set out in adapted as appropriate for the purposes of this Environmental Audit:

- Guidelines for Landscape and Visual Impact Assessment 3rd Edition (The Landscape Institute and the Institute for Environmental Management and Assessment, 2013).
- Landscape Character Assessment Guidance for England and Scotland (The Countryside Agency and Scottish Natural Heritage, 2002)

3.2.2 In line with the above guidance, the appraisal includes a desk-based review of currently available landscape character studies and other relevant information, supplemented by targeted field survey work.

3.2.3 The desk-based review included consideration of the following information:

- National Character Area Profiles (Natural England, 2013/2014);
- Essex Landscape Character Assessment (Chris Blandford Associates, 2003);
- Colchester Borough Landscape Character Assessment (Chris Blandford Associates, 2005);
- Braintree District Landscape Character Assessment (Chris Blandford Associates, 2006);

- Townscape Character Assessments for Colchester, Tiptree, West Mersea and Wivenhoe (Chris Blandford Associates, 2006);
- Landscape Capacity of Settlement Fringes in Colchester Borough (Chris Blandford Associates, 2005);
- Braintree District Settlement Fringe Landscape Capacity Analysis: for Braintree and Environs (Chris Blandford Associates, November 2007);
- Assessment of Open Countryside between Settlements in the Borough of Colchester (Chris Blandford Associates, 2009);
- 1:25,000 & 1:10,000 scale OS mapping; and
- Aerial photography (Google Maps/Bing Maps).

3.2.4 Field surveys of the Study Area were undertaken during September and October 2015 from the extensive network of public rights of way through the Site. This included taking photographs from representative views within the Site.

### **Study Area**

3.2.5 The Study Area was defined by modelling the Zone of Theoretical Visibility (ZTV) of the Site using GIS software as shown on **Figure 3.1**. The field survey work established that the actual Zone of Visual Influence (or visual envelope) of the Site is far more limited than the ZTV suggests due to the screening effects of intervening buildings and vegetation. On this basis, a Study Area extending 2.5 km from the Site was chosen to allow an appraisal of the potential significant landscape and visual effects of development on the Site.

## **3.3 Existing Conditions**

### **Topography and Watercourses**

3.3.1 The western part of the Site, around Marks Tey, lies between 65m and 30m AOD (see **Figure 3.2**). The lower-lying land is associated with watercourses. In the north of the area, Roman River, its tributaries, and its associated shallow valley cut across the Site, running south-east before joining the River Colne adjacent to Abberton Reservoir; and the shallow sided valley of Domsey Brook, a tributary of the Blackwater River, lies in the south. The eastern area of the Site, associated with Eight Ash Green, lies between 50 and 25m AOD, with the lowest land found in the west where the Roman River passes close to the Site boundary.

**KEY**

Site Boundary

Zone of Theoretical Visibility

The Zone of Theoretical Visibility (ZTV) has been digitally mapped using a computer model to show areas from which the Site may be theoretically visible. The ZTV mapping uses elevation data to create a digital terrain model and calculate intervisibility between points. The ZTV does not take account of screening by buildings, structures and vegetation that will influence potential visibility.

**Notes:**

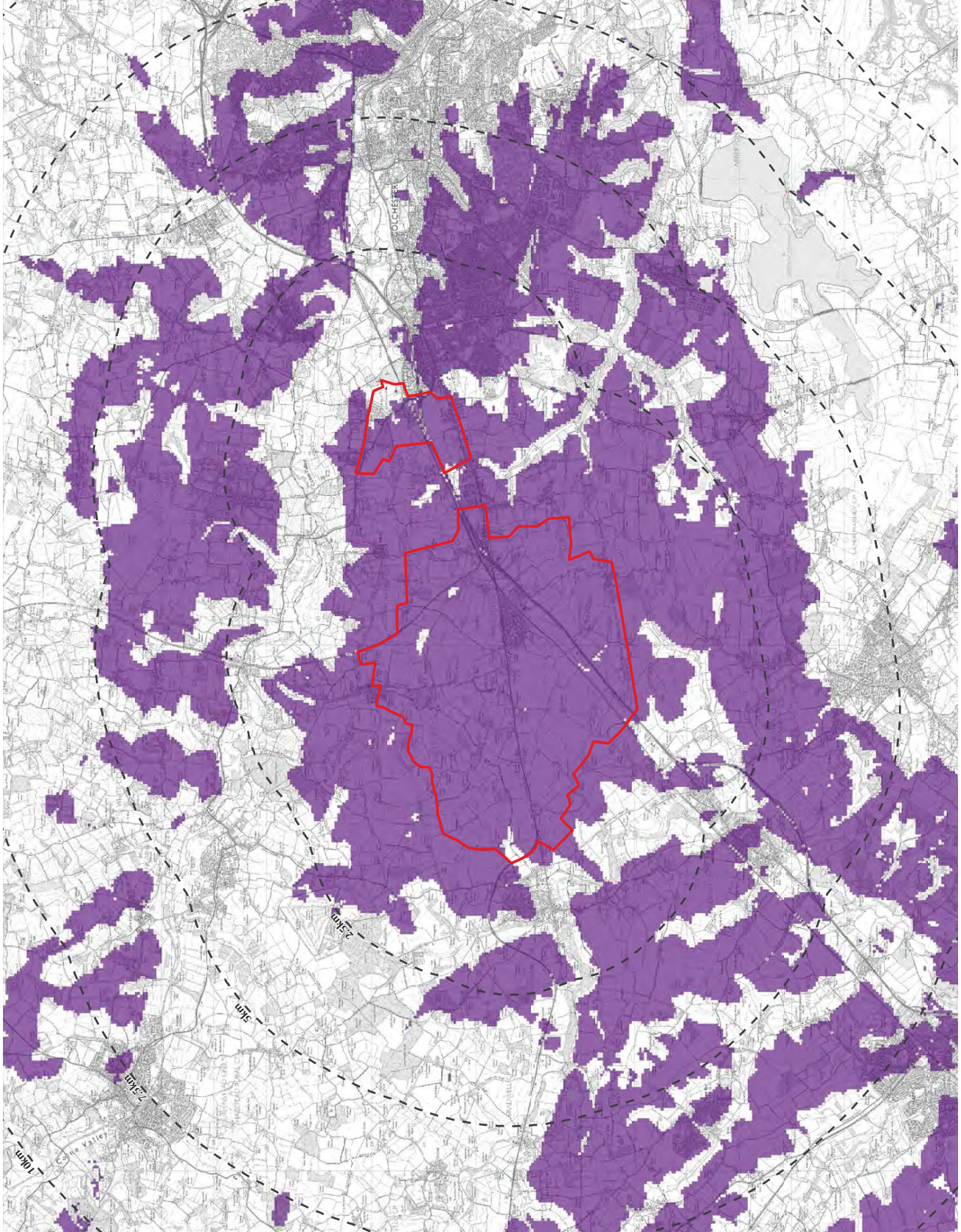
The point locations and heights used within the model are for indicative purposes only. The ZTV is calculated for 7 points, each 1m above the ground, spaced evenly across the highest ground within the site boundary. Viewer height is 2m above ground level.

The terrain model is bare ground and uses OS Terrain 50 height data. Earth curvature and atmospheric refraction have been taken into account.

The software used is ESRI Arc GIS 10

0 1 2 Kilometres

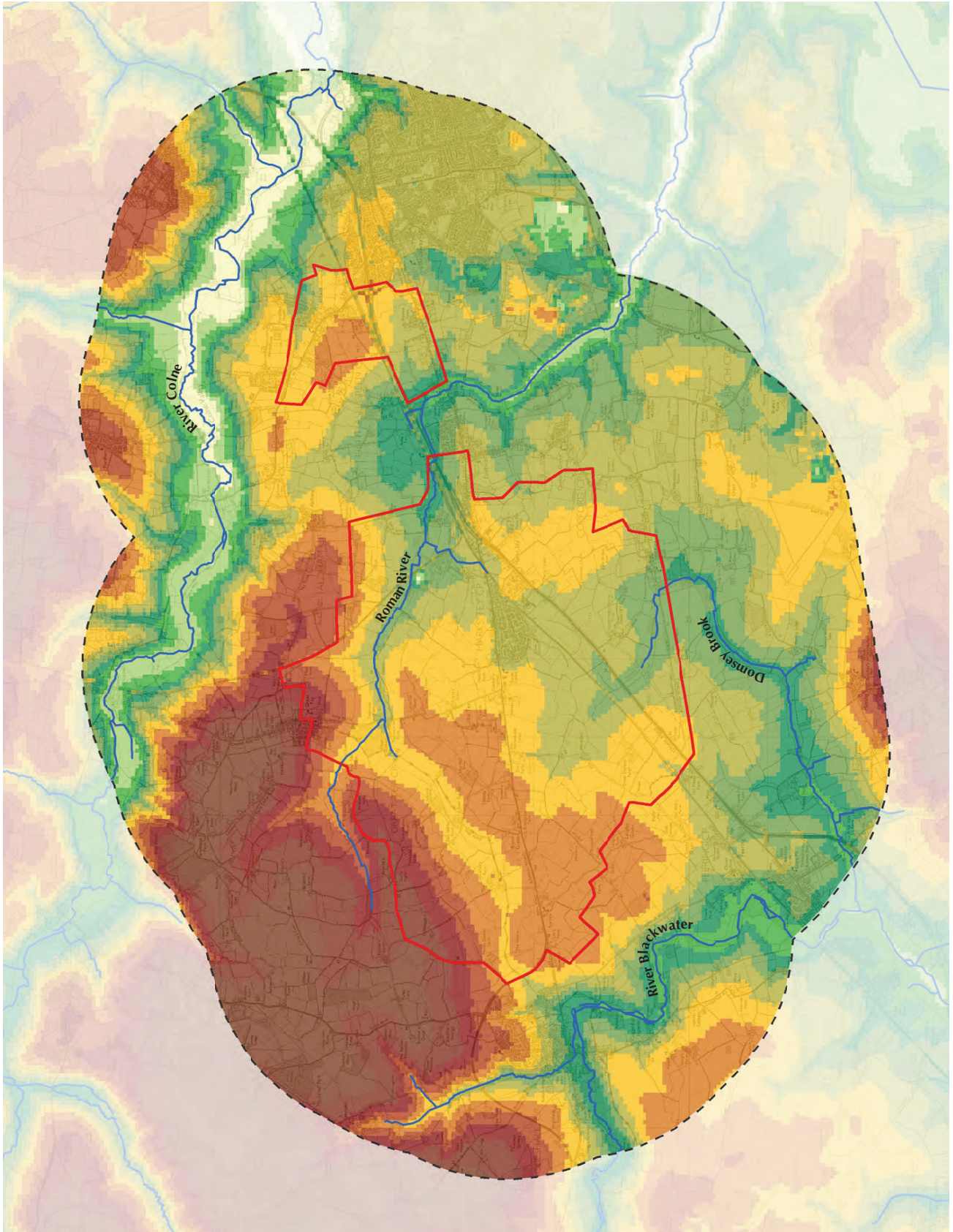
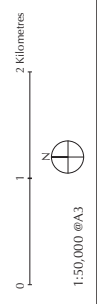
1:75,000 @A3



Based upon the Ordnance Survey Map with the permission of the controller of HM Stationery Office. © Crown Copyright Licence number 100017241

**KEY**

- Site Boundary
  - Study Area (2.5km distance from Site Boundary)
- Height AOD (m)**
- |         |
|---------|
| -2 - 0  |
| 0 - 5   |
| 5 - 10  |
| 10 - 15 |
| 15 - 20 |
| 20 - 25 |
| 25 - 30 |
| 30 - 35 |
| 35 - 40 |
| 40 - 45 |
| 45 - 50 |
| 50 - 55 |
| 55 - 60 |
| 60 - 65 |
| 65 - 70 |
| 70 - 75 |
- Watercourses



Based upon the Ordnance Survey Map with the permission of the controller of Her Majesty's Stationery Office. © Crown Copyright Licence number - 100017241

## Vegetation

- 3.3.2 The vegetation within the Site is predominantly composed of intensive arable farmland (see **Figure 1.1**). Many of the field boundaries are formed from mature hedges, with some small blocks of woodland, including one small area of ancient woodland in the northeast of the Site at Church House Wood.

## Land Use

- 3.3.3 The land use within the Marks Tey area of the site is dominated by arable farmland. The main settlements are formed from the village of Marks Tey, which lies in the centre of the site between the A120 and the railway line (Great Eastern Mainline); and by the small villages of Great Tey (in the north), Little Tey (in the centre) and Easthorpe (in the south). The A12 primary route runs northwest-southeast through the site, with a large junction to the A120, B1408, and minor road to the south of Marks Tey station. Marks Tey station acts as a junction between the Great Eastern Mainline (Colchester to Liverpool Street, London) and the Gainsborough Line, which is a branch line north to Sudbury. A number of minor roads also run across the site, linking small settlements and farms. Along the A12 to the south of Marks Tey are some industrial sites.
- 3.3.4 The eastern area of the Site, at Eight Ash Green has varied land use, with some arable farmland, some settlement, and some key transport infrastructure. The A12 and A1124 cross the Site, with a large junction to the south of Eight Ash Green. The B1408, within the southern edge of the site, has a variety of property along both sides, including residential, a large garden centre, farming, and industrial estate. Eight Ash Green is the predominant settled area within the Site, with smaller settlements at Seven Star Green and Fordam Heath.

## National Character Areas

- 3.3.5 The eastern half of the Site is covered by National Character Area 111<sup>5</sup>, see **Figure 3.3**, the Northern Thames Basin. The following key characteristics are relevant to the Study Area:
- *The landform is varied with a wide plateau divided by river valleys.*
  - *Characteristic of the area is a layer of thick clay producing heavy, acidic soils, resulting in retention of considerable areas of ancient woodland.*
  - *Areas capped by glacial sands and gravels have resulted in nutrient-poor, free-draining soils which support remnant lowland heathlands, although these are now small. Areas that have alluvial deposits present are well drained and fertile.*

---

<sup>5</sup> NCA Profile: 111 Northern Thames Basin (Natural England, 2013) [www.naturalengland.org.uk](http://www.naturalengland.org.uk)

**KEY**

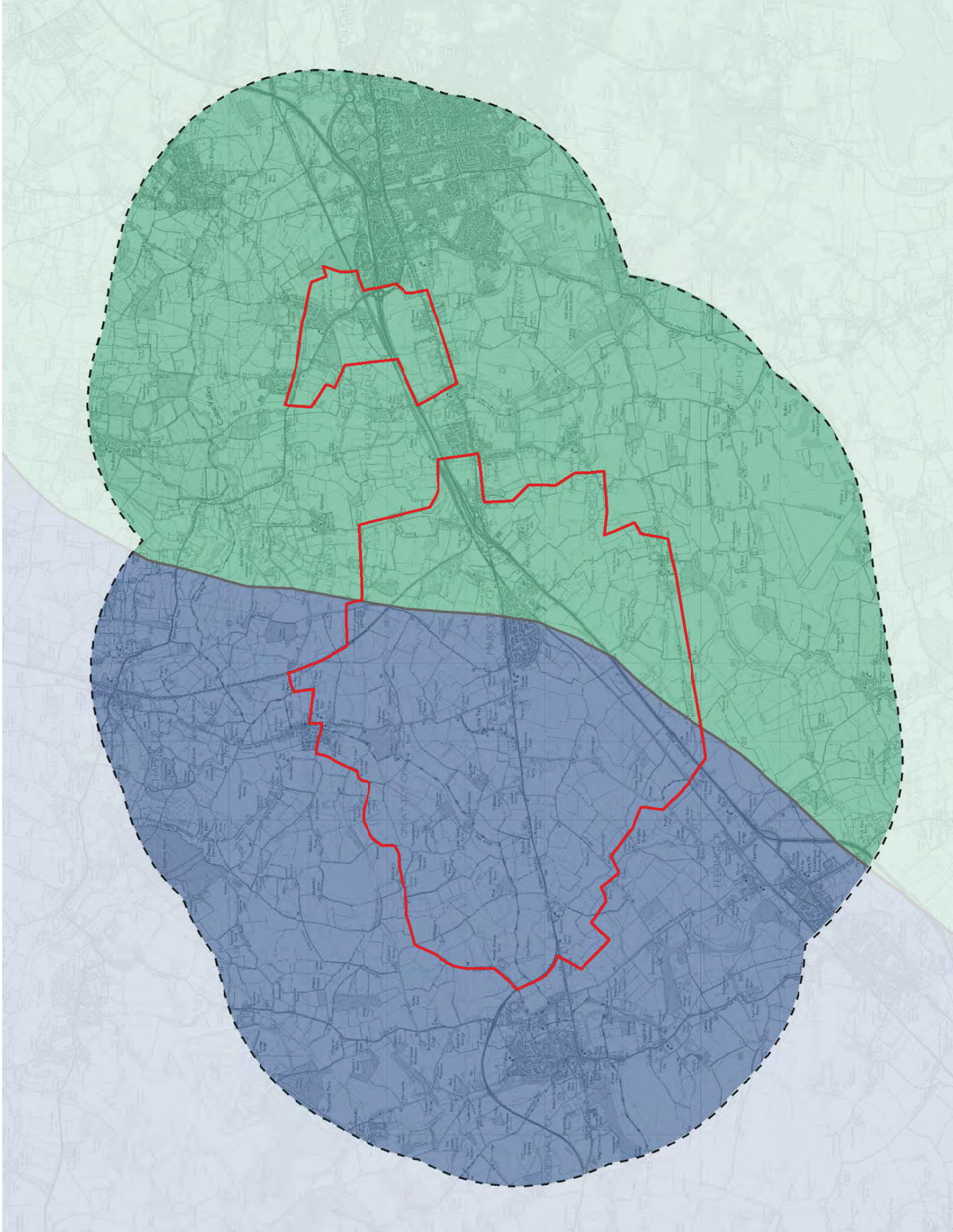
Site Boundary

Study Area (2.5km distance from Site Boundary)

**National Character Areas:**

111: Northern Thames Basin

86: South Suffolk & North Essex Clayland



Based upon the Ordnance Survey Map with the permission of the controller of H.M. Stationery Office. © Crown Copyright Licence number - 100017241

- *The water bearing underlying Chalk beds are a main source of recharge for the principal London Basin Chalk aquifer.*
- *A diverse landscape with a series of broad valleys containing the major rivers Ver, Colne and Lea, and slightly steeper valleys of the rivers Stour, Colne and Roman. Numerous springs rise at the base of the Bagshot Beds and several reservoirs are dotted throughout the area*
- *The pattern of woodlands is varied across the area and includes considerable ancient semi-natural woodland. Hertfordshire is heavily wooded in some areas as are parts of Essex, while other areas within Essex are more open in character. Significant areas of wood pasture and pollarded veteran trees are also present.*
- *The field pattern is very varied across the basin reflecting historical activity. Informal patterns of 18th-century or earlier enclosure reflect medieval colonisation of the heaths. Regular planned enclosures dating from the Romano-British period are a subtle but nationally important feature on the flat land to the south-east of the area. In the Essex heathlands 18th- and 19th-century enclosure of heathlands and commons followed by extensive 20th-century field enlargement is dominant.*
- *Grasslands are characteristic of the river valleys throughout. Horticulture and market gardening are found on the light, sandy soils of former heaths in Essex, particularly around Colchester, along with orchards, meadow pasture and leys following numerous narrow rivers and streams.*
- *The diverse range of semi-natural habitats include ancient woodland, lowland heath and floodplain grazing marsh and provide important habitats for a wide range of species including great crested newt, water vole, dormouse and otter.*
- *Rich archaeology including sites related to Roman occupation, with the Roman capital at Colchester and City of St Albans (Verulamium) and links to London.*

3.3.6 The western half of the Site is covered by National Character Area 86<sup>6</sup>, see **Figure 3.3**, South Suffolk and North Essex Clayland. The following key characteristics are relevant to the Study Area:

- *An undulating chalky boulder clay plateau is dissected by numerous river valleys, giving a topography of gentle slopes in the lower, wider valleys and steeper slopes in the narrower upper parts.*
- *Fragments of chalk give many of the soils a calcareous character, which also influences the character of the semi-natural vegetation cover.*
- *South-east-flowing streams and rivers drain the clay plateau. Watercourses wind slowly across flood plains, supporting wet, fen-type habitats; grazing marsh; and blocks of cricket-bat willows, poplars and old willow pollards. Navigation locks are present on some rivers.*

---

<sup>6</sup> NCA Profile: 86 South Suffolk and North Essex Clayland (Natural England, 2013) [www.naturalengland.org.uk](http://www.naturalengland.org.uk)



- *Lowland wood pasture and ancient woodlands support the dormouse and a rich diversity of flowering plants on the clay plateau. Large, often ancient hedgerows link woods and copses, forming wooded skylines.*
- *The agricultural landscape is predominantly arable with a wooded appearance. There is some pasture on the valley floors. Field patterns are irregular despite rationalisation, with much ancient countryside surviving. Field margins support corn bunting, cornflower and brown hare.*
- *Roman sites, medieval monasteries and castles and ancient woodlands contribute to a rich archaeology. Impressive churches, large barns, substantial country house estates and Second World War airfields dot the landscape, forming historical resources. There is a dispersed settlement pattern of scattered farmsteads, parishes and small settlements around 'tyes' (commons) or strip greens and isolated hamlets. The NCA features a concentration of isolated moated farmsteads and numerous well-preserved medieval towns and large villages.*
- *Larger 20th-century development has taken place to the south and east around Chelmsford, Ipswich and the new towns of Harlow and Stevenage.*
- *Traditional timber-frame, often elaborate buildings with exposed timbers, colour-washed render, pargeting and steeply pitched roofs with pegtiles or long straw thatch. Sometimes they have been refronted with Georgian red brick or Victorian cream-coloured bricks ('Suffolk whites'). Clay lump is often used in cottages and farm buildings.*
- *Winding, narrow and sometimes sunken lanes are bounded by deep ditches, wide verges and strong hedgerows. Transport infrastructure includes the A14, A12, M11 and Stansted Airport.*
- *A strong network of public rights of way provides access to the area's archetypal lowland English countryside.*

### **Essex Landscape Character Assessment**

3.3.7 The Essex Landscape Character Assessment<sup>7</sup> has identified the following landscape character areas within the Study Area. These are shown on **Figure 3.4**:

- Gosfield Wooded Farmland (B4)
- South Colchester Farmlands (E2)
- Blackwater & Brain Valley (C6)
- Colchester & Environs (G4)
- Colne Valley (C7)
- Tiptree Ridge (D4)
- Blackwater/Stour Farmland (B3)

---

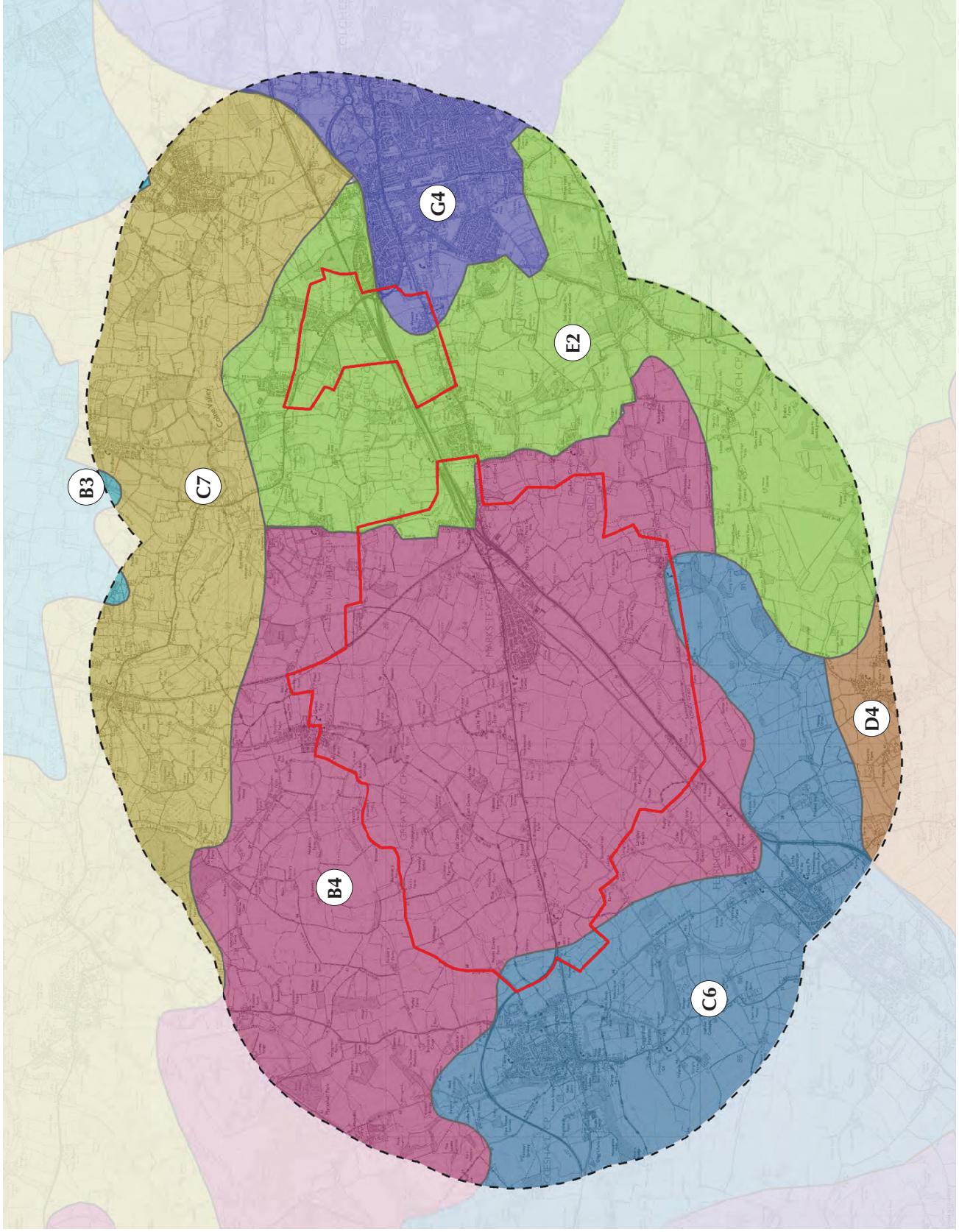
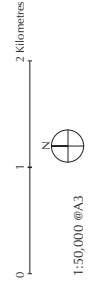
<sup>7</sup> Essex Landscape Character Assessment, Chris Blandford Associates (2003)

**KEY**

- Site Boundary
- Study Area (2.5km distance from Site Boundary)

**Essex Landscape Character Areas:**

- B4: Gosfield Wooded Farmland
- E2: South Colchester Farmlands
- C6: Blackwater & Brain Valley
- G4: Colchester & Environs
- C7: Colne Valley
- D4: Tiptree Ridge
- B3: Blackwater/Stour Farmland



Based upon the Ordnance Survey Map with the permission of the controller of H.M. Stationery Office. © Crown Copyright Licence number - 100017241

3.3.8 The following key characteristics for each character area are relevant to the Study Area:

#### **Gosfield Wooded Farmland (B4)**

- *Flat to gently undulating landform.*
- *Strong pattern of large and small woods, including distinctive ancient limewoods.*
- *Irregular medium size arable fields, bounded by thick hedgerows with mature hedgerow trees.*
- *Enclosed character.*
- *Many small farmsteads, occasional hamlets and villages.*

#### **South Colchester Farmlands (E2)**

- *Mix of small regular pasture and large arable fields.*
- *Dense woodland in the Roman River valley.*
- *Enclosed, intimate character in the north, more open in the south.*
- *Complex settlement pattern of nucleated and linear villages/hamlets, and farmsteads along dispersed lanes.*
- *Distinctive elongated large waterbody of Abberton Reservoir within a shallow valley.*

#### **Blackwater & Brain Valley (C6)**

- *Shallow valleys.*
- *Predominantly arable farmland with well hedged medium to large fields.*
- *The Brain and the Upper Blackwater Valleys are narrow with undulating valleysides.*
- *The Lower Chelmer, and the Blackwater near Maldon, have wide flat valley floors, and gentle valleysides.*
- *Extensive linear poplar and willow plantations are a distinctive feature.*

#### **Colchester and Environs (G4)**

- *Historic town core with a strong grid pattern on a low hill above the River Colne.*
- *Residential and commercial development wraps over valleysides or slightly elevated flatter land.*
- *Uninterrupted valley floor of the Colne forms a ribbon of green space running through the centre of the urban area.*
- *Large blocks of woodlands and open spaces on some valleysides.*
- *Variable size regular hedgerowed fields in the fringing farmland.*

### **Colne Valley (C7)**

- *Shallow valley of variable width with numerous small tributary valleys.*
- *Gently to moderately undulating valleysides.*
- *Narrow valley bottom, mainly pasture.*
- *Arable valleyside farmland with frequent small woodlands.*
- *A series of small towns and villages at bridging points.*
- *Historic mill buildings are distinctive features.*

### **Tiptree Ridge (D4)**

- *Elevated, broad ridge.*
- *Strongly wooded western ridgetside.*
- *Small - medium scale field pattern.*
- *Enclosed character provided by many tall, thick hedgerows and woodland.*
- *Framed views over the Blackwater Valley and the Blackwater coastal farmlands.*

### **Blackwater/Stour Farmlands (B3)**

- *Very gently undulating or flat landform.*
- *Large scale arable field pattern.*
- *Infrequent small blocks of woodland, some mature hedgerow trees on field boundaries.*
- *Wide views across the farmland.*
- *Small villages, hamlets with a wealth of historic buildings.*
- *Tranquil character.*

## **Colchester Borough and Braintree District Landscape Character Areas**

3.3.9 The Colchester Borough Landscape Character Assessment<sup>8</sup> has identified the following landscape character areas within the Study Area. These are shown on **Figure 3.5:**

### **Wooded Roman River Valley (A2)**

- *Relatively steep and wooded slopes of narrow v-shaped Roman River valley (tributary of the Colne River);*
- *Large areas of deciduous and coniferous (mixed) woodland on the valley slopes (e.g. Donyland Wood, Friday Wood and Chest Wood);*
- *Small patches of ancient woodland on the valley sides;*

---

<sup>8</sup> Colchester Borough Landscape Assessment, Chris Blandford Associates (2005)