Environmental Statement – Non-Technical Summary

Land between Hazelend Road & Farnham Road, Bishop's Stortford, Herts

Land at Hazelend Road

Sustainable Urban Extension

Prepared by Terence O'Rourke
Planning | Design | Environment

April 2013
Environmental Statement – Non-Technical Summary

Land between Hazelend Road & Farnham Road, Bishop's Stortford, Herts.

Land at Hazelend Road

Sustainable Urban Extension

April 2013
Non-technical summary

Introduction

NTS.1 Countryside Properties PLC is applying to East Hertfordshire Council for outline planning permission to develop land between Hazelend Road and Farnham Road, Bishop’s Stortford, for a sustainable urban extension comprising up to 450 new dwellings (of a range of sizes, types and tenures, including affordable housing) and public open and amenity space, together with associated landscaping, access, highways (including footpaths and cycleways), parking, drainage (including a foul water pumping station), utilities and service infrastructure works. Figure NTS1 shows the location of the site in relation to Bishop’s Stortford and the application boundary.

NTS.2 An environmental impact assessment (EIA) was required, in accordance with schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011, due to the potential for significant environmental effects. An environmental statement (ES) has been prepared to report the findings and its key elements are summarised in this non-technical summary.

The proposed development site

NTS.3 The 26.3 ha site is divided in two by Hazelend Road, which runs through the centre. The western area (site area 1) will accommodate the proposed residential development and the eastern area (site area 2) will accommodate additional informal public open space and a proposed balancing pond. Site area 1 is currently in arable agricultural use. It is triangular in shape and slopes from 80 m AOD in the west to 70 m AOD in the east. It is bounded to the north by the A120, to the east by Hazelend Road and to the west by Farnham Road. A drainage culvert runs across the north east corner, which is bordered by scrub and individual trees. There are no public rights of way in this part of the site.

NTS.4 Site area 2 consists of two grass fields separated by a dry ditch and slopes from 70 m AOD in the west to 65 m AOD in the east. It is bordered by Hazelend Road to the west, the A120 to the north, the River Stort to the east and the B1004 Michael’s Road to the south. A public footpath runs along its eastern edge.

NTS.5 There are two residential properties adjacent to site area 1 to the north west and a pub and another residential property to the south. The urban edge of Bishop’s Stortford is approximately 400 m south of the site. The land beyond the A120 to the north and Farnham Road to the west is in primary agricultural use, with scattered areas of woodland. The London Liverpool Street to King’s Lynn railway line lies on the opposite side of the River Stort to the east, beyond which is the Birchanger Industrial Estate.
The proposed development

NTS.6 The proposed master plan is shown in figure NTS2. It identifies the various components of the proposed development and the general land use arrangement, the principles of pedestrian / cycle and vehicular access and movement between the site and surrounding areas, and establishes the areas where existing landscape features will be retained and further planting will be undertaken. It should be noted that the illustrative information included on the plan, and identified as such on the key, only provides an indication of the potential location of features within the development and so has not been relied on for assessment purposes.

NTS.7 The proposed development will comprise up to 450 dwellings, up to 40% of which will be affordable housing (subject to viability), and 10.05 ha of informal public open space (including the proposed riverside park discussed below). It is proposed that the existing hedgerows on site will be retained, with the exception of 430 m along the boundaries of site area 1 that needs to be removed to allow the creation of the proposed access junctions and the replacement of the poor quality hedgerow adjacent to Hazelend Road. The existing scrub and individual trees along the ditch in the north eastern corner will also be retained.

NTS.8 Two circular areas of public open space, Hazel Green Park and Hazel Rise Park, will be created within the area of proposed built development. Hazel Green Park will incorporate a local equipped area of play. Several green links are proposed to run through the site (figure NTS2).

NTS.9 New landscape planting is proposed along the site boundaries to strengthen the existing hedgerows and help screen the site (figure NTS2). This will vary from 3 m in width along the southern edge to up to 10 m along the north western edge and will be planted with native species, incorporating some advanced nursery stock. A 6.5 ha riverside park is proposed in site area 2, which will include new landscape planting and the proposed balancing pond (see paragraph NTS14). This will form an extension to the existing Red, White and Blue Park to the south of Michaels Road.

NTS.10 The building heights strategy is also shown on figure NTS2. In the western and northern parcels of proposed built development, the dwellings will be up to two-and-a-half storeys high, with a maximum ridge height of 10 m. In the eastern parcel of proposed built development, the dwellings will be up to three storeys high, with a maximum ridge height of 12 m, while the southern parcel will be developed with a mix of two-and-a-half and three storey dwellings (figure NTS2). Either side of the proposed northern and southern green links there will potentially be dwellings of up to three storeys high, although the precise location of these is not confirmed at this stage.

NTS.11 The western parcel will be developed at a density of between 20 and 30 dwellings per hectare (dph), the southern parcel will be developed at between
25-35 dph, the northern parcel will be developed at between 30-40 dph and the eastern parcel will be developed at between 35-45 dph (figure NTS2).

NTS.12 The following new vehicular access junctions are proposed into site area 1 (figure NTS2):

- A four-arm roundabout at the southern end of the site, which will form the main site access at the existing Hazelend Road / Michaels Road / Rye Street junction. The junction will include for the existing exit from Farnham Road being made left turn only, with right turning vehicles exiting from the new roundabout
- A priority T-junction onto Farnham Road to the west of the site
- A priority T-junction onto Hazelend Road to the east

NTS.13 The master plan includes provision to accommodate a future link across Farnham Road to connect to the facilities proposed as part of the adjacent Bishop’s Stortford North development. A new pedestrian access will also be created into the proposed riverside park in site area 2. The proposed site access roundabout will include islands to allow pedestrians to cross to the existing footway on Rye Street. It is proposed that the existing 510 bus service will be diverted through the site to serve the new development.

NTS.14 The main element of the proposed surface water drainage system is a balancing pond in site area 2 (figure NTS2), which will discharge into the River Stort. The discharge rate will be limited to the existing greenfield runoff rate and the balancing pond will have a storage capacity of 5,710 m$^3$. Surface water runoff from the proposed residential area will be conveyed to the pond via a network of underground pipes.

NTS.15 A new foul water pumping station will be provided to the east of Hazelend Road to cater for wastewater flows from the proposed development. It will be sited in a secure compound and will comprise the main pumping station, which will be underground, a small kiosk containing the control unit and a telemetry mast. An access to the pumping station will be provided from Hazelend Road. There will be two pumps (duty / standby), in order to provide cover in the event of a pump failure, and the pumping station will incorporate 72 m$^3$ of emergency storage capacity.

**Alternatives**

NTS.16 Countryside Properties PLC has not considered potential alternative sites, as the proposed development site is the only area of land under its control in the area. Alternative sites were therefore not considered in the ES.

NTS.17 The master plan has evolved over time and has been subject to a number of iterations following consultation with statutory bodies and the public and the findings of baseline environmental studies. The main aspects of the master plan where alternatives were considered are:
• Landscape planting and open space – landscape planting buffers were introduced at varying widths around the edges of the site to provide screening. Green links and parks were introduced within the site to break up the massing of the proposed built development and provide linked and accessible public open space through the site
• Building heights – the building heights strategy was designed to locate taller buildings on lower and better screened portions of the site to reduce the visibility of the new built development
• Site access – alternative locations and designs for the proposed main access roundabout were considered. The proposed layout was chosen to avoid the need to divert Hazelend Road, minimise topographical constraints and ensure the appropriate visibility splays are provided

Assessment methodology

NTS.18 The initial stage of the EIA was the production of a scoping report that identified the potential environmental effects to be addressed during the process. This was issued to a range of consultees for comment and a number of additional issues were identified.

NTS.19 The various specialist assessments, discussed in more detail below, followed generally similar methodologies. Baseline desk and / or field studies were undertaken to establish the existing situation. The effects of the proposed development were evaluated using a method that compares the sensitivity and importance of receptors with the likely magnitude of change to establish the degree of the effects. If the degree of effect is moderate or above then the effect is considered to be significant. Slight or negligible effects are not considered to be significant.

NTS.20 The degree of an effect determines the resources that should be put in place to avoid or reduce (mitigate) an adverse effect and identifies the actual value of a beneficial effect.

NTS.21 The proposed development site is identified in East Hertfordshire Council’s Core Strategy Issues and Options (2010) as one of five ‘areas of special restraint’ (ASR) to the north of Bishop’s Stortford that are to be brought forward for residential development. The site is ASR5; ASRs 1 to 4 lie to the west of the site and form the wider Bishop’s Stortford North urban extension site (figure NTS3). An assessment of the potential for cumulative effects with the wider Bishop’s Stortford North urban extension site has therefore been undertaken. An outline application for the Bishop’s Stortford North urban extension was submitted in January 2013 and the scheme includes the following elements:

• Up to a maximum of 2,200 residential units, including affordable housing
• Two local centres, which will occupy approximately 4.1 ha of land (approximately 1.1 ha in the western neighbourhood and 3 ha in the eastern neighbourhood) and will include up to 21,000 m² of commercial floorspace, including (if required) a maximum of 3,000 m² for a healthcare
facility, a maximum of 1,200 m² retail floorspace and the potential for other community / cultural / leisure uses

- Two primary schools, consisting of a one-form entry school on approximately 1.25 ha in the western neighbourhood and a two-form entry school on approximately 2 ha in the eastern neighbourhood
- A park and ride facility for approximately 100 cars on 0.4 ha of land in the western neighbourhood
- Approximately 58 ha of green infrastructure, including formal provision for local areas of play, a neighbourhood area for play, allotments and playing pitches and the construction of a changing facility
- Supporting infrastructure, including four new / improved vehicular access points, internal footways, cycleways and highways, car and cycle parking, hard and soft landscaping, creation of sustainable drainage systems and installation of utility services
- Demolition of 221 Rye Street and 164 and 166 Hadham Road

Environmental effects

Air quality

NTS.22 The traffic-related pollutants nitrogen dioxide and fine particulate matter were the main focus of the air quality assessment, although construction dust was also addressed.

NTS.23 Current air quality around the site was established from measurements made by East Hertfordshire Council and modelled background data provided by Defra. These showed that that national air quality objectives for the traffic pollutants are being achieved in the area around the site, but not in Bishop’s Stortford town centre. As a result of these exceedances, the council has declared an air quality management area (AQMA) in the town centre at Hockerill junction. The AQMA incorporates parts of Hockerill Street, London Road, Dunmow Road and Stansted Road and is approximately 1.5 km south of the site.

NTS.24 During the construction process, there is the potential for increased dust generation from activities such as site preparation, earthworks and transport and storage of materials. A range of best practice mitigation measures will be put in place through a construction environmental management plan (CEMP) to ensure that there will be no significant effects on local sensitive receptors from increased dust generation. These measures will include sheeting of lorries, locating machinery and stockpiles away from sensitive receptors, covering of completed earthworks as soon as possible, regular inspection of local highways and site boundaries for dust deposits, and use of dust-suppressed tools.

NTS.25 The modelling undertaken to predict emissions relating to post-construction traffic activities showed that national air quality limit values for the traffic pollutants will not be exceeded in the vicinity of the site and there will be no significant increase in the concentrations of these pollutants as a result of the
proposed development. No significant effects are predicted on the Bishop’s Stortford AQMA as a result of increased traffic arising from the development.

NTS.26 Given the close proximity of the Bishop’s Stortford North site to the proposed development, there is the potential for cumulative dust effects to arise if the construction periods of the two projects overlap. However, similar best practice dust control measures to those discussed above will be put in place during the construction of Bishop’s Stortford North, so there will be no significant cumulative construction dust effects.

NTS.27 The modelling of post-construction traffic emissions found that concentrations of the traffic pollutants will remain below the relevant objectives with both developments in place in the vicinity of the two sites and there will not be a significant effect on air quality in the AQMA. No significant cumulative air quality effects are predicted.

Community, social and economic effects

NTS.28 The provision of new dwellings and public open space has the potential to have effects on the existing local community, economy and services in the surrounding area. In order to assess these effects, current conditions in Bishop’s Stortford Meads ward, in which the site is situated, Bishop’s Stortford town and East Hertfordshire district as a whole have been analysed.

NTS.29 Bishop’s Stortford Meads ward’s demography differs from the district, regional and national averages, with lower proportions of children under 16 years of age and households with dependent children and higher proportions of retirement age residents and single person households. There is an existing shortage of affordable housing in the district as a whole, and the overall available supply of deliverable housing sites is slightly below that required by national planning policy. Unemployment in East Hertfordshire is below the national average. There is a range of retail and service units in Bishop’s Stortford town centre, including major retailers and a number of independent retailers.

NTS.30 There are 11 primary schools in Bishop’s Stortford, the nearest of which to the site are All Saints Church of England Primary School and Nursery, Summercroft Primary School and Northgate Primary School. Several of the town’s primary schools, including these three, are at or approaching capacity. There are five secondary schools in the town, four of which currently have spare capacity. All the GP surgeries in the town are currently registering new patients and four of the five dental practices are currently registering new NHS patients. There is a range of community facilities available in Bishop’s Stortford, including a swimming pool, sports pitches, community centres and public open space. However, Bishop’s Stortford is deficient in recreation space when compared to relevant standards.

NTS.31 It is anticipated that approximately 70 people will be employed on site during the construction phase on average. This will be a temporary, slight beneficial
effect. As the proposed development is residential in nature, there will be no long term changes in employment post-construction.

NTS.32 There will be a long term increase in population when the site is occupied, which will lead to a slight change in the demography of the area. The proposals will lead to an increase in housing provision in the area, which will be a moderate, significant beneficial effect. There will also be an increase in the provision of affordable housing, which will be a moderate, significant beneficial effect. It is predicted that there will be a slight, beneficial increase in demand for local businesses post-construction as a result of the increased local population.

NTS.33 The increase in population will increase demand for local services, including schools, healthcare and community facilities. The increase in demand for primary schools and formal public open space is predicted to be moderate, while the increase in demand for secondary schools, GP surgeries and dental practices is predicted to be negligible. A slight increase in demand for other community facilities, such as community centres and libraries is predicted. However, financial contributions will be made through a legal agreement with East Hertfordshire Council and Hertfordshire County Council to provide for the increases in demand for local services. As a result, no significant effects are predicted on schools, healthcare or community facilities.

NTS.34 The potential for cumulative effects with the Bishop’s Stortford North development was also examined. It is possible that the construction periods of the two developments may overlap, and overall there is likely to be a moderate, significant, beneficial cumulative effect as a result of the temporary increase in employment during construction. As the proposed land at Hazelend Road development does not include any long term employment-generating uses, there is no potential for a significant cumulative effect on post-construction employment.

NTS.35 The eastern part of the Bishop’s Stortford North site falls within Bishop’s Stortford Meads ward, while the western part falls within Bishop’s Stortford Silverleys ward. There will be a substantial, significant cumulative effect on the demography of these wards as a result of the developments. The two developments will also lead to a very substantial, significant, beneficial cumulative effect on affordable housing provision in the town and a very substantial, significant, beneficial cumulative effect on overall housing provision. The cumulative increase in demand for local businesses as a result of the increased population is predicted to be a slight to moderate, significant, beneficial cumulative effect, although a small element of retail provision is included in the Bishop’s Stortford North proposal.

NTS.36 The proposed primary schools on the Bishop’s Stortford North site are likely to accommodate the majority of the increase in demand for primary school places associated with the two developments. The Bishop’s Stortford North scheme also includes a range of formal and informal public open space and the potential for additional community facilities, such as a community hall and
an element of healthcare provision. In addition, it is likely that both schemes will make contributions through legal agreements with the district and county councils to mitigate the increased pressure on services such as education, healthcare and community facilities where these are not provided on site. As a result, no significant cumulative effects are predicted on these aspects.

**Cultural heritage**

NTS.37 Archaeological investigations on site revealed four areas of archaeological potential. Three of these, in site area 1, contain evidence of a possible prehistoric settlement site, with some elements dating from the Late Bronze Age. The fourth, in site area 2, contains an area of possible early medieval settlement.

NTS.38 Subject to agreement with the Hertfordshire County Archaeologist, it is proposed to excavate these areas prior to construction works commencing. This will allow the archaeological remains to be ‘preserved by record’. An archaeological watching brief will be put in place during intrusive construction works on other parts of the site. These measures will ensure that there will be no significant adverse effects on archaeology.

NTS.39 There are three conservation areas within 2 km of the site, at Hazel End (900 m to the north), Stansted Mountfitchet (1.8 km to the north east) and Bishop’s Stortford (1 km to the south). There are no direct views of the site from these areas. There are no scheduled monuments on site and only two within 2 km. Stansted Windmill is within the Stansted Mountfitchet conservation area. Waytemore Castle, a medieval Motte and Bailey castle, is within the Bishop’s Stortford conservation area. Neither of these scheduled monuments has views of the site.

NTS.40 Construction traffic will use the A120 and Michaels Road to access the site, so there will be no increase in HGV traffic through the conservation areas. As neither the conservation areas nor the scheduled monuments have direct views of the site, no significant effects are predicted on these designated areas as a result of the proposed development.

NTS.41 There are no listed buildings on site. A total of 147 listed buildings were identified within a 2 km study area, many of which are within the conservation areas discussed above. Two of the listed buildings, Foxdells Farmhouse and The Cottage, have views of the highest points of the site. Both are grade II listed. Foxdells Farmhouse is a mid-19th century farmhouse and barn, approximately 340 m to the south west of the site, and The Cottage is a 17th century timber-framed building, approximately 760 m to the east of the site. The remaining listed buildings in the study area do not have a direct view of the site, as a result of the intervening topography, vegetation and development.

NTS.42 The construction of the proposed development will not directly affect any of the listed buildings. Construction activities will be visible from Foxdells
Farmhouse and The Cottage and will alter the setting of these buildings by changing views towards the site. This will be a temporary slight adverse effect that will not be significant. The replacement of the current setting of open fields to the north east and north west of these buildings respectively with housing will lead to a permanent slight adverse effect that will not be significant. As the site is not visible from the other listed buildings in the vicinity, there will be no significant effects on the setting of these buildings.

NTS.43 The main changes to the historic landscape of the site over time have been alterations to internal field boundaries. The site was formerly common grazing land, which was enclosed in the 19th century and divided into a number of small, irregularly shaped fields. The historic landscape in the vicinity of the site is undesignated and of low value. The loss of the site’s historic landscape as a result of the proposed development will be a slight adverse effect that will not be significant on both the site itself and the character of the surrounding area.

NTS.44 There is the potential for a cumulative effect on the archaeological resource of the local area as a result of the two developments. However, the Bishop’s Stortford North ES includes details of a similar excavation and preservation by record exercise as is proposed above. Overall, a slight, adverse cumulative effect is predicted, which will not be significant.

NTS.45 The Bishop’s Stortford North development will alter the setting of the grade II listed Foxdells Farmhouse by removing the historic relationship between the buildings and their rural and agricultural surroundings. This will remove the potential setting effect from the land at Hazelend Road development identified above. There will be a slight to moderate, significant, adverse cumulative effect on this listed building, but this will be entirely as a result of the Bishop’s Stortford North development.

NTS.46 Overall, a slight to moderate, significant adverse cumulative effect is predicted on the historic buildings resource within the study area. No significant cumulative effects are predicted on scheduled monuments or conservation areas.

Ground conditions

NTS.47 A desk-top study and intrusive investigations were undertaken to establish the potential for existing contamination at the site. The site was in agricultural use on the earliest map from 1876 and has remained in that use. Eight soil samples from the site were analysed for a range of commonly occurring contaminants, but the analysis revealed no evidence of contamination and all the samples were within appropriate limits for development of the site for residential use.

NTS.48 The very low levels of contaminants recorded during the site investigations mean that there are no significant risks to human health or the water environment as a result of contamination, either during or post-construction and no remediation works are required for the development of the site.
Existing contamination levels on the Bishop’s Stortford North site are not known. However, given that it is a greenfield site, the absence of contamination on the land at Hazelend Road site, and the fact that the developers of the Bishop’s Stortford North site would be required to remediate any contamination encountered on site during construction that posed an unacceptable risk to future site users and to implement good construction working practices, no significant cumulative ground conditions effects are predicted during or post-construction.

### Water environment

The water environment assessment focused on the quality and hydrology of surface water and groundwater bodies and the potential flood risk at the site. The issues addressed included potential contamination from surface water runoff from areas of hardstanding, pollution of surface water and groundwater during construction, and the need for a drainage system that could accommodate the increase in runoff associated with increasing the impermeable area of the site by construction of roads and buildings. The potential increases in demand for wastewater treatment capacity and drinking water supply were also examined. The principal surface water bodies assessed were the River Stort adjacent to the east of the site, the Bourne Brook to the west and the drainage ditch in the north of the site.

The drainage strategy has been designed to manage the additional runoff that will result from the proposed development and ensure that flood risk is not increased. Consequently, there will be no significant effects on flood risk from the proposals. The surface water drainage scheme includes the use of measures to minimise pollution levels in runoff and ensure there will be no significant adverse effects on water quality post-construction.

A range of mitigation measures will be put in place through a CEMP to ensure there will be no significant effects on surface water or groundwater quality during construction, in accordance with the Environment Agency’s Pollution Prevention Guidelines. These include the storage of fuels, oils and chemicals in a secure, impermeable bunded compound, regular inspection and maintenance of storage areas, maintenance of construction vehicles to reduce the risk of fuel / oil leaks, and the use of a localised surface water runoff management system to enable the containment of pollutants and sediment.

Thames Water has confirmed that Bishop’s Stortford North Sewage Treatment Works has sufficient capacity to accommodate new development. Foul water from the site will discharge to a new pumping station in the south east of the site from where it will be pumped, via a proposed foul water rising main, to the existing sewer in Rye Street. There will therefore be no significant adverse effects on the capacity of the wastewater treatment network as a result of the proposed development.
NTS.54 The proposed foul water pumping station will include a dual pump system and will incorporate 72 m$^3$ of emergency storage capacity, which will prevent foul water flooding in the event of a blockage or pump failure. The pumping station will be monitored by Thames Water and will include a built-in alarm system that will ensure Thames Water will attend to fix any problems. It will be specified in accordance with national standards and will be maintained by Thames Water, which will minimise the risk of leaks occurring. These measures will ensure that there will be no significant adverse effects on groundwater quality as a result of the pumping station.

NTS.55 Potable water supply in the area is provided by Affinity Water, which has advised that off-site reinforcement will be required to serve the proposed development. This will take the form of approximately 2 km of new water main to connect to the Silver Leys reservoir. It is also proposed to divert the existing water main that runs through the site to run beneath the new access roundabout. These measures will ensure that there will be no significant adverse effects.

NTS.56 It is assumed that the developers of the Bishop’s Stortford North site will be required to implement similar best practice measures to control pollution during construction as those discussed above for the proposed land at Hazelend Road development. As a result, no significant cumulative effects are predicted on the water environment during construction. In addition, the Bishop’s Stortford North proposals include a range of sustainable drainage systems to manage runoff quantity and quality, which will ensure that there will be no significant adverse cumulative effects on the water environment from runoff post-construction.

NTS.57 It is understood that the Bishop’s Stortford Sewage Treatment Works has capacity to cater for discharges from all allocated sites in the area, so no significant cumulative effects are predicted on wastewater treatment capacity in the area. Affinity Water has confirmed that there is sufficient capacity to cater for the extra water supply demand associated with the developments, so no significant cumulative effects are predicted on the water supply network.

Waste

NTS.58 Defra waste management statistics show that 55,531 tonnes of municipal solid waste were generated in East Hertfordshire in 2011/12. Approximately 37% of this was sent to landfill, while the majority of the rest was recycled or composted. No information is available on the amount of waste currently generated on site. However, given the site’s current use, it is likely to consist of relatively small quantities of agricultural waste.

NTS.59 Hertfordshire’s residual municipal solid waste is currently sent to an energy from waste plant in London and four landfills in surrounding counties, with some also disposed of within Hertfordshire at Westmill Landfill Site. Green waste is sent to four composting facilities (two of which are outside the
county) and recyclables are bulked up at Waterdale Waste Transfer Station and several council depots and sent directly to nationwide reprocessing facilities. Westmill Landfill Site has capacity to at least 2020. There are five operators of inert landfills in Hertfordshire that take construction waste, with a total permitted annual capacity of 385,498 tonnes.

NTS.60 A draft site waste management plan will be prepared by the contractor, which will set out the preferred options for storage and management of construction waste and opportunities for minimisation, re-use and recycling where possible. As part of this, a construction waste management system will be implemented to ensure that waste arisings are correctly segregated for re-use and recycling. These measures will enable the majority of construction waste to be re-used and recycled, and there will not be a significant quantity of waste requiring off site disposal.

NTS.61 Post-construction, the main type of waste generated by the proposed development will be municipal solid waste. The estimated annual household waste generation from the scheme represents a 0.8% increase in household waste generation in East Hertfordshire. As a result, no significant effects are predicted on existing waste management capacity.

NTS.62 As at land at Hazelend Road, the Bishop’s Stortford North scheme will be legally required to implement a site waste management plan, which will ensure that the majority of construction waste is re-used or recycled. As a result, no significant cumulative effects on local waste management facilities are predicted during construction. The combined post-construction waste generated per year by the two developments is estimated to equate to approximately 6% of the amount of municipal waste generated in East Hertfordshire. This is a negligible change and there will be no significant cumulative waste effects post-construction.

*Land use and agriculture*

NTS.63 The potential for effects on land uses off site was scoped out of the assessment, as it was considered that a development of the nature and scale proposed would not affect surrounding land uses. Therefore, only on site land uses were considered in the assessment.

NTS.64 The main land use on site is agriculture. A detailed survey of the quality of the agricultural land found that there are 2.8 ha of grade 2 (very good quality), 16.4 ha of grade 3a (good quality), 2.2 ha of grade 3b (moderate quality) and 4.4 ha of grade 4 (poor quality) agricultural land on site. This is typical of the quality of agricultural land on the northern fringes of Bishop’s Stortford. Grades 1 to 3a are collectively classified as ‘best and most versatile’ agricultural land.

NTS.65 There is one public right of way on site. Public footpath “Bishop’s Stortford 063” runs along the eastern edge adjacent to the River Stort. It runs from Michaels Road in the south to the A120 in the north. Outside the site, it connects Michaels Road to Rye Street to the south, while to the north it...
passes under the A120 through an underpass and continues north east to Gipsy Lane.

NTS.66 Construction effects will primarily relate to the progressive loss of agricultural land within the application site. The loss of the site’s agricultural land will be a slight adverse effect that will not be significant. A range of mitigation measures will be put in place during construction to minimise adverse effects on soil resources, including re-using soils on site in gardens, parks, landscape areas and informal green spaces and implementing best practice soil handling and storage procedures. These measures will ensure there will be no significant adverse effects on soil resources.

NTS.67 Post-construction, the proposed development will introduce new residential and public open space land uses to the site. This will be a moderate, significant beneficial effect. The existing public right of way on site will be retained along its present alignment within the proposed riverside park. No significant adverse effects are therefore predicted on public rights of way.

NTS.68 The combined land at Hazelend Road and Bishop’s Stortford North developments will together lead to the loss of an estimated 108 ha of best and most versatile agricultural land. This will be a substantial, significant adverse cumulative effect.

NTS.69 The Bishop’s Stortford North development will lead to the introduction of new residential, commercial, retail, education, community and public open space land uses, in addition to the residential and open space land uses that will be introduced by the land at Hazelend Road proposal. Overall, the change in land use will lead to a moderate, significant, beneficial cumulative effect.

Landscape and visual effects

NTS.70 Desk and field studies were undertaken to evaluate the landscape in and around the site, and to identify potential views and visual receptors. Several were selected to provide representative viewpoints from various locations, which were agreed with East Hertfordshire Council.

NTS.71 The site and surrounding area fall within a number of landscape character areas. These include river valleys, a rural plateau, floodplain meadows and chalk upland. Site area 1 falls within the Bourne Brook Valley character area, which is characterised by a series of shallow valleys and ridges, areas of poor pasture and urban fringe land uses around the edge of Bishop’s Stortford, arable farming adjacent to the boundary with Essex, the A120 lying within cuttings and on embankments and views towards the edge of Bishop’s Stortford. Site area 2 lies within the Stort Meads character area, which is characterised by flat floodplain either side of the river, public open space, grassland, scattered trees and views of Bishop’s Stortford.

NTS.72 The proposed development will lead to a moderate, significant adverse effect on the landscape character of site area 1 as a result of the replacement of
the existing fields with built development. Over time, as the proposed landscape planting matures, and with the implementation of further planting in open spaces, courtyards and along roads at the detailed design stage, this effect will become slight and not significant. There will be a slight, beneficial insignificant effect on the character of site area 2 as a result of the creation of the riverside park. The introduction of new built development onto site area 1 has the potential to affect the rural qualities of local landscape character areas. However, only very small proportions of these character areas will be affected and the proposed development will not be uncharacteristic in the areas as a whole. No significant effects are therefore predicted on these areas.

NTS.73 The potential for effects on the landscape resources and visual receptors was a key consideration in the design of the proposed development. The taller buildings are proposed in lower parts of the site and planting is proposed within the areas of built development to reduce the visible mass of buildings. New structural planting is proposed on the boundaries of site area 1 and within site area 2 to assist in screening the site and integrating the proposals into the countryside. Important views out of the site towards St Michael’s Church and the historic core of Bishop’s Stortford, Hazelend Wood and the countryside to the south east are retained.

NTS.74 The introduction of built development will change views of the site from the surrounding area, with the most significant effect on receptors closest to the site. Visibility of the site is limited to within 2.5 km of the site boundary, so the viewpoints assessed are all within this distance from the site. Substantial, significant adverse effects are predicted on views from Michaels Road, public footpath Bishop’s Stortford 063 to the south west of the site, Hazelend Road and Farnham Road, while substantial to moderate, significant adverse effects are predicted on views from Hazelend Wood, public footpath Bishop’s Stortford 002 to the west of Foxdells Farm and the A120. Through the implementation of measures at the detailed design stage such as designing buildings in accordance with local styles, sensitive use of building materials and colours to minimise visual impacts, careful design of street lighting to minimise light spill and further planting in the proposed residential areas, and as the proposed landscape planting matures over time, these effects will reduce to moderate.

NTS.75 Moderate, significant adverse effects are predicted on views from public footpath PROW 6_11 to the west of Birchanger and bridleway PROW 14_13 outside Walnuttree Cottages. With the measures discussed above in place, and as the proposed landscape planting matures, these effects will reduce to slight and not significant.

NTS.76 The potential for cumulative effects with the Bishop’s Stortford North development was also examined. The Bishop’s Stortford North site lies largely within the Bourne Brook Valley character area, although a small part is within the Hadhams Plateau character area. The presence of the two developments within the Bourne Brook Valley will lead to a substantial, significant, adverse
cumulative effect on this character area as a result of changes to its key characteristics caused by the introduction of built development. A slight, adverse cumulative effect that will not be significant is predicted on the Hadhams Plateau character area, as only a small proportion of the area will be affected. No additional cumulative effects are predicted on the other landscape character areas.

NTS.77 A substantial, significant, adverse cumulative effect on views from the public footpath to the west of Foxdells Farm was identified. However, this will result entirely from the Bishop’s Stortford North development, which will bring built development directly in front of the view and will screen the land at Hazelend Road site. A moderate, significant, adverse cumulative effect is predicted on views from the public footpath to the west of Birchanger. From this viewpoint, the Bishop’s Stortford North development will be visible across the farmland to the east of Hoggate’s Wood, running eastwards to just south of the properties on Farnham Road.

NTS.78 No additional cumulative effects were identified on the remainder of the viewpoints assessed.

Natural heritage

NTS.79 There are no nationally or internationally designated nature conservation sites in the vicinity of the site. Bishop’s Stortford Marsh Local Wildlife Site lies to the north of the A120 and is connected to site area 2 by a footpath under the A120. It is an area of mixed scrub and woodland, with damp areas and wet meadow. The creation of new public open space on site will ensure that there will be no significant effects on Bishop’s Stortford Marsh as a result of increased recreational use post-construction.

NTS.80 Site area 1 comprises a large arable field with limited ecological interest. Small stands of trees occur in the east of this area, which are dominated by sycamore and are of negligible ecological importance. The dry ditch that crosses the north eastern corner of this part of the site is also of negligible importance. There are three hedgerows on site, two along Hazelend Road and one along Farnham Road. All are dominated by hawthorn and of low ecological importance. Site area 2 consists of two grass fields that contain common and widespread species of grass. The River Stort runs along the eastern edge of the site and is bounded by an area of carr woodland. Both of these habitats are of medium importance.

NTS.81 The loss of the arable habitat on site will be a moderate, significant adverse effect. The proposed new landscape planting will mitigate the loss of parts of the existing hedgerows and will increase the amount of semi-natural vegetation on site. Parts of the grassland on site area 2 will be sown with a native wildflower mix to increase species diversity and provide a food source for invertebrates, birds and bats. These new habitats will be a moderate, significant beneficial effect. The proposed balancing pond will provide new habitat for aquatic invertebrates and amphibians and may be used by
breeding birds and foraging bats. This will be a moderate, significant beneficial effect.

NTS.82 The measures to prevent dust generation and water pollution discussed in the air quality and water environment sections above, together with the identification of root protection zones for the trees on site, will prevent damage to retained habitats and pollution of the River Stort during construction.

NTS.83 Protected species surveys recorded small numbers of common and soprano pipistrelle bats foraging in site area 2, particularly within the area of carr woodland along the river. Records on site area 1 were limited and largely associated with Farnham Road. No evidence of bat roosts was recorded on site. The loss of the arable habitat on site will not significantly affect its use by bats, as this habitat is of little value for foraging bats. The new lighting on site will be designed to minimise light spill into the surrounding countryside and will ensure that the foraging areas will not be directly lit. No significant effects are predicted on bats as a result of the proposed development.

NTS.84 Very small numbers of common lizard were recorded alongside the River Stort. A mitigation strategy will be put in place during construction to move reptiles out of the area where the proposed balancing pond is to be constructed. This will ensure there will be no significant adverse effects on reptiles. Artificial hibernation sites and log piles will be created in site area 2 to try to increase the area’s common lizard population. The new wild flower planting will also improve the habitat in this area for reptiles. Overall, a moderate, significant beneficial effect is predicted.

NTS.85 No badger setts were found on site and there was no evidence that badgers use the site for foraging. No signs of water vole, otter or white-clawed crayfish were recorded during surveys of the River Stort. These species were therefore not considered further in the assessment.

NTS.86 During the crayfish survey, a number of bullhead (a type of small fish) were recorded. Bullhead is a European protected species, although it is widespread across England and is a common resident of streams in Hertfordshire. The mitigation measures discussed above to safeguard the River Stort during construction will also ensure that there will be no significant adverse effects on bullhead.

NTS.87 Breeding bird surveys recorded small numbers of breeding skylark, dunnock, starling, linnet, yellowhammer and reed bunting on site. All vegetation clearance prior to construction will be undertaken outside the breeding season. Any work affecting vegetation not cleared during the period from the beginning of September to the end of February will be checked by a suitably qualified ecological prior to the start of works.

NTS.88 The loss of the arable land on site used by breeding skylark will be a substantial, significant adverse effect at the local level. The retained
hedgerows on site will be managed to retain a good structure for breeding birds. Bird boxes will be erected in mature trees within the retained carr woodland and some buildings will incorporate provision for nest sites. Together with the new habitat creation discussed above, these measures will ensure that there will be no significant adverse effects on the other bird species discussed above.

NTS.89 There is limited potential for cumulative construction effects on natural heritage, because the phasing of the two developments will result in the sites being developed in stages over a number of years. Observations of breeding birds on phased developments show that birds will continue to use undeveloped plots for breeding. No significant cumulative effects are therefore envisaged during construction.

NTS.90 Both the land at Hazelend Road and Bishop’s Stortford North developments will lead to the loss of arable land currently used by breeding skylark. Given the total area of suitable breeding habitat to be lost on the two sites, this will be a substantial, significant, adverse cumulative effect at the local level.

NTS.91 As neither the land at Hazelend Road nor the Bishop’s Stortford North assessments identified any significant residual adverse effects on protected species, it is considered that there is no potential for significant cumulative effects.

Noise and vibration

NTS.92 Noise monitoring was undertaken to establish the existing noise environment in the vicinity of the site. The dominant source of noise on site is traffic on the A120, although the background noise also includes contributions from aircraft flying overhead and the nearby railway line to the east.

NTS.93 During the construction process, there is the potential for increased noise from site preparation, earthworks, piling and building activities. A range of best practice mitigation measures will be put in place through a CEMP to minimise noise generation, including the use of silenced plant and equipment, screening plant, the use of quiet working methods and fitting acoustic covers to noisy equipment. In addition, where works occur at the edges of the site, close to sensitive receptors, it is recommended that hoardings be deployed in these areas during the noisiest works. With these measures in place, the potential for significant adverse effects will be greatly reduced, although there is the potential for a slight to moderate, significant adverse effect at receptors on Farnham Road adjacent to the site during the noisiest activities. No significant vibration effects are predicted during construction.

NTS.94 Modelling of post-construction traffic noise levels has shown that the proposed development will lead to an increase in noise of less than 1 dB on local roads, which will not be significant.
Given the close proximity of the two sites, there is the potential for cumulative construction noise effects to occur if the construction periods of the land at Hazelend Road and Bishop’s Stortford North developments overlap. However, similar best practice noise control measures to those discussed above will be put in place during the construction of Bishop’s Stortford North and coordinated monitoring and control of the two sites will ensure that target noise levels are not breached. No significant cumulative construction noise effects are therefore predicted.

Vibration occurring simultaneously from different sites will not combine to result in a higher vibration level at the receptor. However, it is possible that receptors may experience perceptible levels of vibration for longer. It is therefore likely that the cumulative vibration effects will be no worse in absolute terms than the insignificant effects predicted for both sites individually, but the overall exposure time to these insignificant effects may increase.

The traffic noise assessment undertaken by WSP and reported in the Bishop’s Stortford North ES modelled the potential effects of the two developments. The assessment concluded that there will be no significant cumulative effects as a result of increased traffic flows post-construction.

**Traffic and transport**

It is estimated that there will be up to 60 HGV movements per day during the construction phase. Construction vehicles will be restricted to accessing the site via Michaels Road and Stansted Road, moving onto the strategic road network at the A120 / Stansted Road roundabout. There are very few residential receptors adjacent to the route to the site from the A120. An increase of 60 movements per day equates to less than 1% of traffic flows on these roads and there will be no significant effects as a result of this increase. The CEMP will include traffic management measures, such as construction traffic routes, delivery times and proposals to minimise employee vehicle trips.

Junction modelling has shown that the majority of junctions in the vicinity of the site will continue to operate within capacity with the proposed development in place and no significant effects are predicted on the operation of the majority of junctions on the local road network. The only exception is the Stansted Road / Michaels Road junction, which is predicted to operate at capacity in the AM peak. As a result of the increase in traffic flows through this junction, a moderate, significant adverse effect is predicted.

The assessment focused on the community as a sensitive receptor and addressed the traffic and transport effects in terms of changes to pedestrian severance (for example, being unable to cross the road), driver delay and
accident rates that may result from a change in traffic volumes post-construction.

NTS.102 Negligible effects that will not be significant are predicted on pedestrian severance, driver delay and the accident rate at the majority of junctions in the vicinity of the site. The only exception is the Stansted Road / Michaels Road junction, where the increase in traffic flows discussed above is predicted to lead to a moderate, significant adverse effect on driver delay and a slight adverse effect on the accident rate that will not be significant.

NTS.103 As discussed in paragraph NTS13, the proposed development includes provision for a future pedestrian link on Farnham Road and the proposed site access roundabout includes islands to allow pedestrians to cross to the existing footway on Rye Street. Overall, a slight beneficial effect is predicted on pedestrian facilities, which will not be significant. The proposed development is being designed to allow the existing 510 bus service to route through the site and is therefore likely to lead to increased use of bus services in the town.

NTS.104 A draft travel plan has been prepared for the proposed development. Measures to encourage sustainable travel will include provision of a travel information pack to new residents, free bus travel for up to one year for new residents and secure cycle storage.

NTS.105 It is likely that construction traffic for the Bishop’s Stortford North development will access the site from the A120 via either the Hadham Road junction or the new A120 junction, which avoid the construction routes to be used for the land at Hazelend Road development. No significant cumulative effects are therefore predicted during construction.

NTS.106 The cumulative traffic modelling showed significant improvements along the A120, both in terms of reducing queuing and in journey times. There will be an increase in journey times on roads into and within the town centre, but this will not be significant. The new A120 access that is proposed as part of the Bishop’s Stortford development will lead to a minor delay to traffic on this section of the A120 as a result of the need to navigate the new junction. However, there will be substantial reductions in delay on local roads, such as Rye Street, as a result of the new junction, which will also draw some traffic from the land at Hazelend Road development away from the Michaels Road / Stansted Road junction. As a result, there will no longer be significant effects on traffic flows and driver delay at this junction.

NTS.107 A draft mitigation package has been identified from the cumulative assessment, which includes improvements to the A120 / A1250 Hadham Road / A1184 Bishop’s Park Way roundabout, the A120 / B1383 Stansted Road roundabout, the Little Hadham (A120) signalised junction and junction 8 of the M11, and a Smarter Choices campaign to reduce overall traffic levels in Bishop’s Stortford. It is proposed that a proportional contribution will be made to the implementation of these measures through a legal agreement.
Conclusion

NTS.108 This non-technical summary has outlined the findings of the EIA of the proposed sustainable urban extension on land at Hazelend Road, Bishop’s Stortford, contained within the ES that accompanies the planning application. The proposed development will result in a number of changes to the local environment, but a range of measures will be put in place to minimise potential significant adverse effects and enhance beneficial effects. The proposed mitigation measures and the residual effects of the proposals that are predicted to remain after mitigation are summarised in more detail in chapter 14 of the ES.

NTS.109 Copies of the full ES and its technical appendices have been distributed to East Hertfordshire Council. The full documents are available for public inspection during the consultation period at East Hertfordshire Council’s offices at the address below:

East Hertfordshire Council
Wallfields
Pegs Lane
Hertford
SG13 8EQ

NTS.110 Copies of the ES on CD can be purchased from Terence O’Rourke Ltd at a price that reflects the time and production costs. Paper copies may also be available (at printing cost) from Terence O’Rourke Ltd at the following address:

Terence O’Rourke Ltd
Everdene House
Deansleigh Road
Bournemouth
BH7 7DU

Tel: 020 3664 6755
Email: maildesk@torltd.co.uk
LAND AT HAZELEND ROAD, BISHOP’S STORTFORD
ENVIRONMENTAL STATEMENT

Figure NTS2 Master plan