



Uttlesford District Council

Chief Executive: Dawn French

Planning Policy Working Group

Date: Monday, 28 November 2016
Time: 19:00
Venue: Council Chamber
Address: Council Offices, London Road, Saffron Walden, CB11 4ER

Members: Councillors S Barker, P Davies, A Dean, S Harris, J Lodge, J Loughlin, A Mills, E Oliver, J Parry, H Rolfe.

AGENDA

Open to Public and Press

- 1 Apologies for absence and declarations of interest**
To receive any apologies for absence and declarations of interest.
- 2 Minutes of previous meeting** 5 - 10
To receive the minutes of the meeting held on 13 September 2016
- 3 Matters Arising**
To consider matters arising from the minutes
- 4 Great Dunmow Neighbourhood Plan** 11 - 14
To consider whether the Neighbourhood Plan should be made.
- 5 Thaxted Neighbourhood Plan documents** 15 - 20
To received documents in relation to the Thaxted Neighbourhood Plan
- 6 Local Plan evidence base - update** 21 - 132
To receive an update on the Local Plan evidence base

7 Date of next meeting

The next meeting will be held on 10 January 2017

MEETINGS AND THE PUBLIC

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**PLANNING POLICY WORKING GROUP held at COUNCIL OFFICES
LONDON ROAD SAFFRON WALDEN on 13 SEPTEMBER 2016 at 7.00pm**

Present: Councillor H Rolfe – Chairman
Councillors S Barker, J Loughlin, J Lodge, E Oliver, A Mills and J Parry.

Officers in attendance: M Cox (Democratic Services Officer), R Fox (Planning Policy Team Leader), A Gilham (Principle Policy Planner), G Glenday (Assistant Director Planning) and S Wood (Planning and Housing Policy Manager).

PP24 APOLOGIES FOR ABSENCE AND DECLARATION OF INTERESTS

Apologies for absence were received from Councillors Dean, Davies and Harris.

Councillor Barker declared her interest as a member of ECC.

PP25 MINUTES

The minutes of the meeting held on 23 August 2016 were signed by the Chairman as a correct record.

PP26 BUSINESS ARISING

(i) Minute PP23 – Local Plan Timetable

In answer to a question from Councillor Lodge, officers said they would confirm the date when the Air Quality Action plan would be considered by the working group.

PP27 LETTER FROM COUNCILLOR LODGE REGARDING THE DISTRIBUTION STRATEGY

The working group received a copy of a letter that Councillor Lodge had sent to the Leader raising a number of issues around the Local Plan distribution strategy, the preparation timescale and process. The document set out officer's response to the various questions and Councillor Lodge's further comments.

Councillor Lodge highlighted the main issues in his letter. He was concerned about the lack of available evidence to make an informed decision on the spacial strategy. He questioned how officers had arrived at the indicative numbers, in particular the housing numbers for Great Dunmow and Saffron Walden. He felt that there was insufficient time within the plan preparation timetable to do this exercise properly.

Cllr Rolfe said the council's decision on the distribution strategy had included an element of dispersal. This was important for the council to maintain a 5-year land supply, something that had proved to be important at recent appeal decisions. He said there had been a positive response from town and parish councils to the recent letter about possible development sites. All the evidence was being put together systematically and would be in place when the Plan was submitted.

The Planning Policy Team Leader confirmed that the evidence base was nearly complete. All the studies had been commissioned but no allocations would be made until the work was finalised. The numbers set out in the letter to the town/parish councils were indicative but the split of 60/30/10 between single site, main towns and villages was considered to be a logical and reasonable way to proceed.

Councillor Lodge said there was no evidence behind the 750 houses proposed for Saffron Walden and no alternatives suggestions had been put forward. He said any future larger scale development in Saffron Walden would require a workable traffic plan but this had not yet been addressed in the Transport Study. He thought the proposed link road would serve little purpose, it was an east – west link that was required to enable access to facilities.

The Chairman said there was a need for additional housing in Saffron Walden, particularly for affordable units. He also pointed out that Saffron Walden had taken a lower percentage of housing than other areas of the district. Councillor Lodge said that any option for development should be workable and sustainable.

Councillor Lodge said that Braintree DC had decided to delay its Local plan submission by two months and asked if this was an option for Uttlesford. The Assistant Director Planning reminded the working group that the DCLG had given a clear steer that the Plan should be submitted by the end of March 2017, and whilst this was a decision for Members, there would be risks in delaying the submission.

The Planning Policy Team Leader said he would reply fully to Councillor Lodge's letter and a copy would be attached to the minutes of this meeting.

PP28

FEEDBACK FROM MEMBER WORKSHOP

The Assistant Director Planning reported on the Member workshop on 7 September 2016. Members had received an update on the evidence so far, and how this fed into the various possible scenarios. There had also been a presentation on the Transport Study from the consultants and feedback on the town and parish councils' comments on the possible site allocations. The break out session had looked in more detail at the evidence and considered a SWOT analysis of the single settlement options. The Q&A session had helped officers to gauge Members' views on the various options.

He reported that the two appeals for the proposed large developments at Elsenham and West of Great Dunmow had been refused by the Secretary of State. However, the decision had highlighted a number of positives, which served to endorse the evidence for the next stage of the plan.

- The objectively assessed need (AON) for the district was acceptable.
- UDC was performing well in building new homes.
- UDC was able to demonstrate a five-year land supply.

Councillor Lodge said the workshop had been useful and produced some interesting ideas, and asked how this would lead into the next stage of the plan. Councillor Rolfe said the evidence should lead all the decisions and officers were still working on the evidence base. The next stage was to hold public exhibitions in Stansted, Saffron Walden and Dunmow. The next PPWG on 11 October would draw together all the strands and move towards some firm conclusions.

Councillor Loughlin was concerned that Members would be expected to make a decision at the Council meeting on 8 November when they had not been involved in the detailed discussion on the evidence. This was conceded, although all the information was publically available for any member to read.

It was suggested that group leaders should encourage their Members to attend the meeting on 11 October.

PP29

TRANSPORT STUDY

The Principle Policy Planner updated members on the progress of the Transport Study. The consultants had presented a summary to the recent Member workshop but there was still further work to be done, including detailed work on Saffron Walden. He said the purpose of the study was to assist the preparation of the Plan, to address the Inspector's comments in relation to transport matters on the withdrawn Plan, and to consider the likely implications of the alternative options for the spacial distribution of development.

This was a strategic level document, which had not been in place for the previous plan process, but had been requested by ECC and Highways England and had been prepared in accordance with guidance and best practise.

Members asked when the Plan was likely be completed and whether the working group could receive a copy of the study findings so far. Officers said that a number of key highway authorities had yet to comment on the plan, which was the requirement of the Duty to Cooperate. Officers said they would look to get something to members as soon as possible.

PP30

UTTLESFORD DISTRICT COUNCIL RETAIL STUDY UPDATE 2016

The Principle Policy Planner presented the update report to the 2014 Retail Study. This was required to ensure that the latest information was available to inform decisions on the impact on retail centres, and that there was a town centre first approach in line with national policy. The study looked at retail provision up to 2016.

The study set out the district's current position and recommendations for future provision. Councillor Rolfe drew out the main conclusions, which centred on the difference between convenience shopping (everyday items) and comparison shopping (items not purchased on a regular basis). Both Great Dunmow and Saffron Walden required more convenience provision, but it was only Saffron Walden that had capacity for additional floor space for comparison shopping.

Councillor Rolfe reflected on the recent Waitrose refurbishment and the subsequent decline in footfall in Saffron Walden. He thought there might be an argument for another large operator to drive up visits to the town. Officers said there would have to be evidence of increased capacity but agreed to put this question to the consultants.

In answer to a question from Councillor Lodge, it was confirmed that the study had used the Local Plan population projections.

The Chairman said that the council wanted to encourage retail growth in the towns and would work collectively with town/parish councils and the town teams.

The working group NOTED the Retail Study update as part of the evidence base.

PP31

DRAFT LOCAL PLAN CHAPTERS

The working group received the latest Strategic and Development Management Policies for inclusion in the new Local Plan. It set out proposed changes to the text and additional policies under a number of headings. There had been two member workshops that had looked in detail at the policies, and although the exercise was nearly complete there was still work to be done.

Members had a number of questions, and felt it would be helpful to hold a further workshop. It was agreed that this would be arranged and Members would be advised of the date.

PP32

PROJECT PLAN

The working group received the latest version of the Local Plan project plan and risk register.

Councillor Parry said there were a number of reports shown on the plan for this meeting, which had not been considered tonight, and she was very concerned about any resulting slippage in the programme.

Officers apologised that the plan had not been updated but confirmed that the studies were still on track. An updated version of the plan would be circulated to all members.

ACTION POINTS

PP26 - Air Quality Action Plan	To advise members when this would be considered by the working group
PP27- Letter from Councillor Lodge	To attach a copy of the officer's reply to the minutes
PP29 - Transport Study	To provide Members of the working group with a copy of the study.
PP31 - Draft Local Plan Chapters	To arrange a further member workshop.
PP32 - Project Plan	To circulate an updated version of the plan

Response to Councillor Lodge

Distribution Strategy

The indicative numbers for settlement types set out in the letter of 27 July were derived from the hybrid distribution strategy agreed by PPWG, Cabinet and Full Council.

The 2,800 figure for new settlement(s) was based on likely build out rates. This left approximately 1,800 homes to be provided at the towns and villages. Given the relative scale of the towns compared with key villages and type A villages, the need to sustain services and provide appropriate infrastructure etc. it was logical that between 600-750 dwellings be allocated in each of the towns; 30-70 in each of the key villages; and, 10-20 in each of the Type A villages.

Clearly, the final numbers for each settlement type will only be determined once specific allocations have been agreed by Members.

Potential Allocations

The location of the new settlement(s) and allocations has not been predetermined or agreed. There will be a Member Briefing on 11 October before the opportunity for full debate at PPWG on 25 October and Cabinet on 26 October before a final decision is taken at Full Council on 8 November.

Sustainability Appraisal and Alternative Strategies

A Sustainability Appraisal was commissioned at Issues and Options Stage last year. This considered similar potential distribution options to those debated in July this year. A further sustainability appraisal has been undertaken in respect of the potential allocations. The terms of reference for evidence base work such as this are generally a matter for officers.

Air Quality Management Area

Essex County Council is undertaking traffic survey work. Further AQMA testing may be commissioned depending on the findings.

Employment Land Review

There will be opportunities for Members to consider the employment allocations alongside housing allocations at the meetings referred to above.

Transport Study

The transport study was commissioned in November 2015. Its findings were presented to the Member Workshop on 7 September. The terms of reference were not reported to PPWG as this was a technical officer matter.

Retail Study

The retail study was commissioned in March 2016. Its findings were presented to PPWG on 13 September. The terms of reference were not reported to PPWG as this was a technical officer matter.

Water Cycle Study

The refresh of the water cycle study was commissioned on 2 September. The terms of reference were not reported to PPWG as this was a technical officer matter.

Education Strategy

Any formal education strategy is a matter for Essex County Council as education authority and will form part of the Schools Organisation Plan. We will continue to liaise with the County's Infrastructure Delivery Department over education and other requirements.

Committee: Planning Policy Working Group

Agenda Item

Date: 28 November 2016

4

Title: Great Dunmow Neighbourhood Plan

Author: Sarah Nicholas, Senior Planning Officer

Summary

1. The Localism Act 2011 introduced a right for communities to draw up neighbourhood plans. Great Dunmow Town Council, with support and advice from the District Council, has produced a neighbourhood plan which has subsequently undergone a successful examination and referendum. This report considers whether the Great Dunmow Neighbourhood Plan should be made (the Neighbourhood Plan legislation's term for adopted) by the District Council as part of the statutory development plan.
2. A neighbourhood plan, once 'made', forms part of the statutory development plan and sits alongside the Uttlesford Local Plan Adopted 2005. Should planning permission be sought in areas covered by an adopted neighbourhood plan, the application must be determined in accordance with both the neighbourhood plan and the Local Plan.

Recommendations

3. To recommend to Cabinet and to Council that the Great Dunmow Neighbourhood Plan is formally 'made' as part of the statutory development plan for the District.

Financial Implications

4. The examination and referendum were initially funded by Uttlesford District Council at a cost of approximately £6,750 and £8,500 respectively. UDC will be able to claim up to £20,000 funding from DCLG which will cover the cost of the examination and the referendum.

Background Papers

5. .None

Impact

- 6.

Communication/Consultation	The plan has undergone significant community involvement in its preparation
Community Safety	The plan deals with community safety

Equalities	The plan consulted with every resident
Health and Safety	None
Human Rights/Legal Implications	None
Sustainability	The plan deals with sustainability of town
Ward-specific impacts	Great Dunmow North and South
Workforce/Workplace	None

Situation

7. The parish of Great Dunmow was designated a neighbourhood plan area in October 2012. The Neighbourhood Plan group then gathered evidence and undertook significant consultation. Pre-Submission consultation under regulation 14 was undertaken between 19th September and 31st October 2015.
8. The Great Dunmow Neighbourhood Plan was submitted for Examination in April 2016. The examination was conducted via written representations as the examiner decided that a public hearing would not be required. The examiner's report, detailing recommendations was received in June 2016. On the 15 September, Cabinet accepted and endorsed the proposed changes to the Neighbourhood Plan as set out in the Examiner's report and supported the Plan to go forward to referendum.
9. A referendum was held in Great Dunmow parish on Thursday 3 November 2016 posing the following question to eligible voters:

Do you want Uttlesford District Council to use the neighbourhood plan for Great Dunmow to help it decide planning applications in the neighbourhood area?
10. 21% of registered electors recorded votes, 1562 votes were cast of which 1451 were in favour of 'yes' and 111 votes in favour of 'No'. It was therefore declared that more than half of those voting had voted in favour of the Great Dunmow Neighbourhood Plan.
11. In accordance with the Neighbourhood Planning Regulations, following the outcome of the referendum it is now for the District Council to 'make' the neighbourhood plan so that it formally becomes part of the development plan for Uttlesford District.
12. Section 38A of the Planning and Compulsory Purchase Act 2004 (as amended) sets out the requirement for a local planning authority when it comes to making a neighbourhood plan. It is stated that,

“(4) A local planning authority to whom a proposal for the making of a neighbourhood development plan has been made-

(a) must make a neighbourhood development plan to which the proposal relates if in each applicable referendum under that Schedule (as so applied) more than half of those voting have voted in favour of the plan, and

(b) if paragraph (a) applies, must make the plan as soon as reasonably practicable after the referendum is held.

(6) The authority are not to be subject to the duty under subsection (4)(a) if they consider that the making of the plan would breach, or would otherwise be incompatible with, any EU obligation or any of the Convention of the rights (within the meaning of the Human Rights Act 1998).”

13. As a result of the outcome from the referendum and in accordance with the aforementioned legislation the Council is legally required to bring the plan into force following the successful referendum, it is recommended that the plan is formally made by the Council to become part of the development plan for the district and to help determine planning applications in the parish.

Risk Analysis

14.

Risk	Likelihood	Impact	Mitigating actions
That the Neighbourhood Plan is not made	1. Little – members have approved the proposed changes to the Plan following the examination.	The Council will be in breach of its statutory duty under the Town and County Planning Act 1990.	As the legislation concerning the recommendation is quite explicit there is no way of mitigating this risk.

1 = Little or no risk or impact

2 = Some risk or impact – action may be necessary.

3 = Significant risk or impact – action required

4 = Near certainty of risk occurring, catastrophic effect or failure of project.

Committee: Planning Policy Working Group

Agenda Item

Date: 28 November 2016

5

Title: Thaxted Neighbourhood Plan: Evidence Base documents

Author: Sarah Nicholas, Senior Planning Officer

Summary

1. In preparing their Neighbourhood Plan (NP), Thaxted NP Group has commissioned a Heritage Assessment and a Landscape Assessment to help inform the NP. The documents can be viewed on the [Thaxted Neighbourhood Plan website](#). A summary of the documents produced by the Group is appended to this report.
2. The group has asked the Council to include these reports as part of the Council's local plan evidence and take it into account in the local plan process.

Recommendations

3. To note the documents and include them as part of the local plan evidence base.

Financial Implications

4. None

Background Papers

5. The following papers were referred to by the author in the preparation of this report and are available for inspection from the author of the report.

None

Impact

- 6.

Communication/Consultation	These documents will form part of the background studies to support the neighbourhood plan when on consultation.
Community Safety	N/A.
Equalities	N/A
Health and Safety	N/A

Human Rights/Legal Implications	N/A
Sustainability	N/A
Ward-specific impacts	Thaxted and the Eastons
Workforce/Workplace	N/A

Situation

7. Thaxted Neighbourhood Plan Group has commissioned Heritage Consultants, Grove Lewis to undertake a detailed analysis of the importance of heritage views. They considered each of the main approach routes but also views into and out of specific sites where development has been suggested through the District Council's 'Call for Sites'.
8. Liz Lake Associates undertook a comprehensive study of the rural hinterland of the village. The report records the physical form of the landscape but also considers the consequences of development on sixteen parcels of land which can be used to access development suitability.

Risk Analysis

9.

Risk	Likelihood	Impact	Mitigating actions
If the NP evidence is not included and considered in the Local Plan process vital local evidence may be overlooked when allocating sites in the parish.	1 - Low	Delays in adopting the Local Plan	The NP, if 'Made' will become part of the Development Plan. The Council are working with all NP to ensure the Local Plan and NP will be aligned and sharing evidence is part of that process.

1 = Little or no risk or impact

2 = Some risk or impact – action may be necessary.

3 = Significant risk or impact – action required

4 = Near certainty of risk occurring, catastrophic effect or failure of project.

ASSESSMENT OF HERITAGE SETTING – A SUMMARY OF A REPORT BY GROVER LEWIS, AUGUST 2016

THE NEED FOR AN ASSESSMENT

Much has been written about the centre of Thaxted. The importance and the setting of its listed buildings within the Conservation Area is well documented and is in any case, the subject of a detailed character study being undertaken by volunteers as a part of the Neighbourhood Plan evidence gathering.

The importance of two of our most iconic buildings however, the church and the windmill, is as much related to their setting within the wider landscape as it is to their innate architectural quality. Both church and windmill are dominant features in the wider landscape and are seen from just about every approach to the village. In planning for the future of Thaxted it is therefore important to fully understand the relative importance of the various views of our most important buildings, and the Conservation Area within which they sit, in order to assess the impact any new development would have.

THE COMMISSION

Heritage Consultants, Grover Lewis were therefore commissioned to undertake a detailed analysis specifically of the importance of heritage views. They were asked to provide an objective assessment on the wider setting of our key heritage assets based on Historic England guidance and other town planning principles. They were to consider each of the main approach routes but also views into and out of specific sites where development was being contemplated under Uttlesford's Local Plan 'Call for Sites'.

Their report has now been published and is available to view on the Neighbourhood Plan website. This brief summary provides an overview of the approach and findings.

FOCUS

The report focuses principally on the setting of the windmill and the church, these being the two most important heritage features in terms of prominence. It also however considers the potential impact of development on other listed buildings that are on the periphery of the Conservation Area (or beyond it) where these have a visual or functional relationship with a possible development site. Although Grover Lewis's terms of reference do not extend to the area covered by the Conservation Area itself they have expressed a view that the Thaxted Conservation Area gains considerable significance from its setting within the open countryside. This is particularly so on the south and west side where the Conservation Area boundary immediately abuts open fields.

THE APPROACHES TO THE VILLAGE

From Saffron Walden – the church is a dominant feature particularly from the Sampford Road junction, from adjoining footpaths and from a number of other viewpoints along the route. The village itself is largely obscured however, by hedges and 20th century suburban housing.

From Debden – there is a *'very high degree of intervisibility between the Conservation Area and its countryside and its setting'* along this approach to the village. Both the church and the windmill, as well as the URC, are prominent. The juxtaposition of the Conservation Area and the surrounding landscape is a key factor in determining the significance of the Conservation Area on its western side. As you enter the Conservation Area itself the church provides a powerful stop to the vista along Bolford Street.

From Broxtden – a similarly close relationship between the Conservation Area and its surrounding countryside is also apparent on the Park Street entrance. Viewpoints here are

however at a lower level and greater prominence is therefore given to the church and windmill than to the village as a whole. You come across the built environment suddenly and are straight into the Conservation Area. The relationship between the Conservation Area and its rural setting is therefore of considerable importance in views from this direction.

From Dunmow – with limited roadside planting there are fine panoramic views of the village along this route.

From Bardfield – views on entering the village from the Bardfield direction are less spectacular. This is due to the continuous 20th century ribbon development. Similarly, there are no significant outward views or intervisibility between the Conservation Area and the surrounding countryside. There are however powerful views of the church particularly as you get closer to the centre.

From Great Sampford – There are prominent views of the church from some considerable distance out. The Thatcher's Grange development is however intrusive.

ASSESSMENT OF IMPACT

In considering the impact that specific developments would have on heritage setting, an assessment has been carried out related to both the importance or sensitivity of the heritage assets affected and also the scale or severity of the impact. Sensitivity levels are based upon:

High sensitivity – Grade I or Grade II* listed;

Medium sensitivity – Grade II listed;

Low sensitivity – locally listed or non-designated assets.

Scale or severity is then categorised as:

Major; Moderate; Minor; Negligible; or Neutral.

INDIVIDUAL SITES

The sites considered have been numbered in accordance with the numbering given to them in the 'Call for Sites'.

04: Land south of Sampford Road – *'Given the serial nature of the views ... (of the church along Sampford Road)... and taking into account the harmful impact already caused by the Thatcher's Grange/Bellrope Meadow developments, the potential impact on the grade I listed parish church is considered to be major/moderate adverse'.*

17: Land to the east of The Mead – *'Low-rise development would be unlikely to intrude significantly into views...(of the church)'.* Glimpsed roofscapes above the hedges would however sit uncomfortably in views of the church from Sampford Road.

14: Land at Claypits Farm – the replacement of existing buildings with sympathetic new development could enhance the setting of Claypits Farmhouse and the Conservation Area but *'an ill-conceived or over-intensive development would almost certainly harm the setting of both the listed building and the Conservation Area.'* *'Development of the eastern open part of the site would threaten to obscure the fine view of ...the church from a well-used public footpath.'*

15: Land east of Park Street – *'development... would result in a major change to the immediate countryside setting of the Conservation Area at a point that makes a well-defined entrance into the built-up area'.* There would be moderate adverse impact on heritage assets of medium sensitivity.

06: Enclosed Pasture Land opposite Totmans Farm – development would change the openness and verdant character and would adversely impact both the Grade II listed Totmans and the nature of the entrance to the Conservation Area.

08: Land east of Dunmow Road, to the north of Prior's Hall – ‘Development of this substantial rolling tract of open countryside would introduce an alien and incongruous feature that would seriously degrade the setting of...(the church and windmill) ... and the Conservation Area.’

CONCLUSION

Thaxted is considered to be a fine village that has retained its historic character. Its Conservation Area boundary defines well the historic core which is all the more important for its juxtaposition with its surrounding open countryside. Development on any of the potential sites considered could potentially have some degree of adverse impact on the setting of the heritage assets and/or the Conservation Area itself. The only site where development could possibly enhance the setting of heritage assets is 14: Claypits Farm where a sensitive scheme limited to the site of the existing buildings could improve the setting of the farmhouse itself without any significantly detrimental effect on the views of the church.

ASSESSMENT OF LANDSCAPE CHARACTER – A SUMMARY OF A REPORT BY LIZ LAKE ASSOCIATES, SEPTEMBER 2016

THE NEED FOR AN ASSESSMENT

The landscape that surrounds Thaxted is a vital part of its character. Not only does it provide a setting and context for the historic core but it is also important for its own sake. This was highlighted in the recent decision in the Gladman appeal against refusal of permission for development on land adjacent to Walden Road. Recognising this fact, Liz Lake Associates, a specialist firm of Landscape Architects were commissioned to undertake a comprehensive study of the rural hinterland of the village.

Using a combination of desk-top study and fieldwork Liz Lake have produced a report which not only records the physical form of the landscape but also considers the consequences of development on some sixteen different land parcels. The intention is to provide a helpful tool in the formulation of the Neighbourhood Plan which can be used to assess development suitability.

LANDSCAPE REVIEW

First, the report provides us with a comprehensive review of all of the previous studies that have been carried out relating to landscape character in our area from general guidance to regional level assessments, to Thaxted specific analysis. This is set against a background of relevant Town Planning policies and specific designations.

A comprehensive catalogue of photographs (now held on disc in the C.I.C.) was presented to accompany the report and to provide a record of the nature of the landscape as viewed from all principal approach routes into the centre.

GENERAL CONCLUSIONS

In terms of general visual amenity Liz Lake's conclusion is that views from the north-west; west; south-west; south; and south-east are all of particular importance – ***‘Certain views of the nucleated settlement, punctuated by the landmarks of the church and windmill and surrounded by expansive undulating countryside, are exceptional and iconic’.***

From the east; north-east; and north views are ***‘more restricted by intervening topography, vegetation and built-form’.*** Criticism is made against recent development that

has taken place – ***‘In places a harsh urban-rural interface is apparent where recent development abuts the surrounding countryside’.***

INDIVIDUAL PARCELS

Specific analysis of individual sectors is based on sixteen parcels of land defined by common characteristics which are referred to as Local Parish Landscape Character Areas (LPLCAs). The boundaries of each parcel are shown on a map forming a part of an appendix to the Landscape Character report. Each parcel has been considered in terms of its potential to accept future development and pro-formas are attached as an appendix which summarise the individual qualities and characteristics of each parcel. Conclusions are then drawn as to the capacity for development categorised as High; Medium-High; Medium; Low-Medium; or Low.

In the final analysis all parcels are seen to have significant sensitivity and no areas are considered to have a High capacity or even a Medium-High capacity to accommodate development. The areas where development would be least harmful are in the Medium category and these are parcel numbers 5, 12, and 13 (Claypits Farm/Totmans Farm; land beyond The Mead; and the recreation ground respectively). All other parcels are considered to have a very limited capacity to accommodate development.

OBJECTIVES AND POLICIES

To assist in the drafting of the Neighbourhood Plan, recommendations are made as to objectives and policies relating to Landscape. The following general principles are recommended:

Strategy Objectives – To conserve *‘Seek to protect and enhance positive landscape features that are essential in contributing to local distinctiveness and sense of place through effective planning and positive land management measures’.*

Strategy Objectives – To enhance *‘Seek to improve the integrity of the landscape, and reinforce its character, by introducing new and/or enhanced elements where distinctive features or characteristics are absent’.*

Suggestions are then made in relation to landscape planning guidelines specific to each parcel mostly related to the protection of existing views, field patterns, landscape features and, where it would be beneficial, enhancements and improvements (e.g. for Claypits Farm). Suggestions are also made on a parcel-specific basis in relation to land management guidelines. These relate to a large extent, to hedgerow and boundary conservation and the management of ecological structure.

CONCLUSION

Whilst this study only considers development potential from a landscape perspective (ignoring other planning and practical issues such as highways and access, and sustainability) it is clear that Landscape is a highly important factor in considering scope for development. It has been demonstrated what everyone probably knew, that the landscape around Thaxted is special and highly sensitive to change. Viewed in this context, any new development should probably be restricted to the already urban core rather than extending the village further into its surrounding rural fringe.

Evidence – ongoing 26 November 2016	Stage
Habitat regulations	Can only be done once there is a complete plan
SLAA	Was considered by PPWG 16 December 2015. A targeted further call for sites may be warranted.
Sustainability Appraisal	Carried out at issues and options stage. Will need to be carried out at each substantive stage as decisions are made about the proposals to be included in a Draft Local Plan
Air Quality Assessment	Dependent on completion of Saffron Walden transport study.
Gypsy and Traveller Accommodation Assessment	Overview received – attached. Final report still outstanding – date to be confirmed.
Water Cycle Study	Interim report received – attached. Final report will follow once the Draft Plan is available.
Work which has been or is going to be commissioned since local plan pause	Indicative date:
Transport – Various scenarios, Saffron Walden study update from County; Junction 8 etc	<p>The reasons for the pause included issues that indicated that some additional modelling is required. Initial modelling outputs, updated report and technical notes – report due 16 December 2016</p> <p>Once complete, work will start on modelling assessment of J8 by ECC followed by round of discussion with HE – report due end of February 2017.</p>
Strategic Assessment of all SHLA sites and reasonable alternatives	Initial report end December 2016
Update Employment Land Report - update addendum. The report was based on East of England Forecasting Model output published in 2014. New output published in 2016, together with latest market perspectives could have implications for the overall employment land need.	Date to be confirmed

Joint piece of work with Braintree who have commissioned AECOM. Master planning site West of Braintree. Although UDC has not committed to this site the two potential partner authorities are exploring options as part of the duty to cooperate .	Date to be confirmed
Investigate potential of Affordable Housing contributions from sites less than ten dwellings	Date to be confirmed
Review the work undertaken by Level – Affordable Housing Viability Assessment due to length of time since the last report.	Date to be confirmed.
Infrastructure schedule for further scenarios needed. There may also be a need for some additional viability testing once scenarios known or report reworded.	Further work to be commissioned from Pathfinder. Date To be confirmed. Draft documents attached for work carried out to date.
Retail study may need to take account of new numbers/scenarios	Date to be confirmed.
The evidence gathered to date is being reviewed to identify any gaps and the need to potentially update the evidence. An audit is also being undertaken (based on 3 year and 1 year rule set out in PINS Guidance) of the evidence base list. Therefore, additional evidence commissioning may be required.	We should have this information prior to the end of 2016 – potentially sooner. – Evidence base list attached.

Uttlesford GTAA 2016-2033

Summary of Outcomes

Introduction and Methodology

- 1.1 The primary objective of the 2016 Gypsy and Traveller Accommodation Assessment (GTAA) is to provide a robust assessment of current and future need for Gypsy, Traveller and Travelling Showpeople accommodation in Uttlesford. As well as updating previous GTAAs, another key reason for completing the study was the publication of a revised version of Planning Policy for Traveller Sites (PPTS) in August 2015. This included a change to the definition of Travellers for planning purposes.
- 1.2 The GTAA provides a robust and credible evidence base which can be used to aid the implementation of Development Plan policies and the provision of new Gypsy and Traveller pitches and Travelling Showpeople plots for the period up to 2033. This will allow the outcomes of the study to be used to support the different local plan periods for the local authorities that are involved. The outcomes of this study supersede the outcomes of any previous Traveller and Travelling Showpeople Accommodation Needs Assessments completed in Uttlesford.
- 1.3 The GTAA has sought to understand the accommodation needs of the Gypsy, Traveller and Travelling Showpeople population in Uttlesford through a combination of desk-based research and engagement with members of the travelling community living on all known sites. A total of 15 interviews were completed with Gypsies and Travellers and a further 1 was completed with Travelling Showpeople living on authorised and unauthorised sites and yards. Despite extensive efforts to identify them no interviews were completed with a Traveller living in bricks and mortar.
- 1.4 The fieldwork for the study was completed between January and September 2016, which was after the publication of the new Planning Policy for Traveller Sites (PPTS). As a result of this change questions to enable the determination of the travelling status of households were included in the household interviews.
- 1.5 The baseline date for the study is **September 2016**.

Key Findings

Additional Pitch Needs – Gypsies and Travellers

- 1.6 Overall the additional pitch needs for Gypsies and Travellers from 2016-2033 are set out in the tables below. Additional needs are set out for those households that meet the new planning definition of a Gypsy or Traveller, for those 'unknown' households where an interview was not able to be completed (either due to households refusing to be interviewed, or not being present despite 3 visits to each site) who may meet the new planning definition, and for those households that do not meet the new planning definition.

- 1.7 Only the need from those households who meet the new planning definition and from those of the 'unknown' households who subsequently demonstrate that they meet it should be considered as need arising from the GTAA.
- 1.8 The need arising from households that meet the new definition should be addressed through site allocation/intensification/expansion policies.
- 1.9 The Council will need to carefully consider how to address the needs associated with 'unknown' Travellers in Local Plan policies as it is unlikely that all of this need will need to be addressed through the provision of Gypsy or Traveller pitches. In terms of Local Plan policies the Councils should consider the use of a criteria-based policy (as suggested in PPTS) for any unknown households that do provide evidence that they meet the definition.
- 1.10 The need for those households who do not meet the new definition will need to be addressed through other means such as the SHMA.

Addition Need for Uttlesford

- 1.11 There were no Gypsy or Traveller households identified in Uttlesford that meet the new definition, 42 'unknown' households that may meet the new definition and 15 households that do not meet the new definition.
- 1.12 There is **no need for any additional pitches** for households that meet the new definition.
- 1.13 Need for up to 12 additional pitches for 'unknown' households is made up of new household formation of 12 from a maximum of 42 households. This uses the national formation rate of 1.50%¹). If the national average² of 10% were applied this could result in a need for 1-2 additional pitches.
- 1.14 Whilst it does not need to be addressed in the GTAA need for 10 additional pitches for households that do not meet the new definition is made up of 5 concealed households or adults, 1 for a teenager in need of a pitch of their own in the next 5 years, 1 from an unauthorised pitch, and 3 from new household formation. This uses a new household formation rate of 0.80% that has been derived from the household demographics.

Figure 1 – Additional Need for Gypsy and Traveller Households in Uttlesford 2016-2033

Status	Total
Travelling	0
Unknown	0-12
Non-Travelling	10

Figure 2 – Additional Need for 'Travelling' Households in Uttlesford to 2033 by 5 Year Periods

Years	0-5	6-10	11-15	16-17	
	2016-21	2021-26	2026-31	2032-33	Total
	0	0	0	0	0

¹ ORS Technical Note on Household Formation and Growth Rates (August 2015)

² Based on the outcomes of over 1,500 interviews completed by ORS since changes to PPTS

Additional Plot Needs - Travelling Showpeople

- 1.15 There was only 1 Travelling Showperson household identified in Uttlesford and details from the interview that was completed with this household showed that there is no current or future need.

Transit Requirements

- 1.22 It is recommended that whilst there may be relatively high numbers of encampments in some areas, the situation relating to levels of unauthorised encampments should be continually monitored whilst any potential changes associated with the new PPTS develop.
- 1.23 A review of the evidence base relating to unauthorised encampments should be undertaken in autumn 2018 once there is a new 3 year evidence base following the changes to PPTS in August 2015 including attempts to try and identify whether households on encampments meet the new definition. This will establish whether there is a need for investment in more formal transit sites or emergency stopping places.
- 1.24 In the short-term the Council should consider the use of short-term toleration or negotiated stopping agreements to deal with any encampments, as opposed to taking forward an infrastructure-based approach. At this point whilst consideration should also be given as to how to deal with households that do and do not meet the new definition, from a practical point of view it is likely that households on all unauthorised encampments will need to be dealt with in the same way.
- 1.25 The term 'negotiated stopping' is used to describe agreed short term provision for Gypsy and Traveller caravans. It does not describe permanent 'built' transit sites but negotiated agreements which allow caravans to be sited on suitable specific pieces of ground for an agreed and limited period of time, with the provision of limited services such as water, waste disposal and toilets. Agreements are made between the authority and the (temporary) residents regarding expectations on both sides.
- 1.26 Temporary stopping places can be made available at times of increased demand due to fairs or cultural celebrations that are attended by Gypsies and Travellers. A charge may be levied as determined by the local authority although they only need to provide basic facilities including: a cold water supply; portaloos; sewerage disposal point and refuse disposal facilities.



MALINS

Associates Limited

Economic Viability Study

Prepared for

Uttlesford District Council

In relation to

Local Plan New Settlement and Neighbourhood Proposals

May 2016

Revised October 2016

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Section 1

1.0. Introduction

1.1. Malins Associates Limited and Pathfinder Development Consultants have been commissioned by Uttlesford District Council to undertake economic viability assessments on eight New Settlement/Neighbourhood proposals put forward by promoters/developers in the Call for Sites.

1.2. The Uttlesford Local Plan was adopted in 2005. It still forms the basis for making planning decisions within the District alongside the National Planning Policy Framework published in March 2012 and the Planning Practice Guidance but it is becoming increasingly out of date and a replacement plan is being prepared.

1.3. A local development scheme was approved by the Council in February 2016, and is the project plan for producing the new Local Plan. It has three main functions:

- To provide information on the documents the Council intends to prepare together with timescales for preparation.
- To establish the Council's priorities and to allow the Council to programme the work needed to prepare the new plans.
- To set out the timetable for the review of documents.

1.4. In terms of the timetable, it is proposed that the Plan is submitted for public examination in November/December 2016. Following that, and subject to the Inspectors Report, it is anticipated that the Plan will be adopted towards the end of 2017.

1.5. In the Call for Sites, eight proposed New Settlement/Neighbourhood options were submitted to the Council for consideration. If the Council were to promote a New Settlement or Neighbourhood as part of its Local Plan, it would need to have robust evidence that it could be delivered, and could deliver housing throughout the Plan period. The Council therefore commissioned an independent economic viability study.

1.6. This report sets out the methodology and assumptions used to carry out the economic viability assessment of these proposals within the Uttlesford District Council area, and a summary of the findings.

2.0. Context

2.1. The viability study was commissioned as part of the overall process of developing the Uttlesford District Local Plan, which is ongoing.

2.2. This study is part of an evidence base that is required when the Plan is submitted to the Planning Inspectorate. The Council must demonstrate that it has made adequate plans to meet objectively assessed needs for housing and other development within the district as far as is consistent with National Planning Policy. This includes identifying a five year supply of specific deliverable sites.

2.3. New Towns, Eco-Towns, Garden Cities and Garden Villages are all examples of free standing new settlements. In recent years, the concept of New Settlements has become popular. The Council will fully assess the potential for New Settlements in Uttlesford. Alongside this, a number of New Neighbourhoods were also proposed, which will be assessed using the same methodology.

2.4. Those who support New Settlements/Neighbourhoods argue that they are more sustainable because they enable infrastructure to be planned, allow comprehensive master planning and design, and include provision for landscaping and green infrastructure, as well as the provision of a range of community, commercial and employment facilities. They may also have the advantage of taking development pressure off otherwise constrained existing settlements.

2.5. This Economic Viability Appraisal study will look at each of the proposals in isolation, and make recommendations as to their deliverability over the period of the Plan. This information will feed into the evidence base that will form the Local Plan Pre-Submission for public consultation.

3.0. Our approach to this study

3.1. Our overall approach to this study reflects government and industry guidance, takes into account the stage of the process of the Local Plan development within Uttlesford District Council, and the wish of the Council to engage positively with developers, landowners and agents.

3.2. In the Call for Sites, eight New Settlement/Neighbourhood options were submitted to the Council for consideration. The proposed New Settlements and Neighbourhoods are of differing sizes and include residential, commercial, retail and employment uses. All proposals also include infrastructure, community and open space land use. These New Settlements/Neighbourhoods are summarised in Appendix A.

3.3. We developed a bespoke assessment framework for this viability study taking into account Planning Guidance and consideration of the local market conditions and planning policies.

3.4. During February and April 2016 we held a series of meetings with individual promoters specific to this study, at Uttlesford District Council Offices. Appendix B lists the attendees. Those promoters not able to attend consultation meetings were contacted via other means, so that their input was included within the study.

3.5. The purpose of the consultation meetings was to present the proposed methodology and specifically the assumptions that we had included in our bespoke framework, and to listen to feedback from the promoters. That would allow us to amend aspects of the modelling framework if required, before proceeding to use it in the assessment of each site. The meetings allowed us to be transparent about our approach and, as far as possible, ensure that promoters – and others – would understand in due course the basis for the conclusions we would draw on each of the sites assessed.

3.6. At the meetings we presented and discussed with the promoters present a range of issues including:

- Viability theory and definitions of terms used
- Assumptions that we proposed making in relation to:
 - The property types and sizes we anticipate on sites
 - Sales rates
 - Sales values
 - Costs in relation to site acquisition, construction, marketing and sales, finance and how abnormal costs would be taken into account
 - Policies relating to affordable housing and the use of the Strategic Housing Market Assessment (SHMA)
 - Residual and Target Land Values
 - S106 infrastructure costs
- Reasonable adjustments that might be made to achieve viability

3.7. Promoters attending the meetings were able to question us and put forward ideas on the day. They were also offered the opportunity to come back to us with further information - particularly important to allow for submission and consideration of commercially sensitive or confidential information.

3.8. As a result of the feedback we reviewed and adjusted some assumptions. Specifically we:

- Amended the % assumed for plot external costs
- Amended the % assumed for site wide costs
- Clarified the definition of net and gross developable areas
- Clarified what is included in the base build cost and clarified that an element for overhead and profit is allowed for, albeit separately, rather than as part of the base building costs
- Increased the margin between the residual land value and the Target Land Value (as defined further in 8.2) to give additional comfort
- Reviewed the profit we were proposing on Gross Development Value (following feedback from one promoter). Having also reviewed previous Inspector's decisions in regard to this matter, we did not make any changes to the industry accepted 20%.

3.9. This input from promoters is therefore reflected in the assumptions and methodology set out in detail in Section 2 of this report.

3.10. Finally we individually assessed each of the proposals which had been identified for inclusion in the submission to the Planning Inspectorate following the Preferred Options consultation (as detailed in Appendix A).

4.0. The scope of this report

4.1. This is a summary report. It sets out the key guidance and standard methodology that should be used in any viability study. It explains the specific assumptions we have made for this study in drawing up a bespoke modelling framework for sites within Uttlesford District Council, and the sources and rationale for those assumptions.

4.2. This report summarises the findings of the assessment. This sets out, on a site specific basis whether a site is considered viable (and on what terms), or not viable. It includes caveats as appropriate.

4.3. Although the report includes assumed figures for build costs and land /property values etc. it does not include the detailed data sets or information that sit behind those assumptions. Nor does the report include actual calculations/spreadsheets for each site. This information is considered to be technical or overly detailed for publication and is likely to contain confidential/commercially sensitive information provided in confidence.

4.4. Limitations

4.4.1. This report does not constitute a formal 'Red Book' valuation (RICS Valuation - Professional Standards, March 2012) or should not be relied upon as such. It is a viability study carried out in line with RICS guidance note, Financial Viability in Planning 2012. Specifically, it should be noted that viability assessments of each site and conclusions detailed in Section 3 of this report, were carried out on the basis of a broad based study, given the limited detailed site information available. This report is confidential to the Client and the authors accept no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

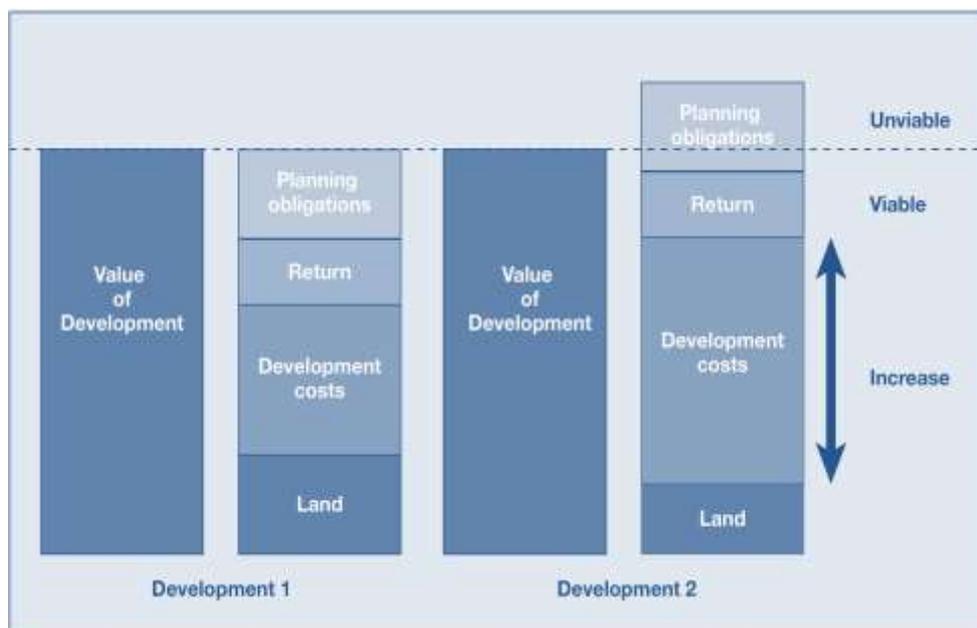
Section 2

5.0. Standard Methodology in assessing viability

5.1. Economic Viability Analysis (EVA) is based upon a residual land value calculation, supported by a design and build cost estimate in as much detail as possible, and a scheme cash flow plotting the pattern of likely cash spend and income to generate interest on development finance.

5.2. The difference between gross development value and total cost equates to a residual land value. The model runs over a development period from the date of commencement of the project, to completion when the development has been constructed, sold and occupied. In order to assess whether a development scheme can be regarded as economically viable, it is necessary to compare residual land values produced with target land values. If the development proposal generates a residual land value that is higher than the target land value for the scheme, it can generally be regarded as economically viable and therefore deliverable. However, if the scheme generates a residual land value which is lower than the target, it should not be deemed as economically viable (as illustrated in Diagram 1 below). The standard convention of working with current values and costs is used rather than those predicted in the future.

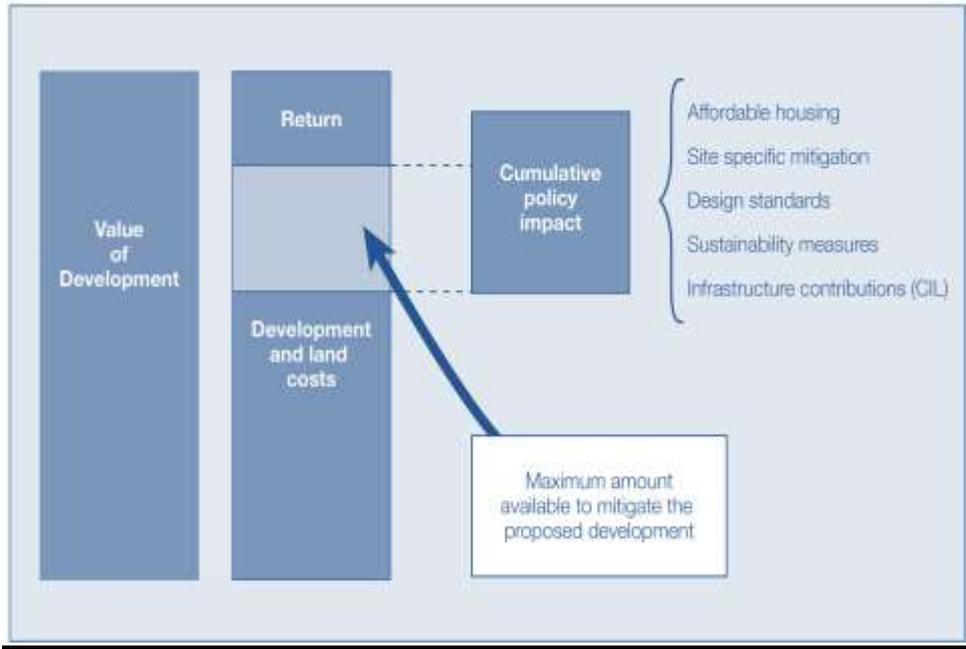
Diagram 1 - Comparative development viability



5.3. Diagram 1 illustrates the balance required to achieve a viable scheme – Development 1. It also shows how a scheme becomes unviable where there are increased development costs, due to site considerations, along with planning obligations – Development 2.

5.4. A viability assessment will have regard to not just single policy impacts but a cumulative impact of policy and planning obligations as illustrated in Diagram 2.

Diagram 2 - Cumulative impact of policy and planning obligations



6.0. Planning Guidance

6.1. There is strong policy background detailing the objectives and methodology for undertaking Economic Viability Assessments. This includes:

6.1.1. In the context of achieving sustainable development the National Planning Policy Framework (NPPF) March 2012, refers to ensuring viability and deliverability at sections 173 – 177.

“To ensure viability, the cost of any requirement likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions and other requirements should, when taking into account the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable a development to be deliverable.” (Paragraph 173)

6.1.2. The NPPF also refers to the use of Planning Conditions and obligations of Sections 203-206 and advises that where obligations are being sought:

“...local planning authorities should take account of changes in market conditions over time and wherever appropriate be sufficiently flexible to prevent planned development being stalled.” (Paragraph 205)

6.1.3. The National Planning Practice Guidance notes:

“A competitive return for the land owner is the price at which a reasonable land owner would be willing to sell their land for the development. The price will need to provide an incentive for the land owner to sell in comparison with the other options available. Those options may include the current use value of the land or its value for a realistic alternative use that complies with planning policy.”

6.1.4. The Royal Institution of Chartered Surveyors (RICS) has produced a guidance note, Financial Viability in Planning (August 2012). This is now being referred to by planning inspectors in appealed decisions. The RICS guidance note defines viability and the context of undertaking appraisals of financial viability for the purpose of town planning decisions as:

“An objective financial viability test of the ability of a development project to meet its costs including the costs of planning obligations, by ensuring an appropriate site value for the land owner at a market risk adjusted return to the developer in delivering that project.”

6.1.5. The guidance goes on to note:

“site value should equate to the market value subject to the following assumption: that the value has regard to the development plan policies and all other material planning considerations and disregard that which is contrary to the development plan.”

6.1.6. Any assessment of site value however will have regard to prospective planning obligations, and the point of the viability appraisal is to assess the extent of these potential obligations and also have regard to the prevailing property market. The fundamental issue in considering viability assessments in a town planning context is whether an otherwise viable development is made unviable by the extent of planning obligations and other requirements.

6.1.7. The RICS guidance emphasises that a proper understanding of financial viability is essential in ensuring that:

- Land is willingly released for development by land owners
- Developers are capable of obtaining an appropriate market risk adjusted return for delivering the proposed development.
- The proposed development is capable of securing funding

6.1.8. Where planning obligation liabilities reduce the site value to the landowner and return to the developer below an appropriate level, land will not be released and therefore development will not take place.

6.1.9. In their April 2012 topic paper practice note, the Homes and Community Agency (HCA) Advisory Team for Large Applications (ATLAS) Team note:

“The issue of viability is a material consideration in decision making. The weighting attached to it needs to be balanced with the circumstances of any specific project, the underlined policy basis and all the other relevant material planning considerations. In the current economic climate, when project viability is often a key barrier preventing development from proceeding and potentially hindering its ability to meet all established policy objectives, it is critical...(have a good understanding of the use of financial appraisals to test viability)”.

6.1.10. The Department for Communities and Local Government (DCLG) publication “Section 106 affordable housing requirements – Review and Appeal, April 2013” notes the following:

- The test for viability is that the evidence indicates that the current cost of building out the entire site (at today’s prices) is at a level that would enable the developer to sell all the market units on the site (in today’s market) at a rate of build out evidenced by the developer, and make a competitive return to a willing developer and a willing landowner.
- Any purchase price used should be benchmarked against both market values and sale prices of comparable sites in the locality.

7.0. Assumptions used in our modelling framework

7.1. The inputs for viability appraisals are hard to determine at an early stage for specific proposed site allocations as they are generally without the benefit of detailed designs, surveys or enquiries undertaken by the developer (as demonstrated by the complexity of many S106 negotiations). Therefore our viability assessments are necessarily broad approximations, subject to a margin of uncertainty.

7.2. The assumptions are primarily made in the context that the majority land use of the sites proposed, are for residential development. In 7.8 below we set out the specific assumptions we have made in respect of commercial use (and commercial elements within other sites); related caveats to the assessment of commercial sites are also included in the conclusions section of this report. The assumptions below take into account feedback from promoters at the consultation workshop as set out in 3.8 above.

7.3. Property Type and Sizes

Diagram 3 sets out the number of homes, bedroom size and gross internal floor area we expect to see on a typical residential site. The market dwelling sizes align with discussions held with developers/promoters at our consultation events. The affordable dwelling sizes align with the DCLG Nationally Described Standards. The proportion of different house types is in line with data contained within the Strategic Housing Market Assessment (SHMA) September 2015.

Diagram 3 – Property Types and Sizes for a typical phase of 100 dwellings

	Market Housing	ART	Shared Ownership	Total
1 Bed Flat GIFA m2	46	50	50	
Number	2	4	2	8
Total GIFA m2	92	200	100	392
2 Bed Flat GIFA m2	55	70	70	
Number	0	4	0	4
Total GIFA m2	0	280	0	280
2 Bed House GIFA m2	74	79	79	
Number	5	8	5	18
Total GIFA m2	370	632	395	1397
3 Bed House GIFA m2	85	93	93	
Number	26	10	5	41
Total GIFA m2	2210	930	465	3605
4 Bed House GIFA m2	130	106	106	
Number	19	2	0	21
Total GIFA m2	2470	212	0	2682
5 Bed House GIFA m2	150			
Number	8	0	0	8
Total GIFA m2	1200	0	0	1200
Total Homes	60	28	12	100
Total GIFA m2	6342	2254	960	9556

7.4. Gross Development Value

7.4.1. For open market properties we have assumed sales values based on postcode averages for the last 12 months, less a maximum of a 5% discount. This to represent risk associated with build volumes and uncertainty in developing new communities and is applied to new build sales prices being achieved, where sales data indicates that this is appropriate. The key sources for this information were Rightmove, Zoopla, and Land Registry data.

7.4.2. Values used for affordable housing are based on market rates over the last 12 months – we have evidence of these rates through our close working with Registered Providers who are active in the area, and notional offer prices received from them.

7.5. Gross Development Costs

7.5.1. Site Acquisition Costs

We have included site acquisition costs to cover agent and legal fees at a total of 2% of the residual land value. Stamp duty at the prevailing rate has been allowed for, calculated on the residual value.

7.5.2. Construction Costs

We have assumed that all design costs (site survey, architecture, engineering, planning consultant and fees), are included within the design and build cost.

Base build costs have utilised the location adjusted *Building Cost Information Service (BCIS)* data, with a 25% enhancement for external works. We have not deducted an allowance for a contractor's profit contained within base BCIS costings but have, separately, also allowed for overhead and profit elsewhere. This represents an additional 6 - 10% uplift on base prices to cover plot external costs.

Rates used are adjusted to reflect the location factor for Uttlesford and are at the higher, mean level for estate housing. (Significant evidence exists on larger developments that volume house builders' rates are lower than this due to the economies they deliver - we have not taken this into account).

7.5.3. Abnormal and Additional Construction Costs

Abnormal costs have been allowed for in line with detailed information made available by individual developers/promoters. Contingency costs have been allowed for at a rate of 5%.

7.5.4. Design & Professional Fees

Allowances have been included to cover all design and professional fees, at 7.5%. This is in the middle of the standard range of 5 to 10% of fees typically assumed in Economic Viability testing, and takes into account the nature of the development.

7.5.5. Labour Uplift

Uttlesford is geographically placed between the buoyant construction markets of Cambridge and London, both within commuting distance for labour. BCIS rates in North London are in excess of 20% higher than Uttlesford, which must be attributed to labour costs. Considerable concern exists due to the combination of proximity to these markets and well-publicised labour shortages and the aging workforce.

Due to this we believe it prudent to allow for an uplift to BCIS rates for large projects which will require relatively large labour forces. An uplift of 5% is therefore viewed as prudent.

7.5.6. S106 Contributions

S106 contributions have been allowed for in line with detailed advice received from Essex County Council. This advice reflects the infrastructure requirements of New Settlements/Neighbourhoods. Appendix C contains the S106 and Infrastructure Schedule in relation to these proposals.

For each scheme, we have considered a typical phase of 100 homes:

- An average phase spreading all costs evenly, with a residual land value, which if viable should be no less than the target land value.
- An early phase delivered in the first 35% of the development, where S106 contributions are much higher than the average, enabling the early delivery of infrastructure.
- A later phase of the development, occurring in the last third of the development, with much lower S106 contributions. This generates land values considerably in excess of the target.

The key is to ensure that early phases break even with a notional land value, which may require delivery timescales for infrastructure being slightly delayed or staggered, in comparison to advice received from ECC. For most infrastructure items, as advised by ECC, an indicative cost was provided. We have appraised schemes with these indicative costs. There are a small number of items where costs are not available, where we have assumed a notional additional contribution of £5,000 per dwelling, which we have also appraised.

7.5.7. Marketing and Sales Costs

We have adopted full marketing sales and disposals costs within the appraisal, including:

- Marketing costs of the private properties
- Agent's fees
- Legal fees associated with private sales

On this basis we have assumed a sales and marketing cost of 2.75% of the gross development value of the open market sales properties plus £600.00 per property for legal fees. For affordable housing we have assumed agent fees of £1,500 for the scheme with legal costs at the same level as market value sales.

7.5.8. Finance Costs.

Where development finance is available, lenders are currently charging minimum rates of at least 7%. Arrangement (1%), monitoring (2%) and exit fees (1%) are also charged. These onerous lending terms persist due to on-going resistance to lending on residential development in the current market. We have adopted an interest rate of 7% with no additional allowance for fees, which we consider to be a standard assumption for development in the current economic climate.

It is conventional to assume finance on all costs in order to reflect the opportunity cost (or, in some cases, the actual cost) of committing equity to the project.

7.6. Development Programme

7.6.1. For the purpose on undertaking the Economic Viability Assessment only, we have assumed that a standard development phase of 100 homes, occurs over a 24 month period with the land being acquired in month one, and construction taking 23 months.

7.6.2. We have assumed sales of open market homes occur from month 13 to month 24 on an even basis (at approximately a rate of 5 sales per month). The rate of sales directly links to the assumed sales prices of individual homes. Affordable housing development assumes payment over a 9 month contract, commencing once initial infrastructure is in place.

7.6.3. These assumptions are particularly important in the calculation of development interest. The accounting for development interest on the land acquisition is from month one of the programme, not allowing for any historic holding costs of the site, in line with best practice.

7.7. Overhead & Profit

7.7.1. When considering the changing economic climate, financial institutions have tightened their requirements for overhead and profit returns on all schemes. Banks have raised their expectations in terms of risk and required returns that new developments offer. It is currently deemed likely that any private residential development proposals predicting an overhead and profit return of less than between 17.5% and 25% of gross development value would not be considered viable. We have therefore adopted an overhead and profit rate of 20% of gross development value for the scheme, at the midpoint of the acceptable range.

7.7.2. As affordable housing contains less commercial risk, typically with a JCT Design & Build Contract or a Development Agreement being signed at the commencement of works, and monthly valuations of construction work, borrowing and risk are reduced and so lower levels of overhead and profit are the norm. We have therefore allowed an overhead and profit of 6% in relation to the delivery of affordable housing.

7.7.3. At the planning appeal for Shinfield, Reading (APP/X0360/A/12/2179141) the inspector deemed that “the usual target being in the range 20-25%” of gross development value. We have therefore adopted an overhead and profit rate of 20% of gross development value for the scheme, at the bottom of the acceptable range. This is in line with the recent appeal decision Chapel St Leonards APP/D2510/Q/14/2228037 noting that this level of return is reasonable.

7.8. Assumptions used in assessing employment elements

7.8.1. Paragraphs 7.1 to 7.7 above set out the assumptions we used in relation to the assessment of the residential sites. We have used a different set of assumptions for the

commercial sites (and commercial elements within other sites) which are standard to the Commercial Development Industry:

- The net developable area per hectare = 80% of the gross developable area per hectare
- Of the net developable area per hectare – 60% is floor area (GIFA) and 40% is for car parking/ yards / planting etc.
- Of the 60% floor area – 15% is for office use; 85% is for commercial units
- The Target Land Value per net development hectare is assumed to be £500,000
- Gross Development Value for offices is £160 per annum per m²; for commercial units £80 per annum per m²
- For investment purposes – Year's Purchase @ an assumed 8% interest rate
- Build costs for offices - £1,312 per m² and for commercial units £665 per m²
- 5% contingency
- 10% design fees
- 10% letting agents fees
- 5% legal fees for letting
- Interest rate of 6.5% on capital employed
- Profit of 18% of Gross Development Value

7.9. Assumptions for assessing retail elements

7.9.1. The retail element is being based on comparable evidence from similar projects in the Region, rather than on a residual basis. The rationale being that schemes are not sufficiently worked up in detail, with retail uses ranging from small individual shops to big super stores depending on the requirements of the area.

8.0. Methods for Assessing Land Values

8.1. Overview

8.1.1 The minimum land value judged as capable of ensuring a site is brought forward is important in our calculations of scheme viability.

8.1.2. As noted in 6.1.1 Para 173 – 177 of the NPPF notes that developments should *“provide competitive returns to a willing land owner and willing developer to enable a development to be deliverable.”*

8.1.3. The ‘Harman Report’ (June 2012) notes that Threshold Land Value (TLV) should represent the value at which a typical willing landowner is likely to release land for development. The report notes that TLV needs to take account of the fact that future plan policy requirements will have an impact on and values and landowner expectations.

8.1.4. Market values provide a useful ‘sense check’ on the TLV, but ‘Harman’ recommends an approach based on a premium over current use values and credible alternative use values.

8.1.5. The report goes on to note that if local market evidence shows that minimum price provisions are substantially in excess of initial assumptions, the TLV will require adjusting to reflect market evidence.

8.1.6. The RICS report 'Financial Viability in Planning,' defines Benchmark Land Values (BLV) as equating to the market value, subject to having regard to development plan policies and other material planning considerations and disregards that which is contrary to the Local Plan. It goes on to note for area wide viability testing, site value may need to be further adjusted to reflect emerging policy, at a level, which would not prejudice delivery.

8.1.7. The report also notes the BLV must be at a level which makes a landowner willing to sell. Comparable evidence is important in establishing BLV for scheme specific **as well** as area wide assessments.

8.1.8. It is common to refer to both Threshold Land Value (TLV) and Benchmark Land Values (BLV), as terms that are often interchangeable. For the sake of clarity and to avoid confusion, we have sought to differentiate these two terms, with a degree of clarity that perhaps goes beyond the intent of the authors of the reports referred to above which is in line with increasingly commonly used practice.

- TLV – Value at which a typical willing landowner is likely to release land for development, and based typically on existing use value plus a premium
- BLV – Market value subject to considering planning policy and based on market evidence.

8.1.9. In this context we note the Examiner's report in relation to Greater Norwich Development Partnership CIL charging schedule (December 2012)

"...it is necessary to establish a threshold land value i.e. the value at which a typical willing landowner is likely to release land for development. Based on market experience...a landowner would expect to receive at least 75% of the benchmark value... It is reasonable to see a 25% reduction in benchmark values as the maximum that should be used..."

8.1.10. This approach was also uncontested and accepted at the Sandwell CIL examination in July 2014. In short if land trades today at the BLV, the TLV should be no less than 75% of this.

8.2. Determining the land value

8.2.1. In assessing viability we want to establish a **Target Land Value** that is appropriate in ensuring landowners receive a competitive return (as distinct the separate approaches adopted in setting Threshold Land Value (TLV) or Benchmark Land Value (BLV)).

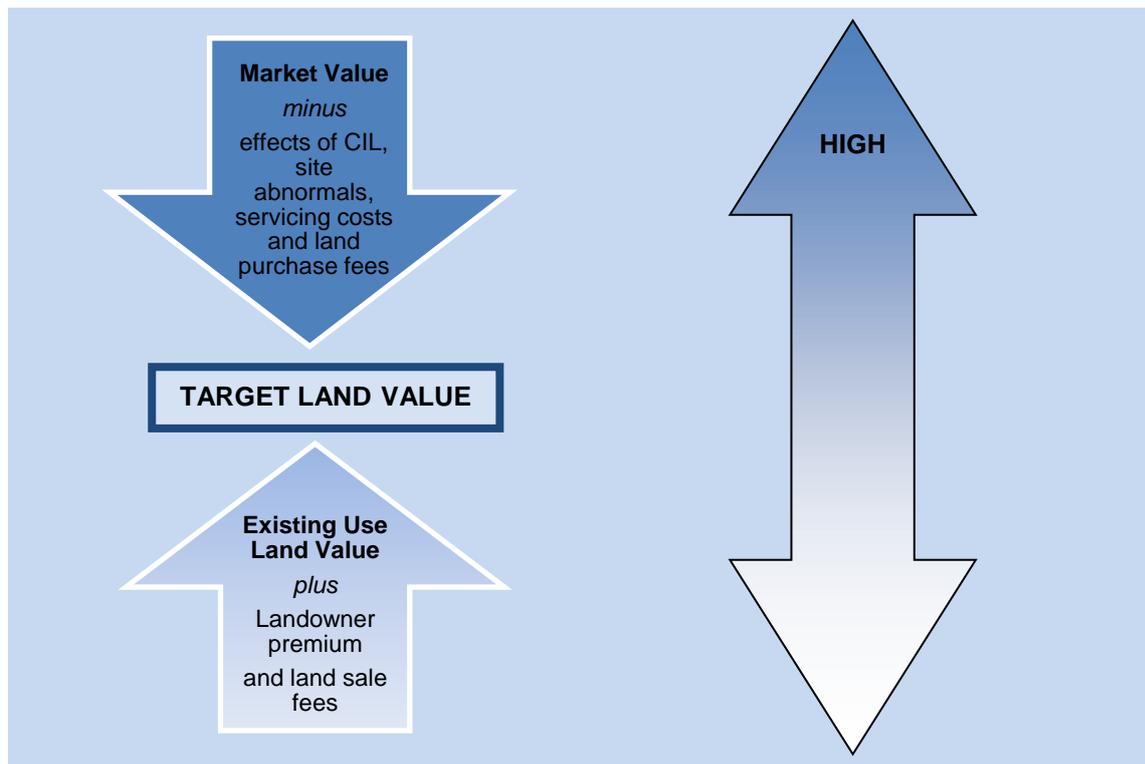
8.2.2. Broadly speaking there are two different approaches to arrive at an appropriate Target Land Value:

- Assessing the uplift from an existing or known alternative use value - TLV.
- Assessing the discount from the market value of a site, adjusted to allow for the costs

of planning policy - BLV.

8.2.3. Diagram 4 illustrates how the two approaches start from different bases, but should theoretically produce a similar figure.

Diagram 4 – Approaches to arriving at a Target Land Value



8.2.4. A further explanation, along with the issues to take into account when considering both Threshold Land Values (TLV) and Benchmark Land Values, are set out in 8.3 and 8.4 below before returning to the issue of how the Target Land Value is determined.

8.3. Threshold Land Values (TLV)

8.3.1. To derive an appropriate TLV from the existing use value, it is necessary to work upwards in value. Harman and the RICS acknowledge that in order for development to come forward over the existing use, a 'competitive return' (also referred to as a premium) is necessary.

8.3.2. There is no set rule as to how much of a premium should be applied on top of the existing use value. We can sensibly expect that a minimum uplift in value would be required in order to allow the seller to pay stamp duty, sales fees, legal costs and disruption. But that bare minimum is usually not incentive enough to persuade a landowner to sell.

8.3.3. Beyond that bare minimum, an incentive (referred to as a 'premium') is required to encourage the landowner to sell. It is difficult to say what premium a seller would require in

order to sell the land. This is because there are inevitable differences in each deal. For example, the motivations of the parties involved in the transaction may vary, as might perceptions of future market prospects. Some landowners (say family trusts, or Oxbridge Colleges) take a very long-term view of land holdings, and can only be persuaded to sell at a high price. We cannot know these individual circumstances, so Harman stipulates that an appropriate premium should be determined by local precedent - another way of saying market value.

8.3.4. In some instances an alternative use may be considered over residential development, e.g. employment, retail etc. Assuming that the alternative use is realistic, then it may be prudent to consider land values for this alternative use, in addition to its existing use. This may give a more accurate view of the TLV, because a rational landowner will always seek to maximise site value.

8.3.5. Regarding existing use values, sites coming forward for development in can typically comprise green field sites. Guidance issued by the HCA in "Transparent Assumptions: Guidance for the Area Wide Viability Model" 2010 states that for green field land, benchmarks tend to be in a range of 10 to 20 times agricultural value. In Knight Frank's report, *The Rural Report*, Winter 2014, typical agricultural land value per hectare, in the East of England, are noted as being £25,946. This would give a TLV of between £259,460 per hectare and £518,920 per hectare.

8.3.6. As well as the *existing* use of the site, credible *alternative* uses should also be taken into account. Should an alternative use derive a higher land value, it is logical that a landowner would seek this higher value.

8.3.7. The alternative use depends on planning policy to a good degree. If a landowner knows that his site appears (or is likely to appear) in the development plan for residential land, he or she would only sell for this value (if greater than the existing use). The alternative use value sought will be particularly high in areas where the landowner is aware that high sales values for residential properties make land particularly valuable.

8.3.8. If sites in Uttlesford District Council area have a realistic alternative use value for residential development (having been allocated in the emerging Local Plan) then landowners will anticipate this is the value sought for the site. We do not foresee other use types coming forward on the sites. In the Uttlesford District Council area land values for residential development are higher than the existing use values; it is therefore prudent to also understand market values, as described in greater detail in 8.5 below.

8.4. Benchmark Land Value

8.4.1. To derive an appropriate BLV from market values (as opposed to existing land use value) it is necessary to work downwards in value. Market values based on transactional evidence of sites being bought and sold, represents the value at which land can be delivered, with the knowledge of current planning policy. Thus BLV benefits from being

based on comparable market evidence.

8.4.2. However, the BLV cannot be straightforwardly derived from current market values. The market value / BLV should be adjusted to allow for any future changes in planning policy. Furthermore, it may also be necessary to reduce the market value / BLV to allow for risk in obtaining planning permission, dependent upon comparable evidence. There is no set rule for the amount of discount that should be applied to the market value of a site.

8.4.3. This market comparable based approach considers land traded in the area. This market performance will inform landowners' 'hope values' for sites. After adjustment for various factors (such as time and various flavours of risk, such as whether the land had planning permission), we can start to make judgments about how comparable sites might trade.

8.4.4. We have been able to obtain a number of comparables from developers and agents in the area. This information was provided on a confidential basis and therefore the actual comparables used cannot be made available to the public.

8.5. Which method of estimating the land value does this study use?

8.5.1 We seek to determine a Target Land Value used to compare to Residual Land Values (RLV) on site specific proposals as outlined below, using a combination of both methods (i.e. a combination of TLV and BLV).

8.5.2. We examined a wide range of comparables, looking at residential development site values whilst taking into consideration existing uses. This is to ensure that the Target Land Value is as accurate as possible. Given the complexities of development across a whole plan area, and limited nature of publically available transactional data, we have based this assessment on appropriate available evidence for a strategic assessment of this nature.

8.5.3. From our recent work we would highlight several key issues in assessing the land value, as follows.

- It is important to stress that there is no single Target Land Value at which land will come forward for development. Much depends on the land owner and their need to sell or wait in the hope that land values might improve and on the condition and location of the site.
- All sites vary in terms of the degree to which they are serviced or free of abnormal development conditions. Such associated costs vary considerably from site to site and it is difficult to adopt a generic figure with any degree of accuracy. Our starting point is to assume that the value of sites relates to a fully serviced development plot.

8.5.4. The land transaction market is not transparent. Very little data is in the public domain and the subjective influences behind the deal are usually not available. We have therefore placed a strong emphasis on consultation with both landowners and developers to get as accurate a picture as possible as to what the Target Land Value might be, as well as data supplied by developers in making viability arguments to the council on site specific cases at

a development control level.

8.6. Treatment of site abnormal development costs

8.6.1. Abnormal development costs or site servicing costs will be met by developers once the land is purchased. Careful analysis of transactions is required to assess the split between abnormal development and servicing costs (as a discount from the market value) from the premium sought by the land owner above the existing use value, or adjustments to the benchmark value to reflect the additional costs.

8.6.2. In short, sites with significant abnormal costs (contamination remediation, poor ground condition and exceptional servicing costs etc.), would lead to these costs being deducted from a BLV, or result in a lower premium for a TLV.

8.7. Bringing together the Target Land Value and the Residual Land Value

8.7.1. Having estimated the residual value on individual schemes, we compare this residual value with the Target Land Value the landowner will accept to release his or her land for the development.

8.7.2. If the residual land value shown by the appraisals is below the Target Land Value, the development is not financially viable. That means that unless the circumstances change the development will not be delivered. We have considered if a reduced affordable housing requirement would lead to viability in such circumstances.

8.7.3. If the residual value and the Target Land Value are equal, or if the residual value exceeds the Target Land Value, the development is viable.

8.8. Setting a Target Land Value

8.8.1. Having observed market transactions, the RICS guidance paper notes that we need to deduct an amount in order to take account of policy requirements.

8.8.2. The Inspector in the report on the examination of the London Mayoral CIL (January 2012) commented:

'Finally the price paid for development land may be reduced. As with profit levels there may be cries that this is unrealistic, but a reduction in development land value is an inherent part of the CIL concept. It may be argued that such a reduction may be all very well in the medium to long term but it is impossible in the short term because of the price already paid/agreed for development land. The difficulty with that argument is that if accepted the prospect of raising funds for infrastructure would be forever receding into the future. In any event in some instances it may be possible for contracts and options to be re-negotiated in the light of the changed circumstances arising from the imposition of CIL charges.' (paragraph 32)

8.8.3. The question, therefore, is how much we should adjust the land value downwards, in order to take account of policy costs such as the continuing requirement for affordable

housing. RICS guidance requires us to comment on the state of the market and delivery targets as at the date of assessment and to set out our 'professional opinion underlying the assumptions adopted'.

8.8.4. If we look at the state of the market, our discussions with developers showed that effective demand for homes (i.e. demand from people willing and able to pay) is relatively strong in the area. However if we over-value land, the RICS report points out that we will reduce the amount available for planning contributions. This was taken into account when suggesting the Target Land Values below.

8.9. Target Land Values used

8.9.1. In suggesting a Target Land Value we are basing it on the gross developable area rather than net¹. We have reviewed the evidence above, and triangulated between existing use value, alternative use value and market value. Using our professional judgement, we believe that a sensible Target Land Value assumption for the area is as follows:

- £250,000 to £350,000 per gross developable hectare

8.9.2. For the commercial sites, we have set the Target Land Value at £500,000 per net hectare (as defined further in the reference footnote to 8.9.1 above)

8.9.3. These land values quoted are a broad average across each value zone. Site specific viability, including dealing with the costs of site specific constraints and landowners individual aspiration on land value, will of course vary. Any site abnormalities which are not reflected in our appraisals should be deducted from the land values assumed.

8.9.4. However, it is acknowledged that there will always be a minimum return that a landowner will require to release a site for development, which may not be sufficient once the cost of abnormalities are deducted.

¹ A net developable area is a more refined estimate than a gross developable and includes only those areas which will be developed for housing and directly associated uses. This will include:

- access roads within the site;
- private garden space;
- car parking areas;
- incidental open space and landscaping; and
- children's play areas where these are to be provided.

It therefore excludes:

- major distributor roads;
- primary schools;
- adult/youth play spaces or other open spaces serving a wider area; and
- significant landscape buffer strips.

We have assumed a net developable area equates to 80% of the equivalent gross developable area. The definition above reflects discussions at the consultation event (see also 3.8)

SECTION 3

9.0. Conclusions – are the sites viable?

9.1. Section 2 of this report sets out the assumptions, methodology and model we used in this study. Each of the 8 sites identified through the Call for Sites process have been assessed within this framework.

9.2. Fundamentally we were looking for the residual land value to be equal to or exceed the Target Land Value to prove the scheme's financial viability.

9.3. As schemes are in the early stage of development, it is consider prudent to allow a 10% buffer so that on an average phase, the residual land value of a viable scheme achieves a minimum of 110% of the target land value. This is to account for the level of uncertainties that still exists relating to the cost of developing these New Settlements/Neighbourhoods.

9.4. Some developers have far more detailed information relating to development and infrastructure costs for their site, resulting in some schemes (with less detailed information) appearing to perform better, but in effect containing more risk due to these uncertainties. It is thought unlikely that this risk will outweigh the higher levels of value shown in our analysis.

9.5. For each scheme, we have considered a typical phase of 100 homes:

- An average phase spreading all costs evenly, with a residual land value, which if viable, should be no less than the target land value.
- An early phase delivered in the first 35% of the development, where S106 contributions are much higher than the average, enabling the early delivery of infrastructure.
- A later phase of the development, occurring in the last third of the development, with much lower S106 contributions. This generates land values considerably in excess of the target.

9.6. The commercial sites were assessed using a different set of assumptions from those used for residential sites (as set out in 7.8 of this report). The assessment concluded that the sites are viable however our view is that they are very sensitive to the market. Our opinion is that development will only occur in the current market if pre-lets at the top end of the range are available. Lower profits may well be acceptable if covenants are strong. These issues are no different from any commercial development in the current market. We have assumed all large infrastructure costs have been carried in their entirety by the residential element of the schemes, due to the sensitive nature of the commercial appraisal. Therefore, as you can see in the results table in 9.8 below, all commercial schemes perform to the same level of viability.

9.7. The retail element is being based on comparable evidence from similar projects in the Region, rather than on a residual basis. The rationale being that schemes are not sufficiently worked up in detail, with retail uses ranging from small individual shops to big super stores depending on the requirements of the area. Due to recent significant changes to the retail market, and in particular food retail, there is considerable uncertainty about the level of land value that can be achieved. For this reason, we have ensured that the Target Land Value can be fully achieved by the residential elements of the developments. Any retail land value will therefore enhance the viability of the developments in addition to that shown in table 9.8 below.

9.8. Table: Residual land value as a percentage of Target Land Value.

The table below shows residual land values as a percentage of Target Land Values. For the average phases, it is essential that the residual land value is in excess of 110% of the Target Land Value, as detailed in 9.3 above. For early phases, which carry the majority of the infrastructure costs, the minimum requirement is to achieve a positive figure. The latter phases should achieve significant land values well in excess of the Target, due to the earlier completion of major infrastructure. This viability assessment has been modelled in current market conditions, and does not take account of enhanced property values on an established development.

	Commercial	Average phase – costed S106 items only	Average phase – costed S106 items plus £5,000 per unit	Early phase in first 35% of development	Latter phase in remainder of development
Chelmer Mead	123%	132%	111%	3%	176%
Andrewsfield	123%	141%	124%	59%	182%
Boxted Wood	123%	130%	109%	8%	190%
Elsenham	123%	164%	142%	74%	194%
Easton Park	123%	150%	129%	67%	195%
Takeley	123%	152%	111%	43%	172%
Birchanger	123%	163%	121%	53%	183%
Gt Chesterford	123%	177%	136%	67%	197%

9.7 From our assessment of the information available and following the detailed methodology contained with Section 2 of this report, it can concluded that all of the proposed new settlements/neighbourhoods are financially viable and therefore able to delivered over the Local Plan period if allocated. As stated previously in this report, this assessment is based on current market conditions.

Appendix A

Summary of New Settlement/Neighbourhood Proposals

1. Chelmer Mead

This is a site located to the North-West and East of Little Dunmow, and to the North of Flitch Green, Essex. This is a New Settlement proposal for up to 1,700 residential dwellings. The proposal also includes a Local Centre, with shops, health centre, community facilities and offices, a Business Park, a new Primary School, Country Park and other areas of public open space. The proposal also includes primary road infrastructure and an enhanced bus service.

2. Andrewsfield

This site is centred on Saling Airfield, between Stebbing and Rayne. The majority of this proposed New Settlement is located within the Braintree District. The proposal is for up to 7,500 new residential dwellings across the whole site. It is anticipated that there will be two district centres with shops, a food store and community uses. There will also be four other smaller local centres. The proposal also includes two employment parks, five Primary schools and one Secondary school, formal sports areas, village greens and a Country Park. All primary road infrastructure, and a new bus service, is also proposed.

3. Boxted Wood

This site is centred on Boxted Wood, Stebbing Green and to the South-West of the Andrewsfield proposal above. A large proportion of this proposed New Settlement is located within the Braintree District, as can be seen from the plan below, the site butts up against the Andrewsfield proposal. It is anticipated that this New Settlement can deliver up to 4,500 new residential dwellings. The proposal also includes a main centre providing shops, offices and communal facilities. There will also be a number of smaller, local centres. The New Settlement will also provide employment parks, three primary schools, one secondary school and includes all primary road infrastructure.

4. Elsenham

This site is located on land to the North-East of Elsenham. This is a New Settlement proposal for up to 4,000 new residential dwellings. The proposal includes a new Town Centre with shops, health centre, employment and community uses. Furthermore, it is proposed to deliver two Primary schools, one Secondary school, an Employment Park and dedicated formal sports facilities. Alongside all primary road infrastructure, it is planned to provide rail interchange facilities, including a bus stop, taxi waiting area and drop-off point.

5. Easton Park

This New Settlement is centred on Easton Park Estate, Little Easton Parish. The proposal is to deliver up to 10,000 new residential dwellings. There will be a new main centre with shops, services, health centre and library provision. Four other local centres, with smaller shops and community facilities are also proposed. Alongside

this, there will be a dedicated employment park and business space, four new Primary schools, one new Secondary school, a Country Park, village greens and formal sports facilities. Apart from primary road and rail infrastructure, there will also be the provision of a new rapid bus route.

6. Priors Green, Takeley

This proposed New Neighbourhood is located on land North of Priors Green, and South-West of Priors Wood. The proposal is to deliver up to 1,700 new residential dwellings. There will be a new local centre, with shops, health centre and community uses. There will also be a dedicated employment area, one new primary school, Pocket Parks and allotments/community orchard. The proposal will build on and enhance the existing primary road infrastructure associated with the existing Priors Green development.

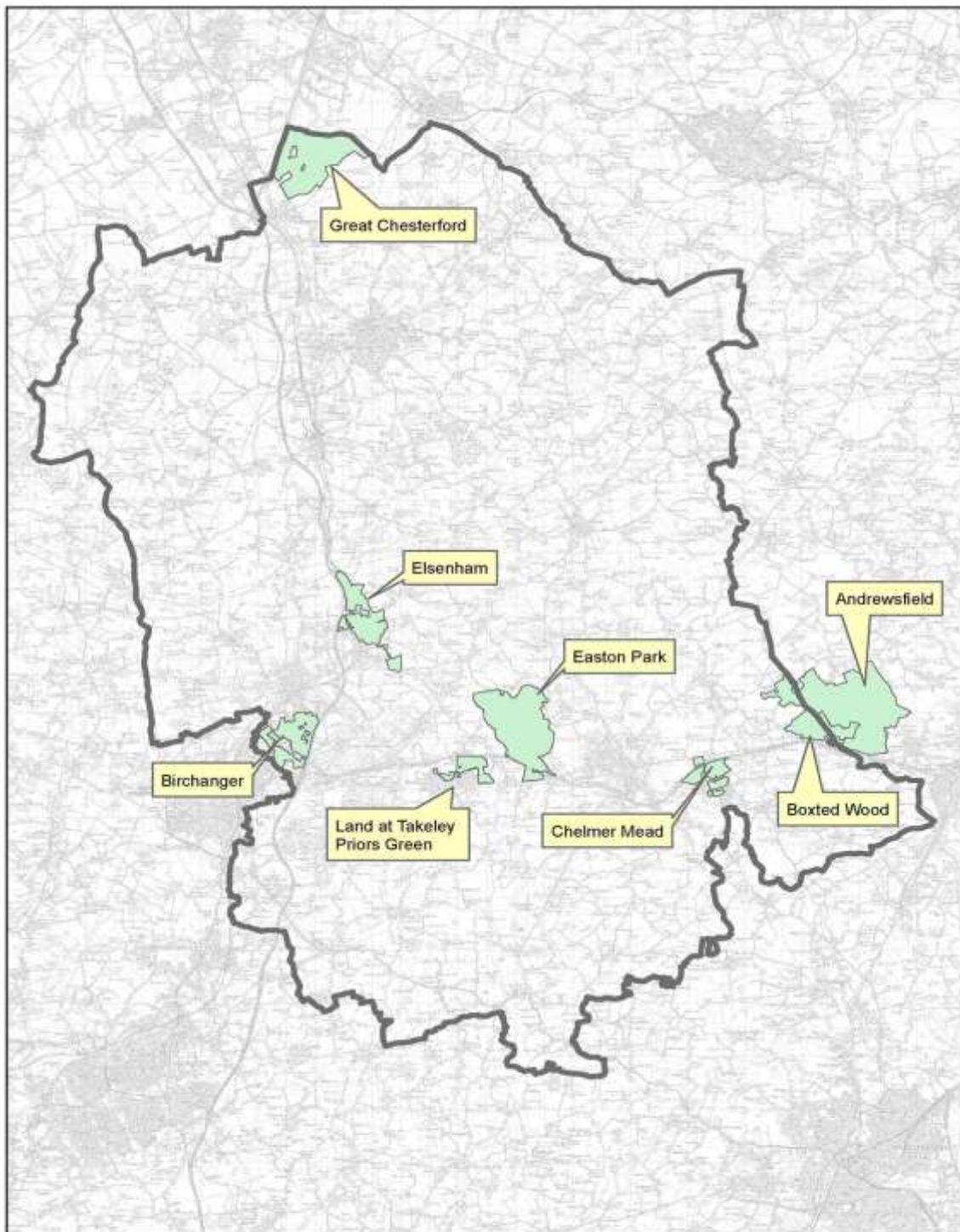
7. Parsonage Spring, Birchanger

This New Neighbourhood is proposed on land located between Stansted Mountfitchet, Birchanger and the M11, Junction 8. The proposal is to deliver up to 3,500 new residential dwellings. The proposal will provide an employment area, 2 new Primary schools and a Secondary school extension. There will be social and community infrastructure, along with new woodland publically accessible open space.

8. Great Chesterford

This New Settlement is proposed on land to the South-East of the A11, and to the North-East of the B184. The proposal is to deliver up to 5,000 new residential dwellings. The proposal will meet all primary road infrastructure requirements, and will deliver a mixed development including employment use, schools, health centre, shops, community use, sports and recreation and publically accessible open space.

New Settlement/Neighbourhood Location Map



Large Sites / New Settlements



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Appendix B

Attendees at consultation events held from February to April 2016 at UDC offices, and contributors to correspondence.

Promoters/land owners/agents and consultants

Robin Meakins – Barton Willmore

Colin Campbell – Savills

Adam Halford – Bidwells

Craig Nelson – Ptarmigan Land

James Brierley – Gerald Eve

John August – Galliard Homes

Martin Herbert – AECOM

David Maxwell – Capita

Richard Mabb – Mabb Planning

Jonathan Harris – GL Hearn

Robert Bucknall

Ian Chater – Chater Homes

Harry Jones – David Lock Associates

Philip Copsey – David Lock Associates

The Fairfield Partnership

Essex County Council Officers – Infrastructure Advice

Neil Keylock – School Places Data and Intelligence Manager

David Sprunt – Principal Transport Strategy and Engagement Officer

Gill Holland – Children’s Community Development Officer

Keith Blackburn – Senior Infrastructure Planning Officer

Blaise Gammie – Infrastructure Planning Manager

Matthew Bradley – Strategic Development Manager

Zhanine Smith – Principal Spatial Planner

Other (authors of this report)

Martin Aust – Pathfinder Development Consultants

Doug Malins – Malins Associates Limited

Appendix C

Uttlesford District Council Infrastructure Delivery Schedule and Financial Viability Study – ECC Input

The information outlined within the tables below is indicative figures, and may be subject to change.

Site – Chelmer Mead (1, 700 dwellings)

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Transport	B1256 Station Road – roundabout (capacity)	Up to occupation of 400 dwellings	Delivery by developer	£1 million	
Transport	B1256 – Braintree Road – mitigation necessary, likely signalised junction (safety scheme)	Up to occupation of 400 dwellings.	Delivery by developer	£1 million	
Transport	<p>Passenger Transport Infrastructure and subsidised bus services to and from – local transportation interchanges, key community and economic centres.</p> <p>Frequency of service – Peak period (7am – 10am and 4pm – 7pm) every 20 minutes, inter peak and evening minimum hourly service (all subject to viability of bus service provision).</p>	First occupation to occupation of final dwelling plus 5 years	Delivery of developer	£1.2 million*	Note – that concern about the viability of bus services after the subsidised bus services – the quantum of the development limits the viability.
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million	Includes P and R contributions for Chelmer Valley
Transport	Felsted – contributions for	Contribution receipt	Contribution from developer	£150,000	

	traffic management and safety	from first occupation	– delivery ECC.		
Transport	Flitch Way – contribution for improvements between the site and Great Dunmow and Braintree.	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£100,000	
Transport	Local level highway infrastructure enhancements will also be required.	Contribution decided following further site information.	Contribution from developer – delivery ECC.	X	
Transport	M11 J8 capacity improvement (reference from figure 1 is A)	Contribution decided following further site information.	Contribution from developer – delivery HE / ECC	Substantial funding required.	
Transport	A120 Braintree junctions (A120/B1018 Galleys Corner; A120/B1256 Marks farm Roundabout (reference from figure 1 is primarily but not exclusively D and E)	Contribution decided following further site information.	Contribution from developer – delivery HE / ECC	Anything less than £250,000 would be non-compliant to ECC requirements due to CIL regulations.	
Transport	Sustainable travel promotion and package	From first occupation to build out of the site plus 5 years following completion of the final dwelling	Delivery by developer - ECC Travel planning team?	£220,000 bond.	
Primary Schools & EY	Preference for 2.5ha site for 2-2½ fe primary school with commensurate early years and childcare facilities.	To be delivered by 300 th occupation, transfer of site at least one year prior.	ECC (costs to be borne by developer)	£8.5M index linked to April 2015 costs per facility. Land to be provided at nil cost.	Sites to be provided in compliance with ECC developer's guide.
Secondary	The pupil numbers that would be produced by a development of this scale would too large to be accommodated by existing secondary schools, and too small to sustain a new secondary school. (The minimum size for a new	Funding to be provided prior to 1 st occupation.	ECC (costs to be borne by developer)	Cost of school expansions estimated at £18,500 per place, 0.2 places per house. Index linked to April 2015 costs per facility. Cost of	ECC would potentially object to this allocation.

	secondary school would be 600 pupils. A development of 3,000 houses would be required to generate this number of pupils.)			transportation to nearest available secondary school.	
Early Years and Childcare	Facilities to provide parental choice and serve employment areas. Approximately 0.26ha split over two sites.	First facility potentially to be provided in conjunction with employment site.	ECC (costs to be borne by developer)	£1.2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£0.2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Flexible community facilities	Facility to house a range of services e.g. day-care for the elderly, playgroups and youth clubs.	To be provided mid-way through development.	UDC (costs to be borne by developer)	£2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide

Site – Elsenham (4,000)

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Transport	Grove Hill capacity – relocation of on-street parking and signal upgrade. Note that this requires additional land outside site	Contribution receipt from first occupation	Delivery by developer	£500,000	
Transport	Monitoring of vehicle routing over time to capture impacts of rat-running traffic on unsuitable roads	Build out of site plus 5-10 years following completion of final dwelling	Delivery by developer - ECC Travel planning team?	£500,000 bond to ensure delivery of mitigation should impacts be greater than predicted	
Transport	Additional infrastructure to minimise vehicle impact in Stansted Mountfitchet, extent to be determined by detailed modelling, could require new link to B1383	Post 800 dwellings.	Delivery by developer.	£10 million	

Transport	Sustainable travel promotion and package	From first occupation to build out of the site plus 5 years following completion of the final dwelling	Delivery by developer - ECC Travel planning team?	£500,000 bond.	
Transport	Accessibility and interchange improvements at rail station	No more than 150 dwelling occupations.	Delivery by developer.	£3 million.	
Transport	Accessibility and interchange improvements at rail station, and internal highway links, associated with level crossing closure	On closure of the existing level crossing this will be required.	Delivery by developer.	£7 million.	
Transport	Traffic management within Elsenham to manage vehicle routing and speeds	No more than 150 dwelling occupations.	Contribution from developer and delivered by developer.	£500,000 +	
Transport	<p>Passenger Transport Infrastructure and subsidised bus services to and from – local transportation interchanges, key community and economic centres.</p> <p>Frequency of service – Peak period (7am – 10am and 4pm – 7pm) every 20 minutes, inter peak and evening minimum hourly service (all subject to viability of bus service provision).</p>	First occupation to occupation of final dwelling plus 5 years	Delivery by developer	£2.4 million*	
Transport	M11 J8 capacity improvement (reference from figure 1 is A)	Contribution decided following further site information.	Contribution from developer – delivery HE / ECC	Substantial funding required.	
Transport	Local level highway infrastructure enhancements will also be required.	Contribution decided following further site information.	Contribution from developer – delivery ECC.	£500,000	
Transport	New southern link road.	Review the 800 planning application for further information.	Contribution and delivery by developer.	See developer's proposals.	Note this forms part of the scheme for the 800 homes; therefore

					assume this part of the access route for the larger development proposals. It is also noted that UDC are still awaiting the 800 dwellings inquiry decision.
Primary Schools & EY	Preference for 3 x 2fe primary schools with commensurate early years and childcare facilities. Each site tom be 2.1ha	1 st primary school needs to be delivered by 300 occupations, transfer of site at least one year prior. Second to be delivered at 1700 occupation and then third to be delivered at 3100 occupation.	ECC (costs to be borne by developer)	£7.29M index linked to April 2015 costs per facility. Land to be provided at nil cost.	Sites to be provided in compliance with ECC developer's guide.
Secondary School	Preference for 9ha site. If this development gained approval, then ECC would wish to conduct a review of secondary provision within the area. Consideration would be given to the possible re-location and expansion of Forest Hall Academy onto the development to reduce the level of home to school transport required in the area.)	Secondary school needs to be delivered by 800 occupations	ECC (costs to be borne by developer)	£15M index linked to April 2015 Land to be provided at nil cost	Sites to be provided in compliance with ECC developer's guide.
Early Years and Childcare	Facilities to provide parental choice and serve employment areas. Approximately 0.5ha split over four sites.	One provision to be provided in early phases of employment centre.	ECC (costs to be borne by developer)	£1.2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£1M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Flexible	Facilities to house a range of	One per	UDC (costs to be borne by	£2M index linked to	Sites to be provided in

community facilities	services e.g. day-care for the elderly, playgroups and youth clubs.	neighbourhood	developer)	April 2015 costs per facility.	compliance with ECC developer's guide
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Site – Easton Park (Gt Dunmow) 10,000 dwellings

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Transport	<p>Passenger Transport Infrastructure and subsidised bus services to and from – local transportation interchanges, key community and economic centres.</p> <p>Frequency of service – Peak period (7am – 10am and 4pm – 7pm) every 20 minutes, inter peak and evening minimum hourly service (all subject to viability of bus service provision).</p>	First occupation to occupation of final dwelling plus 5 years	Delivery by developer	£3.4 million*	
Transport	Guided busway connection to Stansted Airport	Upper range of build-out	Delivery by developer?	£10 million	
Transport	Improvement to A120 junction / access – A120/B1256 (W) (reference from figure 1 is B).	Before occupation of first dwellings.	Developer funded and delivered.	£2 million	Note this will require HE approval.
Transport	Direct pedestrian and cycle linkage to town centre	Provision of mitigation measures at early occupation but dependent on phasing and precise location of build.	Developer	£1 million.	
Transport	M11 J8 capacity improvement (reference from figure 1 is A)	Contribution decided following further site information.	Contribution from developer – delivery HE / ECC	Substantial funding required see note.	
Transport	Local level highway	Contribution decided	Contribution from developer	X	

	infrastructure enhancements will also be required.	following further site information.	– delivery ECC.		
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million	Note that includes P and R at Chelmer Valley.
Transport	A120 Braintree junctions – A120/B1018 Galleys Corner; A120/B1256 marks Farm Roundabout (reference from figure 1 is primarily but not exclusively D and E).	Contribution decided following further site information.	Contribution from developer – delivery and approval from HE	Substantial funding required see note.	
Transport	Sustainable travel promotion and package	From first occupation to build out of the site plus 5 years following completion of the final dwelling	Delivery by developer - ECC Travel planning team?	£1.25 million bond.	
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million	Includes P and R contributions for Chelmer Valley
Primary Schools & EY	Preference for 7x 2fe primary schools with commensurate early years and childcare facilities. Each site 2.1ha	1 st primary school needs to be delivered by 300 occupations, transfer of site at least one year prior. Second to be delivered at 1700 occupation and then every 1400 houses thereafter.	ECC (costs to be borne by developer)	£51M index linked to April 2015 costs. Land to be provided at nil cost.	Sites to be provided in compliance with ECC developer's guide.
Secondary School	Preference for 13.6ha site	Secondary school needs to be delivered in phases. Site to be available prior to commencement of phase 2.	ECC (costs to be borne by developer)	£41.5M index linked to April 2015 Land to be provided at nil cost	Sites to be provided in compliance with ECC developer's guide
Early Years and Childcare	Facilities to provide parental choice and serve employment	One provision to be provided in early	ECC (costs to be borne by developer)	£1.2M index linked to April 2015 costs	Sites to be provided in compliance with ECC

	areas. Approximately 1ha split over a number of sites.	phases of employment centre.		per facility.	developer's guide
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£1M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Flexible community facilities	Facilities to house a range of services e.g. day-care for the elderly, playgroups and youth clubs.	One per neighbourhood	UDC (costs to be borne by developer)	£2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide

Site – Boxted Wood 4,500 dwellings

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Transport	Re-configuration and improvements to existing junctions on the A120 – adjacent to the development site – B1256/B1417/A120 (reference from figure 1 is C).	Up to occupation of 1000 dwellings.	Developer – ECC and Highways England	£25 million	
Transport	B1256 – Braintree Road – mitigation necessary likely signalised junction (safety scheme)	Up to occupation of 400 dwellings.	Delivery of developer	£1 million	
Transport	<p>Passenger Transport Infrastructure and subsidised bus services to and from – local transportation interchanges, key community and economic centres.</p> <p>Frequency of service – Peak period (7am – 10am and 4pm – 7pm) every 20 minutes, inter peak and evening minimum hourly service (all subject to viability of bus service</p>	First occupation to occupation of final dwelling plus 5 years following completion of the final dwelling	Delivery of developer	£3.2 million*	

	provision).				
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million pro rata – await confirmation of cost.	
Transport	Braintree/Rayne – contributions for traffic management and safety	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£150,000	
Transport	Fritch Way – contribution for improvements between the site and Great Dunmow and Braintree.	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£100,000	
Transport	Local level highway infrastructure enhancements will also be required.	Contribution decided following further site information.	Contribution from developer – delivery ECC.	X	
Transport	Traffic management for the local rural road network to discourage inappropriate use	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£500,000	
Transport	A120 Braintree junctions – A120/B1018 Galleys Corner; A120/B1256 Marks Farm Roundabout (reference from figure 1 is primarily, but not exclusively D and E).	Contribution decided following further site information.	Contribution from developer – delivery and approval from HE	Substantial funding of the order of £10m required, study currently being undertaken.	
Transport	M11 J8 capacity improvement (reference from figure 1 is A)	Contribution decided following further site information.	Contribution from developer – delivery HE / ECC	Substantial funding required see note.	
Transport	Sustainable travel promotion and package	From first occupation to build out of the site plus 5 years following completion of the final dwelling	Delivery by developer - ECC Travel planning team?	£562,000 bond.	
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million	Includes P and R contributions for Chelmer Valley
Primary Schools & EY	Preference for 2x 2fe and 1x 2½fe primary school, with	1 st primary school needs to be delivered	ECC (costs to be borne by developer)	£23M index linked to April 2015 costs	Sites to be provided in compliance with ECC

	commensurate early years and childcare facilities. 2fe sites to be 2.1ha, 2½ fe site to be 2.5ha.	by 300 occupations, transfer of site at least one year prior. Second to be delivered at 1700 occupation and third to be delivered at 3100 occupations.		per facility. Land to be provided at nil cost.	developer's guide.
Secondary School	Preference for 6.75ha site	Secondary school needs to be delivered by 1500 occupations. Site to be available two years prior.	ECC (costs to be borne by developer)	£25M index linked to April 2015 Land to be provided at nil cost	If there is an intention for the settlement to become larger, a larger secondary site would be required.
Early Years and Childcare	Facilities to provide parental choice and serve employment areas. Approximately 0.5ha split over four sites.	One provision to be provided in early phases of employment centre.	ECC (costs to be borne by developer)	£1.2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£1M index linked to April 2015 costs.	Sites to be provided in compliance with ECC developer's guide
Flexible community facilities	Facilities to house a range of services e.g. day-care for the elderly, playgroups and youth clubs.	One per neighbourhood	UDC (costs to be borne by developer)	£2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide

Site – Andrewsfield (7,500 dwellings)

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Transport	Re-configuration and improvements to existing junctions on the A120 – to allow access all directions – B1256/B1417/A120 (reference from	Up to occupation of 1000 dwellings.	Developer – ECC and Highways England	£25 million	

	figure 1 is C).				
Transport	B1256 – Braintree Road – mitigation necessary likely signalised junction (safety scheme)	Up to occupation of 400 dwellings.	Delivery of developer	£1 million	
Transport	Subsidised bus services to and from – local transportation interchanges, key community and economic centres. Frequency of service – Peak period (7am – 10am and 4pm – 7pm) every 20 minutes, inter peak and evening minimum hourly service (all subject to viability of bus service provision).	Build out of the site plus 5 years following completion of the final dwelling	Delivery of developer	£3.3 million*	
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million pro rata – await confirmation of cost.	
Transport	Braintree/Rayne – contributions for traffic management and safety	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£150,000	
Transport	Fritch Way – contribution for improvements between the site	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£100,000	

	and Great Dunmow and Braintree.				
Transport	Local level highway infrastructure enhancements will also be required.	Contribution decided following further site information.	Contribution from developer – delivery ECC.	X	
Transport	Traffic management for the local rural road network to discourage inappropriate use	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£500,000	
Transport	M11 J8 capacity improvement (reference from figure 1 is A)	Contribution decided following further site information.	Contribution from developer – delivery HE / ECC	Substantial funding required see note.	
Transport	A120 Braintree junctions – A120/B1018 Galleys Corner; A120/B1256 Marks Farm Roundabout (reference from figure 1 is primarily but not exclusively D and E).	Contribution decided following further site information.	Contribution from developer – delivery and approval from HE	Substantial funding of the order of £10m required, study currently being undertaken.	
Transport	Sustainable travel promotion and package	From first occupation to build out of the site plus 5 years following completion of the final dwelling	Delivery by developer - ECC Travel planning team?	£940,000 bond.	
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million	Includes P and R contributions for Chelmer Valley
Primary Schools & EY	Preference for 4x2fe primary schools and 1x3 fe primary school with	1 st primary school needs to be delivered by 300 occupations, transfer of site at least one year prior. Second to be delivered at 1700	ECC (costs to be borne by developer)	£7.29M index linked to April 2015 cost per 2fe facility.	Sites to be provided in compliance with ECC developer's guide.

	commensurate early years and childcare facilities. Each 2fe site - 2.1ha, the 3fe - 2.9ha.	occupation and then every 1400 houses thereafter.		£8.5M index linked to April 2015 cost per 3fe facility. Land to be provided at nil cost.	
Secondary School	Preference for 10.5ha site	Secondary school needs to be delivered by 1500 occupations. Site to be available two years prior.	ECC (costs to be borne by developer)	£35M index linked to April 2015 Land to be provided at nil cost	Sites to be provided in compliance with ECC developer's guide
Early Years and Childcare	Facilities to provide parental choice and serve employment areas. Approximately 0.9ha split over a number of sites.	One provision to be provided in early phases of employment centre.	ECC (costs to be borne by developer)	£1.2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£1M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Flexible community facilities	Facilities to house a range of services e.g. day-care for the elderly, playgroups and youth clubs.	One per neighbourhood	UDC (costs to be borne by developer)	£2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide

- The passenger transport contribution is a guide only. In reality the support needed is based on the number of places served, existing services, journey time, frequency, buildout rate of development, passenger take up of service, fare base. The viability of the service is also dependant on these factors.

Site – Andrewsfield and Boxted Wood combined (12, 000 dwellings) – For education and Early Years Only

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Primary Schools & EY	Preference for 7x2fe and 1x3fe primary schools with commensurate early years and childcare facilities. Each 2fe school site - 2.1ha, the 3fe site – 2.9ha	1 st primary school needs to be delivered by 300 occupations, transfer of site at least one year prior. Second to be delivered at 1750 occupation and then every 1400 houses thereafter.	ECC (costs to be borne by developer)	£7.29M index linked to April 2015 costs per facility. Land to be provided at nil cost.	Sites to be provided in compliance with ECC developer's guide.
Secondary School	1 large secondary school (16.1 ha) or 2 smaller secondary schools (8.1 ha each), depending on the nature of the development.	A secondary school needs to be delivered by 1500 occupations. Site to be available two years prior.	ECC (costs to be borne by developer)	£60M index linked to April 2015 Land to be provided at nil cost	Sites to be provided in compliance with ECC developer's guide
Early Years and Childcare	Facilities to provide parental choice and serve employment areas. Approximately 1ha split over a number of sites.	One provision to be provided in early phases of employment centre.	ECC (costs to be borne by developer)	£1.2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£1M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Flexible community facilities	Facilities to house a range of services e.g. day-care for the elderly, playgroups and youth clubs.	One per neighbourhood	UDC (costs to be borne by developer)	£2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide

Site - Great Chesterford / North Uttlesford Garden Village (c.5,000 homes)

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Transport (road)	A505 Newmarket Rd/A1301 (capacity) – roundabout junction improvements (PBA)	3-5 years (Peter Brett Associates - PBA)	Contribution from developer	£ 1,000,000	In S Cambs This will likely necessitate further land take, and it could be explored together with the research parks.
Transport (road)	Establish the A11 as the preferred route for northbound travel, to be accessed from the existing junctions at Stump Cross and at Granta Park.	To be agreed	Contribution from developer	To be assessed	
Transport (road)	Provide road connectivity from site to surrounding highway network, including the A1307, B184 and A1301 roads	1-3 years	Contribution from developer	To be assessed	
Transport	Need to provide electric car charging points				
Transport (rail)	Expand the limited facilities at the station, including shelters, car and cycle parking, and improve the wider public realm and provide a true multi-modal hub.	1-3 years	Contribution from developer	£750,000	
Transport (rail)	Explore the potential to make Great Chesterford a stop for semi-fast trains through consultation with National Rail, TOCs and West Anglia Task Force.	3-5 years	Network Rail and Rail Operator to be engaged in discussions.	To be assessed	
Transport (bus)	Increased frequency on Citi 7 services south of Sawston, to be routed through the core of	1-3 years	Contribution from developer	£450,000 p.a.	

	the site as well as to the railway station.				
Transport (bus)	Extend Park & Ride services towards walking/cycling distance of Great Chesterford and the site.	1-3 years	Contribution from developer	To be assessed	
Transport – sustainable (footways & cycleways)	<p>Improve the B184 Walden Road by introducing an off-road bi-directional cycleway alongside the site frontage. This could be shared with pedestrians considering the quiet location.</p> <p>Improve the B1383 Newmarket Road by introducing cycle lanes adjacent to the existing footways, thereby facilitating access to the railway station. Introduction of off-road bi-directional cycleway to connected with the existing infrastructure along the northern A1301.</p>	1-3 years	Contribution from developer	£2,750,000	
	<p>Introduction of high-quality cycling connections between the site and the Wellcome Genome Campus, Chesterford Research Campus, by making use of existing Public Rights of Way and local access roads.</p> <p>Introduction of cycling links to the A1307 and the Granta Park to ultimately tie with any future cycling infrastructure along the Cambridge to Haverhill corridor. This would involve</p>	1-3 years	Contribution from developer	£750,000	

	making use of the existing Public Rights of Way on the site.				
	<i>NB Full Transport Assessment would be required – i.e. standard requirement for larger schemes like this</i>				
Education Primary Schools & EY	Preference for 4 x 2fe primary schools, with commensurate early years and childcare facilities. 2fe sites to be 2.1ha. EY&C would also need four standalone facilities	1 st primary school needs to be delivered by 300 occupations, transfer of site at least one year prior. Second to be delivered at 1700 occupation and third to be delivered at 3100 occupations.	ECC (costs to be borne by developer)	£29.2m at 2016 costs + EYC Sites circa 0.1ha sites / £1.2m each Land to be provided at nil cost.	Sites to be provided in compliance with ECC developer's guide.
Education Secondary School	7fe new school with sixth form Preference for 6.75ha site	Secondary school needs to be delivered by 1500 occupations. Site to be available two years prior.	ECC (costs to be borne by developer)	£30M at 2016 cost Land to be provided at nil cost 9ha. site	Sites to be provided in compliance with ECC developer's guide. If there is an intention for the settlement to become larger, a larger secondary site would be required.
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£1M index linked to April 2015 costs.	Sites to be provided in compliance with ECC developer's guide
Flexible community facilities	Facilities to house a range of services e.g. day-care for the elderly, playgroups and youth clubs.	One per neighbourhood	UDC (costs to be borne by developer)	£2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide



MALINS
Associates Limited

Economic Viability Study
Prepared for
Uttlesford District Council
In relation to
Local Plan Residential Allocations in Towns and Villages

October 2016

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Section 1

1.0. Introduction

1.1. Malins Associates Limited and Pathfinder Development Consultants have been commissioned by Uttlesford District Council to undertake economic viability assessments on seventeen residential allocation proposals put forward by promoters/developers in the Call for Sites.

1.2. The Uttlesford Local Plan was adopted in 2005. It still forms the basis for making planning decisions within the District alongside the National Planning Policy Framework published in March 2012 and the Planning Practice Guidance but it is becoming increasingly out of date and a replacement plan is being prepared.

1.3. A local development scheme was approved by the Council in February 2016, and is the project plan for producing the new Local Plan. It has three main functions:

- To provide information on the documents the Council intends to prepare together with timescales for preparation.
- To establish the Council's priorities and to allow the Council to programme the work needed to prepare the new plans.
- To set out the timetable for the review of documents.

1.4. In terms of the timetable, it is proposed that the Plan is published for consultation in November/December 2016 and submitted for public examination in March 2017. Following that, and subject to the Inspectors Report, it is anticipated that the Plan will be adopted towards the end of 2017.

1.5. In the Call for Sites, numerous sites in both the towns and villages were put forward by developers and landowners for consideration. If these sites were to be allocated as part of its Local Plan, the Council would need to have robust evidence that the sites are financially viable, and can deliver housing throughout the Plan period. The Council therefore commissioned this independent economic viability study.

1.6. This report sets out the methodology and assumptions used to carry out the economic viability assessment of these proposals within the Uttlesford District Council area, and a summary of the findings.

2.0. Context

2.1. The viability study was commissioned as part of the overall process of developing the Uttlesford District Local Plan, which is ongoing.

2.2. This study is part of an evidence base that is required when the Plan is submitted to the Planning Inspectorate. The Council must demonstrate that it has made adequate plans to meet objectively assessed needs for housing and other development within the district as far as is consistent with National Planning Policy. This includes identifying a five year supply of specific deliverable sites.

2.3. The Council needs to plan for 4,600 dwellings up to 2033. This takes into account sites already with planning permission and the development of smaller windfall sites. At a meeting of Full Council on the 26th July 2016, Members approved a Development Strategy regarding the dispersal of the new housing across new settlement(s), the towns and the villages.

2.4. The purpose of this report is to independently assess seventeen proposed development sites located in the towns, key villages and smaller villages. A separate report dated May 2016 (subsequently revised October 2016) has carried out a similar assessment of the proposed New Settlements/Neighbourhoods. Neighbourhoods differ from new settlements in not being freestanding but extending or expanding an existing settlement.

2.5. This Economic Viability Appraisal study will look at each of the proposals in isolation, and make recommendations as to their deliverability over the period of the Plan. This information will feed into the evidence base that will form the Local Plan Pre-Submission for public consultation.

2.6 A schedule of infrastructure requirements for each site used as part of the assessment is included in Appendix C.

3.0. Our approach to this study

3.1. Our overall approach to this study reflects government and industry guidance, takes into account the stage of the process of the Local Plan development within Uttlesford District Council, and the wish of the Council to engage positively with developers, landowners and agents.

3.2. In the Call for Sites, numerous proposals were submitted to the Council for consideration. The proposed developments in the towns and villages are of differing sizes, but predominantly only residential in nature. The larger sites also include an element of infrastructure, community and open space land use. A sample of the proposed development sites which have been assessed for their viability are summarised in Appendix A.

3.3. We developed a bespoke assessment framework for this viability study taking into account Planning Guidance and consideration of the local market conditions and planning policies.

3.4. During February and April 2016 we held a series of meetings with individual promoters specific to the New Settlements/Neighbourhoods study dated May 2016, at Uttlesford District Council Offices. Appendix B lists the attendees. Those promoters not able to attend consultation meetings were contacted via other means, so that their input was included within the study.

3.5. The purpose of the consultation meetings was to present the proposed methodology and specifically the assumptions that we had included in our bespoke framework, and to listen to feedback from the promoters. The feedback received allowed us to amend aspects of the modelling framework if required, before proceeding to use it in the assessment of each site. The meetings enabled us to be transparent about our approach and, as far as possible, ensure that promoters – and others – would understand in due course the basis for the conclusions we would draw on each of the sites assessed.

3.6. At the meetings we presented and discussed with the promoters present a range of issues including:

- Viability theory and definitions of terms used
- Assumptions that we proposed making in relation to:
 - The property types and sizes we anticipate on sites
 - Sales rates
 - Sales values
 - Costs in relation to site acquisition, construction, marketing and sales, finance and how abnormal costs would be taken into account
 - Policies relating to affordable housing and the use of the SHMA
 - Residual and Target Land Values
 - S106 infrastructure costs
- Reasonable adjustments that might be made to achieve viability

3.7. Promoters attending the meetings were able to question us and put forward ideas on the day. They were also offered the opportunity to come back to us with further information - particularly important to allow for the submission and consideration of commercially sensitive or confidential information.

3.8. As a result of the feedback we reviewed and adjusted some assumptions. Specifically we:

- Amended the % assumed for plot external costs
- Amended the % assumed for site wide costs
- Clarified the definition of net and gross developable areas
- Clarified what is included in the base build cost and clarified that an element for overhead and profit is allowed for, albeit separately, rather than as part of the base building costs
- Increased the margin between the residual land value and the Target Land Value (as defined further in 8.2) to give additional comfort
- Reviewed the profit we were proposing on Gross Development Value (following feedback from one promoter). Having also reviewed previous Inspector's decisions in regard to this matter, we did not make any changes to the profit level assumed.

3.9. This input from promoters is therefore reflected in the assumptions and methodology set out in detail in Section 2 of this report. However, it should be noted that some of our assumptions have been revised further to take account of the fact that these seventeen proposed sites are, on the whole, less complex, considerably smaller in size and therefore carrying a lesser degree of risk.

3.10. The revised methodology and assumptions are detailed in Section 2 below.

4.0. The scope of this report

4.1. This is a summary report. It sets out the key guidance and standard methodology that should be used in any viability study. It explains the specific assumptions we have made for this study in drawing up a bespoke modelling framework for sites within Uttlesford District Council, and the sources and rationale for those assumptions.

4.2. This report summarises the findings of the assessment. This sets out, on a site specific basis whether a site is considered viable (and on what terms), or not viable. It includes caveats as appropriate.

4.3. Although the report includes assumed figures for build costs and land /property values etc. it does not include the detailed data sets or information that sit behind those assumptions. Nor does the report include actual calculations/spreadsheets for each site. This information is considered to be technical or overly detailed for publication and is likely to contain confidential/commercially sensitive information provided in confidence.

4.4 The sites selected for assessment are a sample of deliverable sites in the towns, key villages and smaller 'Type A' villages, which have a primary school. For the "Type A" villages, we have assessed a sample of 3 sites located in geographically distinct parts of the district, in order to ensure that these smaller developments are also generally deliverable.

4.5. Limitations

4.5.1. This report does not constitute a formal 'Red Book' valuation (RICS Valuation - Professional Standards, March 2012) or should not be relied upon as such. It is a viability study carried out in line with RICS guidance note and Financial Viability in Planning 2012. Specifically, it should be noted that viability assessments of each site and conclusions detailed in Section 3 of this report, were carried out on the basis of a broad based study, given the limited detailed site information available. This report is confidential to the Client and the authors accept no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

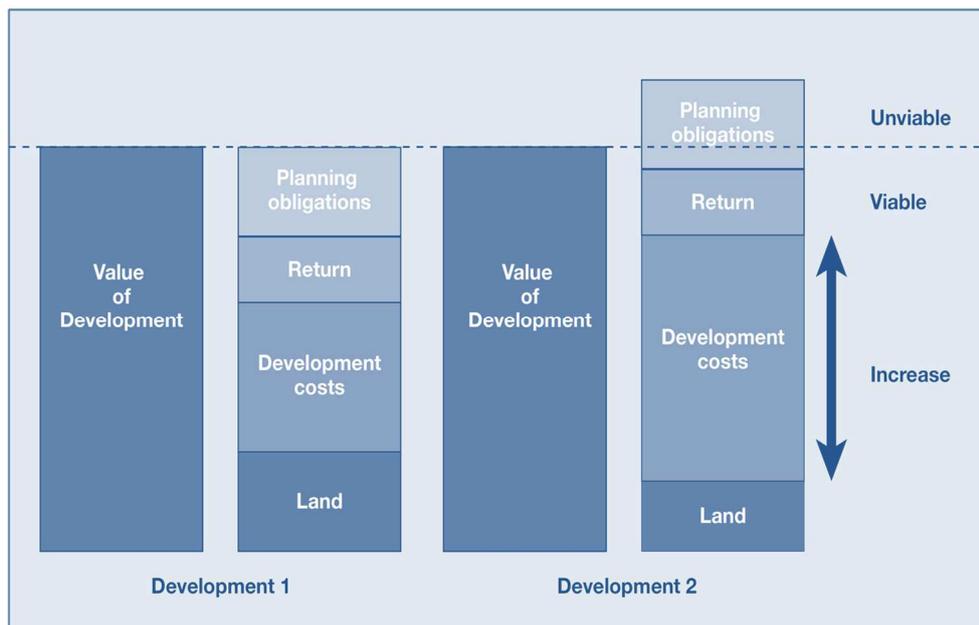
Section 2

5.0. Standard Methodology in assessing viability

5.1. Economic Viability Analysis (EVA) is based upon a residual land value calculation, supported by a design and build cost estimate in as much detail as possible, and a scheme cash flow plotting the pattern of likely cash spend and income to generate interest on development finance.

5.2. The difference between gross development value and total cost equates to a residual land value. The model runs over a development period from the date of commencement of the project, to completion when the development has been constructed, sold and occupied. In order to assess whether a development scheme can be regarded as economically viable, it is necessary to compare residual land values produced with target land values. If the development proposal generates a residual land value that is higher than the target land value for the scheme, it can generally be regarded as economically viable and therefore deliverable. However, if the scheme generates a residual land value which is lower than the target, it should not be deemed as economically viable (as illustrated in Diagram 1 below). The standard convention of working with current values and costs is used rather than those predicted in the future.

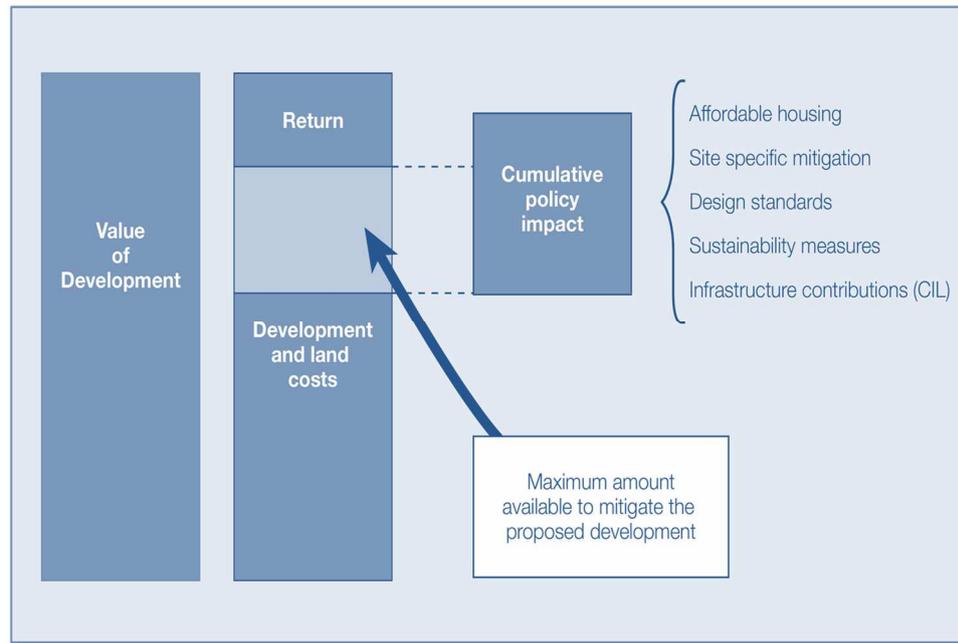
Diagram 1 - Comparative development viability



5.3. Diagram 1 illustrates the balance required to achieve a viable scheme – Development 1. It also shows how a scheme becomes unviable where there are increased development costs, due to site considerations, along with planning obligations – Development 2.

5.4. A viability assessment will have regard to not just single policy impacts but a cumulative impact of policy and planning obligations as illustrated in Diagram 2.

Diagram 2 - Cumulative impact of policy and planning obligations



6.0. Planning Guidance

6.1. There is strong policy background detailing the objectives and methodology for undertaking Economic Viability Assessments. This includes:

6.1.1. In the context of achieving sustainable development the National Planning Policy Framework (NPPF) March 2012, refers to ensuring viability and deliverability at sections 173 – 177.

“To ensure viability, the cost of any requirement likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions and other requirements should, when taking into account the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable a development to be deliverable.” (Paragraph 173)

6.1.2. The NPPF also refers to the use of Planning Conditions and obligations of Sections 203-206 and advises that where obligations are being sought:

“...local planning authorities should take account of changes in market conditions over time and wherever appropriate be sufficiently flexible to prevent planned development being stalled.” (Paragraph 205)

6.1.3. The National Planning Practice Guidance notes:

“A competitive return for the land owner is the price at which a reasonable land owner would be willing to sell their land for the development. The price will need to provide an incentive for the land owner to sell in comparison with the other options available. Those options may include the current use value of the land or its value for a realistic alternative use that complies with planning policy.”

6.1.4. The Royal Institution of Chartered Surveyors (RICS) has produced a guidance note, Financial Viability in Planning (August 2012). This is now being referred to by planning inspectors in appealed decisions. The RICS guidance note defines viability and the context of undertaking appraisals of financial viability for the purpose of town planning decisions as:

“An objective financial viability test of the ability of a development project to meet its costs including the costs of planning obligations, by ensuring an appropriate site value for the land owner at a market risk adjusted return to the developer in delivering that project.”

6.1.5. The guidance goes on to note:

“site value should equate to the market value subject to the following assumption: that the value has regard to the development plan policies and all other material planning considerations and disregard that which is contrary to the development plan.”

6.1.6. Any assessment of site value however will have regard to prospective planning obligations, and the point of the viability appraisal is to assess the extent of these potential obligations and also have regard to the prevailing property market. The fundamental issue in considering viability assessments in a town planning context is whether an otherwise viable development is made unviable by the extent of planning obligations and other requirements.

6.1.7. The RICS guidance emphasises that a proper understanding of financial viability is essential in ensuring that:

- Land is willingly released for development by land owners
- Developers are capable of obtaining an appropriate market risk adjusted return for delivering the proposed development.
- The proposed development is capable of securing funding

6.1.8. Where planning obligation liabilities reduce the site value to the landowner and return to the developer below an appropriate level, land will not be released and therefore development will not take place.

6.1.9. In their April 2012 topic paper practice note, the Homes and Community Agency (HCA) Advisory Team for Large Applications (ATLAS) Team note:

“The issue of viability is a material consideration in decision making. The weighting attached to it needs to be balanced with the circumstances of any specific project, the underlined policy basis and all the other relevant material planning considerations. In the current economic climate, when project viability is often a key barrier preventing development from proceeding and potentially hindering its ability to meet all established policy objectives, it is critical...(have a good understanding of the use of financial appraisals to test viability)”.

6.1.10. The Department for Communities and Local Government (DCLG) publication “Section 106 affordable housing requirements – Review and Appeal, April 2013” notes the following:

- The test for viability is that the evidence indicates that the current cost of building out the entire site (at today’s prices) is at a level that would enable the developer to sell all the market units on the site (in today’s market) at a rate of build out evidenced by the developer, and make a competitive return to a willing developer and a willing landowner.
- Any purchase price used should be benchmarked against both market values and sale prices of comparable sites in the locality.

7.0. Assumptions used in our modelling framework

7.1. The inputs for viability appraisals are hard to determine at an early stage for specific proposed site allocations as they are generally without the benefit of detailed designs, surveys or enquiries undertaken by the developer (as demonstrated by the complexity of many S106 negotiations). Therefore our viability assessments are necessarily broad approximations, subject to a margin of uncertainty.

7.2. Property Type and Sizes

Diagram 3 sets out the number of homes, bedroom size and gross internal floor area we expect to see on a typical residential site of 100 homes. The market dwelling sizes align with discussions held with developers/promoters at our consultation events relating to the report on New Settlements/Neighbourhoods dated May 2016. The affordable dwelling sizes align with the DCLG Nationally Described Standards and represent a 40% requirement in line with the Council's Policy. The proportion of different house types and tenure is in line with data contained within the SHMA September 2015, and complies with the Affordable Housing requirements for the District.

Diagram 3 – Property Types and Sizes for a typical phase of 100 dwellings

	Market Housing	ART	Shared Ownership	Total
1 Bed Flat GIFA m2	46	50	50	
Number	2	4	2	8
Total GIFA m2	92	200	100	392
2 Bed Flat GIFA m2	55	70	70	
Number	0	4	0	4
Total GIFA m2	0	280	0	280
2 Bed House GIFA m2	74	79	79	
Number	5	8	5	18
Total GIFA m2	370	632	395	1397
3 Bed House GIFA m2	85	93	93	
Number	26	10	5	41
Total GIFA m2	2210	930	465	3605
4 Bed House GIFA m2	130	106	106	
Number	19	2	0	21
Total GIFA m2	2470	212	0	2682
5 Bed House GIFA m2	150			
Number	8	0	0	8
Total GIFA m2	1200	0	0	1200
Total Homes	60	28	12	100
Total GIFA m2	6342	2254	960	9556

7.4. Gross Development Value

7.4.1. For open market properties we have assumed sales values based on postcode averages for the last 12 months, plus up to a maximum of a 10% uplift, to represent an uplift to new build sales prices where sales data indicates that this is appropriate and is being achieved. The key sources for this information were Rightmove, Zoopla, and Land Registry data.

7.4.2. Values used for affordable housing are based on market rates over the last 12 months – we have evidence of these rates through our close working with Registered Providers who are active in the area, and notional offer prices received from them.

7.5. Gross Development Costs

7.5.1. Site Acquisition Costs

We have included site acquisition costs to cover agent and legal fees at a total of 2% of the residual land value. Stamp duty at the prevailing rate has been allowed for, calculated on the residual value.

7.5.2. Construction Costs

We have assumed that all design costs (site survey, architecture, engineering, planning consultant and fees), are included within the design and build cost.

Base build costs have utilised the location adjusted *Building Cost Information Service (BCIS)* data, with a 20% enhancement for external works. We have not deducted an allowance for a contractor's profit contained within base BCIS costings but have, separately, also allowed for overhead and profit elsewhere. This represents an additional 6 - 10% uplift on base prices to cover plot external costs.

Rates used are adjusted to reflect the location factor for Uttlesford and are at the higher, mean level for estate housing. (Significant evidence exists on larger developments that volume house builders' rates are lower than this due to the economies they deliver - we have not taken this into account).

7.5.3. Abnormal and Additional Construction Costs

Abnormal and additional construction costs have been allowed for in line with known constraints and to allow for reasonable site risks. Contingency costs have been allowed for at a rate of 5%.

7.5.4. Design & Professional Fees

Allowances have been included to cover all design and professional fees, at 7%. This is in the middle of the standard range of 5 to 10% of fees typically assumed in Economic Viability testing, and takes into account the nature of the development.

7.5.5. S106 Contributions

S106 contributions have been allowed for in line with detailed advice received from Essex County Council. The Schedule of S106 and Infrastructure requirements is detailed in Appendix C of this report. Whilst the final requirements for S106 contributions will only be known in detail as the sites come forward, for the purposes of this viability assessment, we have allowed a figure that would be commensurate with developments of this size and complexity. Furthermore, we have stress tested all of the appraisals with contributions more akin to levels associated with New Settlements, and the proposals still remained financially viable.

7.5.6. Marketing and Sales Costs

We have adopted full marketing sales and disposals costs within the appraisal, including:

- Marketing costs of the private properties
- Agent's fees
- Legal fees associated with private sales

On this basis we have assumed a sales and marketing cost of 2% of the gross development value of the open market sales properties plus £600.00 per property for legal fees. For the affordable housing we have assumed agent fees of £1,500 for the scheme with legal costs at the same level as market value sales.

7.5.7. Finance Costs.

Where development finance is available, lenders are currently charging minimum rates of at least 6%. Arrangement (1%), monitoring (2%) and exit fees (1%) are also charged. These onerous lending terms persist due to on-going resistance to lending on residential development in the current market. We have adopted an interest rate of 6% with no additional allowance for fees, which we consider to be a standard assumption for development in the current economic climate.

It is conventional to assume finance on all costs in order to reflect the opportunity cost (or, in some cases, the actual cost) of committing equity to the project.

7.6. Development Programme

7.6.1. For the purpose on undertaking the Economic Viability Assessment only, we have assumed that a standard development phase of 100 homes, occurs over a 24 month period with the land being acquired in month one, and construction taking 23 months.

7.6.2. We have assumed sales of open market homes occur from month 13 to month 24 on an even basis (at approximately a rate of 5 sales per month). The rate of sales directly links to the assumed sales prices of individual homes. Affordable housing development assumes payment over a 9 month contract, commencing once initial infrastructure is in place.

7.6.3. These assumptions are particularly important in the calculation of development interest. The accounting for development interest on the land acquisition is from month one

of the programme, not allowing for any historic holding costs of the site, in line with best practice.

7.6.4. The development programmes for the smaller and more modest sized sites are based on the above assumptions, but scaled specifically to the size of that particular development.

7.6.5 For the larger schemes of 200 homes and above, we would assume land acquisition and therefore development occurs on a phased basis. Therefore, we have assumed that these larger schemes occur over a 36 month period only for the purpose of this viability model, whilst in reality the sales and construction period will occur over a longer period but with phased land acquisition. This way we can account for the development interest that is only attributable to the land acquisition.

7.7. Overhead & Profit

7.7.1. When considering the changing economic climate, financial institutions have tightened their requirements for overhead and profit returns on all schemes. Banks have raised their expectations in terms of risk and required returns that new developments offer. It is currently deemed likely that any private residential development proposals predicting an overhead and profit return of less than between 17.5% and 25% of gross development value would not be considered viable. We have therefore adopted an overhead and profit rate of 20% of gross development value for the scheme, at the midpoint of the acceptable range.

7.7.2. As affordable housing contains less commercial risk, typically with a JCT Design & Build Contract or a Development Agreement being signed at the commencement of works, and monthly valuations of construction work, borrowing and risk are reduced and so lower levels of overhead and profit are the norm. We have therefore allowed an overhead and profit of 6% in relation to the delivery of affordable housing.

7.7.3. At the planning appeal for Shinfield, Reading (APP/X0360/A/12/2179141) the inspector deemed that “the usual target being in the range 20-25%” of gross development value. We have therefore adopted an overhead and profit rate of 20% of gross development value for the scheme, at the bottom of the acceptable range. This is in line with the recent appeal decisions Chapel St Leonards APP/D2510/Q/14/2228037 and in Holsworthy APP/W1145/Q/13/2204429, noting that this level of return is reasonable.

8.0. Methods for Assessing Land Values

8.1. Overview

8.1.1 The minimum land value judged as capable of ensuring a site is brought forward is important in our calculations of scheme viability.

8.1.2. As noted in 6.1.1 Para 173 – 177 of the NPPF notes that developments should
“provide competitive returns to a willing land owner and willing developer to enable a development to be deliverable.”

8.1.3. The 'Harman Report' (June 2012) notes that Threshold Land Value (TLV) should represent the value at which a typical willing landowner is likely to release land for development. The report notes that TLV needs to take account of the fact that future plan policy requirements will have an impact on values and landowner expectations.

8.1.4. Market values provide a useful 'sense check' on the TLV, but 'Harman' recommends an approach based on a premium over current use values and credible alternative use values.

8.1.5. The report goes on to note that if local market evidence shows that minimum price provisions are substantially in excess of initial assumptions, the TLV will require adjusting to reflect market evidence.

8.1.6. The RICS report 'Financial Viability in Planning,' defines Benchmark Land Values (BLV) as equating to the market value, subject to having regard to development plan policies and other material planning considerations and disregards that which is contrary to the Local Plan. It goes on to note for area wide viability testing, site value may need to be further adjusted to reflect emerging policy, at a level, which would not prejudice delivery.

8.1.7. The report also notes the BLV must be at a level which makes a landowner willing to sell. Comparable evidence is important in establishing BLV for scheme specific as well as area wide assessments.

8.1.8. It is common to refer to both Threshold Land Value (TLV) and Benchmark Land Values (BLV), as terms that are often interchangeable. For the sake of clarity and to avoid confusion, we have sought to differentiate these two terms, with a degree of clarity that perhaps goes beyond the intent of the authors of the reports referred to above which is in line with increasingly commonly used practice.

- TLV – Value at which a typical willing landowner is likely to release land for development, and based typically on existing use value plus a premium
- BLV – Market value subject to considering planning policy and based on market evidence.

8.1.9. In this context we note the Examiner's report in relation to Greater Norwich Development Partnership CIL charging schedule (December 2012)

"...it is necessary to establish a threshold land value i.e. the value at which a typical willing landowner is likely to release land for development. Based on market experience...a landowner would expect to receive at least 75% of the benchmark value... It is reasonable to see a 25% reduction in benchmark values as the maximum that should be used..."

8.1.10. This approach was also uncontested and accepted at the Sandwell CIL examination in July 2014. In short if land trades today at the BLV, the TLV should be no less than 75% of this.

8.2. Determining the land value

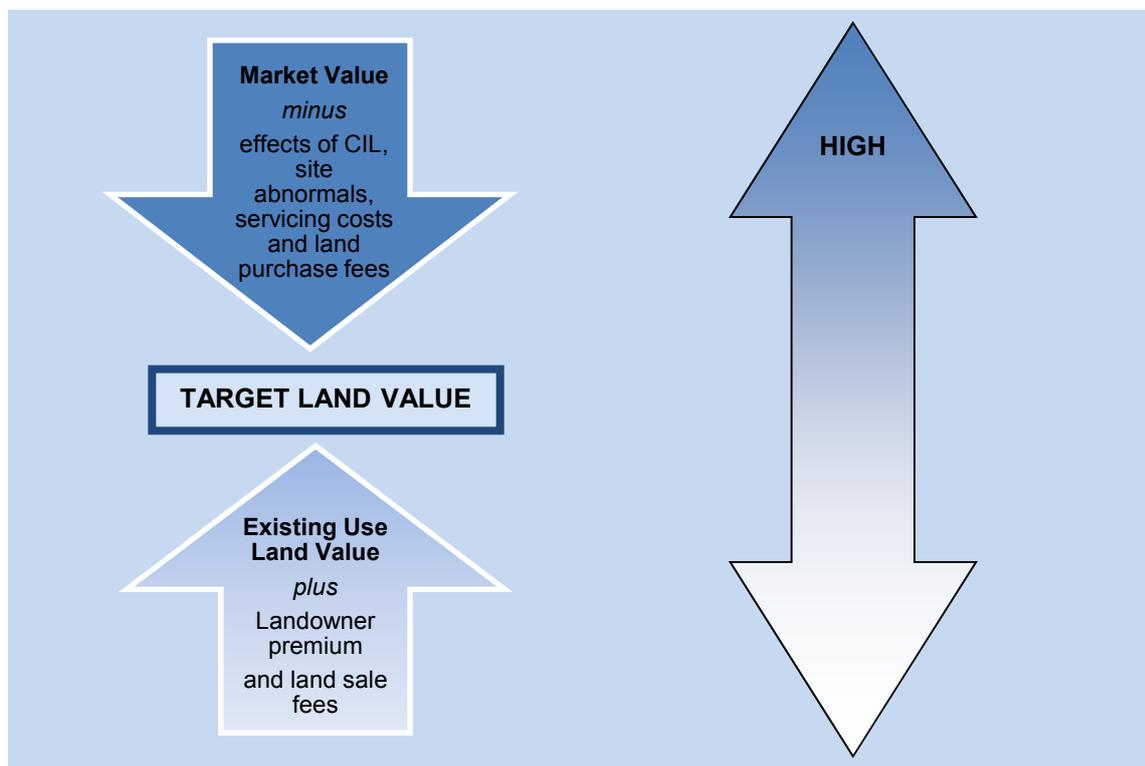
8.2.1. In assessing viability we want to establish a **Target Land Value** that is appropriate in ensuring landowners receive a competitive return (as distinct to the separate approaches adopted in setting Threshold Land Value (TLV) or Benchmark Land Value (BLV)).

8.2.2. Broadly speaking there are two different approaches to arrive at an appropriate Target Land Value:

- Assessing the uplift from an existing or known alternative use value - TLV.
- Assessing the discount from the market value of a site, adjusted to allow for the costs of planning policy - BLV.

8.2.3. Diagram 4 illustrates how the two approaches start from different bases, but should theoretically produce a similar figure.

Diagram 4 – Approaches to arriving at a Target Land Value



8.2.4. A further explanation, along with the issues to take into account when considering both Threshold Land Values (TLV) and Benchmark Land Values, is set out in 8.3 and 8.4 below before returning to the issue of how the Target Land Value is determined.

8.3. Threshold Land Values (TLV)

8.3.1. To derive an appropriate TLV from the existing use value, it is necessary to work upwards in value. Harman and the RICS acknowledge that in order for development to come

forward over the existing use, a 'competitive return' (also referred to as a premium) is necessary.

8.3.2. There is no set rule as to how much of a premium should be applied on top of the existing use value. We can sensibly expect that a minimum uplift in value would be required in order to allow the seller to pay stamp duty, sales fees, legal costs and disruption. But that bare minimum is usually not incentive enough to persuade a landowner to sell.

8.3.3. Beyond that bare minimum, an incentive (referred to as a 'premium') is required to encourage the landowner to sell. It is difficult to say what premium a seller would require in order to sell the land. This is because there are inevitable differences in each deal. For example, the motivations of the parties involved in the transaction may vary, as might perceptions of future market prospects. Some landowners (say family trusts, or Oxbridge Colleges) take a very long-term view of land holdings, and can only be persuaded to sell at a high price. We cannot know these individual circumstances, so Harman stipulates that an appropriate premium should be determined by local precedent - another way of saying market value.

8.3.4. In some instances an alternative use may be considered over residential development, e.g. employment, retail etc. Assuming that the alternative use is realistic, then it may be prudent to consider land values for this alternative use, in addition to its existing use. This may give a more accurate view of the TLV, because a rational landowner will always seek to maximise site value.

8.3.5. Regarding existing use values, sites coming forward for development in the Uttlesford District can typically comprise green field sites. Guidance issued by the HCA in "Transparent Assumptions: Guidance for the Area Wide Viability Model" 2010 states that for green field land, benchmarks tend to be in a range of 10 to 20 times agricultural value. In Knight Frank's report, *The Rural Report*, Winter 2014, typical agricultural land value per hectare, in the East of England, are noted as being £25,946. This would give a TLV of between £259,460 per hectare and £518,920 per hectare. In the BNP Paribas report of March 2014 they note "for sites in existing employment use (secondary industrial, timber yards, nurseries etc.) ... a benchmark land value of £0.7 million per gross hectare ... is reflective of the capital value of the existing uses.

8.3.6. As well as the *existing* use of the site, credible *alternative* uses should also be taken into account. Should an alternative use derive a higher land value, it is logical that a landowner would seek this higher value.

8.3.7. The alternative use depends on planning policy to a good degree. If a landowner knows that his site appears (or is likely to appear) in the development plan for residential land, he or she would only sell for this value (if greater than the existing use). The alternative use value sought will be particularly high in areas where the landowner is aware that high sales values for residential properties make land particularly valuable.

8.3.8. If sites in the Uttlesford District Council area have a realistic alternative use value for

residential development (having been allocated in the emerging Local Plan) then landowners will anticipate this is the value sought for the site. We do not foresee other use types coming forward on the sites. In the Uttlesford District Council area land values for residential development are higher than the existing use values; it is therefore prudent to also understand market values, as described in greater detail in 8.5 below.

8.4. Benchmark Land Value

8.4.1. To derive an appropriate BLV from market values (as opposed to existing land use value) it is necessary to work downwards in value. Market values based on transactional evidence of sites being bought and sold, represents the value at which land can be delivered, with the knowledge of current planning policy. Thus BLV benefits from being based on comparable market evidence.

8.4.2. However, the BLV cannot be straightforwardly derived from current market values. The market value / BLV should be adjusted to allow for any future changes in planning policy. Furthermore, it may also be necessary to reduce the market value / BLV to allow for risk in obtaining planning permission, dependent upon comparable evidence. There is no set rule for the amount of discount that should be applied to the market value of a site.

8.4.3. This market comparable based approach considers land traded in the area. This market performance will inform landowners' 'hope values' for sites. After adjustment for various factors (such as time and various flavours of risk, such as whether the land had planning permission), we can start to make judgments about how comparable sites might trade.

8.4.4. We have been able to obtain a number of comparable from developers and agents in the area. This information was provided on a confidential basis and therefore the actual comparable used cannot be made available to the public.

8.5. Which method of estimating the land value does this study use?

8.5.1 We seek to determine a Target Land Value used to compare to Residual Land Values (RLV) on site specific proposals as outlined below, using a combination of both methods (i.e. a combination of TLV and BLV).

8.5.2. We examined a wide range of comparable, looking at residential development site values whilst taking into consideration existing uses. This is to ensure that the Target Land Value is as accurate as possible. Given the complexities of development across a whole plan area, and limited nature of publically available transactional data, we have based this assessment on appropriate available evidence for a strategic assessment of this nature.

8.5.3. From our recent work we would highlight several key issues in assessing the land value, as follows.

- It is important to stress that there is no single Target Land Value at which land will come forward for development. Much depends on the land owner and their need to

sell or wait in the hope that land values might improve and on the condition and location of the site.

- All sites vary in terms of the degree to which they are serviced or free of abnormal development conditions. Such associated costs vary considerably from site to site and it is difficult to adopt a generic figure with any degree of accuracy. Our starting point is to assume that the value of sites relates to a fully serviced development plot.
- The development potential of sites will be reflected in the land value required, in order for a landowner to release the site for redevelopment.

8.5.4. The land transaction market is not transparent. Very little data is in the public domain and the subjective influences behind the deal are usually not available. We have therefore placed a strong emphasis on consultation with both landowners and developers to get as accurate a picture as possible as to what the Target Land Value might be, as well as data supplied by developers in making viability arguments to the council on site specific cases at a development control level. We are aware of the following transactions in particular:

- Wedow Road, Thaxted - 4.76 acres site sold with planning permission for 55 residential units in 2012. The land value paid for the site was £5,035,000 which equates to £91,545 per residential unit and £1,414,325 per developable acre. We understand that the average private sales rate was £250psf.
- Land at Brays Lane, Rochford Essex - 13.5 acre site including 2.63 acres of playing fields was sold with outline planning permission for up to 100 residential units in July 2012 for a base price of £7,550,000. This equates to £75,000 per unit and £990,813 per developable acre.
- Land at Ashdon Road and Little Walden Road, Saffron Walden - This 11.8 acre site with outline planning permission for 145 units and 2.4 acres of commercial space was bought by Persimmon Homes in July 2012 for £10,300,000. This equates to £71,034 per unit and £1,061,855 per developable acre.

This evidence above demonstrates that development land in the area is transacting for on average £70,000 per residential unit. Allowing for a very conservative discount for planning (considering the location and planning history of the site) this would suggest a value of £35,000 per residential unit or £1,235,000 per developable hectare.

In the February 2015 publication 'Land value estimates for policy appraisal', the DCLG assume an average site value in Uttlesford for a 1 hectare site is £3,025,000 assuming 100% market housing. This equates to £1,270,000 at a policy requirement of 40% affordable housing assuming no land value is attributed to affordable plots, and a 30% discount to reflect the planning status of sites, which would seem appropriate.

8.6. Treatment of site abnormal development costs

8.6.1. Abnormal development costs or site servicing costs will be met by developers once the land is purchased. Careful analysis of transactions is required to assess the split between abnormal development and servicing costs (as a discount from the market value) from the premium sought by the land owner above the existing use value, or adjustments to the benchmark value to reflect the additional costs.

8.6.2. In short, sites with significant abnormal costs (contamination remediation, poor ground condition and exceptional servicing costs etc.), would lead to these costs being deducted from a BLV, or result in a lower premium for a TLV.

8.7. Bringing together the Target Land Value and the Residual Land Value

8.7.1. Having estimated the residual value on individual schemes, we compare this residual value with the Target Land Value the landowner will accept to release his or her land for the development.

8.7.2. If the residual land value shown by the appraisals is below the Target Land Value, the development is not financially viable. That means that unless the circumstances change the development will not be delivered. In this situation it would be the norm to consider if a reduced affordable housing requirement would lead to viability.

8.7.3. If the residual value and the Target Land Value are equal, or if the residual value exceeds the Target Land Value, the development is viable.

8.8. Setting a Target Land Value

8.8.1. Having observed market transactions, the RICS guidance paper notes that we need to deduct an amount in order to take account of policy requirements.

8.8.2. The Inspector in the report on the examination of the London Mayoral CIL (January 2012) commented:

'Finally the price paid for development land may be reduced. As with profit levels there may be cries that this is unrealistic, but a reduction in development land value is an inherent part of the CIL concept. It may be argued that such a reduction may be all very well in the medium to long term but it is impossible in the short term because of the price already paid/agreed for development land. The difficulty with that argument is that if accepted the prospect of raising funds for infrastructure would be forever receding into the future. In any event in some instances it may be possible for contracts and options to be re-negotiated in the light of the changed circumstances arising from the imposition of CIL charges.' (paragraph 32)

8.8.3. The question, therefore, is how much we should adjust the land value downwards, in order to take account of policy costs such as the continuing requirement for affordable housing. RICS guidance requires us to comment on the state of the market and delivery targets as at the date of assessment and to set out our 'professional opinion underlying the

assumptions adopted’.

8.8.4. If we look at the state of the market, our discussions with developers showed that effective demand for homes (i.e. demand from people willing and able to pay) is relatively strong in the area. However if we over-value land, the RICS report points out that we will reduce the amount available for planning contributions. This has been taken into account when suggesting the Target Land Values below.

8.9. Target Land Values used

8.9.1. In suggesting a Target Land Value we are basing it on the net developable area rather than gross¹. We have reviewed the evidence above, and triangulated between existing use value, alternative use value and market value. Using our professional judgement, we believe that a sensible Target Land Value assumption for the area is as follows:

- £1,270,000 per net developable hectare in the average location.
- Plus or minus up to 10% depending on the GDV's (Gross Development Values) for the location.

8.9.2. These land values quoted are a broad average across each value zone. Site specific viability, including dealing with the costs of site specific constraints and landowners individual aspiration on land value, will of course vary. Any site abnormalities which are not reflected in our appraisals should be deducted from the land values assumed.

8.9.3. However, it is acknowledged that there will always be a minimum return that a landowner will require to release a site for development, which may not be sufficient once the cost of abnormalities are deducted.

¹ A net developable area is a more refined estimate than a gross developable and includes only those areas which will be developed for housing and directly associated uses. This will include:

- access roads within the site;
- private garden space;
- car parking areas;
- incidental open space and landscaping; and
- children's play areas where these are to be provided.

It therefore excludes:

- major distributor roads;
- primary schools;
- adult/youth play spaces or other open spaces serving a wider area; and
- significant landscape buffer strips.

We have assumed a net developable area equates to 80% of the equivalent gross developable area. The definition above reflects discussions at the consultation event (see also 3.8)

SECTION 3

9.0. Conclusions – are the sites viable?

9.1. Section 2 of this report sets out the assumptions, methodology and model we used in this study. Each of the seventeen sites identified through the Call for Sites process have been assessed within this framework. This includes infrastructure requirements compiled from providers with estimates used where appropriate, shown in Appendix C.

9.2. Fundamentally we are looking for the residual land value to be equal to or exceed the Target Land Value to prove the scheme's financial viability.

9.3. As schemes are in the early stage of development, it is considered prudent to allow a 5% buffer so that, the residual land value of a viable scheme achieves a minimum of 105% of the target land value. This is to account for the level of uncertainties that still exists relating to the cost of developing these sites.

9.4. Table of Results - Assessment of viability of Local Plan residential sites

The table of results below provides details of each of the schemes including scheme reference, location, proposed numbers of homes, net developable area (hectares) and proposed density. Most importantly it highlights residual land values as a percentage of Target Land Values, with the green traffic light confirming viability.

From our assessment of the information available and following the detailed methodology contained with Section 2 of this report, it can be concluded that all of the proposed new sites for the towns and villages are financially viable and therefore able to be delivered over the Local Plan period, if allocated. It can be seen clearly that some of the sites are considerably more viable than others, but all of them perform over the 105% rate as advised in this report.

As stated previously in this report, this assessment is based on current market conditions and in line with current Policy arrangements, which enables a meaningful assessment and comparison of the sites.

Table of Results - Assessment of viability of Local Plan residential sites

Number	Scheme Reference	Location	no. homes	Hec net	Density	% Target Land Value	Viable
1	07Saf15	Land north and south of Thaxted Road, Saffron Walden	300	11.83	25.4	176	
2	11Saf15	Land east of Shire Hill and south of Radwinter Road, Saffron Walden	450	25.7	17.5	117	
3	10Saf16	Land east of Little Walden Road, Saffron Walden	85	2.75	30.9	237	
4	08GtDun15	Helena Romanes School, Great Dunmow	200	10	20.0	154	
5	12GtDun15	Land west and south west of Great Dunmow	400	20	20.0	147	
6	07GtDun15	Wood Field, Woodside Way, Great Dunmow	120	5	24.0	184	
7	02Els15	Land north of Leigh Drive, Elsenham	30	0.8	37.5	272	
8	04Els15	Land north of Stansted Road, Elsenham	30	1	30.0	205	
9	08Els16	Land at Rush Lane, Robin Hood Road, Elsenham	40	1.68	23.8	135	
10	09Sta15	Land east of Cambridge Road and west of High Lane, Stansted Mountfitchet	40	1.2	33.3	181	
11	07Sta15	Land at Bentfield Green, Stansted Mountfitchet	70	3.6	19.4	135	
12	02HBO15	Land at Bonningtons Farm, Station Road, Takeley	45	1.8	25.0	156	
13	03HBO15	Land west of Station Road, Bonnington Green Takeley	230	12.45	18.5	113	
14	14Tha15	Claypitts Farm, Bardfield Road, Thaxted	25	1.07	23.4	137	
15	05Cla15	Land west of Stortford Road, Clavering	14	0.64	21.9	165	
16	02Man16	Land north of Stewarts Way and west of The Street, Manuden	30	1.88	16.0	125	
17	12Fel15	Gransmore Meadow, Chelmsford Road, Felsted	10	0.4	25.0	167	

Appendix A

Summary of Residential Allocation Proposals for Towns and Villages

- 1. Land north and South of Thaxted Road, Saffron Walden – 300 dwellings**

This greenfield site lies on the south eastern edge of the town. This proposal includes the land to the east of Thaxted Road for residential development, with leisure uses on land to the west. The site adjoins the adopted town development limits.
- 2. Land east of Shire Hill and south of Radwinter Road, Saffron Walden – 450 dwellings**

This greenfield site is located on the eastern edge of the town. The site adjoins the adopted development limits. This site, as part of a larger development that includes land to the south (detailed in 1 above) could assist in the provision of a link road between Radwinter Road and Thaxted Road, along with land for further provision of primary education.
- 3. Land east of Little Walden Road, Saffron Walden – 85 dwellings**

This greenfield site lies on the northern edge of the town, on the eastern side of Little Walden Road. The site adjoins the town development limits. Development of this site would extend the development boundary along Little Walden Road.
- 4. Helena Romanes School, Great Dunmow – 200 dwellings**

The site is considered suitable for development as part of a comprehensive development including land south of Stortford Road for residential, secondary school and sixth form centre.
- 5. Land west and south west of Great Dunmow – 400 dwellings**

This is a greenfield site adjoining the western edge of the town and opposite a site with planning permission for residential development. The site is proposed as suitable for residential development along with the safeguarding of land to the west for a new secondary school.
- 6. Wood Field, Woodside Way, Great Dunmow – 120 dwellings**

This site adjoins an existing site with planning permission for residential development and is also located opposite the development at Woodlands Park.
- 7. Land north of Leigh Drive, Elsenham – 30 dwellings**

This greenfield site is part of a larger site with planning permission for residential development, an Extra Care Facility and land for a community building. This proposal is for residential use and land for a community building.
- 8. Land north of Stansted Road, Elsenham – 30 dwellings**

This is a greenfield site located between the M11 and an existing site with planning permission for residential development. It abuts the Ancient Woodland of Alsa Wood to the north. This site is within in walking/cycling distance of the shops, doctors' surgery, and the school.
- 9. Land at Rush Lane, Robin Hood Road, Elsenham – 40 dwellings**

This is a greenfield site located on the southern edge of the village. The site is well related to the village and is in cycling/walking distance of the shops, school and doctors' surgery.

10. Land east of Cambridge Road and west of High Lane, Stansted Mountfitchet – 40 dwellings

This greenfield site lies at the northern edge of the town. It is a triangular site bounded by roads on two sides. Stansted is a key village and has a number of services and facilities. Land to the west has planning permission for residential development.

11. Land at Bentfield Green, Stansted Mountfitchet – 70 dwellings

This greenfield site is located on the northern edge of the village. The proposal involves residential development on the eastern half of the site with public open space on the remainder of the site. The site adjoins the development limits. Stansted is a key village with a number of key services and facilities.

12. Land at Bonningtons Farm, Station Road, Takeley – 45 dwellings

This brownfield site is located on the edge of Takeley, south of the Flich Way (County Wildlife Site and linear Country Park). Bonningtons Farmhouse on the site is a listed building. The site is in easy walking/cycling distance of the village centre and Roseacres primary school.

13. Land west of Station Road, Bonnington Green Takeley – 230 dwellings

This greenfield site is located on the edge of Takeley, south of the Flich Way (County Wildlife Site and linear Country Park). The site wraps around the site submitted at Bonningtons Farm, as detailed in 12 above.

14. Claypitts Farm, Bardfield Road, Thaxted – 25 dwellings

This part brownfield and part greenfield site lies on the south eastern side of the village, adjacent to the development limits. The site is adjacent to the conservation area and the access road lies within the development limits and conservation area. The site is within walking/cycling distance of the village services and facilities.

15. Land west of Stortford Road, Clavering – 14 dwellings

This is a greenfield site, which would extend residential development along Stortford Road, but not extending further than the existing development on the opposite side. The site is well located to the village shop and school.

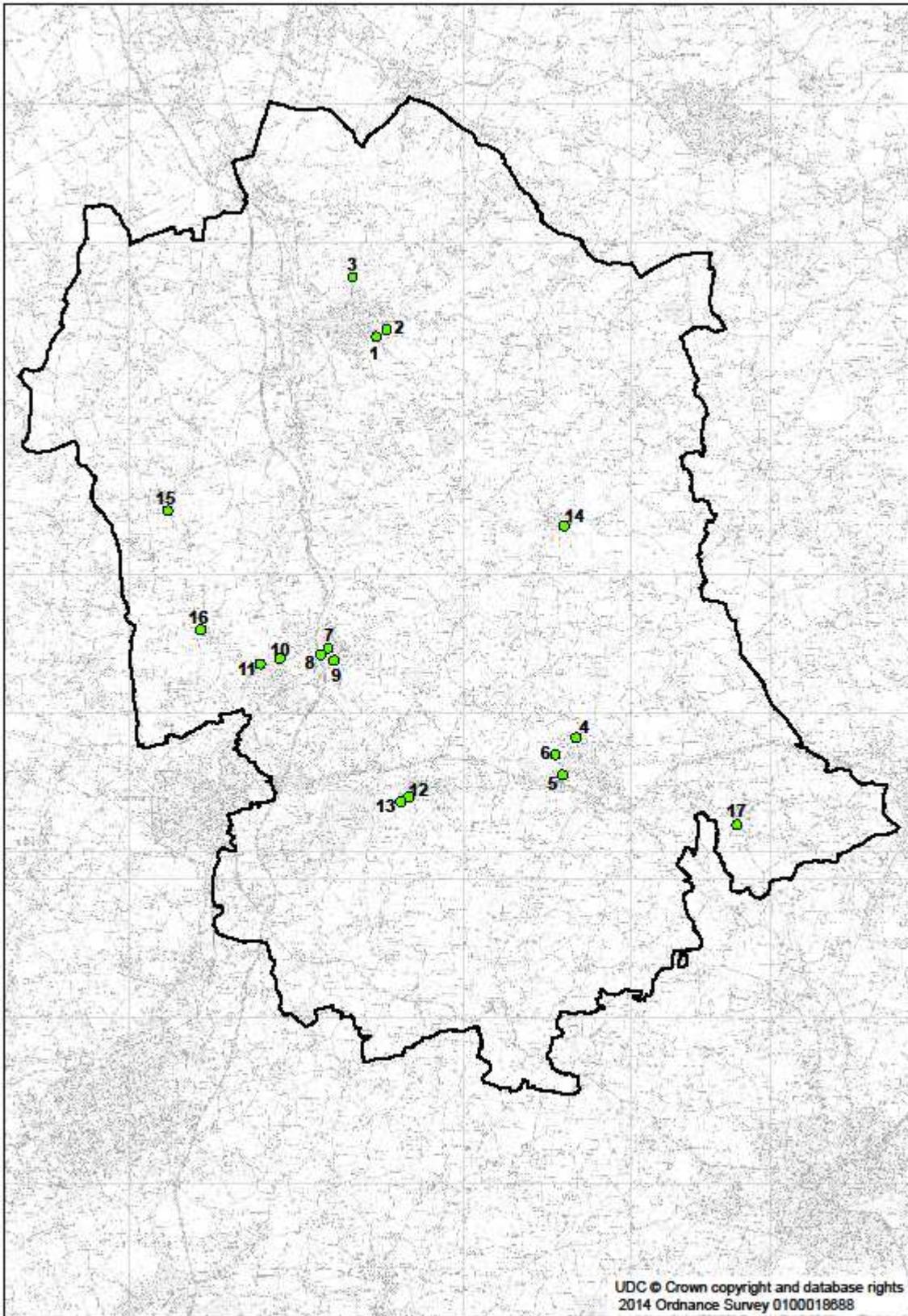
16. Land north of Stewarts Way and west of The Street, Manuden – 30 dwellings

This greenfield site lies to the north of the village, adjacent to the development limits and conservation area. The site is well related to the village and is within walking/cycling distance of the school.

17. Gransmore Meadow, Chelmsford Road, Felsted – 10 dwellings

This is a greenfield site adjoining the southern edge of Felsted. The site is within walking/cycling distance of the facilities in Felsted

Proposed Residential Allocations Location Map



Appendix B

Attendees at consultation events held from February to April 2016 at UDC offices and contributors to correspondence.

Promoters/land owners/agents and consultants

Robin Meakins – Barton Willmore

Colin Campbell – Savills

Adam Halford – Bidwells

Craig Nelson – Ptarmigan Land

James Brierley – Gerald Eve

John August – Galliard Homes

Martin Herbert – AECOM

David Maxwell – Capita

Richard Mabb – Mabb Planning

Jonathan Harris – GL Hearn

Robert Bucknall

Ian Chater – Chater Homes

Harry Jones – David Lock Associates

Philip Copsey – David Lock Associates

The Fairfield Partnership

Essex County Council Officers – Infrastructure Advice

Neil Keylock – School Places Data and Intelligence Manager

David Sprunt – Principal Transport Strategy and Engagement Officer

Gill Holland – Children’s Community Development Officer

Keith Blackburn – Senior Infrastructure Planning Officer

Blaise Gammie – Infrastructure Planning Manager

Matthew Bradley – Strategic Development Manager

Zhanine Smith – Principal Spatial Planner

Other (authors of this report)

Martin Aust – Pathfinder Development Consultants

Doug Malins – Malins Associates Limited

Appendix C

Uttlesford District Council Infrastructure Delivery Schedule & Financial Viability Study – ECC Input

The information outlined within the tables below is indicative figures, and may be subject to change.

Saffron Walden (800 homes total – 3 sites)

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(s)	Cost	Notes
Transport 07Saf15 and 11Saf15 (east)	Stated by ECC Transport colleagues that they have previously assessed and provided response on these Additional comments: No transport policy objections, subject to review of the associated transport assessment and appropriate mitigation that supports sustainable transport measures, and appropriate highway measures. Public transport linkages to town centre and Audley End station and safe crossings of Thaxted Rd will be required. Thaxted Rd/Radwinter Rd is AQMA, highly congested, and any development to east of the town likely to exacerbate this situation and mitigation measures are necessary.		Contribution from developer	4 junction capacity mitigation schemes at an estimated cost of £699,500	Eastern Link Road to be provided as part of the development and to serve as a distributor within the development.
Transport 10Saf15	Stated by ECC Transport colleagues that they have previously assessed and provided response on this Additional comments:		Contribution from developer	1 junction capacity mitigation scheme at an estimated cost of £279,000	

	No transport policy objections, subject to review of the associated transport assessment and appropriate mitigation that supports sustainable transport measures, and appropriate highway measures.				
Education Primary & EYC	New Primary School on .9ha of land to the North-West corner of the site. EYC additional: The amount of additional childcare the proposed developments would require is 75.9 places. These could be two additional larger nurseries and ideally would be co-located with new schools	Completion of new primary school located at eastern new development sites. Delivery timetable to be agreed.	ECC (costs to be borne by developer)	£5.2mn + 0.9ha. D1 allocated land to be provided at nil cost EYC costs at standard S106 rate of £13,500 per place. Totalling £1,026,000.	
Education Secondary	Demand for secondary school places should be able to be accommodated within existing expansion plans at Joyce Frankland Academy Newport, and through the admissions process.		ECC (costs to be borne by developer)	Cost of extra places at standard formula calculation via S106 for 144 new spaces. Totalling £2,664,000	See ECC Developer Guidelines
Health	The following capital funding figures for Health have been extracted from the draft Growth and Infrastructure Framework for the period of the plan.	Throughout the plan period	Contribution from developer	Primary Health Care at £769 per dwelling. Acute Health Care at £2,816 per dwelling. Mental Health Care at £273 per dwelling.	Further detailed discussion with Health representatives required.

Great Dunmow (720 homes total – 3 sites)

<p>Transport 12GtDun15 Land West of Dunmow and South of Stortford Road</p>	<p>Stated by ECC Transport colleagues that they have previously assessed and provided response on these Additional comments: No transport policy objections, subject to review of the associated transport assessment and appropriate mitigation that supports sustainable transport measures, and appropriate highway measures. There is a need for strengthened public transport links to key destinations for example Stansted Airport and Dunmow town centre</p>		<p>Contribution from developer</p>		<p>Great Dunmow already has a bypass so there is little in terms of capacity improvements over and above those already planned or directly needed by the developments to access the network. However, contributions to upgrading the town centre and also cycling and walking networks would be required, although these are not costed at this stage.</p>
<p>Transport 08GtDun15 Land at Helena Romanes School</p>	<p>Stated by ECC Transport colleagues that they have previously assessed and provided response on these Additional comments: No transport policy objections, subject to review of the associated transport assessment and appropriate mitigation that supports sustainable transport measures, and appropriate highway mitigation</p>		<p>Contribution from developer</p>		<p>Great Dunmow already has a bypass so there is little in terms of capacity improvements over and above those already planned or directly needed by the developments to access the network. However, contributions to upgrading the town centre and also cycling and walking networks would be required,</p>

					although these are not costed at this stage.
Transport 07GtDun15 Wood Field	Stated by ECC Transport colleagues that they have previously assessed and provided response on these Additional comments: No transport policy objections, subject to review of the associated transport assessment and appropriate mitigation that supports sustainable transport measures, and appropriate highway measures. Not clear how access to public highway is to be achieved		Contribution from developer		Great Dunmow already has a bypass so there is little in terms of capacity improvements over and above those already planned or directly needed by the developments to access the network. However, contributions to upgrading the town centre and also cycling and walking networks would be required, although these are not costed at this stage.
Education & EYC	Growth scale can be accommodated by existing additional primary education provision plans for additional local education provision (new school to open in 2019, and another new primary school site is already identified for longer term need), plus secondary education provision (expansion of HRS). Education provision can thus be accommodated		ECC	These new primary provision costs appear to be provided for already. Additional Primary costs at standard formula 94 extra spaces are £2,366,800. These costs may need to be more bespoke than the standard formula. Additional Secondary provision from	See ECC Developer Guidelines for education places provision costs formulas

				standard formula via S106 for 130 new spaces. Totalling £2,405,000	
Health	The following capital funding figures for Health have been extracted from the draft Growth and Infrastructure Framework for the period of the plan.	Throughout the plan period	Contribution from developer	Primary Health Care at £769 per dwelling. Acute Health Care at £2,816 per dwelling. Mental Health Care at £273 per dwelling.	Further detailed discussion with Health representatives required.

Elsenham (100 homes – 3 sites)

Transport 02EIs15, 04EIs15 & 08EIs15	Not clear how access to public highway is to be achieved. There will be impact on congested links, i.e. Grove Hill, Lower Road, and Chapel Hill in Stansted Mountfitchet		Contribution from developer		There may be a requirement for a contribution once plans are worked up in greater detail.
Education & EYC	This level of housing in Elsenham should be able to be accommodated by the planned expansion of Elsenham Primary School, and potential to expand Forest Hall School. Childcare within the Elsenham and Henham Wards are currently delivered through two nurseries and child-minders. Currently there are no vacancies; however we are anticipating additional nursery		ECC – developer funded	Apply standard additional education provision costing from standard formula EYC costing at standard formula for 9 extra spaces is £121,500. Primary costing at standard formula for 27 extra spaces is £329,400.	See ECC Developer Guidelines for education places provision costs formulas

	or pre-school provision in the near future. The amount of additional childcare the proposed development would generate is 9 childcare places which may be incorporated within the proposed provision.			Secondary costing at standard formula for 18 extra spaces is £333,000	
Health	The following capital funding figures for Health have been extracted from the draft Growth and Infrastructure Framework for the period of the plan.	Throughout the plan period	Contribution from developer	Primary Health Care at £769 per dwelling. Acute Health Care at £2,816 per dwelling. Mental Health Care at £273 per dwelling.	Further detailed discussion with Health representatives required.

Stansted Mountfitchet (110 homes – 2 sites)

Transport 09Sta15 & 07Sta15	Not clear how access to public highway is to be achieved, concern if access for 07 is to be via Pennington Lane as this is a narrow lane unsuitable for increased flows. Impact on congested links through Stansted Mountfitchet village centre.		Contribution from developer		There may be a requirement for a contribution once plans are worked up in greater detail.
Education & EYC	This level of housing in Stansted Mountfitchet should be able to be accommodated within existing primary school provision, and with the planned/potential to expand Forest Hall School. Stansted South and Stansted North are the two wards		ECC – developer funded	Apply standard additional education provision costing from standard formula EYC costing at standard formula for 10 extra spaces is £135,000.	See ECC Developer Guidelines for education places provision costs formulas

	surrounding Stansted Mounfitchet. There is a full range of childcare within these two wards however the Summer 2016 sufficiency data shows that of the 184 places 173 are currently taken which is a 94.0% capacity. The proposed development would generate another 9.9 places which given the level of vacancies at the moment would be difficult to accommodate. However any 106 contribution could be used to support increased capacity with existing childcare providers.			Primary costing at standard formula for 30 extra spaces is £366,000. Secondary costing at standard formula for 20 extra spaces is £370,000	
Health	The following capital funding figures for Health have been extracted from the draft Growth and Infrastructure Framework for the period of the plan.	Throughout the plan period	Contribution from developer	Primary Health Care at £769 per dwelling. Acute Health Care at £2,816 per dwelling. Mental Health Care at £273 per dwelling.	Further detailed discussion with Health representatives required.

Takeley (275 homes)

Transport 02HBO15 & 03HBO15	Concern of impact on M11 J8 and at Takeley Four Ashes signals.	Timescale for funding M11 J8 improvements could be 2025+	To be identified	Cost of M11 J8 improvements extremely high	Transport considerations may present major issues
Education & EYC	420 place new primary needed inc 56 place nursery		ECC – developer funded	£7.3mn + land at nil cost	See ECC Developer Guidelines for education places provision costs

					formulas
Health	The following capital funding figures for Health have been extracted from the draft Growth and Infrastructure Framework for the period of the plan.	Throughout the plan period	Contribution from developer	Primary Health Care at £769 per dwelling. Acute Health Care at £2,816 per dwelling. Mental Health Care at £273 per dwelling.	Further detailed discussion with Health representatives required.

Thaxted (25 homes)

Transport 14Tha15	Safe access would have to be demonstrated for this site				There may be a requirement for a contribution once plans are worked up in greater detail.
Education & EYC	Extra provision needs generated from +25 homes might be accommodated in existing school – on very constrained site – will check Thaxted has pre-school, nursery and child-minder provision and currently (Summer 2016 childcare sufficiency data) shows that there are 65 places of which 59 are filled. This would only just allow sufficient childcare places required for the proposed new development of where 5 additional childcare places would be required. As Thaxted has already been an area of high development it is		ECC – developer funded	Apply standard additional education provision costing from standard formula EYC costing at standard formula for 5 extra spaces is £67,500. Primary costing at standard formula for 7 extra spaces is £85,400. Secondary costing at standard formula for 5 extra spaces is £92,500	See ECC Developer Guidelines for education places provision costs formulas

	likely that more families are going to grow and possibly move into the area and therefore placing a strain on the existing childcare provision.				
Health	The following capital funding figures for Health have been extracted from the draft Growth and Infrastructure Framework for the period of the plan.	Throughout the plan period	Contribution from developer	Primary Health Care at £769 per dwelling. Acute Health Care at £2,816 per dwelling. Mental Health Care at £273 per dwelling.	Further detailed discussion with Health representatives required.

SUBJECT

Uttlesford Water Cycle Study Interim Technical Note

DATE

10 October 2016

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APPROVER

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1 Introduction

Uttlesford District Council (UDC) previously prepared a Stage 1 Water Cycle Study (WCS) (Scoping and Outline Strategy) in 2010 and a Stage 2 WCS (Detailed Strategy) in 2012. The 2012 WCS is now out of date as it was prepared in relation to a previous Local Plan that did not proceed to the formal adoption stage. However, the study concluded that there were potential constraints to the proposed development relating to the sewer and wastewater treatment capacity in some areas without suitable upgrades, including Great Dunmow, Newport, Saffron Walden, Great Chesterford and Thaxted. The emerging Local Plan is looking to allocate sites for 4,600 new dwellings with the proposed distribution strategy for Uttlesford District. Therefore, an update is required to the 2012 WCS to assess the likely impact of new development on the water environment.

This initial assessment has been prepared in advance of the publication of WCS update, to guide UDC to make an informed decision and recommendation regarding the choice of two new settlement sites, alongside the remaining development sites. The initial assessment has been based on the following data sources:

- **UDC** Housing Development Trajectory and distribution breakdown
- **UDC** Preferred site allocations mapping
- **Thames Water** Asset Datasets: WwTW
- **Anglian Water** Assets Datasets: Sewers / Pumping Station / WwTW
- **Affinity Water** 2015 Water Resource Management Plan
- **Environment Agency**- River Basin Management Plan and water body quality data
- **Environment Agency**- Catchment Abstraction Licencing Strategies

Due to time constraints, at the time of writing this technical note there is some data still remained outstanding from Anglian Water, Affinity Water and Thames Water. Therefore, initial conclusions for their assets have been based on the information readily available online and from the information used for the 2012 WCS. Further consultation will be undertaken with the key stakeholders before completing the WCS update.

2 Development Trajectory

The current Uttlesford Local Plan was adopted in 2005. It currently forms the basis for making planning decisions within the District alongside the National Planning Policy Framework published in

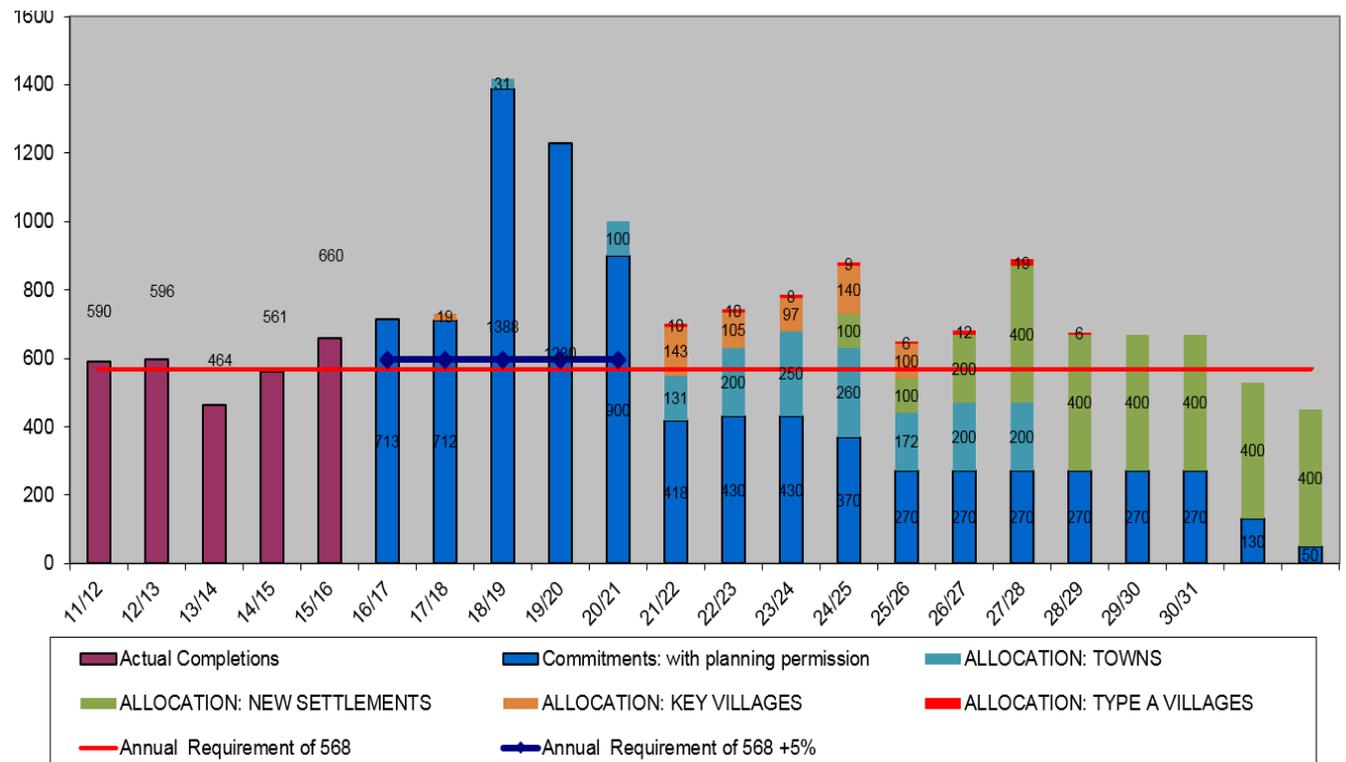
March 2012 and the Planning Practice Guidance. UDC have identified that it is becoming increasingly out of date, therefore and a replacement plan is currently being prepared.

To inform the Local Plan and other studies, UDC has made an initial consideration of the Department for Communities and Local Government (DCLG's) household projections published 2012. Between 2012 and 2033 the projections estimate an average annual increase of 568 dwellings per year within the Uttlesford District. A breakdown of the development trajectory considered in this assessment is detailed in Table 1 and Figure 1.

Table 1: Development Trajectory

LOCATION	Total (from 2017 to 2033)
ALLOCATION TYPE: NEW SETTLEMENTS Two locations to be confirmed by UDC from the list below for the WCS Update as further explained below: <ul style="list-style-type: none"> • Elsenham • Great Chesterford • Little Easton • Stebbing 	2,800
ALLOCATION TYPE: TOWNS <ul style="list-style-type: none"> • Great Dunmow • Saffron Walden 	1,544
ALLOCATION TYPE: KEY VILLAGES <ul style="list-style-type: none"> • Thaxted • Takely • Stansted • Newport • Little Canfield 	604
TOTAL 4,948	

Figure 1: Housing Completions and Trajectory 2011 to 2033



Due to the small scale development within the Type A villages, these locations have been omitted from the WCS update. Within this update an assessment of a single Preferred Option, comprising with a single housing trajectory and the locations is undertaken. Four potential New Settlement locations have been identified and all settlements will require a high level scoping assessment to assist UDC in determining which sites to allocate although only 2 New Settlements will likely to form the preferred option, requiring further assessment within this WCS Update.

3 Water Resources and Supply

A summary of water resources and supply within the Uttlesford District are provided in the section below, including likely capacity constraints and solutions.

3.1 Water Resource Management Plan (WRMP)

Affinity Water is currently the sole supplier of potable water to UDC and the entirety of the district is located within their Central Supply Region. The Central Region abstracts 60% of the water supply from groundwater sources (with boreholes abstracting from chalk and gravel aquifers), 40% from surface water sources and imports from neighbouring water companies: (Thames Water, Anglian Water and Cambridge Water). Water is also exported from the Central Region to South East Water and Cambridge Water. The Central Region has an average Distribution Input of 875MI/d.

The Central Supply Region is further subdivided into water resource zones (WRZs) and these are broadly integrated areas in which customers are supplied by a common strategic pipe network from a number of local water sources. WRZs also allow water to be transferred between zones to enable operational flexibility and they are created to facilitate assessment of the supply and demand. UDC is located within WRZ 5 (Stort).

Table 2: Central Region WRZ5 Summary

Water Resource Zones	Average Deployable Output MI/d	Max Deployable Output MI/d	Reason for change from 2009 WRMP
WRZ 5 Stort	70.77	73.38	Decrease- Net reduction in abstraction licences.

Table 2 details the deployable output for WRZ5 and the change from the output when compared to the 2009 WRMP that was used in the 2012 Uttlesford WCS. Deployable output (DO) is the term used to define how much water can be abstracted reliably from a source during a dry year and delivered into supply. It is measured in mega litres per day (MI/d) and it is evaluated as an average DO over the whole year (known as average DO or ADO) and during critical periods (typically a seven-day period) when demands are at their highest (known as peak DO or PDO).

In summary, the previous WRMP (2009) assessed groundwater DO values based on 2005/06 groundwater levels, which were at their lowest during the dry year. Following another dry year in 2011/12 groundwater level data was reassessed as part of the 2014 WRMP, to see whether 2011/12 represented a more extreme case. Within the UDC study area this has resulted in a net decrease in abstraction licenses in WRZ5. This reduction in abstraction requires investment in those areas to ensure demand is met.

3.2 Catchment Management Abstraction Strategy (CAMS)

The EA monitors existing abstractions so as to understand the water balance within catchments and what water may be available for future use. The EA prepares Catchment Abstraction Management Plans (CAMS) to make sure there is enough water for people and the environment. The results of the CAMS process are published in abstraction licensing strategies. There are four main strategies which cover UDC study area and the details are contained within Table 3.

Table 3: CAMS Summary

CAMS catchment	WRMU reference	Uttlesford Rivers Affected	Resource Availability Status
Cam and Ely Ouse	A: (Cam, Rhee and Granta)	Cam and tributaries, Granta (River Bourn near Ashdon)	Surface Water- restricted water available for licensing during high flows. No water available for licensing during moderate to low flow. Groundwater- not available for licensing. Overall consumptive abstraction available is less than 30% of the time.
Combined Essex	1: Pant/Blackwater, Ter, Roman/Layer, Wid, Brain, Chelmer	Pant, Ter and Chelmer	Surface Water and Groundwater- No water available for licensing.
Roding, Beam and Ingrebourne	2: Upper Roding	Roding	Surface Water - No water available for licensing. Overall consumptive abstraction available is less than 30% of the time.
Upper Lee	1: Rivers Lee, Mimram, Beane, Rib, Ash and Upper Stort	Stort	Surface Water and Groundwater- No water available for licensing. Overall consumptive abstraction available is less than 30% of the time.
	2: River Stort and Pincey Brook	Stort, Pincey Brook, Stansted Brook	

The CAMS indicate that overall no further consumptive licences will be granted for groundwater or surface water sources. There is no further water for abstraction as overall further abstraction would result in an unsustainable impact on the environment. Water may be available to 'buy' (known as licence trading) the entitlement to abstract water from an existing licence holder.

In summary, with no further licences being granted within UDC water efficiency measures relating to the existing supply will need to be implemented to safeguard water supplies into the future. Further sustainability reductions may be required in the future to support the aspirations of the Water Framework Directive (WFD). Development of additional resources, or increased efficiency through demand management, will be required to maintain the supply required for new developments.

3.3 Water Demand

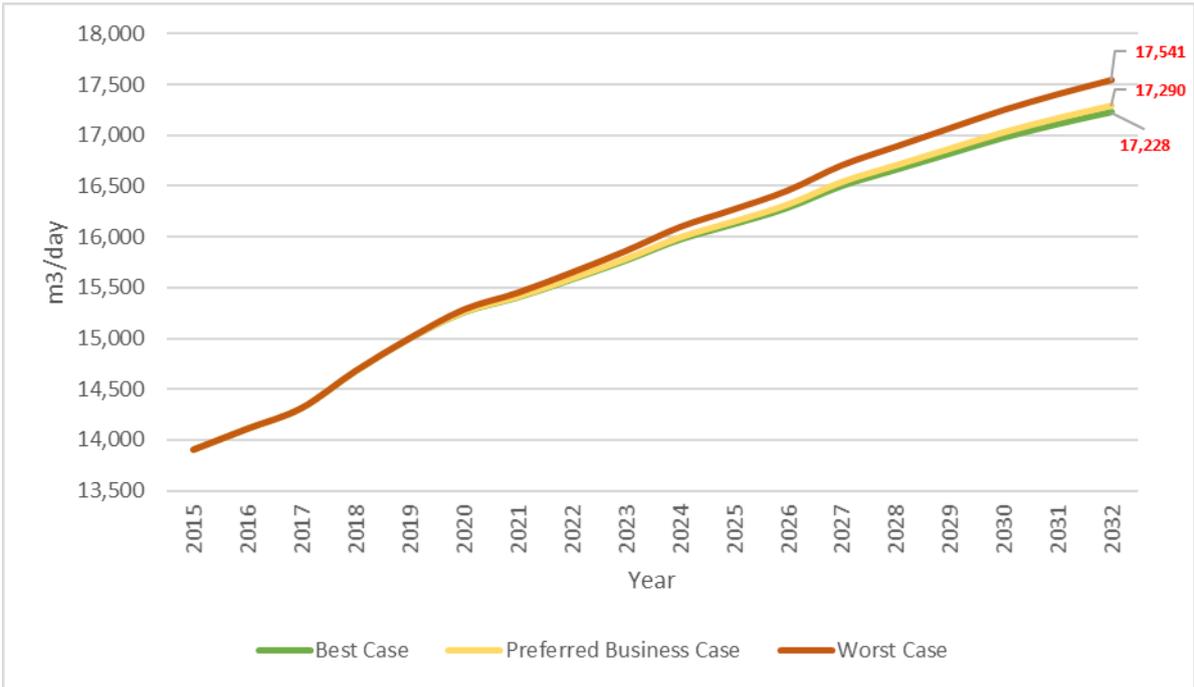
The impact on water resources and infrastructure with UDC as a result of new development does not solely depend upon the number of dwellings constructed. Demographic changes, i.e. changes in population and occupancy rates, will influence the impact of each new dwelling. Behavioural changes such as changes in per capita consumption (PCC), in both new and existing dwellings, will also affect the impact that the development has on the water infrastructure. To assess the impact of proposed residential development within the study area on the water infrastructure, an estimate of the predicted population and dwellings amounts, and hence average occupancy rate, is also required. The PCC scenarios assessed in this initial assessment are listed in the table below:

Table 4: Uttlesford District PCC Scenarios

Scenario	PCC of Existing Dwellings	PCC of New Dwellings
Best Case	161.95-143.17 l/p/d. As per Affinity's preferred option NYAA PCC rates as detailed in the 2014 WRMP.	105 l/p/d – In line with DEFRA's requirements for social housing.
Preferred Business Case	161.95-143.17 l/p/d. As per Affinity's preferred option NYAA PCC rates as detailed in the 2014 WRMP.	110 l/p/d – As defined by Building Regulations optional requirements.
Worst Case	161.95-152.46 l/p/d. As per Affinity's baseline option NYAA PCC rates as detailed in the 2014 WRMP.	125 l/p/d – As defined by Building Regulations minimum requirements.

The above scenarios have been used to provide an initial assessment as to the impacts on water demand within the District, with the demand projection results for Uttlesford District are shown in Figure 1. This includes likely water demand from the existing dwellings and planning commitments as well as the new dwellings.

Figure 1: Uttlesford District Water Demand Projections 2015-2032 (Final 2032 figures shown in red).



The projections show that there is limited variation between scenarios with a final difference of 313m³/day between best and worst case scenarios. This is due to the total demand figures being mainly influenced by the demand from the existing dwellings. The below table provides an overview of the increase to the existing water consumption within the District.

Table 5: Uttlesford District Extra Residential Water Demand Summary, including existing planning commitments

Scenario	2032 Increase in Demand (m3/day)	Change in Demand
Best Case	3,330	+23.96%
Preferred Business Case	3,391	+24.40%
Worst Case	3,643	+26.21%

3.4 Water Balance Initial Conclusions

The initial calculations show an overall increase in residential water demand of some 3,500m³/day between 2015 and 2032. Affinity Water in their 2014 WRMP have concluded that there is not enough water to meet the increasing demand in all of the operating areas, and therefore Affinity Water have undertaken an options appraisal to consider ways to resolve the deficits. Feasible options to balance supply and demand include schemes to reduce leakage, install more customer meters and encourage better use of water with minimal wastage. These are consistent with Government aspirations to reduce per capita water consumption. Affinity Water has also identified possible schemes to provide additional water resources from groundwater, surface water and transfers from neighbouring water companies and third parties within and in close proximity to their boundaries. Affinity Water have balanced supply and demand with a combination of options and the main options under consideration are described below.

Options within WRZ5

- Discrete ALC leakage options in AMP6 (2015-2020) and AMP7 (2021-2025) have been replaced by a single ALC option deriving a total of 3.5Ml/d over the planning period.
- This WRZ is the first to be universally metered.
- Population is projected to grow by 25% in WRZ5. This has necessitated the selection of a new resource development option to balance supply and demand.
- The increased population and housing growth projected in WRZ5 has introduced a supply scheme that was not present in the draft 2014 WRMP. The need to develop other schemes has been partially offset by the greater volume of leakage reduction that has been selected for modelling.

With the measures above the 2014 WRMP concluded demand can be met, however this needs confirmation with Affinity Water whilst considering any additional new development that now planned in UDC Local Plan Update. The latest development site information available from UDC should also be used in informing Affinity Water’s 2019 WRMP.

4 Wastewater and Sewerage

Wastewater treatment and conveyance within Uttlesford district is managed by both Anglian Water and Thames Water. Since the publication of the 2012 Detailed WCS the proposed development trajectory has been modified by UDC, this along with any changes or upgrades to Anglian and Thames Water assets has necessitated an update to the previous WCS.

In order to confirm the impact of the proposed residential development, the following aspects have been assessed as part of this technical note:

- Impact of development trajectory on volumetric discharge in terms of Dry Weather Flow (DWF) in relation to existing discharge consents;
- Identification of WWTWs which require upgrading or where upgrades are not feasible, identification of potentials for new WWTWs;
- Identification of key wastewater constraints in relation to each site considered within UDCs proposed trajectory.

4.1 Wastewater Projections

The 2012 Detailed WCS concluded that there were constraints across a number of key existing settlements, these included: Saffron Waldon, Great Dunmow, Newport and Felstead. The methodology used previously has been re-applied using the latest variables as below:

$$Total\ DWF = Existing\ DWF + New\ DWF$$

Where

$$DWF = (number\ of\ dwellings \times occupancy\ rate \times PCC) + infiltration + trade\ flow$$

Following consultation with Anglian Water, The PCC rate used is 131 l/p/d. This is lower than the 144 l/p/d used in the 2012 Detailed WCS, however is still above the maximum requirement for Building Regulations (125 l/p/d). The allowance for infiltration, which accounts for water entering the sewerage network from incorrect or illegal connections, and through defects in the existing assets, is estimated to be an additional 25% of the DWF from dwellings, based on guidance from AWS. Occupancy rates have been set at 2.43 as per the 2011 census data for Uttlesford District.

It has been assumed that trade effluent remains constant for the foreseeable future across the District. Intensification of existing employment areas is unlikely to result in a net increase in industrial demand, as it is predicted that existing companies with heavy water use will improve efficiency, and be replaced with service-orientated industry over time.

Initial, high level discussions with Anglian Water engineers and planners, based on their knowledge of current capacity and performance at the WWTWs, have been undertaken to assess the potential impact from the proposed development. Where Anglian Water estimate that upgrades will be required, the feasibility of such upgrades, has been briefly outlined below.

For the purpose of the initial calculations dwellings outlined within the proposed development trajectory (including existing and committed development) have been assigned to a WWTW dependant on the catchment in which they are located in, as summarised in Table 6 below. It should be noted however that for the initial calculations both Windfall sites and sites located in Type A villages have not been included.

Table 6: Communities Served by WwTW

Water Company	Wastewater Treatment Works	Communities Served
Anglian Water	Great Chesterford	Great Chesterford
	Saffron Walden	Saffron Walden
	Newport	Newport
	Great Dunmow	Great Dunmow
	Great Easton	Thaxted
	Felstead	Stebbing
Thames Water	Stansted Mountfitchet	Elsenham
		Standsted Mountfitchet
	Takeley	Takeley
		Little Canfield

Two variations of the baseline DWF estimates have been provided: one uses a calculated baseline DWF based on the existing population estimates from Anglian Water, the other uses the measured Baseline DWF Q80 flows from 2015 also provided by Anglian Water.

At the time of this technical note, Thames Water were unable to provide equivalent data for Stansted Mountfitchet and Takeley WwTWs and therefore we have provisionally used the calculated baseline DWF used in the 2012 Detailed WCS.

4.2 Towns and Key Villages

Results from the initial wastewater DWF calculations have been outlined in Table 7 below and they provide a general indication of the impacts of the proposed development on existing WwTWs due to the existing planning commitments and new dwellings within the towns and Key Villages shown in Table 1.

Table 7: DWF Impacts from development in Towns and Key Villages

Wastewater Treatment Works	Existing DWF Consent (m ³ /day)	Existing DWF - Calculated (m ³ /day)	Existing DWF - Measured (m ³ /day)	Increase in Dwellings (2016-2032)	2032 DWF – Using Calculated baseline (m ³ /day)	2032 DWF – Using Measured baseline (m ³ /day)
Saffron Waldon	3700	2842	2828	1424	3408	3395
Great Dunmow	1509	1497	472	2894	2649	1624
Takeley	667	507	Not Available	419	673	Not Available
Great Easton	720	608	701	103	649	742
Newport	650	456	670	451	635	849
Stansted Mountfitchet	2650	1771	Not Available	848	2108	Not Available
Great Chesterford	1284	526	2886	86	561	1132

If the calculated baseline DWF are used then results show that for five of the seven WwTWs within Uttlesford that the volumetric 2032 DWF is not increased over the existing consent levels. However, for both Takeley and Great Dunmow the existing consents are expected to be exceeded by 2032. Alternatively, if the measured baseline DWF are used then results show that Newport and Great Easton WwTWs will also exceed their existing volumetric consents.

For Takeley the consent is exceeded by a calculated 5 m³/day. Whilst Thames Water were not available for comment at this stage it would be expected that this would be able to be managed through implementation of water efficiency measures provided that the actual measured baseline DWF is less than the calculated baseline DWF used in this assessment (i.e. based on 2012 Detailed WCS figures).

If the calculated baseline DWF provided by Anglian Water is used for Great Dunmow WwTW, it is currently shown to be nearing its existing DWF consent, with around only 12 m³/day of headroom calculated to be available. It is therefore clear that under the existing consent, there is no more

volumetric capacity for any extra dwellings. The proposed development currently allocates around 2900 dwellings within the Great Dunmow wastewater catchment, at this stage a clear constraint has been identified which need further investigation. Anglian have confirmed that they are developing a strategy for Great Dunmow, details of this strategy have not been provided at this stage but discussions with Anglian are on-going. The significant differences between the calculated and measured baseline DWF at both Great Dunmow and Felsted WwTW and our consultations with Anglian Water to date also suggest that it is possible that flows from Great Dunmow catchment is currently being diverted to Felsted WwTW as an interim measure until a permanent solution is found.

4.3 New Settlements

The above calculations in Section 4.2 have been undertaken for those sites which are specified within the proposed development trajectory within the existing Towns and Key Villages. As discussed above, this WCS update should also assess proposed new settlements in terms of wastewater management. As this is currently a scoping and optioneering exercise the additional dwelling figures proposed in any of those potential New Settlements have not been included in the above analysis.

Instead these have been separately assessed whilst using the estimated 2032 DWF figures from Table 7 above as new baseline to determine the total impact on the relevant WwTWs with these New Settlements. Therefore, an initial assessment was carried out for the four New Settlement locations (Great Chesterford, Elsenham, Little Easton and Stebbing), assuming 1400 additional dwellings at each. In practice, only two New Settlements will be allocated in UDC's Local Plan giving a total of 2800 additional dwellings.

The results are shown below:

Table 8: Additional Dry Weather Flow Impacts with potential new settlements

New Settlement	WwTW (m3/day)	Existing DWF Consent (m3/day)	2032 DWF – Using Calculated baseline (m3/day)	2032 DWF – Using Measured baseline (m3/day)
Elsenham	Stanstead Mountfitchet	2650	2665	Not Available
Great Chesterford	Great Chesterford	1284	1118	1689
Little Easton	Great Dunmow	1509	3206	2181
Stebbing	Felstead	1630	1512	3443

The results show that when using the calculated DWF baseline as above, for the Great Chesterford and Stebbing new settlements there is adequate volumetric capacity at the associated WwTWs. For the Elsenham and Little Easton new settlements there is limited capacity or no capacity. However, when using the measured DWF baseline values, there is no volumetric capacity across any of the relevant WwTWs, which need further clarification and investigation with Anglian Water and Thames Water.

Due to the current constraints involved with the current Local Plan Update timetable, the two allocated new settlements may require a further site specific assessment, developed in co-operation with Anglian and Thames Water, based on the conclusions of the current WCS Update.

4.4 Sewerage System

Initial consultation undertaken with Anglian Water has indicated that the sewerage conveyance networks should not be considered a major constraint at this stage in the planning process, however, developers should always liaise with Anglian Water at the earliest possible opportunity in the planning process.

5 Water Quality

River Basin Management Plans (RBMP) have been developed by the various regional offices of the Environment Agency and were published in 2009. The RBMPs set out a strategy, including a Programme of Measures, for each catchment to comply with the requirements of the WFD. An assessment of the current status of the rivers has been made, showing the rivers and lakes that currently fall below the 'good' status required to meet the WFD objectives. The documents then set out those rivers that should be at 'good' status by 2027.

Discharges from WwTW and industry, and surface water runoff (in particular from agricultural areas) can lead to nutrient enrichment, or eutrophication, of the receiving watercourses. High levels of nutrients can adversely affect the biodiversity of the watercourse, particularly as it decreases the oxygen levels in the water that other life forms depend upon.

As with the CAMS designations, Uttlesford District falls within the Thames and Anglian RBMP areas. Further information on the WFD, the current status, and future targets of the District's watercourses is included in Table 9.

Table 9: RBMP Summary

Catchment	Sub Catchment	River Reach	RBMP Cycle 2 2015			
			Overall Status	Ecological Status	Chemical Status	Objectives
Cam and Ely Ouse	Cam, Rhee and Granta	Cam (Audley End to Stapleford)	Poor	Poor	Good	Moderate by 2027
		Weden Brook	Good	Good	Good	Good by 2015
		Slade	Poor	Poor	Good	Poor by 2015
		Cam (Newport to Audley End)	Moderate	Moderate	Good	Good by 2027
		Wicken Water	Moderate	Moderate	Good	Good by 2015
		Cam (US Newport)	Poor	Poor	Good	Good by 2027
		Debden Water	Moderate	Moderate	Good	Good by 2027
Combined Essex	Chelmer	Great Easton to River Can	Moderate	Moderate	Good	Moderate by 2015
		US Great Easton	Moderate	Moderate	Good	Good by 2027
		Stebbing Brook	Good	Good	Good	Good by 2015
		Can	Poor	Poor	Good	Good by 2021

Catchment	Sub Catchment	River Reach	RMBP Cycle 2 2015			
			Overall Status	Ecological Status	Chemical Status	Objectives
Thames	Upper Roding	To Cripsey Brook	Poor	Poor	Good	Poor by 2015
	Upper Lee	Stanstead Brook	Bad	Bad	Good	Good by 2027
		Pincey Brook	Moderate	Moderate	Good	Moderate by 2015
		Great Hallingbury Brook	Moderate	Moderate	Good	Moderate by 2015
		Stort at Clavering	Moderate	Moderate	Good	Moderate by 2015

6 Site Allocation Assessment

Mapping for each new settlement, towns and key villages (including existing assets and constraints) are contained within Appendix 1.

A Red Amber Green (RAG) summary table is provided below based on the work done to date but this will be updated prior to the completion of final WCS once further consultation with the water companies is completed. The rating system is broken down as follows:

- 1 [Green] – No major constraints identified.
- 2 [Amber] – Minor constraints identified.
- 3 [Red] – Major constraints identified.

It should be noted that where major constraints are identified, these should not be considered 'showstoppers' at this stage of the WCS update. These highlight issues which will need to be discussed in further detail with the relevant stakeholder.

Table 10: Red Amber Green Assessment of Settlements

Settlement	Site Ref	Type	Existing WWTW	Flooding		Environmental Designation		Water Quality		Water Supply		Wastewater Treatment		Sewers	
				Description	Rating	Description	Rating	Description	Rating	Description	Rating	Description	Rating	Description	Rating
Elsenham	07Els15	New Settlement	Stansted Mountfitchet	Site is bisected by existing watercourses and there are associated area of fluvial and surface water flooding. Site is located upstream of Stansted Mountfitchet and Elsenham, parts of which are culverted.	2	No designated sites within 10km.	1	Northern half of the site is located within SPZ 2.	2	No water supply constraints identified. Demand to be met through efficiency measures.	1	Capacity may be feasible at Stanstead Mountfitchet WWTW subject to treatment upgrades. Site promoter to undertake site specific Water Cycle Study or similar in liaison with Thames Water and Anglian Water who serve the area.	2	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian/Thames Water on a site specific basis.	2
	08Els15	Key Village	Stansted Mountfitchet	Site is not located in an area at risk of fluvial flooding however is there are associated surface water flood risk areas in the south of the site. The site is upstream of Stanstead Mountfitchet which has recorded historic flooding.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Capacity is likely available at Stanstead Mountfitchet WWTW subject to liaison with Thames Water.	1	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian/Thames on a site specific basis.	2
Great Chesterford	10GtChe15	New Settlement	Great Chesterford	Site is not located in an area at extensive risk of surface or fluvial risk of flooding. There are limited areas of flooding along existing watercourses along the southern edge of the site.	1	No designated sites within 10km.	1	Site is located across both SPZ 2 and 3.	2	No water supply constraints identified. Demand to be met through efficiency measures.	1	Adequate capacity is likely available at Great Chesterford WWTW subject to liaison with Anglian Water.	1	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
	05GtChe15	Key Village	Great Chesterford	Site is not located in an area of fluvial flooding, there is limited surface water flood risk identified along the south west border.	1	No designated sites within 10km.	1	Site is located within SPZ 3.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Adequate capacity is likely available at Great Chesterford WWTW subject to liaison with Anglian Water.	1	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
Gt Dunmow	06GtDun15	Towns	Great Dunmow	Site is not located in an area of fluvial flooding, there is limited surface water identified on site.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	No capacity available at Great Dunmow WWTW.	3	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
	07GtDun15	Towns		Site is not located in an area of fluvial flooding, there is limited surface water identified on site.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	No capacity available at Great Dunmow WWTW.	3	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
	08GtDun15	Towns		Site is not located in an area of fluvial flooding, there is limited surface water identified on site.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	No capacity available at Great Dunmow WWTW.	3	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2

Settlement	Site Ref	Type	Existing WWTW	Flooding		Environmental Designation		Water Quality		Water Supply		Wastewater Treatment		Sewers	
				Description	Rating	Description	Rating	Description	Rating	Description	Rating	Description	Rating	Description	Rating
	12GtDun15	Towns		Site is not located in an area of fluvial flooding, there is limited surface water identified on site.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	No capacity available at Great Dunmow WWTW.	3	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
Little Canfield	02LtCan15	Key Village	Takeley	Site is not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Proposed development trajectory exceeds existing consents at Takeley WWTW.	2	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian/Thames on a site specific basis.	2
	UTT/16/0270/FUL	Key Village		Site is not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Proposed development trajectory exceeds existing consents at Takeley WWTW.	2	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian/Thames on a site specific basis.	2
Little Easton	06LtEas15	New Settlement	Great Easton / Great Dunmow	Site is bordered along the western edge by the River Roding and its associated floodplain. Existing watercourses on site have surface water flood risk identified.	2	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Both Great Easton and Great Dunmow WWTW located in northern corner of the site, however very limited capacity available. A new WWTW would like be required if site is brought forward, site promoter is recommended to undertake a site specific WCS or similar.	3	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
Newport	03New15	Key Village	Newport	Site located adjacent to the River Cam but is not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is located within SPZ 3.	2	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Newport has adequate volumetric capacity to accommodate the proposed development however calculated flows are nearing the consent.	2	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
	02New15	Key Village		Site located adjacent to the River Cam but is not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is located within SPZ 3.	2	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Newport has adequate volumetric capacity to accommodate the proposed development however calculated flows are nearing the consent.	2	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
	06New15	Key Village		Site located adjacent to the River Cam but is not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is located within SPZ 2 and 3.	2	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Newport has adequate volumetric capacity to accommodate the proposed development however calculated flows are nearing the consent.	2	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2

Settlement	Site Ref	Type	Existing WWTW	Flooding		Environmental Designation		Water Quality		Water Supply		Wastewater Treatment		Sewers	
				Description	Rating	Description	Rating	Description	Rating	Description	Rating	Description	Rating	Description	Rating
	UTT/15/0879/OP	Key Village		Site is not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is located within SPZ 2.	2	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Newport has adequate volumetric capacity to accommodate the proposed development however calculated flows are nearing the consent.	2	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
Saffron Walden	04Saf15	Towns	Saffron Walden	Adjacent to River Slade but not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is located within SPZ 2.	2	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Saffron Walden has adequate volumetric capacity to accommodate the proposed development.	1	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
	07Saf15	Towns		Adjacent to River Slade but at low risk of fluvial flooding. Surface water flooding in location of ditch which runs through the centre of the site.	2	No designated sites within 10km.	1	Site is located within SPZ 3.	2	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Saffron Walden has adequate volumetric capacity to accommodate the proposed development.	1	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
	11Saf15	Towns		Adjacent to River Slade but at low risk of fluvial flooding. Surface water flooding in location of ditch which runs through the southern portion of the site.	2	No designated sites within 10km.	1	Site is located within SPZ 3.	2	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Saffron Walden has adequate volumetric capacity to accommodate the proposed development.	1	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
	13Saf15	Towns		Located within Flood Zone 1 but adjacent to high risk Flood Zone 3.	2	No designated sites within 10km.	1	Site is located within SPZ 3.	2	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Saffron Walden has adequate volumetric capacity to accommodate the proposed development.	1	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
	16Saf16	Towns		Site is not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is located within SPZ 3.	2	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Saffron Walden has adequate volumetric capacity to accommodate the proposed development.	1	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
	UTT/15/3768/FUL	Towns		Site is not located in an area of fluvial or flood risk. Northern portion of the site is at risk from surface water flooding.	2	No designated sites within 10km.	1	Site is located within SPZ 3.	2	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Saffron Walden has adequate volumetric capacity to accommodate the proposed development.	1	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
Stansted	09Sta15	Key Village	Stansted Mountfitchet	Site is not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through	1	Initial calculations show that Saffron Walden has adequate volumetric capacity to accommodate the proposed development.	1	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with	2

Settlement	Site Ref	Type	Existing WWTW	Flooding		Environmental Designation		Water Quality		Water Supply		Wastewater Treatment		Sewers	
				Description	Rating	Description	Rating	Description	Rating	Description	Rating	Description	Rating	Description	Rating
	26Sta16	Key Village		Site is not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Saffron Waldon has adequate volumetric capacity to accommodate the proposed development.	1	Anglian/Thames on a site specific basis.	2
Stebbing	06Ste15	New Settlement	Felstead	Southern portion of site located in Flood Zone 3. Remainder of site in low risk fluvial zone. Surface water flood risk is present in ditches within site, mainly within the southern portion.	2	Ancient Woodland located within the site.	2	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Felstead has adequate volumetric capacity when the calculated baseline is applied. When the measured baseline is applied existing consents are exceedance.	2	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
	05Ste15	New Settlement	Felstead	In low risk fluvial Flood Zone 1. High surface water flood risk in low lying topography in the middle of the site.	2	Ancient Woodland located within the site.	2	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Felstead has adequate volumetric capacity when the calculated baseline is applied. When the measured baseline is applied existing consents are exceedance.	2	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2
Takeley	UTT/15/2424/FUL	Key Village	Takeley	Site is not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Proposed development trajectory exceeds existing consents at Takeley WWTW.	2	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian/Thames on a site specific basis.	2
	02HBO15	Key Village		Site is not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Proposed development trajectory exceeds existing consents at Takeley WWTW.	2	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian/Thames on a site specific basis.	2
	03HBO15	Key Village		Site is not located in an area of fluvial or surface water flood risk.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Proposed development trajectory exceeds existing consents at Takeley WWTW.	2	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian/Thames on a site specific basis.	2
Thaxted	10Tha15	Key Village	Great Easton	Northern portion of site at high risk of surface water flooding. Site not at risk of fluvial flooding.	2	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Great Easton has adequate volumetric capacity to accommodate the proposed development.	1	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2

Settlement	Site Ref	Type	Existing WWTW	Flooding		Environmental Designation		Water Quality		Water Supply		Wastewater Treatment		Sewers	
				Description	Rating	Description	Rating	Description	Rating	Description	Rating	Description	Rating	Description	Rating
	14Tha15	Key Village		Site in fluvial flood zone 1. Minor area of surface water flooding on eastern portion of the site.	1	No designated sites within 10km.	1	Site is not located within a SPZ.	1	No water supply constraints identified. Demand to be met through efficiency measures.	1	Initial calculations show that Great Easton has adequate volumetric capacity to accommodate the proposed development.	1	Anglian Water have not highlighted any 'showstoppers' at this stage of the WCS. Developers will still be regard to liaise with Anglian on a site specific basis.	2

7 Initial Conclusions

The conclusions of the initial assessment are presented in the section below. It is considered that the capacity of the wastewater treatment works and the associated impact on water quality are the greatest potential issues in relation to the development aspirations within UDC.

7.1 Water Resources and Supply

The initial demand calculations show an overall increase in demand of some 3,500m³/day between 2016 and 2032. Affinity Water have concluded there is not enough water to meet the increasing demand in all of the operating areas, and therefore Affinity Water have undertaken an options appraisal to consider ways to resolve the deficits. With the appropriate mitigation measures the WRMP concluded demand can be met, however this needs confirmation from Affinity Water.

7.2 Wastewater and Sewerage

The initial assessment results provide a general indication of the impacts of the proposed trajectory on existing wastewater assets.

If the calculated baseline DWF are used then results show that for five of the seven WwTWs within Uttlesford that the volumetric 2032 DWF is not increased over the existing consent levels to accommodate the proposed new development in Towns and Key Villages (i.e. excluding any of the New Settlement Locations). However, for both Takeley and Great Dunmow the existing consents are expected to be exceeded by 2032. Alternatively, if the measured baseline DWF are used then results show that Newport and Great Easton WwTWs will also exceed their existing volumetric consents

The results show that with the additional impact of the potential New Settlement sites at Great Chesterford and Stebbing there is adequate volumetric capacity at the associated Great Chesterford and Felsted WwTWs when using calculated DWF baseline. For the Elsenham and Little Easton New Settlements there is limited or no volumetric capacity at Stansted Mountfitchet and Great Dunmow WwTWs. However, when using the measured DWF values as the baseline, there is no volumetric capacity across any of the relevant WwTWs to accommodate the proposed New Settlement Locations.

Due to the current constraints involved with the current Local Plan Update timetable, the two allocated new settlements may require a further site specific assessment, developed in co-operation with Anglian and Thames Water, based on the conclusions of the current WCS Update.

7.3 Water Quality

The key development sites located within each catchment are detailed below:

- **Cam and Ely Ouse**- Saffron Walden, Newport and Great Chesterford
- **Thames**- Elsenham, Takeley, Stansted and Little Easton
- **Combined Essex**- Thaxted, Great Dunmow and Great Easton, Felsted, Stebbing

The major impact of the potential development sites on the water environment will be the variations in water quality and quantity discharged to receiving watercourses from the site itself (surface water runoff) and the WwTW that serve the sites. Water discharged from the sites will require careful management to ensure the development does not have a detrimental impact on the water environment.

7.4 Site Allocation Assessment

The potential new settlement locations under consideration are listed below.

- Elsenham
- Great Chesterford
- Little Easton
- Stebbing

When the proposed sites are compared using the RAG assessment all sites have similar overall scores. The exception is the Little Easton New Settlement, where it has been identified that there is very limited capacity available at the nearby WwTWs Great Easton and Great Dunmow. A new WwTW would likely be required if this New Settlement is brought forward and a site promoter is recommended to undertake a site specific WCS.

7.5 Further Work and Assessment

At the time of writing this technical note data remained outstanding from Anglian Water, Affinity Water and Thames Water. Further consultation will be undertaken with key stakeholders before completing the WCS update, to confirm the findings of the initial work undertaken and to incorporate the latest datasets.

APPENDIX 1- Site Allocation Constraints Mapping