



TENDRING

Economic Viability Study

Three Dragons and Troy Planning + Design

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This report is not a formal land valuation or scheme appraisal. It has been prepared using the Three Dragons toolkit and non-residential model and is based on local data supplied by Tendring District Council, consultation and quoted published data sources. The toolkit provides a review of the development economics of a range of illustrative schemes and the results depend on the data inputs provided. This analysis should not be used for individual scheme appraisal.

No responsibility whatsoever is accepted to any third party who may seek to rely on the content of the report unless previously agreed.

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Executive Summary

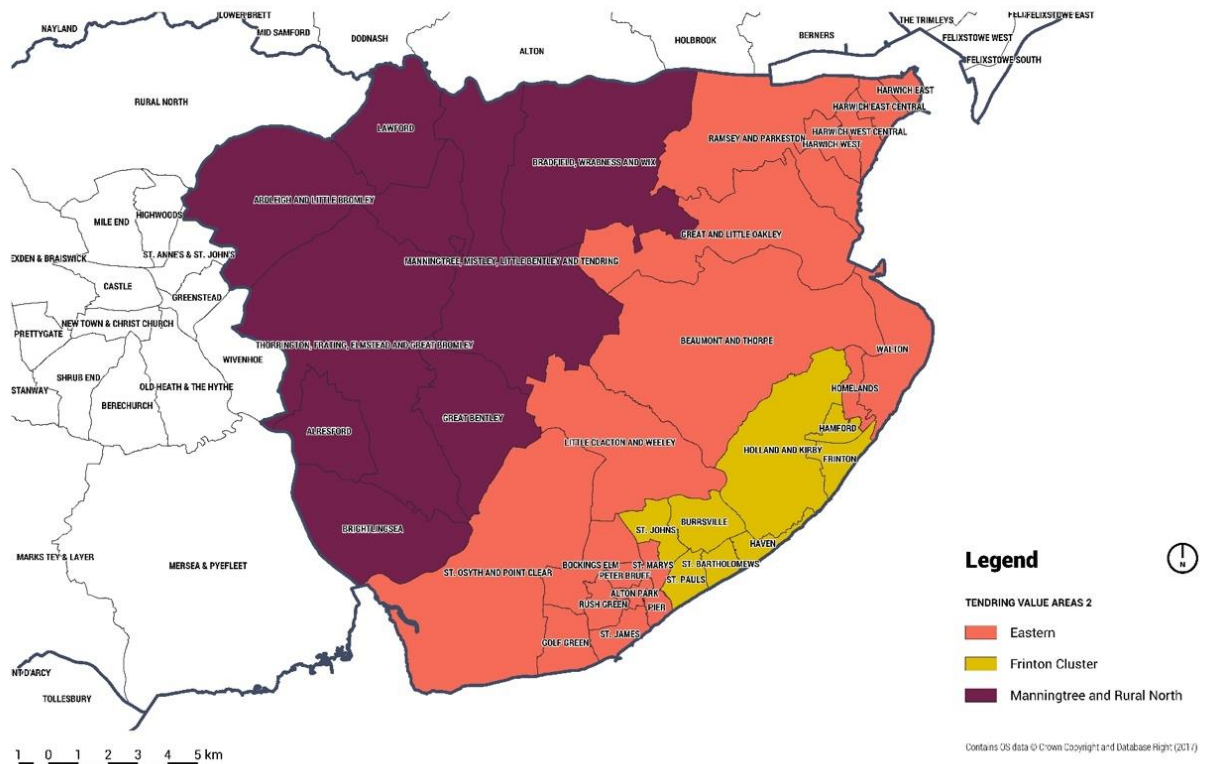
1. The Tendring District Council Viability Study provides the Council with evidence to assist it in drawing up its Local Plan, including its affordable housing policies. The evidence has been prepared in consultation with the development industry and has followed the relevant regulations and guidance and is in line with the National Planning Policy Framework. This assessment also takes into account the policies in the new Local Plan and its supporting evidence base.
2. Tendring District Council is aligning the development of its Local Plan with Braintree District Council and Colchester Borough Council (the Partner Authorities) to cover growth in North Essex to 2033 and beyond.
3. The Partner authorities are currently preparing a combined strategic Part 1 Local Plan which will set out the opportunity for cross-boundary Garden Communities. The Part 2 Emerging Local Plan will include the allocations and policies needed to jointly deliver the predicted growth within the Partner Authority boundaries to 2033. Each council will produce a separate Part 2 Local Plan and this Viability Study is to inform the Pre-Submission consultation for this Part 2 Local Plan.
4. The councils recognise the importance of producing a plan that is viable and deliverable and has commissioned Troy Planning + Design and Three Dragons to assess viability. The viability assessment has demonstrated that the local plan policies in relation to residential development are financially viable for the majority of the typologies tested and that a policy requiring 30% affordable housing on sites over 10 units is generally achievable. There are however some viability issues in the Eastern area of the district and certain sites in this area may not be able to meet all policy requirements.
5. The recent Housing White Paper (February 2017) suggests that all sites over 10 dwellings may have to meet a requirement for 10% of units to be affordable home ownership. If this become a national policy requirement it will not negatively affect viability on the schemes tested in this study.

6. The testing undertaken uses a standard residual land value approach, using the Three Dragons Toolkit for residential development and the Three Dragons Non-Residential Model for non-residential development. The residual value of development (total value less all development and policy costs, including planning obligations) is compared to a land value benchmark and the scheme is said to be viable if the residual value exceeds the benchmark. Note that the benchmark land value is an estimate of the lowest value that a landowner may accept, and does not preclude the possibility that some schemes may have enough value to pay more for land.

Residential Development

Background

7. The testing for residential development was undertaken in two ways
- As a series of notional 1ha tiles at 20/25/30/35 dwellings per hectare (dph)
 - As a set of case studies, ranging from 1 to 1,100 dwellings, representative of sites identified in the Local Plan
8. The District was divided for testing purposes into three value areas; Frinton Cluster, Manningtree & Rural North and Eastern. House prices and land values are highest in the Frinton Cluster, then in the Manningtree & Rural North and lowest in the Eastern area (see map overleaf).
9. The testing has taken account of the policies in the council's Local Plan. In particular, we have taken account of the requirement for affordable housing to be delivered at 30% of units on sites of more than 10 dwellings. Where affordable housing is not delivered on site, any commuted sums or 'gifted' units will be equivalent to the 30% contribution (Policy LP5). Some sensitivity testing was included using a lower affordable housing level of 25%.
10. The testing of sites has taken the council's policy on accessible and adaptable homes (policy number) into account. This requires 10% of both affordable and market housing to be built to Part M(4) 2 of the Building Regulations adaptable & accessible standard and 5% affordable homes to be to Part M(4) 3 wheelchair user standards.

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11. No CIL charge was applicable as the council has not made a decision to adopt a CIL and full S106 contributions were applied. These were varied at differing site sizes.
12. Sensitivity testing was carried out using a high cost scenario, taking account of the potential for high infrastructure requirements or land remediation on sites of 300 dwellings or above.

Findings

13. The testing undertaken for the notional 1 ha sites provides an overview of the viability of the whole plan. The residual values from notional sites are tested against the benchmark land value. The results vary from location to location but in all areas and in all scenarios produce a surplus over the benchmark land value, indicating that non-complex small/medium sites can be delivered in all areas as per Local Plan policies.
14. Testing has also included a set of representative case studies. The majority of the case studies in the higher value Frinton Cluster and mid-value Manningtree & Rural North areas produced a positive residual value over the benchmark land value, demonstrating that policies in the emerging Local Plan are achievable, including those outlined in

paragraph 9 above. In the Eastern area, although many sites are viable, a proportion of sites produced a negative residual value, indicating that it might not always be possible to deliver policy compliant development in this low value area, especially if sites are not straightforward.

15. Testing included higher cost sensitivity scenarios. Larger schemes of 300+ units in the Frinton Cluster and Manningtree & Rural North are viable at the Local Plan policy position, even when using this higher cost scenario. Sheltered and extra care schemes are also viable in these areas.
16. In the Eastern area, larger case studies of 600 units or more were viable using a 'normal cost scenario' and the 300-unit scheme was marginally viable. None of the larger case studies were viable using the high cost scenario in the Eastern area, and nor were the sheltered or extra care schemes.
17. The rural exception site was modelled so as to evaluate whether the inclusion of market housing would assist deliverability. Using a mix arrived at following consultation, a level of between 20% and 40% market housing was required to achieve viability, depending on the market value area. Clearly, in practice, this will need to be assessed on a site by site basis as the size and tenure of dwellings on such sites will vary according to local need. In particular this level may be able to be lowered in the two higher value areas.
18. The 10-unit starter home scheme (which included no other affordable elements) was on the margins of viability in the Frinton Cluster (just below benchmark land value) and Manningtree & Rural North (just above benchmark land value). In the Eastern area, it was not viable even at a nil land cost.
19. The 50-unit flatted schemes were only viable in Manningtree & Rural North. In practice, policy requirements for affordable housing in flatted schemes would need to be relaxed to bring them forward in value areas where they are not viable. However, even with a reduced policy position, it is likely that flatted schemes would not be viable in the Eastern area.
20. In general, the viability testing supports the policies included in the Local Plan, although in certain scenarios described above some flexibility may be needed where viability is weaker.

Non-Residential Development

21. The report provides viability analysis of the non-residential development planned to come forward under the new Local Plan.
22. Of the uses tested, only retail warehouses, convenience retail and budget hotels are viable. These types of development are able to come forward subject to the availability of sites. Student accommodation is marginal with only a very small increase in values needed to produce a viable outcome, and it is likely that this type of development can also proceed.
23. Based on the costs and values in this testing, speculative office, industrial and warehouse developments are unlikely to be brought forward by the market. However, this does not preclude local authorities developing new employment spaces, in order to deliver economic development benefits. In addition, public sector funding from sources such as the South East LEP can be used to reduce the costs of providing new employment space. It is also likely that businesses will continue to commission design and build workspace development.
24. High street comparison retail is not viable as modelled here. However, this is in part due to the relatively high existing use value assumed for prime retail sites. If a lower value site is available, then this type of retail may come forward.
25. Based on the costs and values in this testing, care homes are not viable.



1 Introduction

Purpose of the Economic Viability Assessment

- 1.1 The viability evidence provided in this report is to support Tendring District Council in drawing up its Local Plan, including Affordable Housing Policies. The evidence has been prepared in consultation with the development industry and has followed the relevant regulations and guidance and is in line with the National Planning Policy Framework. The council recognise the importance of producing a plan that is viable and deliverable and has commissioned Troy Planning + Design and Three Dragons to assess viability.
- 1.2 The testing undertaken uses a standard residual land value approach, using the Three Dragons Toolkit for residential development and the Three Dragons Non- Residential Model for non-residential development. The residual value of development (total value less all development and policy costs, including planning obligations) is compared to a land value benchmark and the scheme is said to be viable if the residual value exceeds the benchmark. Note that the benchmark land value is an estimate of the lowest value that a landowner may accept, and does not preclude the possibility that some schemes may have enough value to pay more for land.
- 1.3 Tendring District Council is aligning the development of its Local Plan with Colchester Borough Council and Braintree District Council (the Partner Authorities) to cover growth in North Essex to 2033 and beyond.

National Planning Context

- 1.4 The National Planning Policy Framework (NPPF) paragraph 173 sets out how the Government expects viability to be considered in planning:

*'Pursuing sustainable development requires careful attention to viability and costs in plan-making and decision-taking. Plans should be deliverable. Therefore, the sites and the scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened. To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.'*¹

- 1.5 The NPPF explicitly recognises the need to provide competitive returns to a willing land owner and willing developer, and local planning authorities are to assess the 'likely cumulative impact' of their proposed development standards and policies.
- 1.6 Planning Practice Guidance² (PPG) provides further detail about how the NPPF should be used. PPG contains general principles for understanding viability (which are relevant to CIL viability) as well as specific CIL viability guidance³. It also notes that a range of sector-led guidance is available⁴. In order to understand viability, a realistic understanding of the costs and the value of development is required and direct engagement with development sector may be helpful⁵. Evidence should be proportionate to ensure plans are underpinned by a broad understanding of viability, with further detail where viability may be marginal or for strategic sites with high infrastructure requirements⁶. However not every site requires testing and site

¹ DCLG, 2012, NPPF Para 173

² DCLG, Planning Practice Guidance

³ PPG Paragraph: 003 Reference ID: 10-003-20140306

⁴ PPG Paragraph: 002 Reference ID: 10-002-20140306

⁵ PPG Paragraph: 004 Reference ID: 10-004-20140306

⁶ PPG Paragraph: 005 Reference ID: 10-005-20140306

typologies may be used to determine policy⁷. For private rented sector, self build and older people's housing, the specific scheme format and projected sales rates (where appropriate) may be a factor in assessing viability⁸.

- 1.7 PPG requires that a buffer should be allowed and that current costs and values should be used (except where known regulation/policy changes are to take place)⁹. On retail and commercial development, broad assessment of value in line with industry practice may be necessary¹⁰. Generally, values should be based on comparable, market information, using average figures and informed by specific local evidence¹¹. For an area wide viability assessment, a broad assessment of costs is required, based on robust evidence which is reflective of local market conditions. All development costs should be taken into account, including infrastructure and policy costs as well as the standard development costs¹².
- 1.8 Developer returns should be proportionate to risk¹³. The return to the landowner will need to provide an incentive for the land owner to sell in comparison with the other options such as current use value or policy compliant alternative use value¹⁴.
- 1.9 Recent Ministerial guidance on affordable housing policy (28th November 2015) and associated changes to NPPG¹⁵ have made the following changes:

'contributions should not be sought from developments of 10-units or less, and which have a maximum combined gross floorspace of no more than 1000sqm'

'in designated rural areas, local planning authorities may choose to apply a lower threshold of 5-units or less. No affordable housing or tariff-style contributions should then

⁷ PPG Paragraph: 006 Reference ID: 10-006-20140306

⁸ PPG Paragraph: 018 Reference ID: 10-018-20150326

⁹ PPG Paragraph: 008 Reference ID: 10-008-20140306

¹⁰ PPG Paragraph: 012 Reference ID: 10-012-20140306

¹¹ PPG Paragraph: 012 Reference ID: 10-012-20140306

¹² PPG Paragraph: 013 Reference ID: 10-013-20140306

¹³ PPG Paragraph: 015 Reference ID: 10-015-20140306

¹⁴ PPG Paragraph: 015 Reference ID: 10-015-20140306

¹⁵ PPG Paragraph: 031 Reference ID: 23b-031-20161116

be sought from these developments. In addition, in a rural area where the lower 5-unit or less threshold is applied, affordable housing and tariff style contributions should be sought from developments of between 6 and 10-units in the form of cash payments which are commuted until after completion of units within the development.'

- 1.10 For specific topics, the NPPG provides information on the different types of policy requirements that authorities may decide to implement through their Local Plans. This provides greater clarity on how these requirements may affect the cost of development and provides a starting point for how they should be taken into account. For example, the NPPG sets out optional technical standards for internal space standards, water consumption and accessibility against which additional costs may be calculated¹⁶.
- 1.11 For other areas such as the implementation of Sustainable Drainage Systems (SUDs), NPPG sets out a clear approach to deliver schemes against the hierarchy provided by the government's non-statutory technical standards, so far as is reasonably practical¹⁷. The costs of implementing the standards should not normally exceed the requirement to meet building regulations, accepting that development and land value assumptions for brownfield land should *"clearly reflect the levels of mitigation and investment required to bring sites back into use"*¹⁸.

¹⁶ PPG Paragraph: 001 Reference ID: 56-001-20150327

¹⁷ PPG Paragraph: 080 Reference ID: 7-080-20150323

¹⁸ PPG Paragraph: 025 Reference ID: 10-025-20140306

Other Guidance on Viability Testing for Residential Development

- 1.12 Guidance has been published to assist practitioners in undertaking viability studies for policy making purposes – “*Viability Testing Local Plans - Advice for planning practitioners*”¹⁹. The Foreword to the Advice for planning practitioners includes support from DCLG, the LGA, the HBF, PINS and POS. PINS and the POS²⁰ state that:

“The Planning Inspectorate and Planning Officers Society welcome this advice on viability testing of Local Plans. The use of this approach will help enable local authorities to meet their obligations under NPPF when their plan is examined.”

- 1.13 The approach to viability testing adopted for this study follows the principles set out in the Advice. The Advice re-iterates that:

“The approach to assessing plan viability should recognise that it can only provide high level assurance.”

- 1.14 The Advice also comments on how viability testing should deal with potential future changes in market conditions and other costs and values and, in line with PPG, states that:

“The most straightforward way to assess plan policies for the first five years is to work on the basis of current costs and values”. (page 26)

But that:

“The one exception to the use of current costs and current values should be recognition of significant national regulatory changes to be implemented.....” (page 26)

¹⁹ The guide was published in June 2012 and is the work of the Local Housing Delivery Group, chaired by Sir John Harman, which is a cross-industry group, supported by the Local Government Association and the Home Builders Federation.

²⁰ Acronyms for the following organisations - Department of Communities and Local Government, The Local Government Association, Environment and Housing Board, Home Builders Federation, Planning Inspectorate, Planning Officers Society

Local Planning Policy Context

- 1.15 The NPPF is clear that viability testing should take into account, '*...the costs of any requirements likely to be applied to development...*' (Para 173). Therefore, a planning policy review has been undertaken – see Appendix II – Local Plan Policies.
- 1.16 Once adopted, the Local Plan will be the main planning document for Tendring District Council. It will set out the overarching spatial strategy and development principles for the area, along with the joint 'Part 1' strategy with Colchester Borough Council and Braintree District Council.
- 1.17 This Study does not specifically take account of the policies from the combined 'Part 1' Local Plan, which is primarily concerned with setting the spatial strategy and requirements for development as well as identifying allocations for three new Garden Communities. The proposed Garden Communities have been subject to separate viability testing.
- 1.18 The policies of the 'Part 2' Plan are fully assessed within this Viability Study. These give effect to the spatial strategy and meeting the requirements for growth in the district as set out in the 'Part 1' Plan. This is achieved through the allocation of sites together with more detailed policies for development management, standards and measures to secure the levels of infrastructure required to support development. The Local Plan will be used to help determine planning applications in the district. The main elements of the Local Plan are:
- Providing strategic objectives and a vision for the District
 - Setting out an overarching strategy for the location of new development
 - Delivering the scale of new employment, housing and retail provision required
 - Identification of strategic development sites
 - Identifying and providing for future infrastructure requirements
 - Managing key environmental constraints and opportunities
 - Include strategic policies for development control purposes and setting out the standards that new development is expected to meet.

1.19 The Local Plan includes a number of policies which can have an impact on the viability of development. Impacts of policies are of four main types:

- Because they require the developer to make provision for a particular type of development within their scheme (e.g. affordable housing, specialist housing for older people);
- Because they require development to provide for planning obligations to ensure its acceptability in planning terms (see '*CIL and S106 requirements below*');
- Because they impact on the form of development and hence its costs e.g. in meeting design or environmental standards; or
- Because they mean that an area within a development scheme has to be set aside for a use that does not generate an income (e.g. in meeting an open space requirement)

1.20 We have worked with the Council to analyse the policies of the Local Plan. This is necessary to identify those which may add costs and/or reduce the anticipated revenue from development. Appendix II provides a summary of each policy, potential impact on viability and implications for viability testing or reflecting policy requirements within the methodology for testing.

1.21 This is also important to inform the types of development that viability testing should take into account based on the outputs the Local Plan supports – for example specialist housing for older people or 'Rural Exception Sites' for affordable housing outside of settlement limits.

1.22 Below, we highlight examples of policies which are likely to have an impact on viability:

- Affordable housing (see next section)
- Meeting policy targets for accessible and adaptable homes (Policy SPL 3 (Part B))
- Providing new dwellings in accordance with nationally described space standards
- Transport infrastructure and Public Rights of Way
- Provision of community facilities e.g. schools, healthcare
- Ensuring provision of land and monies for open space and leisure facilities.

- Water efficiency standards for residential development (Policy PPL 5).

Policy LP 5: Affordable and Council housing

1.23 A key policy that affects development viability is LP 5: affordable housing provision. The policy states that:

- A target of 30% of the total number of residential units on sites for development proposals outside of the Tendring Colchester Borders Garden Community will be required.
- A threshold of 11 dwellings will apply across the district.
- As an alternative, the Council will accept a minimum of 10% of new dwellings, alongside a financial contribution towards the construction or acquisition of affordable housing provision off-site to make up the remaining 20%.

1.24 Standalone new settlements by virtue of their size will be subject to separate viability appraisals, including on affordable housing; however, the starting point should be 30% for affordable housing provision.

1.25 Off-site provision or a financial contribution may be accepted where on-site delivery is impractical. A viability appraisal will be required and will be independently verified if applicants seek to demonstrate that requirements cannot be achieved. The mix of units should reflect local need.

1.26 In assessing viability, we have modelled the requirements for affordable housing as set out in the policy. Modelling of affordable housing contributions of a proportion of total site capacity are included on schemes comprising 11 or more dwellings with the relevant target determined by the location of development. This approach is also consistent with National Planning Practice Guidance in identifying the scales of development where the provision of affordable housing should be required. Modelling makes further specific assumptions about the type of affordable housing to be provided. Details of the assumptions used are set out in the next chapter and Appendix I.

CIL and S106 Requirements

1.27 Tendring District Council has not adopted a Community Infrastructure Levy (CIL) and therefore this study has not taken such a levy into consideration. Neither is it designed

to provide evidence to support a CIL charging schedule. S106 contributions have therefore not been scaled back (as would be the case if a CIL charge was in place) but will nonetheless have to meet the three tests:

- Necessary to make the development acceptable in planning terms;
- Directly related to the development; and
- Fairly and reasonably related in scale and kind to the development.

1.28 The testing assumptions set out in Chapter 2 detail the assumptions for future levels of planning obligations that new developments will be expected to provide for (see Paragraph 2.18).

Research Evidence

1.29 The research which underpins the Economic Viability Assessment includes:

- Analysis of information held by the authority, including the profile of land supply identified in the Strategic Housing Land Availability Assessment and sites proposed for allocation in the emerging Local Plan; a review of historic planning permissions; and reviewing records of planning contributions;
- A stakeholder workshop was undertaken on 13 March 2017 and held jointly on behalf of the three authorities of Braintree District Council along with Colchester Borough Council and Tendring District Council. The session was attended by around 25 delegates, spanning the public and private sector and including representatives from planning, housing and the development industry. Notes of the session are included at Appendix III.
- Telephone interviews with Registered Providers operating in the district;
- Follow up discussions with stakeholders and estate agents were used to validate assumptions for land values and property prices, particularly for new-build stock;
- On-going dialogue with council officers, in-particular from planning and housing; and
- Analysis of publicly available data to identify the range of values and costs needed for the viability assessment.

1.30 All the residential viability testing uses the Three Dragons Toolkit, adapted for Tendring, to analyse scheme viability for residential development and the Three Dragons bespoke model for the analysis of non-residential schemes.



2 Viability Testing – Residential Development

Principles and Approach

- 2.1 The advice for planning practitioners summarises viability as follows;
- 2.2 *'An individual development can be said to be viable if, after taking account of all costs, including central and local government policy and regulatory costs and the cost and availability of development finance, the scheme provides a competitive return to the developer to ensure that development takes place and generates a land value sufficient to persuade the land owner to sell the land for the development proposed. If these conditions are not met, a scheme will not be delivered.'*²¹
- 2.3 As is standard practice²², we have adopted a residual value approach to our analysis. Residual value is the value of the completed development (known as the Gross Development Value or GDV) less the development costs. The remainder is the residual value and is available to pay for the land. The value of the scheme includes both the value of the market housing and affordable housing. Scheme costs include the costs of

²¹ P 14 Viability Testing Local Plans: Advice for Planning Practitioners Harman 2012

²² See page 25 of Viability Testing Local Plans: Advice for Planning Practitioners Harman 2012 – “We recommend that the residual land value approach is taken when assessing the viability of plan-level policies and further advice is provided below on the considerations that should be given to the assumptions and inputs to a model of this type.”

building the development, plus professional fees, scheme finance and a return to the developer as well as any planning obligations.

Figure 2.1 - Residual Value Approach

$$\begin{array}{r} \text{Total development value (market and affordable)} \\ \text{Minus} \\ \text{Development costs (incl. build costs and return to developer)} \\ = \\ \text{Gross residual value} \\ \text{Minus} \\ \text{CIL + planning obligations (including AH)} \\ = \\ \text{Net residual value (available to pay for land)} \end{array}$$

Value Areas Identified

- 2.4 Viability testing has been undertaken for three separate Value Areas identified as the 'Frinton Cluster', 'Eastern', and 'Manningtree and Rural North'. The map at Figure 2.2 below shows the distribution of the three areas identified. These are mapped using electoral ward boundaries and based on the latest information for new build house prices using Land Registry data.
- 2.5 The map broadly reflects that the 'Eastern' area contains the larger settlements of Jaywick, Clacton-on-Sea and Harwich where property values tend to be lower. Volumes of development are more limited in the rural parts of the value area identified. New build development in Frinton has historically commanded higher values, reflecting localised differences in the market. More recently, new build activity in nearby surrounding wards has achieved values similar to those in Frinton. The 'Manningtree and Rural North' area contains a network of predominantly rural settlements and is more closely related to the property and employment markets around Colchester. These factors appear to have an upward effect on property values. A similar geographic

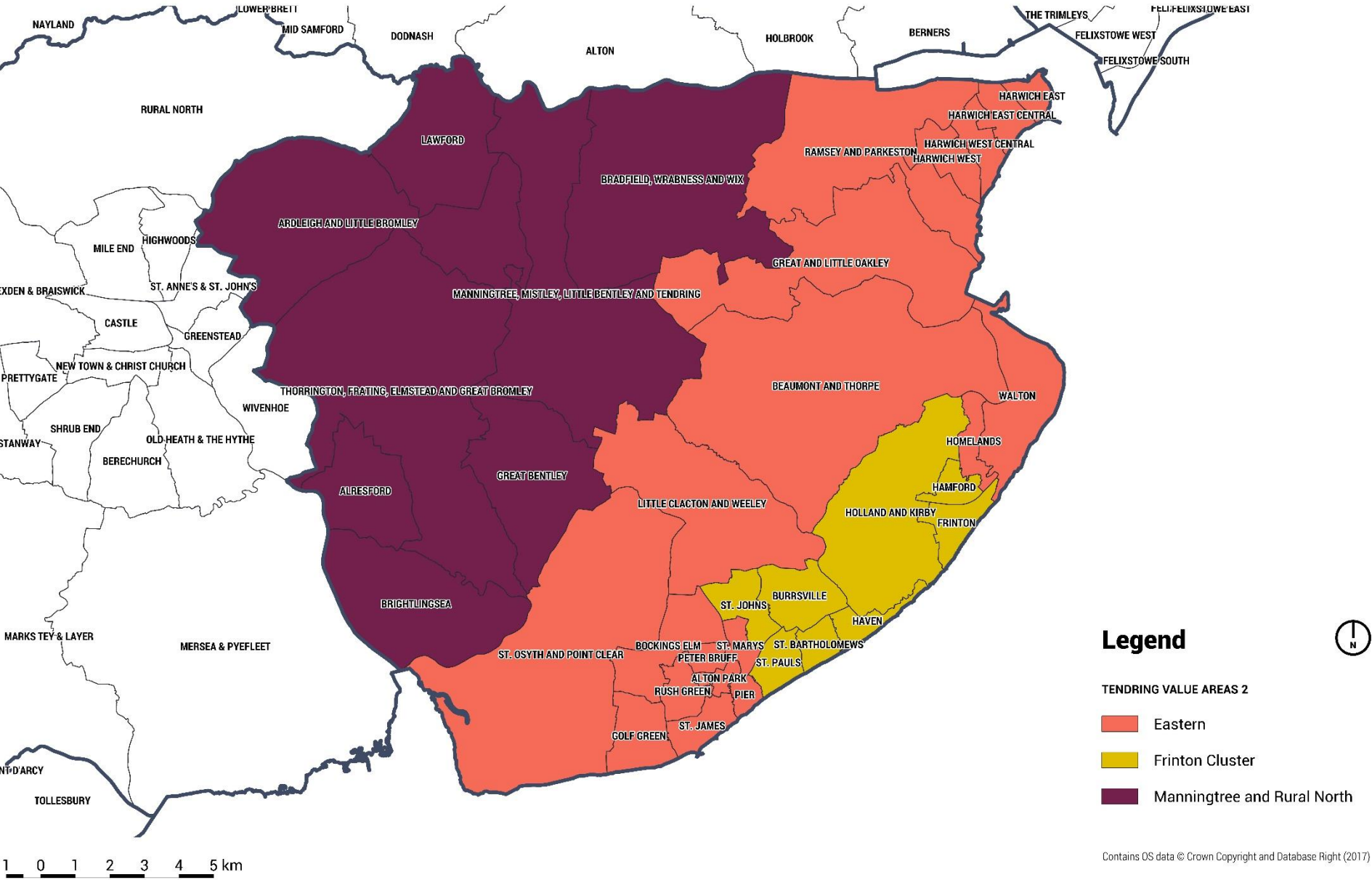
distribution of property values has also been identified in earlier work prepared for the Council²³.

- 2.6 Further details of the specific approach and values used to provide testing assumptions are discussed in Paragraphs 2.18 to 2.19.

²³ Tendring District Council Community Infrastructure Levy Viability Report, Peter Brett Associates, 2013

Figure 2.2 - Land Value Areas for Tendring

TENDRING - Value Areas 2



Land Value Benchmarks

- 2.7 To assess viability, the residual value generated by a scheme is compared with a benchmark land value, which reflects a competitive return for a landowner.
- 2.8 In terms of benchmark land values, Viability Testing Local Plans sets out a preferred approach in the following extract from page 29:

Consideration of an appropriate Threshold Land Value needs to take account of the fact that future plan policy requirements will have an impact on land values and landowner expectations. Therefore, using a market value approach as the starting point carries the risk of building-in assumptions of current policy costs rather than helping to inform the potential for future policy. Reference to market values can still provide a useful 'sense check' on the threshold values that are being used in the model (making use of cost-effective sources of local information), but it is not recommended that these are used as the basis for the input to a model.

We recommend that the Threshold Land Value is based on a premium over current use values and credible alternative use values (noting the exceptions below).

- 2.9 Identification of benchmark land values has been undertaken for each of the Value Areas identified in Figure 2.2 above. The map has been generated by house price data which, logically, is reflected in the corresponding land values.
- 2.10 We have looked at a range of methods to arrive at benchmark land values starting with generic agricultural land value for the District of around £24K per hectare²⁴. The Homes and Communities Agency guide on area wide viability²⁵ references that benchmarks for greenfield land tend to be in a range of 10 to 20 times agricultural value. This indicates a district value of between £240,000 and £480,000 and gives an indication of values for large greenfield sites. In the Manningtree & Rural North and the Frinton Cluster value areas of Tendring District, where the housing market is relatively buoyant, we have tended towards the upper end of this benchmark and in the Eastern area where small

²⁴ DCLG 2015

²⁵ See Homes and Communities Agency, 2010, Annex 1 (Transparent Viability Assumptions) p9 which references *"Benchmarks and evidence from planning appeals For greenfield land ... tend to be in a range of 10 to 20 times agricultural value"*

site land values are already low, we have tended towards the lower end. On very large sites, such as the Garden Communities (which are not considered in this study) land will clearly transact towards the lower end.

2.11 Information on which to base a suitable benchmark for smaller sites is to some extent limited. We have looked to a variety of sources from which we have been able to draw information and make comparison thus making the 'sense check' identified in Viability Testing Local Plans. Feedback from the consultation process described in the following paragraph indicates that a benchmark of between £400,000 to £950,000 per hectare is a realistic range to use for this study. This range narrows slightly when looking at the market value areas separately, which primarily reflects the local differences in property prices.

2.12 The information gathering and consultation was based upon a number of sources:

- The council's previously commissioned CIL report 2013²⁶ which gave benchmark land values of £1.23m for the higher value areas and just under £0.5m for the lower.
- An internet search found 3 small sites of under 1 hectare on the market at prices between £1.35m and £1.73m
- A DCLG²⁷ value of £1.19m per unencumbered gross ha suggests a lower value once obligations are taken into account. Modelling a similar 35dph scheme with and without planning obligations (including affordable housing) approximates the value of obligations at between £1.15m and £0.72m per ha (at 35dph as assumed by DCLG). Although clearly an approximation as mixes and other factors will vary, this gives an indication that land will transact at levels below DCLG value and closer to the range of this study.
- The development industry was consulted at a developer workshop where the land values used in this study were presented. Comments were limited but

²⁶ Community Infrastructure Levy Viability Report, Final Report, July 2013

²⁷ DCLG December 2015 <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2015>

broadly concurred with our findings.

- A survey of local agents²⁸ confirmed that our values were about right and affirmed the lower values used in the Eastern area of the district.

2.13 We have therefore arrived at the benchmark land values given in figure 2.3 below:

Table 2.3: Benchmark Land Values - £ per gross ha

Tendring	Small – Medium sites	Intermediate site	Large strategic site Over 20 ha (gross) (Excluding Garden Communities)²⁹
Eastern - Low Value area	£0.4m	£0.35m	£0.25m
Manningtree & Rural North - Mid Value Area	£0.7m	£0.57m	£0.44m
Frinton Cluster - High value area	£0.95m	£0.7m	£0.44m

2.14 The benchmark land values are an estimate of the lowest values that land owners may accept and, where development is able to pay more, land will be transacted at higher prices.

²⁸ The consultant team engaged with the following agents, all of whom were based in Colchester and confirmed knowledge of the study area, during March 2017: Haart (Colchester); Fenn Wright Land and Property; Edward Lee Property; and Connells (Colchester)

²⁹ For garden communities, land will transact at a lower value, see Paragraph 2.7 of report for further information regarding the evidence base for this assumption

Testing approach and assumptions

2.15 Two types of testing have been undertaken:

- A notional 1 hectare site/tile (at a range of densities from 20dph to 35dph);
- A series of case studies ranging in size from 1 – 1,100 dwellings. The case studies are representative of development in Tendring, in particular the sites identified in the Local Plan, and are informed by information provided by the Council.

2.16 Key assumptions in relation to costs and revenues used in the analysis of residual values for both the 1 hectare tile and case study sites can be found at Appendix I – Technical Detail.

2.17 Both cost and revenue assumptions were included in the consultation process described in para 1.29 above and amendments were made based on comments received, where a basis could be provided for the amendment. Details can be found at Appendix III – Stakeholder Workshops.

2.18 Revenue assumptions are based upon a thorough interrogation of Land Registry price paid data taking into account new build sales and price per square metre (using information from Energy Performance Certificates). Prices fell into one of 3 distinct value zones: the 'Eastern', 'Frinton Cluster' and 'Manningtree and Rural North', with prices generally lower in the Eastern area. This grouping has been done to reflect similarities in property values across these areas. These three areas were presented at the stakeholder workshop. Participants were happy with these areas.

2.19 The Value Areas are illustrated in Figure 2.2 above. It is acknowledged that there will be some local variations across any value area, particularly for rural areas and where levels of development are lower. However, the grouping of available data is considered to best reflect the average conditions and property values for new-build activity in different parts of the District. Details of the house price sample presented at the stakeholder workshop (prior to minor refinements) are included at Appendix III and the property values used for testing are shown in Appendix I – Technical Detail.

- 2.20 The cost assumptions are based upon a mix of publicly available data, e.g. BCIS for build costs, industry standard practice, and information provided by the council, for example the value of S106 contributions.
- 2.21 Details of previously achieved S106 costs were provided by the council along with anticipated future S106 collection which were triangulated with information included in the council's Infrastructure Delivery Plan (IDP). Based on this, a representative cost of £5,500 per unit, which has historically covered education, health, open space and minor specific transport contributions, has been for this study for small to medium sites. For sites above 75 dwellings this was increased to £10,000 per unit to account for the likelihood of higher contributions towards education and other community infrastructure as advised by Tendring District Council.
- 2.22 To take account of the possibility that some sites may incur particularly high infrastructure or remediation costs, the specifics of which were unknown at the time of testing, we have carried out a series of high cost scenarios on the larger sites as a sensitivity test. In these sensitivity tests an additional £5,000 - £10,000 per dwelling was added to the larger sites of 300 units or above (i.e. s106 of either £15,000 or £20,000/dwelling for the sensitivity tests on the 300 dwelling+ case studies). This is in addition to site opening up costs (to allow for on-site infrastructure as detailed in Appendix I). For a three-bed semi of 100 sqm at 35 dph this is a total site infrastructure/s106 cost of just over £36,000 to £41,000 per unit for the high cost scenarios.
- 2.23 Objectively assessed housing needs identified in the SHMA indicate that around 27% of the total requirement for new residential should development should be provided as affordable housing. The Council's emerging policy (LP5) requires 30% of units on new developments of 11 dwellings or more to provide for these overall requirements. Modelling has therefore been undertaken against the policy requirement of 30% with some sensitivity testing of the larger sites at 25%.
- 2.24 Tendring district is covered entirely by the Colchester Broad Rental Market Area (BRMA) which sets the maximum Local Housing Allowance (LHA) that can be paid for that area. As registered providers will cap their rents at LHA rates, the BRMA will have an impact

on scheme viability through the price registered providers are able to pay for affordable units. For the purposes of our testing we have assumed that affordable rents are capped at these levels.

- 2.25 The affordable units were split 80/20 between rented and intermediate tenure as this best meets the requirements of Registered Providers to develop affordable housing schemes that meet their financial criteria whilst addressing the high need for Affordable Rented tenure identified in the SHMA. The Housing White Paper, consulted upon in February 2016, suggests a minimum requirement for 10% affordable home ownership on sites over 10 units³⁰. If this is adopted as national policy the Council has indicated it will include the same requirement. On the smaller sites of around 15 units or fewer the proportion of intermediate units may need to be increased slightly but this will not adversely affect the results of this study as this tenure strengthens viability compared to affordable rented accommodation.
- 2.26 Dwelling mix for market housing was varied between densities, with the lower densities providing a higher level of detached units and bungalows and the higher densities including flats as well as a greater number of terraced or semi-detached units.
- 2.27 The mix for affordable housing was similar in all development sizes to reflect housing need and past delivery, reflecting the focus identified in the SHMA.
- 2.28 Case study sites over 2.5 gross ha (around 75 dwellings) were assumed to have a net to gross ratio of around 80% to take account of any open space and any on-site infrastructure provision. This increased to 65% above 6 hectares and 50% above 75 hectares. These adjustments to site area are considered to be adequate to meet the Council's policy requirements.
- 2.29 A full set of assumptions is provided in Appendix I - Technical Detail for Residential Testing.

³⁰ Para 4.17 Fixing our Broken Housing Market (Housing White Paper) 7/2/17



3 Residential Viability Analysis – Notional 1 Hectare Site

Testing Results

- 3.1 The results of the 1ha tiles are shown below. Each value area has been considered separately and has been tested at 20, 25, 30 and 35 dwellings per hectare (dph). The full set of results are shown in table form at appendix IV. The assessment includes some sensitivity testing against higher benchmark land values.

Notional 1 hectare scheme – Frinton Cluster

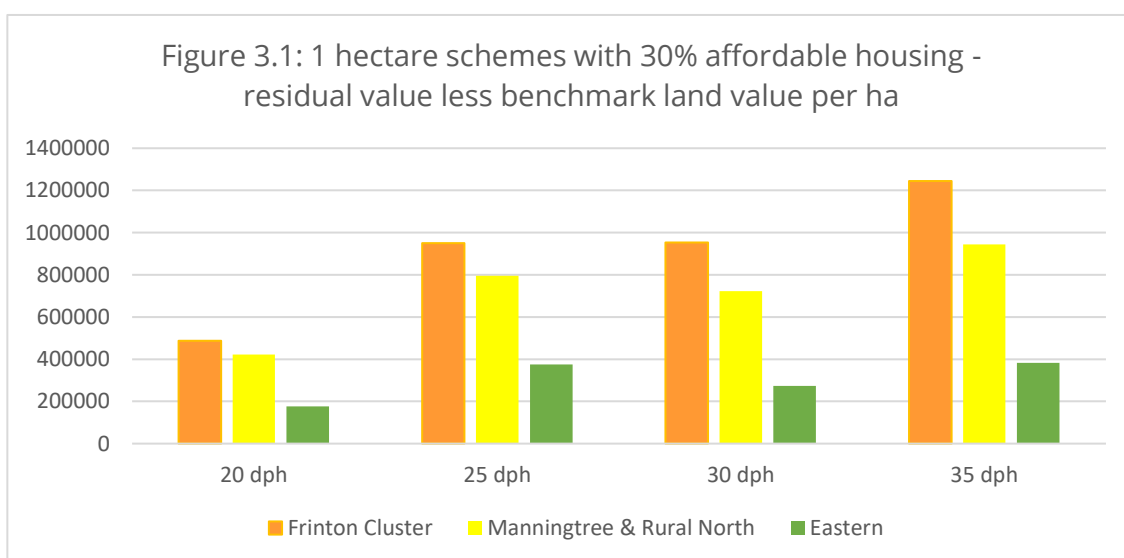
- 3.2 Testing in the Frinton Cluster value area with 30% affordable housing showed a strong market with sites financially viable at all densities. At 30% affordable housing scheme values ranged from £0.488m to £1.245m per gross hectare above benchmark land value. The most valuable sites were at 35 dph.

Notional 1 hectare scheme – Manningtree & Rural North

- 3.3 Testing in the Manningtree & Rural North value area showed a strong market with sites financially viable at all densities with 30% affordable housing. Values ranged from £0.422 to £0.944m per hectare above benchmark land value. The most valuable sites were at 35 dph.

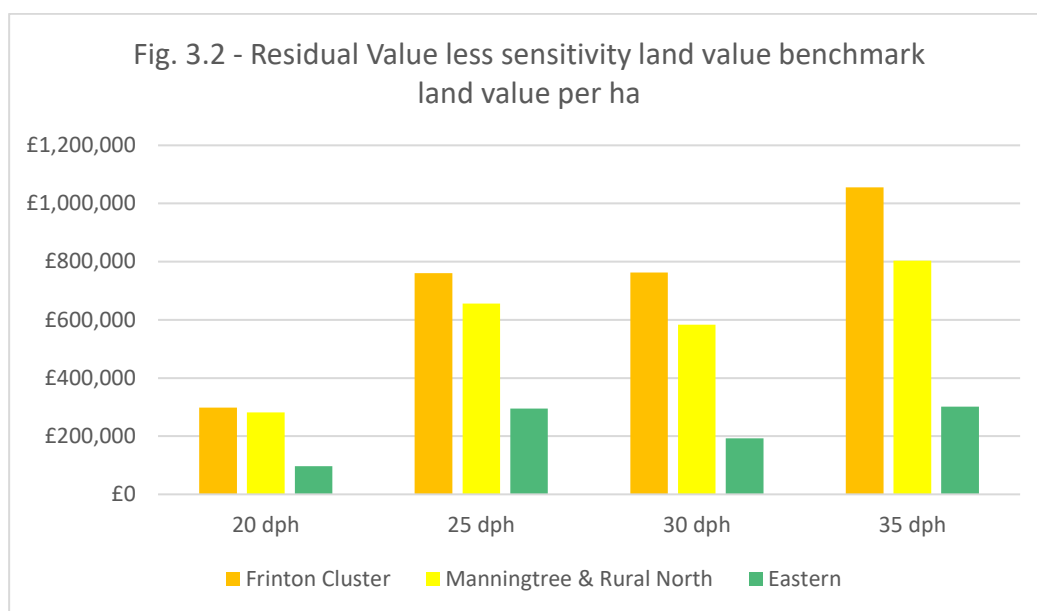
Notional 1 hectare scheme – Eastern

- 3.4 Testing in the Eastern value area showed a weaker market in comparison to the two other value areas, though with sites financially viable at all densities. At 30% affordable housing scheme values ranged from £0.177 to £0.382m per hectare above benchmark land value. The most valuable sites were at 35 dph.



Notional 1 hectare scheme – All Schemes at sensitivity benchmarks

- 3.5 All schemes were evaluated again at a higher, sensitivity, benchmark land value. This takes into account that sites of this nature and size are often the easiest to deliver as they are straightforward in terms of shape or remediation and are not encumbered by significant net to gross ratios. It also allows for any pockets of higher value/prices within each area. Apart from land value, all other factors remain the same.
- 3.6 Figure 3.2 below demonstrates that the 1 hectare sites remain viable when the main benchmark land value is increased by 20%.



Notional 1 hectare scheme – Overview

- 3.7 The testing undertaken for the notional 1 ha sites provides a broad overview of the viability of Tendring District Council's Local Plan.
- 3.8 At a 1 hectare site level a range of policy compliant residential densities can be delivered with a residual value in excess of both the main and sensitivity benchmark land values.
- 3.9 The sites were modelled with 30% affordable housing tested, which reflects the need identified in the SHMA and is equitable with the testing of the proposed Garden Communities.
- 3.10 In all value areas, the 35dph scenario is the most viable, although at 20, 25, 30 & 35 dph the residual values are in excess of the main and the sensitivity benchmark land value. At the higher sensitivity benchmark land value a 20 dph scheme in the lower value Eastern area generates a surplus of only £0.097m, with all other scenarios exceeding this total.
- 3.11 The results of the 1 ha tiles give an overview of good general development viability at a range of densities in all value areas.



4 Residential Viability Analysis – Case Study Sites

Case study characteristics

- 4.1 In conjunction with the Council we have identified a series of case studies which reflect typical sites likely to be brought forward in the District and in the different value areas. The case studies vary in size from 1 to 1,100 dwellings and in density from 25 to 67 dwellings per hectare. There are 15 basic scenarios which were tested in the both value areas, with sensitivity testing around affordable housing policy, density, infrastructure and site costs.
- 4.2 We have divided the case studies into three main groups against the different benchmark land value site sizes: small - medium case studies of less than 2.5 ha (approximately 1 - 50 dwellings), and which we further subdivide to reflect affordable housing thresholds (more than ten units); intermediate case studies for schemes between 75 and 300 dwellings; and larger case studies of over 20 ha (600 or more dwellings). We have dealt separately with the rural exception site (10 dwellings) and the sheltered / extra care schemes. These are all reported on below. The key characteristics of the case studies are shown at the outset of each sub-section under which they are reported; all other assumptions are the same as for the 1ha tiles. Appendix I provides details of the assumptions used for the testing and Appendix IV contains the results in tabular format.

Smaller case studies (Case Studies 1 to 9)

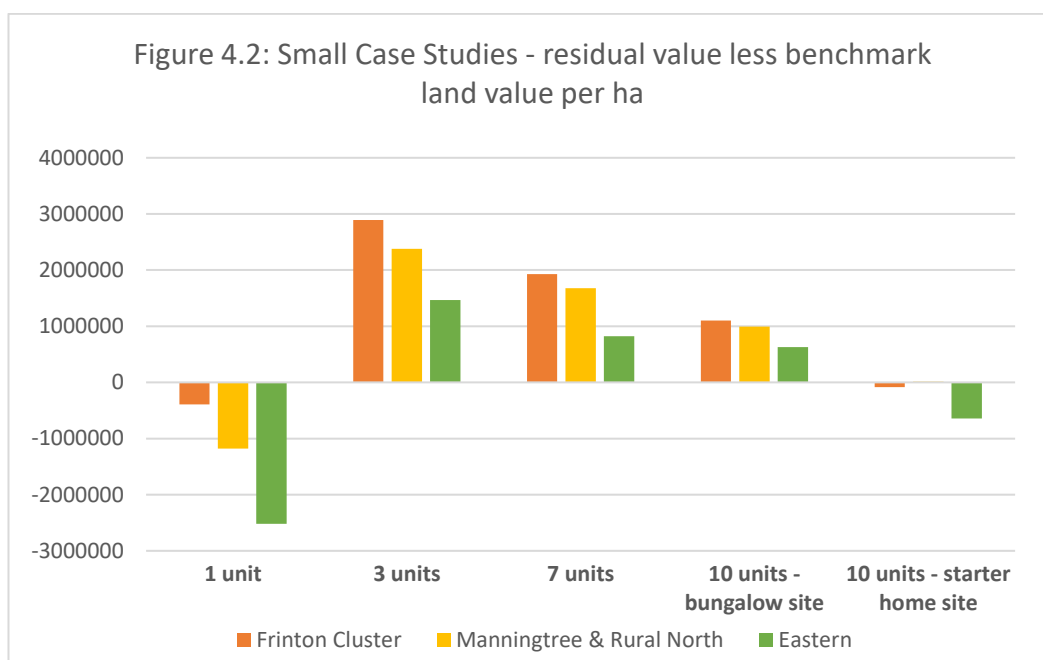
- 4.3 This section of the report examines the results from the testing of the small – medium case studies; which are those sites under 2.5 ha. First, we look separately at the smallest case studies, below the affordable housing threshold, and then at small to medium studies which will need to provide affordable housing.

Small sites below 11 units (case studies 1 to 6)

Case Study Ref	No of Dwgs	%AH	Density (dph)	Net Area (ha)	Gross area (ha)	Net to Gross %	S106 Contributions (£/dwelling)	Opening up costs for strategic Infrastructure (£ per net ha)
T1	1	0	40	0.025	0.025	100	5,500	Nil
T2	3	0	40	0.075	0.075	100	5,500	Nil
T3	7	0	30	0.233	0.233	100	5,500	Nil
T5	10 (Bungalows)	0	20	0.5	0.5	100	5,500	Nil
T6	10 (Starter Homes)	-	30	0.333	0.333	100	5,500	Ni

Figure 4.1: Characteristics of Small Site Case Studies

- 4.4 The smallest case studies comprising schemes of 1, 3, 7 and 10 units help consider the impact of Local Plan policies on sites below the affordable housing threshold that will come forward during the plan period. Smaller schemes, especially those of 3 units or fewer, will often incur higher costs which may be ameliorated by higher selling prices. (For single unit schemes, land value may in practice be a less relevant marker because schemes are often small infill sites which attract high prices and values or may be on land already in possession of the owner such as a garden). For these case studies, we assume that development occurs within a year. We follow a similar approach to that used with the 1 hectare notional scheme, with the benchmark land value deducted from the residual value.
- 4.5 The results of the viability testing for the small case studies, in both value areas, are set out in figure 4.2 below.



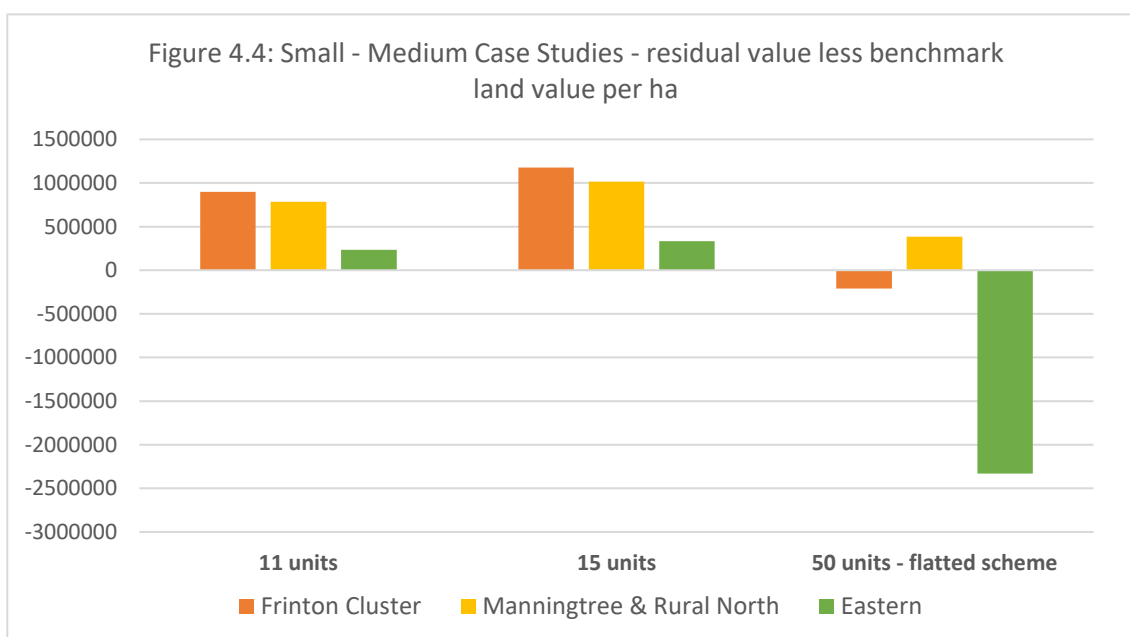
- 4.6 Both the 3-unit scheme and the 7-unit scheme show a surplus generally in excess of £1m/ha above the benchmark land value across all three areas (with the exception of the 7-unit scheme in the Eastern cluster where it falls just below this). The surplus in the Frinton and Manningtree & Rural clusters is much higher: being above £1.6m/ha.
- 4.7 At 1 dwelling a small scheme is not shown as viable with a deficit of -£0.39m/ha to benchmark land value in the Frinton Cluster area, -£1.18m/ha in Manningtree & Rural areas and -£2.52m/ha in the Eastern area. This is generally a reflection of the higher costs incurred on an individual unit without the benefit of the value gained by additional units. Single dwellings may be individual one-off schemes not necessarily brought forward for profit.
- 4.8 A 10-unit bungalow scheme shows a surplus of around £1m/ha above the benchmark land value for two value areas with the exception of the Eastern cluster where it falls below this to £0.63m/ha.
- 4.9 A 10-unit starter home scheme is not shown as viable with a deficit of -£0.085m/ha to benchmark land value in the Frinton Cluster area and -£0.65m/ha in in the Eastern areas. However, within Manningtree & Rural areas a starter home site would see a very small surplus of £0.015m/ha.

Small – Medium Sites Over 11 Dwellings

Case Study Ref	No of Dwgs	%AH	Density (dph)	Net Area (ha)	Gross area (ha)	Net to Gross %	S106 Contributions (£/dwelling)	Opening up costs for strategic Infrastructure (£ per net ha)
T7	11	30	30	0.367	0.367	100	5,500	Nil
T8	15	30	35	0.428	0.428	100	5,500	Nil
T9	50 (Flatted Scheme)	30	67	0.75	0.75	100	5,500	50,000

Figure 4.3: Characteristics of small to medium site case studies

- 4.10 These small - medium case studies are representative of sites below 2 ha allocated to deliver residential growth during the plan period. They are above the 10-dwelling threshold for affordable housing delivery.
- 4.11 The results of the viability testing for the small-medium case studies, in both value areas, are set out in figure 4.4 below.



- 4.12 In the Manningtree & Rural value area all small-medium residential case studies are viable at residual value less benchmark land value. The highest values are achieved for the 11-unit scheme and the 15-unit scheme at £0.785m/ha and £1m/ha respectively, per hectare, after deduction for land value. Manningtree & Rural areas is the only value area

in Tendring District to be viable for 50-unit (flatted) schemes with a residual value of £0.385m/ha.

- 4.13 In the Frinton Cluster value area the small-medium residential case studies are viable at residual value less benchmark land value apart from 50-unit (flatted) scheme which sees a value of -£0.2m/ha. Values are achieved for the 11-unit scheme and the 15-unit scheme at £0.9/ha and £1.2m/ha respectively, per hectare, after deduction for land value.
- 4.14 In the Eastern value area, all small-medium residential case studies are viable at residual value less benchmark land value apart from 50-unit (flatted) scheme which saw a value of -£2.329m/ha. The highest values are achieved for the 11-unit scheme and the 15-unit scheme at £0.232m/ha and £0.33m/ha respectively, per hectare, after deduction for land value.
- 4.15 Flatted schemes as tested here are not viable in the Frinton or Eastern value areas. The lack of viability, particularly in the Eastern Cluster, arises from a local combination of costs and values rather than from the cost of meeting policy requirements. Such schemes would struggle to deliver, even at a reduced land value, in the present financial climate.

Intermediate case studies

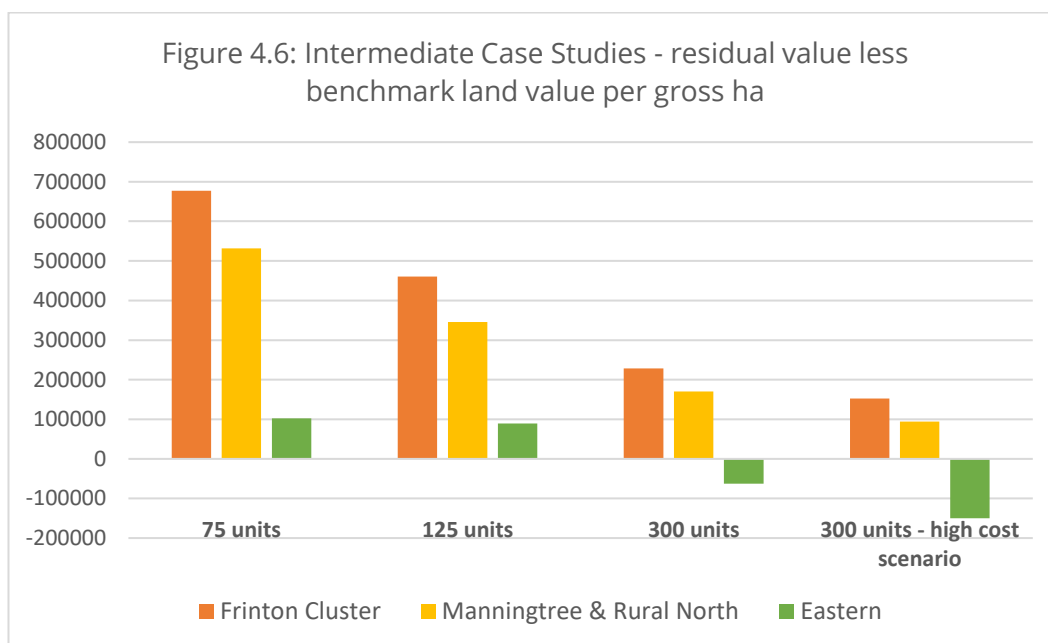
Case Study Ref	No of Dwgs	%AH	Density (dph)	Net Area (ha)	Gross area (ha)	Net to Gross %	S106 Contributions (£/dwelling)	Opening up costs for strategic Infrastructure (£ per net ha)
T10	75	30	30	2.5	3.12	80	10,000	50,000
T11	125	30	25	5	7.143	70	10,000	100,000
T12	300	30	30	10	15.385	65	10,000	150,000
T12	300	30	30	10	15.385	65	15,000	150,000

Figure 4.5: Characteristics of intermediate case studies

- 4.16 The intermediate case studies are indicative of sites sized above 2.5 ha which will deliver residential growth during the plan period. Opening up costs are higher and net to gross ratios lower than for the small to medium sites. Each scenario includes an allowance for S106 planning obligations of £10,000/dwelling. A 300-unit scheme has also been

modelled at a 'higher cost scenario' (£15,000 s106/dwelling) to allow for additional infrastructure or site remediation costs that may be incurred on larger site sizes.

4.17 The results of the case study modelling are shown in Figure 4.6 below.



4.18 In the Manningtree & Rural area the 75-unit scheme is most viable, producing a surplus of £0.55m/ha above the benchmark land value. As the size of the scheme increases the value above the benchmark figure decreases with a 125-unit scheme having a surplus of £0.345m/ha, a 300-unit scheme having a surplus of £0.17m/ha and the 300-unit 'high cost' scheme having a surplus of £94k/ha.

4.19 In the Frinton Cluster area, the 75-unit scheme is also most viable, producing a surplus of £0.68m/ha above the benchmark land value. As the size of the scheme increases the value above the benchmark figure decreases with a 125-unit scheme having a surplus of £0.46m/ha, a 300-unit scheme having a surplus of £0.23m/ha and the 300-unit high cost scheme having a surplus of £0.15m/ha.

4.20 In the Eastern area, again, the 75-unit scheme is most viable, producing a surplus of £0.1m/ha above the benchmark land value. As the size of the scheme increases the value above the benchmark figure decreases with a 125-unit scheme having a surplus of £90K/ha. A 300-unit scheme and the 300-unit high cost scheme located within the Eastern value area still produces a positive residual value, but this is £0.06-£0.15m below the benchmark land value (per ha) depending upon the scenario.

- 4.21 As the number of units is increased the amount of surplus value decreases, indicative of the higher costs associated with developing a larger scheme. When costs are increased further to account for sites where there may be higher infrastructure or remediation costs, this scheme is still viable albeit with a small surplus over land value for the Frinton Cluster and Manningtree & Rural areas. However, for a scheme of 300-units to come forward in the Eastern area there would have to be some flexibility about the site value.

Larger case studies

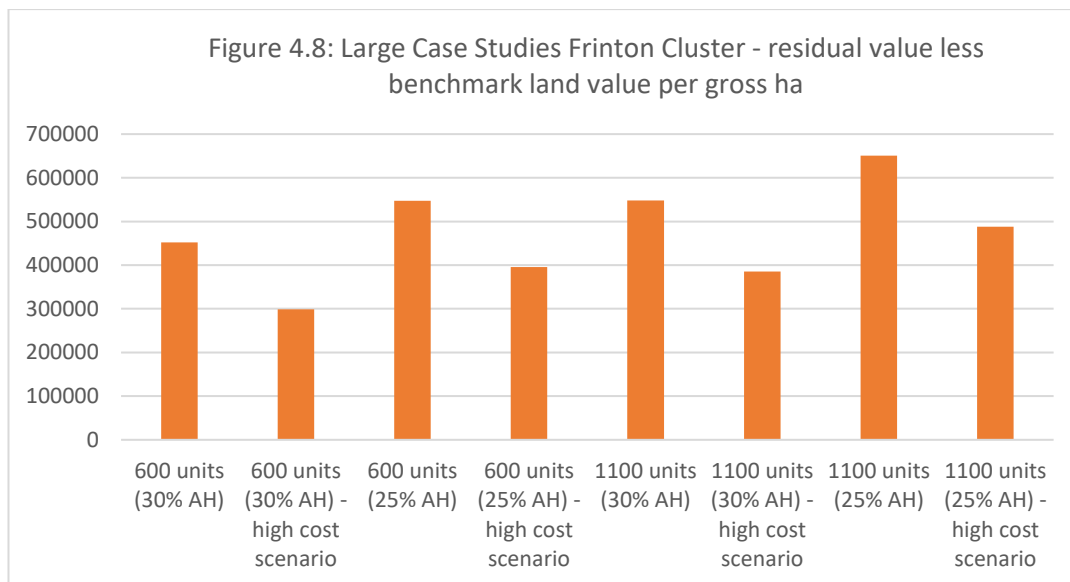
Case Study Ref	No of Dwgs	%AH	Density (dph)	Net Area (ha)	Gross area (ha)	Net to Gross %	S106 Contributions (£/dwelling)	Opening up costs for strategic Infrastructure (£ per net ha)
T13	600	30	30	20	30.77	65	10,000	200,000
T13	600	30	30	20	30.77	65	20,000	200,000
T13	600	25	30	20	30.77	65	10,000	200,000
T13	600	25	30	20	30.77	65	20,000	200,000
T14	1,100	30	35	31.429	48.352	65	10,000	200,000
T14	1,100	30	35	31.492	48.352	65	20,000	200,000
T14	1,100	25	35	31.492	48.352	65	10,000	200,000
T14	1,100	25	35	31.492	48.352	65	20,000	200,000

Figure 4.7: Characteristics of larger case studies

- 4.22 This section of the report deals with large case studies on sites above 20 gross ha. 600-unit and 1,100-unit case studies were modelled at densities of 30dph and 35dph respectively.
- 4.23 The standard scenario has £20,000 per net hectare for opening up costs as well as £10,000/dwelling s106 as well as the lower land values likely to be achieved on schemes of this size. There is also a 'high cost scenario' which considers the impact of further costs for additional infrastructure or site remediation (£20,000 per plot s106).
- 4.24 The scenarios also set out the viability outcomes if a lower proportion (25%) of affordable housing was brought forward on sites considered as larger case studies.
- 4.25 The results for the three different value areas are outlined in the following sections.

Frinton Cluster

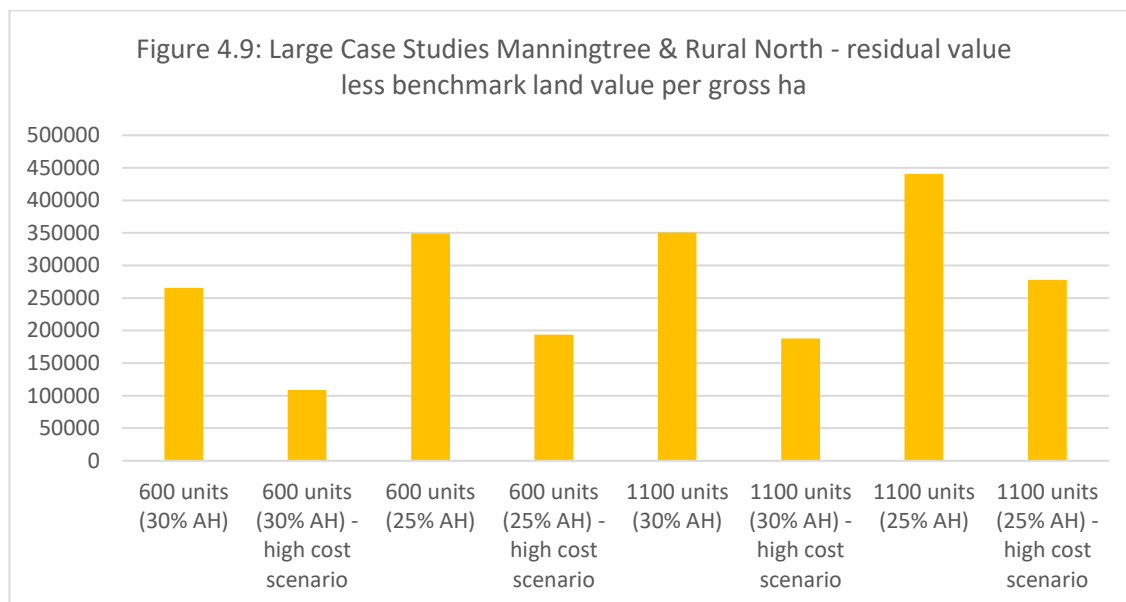
4.26 The results for the Frinton Cluster large case studies are shown in figure 4.8 below.



- 4.27 In the Frinton Cluster area all the large case studies show a per hectare surplus over benchmark land value, including schemes modelled at a high cost scenario.
- 4.28 The lower density (30 dph – 600-unit) case study still gives a surplus but is less than a scheme for 1,100 units (at 35dph) where costs and affordable housing contributions are equivalent. The surplus generated by the 1,100-unit scheme at 30% affordable housing (£0.55m/ha) is broadly equivalent to a 600-unit scheme providing 25% affordable housing (also £0.55m/ha). This broadly follows the results for 1ha tiles shown at Figure 3.1 in terms of the relationship between development at different densities.
- 4.29 A 600-unit scheme with 30% affordable housing provides a surplus of £0.45m/ha over benchmark land value.
- 4.30 The scheme for 1,100 units with 25% affordable housing produces the highest surplus of £0.65m/ha. This is followed by 1,100 units with 30% affordable housing with a surplus of £0.55m/ha; both these studies were modelled at 35 dph.
- 4.31 The surplus generated on all of the 'high cost' scenarios (after allowing for benchmark land value) at 25% and 30% affordable housing ranges from £0.3 - £0.4m/ha for the 600-unit scheme and £0.39 - £0.49m/ha for 1,100 units.

Manningtree and Rural North Cluster

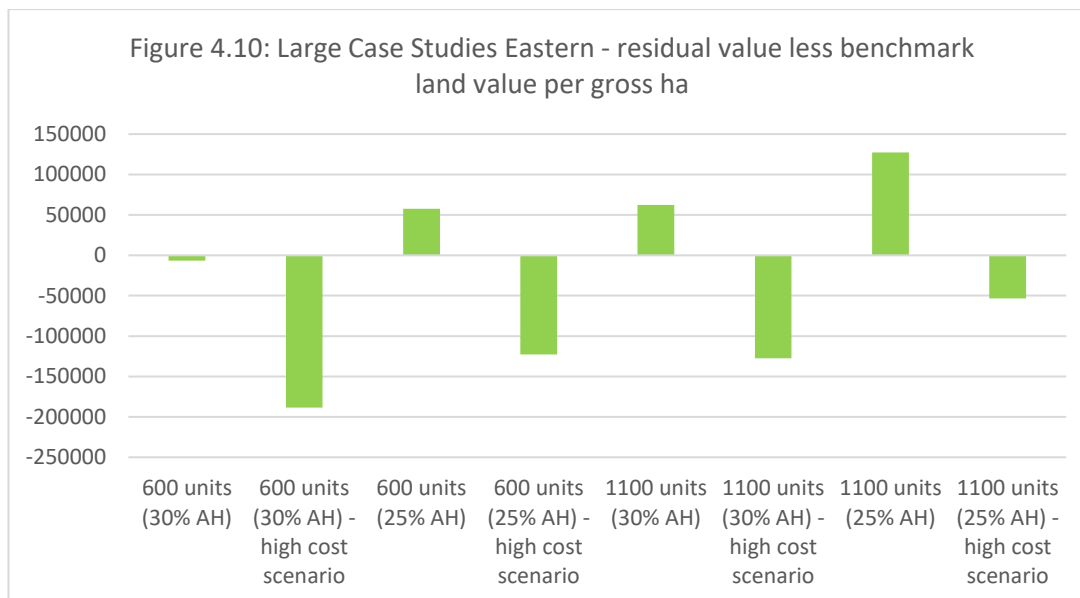
- 4.32 The results for the Manningtree and Rural North Cluster large case studies are shown in figure 4.9 below.



- 4.33 In the Manningtree & Rural North area all the large case studies show a per hectare surplus over benchmark land value, including schemes modelled at a high cost scenario. The scheme for 1100 units with 25% affordable housing produces the highest surplus of £0.44m/ha followed by 1100 units with 30% affordable housing with a surplus of £0.35m/ha; both these studies were modelled at 35 dph.
- 4.34 A lower density (600-units at 30 dph with 30% affordable housing) case study still gives a surplus (£0.27m/ha) but is less viable than the equivalent 1,100-unit scheme at 35dph.
- 4.35 'Higher cost' scenarios for the 600-unit scheme at 25% and 30% affordable housing generate a surplus (after benchmark land value) of £0.194 - £0.109m/ha respectively. The equivalent surplus for the 1,100-unit schemes with higher costs are £0.28 - £0.188m/ha.

Eastern Cluster

4.36 The results for the Eastern Cluster large case studies are shown in figure 4.10 below.



4.37 For the large case studies, testing in the Eastern area produced a more complex set of results. Sites were generally viable when standard costs normally anticipated to occur on such development were applied. More viable results were produced at 25% affordable housing with results more marginal at 30% contributions.

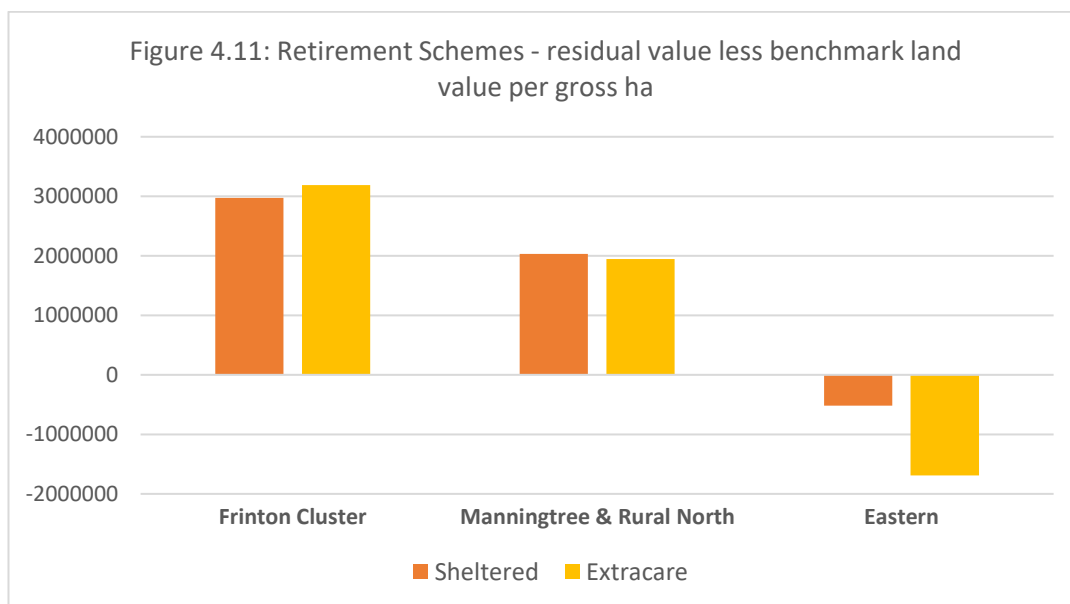
4.38 1,100-unit schemes were viable at 30% and 25% affordable housing with surplus (after benchmark land value) of £0.063m and £0.128m per gross ha respectively. A 600-unit scheme at 25% affordable housing is viable, with a surplus of £0.058m per gross ha after benchmark land value, but the equivalent 600-unit scheme at 30% affordable housing shows a marginal deficit of £6,480 per gross ha.

4.39 A positive residual value of £0.243m per gross ha is generated for a 600-unit scheme with 30% affordable housing (at typical development costs) and is close to benchmark land value. In these circumstances development may come forward if there is some flexibility in land value or if viability improves slightly.

4.40 At the higher cost scenario, the case studies do not produce surplus post benchmark land value at either 25% or 30% affordable housing. Deficits range from -£0.188m to -£0.054m per gross hectare. All generate a positive residual value before applying benchmark land value, ranging from £0.062m to £0.197m per gross hectare.

Sheltered & Extra Care Sites

- 4.41 Sheltered and extra care schemes were modelled in both value areas. The results are presented in figure 4.11 below.



- 4.42 Sheltered housing schemes produced viable results in both the Frinton Cluster and Manningtree & Rural North value areas and gave a surplus over benchmark land value of £3m/ha in the Frinton Cluster area and £2.04m/ha in the Manningtree & Rural North area. Within the Eastern area a scheme for sheltered housing still produce a positive residual value but this is £0.5m/ha below the benchmark.
- 4.43 Extra Care schemes, again, produced viable results for Frinton Cluster and Manningtree & Rural North value areas and gave a surplus over benchmark land value of £3.2m/ha in the Frinton Cluster area and £1.9m/ha in the Manningtree & Rural North area. Within the eastern area a scheme for extra care housing would be unviable with a deficit of -£1.7m/ha below the benchmark.

Rural exception sites

4.44 The table below shows the results of testing a 10-unit rural exception site

Residual value per scheme	Tenure: 40% market / 20% Affordable Rent / 40% shared ownership	Tenure: 20% market / 50% Affordable Rent / 30% shared ownership
Frinton Cluster	£449,000	£126,000
Manningtree and Rural North	£341,000	£71,000
Eastern	£97,000	-£93,000

4.45 The results show that some level of market housing is likely to be required to assist these schemes to come forward. Notwithstanding the fact that these rural exception schemes will be specific to local need, in the Eastern area the residual value is £97,000 with 40% market housing indicating an average plot value of just under £10,000 a unit. At 20% market housing, the average value in the Frinton Cluster is £12,600 per plot. These values are within the expected range for rural exception sites. In arriving at these figures, we have assumed there is no HCA grant available and therefore indicating that a market contribution of between 20% and 40% is likely to be necessary to subsidise the affordable element in order to achieve a suitable value per plot.

Case Studies – Overview

- 4.46 The case studies modelled in this viability study were identified with the council as sites expected to come forward in the delivery of the Local Plan. They include full allowance of the costs of policies contained therein. In broad terms, the policy compliant case studies are viable.
- 4.47 The main exceptions to this are the single dwelling schemes, some of the flatted and starter home schemes, and some of the larger schemes in lower value areas. The single dwelling schemes as tested here have higher build costs and are not viable across all of the value areas. However, these sites will generally be brought forward on a case-by-case basis often taking different priorities into account in relation to costs and values, for example a scheme in landowner's garden or a self-build project. The results do not impact the overall viability of the development plan.
- 4.48 All case studies tested in regard to the Manningtree & Rural North value area produced viable results, including allowance for the additional costs associated with larger developments. A sensitivity 'high costs scenario' has also shown that these schemes could bear further infrastructure and/or remediation costs if necessary.
- 4.49 All case studies tested in regard to the Frinton Cluster value area produced viable results with the exception of 10-unit starter home sites and 50-unit flatted schemes. The large sites of 600 and 1100 dwellings have produced viable results including the additional costs associated with larger developments. A sensitivity 'high costs scenario' has also shown that these schemes could bear further infrastructure and/or remediation costs if necessary.
- 4.50 In the Eastern value area, a number of case studies tested did not reach the benchmark land values, especially on larger developments with the higher cost scenario applied. However, schemes ranging from 3 to 125 units produced surplus values which indicates that a considerable amount of development is viable within the Eastern Value area. Larger developments which require more developer investment may only come forward if there is flexibility about land values or when values increase later in the plan period. All other schemes of 3 dwellings or above, other than those identified, have produced positive results in viability modelling.
- 4.51 Overall, the viability findings indicate that the Local Plan is deliverable.



5 Non-residential Development

Introduction

- 5.1 This section of the report provides viability analysis of the non-residential development planned to come forward under the new local plan. There will also be non-residential development in the Garden Communities which is covered in a separate viability study.
- 5.2 The draft Local Plan notes that Tendring District has a diverse economy with local employment across a range of activities. Health, retail, and education are the largest sectors in terms of the number of jobs, and together represent 45% of the District's total employment. Harwich is home to Harwich International Port and significant new jobs growth is planned for this location. To the west of the District, the economy and labour market of Manningtree is influenced by its relative proximity to Colchester and good transport links to London, and there are existing employment locations as well as opportunities in the west of the District.
- 5.3 Opportunities have been identified for Tendring to develop potential future strengths in Offshore Wind and the Care & Assisted Living sector. The Cultural, Visitor and Tourism sector plays an important role in the District's economy. The major comparison retail requirement will be for Clacton (particularly in the town centre) as well as the other settlements in the District. There is capacity for new convenience floorspace in many of the towns in the District. While the University of Essex is in Colchester, it is very close to the border with Tendring and it is anticipated that some of the student accommodation to be developed adjacent to the campus will be in Tendring.

Case Studies and Testing Assumptions

5.4 The viability testing responds to the planned development by using the following case studies:

- Town centre offices
- Business park offices
- Industrial/warehouse uses
- Town centre comparison retail
- Retail park comparison retail
- Small convenience retail
- Supermarket
- Hotel
- Mixed leisure
- Care home
- Student Accommodation

5.5 The characteristics for each case study are set out in table 5.2 below.

5.6 Build costs are drawn from BCIS, using median values rebased to this location³¹. Build costs are slightly higher than the national average. Revenues have been based on transactions listed by Co-Star Suite³² (lettings and investments), supplemented by market commentaries³³. Where possible we have based our values on local data but for some uses data had been drawn from analogous developments in other areas (some retail, care homes, leisure) in order to broaden the base for the estimates used here. Where there is a range of examples we have focused on quality provision of a standard likely to be attractive to institutional investors.

³¹ For student accommodation in Tendring we have used the same build costs as Colchester student accommodation, because any student accommodation developed will be on or adjacent to the University rather than elsewhere in the district.

³² CoStar Suite is a national database which offers a full market inventory of properties and spaces, available as well as fully leased, searchable by market and submarket

³³ CBR, Savills, Knight Frank, Focus

Retail Values

- 5.7 Retail case studies include convenience and comparison³⁴, in and out of town centre. The main locations with data available for high street comparison retail values are Clacton, Harwich, Manningtree and Frinton. For out of centre comparison retailing (retail warehouses) values are driven by the strength of the operator covenant and we have used data from a broader area across the east of England.
- 5.8 Supermarket operators have commanded a premium with investment institutions, although there has been a structural shift with the historic pattern of developing large stores now replaced with development of smaller supermarket formats (as used by both discount and premium convenience operators) and greater provision of small format stores, often within the Sunday trading threshold³⁵ (280 sq m display floor area), also often in existing floorspace. These changes reflect the alterations in shopping habits. Although there are some small regional variations on convenience retail values, they are reasonably standard across the country with investors focusing primarily on the strength of the operator covenant and security of income. As a result, it is reasonable to use a broad geographical evidence base for convenience retail. In relation to convenience retail we note that in the past leases to the main.

Office Values and Industrial and Warehouse Values

- 5.9 We have used local data for office, industrial and warehouse values.

³⁴ Convenience retailing is defined as the provision of everyday essential items, including food, drinks, newspapers/magazines and confectionery; and within this larger stores provide the range required for weekly shops and smaller stores provide more of a 'top-up' function. Comparison retail relates to other consumer goods.

³⁵ Sunday Trading Act 1994

Hotel and Leisure Values

- 5.10 Nationally, there has been significant growth in the provision of budget hotels³⁶, with relatively few full-service hotels outside the major conurbations. The most likely hotel development is a budget hotel from a limited number of national hotel operators. We have used data from across a wide area to come to a view about the values these types of hotel command.
- 5.11 For leisure, we have used values for cinemas, using data drawn from a broad area.

Care Homes

- 5.12 Care home values have been estimated using data drawn from a broad area.

Student Accommodation

- 5.13 The purpose-built student accommodation sector has evolved into a mature investment opportunity. Student numbers have increased and whilst the higher student fees did affect the market, it has seemingly recovered, especially in those areas that attract higher levels of overseas students. The University of Essex has pursued plans for expansion in recent years, with a corresponding increase in the provision of accommodation, including fulfilling its guarantee to provide housing for all first-year students. Its aspirations for further increases in student numbers (up to 25,000 students by the end of the plan period) means it has the potential for future growth and to support demand for development. In terms of evidence on values we draw from across a broad area as data is more limited in this market. Experience elsewhere has shown that the best values for student accommodation are when the developments well located relative to the university. As it is anticipated that the proposed new student accommodation in Tendring will only be on or adjacent to the University of Essex

³⁶ The British Hospitality Association Trends and Developments Report 2012 indicates that budget hotels are defined as a property without an extensive food and beverage operation, with limited en-suite and in-room facilities (limited availability of such items as hair dryers, toiletries, etc.), low staffing and service levels and a price markedly below that of a full service hotel.

campus we have used higher than average values per room and it should be noted that values may be lower in less attractive locations.

Table 5.1 Benchmark land values

Type	£ per gross hectare
Prime town centre retail	Site EUV
Convenience and other comparison retail	£0.95m
Budget hotels, care homes, leisure	£0.66m
Office, industrial and warehouse	£0.55m

Table 5.2 Case study characteristics

	Out of centre offices	Town centre offices	Industrial/ warehouse units	Warehouse/ industrial units
Floorspace sqm	1,500	2,000	1,600	5,000
Storeys	2	4	1	1
Site coverage	40%	75%	40%	40%
Rent/sqm	£179	£179	£65	£65
Yield	8.20%	8.20%	7.54%	7.54%
Purchaser costs % GDV	5.80	5.80	5.80	5.80
Build costs/sqm	£1,324	£1,589	£828	£530
External works % of base build costs	10%	10%	10%	10%
Professional fees	10.00%	12.00%	12.00%	12.00%
Sales and letting costs % of GDV	3%	3%	3%	3%
Allowance for s106	£20,000	£0	£20,000	£50,000
Finance costs	6.0%	6.0%	6.0%	6.0%
Build and void period (months)	22	26	20	32
Developer return % GDV	20%	20%	20%	20%
SDLT & agent fees/sqm (if viable)	£0	£0	£0	£0

Table 5.2 (continued) Case Study characteristics

	Prime town centre comparison shops	Secondary town centre comparison shops	Out of centre comparison shops	Small convenience store	Mid convenience store	Supermarket
Floorspace sqm	200	200	1,000	300	900	2,500
Storeys	2	2	1	1	1	1
Site coverage	80%	80%	40%	65%	55%	40%
Rent/sqm	£178	£107	£157	£208	£177	£194
Yield	7.10%	7.10%	6.60%	6.70%	6.20%	5.40%
Purchaser costs % GDV	5.80	5.80	5.80	5.80	5.80	5.80
Build costs/sqm	£1,038	£925	£718	£1,262	£1,262	£1,621
External works % of base build costs	10%	10%	10%	10%	10%	10%
Professional fees	12.00%	12.00%	10.00%	12.00%	10.00%	10.00%
Sales and letting costs % of GDV	3%	3%	3%	3%	3%	3%
Allowance for s106	£0	£0	£100,000	£0	£100,000	£100,000
Finance costs	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Build and void period (months)	24	24	26	6	11	15
Developer return % GDV	20%	20%	20%	20%	20%	20%
SDLT & agent fees/sqm (if viable)	£6	£0	£27	£12	£6	£19

Table 5.2 (continued) Case Study characteristics

	Budget hotel	Care home	Student Accommodation
Floorspace sqm	2,450	3,000	5,565
Storeys	3	2	4
Site coverage	50%	40%	75%
Capital value per room	£80,000	£95,000	£105,000
Purchaser costs % GDV	5.80	5.80	5.80
Build costs/sqm	£1,191	£1,453	£1,618
External works % of base build costs	10%	10%	10%
Professional fees	12.00%	12.00%	12.00%
Sales and letting costs % of GDV	3%	3%	3%
Allowance for s106	£10,000	£75,000	£0
Finance costs	6.0%	6.0%	6.0%
Build and void period (months)	16	12	18
Developer return % GDV	20%	20%	20%
SDLT & agent fees/sqm (if viable)	£2	£0	£0

	Leisure development
Floorspace sqm	3,800
Storeys	2
Site coverage	80%
Rent/sqm	£161
Yield	6.60%
Purchaser costs % GDV	5.80
Build costs/sqm	£1,415
External works % of base build costs	10%
Professional fees	12.00%
Sales and letting costs % of GDV	3%
Allowance for s106	£20,000
Finance costs	6.0%
Build and void period (months)	12
Developer return % GDV	20%
SDLT & agent fees/sqm (if viable)	£0

Land Values for Non-Residential Development

5.14 Benchmark land values are an estimate of the lowest value that land may be released for development as opposed to the highest values seen in market transactions. The benchmark land values have been developed based on existing use values, with a premium where the use is expected to change. We have used data from Tendring District Council to estimate a benchmark value for industrial/office use of £0.55m/ha, with a 20% premium where this may be used for a non-B class use. For retail uses we have used the higher residential benchmark as this may be an alternative use). The exception is the higher value town centre comparison retail where we have assumed that the site will have an existing retail use but with lower values and less floorspace. Here we have used this as the basis for generating value estimates along with an allowance for demolition and associated costs³⁷.

5.15 The tables below summarise the results from the detailed assessments for each non-residential development type. They provide the following information

- Net value per square metre.
- Net costs per square metre - including an allowance for land cost and s106 to deal with site specific issues (e.g. On-site highways, travel plan etc. to make development acceptable).
- Residual value per sq m (i.e. Value less costs).
- The land value benchmark for that use - presented £s per sq m of development to take into account differences in site coverage and the number of storeys for the notional developments.
- The viability headroom – for uses that are viable, this is the residual value over and above the benchmark land value.

5.16 It is important to note that the analysis considers development that might be built for subsequent sale or rent to a commercial tenant. However, there will also be design and

³⁷ We used a 100 sq m retail unit on two floors with 50% site coverage, with rents from the lower end of the range recorded and weaker yield; along with an allowance for demolition and a 20% incentive for the landowner.

build development that is undertaken for specific commercial operators, either as owners or pre-lets. In these circumstances, the economics of the development relate to the profitability of the enterprise accommodated within the buildings rather than the market value of the buildings.

- 5.17 Public sector economic development priorities may also result in funding being used to deliver some forms of development or provide infrastructure that reduces the cost/risk of private sector development. This might include making use of local authorities' ability to borrow cheaply or use capital budgets to create income earning assets, as well as programmes such as the South East LEP's Growth Deal which plans to invest over £100m 2017-20.

B Class Uses – Offices, Industrial and Warehouses

- 5.18 The viability assessments indicate that all of these B class uses produce a negative residual value. The lack of viability for B class uses is common across many areas of the country.

Table 5-3: Offices

	Out of centre offices	Town centre offices
Value per sq m	£1,960	£1,960
Costs per sq m	£2,250	£2,671
Residual per sq m	-£290	-£711
Land benchmark per sq m	£69	£18
Viability 'headroom' per sq m	-£359	-£729

Table 5-4: Industrial and Warehouses

	Industrial units	Warehouses
Value per sq m	£774	£774
Costs per sq m	£1,316	£950
Residual per sq m	-£542	-£176
Land benchmark per sq m	£138	£138
Viability 'headroom' per sq m	-£680	-£313

Retail Uses

- 5.19 The viability of retail development will depend primarily on occupier demand and the type of retail being promoted. For this reason, we have tested different types of retail provision.
- 5.20 All of the convenience retail uses tested were viable, with the small stores having the strongest viability.

Table 5-5: Convenience retail and supermarkets

	Small convenience store	Mid convenience store	Supermarket
Value per sq m	£2,788	£2,563	£3,226
Costs per sq m	£2,257	£2,328	£2,919
Residual per sq m	£531	£235	£307
Land benchmark per sq m	£146	£173	£238
Viability 'headroom' per sq m	£385	£62	£69

- 5.21 Neither of the town centre comparison retail developments are viable. The prime town centre retail is sensitive to the site value as the case study does produce a positive residual value. We have tested the prime town centre retail scheme against a site with less valuable retail current uses but if sites with a lower existing use value were available, it may be possible for this form of development to be viable. The secondary town centre retail is not viable, even against a lower land value benchmark than the prime retail. Out of centre retail warehouses are viable.

Table 5-6: Town centre and out of centre comparison retail

	Prime town centre comparison shops	Secondary town centre comparison shops	Out of centre comparison shops
Value per sq m	£2,251	£1,353	£2,136
Costs per sq m	£1,964	£1,592	£1,622
Residual per sq m	£287	-£239	£514
Land benchmark per sq m	£959	£59	£238
Viability 'headroom' per sq m	-£672	-£299	£277

Other Tested Areas

- 5.22 The other uses tested include hotels, mixed leisure developments and care homes. Of these uses, only budget hotels are viable, while student accommodation is marginal. We note that it would only require a 2% increase in values for student accommodation to become viable and given that this is within the variance in the data used to estimate the values it seem likely that this type of development will be viable, particularly if developed on campus where the land may be obtained at below commercial rates. This is confirmed by evidence of student accommodation delivery on the campus.

Table 5-7: Other retail, leisure and care uses

	Budget hotel	Student Accommodation	Leisure	Care home
Value per sq m	£2,160	£2,836	£2,158	£1,796
Costs per sq m	£2,090	£2,833	£2,350	£2,340
Residual per sq m	£70	£3	-£192	-£544
Land benchmark per sq m	£44	£25	£41	£83
Viability 'headroom' per sq m	£26	-£22	-£234	-£627

Other Uses

5.23 The viability testing has been based on the development expected to come forward. It is acknowledged that there are other uses that could arise and it is recommended that the following approach is taken:

- A2 Financial and Professional Services – treat as A1 in viability terms as many of these uses are likely to occupy the same sorts of premises as some town centre retail.
- A3 Restaurants and Cafes – again treat as A1 in viability terms as many of these uses are likely to occupy the same sorts of premises as some town centre retail.
- A4 Drinking Establishments - again treat as A1 in viability terms as many of these uses are likely to occupy the same sorts of premises as some town centre retail.
- A5 Hot Food Takeaways - again treat as A1 in viability terms as many of these uses are likely to occupy the same sorts of premises as some town centre retail.
- Selling and/or displaying motor vehicles - sales of vehicles are likely to occupy the same sorts of premises and locations as many B2 uses and therefore the viability will be covered by the assessment of the viability of B2 uses.
- Retail warehouse clubs – these retail uses are likely to be in the same type of premises as the out of town A1 retail uses and covering the same purchase or rental costs.
- Nightclubs – these uses are likely to be in the same type of premises as A1 town centre retail uses and covering the same purchase or rental costs.
- Scrapyards – there may be new scrapyard/recycling uses in the future, particularly if the prices of metals and other materials rise. These are likely to occupy the same sorts of premises as many B2 uses and therefore the viability will be covered by the assessment of the viability of B2 uses.

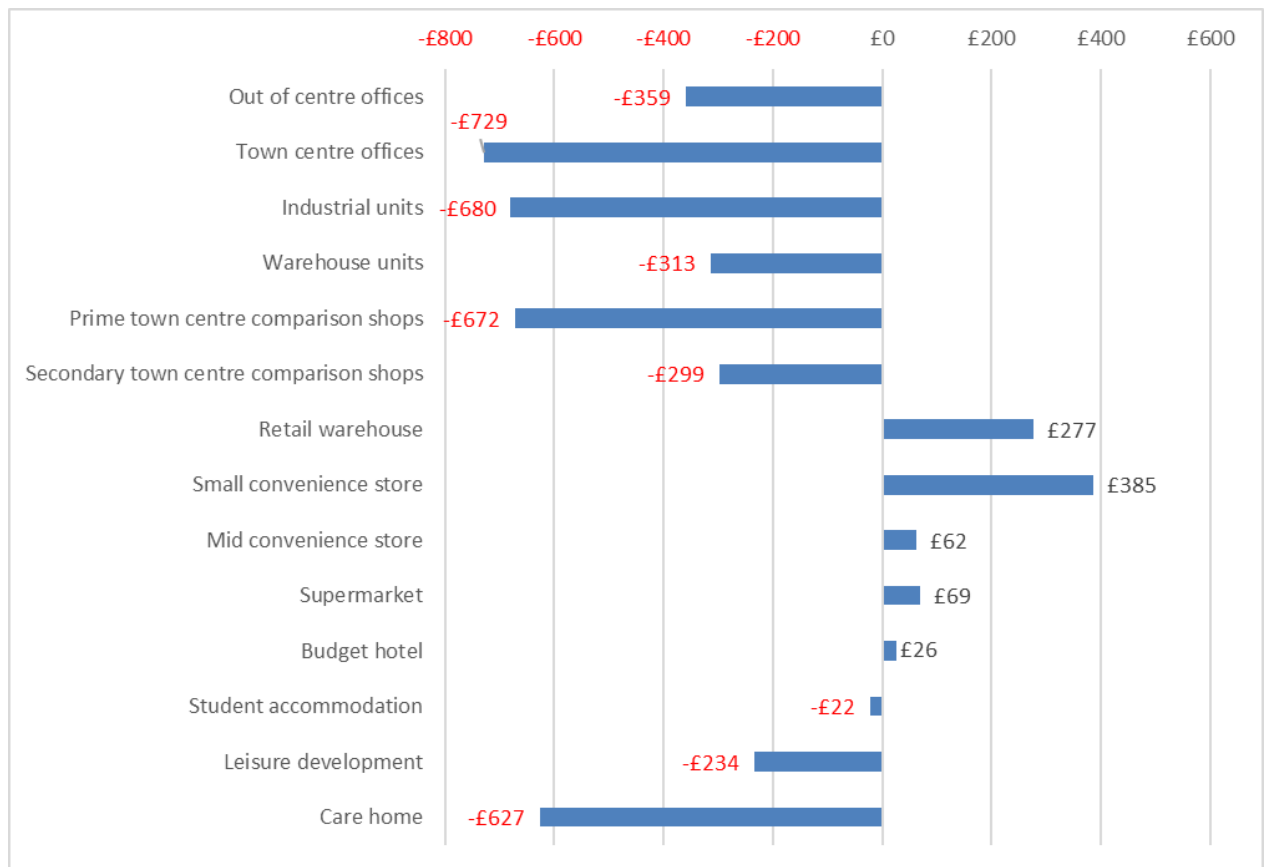
- Taxi businesses – these uses are likely to be in the same type of premises as A1 town centre retail uses and covering the same purchase or rental costs. Therefore, they are covered by this viability assessment.
- Amusement centres – these uses are likely to be in the same type of premises as A1 town centre retail uses and covering the same purchase or rental costs. Therefore, they are covered by this viability assessment.

Summary

- 5.24 Of the uses tested, only retail warehouses, convenience retail and budget hotels are viable. These types of development are able to come forward subject to the availability of sites. Student accommodation is marginal with only a very small increase in values needed to produce a viable outcome, and it is likely that this type of development can also proceed.
- 5.25 Of the uses tested, only retail warehouses, convenience retail and budget hotels are viable. These types of development are able to come forward subject to the availability of sites. Student accommodation is marginal with only a very small increase in values needed to produce a viable outcome, and it is likely that this type of development can also proceed.
- 5.26 Based on the costs and values in this testing, speculative office, industrial and warehouse developments are unlikely to be brought forward by the market. However, this does not preclude local authorities developing new employment spaces, in order to deliver economic development benefits³⁸. In addition, public sector funding from sources such as the South East LEP can be used to reduce the costs of providing new employment space. It is also likely that businesses will continue to commission design and build workspace development.
- 5.27 High street comparison retail is not viable as modelled here. However, this is in part due to the relatively high existing use value assumed for the prime retail site. If a lower value site is available, then this type of retail may come forward.
- 5.28 Based on the costs and values in this testing, care homes are not viable.
- 5.29 Figure 5.8 below summarises the viability of the different non-residential uses.

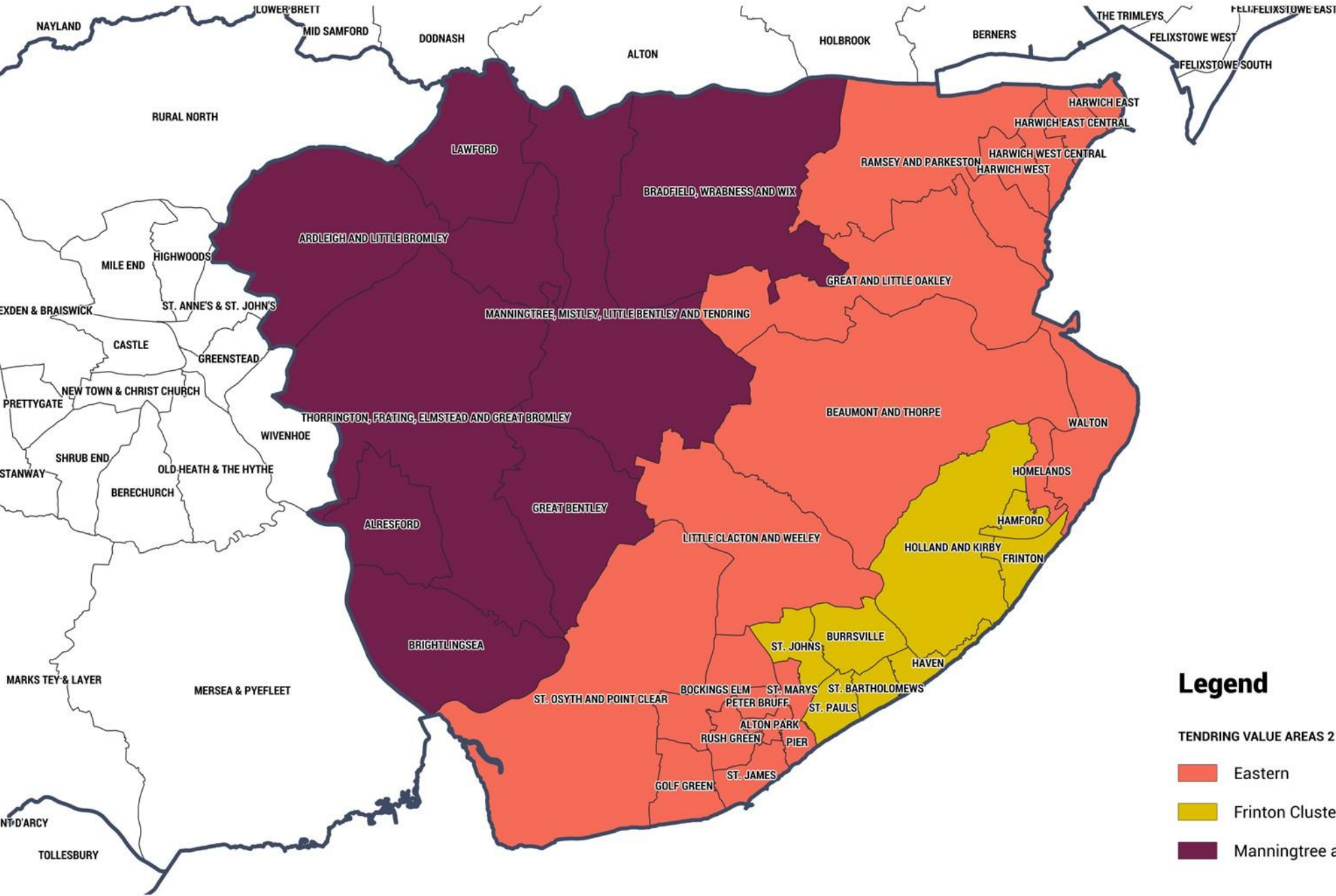
³⁸ This combines a long-term view on returns as well as an ability to borrow cheaply.

Figure 5-8: Non-residential Development Viability Summary - £/sq m viability 'headroom'



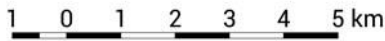
Appendix I – Technical Detail for Residential Testing

TENDRING - Value Areas 2



Legend

- TENDRING VALUE AREAS 2
- Eastern
 - Frinton Cluster
 - Manningtree and Rural North



House Prices

Market GIA SQ M	160	130	100	120	100	106	84	70	58	61	50	80	70	55
	Detached			Semi-detached		Terrace				Flats		Bungalows		
Market Value Area	5 Bed	4 Bed	3 Bed	4 Bed	3 Bed	4 Bed	3 Bed	2 Bed	1 bed	2 Bed	1 Bed	3 bed	2 bed	1 bed
Eastern	£420,827	£341,922	£263,017	£293,409	£244,507	£270,006	£213,967	£178,306	£147,739	£142,093	£116,470	£271,095	£237,208	£186,378
Frinton Cluster	£522,836	£424,804	£326,772	£402,730	£335,608	£351,752	£278,747	£232,289	£192,468	£212,296	£174,013	£346,593	£303,269	£238,283
Manningtre e and Rural North	£483,240	£392,632	£302,025	£370,318	£308,599	£332,691	£263,642	£219,702	£182,039	£223,219	£182,966	£320,344	£280,302	£220,237
	Flats ground rent at £250/dwelling capitalised at 5%. 5% selling price premium applied to sites of 3 dwellings or less													

Market Housing dwelling mix

Type	20 dph	25dph	30dph	35dph
1 bed flat			5%	5%
2 bed flat			5%	5%
2 bed bungalow	10%	5%		
2 bed terrace			10%	10%
3 bed terrace			10%	15%
4 bed terrace				
3 bed semi	15%	20%	15%	10%
4 bed semi				
3 bed detached	15%	15%	15%	15%
4 bed detached	40%	40%	30%	30%
5 bed detached	20%	20%	10%	10%

Affordable Housing

Affordable housing tested at 30% affordable, with some sensitivity tests at 25%

- Rented is tested as 100% Affordable Rent
- Threshold 11+ dwellings

Affordable Housing Dwelling mix

Affordable Housing Development Mix House Type	Affordable Rent (80% of AH)	Intermediate (20% of AH)
1 bed flat	5%	
2 bed flat	5%	
2 bed bungalow	10%	
3 bed bungalow	10%	
2 bed terrace	45%	50%
3 bed terrace	20%	50%
4 bed terrace	5%	-

Affordable housing values

Rents shown are net of service charge of £10pw for flats and £5pw for houses & based on 100% of LHA rates (rounded)

Weekly rents net of service charge	Colchester BRMA
1 bedroom flat	£93
2 bedroom flat	£122
1 bedroom terrace	£98
2 bedroom terrace	£127
3 bedroom terrace	£156
4 bedroom terrace	£199

For rental properties.

Management and maintenance	£1,000
Voids/bad debts	2.00%
Repairs reserve	£600
Capitalisation	5%

For shared ownership

Share size	40%
Rental charge	2.75%
Capitalisation	5%

General costs and assumptions – all dwellings

Dwelling sizes

House type description	Affordable sq m	Market sq m
1 bedroom flat	50 (2p)	50
2 bedroom flat	70 (4p)	61
1 bedroom bungalow	55 (2p)	55
2 bedroom bungalow	70 (4p)	70
1 bedroom terrace	58 (2p)	58
2 bedroom terrace	79 (4p)	70
3 bedroom terrace	93 (5p)	84
4 bedroom terrace	106 (6p)	106
3 bed semi detached	93 (5p)	100
4 bed semi detached	106 (6p)	120
3 bed detached		100
4 bed detached		130
5 bed detached		160

Dwelling size compliant with Nationally Described Space Standards

An allowance of 10% of floor area will be added to the 1-2 storey flats used in the 1ha tile testing for circulation and common areas.

An allowance of 15% of floor area will be added to the 3 storey flats used in case study T9.

For the sheltered scheme, case study T15, one bed flats are 50sqm and two bed flats are 75sqm. An allowance of 20% of floor area for communal and service areas will be added.

For the extracare scheme, case study T16, one bed flats are 65sqm and two bed flats are 80sqm. An allowance of 35% of floor area for communal and service areas will be added.

Other costs

Type	Cost	Comment
Flats (1-2 storeys)	£1,459	sq m includes 15% for external works
Flats (3-5 storeys)	£1,510	sq m includes 15% for external works
Houses	£1,288	sq m includes 15% for external works
2 to 3 Houses	£1,352	sq m includes 15% for external works (5% increase over standard house build cost)
Single House	£2,108	sq m includes 15% for external works
Bungalows	£1,535	sq m includes 15% for external works
Sheltered housing	£1,493	sq m includes 15% for external works
Professional fees	8%-12%	10 units or less – 12% 11 – 50 units – 10% 51 – 100 units – 9% 101+ units – 8%
Finance	6%	of development costs (net of inflation)
Marketing fees	3% 6%	of GDV of GDV for sheltered and extracare schemes
Developer return	20%	of GDV

Type	Cost	Comment
Contractor return	6%	of affordable build costs
s106/278	£5,500 £10,000	Per dwelling Sites 75 or more dwellings
Strategic infrastructure costs/ opening up	>50 units 50k/net ha >100 units £100k/net ha >200 units £150k/net ha >400 units £200k/net ha	net ha for larger sites
High cost scenario	5k per unit on sites 300 or more 10k per unit on sites 600 or more	Added costs for sensitivity test to allow potential for higher site remediation or infrastructure
Accessibility	Allow for 10% market housing to be to Part M(4) 2 adaptable & accessible standard. Allow for 10% affordable homes to be to Part M(4) 2 and 5% affordable homes to be to Part M(4) 3 wheelchair user standards.	Costs based on DCLG Housing Standards Review, Cost Impacts, September 2014.
Water standards	110 litres per unit per day	Costs based on DCLG Housing Standards Review, Cost Impacts, September 2014.
Void Costs	£100,000	Applies to sheltered and extracare schemes
Agents and legal	1.75%	

Densities

1ha tiles will be tested at 20, 25, 30 and 35 dph

Main density for case studies will be 30 dph – unless otherwise specified

Net to gross ratios:

- Up to 2ha – 100%
- 2-4ha – 80%
- 4-6ha - 70%

- 6+ha - 65%

Build out rate approximately 50 dwelling per annum per outlet.

Benchmark Land Values - £ per gross ha

Tendring	Small – Medium sites	Intermediate site	Large strategic site
Eastern - Low Value area	£0.4m	£0.35m	£0.25m
Manningtree & Rural North - Mid value area	£0.7m	£0.57m	£0.44m
Frinton Cluster - High value area	£0.95m	£0.7m	£0.44m

Appendix II – Local Plan Policies

No	Title	Policy requirements	Viability Implications
		Sustainable Places	
Policy SPL 1	Settlement Hierarchy / Managing Growth	This policy establishes a settlement hierarchy, categorising settlements as Strategic Urban Settlements, Smaller Urban Settlements, Rural Service Centres, or Smaller Rural Settlements.	No specific viability implications. Range of schemes tested in viability study to cover development scenarios and the different scales of delivery likely to come forward across the settlement hierarchy. Case study scenarios provide greater definition of different urban and rural development typologies.
Policy SPL 2	Settlement Development Boundaries	Within Settlement Development Boundaries there is a general presumption in favour of new development, subject to detailed consideration against other relevant Local Plan policies and any approved Neighbourhood Plans. Outside of these, the Council will consider any planning application in relation to the Settlement Hierarchy and any other relevant policies in this plan. An exemption to this policy is provided through the Rural Exception Site Policy LP6.	There are no specific viability implications. The policy specifically relates to development management issues in identifying where more limited levels of development will be considered appropriate. Testing assumptions include the provision of Rural Exception Sites.
Policy SPL 3	Sustainable Design	All new development (including changes of use) should make a positive contribution to the quality of the local environment and protect or enhance local character. The policy requires proposals to meet practical requirements for development, including standards for accessible and adaptable homes as follows:	The specific policy requirements for accessible and adaptable homes are directly relevant to modelling and have been costed as part of testing assumptions. The criteria for design and amenity relate to site-specific development management

No	Title	Policy requirements	Viability Implications
		<p><i>"On housing developments of 10 or more dwellings, 10% of market housing should be to Building Regulations Part M (4)2 'adaptable and accessible' standard. For affordable homes, 10% should be to Building Regulations Part M (4) 2 and 5% should be to Part M (4)3 'wheelchair user' standards"</i></p> <p>Proposals should be compatible with surrounding uses and minimise any adverse environmental impacts. Development proposals should have considered climate change adaptation measures and technology from the outset.</p>	<p>requirements but are reflected in typical assumptions regarding costs and development layout.</p> <p>Testing assumptions for some case studies include additional allowances for planning obligations and enabling costs and are likely to capture instances where the costs of complying with policy requirements are greater, but this is likely to be determined on a site-by-site basis.</p>
		Healthy Places	
Policy HP 1	Improving Health and Wellbeing	<p>The Council will work to improve the health and wellbeing of residents by working in partnership with, and supporting the NHS to deliver a service which meets the needs of residents in Tendring District, and to provide better location and integration of services. Development sites of more than 50 dwellings will be required to prepare a Health Impact Assessment (HIA) as part of an application. Mitigation towards new or enhanced health facilities from developers, where new housing development would result in a shortfall or worsening of health provision, will be sought.</p>	<p>There are no specific requirements or viability implications in relation to this policy.</p> <p>Testing assumptions include typical allowances for planning obligations which are required to make development acceptable in planning terms.</p> <p>Testing assumptions also include allowances for professional fees including necessary assessments as part of demonstrating that development is acceptable.</p>
Policy HP 2	Community Facilities	<p>The Council will work with the development industry and key partners to deliver and maintain a range of new community</p>	<p>There are no specific requirements or viability implications in relation to this policy.</p>

No	Title	Policy requirements	Viability Implications
		<p>facilities. New development should support and enhance community facilities where appropriate by providing on or off-site contributions to community facilities.</p> <p>The loss or change of use of existing community or cultural facilities will be resisted unless they are to be relocated or if they are proven to be unviable.</p>	<p>Testing assumptions include typical allowances for planning obligations which are required to make development acceptable in planning terms.</p>
Policy HP 3	Green Infrastructure	<p>Green Infrastructure will be used as a way of adapting to, and mitigating the effects of, climate change. All new development must be designed to include, protect and enhance existing Green Infrastructure in the local area. Green Infrastructure as identified on the Policy Map, will be protected, managed and where necessary enhanced. Developers should use the guiding principles set out in the Green Infrastructure Delivery Plan to influence all development proposals from an early stage in the design process. Any new Green Infrastructure proposed must be accompanied by a plan for the long-term sustainable maintenance and management of these assets, as well as phasing plans to demonstrate how they are to be delivered.</p>	<p>There are no specific viability implications. The policy seeks to provide further guidance rather than additional development requirements. The means of complying with the policy are provided within typical assumptions for development costs and professional fees (e.g. ecological surveys). In most cases it is expected that requirements can be accommodated within typical development sites (e.g. through Masterplanning) and allowances for planning obligations (e.g. open space).</p>
Policy HP 4	Safeguarded Local Greenspace	<p>The policy provides for criteria that must be satisfied where development proposals would result in the loss of areas designated as Safeguarded Local Greenspaces as defined by the policies map.</p>	<p>There are no specific viability implications in relation to this policy. The policy provides criteria for development management.</p>

No	Title	Policy requirements	Viability Implications
Policy HP 5	Open Space, Sports and Recreation Facilities	<p>The table associated with this policy outlines the standards of open space to be provided by proposed development schemes for all local communities based on existing and future needs.</p> <p>All new residential developments of 11 or more dwellings will be required to contribute to open space by either providing new areas or improving the quality or accessibility of existing open space. However, due to viability issues small schemes may not prove cost effective for the council to administer.</p>	<p>This policy is relevant to the testing assumptions for the study. Allowances for planning obligations reflect recent averages and reflect the costs of complying with this policy.</p> <p>Case Study assumptions for all sites in excess of 1.5ha include adjustments for net-to-gross ratio which gives scope to incorporate open space on-site.</p>
		Living Places	
Policy LP 1	Housing Supply	<p>The Council will work with the development industry and other partners to deliver a minimum increase of 11,000 new homes (net) between 1st April 2013 –31st March 2033 to support economic growth and meet objectively assessed requirements for future housing in the District.</p> <p>This supply of housing will also be supplemented by Rural Exception Schemes outside of Settlement Development Boundaries and through bringing long-term empty properties back into use through the Council's Empty Homes Strategy.</p>	<p>The range of schemes tested in viability study look to cover development scenarios and the different scales of delivery likely to come forward across the settlement hierarchy in order to provide for housing requirements.</p>
Policy LP 2	Housing Choice	<p>The council will work with developers to provide a mixture of dwelling types, sizes and tenures to reflect the diverse needs</p>	<p>The viability study directly addresses the requirements of this policy. The development</p>

No	Title	Policy requirements	Viability Implications
		and vision of growth of the Tendring District. The Council will also require a proportion of the new properties to be provided in the form of Council Housing or affordable housing in line with the requirements in Policy LP5. The Council will support the development of bungalows, retirement complexes, extra care housing, independent living, starter homes, self-build and other forms of residential accommodation aimed at meeting the future needs of older and disabled residents as well as family housing.	typologies and case studies used in testing include a mix of development at different densities likely to be delivered across the plan area and reflecting the requirements from the SHMA. Case Study testing assumptions also allow for the provision of Bungalows, Rural Exception Sites, Self-Build Plots and the housing needs of older people as part of the range of development types assessed.
Policy LP 3	Housing Density and Standards	New residential and mixed-use development must achieve an appropriate housing density that has regard to overall sustainability of the development. This includes accessibility to on-site and local services, and appropriate to the local context and character of the area. The policy requires all new dwellings to be provided in accordance with the nationally described space standards.	The viability study directly addresses the requirements of this policy. The development typologies and case studies used in testing include a mix of development at different densities likely to be delivered across the plan area. Testing for all dwelling types accord with the optional nationally described space standards.
Policy LP 4	Housing Layout	To ensure a positive contribution towards the District's 'sense of place', the design and layout of new residential and mixed-use developments in the Tendring District will be expected to	There are no specific requirements or viability implications in relation to this policy. The criteria for design and amenity relate to site-

No	Title	Policy requirements	Viability Implications
		<p>promote health and wellbeing, minimise the opportunities for crime and anti-social behavior, ensure that all new roads are adequate to service the proposed development with the appropriate provision of off street parking.</p> <p>To ensure new developments meet these requirements and other requirements of policies in this Local Plan, the Council will sometimes work with landowners, developers and other partners, particularly on larger schemes, to prepare master plans or development briefs prior to the submission of planning applications.</p>	<p>specific development management requirements but are reflected in typical assumptions regarding costs and development layout.</p> <p>Testing assumptions for some case studies include additional allowances for planning obligations and enabling costs and are likely to capture instances where the costs of complying with policy requirements are greater, but this is likely to be determined on a site-by-site basis.</p>
Policy LP 5	Affordable and Council Housing	<p>The Local Planning Authority will be seeking to secure 30% of new dwellings (including conversions) on housing development for more than 11 dwellings to be provided as affordable housing, normally through provision on-site.</p> <p>As an alternative, the Council will accept a minimum 10% of new dwellings, (including conversions) alongside a financial contribution towards the construction or acquisition of property for use as council housing equivalent to delivering the remainder of the 30% requirement.</p> <p>Proposals that involve the provision of alternative forms of affordable housing will be accepted as long as they offer</p>	<p>The viability study directly addresses the requirements of this policy.</p> <p>Testing assumptions take account of various potential levels of affordable housing provision taking into account current estimates of costs and values and across a range of different market areas reflecting different viability characteristics in the District.</p>

No	Title	Policy requirements	Viability Implications
		equal or greater benefit to the community in providing affordable housing, in perpetuity, for local people.	
Policy LP 6	Rural Exception Sites	Affordable housing development in rural locations will be supported on rural exception sites contiguous with village settlement boundaries, provided a genuine local need can be demonstrated and there is no significant material adverse impact on the landscape, residential amenity, highway safety, or the form and character of the settlement to which it adjoins.	Testing takes account of Rural Exception Sites and considers viability of development in different circumstances as part of Case Study assumptions
Policy LP 7	Self-Build and Custom-Built Homes	The Local Authority will encourage the inclusion of self and custom build homes within larger residential schemes. For development within the countryside, located outside of a defined settlement boundary, the Council will also support replacement dwellings and in certain cases the creation of a new dwelling subject to certain criteria being met and the impacts of development would not conflict with other policy requirements in this Local Plan.	No actual requirement as part of policy so not included in the testing.
Policy LP 8	Backland Residential Development	The Local Planning Authority will support backland development where it comprises a regular shaped plot served by adequate access and private amenity space serving both the new dwelling and existing dwelling, and would respect the local character of the streetscene and area.	There are no specific viability implications in relation to this policy. The policy primarily provides development management criteria for development in particular circumstances. Case Study testing assumptions allow for very small developments taking account of the

No	Title	Policy requirements	Viability Implications
			different conditions for development across the District.
Policy LP 9	Traveller Sites	<p>Land is identified to deliver Gypsy and Traveller pitches in line with identified need.</p> <p>When considering any proposals for additional traveller sites or pitches, the Council will consult the latest evidence of need contained in the most recent Gypsy and Traveller Accommodation Assessment and will refuse permission for proposals that cannot demonstrate, with evidence, a genuine need for the proposed level of provision. If a genuine need is demonstrated the council will follow a strict criterion as specified within the local plan to assess the appropriateness of the site.</p>	The policy is primarily related to managing specific land uses and the needs of specific groups. This policy is not relevant to the development types covered by the viability study.
Policy LP 10	Care, Independent and Assisted Living	<p>To meet the care needs of our future generations and generate growth in the care, independent and assisted living sector in line with the Economic Development Strategy, the Council will support the construction of high quality care homes and extra-care housing in sustainable locations.</p> <p>All new care homes and extra care housing must offer a high quality and attractive environment for their residents and provide sufficient external space to accommodate the</p>	<p>The viability study directly addresses the requirements of this policy. The development typologies and case studies used in testing include the provision of sheltered accommodation for the elderly and 'Care Home' schemes as part of non- residential testing assumptions.</p> <p>The housing mix used in different development typologies also includes single</p>

No	Title	Policy requirements	Viability Implications
		<p>normal recreation and other needs of residents, visitors or employees.</p> <p>Development that would result in the loss of all, or part, of an existing care home will not be permitted unless the applicants can demonstrate, with evidence, that the site or premises are no longer economically viable.</p>	storey (bungalow) properties for certain development densities.
Policy LP 11	HMO and Bedsits	All proposals involving the creation of Houses in Multiple Occupation (HMOs) or bedsits (including new-build, subdivisions and conversions) will require planning permission and will only be permitted within defined town centres subject to meeting the council's criteria set out within the Local Plan.	The policy is primarily related to managing specific land uses and the needs of specific groups. This policy is not relevant to the development types covered by the viability study.
		Prosperous Places	
Policy PP 1	New Retail Development	Retail development will be encouraged and permitted in the retail policy area of the town centres as defined on the Policies Map. This will be the main focus for new additional retail floorspace for the town centres, maintaining the District's current hierarchy and market share between centres.	There are no specific viability implications in relation to the policy. The Viability Study considers a range of non-residential development typologies in different locations across the District which are capable of delivering the requirements set out in the Local Plan.
Policy PP 2	Retail Hierarchy	The identified centres, as defined on the Policies Map, provide the key locations that can be resilient to future	There are no specific viability implications in relation to the policy. The Viability Study

No	Title	Policy requirements	Viability Implications
		<p>economic changes and which should be considered as part of a sequential test for proposed main town centre uses. Retail development should take place at a scale appropriate to the size and function of the centre within which it is to be located. To guide this approach, the retail hierarchy as defined within the Local Plan should be followed.</p> <p>The Council will promote a mix of appropriate town centre uses within these defined centres with 'active street frontages' at ground floor level. Proposals must be properly related in their scale and nature having regard to the retail hierarchy.</p>	considers a range of non-residential development typologies in different locations across the District.
Policy PP 3	Village and Neighbourhood Centres	Small-scale retail development to serve the day-to-day needs of village and local neighbourhoods will normally be permitted. Where express planning permission is required, proposals for change of use from retail within a neighbourhood shopping parade or a village with limited shopping provision will not be permitted unless evidence is provided to demonstrate that the current use is no longer viable.	There are no specific viability implications in relation to this policy. The policy provides criteria for development management to indicate the type and scale of development that might be considered appropriate in different locations and different circumstances.
Policy PP 4	Local Impact Threshold	Applications for retail, leisure and office development outside of a centre as defined on the Policies Map, which are not in accordance with the Local Plan, will require an impact	There are no specific viability implications in relation to this policy. The policy provides criteria for development management to

No	Title	Policy requirements	Viability Implications
		assessment if the development is in excess of a defined floor space as identified in the Local Plan.	indicate the type and scale of development that might be considered appropriate in different locations and different circumstances.
Policy PP 5	Town Centre Uses	The Town Centre Boundary and the Primary and Secondary Shopping Frontages are defined on the Policy Map. Within the Primary Shopping Area, proposals for development will be permitted where they conform to the criteria set out within the Local Plan.	There are no specific viability implications in relation to this policy. The policy provides criteria for development management to indicate the type and scale of development that might be considered appropriate in different locations and different circumstances.
Policy PP 6	Employment Sites	The Council will seek to protect existing employment sites. These will be safeguarded for B1 (Business), B2 (General Industry) and B8 (Storage or Distribution) purposes. Proposals for non-employment uses on these sites will only be considered acceptable if they clearly demonstrate that the alternative use/s will not negatively impact upon the primary employment uses, or supply of employment land within the locality or will deliver economic regeneration to the area. Proposals for retail and town centre uses on these sites will also be subject to the requirements of Policies PP1 - PP5 (inclusive) of this Local Plan.	No specific viability testing and the policy is not directly relevant for testing as it primarily looks to safeguard existing uses. Testing does allow for brownfield / previously developed land benchmark and case studies cover a range of development scenarios which may reflect redevelopment of existing land or premises.

No	Title	Policy requirements	Viability Implications
		The Council will permit sustainable development proposals for farm and other land based diversification schemes that benefit the rural area.	
Policy PP 7	Employment Allocations	New Employment allocations are needed to provide job opportunities for residents in Tendring District and to support the growth aspirations for the towns. To achieve this objective, at least 40 hectares of new employment land is provided for through the allocation of sites defined on the Policies Map, to provide for B1 (Business and Office Use), B2 (General Industry) and B8 (Storage and Distribution) uses.	The Viability Study includes testing for a variety on non-residential and commercial uses reflecting the requirements for employment and retail development provided for by this policy taking account of the characteristics, costs and values associated with provision in the District.
Policy PP 8	Tourism	The Local Authority will support development which seeks to improve the tourism appeal of Tendring District to visitors, especially within areas that already attract tourists or where it would be convenient and sustainable for tourists to access.	There are no specific viability implications. The policy primarily relates to specific tourism and leisure uses and managing existing facilities.
Policy PP 9	Hotels and Guesthouses	The Council will support proposals for new or modification to existing hotels or guesthouses within defined centres and along the districts seafront to provide more visitor accommodation. In these areas, the Council will refuse proposals for the change of use or redevelopment of existing hotels and guesthouses to alternative uses, either in part or in whole. Outside of these areas, the change of use or redevelopment of existing hotels and guesthouses to	There are no specific viability implications. The policy primarily relates to specific tourism and leisure uses and managing existing facilities.

No	Title	Policy requirements	Viability Implications
		alternative uses will only be permitted if the applicant can demonstrate that the current use is no longer economically viable.	
Policy PP 10	Camping and Touring Caravan Sites	<p>Outside of holiday parks (considered under Policy PP10 in this Local Plan) and subject to consideration against other relevant Local Plan policies, if the necessary tests are met in regard to any known flood risk, the Council will support proposals for:</p> <ul style="list-style-type: none"> • new camping and / or touring caravan sites; and • extensions to existing camping and / or touring caravan sites 	<p>There are no specific viability implications. The policy primarily relates to specific tourism and leisure uses and managing existing facilities.</p>
Policy PP 11	Holiday Parks	<p>Safeguarded holiday parks will be protected against redevelopment for alternative uses either in part or in whole. On 'other sites' that are operating as holiday parks but are not specifically shown as safeguarded sites or allocated for an alternative use, proposals for redevelopment will only be considered favorably if the applicant can demonstrate that the current use is no longer economically viable or that the economic benefits of the proposed development would outweigh the loss of the existing operation, having regard to other policies in this Local Plan.</p> <p>Proposals for new static caravan/chalet parks will only be permitted where it can be demonstrated by the applicant how the proposal would help strengthen and diversify the</p>	<p>There are no specific viability implications. The policy primarily relates to specific tourism and leisure uses and managing existing facilities.</p>

No	Title	Policy requirements	Viability Implications
		district's tourist economy or that they are being specifically created for the relocation of an existing site away from flood risk areas. The change of use of caravans and chalets from holiday accommodation to permanent residential dwellings will not be permitted as this could lead to a loss of valuable tourist accommodation and the provision of inadequate housing as a result.	
Policy PP 12	Improving Education and Skills	<p>The Council will work with its key education partners to deliver new and improved facilities for early years, primary, secondary, further and higher education. The Council will support proposals that will result in new, expanded or improved education facilities and facilities for vocational training.</p> <p>Planning permission will not be granted for new residential development unless the individual or cumulative impacts of development on education provision can be addressed, at the developer's cost, either on-site or through financial contributions towards off-site improvements.</p>	Testing assumptions include allowances for typical planning contributions towards infrastructure requirements which reflect the need to make provision towards education facilities. Case Study testing assumptions include higher allowance for the purposes of sensitivity testing.
Policy PP 13	The Rural Economy	<p>To support growth in the rural economy, the Council may grant planning permission for specific types of development in the countryside outside of defined Settlement Development Boundaries, including conversion or re-use of rural buildings in the countryside to employment, leisure or</p>	There are no specific viability implications. The policy specifically relates to development management issues in identifying where more limited levels of development will be considered appropriate or existing uses

No	Title	Policy requirements	Viability Implications
		tourism use; business and domestic equine related activities; agricultural and essential workers' dwellings; and buildings that are essential to support agricultural, aquaculture, horticulture and forestry; and farm diversification schemes.	safeguarded.
Policy PP 14	Priority Areas for Regeneration	The Priority Areas for Regeneration as identified on the Policies Maps and Local Maps will be a focus for investment in social, economic and physical infrastructure and initiatives to improve vitality. The Council will support proposals for new development which are consistent with achieving its regeneration aims and does not adversely affect any exiting or potential heritage assets.	There are no specific viability implications in relation to this policy. Testing assumptions take account of the different characteristics for costs and values across the District. Testing assumptions for some case studies include additional allowances for planning obligations and enabling costs and are likely to capture instances where the costs of regeneration may be greater, but this is likely to be determined on a site-by-site basis.
Policy SAMU1	Development at Edem Maltings, Mistley	Land to the north and south High Street, Mistley (EDME Maltings), shown on the Policies Map as site SAMU1, is allocated for a residential led mixed-use development to provide 150 dwellings, 0.13 Ha of employment land and recreation and leisure facilities subject to demand.	The policy identifies specific allocations for residential and other land uses. There are no specific viability implications. Testing assumptions and Case Study scenarios take account of the type, scale and location of development expected to come forward in the plan.

No	Title	Policy requirements	Viability Implications
			<p>Case studies for residential development include greater allowances for gross:net development ratios and increased allowances for planning obligations (above recent historic averages) and therefore would capture the additional development costs associated with development covered under different circumstances.</p> <p>Testing is also undertaken for non-residential uses that may form part of larger allocated sites.</p>
Policy SAMU2	Development at Hartley Gardens, Clacton	Land north of Bockings Elm and west of A133 shown on the Policies Map as site will provide approx. 800-1000 new homes, at least 7 ha of employment land, 2.1 ha for a new primary school and 1 ha of open space.	The policy identifies specific allocations for residential and other land uses. There are no specific viability implications. Testing assumptions and Case Study scenarios take account of the type, scale and location of development expected to come forward in the plan (see SAMU1 above).
Policy SAMU3	Development at Oakwood Park, Clacton	Land north of Clacton-on-Sea, between Holland Road and the Oakwood Business Park (Oakwood Park, Clacton), shown on the Policies Map as Site SAMU3, is allocated for a mix of	The policy identifies specific allocations for residential and other land uses. There are no specific viability implications. Testing

No	Title	Policy requirements	Viability Implications
		residential development providing at least 500 new dwelling with some designed for older residents, community facilities including a primary school and health centre and public open space.	assumptions and Case Study scenarios take account of the type, scale and location of development expected to come forward in the plan (see SAMU1 above).
Policy SAMU4	Development at Rouses Farm, Jaywick Lane, Clacton	Land at Rouses Farm, west of Laywick Lane and south of St. John's Road, Clacton-on-Sea, as defined on Policies Map as SAMU4, is allocated for a mix of residential development of at least 800 dwellings, community facilities including a primary school and healthcare and neighbourhood centres along with 5 ha public open space.	The policy identifies specific allocations for residential and other land uses. There are no specific viability implications. Testing assumptions and Case Study scenarios take account of the type, scale and location of development expected to come forward in the plan (see SAMU1 above).
Policy SAMU5	Development south of Thorpe road	Land south of Thorpe Road, Weeley, shown on the Policies Map as site SAMU5, is allocated for mixed use development to provide at least 280 new homes, 1 ha of employment land and 1 ha of public open space. The development will also provide for 2.1 ha of land for a new primary school.	The policy identifies specific allocations for residential and other land uses. There are no specific viability implications. Testing assumptions and Case Study scenarios take account of the type, scale and location of development expected to come forward in the plan (see SAMU1 above).
Policy SAH1	Development at Greenfield	Development at Greenfield Farm, Dovercourt, will deliver at least 164 new homes of a mixed size and type to include	The policy identifies specific allocations for residential and other land uses. There are no

No	Title	Policy requirements	Viability Implications
	Farm, Dovercourt	affordable housing as per the Council's requirements and a minimum of 0.7 hectares of public open space.	specific viability implications. Testing assumptions and Case Study scenarios take account of the type, scale and location of development expected to come forward in the plan (see SAMU1 above).
Policy SHA2	Development Low Road, Dovercourt	Low Road, Dovercourt, shown on the Policies Map as site SHA2, is allocated for housing development of at least 300 dwellings and 5 ha of public open space.	The policy identifies specific allocations for residential and other land uses. There are no specific viability implications. Testing assumptions and Case Study scenarios take account of the type, scale and location of development expected to come forward in the plan (see SAMU1 above).
Policy SAH3	Development Robinson Road, Brightlingsea	Robinson Road, Brightlingsea, shown on the Policies Map as site SAH3, is allocated for housing development of at least 115 new dwellings to include affordable housing as per the Council's requirements and a Minimum of 0.56 hectares of public open space including a LEAP.	The policy identifies specific allocations for residential and other land uses. There are no specific viability implications. Testing assumptions and Case Study scenarios take account of the type, scale and location of development expected to come forward in the plan (see SAMU1 above).

No	Title	Policy requirements	Viability Implications
Policy SAE1	Carless Extension, Harwich	Carless Extension, shown on the Policies Map as site SAE1, is proposed for 4.5 ha of employment use as an extension to the west of the existing refinery.	This policy identifies allocations for non-residential development. There are no specific viability implications. Testing has been undertaken for a range of non-residential uses including a range of employment premises that represent typical costs and values in the District.
Policy SAE2	Land South of Long Road, Mistley	Land south of Long Road, Mistley shown on the Policies Map as site SAE2, is allocated for 2 ha of employment use for Businesses/Offices, General Industry and Storage/Distribution (B1, B2 and B8);	This policy identifies allocations for non-residential development. There are no specific viability implications. Testing has been undertaken for a range of non-residential uses including a range of employment premises that represent typical costs and values in the District.
Policy SAE3	Lanswood Park, Elmstead Market	Lanswood Park, phases 4 and 5, shown on the Policies Map as site SAE3, is allocated for 1.2 ha of employment uses.	This policy identifies allocations for non-residential development. There are no specific viability implications. Testing has been undertaken for a range of non-residential uses including a range of employment premises that represent typical costs and values in the District.
Policy SAE4	Mercedes Site, Bathside Bay, Harwich	The Mercedes Site, Bathside Bay is shown on the Policies Map as site SAE4 and is proposed for 7.4ha of employment	This policy identifies allocations for non-residential development. There are no specific

No	Title	Policy requirements	Viability Implications
		use, including the potential relocation of some aspects of the current port facility.	viability implications. Testing has been undertaken for a range of non-residential uses including a range of employment premises that represent typical costs and values in the District.
Policy SAE5	Development at Mistley Port, Mistley	Land associated with Mistley Port, shown on the Policies Map as site SAE6, is safeguarded for port-related development unless it can be demonstrated that there is no reasonable prospect of the development site being used for that purpose (please refer to Policy PP6e). Proposals for alternative uses will then be considered against other relevant Local Plan policies.	There are no specific viability implications. The policy primarily relates to the safeguarding of existing land uses and allows for some redevelopment or intensification which is covered under the testing assumptions for a range of non-residential uses.
Policy SAL6	Development at Mistley Marine	Land associated with Mistley Marine, shown on the Proposals Map as site SAE7, currently consists of marine related services and storage, along with a residential dwelling. The Council will support the retention, enhancement and development of the land for marine-related services, storage and employment, and marine-related leisure development, unless it can be demonstrated that there is no reasonable prospect of the development site being used for those purposes (please refer to Policy PP6e). Alternative uses will then be considered against other relevant Local Plan policies.	There are no specific viability implications. The policy primarily relates to the safeguarding of existing land uses and allows for some redevelopment or intensification which is covered under the testing assumptions for a range of non-residential uses.

No	Title	Policy requirements	Viability Implications
Policy SEA7	Staton Europark, Parkeston	Stanton Europark, shown on the Policies Map as site SAE8, is allocated for 2-4 ha. of employment uses (B2/B8), retail (A1 use) the quantum of which will need to be determined in accordance with most up-to-date retail needs analysis at the time of the determination of any Planning Application; and leisure uses (D2), which are acceptable within the mix of or in addition to the employment allocation.	This policy identifies allocations for non-residential development. There are no specific viability implications. Testing has been undertaken for a range of non-residential uses including a range of retail and employment premises that represent typical costs and values in the District.
Policy DI1	Infrastructure Delivery and Impact Mitigation	All new development should be supported by, and have good access to, all necessary infrastructure. Permission will only be granted if it can be demonstrated that there is sufficient appropriate infrastructure capacity to support the development or that such capacity will be delivered by the proposal. It must further be demonstrated that such capacity as is required will prove sustainable over time both in physical and financial terms. Developers will be expected to contribute towards the delivery of relevant infrastructure. They will either make direct provision or will contribute towards the provision of local and strategic infrastructure required by the development either alone or cumulatively with other developments.	There are no specific viability implications. Testing assumptions take account of typical allowances for planning obligations and also include sensitivity testing for such which make require contributions in excess of recent historic averages. Testing assumptions also allow for opening-up and enabling costs on larger schemes and include adjustments between gross and net developable area that may include the provision of land for infrastructure.

No	Title	Policy requirements	Viability Implications
		Protected Places	
Policy PPL 1	Development and Flood Risk	<p>All development proposals should include appropriate measures to respond to the risk of flooding on and/or off site and within the Flood Zone (which includes Flood Zones 2 and 3, as defined by the Environment Agency) or elsewhere, involving sites of 1ha or more, must be accompanied by a Flood Risk Assessment. New development in areas of high flood risk must be designed to be resilient in the event of a flood. All major development proposals should consider the potential for new Green Infrastructure to help mitigate potential flood risk and include such Green infrastructure, where appropriate.</p> <p>Proposals must have regard, as necessary, to the sequential test and the exception test.</p>	<p>There are no specific viability implications in relation to this policy.</p> <p>Testing assumptions include allowances for professional fees including necessary surveys as part of demonstrating that development is acceptable.</p> <p>Testing assumptions for some case studies include additional allowances for planning obligations and enabling costs and are likely to capture instances where the costs of complying with policy requirements are greater, but this is likely to be determined on a site-by-site basis.</p>
Policy PPL 2	Coastal Protection Belt	<p>Within the Coastal Protection Belt the Council will protect the open character of the undeveloped coastline and refuse planning permission for development which does not have a compelling functional or operational requirement to be located there. The Council will take an 'adaptive approach' to coastal protection, where required, having regard to an assessment of the impact of coastal change and consideration of any applicable Shoreline Management Plan.</p>	<p>There are no viability implications in relation to this policy. The policy is primarily concerned with development management matters in relation to areas where changes in land use may need to be carefully controlled.</p>

No	Title	Policy requirements	Viability Implications
Policy PPL 3	The Rural Landscape	<p>The Council will protect the rural landscape and refuse planning permission for any proposed development which would cause overriding harm to its character or appearance. Development proposals affecting protected landscapes must pay particular regard to the conservation and enhancement of the special character and appearance of an AONB, or its setting, and should have specific regard to any special landscape qualities of the area affected.</p> <p>New development within the rural landscape should minimise the impact of light pollution on the site and its surroundings, in order to protect rural amenity and biodiversity.</p>	There are no viability implications in relation to this policy. The policy is primarily concerned with development management matters in relation to areas where changes in land use may need to be carefully controlled.
Policy PPL 4	Biodiversity and Geodiversity	<p>Sites designated for their international, European and national importance to nature conservation will be protected from development likely to have an adverse effect on their integrity. As a minimum, there should be no significant impacts upon any protected species.</p> <p>Proposals for new development should be supported by an appropriate ecological assessment. Where new development would harm biodiversity or geodiversity, planning permission will only be granted in exceptional circumstances, where the benefits of the development demonstrably outweigh the</p>	There are no specific viability implications. Implementation of the policy may require future consultation with prescribed bodies, including Natural England, who may determine that significant effects from development cannot be ruled out. Appropriate Assessment of the Plan indicates that this may involve preparation of a Recreational Avoidance and

No	Title	Policy requirements	Viability Implications
		harm caused and where adequate mitigation or, as a last resort, compensation measures are included, to ensure no net loss, and preferably a net gain, in biodiversity.	Mitigation Strategy although costs are unknown. These requirements may only apply to sites within a prescribed distance of protected sites. Such a strategy may be in place prior to adoption of the Plan. The Council indicates that typical contributions per dwelling (where applicable) are likely to be in the order of £150/dwelling, which could be accommodated within typical allowances for planning obligations.
Policy PPL 5	Water Conservation, Drainage and Sewerage	All new development, must make adequate provision for drainage and sewerage and should include Sustainable Drainage Systems (SuDS) as a means of reducing flood risk, improving water quality, enhancing the Green Infrastructure network and providing amenity and biodiversity benefits. New dwellings will be required to incorporate measures to achieve a water consumption rate of not more than 110 litres, per person, per day (pppd).	This policy is directly relevant to the assumptions for viability testing. Development costs reflect the requirement to limit water consumption to the optional technical requirement of 110/lpppd. Testing assumptions include allowances for professional fees including necessary surveys as part of demonstrating that development is acceptable. The costs of complying with the SUDs elements of the policy should not exceed those of providing development in accordance with Building Regulations,

No	Title	Policy requirements	Viability Implications
			accepting that costs and values should take account of the requirements to re-use previously developed land.
Policy PPL 6	Strategic Green Gaps	Within Strategic Green Gaps, as shown on the Policies Map, the Council will not permit any development which would result in the joining of settlements or neighbourhoods, or which would erode their separate identities by virtue of their closer proximity.	There are no viability implications in relation to this policy. The policy is primarily concerned with development management matters in relation to areas where changes in land use may need to be carefully controlled.
Policy PPL 7	Archaeology	Proposals for new development which would affect, or might affect, archaeological remains will only be permitted where accompanied by an appropriate desk-based assessment. Where identified as necessary within that desk-based assessment, a written scheme of investigation including, excavation, recording or protection and deposition of archaeological records in a public archive will be required to be submitted to, and approved by, the Local Planning Authority.	There are no viability implications in relation to this policy. Testing assumptions include allowances for professional fees including necessary surveys as part of demonstrating that development is acceptable. Accommodating constraints can typically be accommodated within standard development layouts. Case studies also include allowances for net-to-gross development ratio and include additional allowances for planning obligations and enabling costs and are likely to capture instances where the costs of complying with policy requirements are greater, but this is likely to be determined on a site-by-site basis.

No	Title	Policy requirements	Viability Implications
Policy PPL 8	Conservation Areas	New development within a designated Conservation Area, or which affects its setting, will only be permitted where it has regard to the desirability of preserving or enhancing the special character and appearance of the area.	<p>There are no viability implications in relation to this policy. Testing assumptions include allowances for professional fees including necessary surveys as part of demonstrating that development is acceptable.</p> <p>Accommodating constraints can typically be accommodated within standard development layouts.</p> <p>Case studies also include allowances for net-to-gross development ratio and include additional allowances for planning obligations and enabling costs and are likely to capture instances where the costs of complying with policy requirements are greater, but this is likely to be determined on a site-by-site basis.</p>
Policy PPL 9	Listed Buildings	Proposals for new development affecting a listed building or its setting will only be permitted where they will protect its special architectural or historic interest, its character, appearance and fabric and supported by the relevant historic assessment.	<p>There are no viability implications in relation to this policy. Testing assumptions include allowances for professional fees including necessary surveys as part of demonstrating that development is acceptable.</p> <p>Accommodating constraints can typically be accommodated within standard development layouts.</p>

No	Title	Policy requirements	Viability Implications
			Case studies also include allowances for net-to-gross development ratio and include additional allowances for planning obligations and enabling costs and are likely to capture instances where the costs of complying with policy requirements are greater, but this is likely to be determined on a site-by-site basis.
Policy PPL 10	Renewable Energy Generation	Proposals for renewable energy schemes will be considered having regard to their scale, impact (including cumulative impact) and the amount of energy which is to be generated. Proposals for new development should consider the potential for renewable energy generation, appropriate to the site and its location.	There are no specific viability implications in relation to this policy, which does not impose specific requirements for renewable energy generation.
Policy PPL 11	The Avenues Area of Special Character, Frinton-On-Sea	Within 'The Avenues' area of Frinton-on-Sea, new development must have particular regard to the special character and appearance of the area.	There are no specific viability implications in relation to this policy. The policy primarily provides development management criteria for development in specific locations. Testing assumptions allow for a range of typologies at different densities and capture the likely characteristics of development in these locations.

No	Title	Policy requirements	Viability Implications
Policy PPL 12	The Gardens Area of Special Character, Clacton-On-Sea	Within “The Gardens” area of east Clacton, new development shall have particular regard to the special character and appearance of the area.	There are no specific viability implications in relation to this policy. The policy primarily provides development management criteria for development in specific locations. Testing assumptions allow for a range of typologies at different densities and capture the likely characteristics of development in these locations.
Policy PPL 13	Ardleigh Reservoir Catchment Area	Ardleigh Reservoir is surrounded by a catchment area within which certain proposals for development will be subject to consultation with the operator of the site. This may result in restrictions being imposed or planning permission being refused if the development could materially affect the quality of water draining into the reservoir.	There are no specific viability implications in relation to this policy.
Policy PPL 14	Safeguarding of Civil Technical Site, North East of Little Clacton / South of	The civil technical site located to the north east of Little Clacton and south of Thorpe-le-Soken is surrounded by a safeguarded area, within which certain proposals for development will be subject to consultation with the operator of the site. This may result in restrictions being	There are no specific viability implications in relation to this policy.

No	Title	Policy requirements	Viability Implications
	Thorpe-Le-Soken	imposed or planning permission being refused if the development could materially affect the proper functioning of the technical site.	
Policy PPL 15	Safeguarding of Hazardous Substance Site, South East of Great Oakley / South West of Harwich	The hazardous substance site located at Bramble Island to the south east of Great Oakley and south west of Harwich is surrounded by a safeguarded area, within which certain proposals for development will be subject to consultation with the operator of the site. This may result in restrictions being imposed or planning permission being refused, if safety issues arise or the development could materially affect the proper functioning of the hazardous substance site.	There are no specific viability implications in relation to this policy.
		Connected Places	
Policy CP 1	Sustainable Transport and Accessibility	<p>Proposals for new development must be sustainable in terms of transport and accessibility and therefore should include and encourage opportunities for access to sustainable modes of transport, including walking, cycling and public transport.</p> <p>Planning applications for new major development likely to have significant transport implications will normally require a Transport Statement or a Transport Assessment.</p>	<p>There are no specific viability implications in relation to this policy. Acceptable outcomes for access and transport can typically be achieved within standard assumptions for development costs and site layout.</p> <p>Testing assumptions include allowances for professional fees including necessary surveys as part of demonstrating that development is acceptable.</p> <p>Testing assumptions also include allowances for typical planning contributions towards</p>

No	Title	Policy requirements	Viability Implications
			infrastructure requirements. Case study testing takes account of greater requirements on some larger sites.
Policy CP 2	Improving the Transport Network	Proposals for new development which contribute to the provision of a safe and efficient transport network that offers a range of sustainable transport choices will be supported. Major growth areas at the Colchester Fringe (Tendring and Colchester Borders) and at Clacton will require provision of new and/or improved road infrastructure in order to fully serve the new growth areas and to avoid causing traffic congestion in the existing adjacent settlements. Strategic link roads will be required between the A120 and A133 and between the A133 and B1027, respectively in addition to improvements for non-motorised travel. Proposals which would have any adverse transport impacts will not be granted planning permission unless these are able to be resolved and the development made acceptable by specific mitigation measures which are guaranteed to be implemented.	There are no specific viability implications in relation to this policy. Testing assumptions include allowances for typical planning contributions towards infrastructure requirements. Case study testing takes account of greater requirements on some larger sites.

No	Title	Policy requirements	Viability Implications
Policy CP 3	Improving the Telecommunications Network	<p>Proposals for new telecommunications infrastructure will be supported where they will not cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest and where the development will be sympathetically designed, having regard to its appearance and impact upon local visual amenity and camouflaged if necessary.</p> <p>All new dwellings and non-residential buildings must be served by at least a 'superfast' broadband (fibre optic) connection, in those cases where this is not possible, the Council may utilise Community Infrastructure Levy (CIL) funds, or seek a developer contribution, towards off-site works that would enable those properties access to superfast broadband in the future.</p> <p>New development that may cause interference to the broadcast and telecommunications network will not be permitted unless the applicant can demonstrate how such interference will be mitigated, at the developer's cost.</p>	<p>There are no specific viability implications in relation to this policy. The costs for complying with this policy are incorporated within the standard assumptions for development costs and allowances for planning obligations across the majority of sites.</p> <p>Testing assumptions for some case studies include additional allowances for planning obligations and enabling costs and are likely to capture instances where the costs of complying with policy requirements are greater, but this is likely to be determined on a site-by-site basis.</p>

Appendix III – Stakeholder Workshop Presentation & Notes

North Essex Viability Workshop Notes – 13 March 2017, 10am – 12pm
Weston Homes Community Stadium, Colchester

(List of delegates available on request)

Consultant and Officer Team

Emma Goodings, Braintree District Council (introductory presentation)

Rob Smith – HYAS

Laura Easton – Three Dragons

Troy Hayes – Troy Planning + Design

Jon Goodall – Troy Planning + Design

Introduction:

The opening part of the session was an introduction by Council Officers to report on the approach and progress towards preparing the new Local Plans for Braintree District, Colchester Borough and Tendring District Councils.

'Part 1' Presentation:

A presentation on viability assumptions and modelling being developed for the three new Garden Communities and allocated through the 'Part 1' Local Plan covering strategies matters for the three authorities was given separately. The assumptions and outputs from this work are not directly related to the 'whole plan' viability study being undertaken for each of the separate 'Part 2' Local Plans.

Whole Plan Viability Study Presentations: (see slides on following pages)

The following questions were received, noted and where possible responses given as set out below:

Part 1

Question / Response: To confirm, Benchmark land value - £100k per gross acre

Question: What are assumptions for affordable housing? Big need for older people – how is this being tested? Inputs are expected at a detailed level in terms of values, rental levels etc.

Answer: Wider Evidence Base will tell us. More information is provided by the Whole Plan Viability Study such as Local Authority Housing Allowance rates.

Question: Cost of Obligations and opening up at £40k - £50k per unit is that across tenures?

Answer: Yes

Part 2

Questions: Where 2 bed accommodation is included in any mix, this needs to be 4 persons

Answer: Comments appreciated and a valuable point to pick-up in further discussions with Registered Providers

Question: Market Dwelling Mix different for Part 1 and Part 2?

Answer: Yes that may be the case. However, for the Part 2 studies across the three authorities the broad mix across the notional 1ha tiles is likely to be similar in terms of house type and size based on the SHMA recommendations. Some specific variations are allowed for e.g. lower density in Tendring and also picking up other scenarios through the case studies.

Question: inference in HWP for increasing densities, how is this being addressed?

Answer: We will be testing different densities, including higher densities in more urban areas and lower densities in Tendring. The notional 1ha scenarios equate to around 3,400sqm of floorspace per hectare, which seems in-line with typical developments.

Question: 50 units per outlet seems reasonable for private. May be reasonable to see this as the top-end.

Answer: 3 or 4 outlets at peak. Can't get to 4 outlets straight away. This appeared to be generally agreed by delegates.

Question: Square footage from EPC, that wasn't presented. Important as a 3 bed unit can vary considerably. You would typically always see a premium for detached properties.

Answer: The consultant team agree to circulate a summary table of what had been done to assemble raw data. Will circulate with the slides.

Question: How do you judge the geographies for different market areas?

Answer: Important to look at other data sets and speaking to agents. Rightmove data is also a good proxy. Samples of new build are large and increasing given recent rates of development – in some other local authority areas they can be much smaller. EPCs – we try to ensure at least 100 – 200 examples. Remove skewed transactions. Strike a reasonable balance.

Question: Benchmark Land Values. How has the consultant team arrived at these? They look like the wrong way around with Braintree seeming to be the highest.

Answer: Looked at previous studies and DCLG estimates. Not clear why the Braintree figures are coming out so much lower. We are still researching this and this is just the beginning. The values are subject to change based on any increase in sample size, review of EPC data, removing anomalies and liaison with local agents. Any sales particulars of plots and asking prices for recent developments would be much appreciated.

Braintree, Colchester and Tendring

WHOLE PLAN VIABILITY STUDY - WORKSHOP



Whole Plan and Affordable Housing Viability Study

PROCESS

1. Inception Meeting held with Commissioning Authorities

2. Establish testing parameters

- Reference local & national policies
- Past delivery & planned delivery
- Land values
- Published sources e.g. BCIS
- Individual consultations
- Workshop
- Options outcome

3. Viability Testing

- 1ha tiles
- Case studies

4. Draft report

5. Report



Approach to viability testing

- Residual value approach
- Generic testing and case studies based around the planned development

$$\begin{array}{r}
 \text{Total development value} \\
 \text{Minus} \\
 \text{Development costs} \\
 \text{(incl. build costs and return to developer)} \\
 = \\
 \text{Gross residual value} \\
 \text{Minus} \\
 \text{Planning Obligations (including AH)} \\
 + \text{CIL (if applicable)} \\
 = \\
 \text{Net residual value} \\
 \text{(available to pay for land)}
 \end{array}$$

Benchmark* land values

gross value per hectare

Braintree	Colchester	Tendring
High – £0.75m	High – £1m	High - £0.95m
Mid –£0.5m	Mid –£0.5m	Mid - £0.7m
Low - £0.4m		Low - £0.4m

DCLG estimates that land for small – medium sized sites is £2.8m (Braintree); £1.6m (Colchester); £1.19m (Tendring) - £0 CIL/s106 and no affordable housing (*served clean site with lower than average build costs and reduced developer profit*).

Agricultural land value 24K/ha (Dec 2015)

***Benchmark** – lowest value for land – not *best* price

Residential Testing – dwelling sizes

Compliant with national space standards

An allowance of 10% of floor area will be added to the flats for circulation and common areas.

House type description	Affordable sqm	Market sq m
1 bedroom flat	50 (2p)	50
2 bedroom flat	61 (3p)	61
1 bedroom bungalow	55 (2p)	55
2 bedroom bungalow	70 (4p)	70
1 bedroom terrace	58 (2p)	58
2 bedroom terrace	79 (4p)	70
3 bedroom terrace	93 (5p)	84
4 bedroom terrace	106 (6p)	106
3 bed semi detached	93 (5p)	100
4 bed semi detached	106 (6p)	120
3 bed detached		100
4 bed detached		130
5 bed detached		150

Residential Testing – market dwelling mix

Type	20dph (Tend only)	25dph	30dph	35dph	40dph Urban area
1 bed flat			5%	5%	10%
2 bed flat			5%	5%	10%
2 bed bungalow	10%	5%			
2 bed terrace			10%	10%	15%
3 bed terrace			10%	15%	10%
4 bed terrace					
3 bed semi	15%	20%	15%	10%	10%
4 bed semi					
3 bed detached	15%	15%	15%	15%	15%
4 bed detached	40%	40%	30%	30%	30%
5 bed detached	20%	20%	10%	10%	

- Mix is compatible with SHMA Update 2015
- Tempered by known information about delivery
- More information to come from councils so there may be further amendments

Case Studies

- Case study modelling will follow 1ha tiles and to some extent will be informed by those results
- Similar case studies appear appropriate for each district
- Some density variation – e.g. potentially lower density in Tendring
- Some case studies will take account of additional items such as self-build & accessibility
- 1 unit
- 3 units
- 7 units
- 11 units
- 15 units
- 75 units
- 90 units – flatted
- 125 units
- 300 units
- 600 units
- 1,100 units

Affordable Housing Dwelling Mix

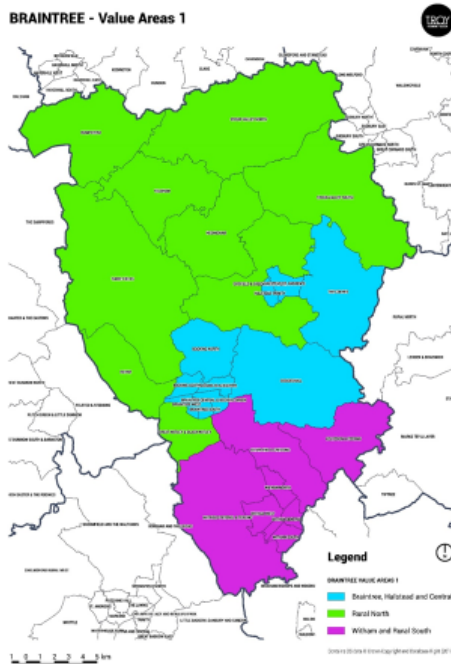
Affordable Housing Development Mix House Type	Affordable	Intermediate
1 bed flat	20%	20%
2 bed flat	10%	20%
2 bed bungalow (for lower dph – otherwise provided as additional terrace)	5%	-
2 bed terrace	45%	45%
3 bed terrace	15%	15%
4 bed terrace	5%	-

- Based on need identified in SHMA
- Still to speak to RPs so mix may change
- May be some LA specific adjustments
- Will be tested at emerging policy position with further sensitivity testing
- Tenure split varies between authorities

Build Cost (BCIS median 5 yr) and new Building Regs

Type	Braintree	Colchester	Tendring	
Flats (1-2storey)	£1,487	£1,417	£1,459	sq m includes 15% for external works
Flats (3-storey)	1,540	£1,467	£1,510	sq m includes 15% for external works
Houses	£1,312	£1,250	£1,288	sq m includes 15% for external works
2-3 houses	£1,378	£1,312	£1,352	sq m includes 15% for external works
One-off houses	£2,148	£2,047	£2,108	includes 15% for external works
Bungalows	£1,565	£1,492	£1,535	Sq m includes 15% for external works
Sheltered flats	£1,521	£1,449	£1,493	includes 15% for external works 3 storey
S106/278 (per dwelling)	£2,000 £6,000	£2,000 £6,000	tbc	For sites less than 100 dwellings Sites around c.100 dwellings (excluding Garden Communities and strategic sites)
Part M (4) 3	£16,857 £29,341	£16,857 £29,341	£16,857 £29,341	Per dwelling for wheelchair adaptable Per dwelling wheelchair accessible
Delivery Rates – around 50 units per developer per year – any comments?				
On larger developments we need to collate information on thresholds for number of developers				

Other costs		
Professional fees	8-12%	Of build costs
Finance	6%	Of development costs
Marketing fees	3%	Of GDV
Developer return	20%	Of GDV
Contractor return (for affordable)	6%	Of affordable build costs
Agents & Legal	1.75%	
Opening up	>50 units £50k/net ha >100 units £100k/net ha >200 units £150/net ha >400 units £200/net ha	



MARKET AREAS - BRAINTREE

- Market areas as mapped by house price
- Shows 3 market areas
- Are they meaningful to developers?
- Potentially complex geography in terms of differences between house types, locations of development and affordable housing
- There are also similarities north-south through the centre of the District
- Is there a premium on smaller properties?
- Looking to refine seven areas identified in an earlier study

Market Values - Braintree

	Detached			Semi-detached	
	5 Bed	4 Bed	3 Bed	4 Bed	3 Bed
Braintree, Halstead and Central	£465,562	£403,487	£310,375	£394,105	£328,420
Rural North	£436,739	£378,507	£291,159	£342,105	£285,087
Witham and Rural South	£495,265	£429,230	£330,177	£396,037	£330,031

Flats - Ground rent @ £250 per dwelling, capitalised at 5%
 On developments of 1-3 units 5% added to selling prices for 'exclusivity'

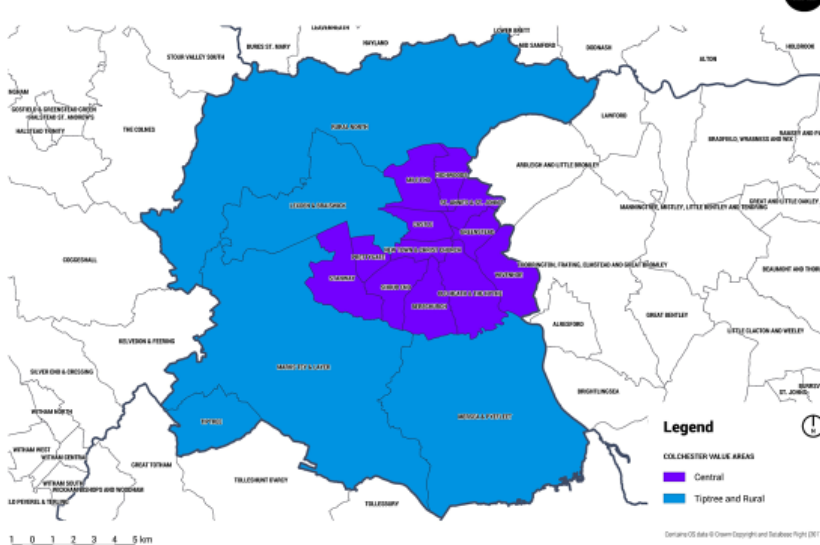
Market Values – Braintree

	Terrace				Flats	
	4 Bed	3 Bed	2 Bed	1 Bed	2 Bed	1 Bed
Braintree, Halstead and Central	£333,100	£263,966	£219,971	£182,262	£170,117	£139,440
Rural North	£330,291	£261,740	£218,116	£180,725	£162,077	£132,850
Witham and Rural South	£361,371	£286,369	£238,641	£197,731	£184,352	£151,108

Flats - Ground rent @ £250 per dwelling, capitalised at 5%
On development of 1-3 units + 5% added to selling price

MARKET AREAS - COLCHESTER

COLCHESTER - Value Area



- Market areas as mapped by house price
- Shows 2 distinct market areas
- Are they meaningful to developers?
- Similar to a previous study, but not exactly the same (BPS, 2015)

Market Values - Colchester

	Detached			Semi-detached	
	5 Bed	4 Bed	3 Bed	4 Bed	3 Bed
Central	£425,694	£368,935	£283,796	£344,431	£287,025
Tiptree and Rural	£465,270	£403,234	£310,180	£358,382	£298,651

Flats - Ground rent @ £250 per dwelling, capitalised at 5%
On developments of 1-3 units 5% added to selling prices for 'exclusivity'

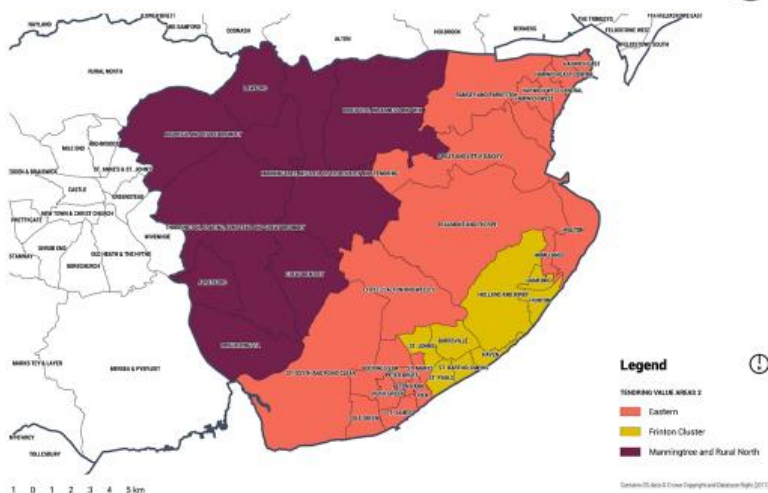
Market Values - Colchester

	Terrace				Flats	
	4 Bed	3 Bed	2 Bed	1 Bed	2 Bed	1 Bed
Central	£285,569	£226,300	£188,583	£156,255	£161,536	£132,407
Tiptree and Rural	£339,925	£269,374	£224,479	£185,997	£165,708	£135,827

Flats - Ground rent @ £250 per dwelling, capitalised at 5%
On development of 1-3 units + 5% added to selling price

MARKET AREAS - TENDRING

TENDRING - Value Areas 2



- Market areas as mapped by house price
- Shows 3 market areas
- Are they meaningful to developers?
- Similar to previous studies (PBA, 2015) identifying higher values around Frinton
- Stronger market gains over recent years?

Market Values - Tendring

	Detached			Semi-detached	
	5 Bed	4 Bed	3 Bed	4 Bed	3 Bed
Eastern	£396,258	£343,424	£264,172	£293,370	£244,475
Frinton Cluster	£494,783	£428,812	£329,855	£408,276	£340,230
Manningtree and Rural North	£443,766	£384,597	£295,844	£331,947	£276,623

Flats - Ground rent @ £250 per dwelling, capitalised at 5%
 On developments of 1-3 units 5% added to selling prices for 'exclusivity'

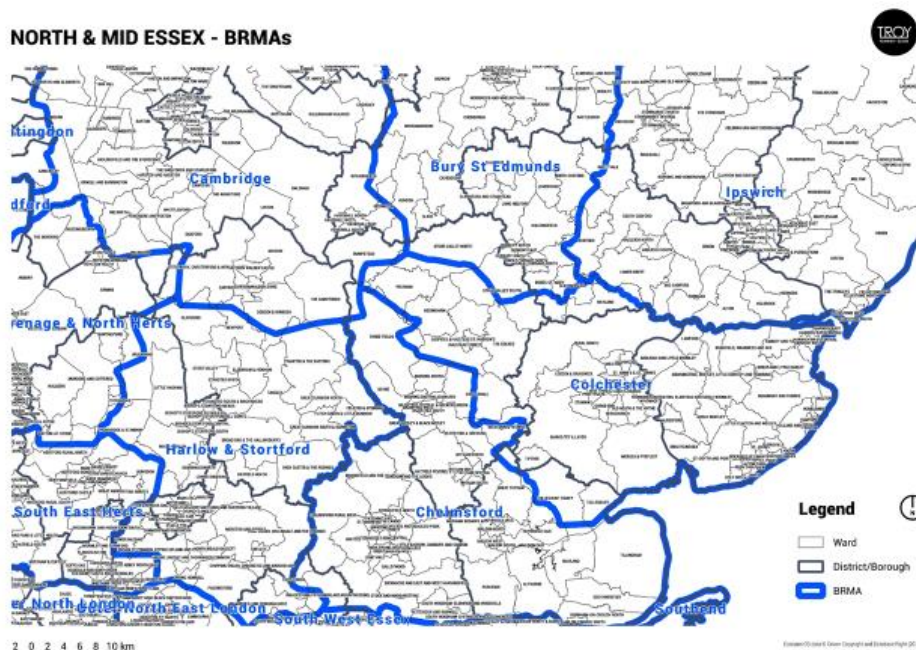
Market Values - Tendring

	Terrace				Flats	
	4 Bed	3 Bed	2 Bed	1 Bed	2 Bed	1 Bed
Eastern	£262,045	£207,658	£173,049	£143,383	£142,355	£116,685
Frinton Cluster	£353,427	£280,074	£233,395	£193,384	£212,296	£174,013
Manningtree and Rural North	£306,387	£242,797	£202,331	£167,646	£0	£0

Flats - Ground rent @ £250 per dwelling, capitalised at 5%
On development of 1-3 units + 5% added to selling price

Factors affecting Affordable Housing

- Types of affordable home ownership e.g. Starter Homes; Rent to Buy
- LHA rates capping rents
- Measures such as 'Bedroom tax' and alignment of benefit to LHA rates impact on who is housed and sorts of properties required
- Affordable housing will be modelled at emerging policy position
- Sensitivity testing at alternative levels and thresholds
- Braintree district falls within 4 different BRMAs
- Colchester and Tendring both within the same single BRMA (Colchester)



Gross to Net Rental Factors - Affordable

For rental properties

• Rents	100% LHA
• Service Charges	£10 flats / £5 houses
• Management and maintenance	£1,000
• Voids/bad debts	3.00%
• Repairs reserve	£600
• Capitalisation	5%

For shared ownership

• Share size	40%
• Rental charge	2.75%
• Capitalisation	5%

Next steps

- Workshop notes/slides to be circulated – another opportunity for input to the study
- Follow up interviews with RPs
- Follow up interviews with other stakeholders if appropriate, or if need for confidential discussion
- Testing undertaken
- Produce report based on findings of testing

Full Sample of Housing Transactions Data Circulated with Slides from 13 March 2017 Developer Workshop

Tendring Market Area Assumptions

	Detached			Semi-detached		Terrace				Flats		EPC Sample Size	Total New Build Transactions Sample
	5 Bed	4 Bed	3 Bed	4 Bed	3 Bed	4 Bed	3 Bed	2 Bed	1 Bed	2 Bed	1 Bed	Total EPC Reviewed	Total Sample from Land Registry 2013-2016
<i>EPC - average sqm from sample</i>	97sqm			93sqm		78sqm				51sqm		53	269
<i>Value/sqm from Sample</i>	£2,642			£2,445		£2,472				£2,334			
Eastern	£396,258	£343,424	£264,172	£293,370	£244,475	£262,045	£207,658	£173,049	£143,383	£142,355	£116,685		
<i>EPC - average sqm from sample</i>	102sqm			77sqm		64sqm				83sqm		43	82
<i>Value/sqm from Sample</i>	£3,299			£3,402		£3,334				£3,480			
Frinton Cluster	£494,783	£428,812	£329,855	£408,276	£340,230	£353,427	£280,074	£233,395	£193,384	£212,296	£174,013		
<i>EPC - average sqm from sample</i>	114sqm			102sqm		86sqm				No Data		47	111
<i>Value/sqm from Sample</i>	£2,958			£2,766		£2,890							
Manningtree and Rural	£443,766	£384,597	£295,844	£331,947	£276,623	£306,387	£242,797	£202,331	£167,646	No Data	No Data		

Appendix IV – Results tables

1 Hectare Tiles – Full Results

Area / DPH / AR-SO Split / %AH / Other Costs								RESULTS				
			% Affordable Housing					Benchmark Values				
Market Value Area	Density	District	Rented / Intermediate	%AH	% Market Housing	Part M Costs allowed	Total Market Sqm	Residual Value (£)	Benchmark / hectare (£)	Sensitivity Benchmark (£)	RV less Main Benchmark	RV less Sensitivity Benchmark
Eastern	20dph	Tendring	80% / 20%	70%	30%	12,686	1694.00	£577,000	£400,000	£480,000	£177,000	£97,000
Eastern	25dph	Tendring	80% / 20%	70%	30%	15,874	2143.80	£775,000	£400,000	£480,000	£375,000	£295,000
Eastern	30dph	Tendring	80% / 20%	70%	30%	18,973	2236.60	£673,000	£400,000	£480,000	£273,000	£193,000
Eastern	35dph	Tendring	80% / 20%	70%	30%	22,135	2589.80	£782,000	£400,000	£480,000	£382,000	£302,000
Manningtree & Rural North	20dph	Tendring	80% / 20%	70%	30%	12,686	1694.00	£1,122,000	£700,000	£840,000	£422,000	£282,000
Manningtree & Rural North	25dph	Tendring	80% / 20%	70%	30%	15,874	2143.80	£1,496,000	£700,000	£840,000	£796,000	£656,000
Manningtree & Rural North	30dph	Tendring	80% / 20%	70%	30%	18,973	2236.60	£1,423,000	£700,000	£840,000	£723,000	£583,000
Manningtree & Rural North	35dph	Tendring	80% / 20%	70%	30%	22,135	2589.80	£1,644,000	£700,000	£840,000	£944,000	£804,000
Frinton Cluster	20dph	Tendring	80% / 20%	70%	30%	12,686	1694.00	£1,438,000	£950,000	£1,140,000	£488,000	£298,000
Frinton Cluster	25dph	Tendring	80% / 20%	70%	30%	15,874	2143.80	£1,901,000	£950,000	£1,140,000	£951,000	£761,000
Frinton Cluster	30dph	Tendring	80% / 20%	70%	30%	18,973	2236.60	£1,903,000	£950,000	£1,140,000	£953,000	£763,000
Frinton Cluster	35dph	Tendring	80% / 20%	70%	30%	22,135	2589.80	£2,195,000	£950,000	£1,140,000	£1,245,000	£1,055,000

Case Study – Full Results (Eastern Market Value Area)

Case Study Ref	Type of dev	No of Dwgs	Net Area (ha)	Gross area (ha)	Net to Gross %	S106/ dwelling (£)	Density	Dwelling mix	Opening up costs per net ha	DCF Applied	Market Value Area	%AH	%Aff Rent	% Shared Ownership	Part M Costs allowed (£)	Residual Value / gross ha (£)	Benchmark / hectare (£)	Residual value post benchmark (£)
Small Site Case Studies																		
T1	Housing	1	0.025	0.025	100%	5,500	40	1 x 4bd	0	No	Eastern	0%	0%	0%	139	(2,120,000)	400,000	(2,520,000)
T2	Housing	3	0.075	0.075	100%	5,500	40	3 x 3bd	0	No	Eastern	0%	0%	0%	416	1,866,667	400,000	1,466,667
T3	Housing	7	0.233	0.233	100%	5,500	30	30dph mix	0	No	Eastern	0%	0%	0%	938	1,223,176	400,000	823,176
T4	Rural Exception	10	0.500	0.500	100%	5,500	20	See Note 1 below	0	No	Eastern				13,371	194,000		
T5	Bungalows	10	0.500	0.500	100%	5,500	20	5 x 2bb 5 x 3bb	0	No	Eastern	0%	0%	0%	1,248	1,030,000	400,000	630,000
T6	Starter Homes	10	0.333	0.333	100%	5,500	30	3 x 2bf 4 x 2 bt 3 x 3bt	0	No	Eastern				1,234	(243,243)	400,000	(643,243)
Medium Site Case Studies																		
T7	Housing	11	0.367	0.367	100%	5,500	30	30dph mix	0	No	Eastern	30%	80%	20%	6,957	632,153	400,000	232,153
T8	Housing	15	0.428	0.428	100%	5,500	35	35dph mix	0	No	Eastern	30%	80%	20%	9,486	733,645	400,000	333,645
T9	Flatted scheme	50	0.750	0.750	100%	5,500	67	15 x 1bf 35 x 2bf	50,000	Yes	Eastern	30%	80%	20%	19,261	(1,929,836)	400,000	(2,329,836)
Intermediate Case Studies																		
T10	Housing	75	2.500	3.120	80%	10,000	30	30dph mix	50,000	Yes	Eastern	30%	80%	20%	47,432	452,337	350,000	102,337
T11	Housing	125	5.000	7.143	70%	10,000	25	25dph mix	100,000	Yes	Eastern	30%	80%	20%	79,371	439,375	350,000	89,375
T12	Housing	300	10.000	15.385	65%	10,000	30	30dph mix	150,000	Yes	Eastern	30%	80%	20%	189,727	287,142	350,000	(62,858)
T12	Housing	300	10.000	15.385	65%	15,000	30	30dph mix	150,000	Yes	Eastern	30%	80%	20%	189,727	199,750	350,000	(150,250)

Large Case Studies																		
T13	Housing	600	20.000	30.770	65%	10,000	30	30dph mix	200,000	Yes	Eastern	30%	80%	20%	379,454	243,520	250,000	(6,480)
T13	Housing	600	20.000	30.770	65%	20,000	30	30dph mix	200,000	Yes	Eastern	30%	80%	20%	379,454	61,690	250,000	(188,310)
T13	Housing	600	20.000	30.770	65%	10,000	30	30dph mix	200,000	Yes	Eastern	25%	80%	20%	329,616	307,507	250,000	57,507
T13	Housing	600	20.000	30.770	65%	20,000	30	30dph mix	200,000	Yes	Eastern	25%	80%	20%	329,616	127,118	250,000	(122,882)
T14	Housing	1,100	31.429	48.352	65%	10,000	35	35dph mix	200,000	Yes	Eastern	30%	80%	20%	695,665	312,352	250,000	62,352
T14	Housing	1,100	31.429	48.352	65%	20,000	35	35dph mix	200,000	Yes	Eastern	30%	80%	20%	695,665	122,586	250,000	(127,414)
T14	Housing	1,100	31.429	48.352	65%	10,000	35	35dph mix	200,000	Yes	Eastern	25%	80%	20%	604,295	377,191	250,000	127,191
T14	Housing	1,100	31.429	48.352	65%	20,000	35	35dph mix	200,000	Yes	Eastern	25%	80%	20%	604,295	196,661	250,000	(53,339)
	Sheltered and Extracare Housing																	
T15	Sheltered	50	0.500	0.500	100%	4,000	100	20 x 1bf 30 x 2bf	-	Yes	Eastern	30%	80%	20%	Assume compliant	(117,006)	400,000	(517,006)
T15	Extracare	50	0.500	0.500	100%	4,000	100	20 x 1bf 30 x 2bf	-	Yes	Eastern	30%	80%	20%	Assume compliant	(1,291,294)	400,000	(1,691,294)

Note 1: T4 Rural Exception scheme mix

		Market Housing	Affordable Rent	Shared Ownership
2 bed terrace			2	2
3 bed terrace				2
3 bed detached		4		
Total		4	2	4
		40%	20%	40%

Case Study – Full Results (Frinton Cluster Market Value Area)

Case Study Ref	Type of dev	No of Dwgs	Net Area (ha)	Gross area (ha)	Net to Gross %	Density	Dwelling mix	S106/ dwelling (£)	Opening up costs per net ha	DCF Applied	Market Value Area	%AH	%Aff Rent	% Shared Ownership	Part M Costs allowed	Residual Value / gross ha (£)	Benchmark / hectare (£)	Residual value post benchmark (£)
Small Site Case Studies																		
T1	Housing	1	0.025	0.025	100%	40	1 x 4bd	5,500	0	No	Frinton Cluster	0%	0%	0%	139	560,000	950,000	(390,000)
T2	Housing	3	0.075	0.075	100%	40	3 x 3bd	5,500	0	No	Frinton Cluster	0%	0%	0%	416	3,840,000	950,000	2,890,000
T3	Housing	7	0.233	0.233	100%	30	30dph mix	5,500	0	No	Frinton Cluster	0%	0%	0%	938	2,879,828	950,000	1,929,828
T4	Rural Exception	10	0.500	0.500	100%	20	See Note 1 below	5,500	0	No	Frinton Cluster				13,371	898,000		
T5	Bungalows	10	0.500	0.500	100%	20	5 x 2bb 5 x 3bb	5,500	0	No	Frinton Cluster	0%	0%	0%	1,248	2,052,000	950,000	1,102,000
T6	Starter Homes	10	0.333	0.333	100%	30	3 x 2bf 4 x 2 bt 3 x 3bt	5,500	0	No	Frinton Cluster				1,234	864,865	950,000	(85,135)
Medium Site Case Studies																		
T7	Housing	11	0.367	0.367	100%	30	30dph mix	5,500	0	No	Frinton Cluster	30%	80%	20%	6,957	1,847,411	950,000	897,411
T8	Housing	15	0.428	0.428	100%	35	35dph mix	5,500	0	No	Frinton Cluster	30%	80%	20%	9,486	2,128,505	950,000	1,178,505
T9	Flatted scheme	50	0.750	0.750	100%	67	15 x 1bf 35 x 2bf	5,500	50,000	Yes	Frinton Cluster	30%	80%	20%	19,261	739,476	950,000	(210,524)
Intermediate Case Studies																		
T10	Housing	75	2.500	3.120	80%	30	30dph mix	10,000	50,000	Yes	Frinton Cluster	30%	80%	20%	47,432	1,377,279	700,000	677,279
T11	Housing	125	5.000	7.143	70%	25	25dph mix	10,000	100,000	Yes	Frinton Cluster	30%	80%	20%	79,371	1,160,313	700,000	460,313
T12	Housing	300	10.000	15.385	65%	30	30dph mix	10,000	150,000	Yes	Frinton Cluster	30%	80%	20%	189,727	928,180	700,000	228,180
T12	Housing	300	10.000	15.385	65%	30	30dph mix	15,000	150,000	Yes	Frinton Cluster	30%	80%	20%	189,727	852,233	700,000	152,233

Large Case Studies																			
T13	Housing	600	20.000	30.770	65%	30	30dph mix	10,000	200,000	Yes	Frinton Cluster	30%	80%	20%	379,454		892,180	440,000	452,180
T13	Housing	600	20.000	30.770	65%	30	30dph mix	20,000	200,000	Yes	Frinton Cluster	30%	80%	20%	379,454		739,061	440,000	299,061
T13	Housing	600	20.000	30.770	65%	30	30dph mix	10,000	200,000	Yes	Frinton Cluster	25%	80%	20%	329,616		987,241	440,000	547,241
T13	Housing	600	20.000	30.770	65%	30	30dph mix	20,000	200,000	Yes	Frinton Cluster	25%	80%	20%	329,616		835,347	440,000	395,347
T14	Housing	1,100	31.429	48.352	65%	35	35dph mix	10,000	200,000	Yes	Frinton Cluster	30%	80%	20%	695,665		988,154	440,000	548,154
T14	Housing	1,100	31.429	48.352	65%	35	35dph mix	20,000	200,000	Yes	Frinton Cluster	30%	80%	20%	695,665		825,350	440,000	385,350
T14	Housing	1,100	31.429	48.352	65%	35	35dph mix	10,000	200,000	Yes	Frinton Cluster	25%	80%	20%	604,295		1,090,775	440,000	650,775
T14	Housing	1,100	31.429	48.352	65%	35	35dph mix	20,000	200,000	Yes	Frinton Cluster	25%	80%	20%	604,295		927,971	440,000	487,971
Sheltered and Extracare Housing																			
T15	Sheltered	50	0.500	0.500	100%	100	20 x 1bf 30 x 2bf	4,000	-	Yes	Frinton Cluster	30%	80%	20%	Assume compliant		3,925,276	950,000	2,975,276
T15	Extracare	50	0.500	0.500	100%	100	20 x 1bf 30 x 2bf	4,000	-	Yes	Frinton Cluster	30%	80%	20%	Assume compliant		4,139,924	950,000	3,189,924

Note 1: T4 Rural Exception scheme mix

		Market Housing	Affordable Rent	Shared Ownership
2 bed terrace			2	2
3 bed terrace				2
3 bed detached		4		
Total		4	2	4

40%

20%

40%

Case Study – Full Results (Manningtree and Rural North Market Value Area)

Case Study Ref	Type of dev	No of Dwgs	Net Area (ha)	Gross area (ha)	Net to Gross %	Density	Dwelling mix	S106/ dwelling (£)	Opening up costs per net ha	DCF Applied	Market Value Area	%AH	%Aff Rent	% Shared Ownership	Part M Costs allowed		Residual Value / gross ha (£)	Benchmark / hectare (£)	Residual value post benchmark (£)
Small Site Case Studies																			
1	Housing	1	0.025	0.025	100%	40	1 x 4bd	5,500	0	No	Manningtree & Rural North	0%	0%	0%	139		(480,000)	700,000	(1,180,000)
T2	Housing	3	0.075	0.075	100%	40	3 x 3bd	5,500	0	No	Manningtree & Rural North	0%	0%	0%	416		3,080,000	700,000	2,380,000
T3	Housing	7	0.233	0.233	100%	30	30dph mix	5,500	0	No	Manningtree & Rural North	0%	0%	0%	838		2,377,682	700,000	1,677,682
T4	Rural Exception	10	0.500	0.500	100%	20	See Note 1 below	5,500	0	No	Manningtree & Rural North				13,371		682,000		
T5	Bungalows	10	0.500	0.500	100%	20	5 x 2bb 5 x 3bb	5,500	0	No	Manningtree & Rural North	0%	0%	0%	1,248		1,692,000	700,000	992,000
T6	Starter Homes	10	0.333	0.333	100%	30	3 x 2bf 4 x 2 bt 3 x 3bt	5,500	0	No	Manningtree & Rural North				1,234		714,715	700,000	14,715
Medium Site Case Studies																			
T7	Housing	11	0.367	0.367	100%	30	30dph mix	5,500	0	No	Manningtree & Rural North	30%	80%	20%	6,957		1,485,014	700,000	785,014
T8	Housing	15	0.428	0.428	100%	35	35dph mix	5,500	0	No	Manningtree & Rural North	30%	80%	20%	9,486		1,717,290	700,000	1,017,290
T9	Flatted scheme	50	0.750	0.750	100%	67	15 x 1bf 35 x 2bf	5,500	50,000	Yes	Manningtree & Rural North	30%	80%	20%	19,261		1,085,081	700,000	385,081
Intermediate Case Studies																			
T10	Housing	75	2.500	3.120	80%	30	30dph mix	10,000	50,000	Yes	Manningtree & Rural North	30%	80%	20%	47,432		1,101,730	570,000	531,730
T11	Housing	125	5.000	7.143	70%	25	25dph mix	10,000	100,000	Yes	Manningtree & Rural North	30%	80%	20%	79,371		915,646	570,000	345,646
T12	Housing	300	10.000	15.385	65%	30	30dph mix	10,000	150,000	Yes	Manningtree & Rural North	30%	80%	20%	189,727		739,860	570,000	169,860
T12	Housing	300	10.000	15.385	65%	30	30dph mix	15,000	150,000	Yes	Manningtree & Rural North	30%	80%	20%	189,727		663,913	570,000	93,913

Large Case Studies																			
T13	Housing	600	20.000	30.770	65%	30	30dph mix	10,000	200,000	Yes	Manningtree & Rural North	30%	80%	20%	379,454		705,594	440,000	265,594
T13	Housing	600	20.000	30.770	65%	30	30dph mix	20,000	200,000	Yes	Manningtree & Rural North	30%	80%	20%	379,454		548,878	440,000	108,878
T13	Housing	600	20.000	30.770	65%	30	30dph mix	10,000	200,000	Yes	Manningtree & Rural North	25%	80%	20%	329,616		789,077	440,000	349,077
T13	Housing	600	20.000	30.770	65%	30	30dph mix	20,000	200,000	Yes	Manningtree & Rural North	25%	80%	20%	329,616		633,768	440,000	193,768
T14	Housing	1,100	31.429	48.352	65%	35	35dph mix	10,000	200,000	Yes	Manningtree & Rural North	30%	80%	20%	695,665		790,532	440,000	350,532
T14	Housing	1,100	31.429	48.352	65%	35	35dph mix	20,000	200,000	Yes	Manningtree & Rural North	30%	80%	20%	695,665		627,728	440,000	187,728
T14	Housing	1,100	31.429	48.352	65%	35	35dph mix	10,000	200,000	Yes	Manningtree & Rural North	25%	80%	20%	604,295		880,744	440,000	440,744
T14	Housing	1,100	31.429	48.352	65%	35	35dph mix	20,000	200,000	Yes	Manningtree & Rural North	25%	80%	20%	604,295		717,940	440,000	277,940
Sheltered and Extracare Housing																			
T15	Sheltered	50	0.500	0.500	100%	100	20 x 1bf 30 x 2bf	4,000	-	Yes	Manningtree & Rural North	30%	80%	20%	Assume compliant		2,732,902	700,000	2,032,902
T15	Extracare	50	0.500	0.500	100%	100	20 x 1bf 30 x 2bf	4,000	-	Yes	Manningtree & Rural North	30%	80%	20%	Assume compliant		2,647,032	700,000	1,947,032

Note 1: T4 Rural Exception scheme mix

		Market Housing	Affordable Rent	Shared Ownership
2 bed terrace			2	2
3 bed terrace				2
3 bed detached		4		
Total		4	2	4

40%

20%

40%

Appendix V – Non-residential Viability Testing

Non-residential Viability Assessment Model					
Office development of two storeys out of town (a/c multiple units)					
	Size of unit (GIA)	1500 sq m			
	Ratio of GEA to GIA	100.0%			User input cells
	GEA	1500 sq m			Produced by model
	NIA as % of GIA	95%			Key results
	NIA	1425 sq m	GEA		Gross external area
	Floors	2	GIA		Gross internal area
	Site coverage	40%	NIA		Net internal area
	Site area	0.19 Hectares			
SCHEME REVENUE					
	Headline annual rent (in £s per sq m)			£179	
	Rent premium			0%	
	Headline annual rent (in £s per sq m) with BREEAM premium			£ 179	
	Annual rent for assesment (total) - NIA			£ 255,075	
	Yield			8.20%	
	(Yield times rent)			£ 3,110,671	
	Less purchaser costs	5.80 % of yield x rent			
	Gross Development Value			£	2,940,142
SCHEME COSTS					
	Build costs	£ 1,324 per sq m		£ 1,986,000	
	Additional build costs	£ - per sq m		£ -	
	Water efficiency	0.00% of base build costs		£ -	
	External costs	10% of base build costs		£ 198,600	
	Total construction costs			£	2,184,600
	Professional fees	10.00% of construction costs		£ 218,460	
	Sales and lettings costs	3% of GDV		£ 88,204	
	S106 costs (not covered by CIL)			£ 20,000	
	Total 'other costs'			£	326,664
	Finance costs	6.0% Interest rate			
	Build period	10 Months			
	Finance costs for 100% of construction and other costs			£ 125,563	
	Void finance/rent free period (in months)	12 Months		£ 150,676	
	Total finance costs			£	276,239
	Developer return	20% Scheme value		£	588,028
	Total scheme costs			£	3,375,532
RESIDUAL VALUE					
	Gross residual value			-£	435,389
	Less purchaser costs	0.00 % Stamp duty land tax		£	-
		2.00 % Agent/legal purchase fees		£	-
	Residual value	For the scheme		-£	435,389
	Viability	Equivalent per hectare		-£	2,322,077
					Not viable
Viability					
	Benchmark land value (per hectare)			£	550,000
	Equivalent benchmark land value for site			£	103,125
	Scheme viability headroom			-£	538,514
	Viability headroom per sq m				NONE

Non-residential Viability Assessment Model					
Office development of four storeys town centre (a/c)					
	Size of unit (GIA)	2000	sq m		
	Ratio of GEA to GIA	100.0%			User input cells
	GEA	2000	sq m		Produced by model
	NIA as % of GIA	95%			Key results
	NIA	1900	sq m	GEA	Gross external area
	Floors	4		GIA	Gross internal area
	Site coverage	75%		NIA	Net internal area
	Site area	0.07	Hectares		
SCHEME REVENUE					
	Headline annual rent (in £s per sq m)			£179	
	Rent premium			0%	
	Headline annual rent (in £s per sq m) with BREEM premium			£ 179	
	Annual rent for assesment (total) - NIA			£ 340,100	
	Yield			8.20%	
	(Yield times rent)			£ 4,147,561	
	Less purchaser costs	5.80	% of yield x rent		
	Gross Development Value			£ 3,920,190	
SCHEME COSTS					
	Build costs	£ 1,589	per sq m	£ 3,178,000	
	Additional build costs	£ -	per sq m	£ -	
	Water efficiency	0.00%	of base build costs	£ -	
	External costs	10%	of base build costs	£ 317,800	
	Total construction costs			£ 3,495,800	
	Professional fees	12.00%	of construction costs	£ 419,496	
	Sales and lettings costs	3%	of GDV	£ 117,606	
	S106 costs (not covered by CIL)			£ -	
	Total 'other costs'			£ 537,102	
	Finance costs	6.0%	Interest rate		
	Build period	14	Months		
	Finance costs for 100% of construction and other costs			£ 282,303	
	Void finance/rent free period (in months)	12	Months	£ 241,974	
	Total finance costs			£ 524,277	
	Developer return	20%	Scheme value	£ 784,038	
	Total scheme costs			£ 5,341,217	
RESIDUAL VALUE					
	Gross residual value			-£ 1,421,027	
	Less purchaser costs	0.00	% Stamp duty land tax	£ -	
		2.00	% Agent/legal purchase fees	£ -	
	Residual value		For the scheme	-£ 1,421,027	
	Viability		Equivalent per hectare	-£ 21,315,404	
			Not viable		
Viability					
	Benchmark land value (per hectare)			£ 550,000	
	Equivalent benchmark land value for site			£ 36,667	
	Scheme viability headroom			-£ 1,457,694	
	Viability headroom per sq m			NONE	

Non-residential Viability Assessment Model					
Four industrial/warehouse units in a block of 1,600 sqm edge of town					
	Size of unit (GIA)	1600	sq m		
	Ratio of GEA to GIA	100.0%			User input cells
	GEA	1600	sq m		Produced by model
	NIA as % of GIA	95%			Key results
	NIA	1520	sq m	GEA	Gross external area
	Floors	1		GIA	Gross internal area
	Site coverage	40%		NIA	Net internal area
	Site area	0.40	Hectares		
SCHEME REVENUE					
Headline annual rent (in £s per sq m)				£65	
Rent premium				0%	
Headline annual rent (in £s per sq m) with BREEAM premium				£ 65	
Annual rent for assesment (total) - NIA				£ 98,800	
Yield				7.54%	
(Yield times rent)				£ 1,310,345	
Less purchaser costs		5.80	% of yield x rent		
Gross Development Value					£ 1,238,511
SCHEME COSTS					
Build costs		£ 828	per sq m	£ 1,324,800	
Additional build costs		£ -	per sq m	£ -	
Water efficiency		0.00%	of base build costs	£ -	
External costs		10%	of base build costs	£ 132,480	
Total construction costs					£ 1,457,280
Professional fees		12.00%	of construction costs	£ 174,874	
Sales and lettings costs		3%	of GDV	£ 37,155	
S106 costs (not covered by CIL)				£ 20,000	
Total 'other costs'					£ 232,029
Finance costs		6.0%	Interest rate		
Build period		8	Months		
Finance costs for 100% of construction and other costs				£ 67,572	
Void finance/rent free period (in months)		12	Months	£ 101,359	
Total finance costs					£ 168,931
Developer return		20%	Scheme value		£ 247,702
Total scheme costs					£ 2,105,942
RESIDUAL VALUE					
Gross residual value					-£ 867,431
Less purchaser costs		0.00	% Stamp duty land tax	£ -	
		2.00	% Agent/legal purchase fees	£ -	
Residual value		For the scheme			-£ 867,431
Viability		Equivalent per hectare			-£ 2,168,577
		Not viable			
Viability					
Benchmark land value (per hectare)					£ 550,000
Equivalent benchmark land value for site					£ 220,000
Scheme viability headroom					-£ 1,087,431
Viability headroom per sq m					NONE

Non-residential Viability Assessment Model						
Warehouse/industrial unit of 5,000 sqm edge of town, accessible location						
	Size of unit (GIA)	5000	sq m			
	Ratio of GEA to GIA	100.0%				User input cells
	GEA	5000	sq m			Produced by model
	NIA as % of GIA	95%				Key results
	NIA	4750	sq m	GEA	Gross external area	
	Floors	1		GIA	Gross internal area	
	Site coverage	40%		NIA	Net internal area	
	Site area	1.25	Hectares			
SCHEME REVENUE						
	Headline annual rent (in £s per sq m)				£65	
	Rent premium				0%	
	Headline annual rent (in £s per sq m) with BREEM premium				£ 65	
	Annual rent for assesment (total) - NIA				£ 308,750	
	Yield				7.54%	
	(Yield times rent)				£ 4,094,828	
	Less purchaser costs	5.80	% of yield x rent			
	Gross Development Value					£ 3,870,347
SCHEME COSTS						
	Build costs	£ 520	per sq m		£ 2,600,000	
	Additional build costs	£ -	per sq m		£ -	
	Water efficiency	2.00%	of base build costs		£ 52,000	
	External costs	10%	of base build costs		£ 260,000	
	Total construction costs					£ 2,912,000
	Professional fees	12.00%	of construction costs		£ 349,440	
	Sales and lettings costs	3%	of GDV		£ 116,110	
	S106 costs (not covered by CIL)				£ 50,000	
	Total 'other costs'					£ 515,550
	Finance costs	6.0%	Interest rate			
	Build period	8	Months			
	Finance costs for 100% of construction and other costs				£ 137,102	
	Void finance/rent free period (in months)	24	Months		£ 411,306	
	Total finance costs					£ 548,408
	Developer return	20%	Scheme value			£ 774,069
	Total scheme costs					£ 4,750,028
RESIDUAL VALUE						
	Gross residual value					-£ 879,681
	Less purchaser costs	0.00	% Stamp duty land tax		£ -	
		2.00	% Agent/legal purchase fees		£ -	
	Residual value		For the scheme			-£ 879,681
	Viability		Equivalent per hectare			-£ 703,744
			Not viable			
Viability						
	Benchmark land value (per hectare)				£ 550,000	
	Equivalent benchmark land value for site				£ 687,500	
	Scheme viability headroom				-£ 1,567,181	
	Viability headroom per sq m				NONE	

Non-residential Viability Assessment Model						
Clacton/Frinton Town centre comparison retail 200 sqm						
	Size of unit (GIA)	200	sq m			
	Ratio of GEA to GIA	100.0%				User input cells
	GEA	200	sq m			Produced by model
	NIA as % of GIA	95%				Key results
	NIA	190	sq m	GEA	Gross external area	
	Floors	2		GIA	Gross internal area	
	Site coverage	80%		NIA	Net internal area	
	Site area	0.01	Hectares			
SCHEME REVENUE						
	Headline annual rent (in £s per sq m)				£178	
	Rent premium				0%	
	Headline annual rent (in £s per sq m) with BREEAM premium			£	178	
	Annual rent for assesment (total) - NIA			£	33,820	
	Yield				7.10%	
	(Yield times rent)			£	476,338	
	Less purchaser costs	5.80	% of yield x rent			
	Gross Development Value				£	450,225
SCHEME COSTS						
	Build costs	£	1,038 per sq m	£	207,600	
	Additional build costs	£	- per sq m	£	-	
	Water efficiency	0.00%	of base build costs	£	-	
	External costs	10%	of base build costs	£	20,760	
	Total construction costs				£	228,360
	Professional fees	12.00%	of construction costs	£	27,403	
	Sales and lettings costs	3%	of GDV	£	13,507	
	S106 costs (not covered by CIL)			£	-	
	Total 'other costs'				£	40,910
	Finance costs	6.0%	Interest rate			
	Build period	12	Months			
	Finance costs for 100% of construction and other costs			£	16,156	
	Void finance/rent free period (in months)	12	Months	£	16,156	
	Total finance costs				£	32,312
	Developer return	20%	Scheme value		£	90,045
	Total scheme costs				£	391,627
RESIDUAL VALUE						
	Gross residual value				£	58,598
	Less purchaser costs	0.00	% Stamp duty land tax		£	-
		2.00	% Agent/legal purchase fees		£	1,172
	Residual value		For the scheme		£	57,426
	Viability		Equivalent per hectare		£	4,594,055
			Go to next stage			
Viability						
	EUUV benchmark land value for site				£	191,863
	Scheme viability headroom				-£	134,437
	Viability headroom per sq m					NONE

Non-residential Viability Assessment Model						
Harwich/Manningtree Town centre comparison retail 200 sqm						
	Size of unit (GIA)	200	sq m			
	Ratio of GEA to GIA	100.0%				User input cells
	GEA	200	sq m			Produced by model
	NIA as % of GIA	95%				Key results
	NIA	190	sq m	GEA	Gross external area	
	Floors	2		GIA	Gross internal area	
	Site coverage	80%		NIA	Net internal area	
	Site area	0.01	Hectares			
SCHEME REVENUE						
Headline annual rent (in £s per sq m)					£107	
Rent premium					0%	
Headline annual rent (in £s per sq m) with BREEAM premium				£	107	
Annual rent for assesment (total) - NIA				£	20,330	
Yield					7.10%	
(Yield times rent)				£	286,338	
Less purchaser costs		5.80	% of yield x rent			
Gross Development Value					£	270,641
SCHEME COSTS						
Build costs		£ 925	per sq m	£	185,000	
Additional build costs		£ -	per sq m	£	-	
Water efficiency		0.00%	of base build costs	£	-	
External costs		10%	of base build costs	£	18,500	
Total construction costs					£	203,500
Professional fees		12.00%	of construction costs	£	24,420	
Sales and lettings costs		3%	of GDV	£	8,119	
S106 costs (not covered by CIL)				£	-	
Total 'other costs'					£	32,539
Finance costs		6.0%	Interest rate			
Build period		12	Months			
Finance costs for 100% of construction and other costs				£	14,162	
Void finance/rent free period (in months)		12	Months	£	14,162	
Total finance costs					£	28,325
Developer return		20%	Scheme value		£	54,128
Total scheme costs					£	318,492
RESIDUAL VALUE						
Gross residual value					-£	47,851
Less purchaser costs			% Stamp duty land tax	£	-	
			2.00 % Agent/legal purchase fees	£	-	
Residual value		For the scheme			-£	47,851
Viability		Equivalent per hectare			-£	3,828,100
				Not viable		
Viability						
Benchmark land value (per hectare)					£	950,000
Equivalent benchmark land value for site					£	11,875
Scheme viability headroom					-£	59,726
Viability headroom per sq m					NONE	

Non-residential Viability Assessment Model					
Out of centre comparison retail multiple units totalling 1,000 sqm					
	Size of unit (GIA)	1000	sq m		
	Ratio of GEA to GIA	100.0%			User input cells
	GEA	1000	sq m		Produced by model
	NIA as % of GIA	95%			Key results
	NIA	950	sq m	GEA	Gross external area
	Floors	1		GIA	Gross internal area
	Site coverage	40%		NIA	Net internal area
	Site area	0.25	Hectares		
SCHEME REVENUE					
	Headline annual rent (in £s per sq m)			£157	
	Rent premium			0%	
	Headline annual rent (in £s per sq m) with BREEAM premium			£ 157	
	Annual rent for assesment (total) - NIA			£ 149,150	
	Yield			6.60%	
	(Yield times rent)			£ 2,259,848	
	Less purchaser costs	5.80	% of yield x rent		
	Gross Development Value			£ 2,135,963	
SCHEME COSTS					
	Build costs	£718	per sq m	£ 718,000	
	Additional build costs	£ -	per sq m	£ -	
	Water efficiency	0.00%	of base build costs	£ -	
	External costs	10%	of base build costs	£ 71,800	
	Total construction costs			£ 789,800	
	Professional fees	10.00%	of construction costs	£ 78,980	
	Sales and lettings costs	3%	of GDV	£ 64,079	
	S106 costs (not covered by CIL)			£ 100,000	
	Total 'other costs'			£ 243,059	
	Finance costs	6.0%	Interest rate		
	Build period	14	Months		
	Finance costs for 100% of construction and other costs			£ 72,300	
	Void finance/rent free period (in months)	12	Months	£ 61,972	
	Total finance costs			£ 134,272	
	Developer return	20%	Scheme value	£ 427,193	
	Total scheme costs			£ 1,594,323	
RESIDUAL VALUE					
	Gross residual value			£ 541,640	
	Less purchaser costs		% Stamp duty land tax	£ 16,582	
		2.00	% Agent/legal purchase fees	£ 10,833	
	Residual value		For the scheme	£ 514,225	
	Viability		Equivalent per hectare	£ 2,056,899	
			Go to next stage		
Viability					
	Benchmark land value (per hectare)			£ 950,000	
	Equivalent benchmark land value for site			£ 237,500	
	Scheme viability headroom			£ 276,725	
	Viability headroom per sq m			£ 277	

Non-residential Viability Assessment Model						
Small Convenience Store 300 sqm						
	Size of unit (GIA)	300	sq m			
	Ratio of GEA to GIA	100.0%				User input cells
	GEA	300	sq m			Produced by model
	NIA as % of GIA	95%				Key results
	NIA	285	sq m	GEA	Gross external area	
	Floors	1		GIA	Gross internal area	
	Site coverage	65%		NIA	Net internal area	
	Site area	0.05	Hectares			
SCHEME REVENUE						
	Headline annual rent (in £s per sq m)				£208	
	Rent premium				0%	
	Headline annual rent (in £s per sq m) with BREEAM premium			£	208	
	Annual rent for assesment (total) - NIA			£	59,280	
	Yield				6.70%	
	(Yield times rent)			£	884,776	
	Less purchaser costs	5.80	% of yield x rent			
	Gross Development Value				£	836,272
SCHEME COSTS						
	Build costs	£ 1,262	per sq m	£	378,600	
	Additional build costs	£ -	per sq m	£	-	
	Water efficiency	0.00%	of base build costs	£	-	
	External costs	10%	of base build costs	£	37,860	
	Total construction costs				£	416,460
	Professional fees	12.00%	of construction costs	£	49,975	
	Sales and lettings costs	3%	of GDV	£	25,088	
	S106 costs (not covered by CIL)			£	-	
	Total 'other costs'				£	75,063
	Finance costs	6.0%	Interest rate			
	Build period	6	Months			
	Finance costs for 100% of construction and other costs			£	14,746	
	Void finance/rent free period (in months)	0	Months	£	-	
	Total finance costs				£	14,746
	Developer return	20%	Scheme value		£	167,254
	Total scheme costs				£	673,524
RESIDUAL VALUE						
	Gross residual value				£	162,749
	Less purchaser costs		% Stamp duty land tax		£	255
		2.00	% Agent/legal purchase fees		£	3,255
	Residual value	For the scheme			£	159,239
	Viability	Equivalent per hectare			£	3,450,175
			Go to next stage			
Viability						
	Benchmark land value (per hectare)				£	950,000
	Equivalent benchmark land value for site				£	43,846
	Scheme viability headroom				£	115,393
	Viability headroom per sq m				£	385

Non-residential Viability Assessment Model						
Mid Size Convenience of 900 sqm						
	Size of unit (GIA)	900	sq m			
	Ratio of GEA to GIA	100.0%				User input cells
	GEA	900	sq m			Produced by model
	NIA as % of GIA	95%				Key results
	NIA	855	sq m	GEA	Gross external area	
	Floors	1		GIA	Gross internal area	
	Site coverage	55%		NIA	Net internal area	
	Site area	0.16	Hectares			
SCHEME REVENUE						
	Headline annual rent (in £s per sq m)				£177	
	Rent premium				0%	
	Headline annual rent (in £s per sq m) with BREEAM premium				£ 177	
	Annual rent for assesment (total) - NIA				£ 151,335	
	Yield				6.20%	
	(Yield times rent)				£ 2,440,887	
	Less purchaser costs	5.80	% of yield x rent			
	Gross Development Value					£ 2,307,077
SCHEME COSTS						
	Build costs	£ 1,262	per sq m		£ 1,135,800	
	Additional build costs	£ -	per sq m		£ -	
	Water efficiency	0.00%	of base build costs		£ -	
	External costs	10%	of base build costs		£ 113,580	
	Total construction costs					£ 1,249,380
	Professional fees	10.00%	of construction costs		£ 124,938	
	Sales and lettings costs	3%	of GDV		£ 69,212	
	S106 costs (not covered by CIL)				£ 100,000	
	Total 'other costs'					£ 294,150
	Finance costs	6.0%	Interest rate			
	Build period	8	Months			
	Finance costs for 100% of construction and other costs				£ 61,741	
	Void finance/rent free period (in months)	3	Months		£ 23,153	
	Total finance costs					£ 84,894
	Developer return	20%	Scheme value			£ 461,415
	Total scheme costs					£ 2,089,840
RESIDUAL VALUE						
	Gross residual value					£ 217,237
	Less purchaser costs		% Stamp duty land tax			£ 1,345
		2.00	% Agent/legal purchase fees			£ 4,345
	Residual value	For the scheme				£ 211,547
	Viability	Equivalent per hectare				£ 1,292,790
			Go to next stage			
Viability						
	Benchmark land value (per hectare)					£ 950,000
	Equivalent benchmark land value for site					£ 155,455
	Scheme viability headroom					£ 56,093
	Viability headroom per sq m					£ 62

Non-residential Viability Assessment Model						
Supermarket of 2,500 sqm						
	Size of unit (GIA)	2500	sq m			
	Ratio of GEA to GIA	100.0%				User input cells
	GEA	2500	sq m			Produced by model
	NIA as % of GIA	95%				Key results
	NIA	2375	sq m	GEA	Gross external area	
	Floors	1		GIA	Gross internal area	
	Site coverage	40%		NIA	Net internal area	
	Site area	0.63	Hectares			
SCHEME REVENUE						
	Headline annual rent (in £s per sq m)				£194	
	Rent premium				0%	
	Headline annual rent (in £s per sq m) with BREEAM premium				£ 194	
	Annual rent for assesment (total) - NIA				£ 460,750	
	Yield				5.40%	
	(Yield times rent)				£ 8,532,407	
	Less purchaser costs	5.80	% of yield x rent			
	Gross Development Value					£ 8,064,657
SCHEME COSTS						
	Build costs	£ 1,621	per sq m		£ 4,052,500	
	Additional build costs	£ -	per sq m		£ -	
	Water efficiency	0.00%	of base build costs		£ -	
	External costs	10%	of base build costs		£ 405,250	
	Total construction costs					£ 4,457,750
	Professional fees	10.00%	of construction costs		£ 445,775	
	Sales and lettings costs	3%	of GDV		£ 241,940	
	S106 costs (not covered by CIL)				£ 100,000	
	Total 'other costs'					£ 787,715
	Finance costs	6.0%	Interest rate			
	Build period	12	Months			
	Finance costs for 100% of construction and other costs				£ 314,728	
	Void finance/rent free period (in months)	3	Months		£ 78,682	
	Total finance costs					£ 393,410
	Developer return	20%	Scheme value			£ 1,612,931
	Total scheme costs					£ 7,251,806
RESIDUAL VALUE						
	Gross residual value					£ 812,851
	Less purchaser costs		% Stamp duty land tax			£ 30,143
		2.00	% Agent/legal purchase fees			£ 16,257
	Residual value		For the scheme			£ 766,452
	Viability		Equivalent per hectare			£ 1,226,323
			Go to next stage			
Viability						
	Benchmark land value (per hectare)					£ 950,000
	Equivalent benchmark land value for site					£ 593,750
	Scheme viability headroom					£ 172,702
	Viability headroom per sq m					£ 69

Non-residential Viability Assessment Model						
70 bedroom budget hotel out of town						
	Size of unit (GIA)	2450	sq m			
	Ratio of GEA to GIA	100.0%				User input cells
	GEA	2450	sq m			Produced by model
	NIA as % of GIA	95%				Key results
	NIA	2327.5	sq m	GEA	Gross external area	
	Floors	3		GIA	Gross internal area	
	Site coverage	50%		NIA	Net internal area	
	Site area	0.16	Hectares			
SCHEME REVENUE						
Capital value per room				£	80,000	
Rooms					70	
Gross capital value				£	5,600,000	
Less purchaser costs		5.80	% of gross capital value			
Gross Development Value						£ 5,293,006
SCHEME COSTS						
Build costs	£	1,168	per sq m	£	2,861,600	
Additional build costs	£	-	per sq m	£	-	
Water efficiency		2.00%	of base build costs	£	57,232	
External costs		10%	of base build costs	£	286,160	
Total construction costs					£	3,204,992
Professional fees		12.00%	of construction costs	£	384,599	
Sales and lettings costs		3%	of GDV	£	158,790	
S106 costs (not covered by CIL)				£	10,000	
Total 'other costs'					£	553,389
Finance costs		6.0%	Interest rate			
Build period		10	Months			
Finance costs for 100% of construction and other costs				£	187,919	
Void finance/rent free period (in months)		6	Months	£	112,751	
Total finance costs					£	300,670
Developer return		20%	Scheme value			£ 1,058,601
Total scheme costs					£	5,117,653
RESIDUAL VALUE						
Gross residual value					£	175,353
Less purchaser costs			% Stamp duty land tax		£	507
		2.00	% Agent/legal purchase fees		£	3,507
Residual value	For the scheme				£	171,339
	Equivalent per hectare				£	1,049,013
			Go to next stage			
Viability						
Benchmark land value (per hectare)					£	660,000
Equivalent benchmark land value for site					£	107,800
Scheme viability headroom					£	63,539
Viability headroom per sq m					£	26

Non-residential Viability Assessment Model						
Student accommodation of 44 studios and 115 cluster flat rooms						
	Size of unit (GIA)	5565	sq m			
	Ratio of GEA to GIA	100.0%				User input cells
	GEA	5565	sq m			Produced by model
	NIA as % of GIA	95%				Key results
	NIA	5286.75	sq m	GEA	Gross external area	
	Rooms	159		GIA	Gross internal area	
	Floors	4		NIA	Net internal area	
	Site coverage	75%				
	Site area	0.19	Hectares			
SCHEME REVENUE						
Room value - studios		£ 105,000		£ 16,695,000		
Less purchaser costs		5.80	% of yield x rent			
Gross Development Value					£	15,779,773
SCHEME COSTS						
Build costs		£ 1,618	per sq m	£ 9,004,170		
External costs		10%	of base build costs	£ 900,417		
Total construction costs					£	9,904,587
Professional fees		12.00%	of construction costs	£ 1,188,550		
Sales and lettings costs		3%	of GDV	£ 473,393		
Planning obligations				£ -		
Total 'other costs'					£	1,661,944
Finance costs		6.0%	Interest rate			
Build period		18	Months			
Finance costs for 100% of construction and other costs				£ 1,040,988		
Void finance period (in months)		0	Months	£ -		
Total finance costs					£	1,040,988
Developer return		20%	Scheme value		£	3,155,955
Total scheme costs					£	15,763,473
RESIDUAL VALUE						
Gross residual value					£	16,300
Less purchaser costs			Stamp duty land tax		£	-
		2.00	% Agent/legal purchase fees		£	326
Residual value					£	15,981
	For the scheme				£	86,148
	Equivalent per hectare					
Go to next stage						
Viability						
Benchmark land value (per hectare)					£	750,000
Equivalent benchmark land value for site					£	139,125
Viability					-£	123,144
Headroom per sq m						NONE

Non-residential Viability Assessment Model						
Edge of centre mixed leisure development						
	Size of unit (GIA)	3800	sq m			
	Ratio of GEA to GIA	100.0%				User input cells
	GEA	3800	sq m			Produced by model
	NIA as % of GIA	95%				Key results
	NIA	3610	sq m	GEA	Gross external area	
	Floors	2		GIA	Gross internal area	
	Site coverage	80%		NIA	Net internal area	
	Site area	0.24	Hectares			
SCHEME REVENUE						
	Headline annual rent (in £s per sq m)				£161	
	Rent premium				0%	
	Headline annual rent (in £s per sq m) with BREEAM premium			£	161	
	Annual rent for assesment (total) - NIA			£	581,210	
	Yield				6.70%	
	(Yield times rent)			£	8,674,776	
	Less purchaser costs	5.80	% of yield x rent			
	Gross Development Value				£	8,199,221
SCHEME COSTS						
	Build costs	£	1,387 per sq m	£	5,270,600	
	Additional build costs	£	- per sq m	£	-	
	Water efficiency	2.00%	of base build costs	£	105,412	
	External costs	10%	of base build costs	£	527,060	
	Total construction costs				£	5,903,072
	Professional fees	12.00%	of construction costs	£	708,369	
	Sales and lettings costs	3%	of GDV	£	245,977	
	S106 costs (not covered by CIL)			£	20,000	
	Total 'other costs'				£	974,345
	Finance costs	6.0%	Interest rate			
	Build period	12	Months			
	Finance costs for 100% of construction and other costs			£	412,645	
	Void finance/rent free period (in months)	0	Months	£	-	
	Total finance costs				£	412,645
	Developer return	20%	Scheme value		£	1,639,844
	Total scheme costs				£	8,929,907
RESIDUAL VALUE						
	Gross residual value				-£	730,685
	Less purchaser costs		% Stamp duty land tax	£	-	
		2.00	% Agent/legal purchase fees	£	-	
	Residual value		For the scheme		-£	730,685
	Viability		Equivalent per hectare		-£	3,076,570
			Not viable			
Viability						
	Benchmark land value (per hectare)			£	660,000	
	Equivalent benchmark land value for site			£	156,750	
	Scheme viability headroom				-£	887,435
	Viability headroom per sq m					NONE

Non-residential Viability Assessment Model						
Care home 60 bedrooms						
	Size of unit (GIA)	3000	sq m			
	Ratio of GEA to GIA	100.0%				User input cells
	GEA	3000	sq m			Produced by model
	NIA as % of GIA	95%				Key results
	NIA	2850	sq m	GEA		Gross external area
	Floors	2		GIA		Gross internal area
	Site coverage	40%		NIA		Net internal area
	Site area	0.38	Hectares			
SCHEME REVENUE						
Capital value per room				£	95,000	
Rooms					60	
Gross capital value				£	5,700,000	
Less purchaser costs		5.80	% of gross capital value			
Gross Development Value						£ 5,387,524
SCHEME COSTS						
Build costs		£ 1,453	per sq m	£	4,359,000	
Additional build costs		£ -	per sq m	£	-	
Water efficiency		0.00%	of base build costs	£	-	
External costs		10%	of base build costs	£	435,900	
Total construction costs						£ 4,794,900
Professional fees		12.00%	of construction costs	£	575,388	
Sales and lettings costs		3%	of GDV	£	161,626	
S106 costs (not covered by CIL)				£	75,000	
Total 'other costs'						£ 812,014
Finance costs		6.0%	Interest rate			
Build period		12	Months			
Finance costs for 100% of construction and other costs				£	336,415	
Void finance/rent free period (in months)		0	Months	£	-	
Total finance costs						£ 336,415
Developer return		20%	Scheme value			£ 1,077,505
Total scheme costs						£ 7,020,833
RESIDUAL VALUE						
Gross residual value						-£ 1,633,310
Less purchaser costs			% Stamp duty land tax		£	-
		2.00	% Agent/legal purchase fees		£	-
Residual value	For the scheme					-£ 1,633,310
	Equivalent per hectare					-£ 4,355,492
			Not viable			
Viability						
Benchmark land value (per hectare)					£	660,000
Equivalent benchmark land value for site					£	247,500
Scheme viability headroom						-£ 1,880,810
Viability headroom per sq m						NONE



THREE DRAGONS

<http://three-dragons.co.uk>

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