

Runnymede A320 Impact and Longcross Garden Village Viability Study

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Executive Summary

- S1 The main objective of this report is to respond to the Inspector's concern initially raised at examination (Stage 1 and 2 hearings), that the sites proposed in the Local Plan around the area of the A320, can facilitate on a viable basis, the necessary infrastructure as well as mitigate the on-site impacts.
- S2 The analysis revisits the High Level Testing carried out in 2017, and concludes as to whether generally there is scope or surplus for additional funding from the process of planning consent across the Borough generally. It looks at the key sites in the A320 area and related sub markets and concludes on individual scheme viability. The report looks in significant detail at the Longcross Garden Village site which is being promoted by Crest Nicholson, which by some margin, is the most significant of the housing allocations proposed in the Local Plan.
- S3 The report finds that development generally across the Borough is very viable, even where a brown field land value benchmark is considered. Much of the development comes from agricultural or green field and thus has a low existing use value.
- S4 The revised National Planning Policy Framework and associated guidance now favours local authorities in their policy stances by emphasising existing use value as the basis of viability negotiations. This asks the question 'by how much will the land value be raised should we, as a planning authority, decide to grant planning permission. This is very much different to the historic position, where applicants often cited land purchase price as the basis for negotiation and where this price sometimes did not reflect policy requirements.
- S5 The key sites around the A320 (and looked at in detail in Section 4) are viable, and deliver significant surplus to the land owners, whilst providing a competitive return to the developer, land owner and

whilst meeting the Council's Affordable Housing and other Section 106 requirements.

- S6 Longcross Garden Village, as a scheme (the south part of the site has been looked at here in detail) is viable to deliver Section 106 requirements as anticipated by the Council. In making my assessment of this site, the Council requested I liaise with the developer's Crest to understand their perspective on various factors (such as housing mix etc.) and assumptions, before I completed my report. My analysis suggests the site has significant viability, though whilst the developer also considers that whilst the scheme is viable, it does not entirely agree the extent of viability posited by myself. One key relates to construction costs and this remains a matter of ongoing discussion. Likewise there is scope to further narrow the debate on the issue of land value benchmark.
- S7 The general appearance of the scheme in terms of its mix and density would not appear to me to be an area where there is likely to be significant dispute.

1 Introduction and objectives

- 1.1 This Viability Study has been undertaken following the Stage 1 and Stage 2 hearing sessions of the examination into the Runnymede Local Plan. It is intended to further inform the examination in relation to the deliverability of mitigation on the A320 corridor and what this means for the delivery and viability of development sites associated with this highway.
- 1.2 The project brief for the Update Study advises that: 'ahead of further hearing sessions the Council is gathering additional highways modelling advice and preparing its bid for the Housing Infrastructure Fund (HIF) as one mechanism to fund A320 improvements. The HIF ask is some £44m to cover the cost of A320 mitigation in Runnymede'.
- 1.3 To help the Council demonstrate that funding mechanisms have a realistic and reasonable prospect of delivery the Council has commissioned this report to test the viability of development sites in the A320 corridor, including Longcross Garden Village, mindful of the funding sources available.

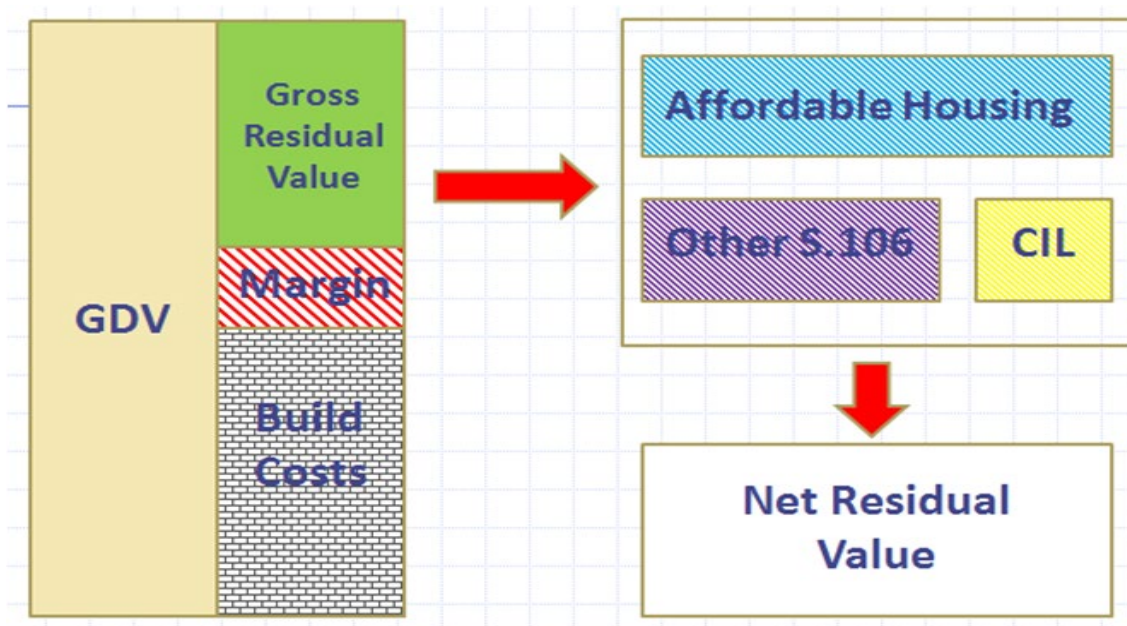
1.4 The Study tests viability in three ways. Firstly, the Study undertakes a review of the High Level Testing (HLT carried out in the Viability Baseline report (2017). Secondly, it reviews and updates the analysis of large sites taking into account updated information on development mix and infrastructure loading. Thirdly the Study includes an in-depth analysis of the viability of the Longcross Garden Village site, taking into account the Council’s anticipated phasing programme.

2 Approach to viability assessment

Overview

2.1 It is important to understand how viability is assessed in the planning and development process. The assessment of viability is usually referred to as residual development appraisal approach. Our understanding is illustrated in the diagram below. This shows that the starting point for negotiations is the gross residual site value which is the difference between the scheme revenue and scheme costs, including a reasonable allowance for developer return.

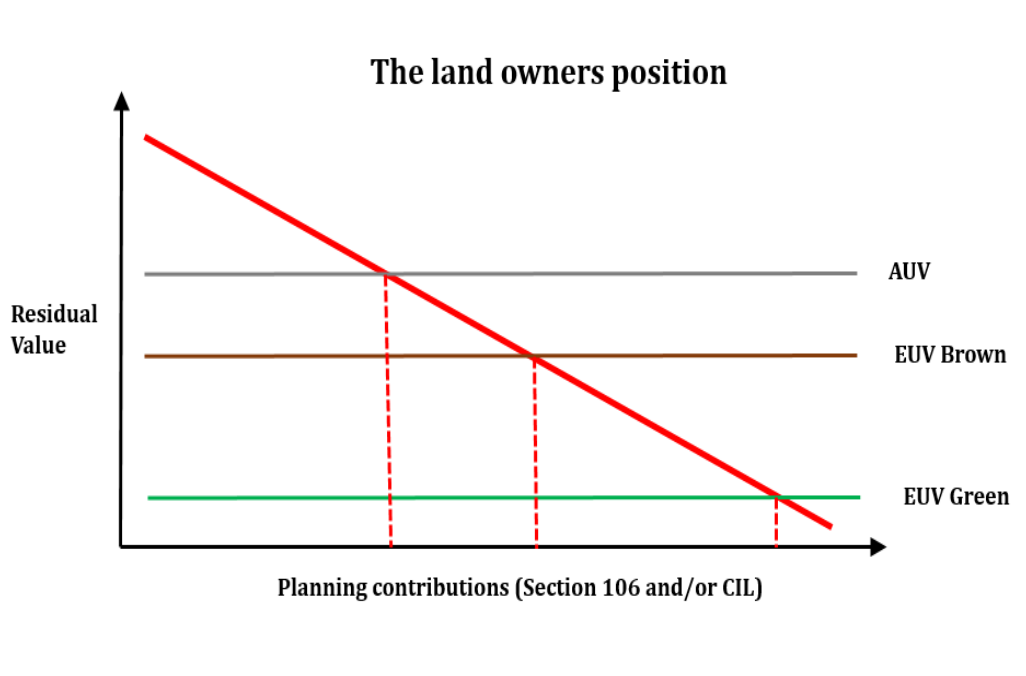
2.2 Once CIL or Section 106 contributions have been deducted from the gross residual value, a ‘net’ residual value results. The question is then whether this net residual value is sufficient in terms of development value relative to the site in its current use.



2.3 Calculating what is likely to be the value of a site given a specific planning permission, is only one factor in deciding what is viable.

Land owner considerations

2.4 A site is extremely unlikely to proceed where the costs of a proposed scheme exceed the revenue. However, simply having a positive residual value does not guarantee in itself, that development happens. The existing use value (EUV) of the site, and a realistic alternative use value (AUV) for a site (e.g. commercial) will also play a role in the mind of the land owner in deciding whether to bring a site forward for new development.



2.5 The diagram above shows how this operates. The land owner will always be concerned to ensure that residual value clears the relevant land value benchmark, which is usually the existing use value for the site. In the case of green field site, the EUV will be agricultural land; in the case of a brown field site, usually industrial land or property.

The Revised NPPF (February 2019) and viability

2.6 Paragraph 57 of the NPPF states that all viability assessments including those undertaken at the plan-making stage, should reflect the recommended approach in national planning guidance, including standardised inputs. Updated national guidance in the NPPG (July

2018) on viability has been published since the baseline viability report of 2017 which sets out the standardised approach. Table 1 shows how this standardised approach has been followed in this Study. Paragraphs 013 & 014 of the revised NPPG are very clear that the land value benchmark should be based on existing use value (EUV). It states:

‘EUV is the value of the land in its existing use together with the right to implement any development for which there are policy compliant extant planning consents, including realistic deemed consents, but without regard to alternative uses.’

2.7 The NPPG further states:

‘Existing use value is not the price paid and should disregard hope value.’

This represents a key shift away from previous guidance (e.g. that of the RICS) which recommended a ‘market value’ approach.

2.8 The NPPG allows for a premium over and above EUV to incentivise the land owner to bring the site forward. It states in paragraph 016:

‘The premium (or the ‘plus’ in EUV+) is the second component of benchmark land value. It is the amount above existing use value (EUV) that goes to the landowner. The premium should provide a reasonable incentive for a land owner to bring forward land for development while allowing a sufficient contribution to comply with policy requirements.’

Table 1 sets out the broad parameters of the NPPF/G with respect to viability.

Table 1

NPPG Para	Requirement	Addressed At
001	Proportionate assessment of viability that takes into account all relevant policies, and local and national standards including cost implications of CIL and S106.	Para 3.8, Sections 3, 4 & 5 and Appendix 2

003	<p>Plan makers can use site typologies to determine viability at the plan making stage.</p> <p>In some circumstances more detailed assessments may be necessary for particular areas or key sites on which the delivery of the plan relies.</p>	<p>Section 3</p> <p>Sections 4 & 5</p>
005	<p>Important to consider the specific circumstances of strategic sites.</p>	<p>Sections 4 & 5</p>
006	<p>Plan makers should engage with landowners, developers and infrastructure and affordable housing providers.</p>	<p>Undertaken in 2017</p>
011	<p>Gross Development Value (GDV)...For residential development may be total sales and/or capitalised net rental income. For commercial development broad assessment of value in line with industry practice.</p> <p>For broad-area wide or site typology assessment at the plan making stage average figures can be used.</p> <p>For specific sites or development, market evidence from the actual site or from existing developments can be used.</p>	<p>Section 3</p> <p>Section 3</p> <p>Section 4 & 5</p>
012	<p>Costs should be identified at plan making stage. Costs include</p> <p>Build costs</p> <p>Infrastructure costs and costs for external works</p> <p>Abnormal costs</p> <p>Site specific infrastructure</p> <p>Policy requirements</p>	

	General finance costs Professional, project management, sales, marketing and legal Contingency where scheme specific assessment is necessary	
014	Benchmark land value should: Be based on EUV Allow for a premium Reflect development costs Be informed by market evidence	Sections 3, 4 & 5
015	EUV can be established...by assessing the value of the specific site or type of site using published sources of information such as agricultural or industrial land values or if appropriate capitalised rental levels at an appropriate yield.	Sections 3,4 & 5
016	Plan makers should establish a reasonable premium to the landowner for the purpose of assessing viability	Sections 3, 4 & 5
018	For the purpose of plan making an assumption of 15-20% of GDV may be considered a suitable return to developers. A lower figure may be more appropriate for affordable housing.	Sections 3, 4 & 5
020	An Executive Summary should be used to set out key findings of a viability assessment in a clear way.	Section 6

Significance of the revised NPPF for viability and planning for housing

2.9 The revised NPPF and NPPG represent a watershed in the approach to viability. With the revised basis now EUV, the government has shifted the approach squarely back to the roots of the planning system and to the heart of the Section 106 process itself.

2.10 This (the Section 106 process) was always intended to capture planning gain and the increase in land value that emanates from the grant of planning permission. Indeed, there are numerous government statements and studies now attempting to re-focus the purpose of planning to this end.

2.11 A recent example is from the Letwin Review:

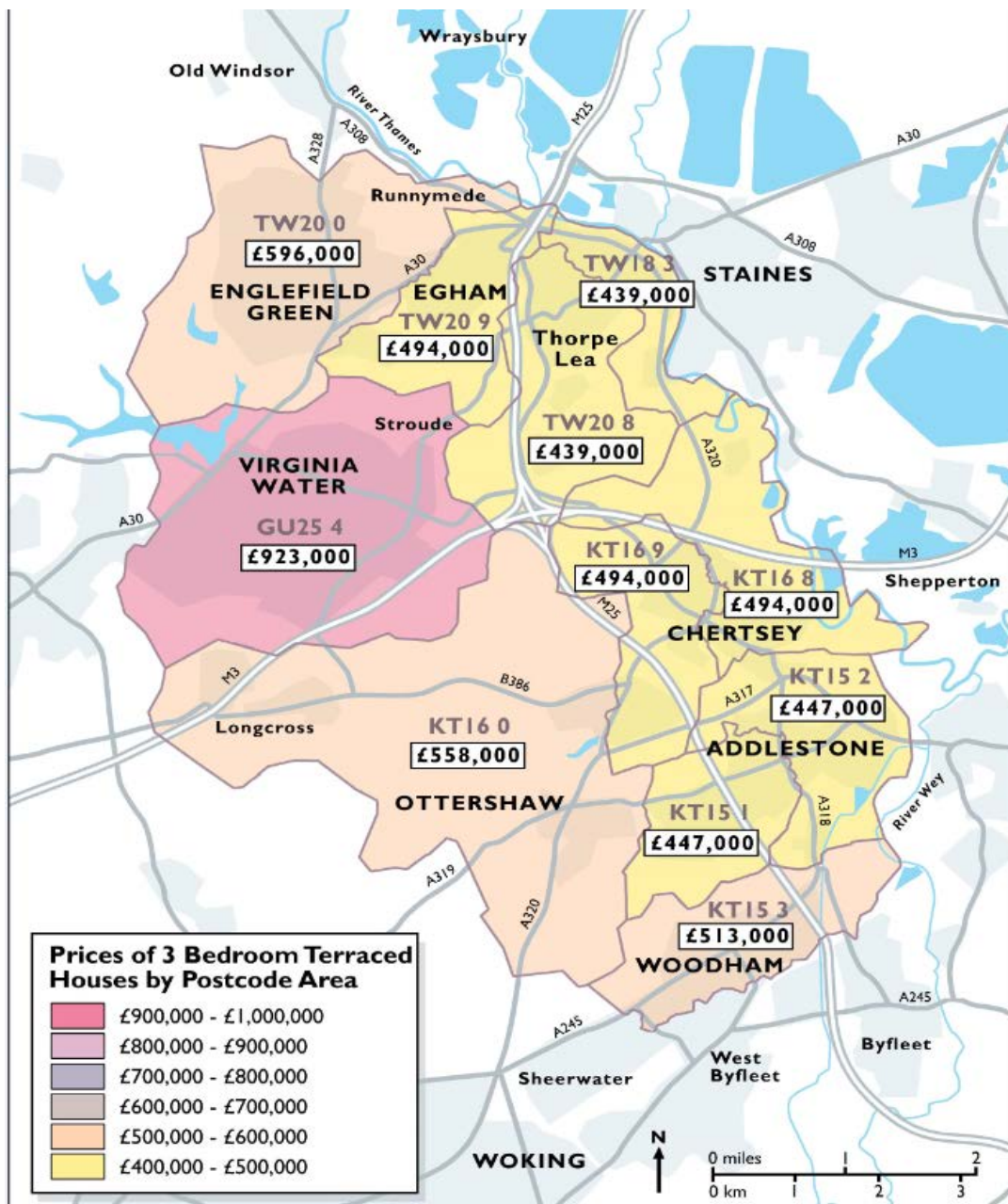
<https://www.planningresource.co.uk/article/1496790/letwin-review-to-recommend-land-value-capture-measures>

3 High Level Testing (HLT)

3.1 The Baseline Viability Report (January 2017) undertook what is known as 'High Level Testing' to assess the viability of a notional one hectare site, across a range of sub markets in the Borough.

3.2 The sub markets are shown in Map 1 below with the main impacts being felt in the Chertsey and Ottershaw areas.

Map 1 Sub Market areas



3.3 The analysis set out in the Baseline Viability Report takes the revenue for the notional one hectare site and considers the costs of development to arrive at a residual value. The approach is set out in full in Section 3 of the baseline report of 2017.

3.4 This updated analysis included in this Study looks at two different densities of potential housebuilding on new development sites; 30 and 40 dwellings per hectare, two medium densities reflecting family type housing. It also takes into account updated indicative new build selling prices as well as increased construction costs, since 2017.

Over the period house prices across Runnymede have fallen by around 3%.

3.5 The full assumptions used in the Update Study are set out in Appendix 1. The results are set out in the Table 2 below.

3.6 As in the baseline report of January 2017, the residual values here are very significant. At the top end (Wentworth) the residual values per hectare range between £16 and £23 million per hectare. At the lower end (Staines border) residual values per hectare range between £2 and £3 million.

Table 2

	RV per Hectare
30 dph	
Wentworth	£16,378,000
Virginia Water	£6,831,000
Englefield Green	£4,727,000
Ottershaw	£4,166,000
Woodham	£3,476,000
Chertsey	£3,190,000
Egham	£3,174,000
Addlestone	£2,475,000
Staines	£2,417,000
40 dph	
Wentworth	£22,590,000
Virginia Water	£9,802,000
Englefield Green	£6,526,000
Ottershaw	£5,753,000
Woodham	£4,810,000
Chertsey	£4,421,000
Egham	£4,397,000
Addlestone	£3,442,000
Staines	£3,271,000

3.7 It is important to stress that the residual values shown take account of:

- 35% Affordable Housing in line with the Council's policy;

- A Section 106 contribution over and above Affordable Housing of £25,000 per dwelling reflecting the full range of the Council's other policy requirements and in particular sustainable design and renewable energy costs at £10,000 per dwelling.
 - An allowance of 15% on construction costs for servicing of sites with all necessary utilities and external works.
- 3.8 The question for the Study is whether there is the potential for development sites to contribute reasonably and proportionately towards the costs associated with the A320 mitigation works required in association with development being allocated in the Local Plan whilst also meeting the full range of affordable housing and Section 106 costs in the Council's policies.
- 3.9 Set out below in Table 3 is an indication of the surpluses that would be available to contribute towards the A320 mitigation works.
- 3.10 Table 3 below shows the existing use value (EUV) for commercial land which the Council believe to be a 'fair marker' for the Borough given that many sites are being developed from brown field land.

Table 3 Surpluses per hectare and per dwelling

	RV per Hectare	Commercial land	Surplus	Surplus
		EUV (Per Hectare)	(RV - EUV)	(RV - EUV)
			Per Hectare	Per Dwelling
30 dph				
Wentworth	£16,378,000	£2,000,000	£14,378,000	£479,267
Virginia Water	£6,831,000	£2,000,000	£4,831,000	£161,033
Englefield Green	£4,727,000	£2,000,000	£2,727,000	£90,900
Ottershaw	£4,166,000	£2,000,000	£2,166,000	£72,200
Woodham	£3,476,000	£2,000,000	£1,476,000	£49,200
Chertsey	£3,190,000	£2,000,000	£1,190,000	£39,667
Egham	£3,174,000	£2,000,000	£1,174,000	£39,133
Addlestone	£2,475,000	£2,000,000	£475,000	£15,833
Staines	£2,417,000	£2,000,000	£417,000	£13,900
40 dph				
Wentworth	£22,590,000	£2,000,000	£20,590,000	£514,750
Virginia Water	£9,802,000	£2,000,000	£7,802,000	£195,050
Englefield Green	£6,526,000	£2,000,000	£4,526,000	£113,150
Ottershaw	£5,753,000	£2,000,000	£3,753,000	£93,825
Woodham	£4,810,000	£2,000,000	£2,810,000	£70,250
Chertsey	£4,421,000	£2,000,000	£2,421,000	£60,525
Egham	£4,397,000	£2,000,000	£2,397,000	£59,925
Addlestone	£3,442,000	£2,000,000	£1,442,000	£36,050
Staines	£3,271,000	£2,000,000	£1,271,000	£31,775

3.11 The surpluses for both a per hectare and a per dwelling basis are shown in the right hand columns of the table.

3.12 On a per dwelling basis, the surpluses range from circa £14,000 per dwelling to circa £480,000 per dwelling if sites are developed at 30 dph and from circa £32,000 per dwelling to circa £515,000 per dwelling if sites are developed at 40 dph.

3.13 These are all very substantial surpluses and the Study is therefore able to conclude that the Council could look to fund the road costs substantially from development.

Key sites analysis

3.14 In terms of assessing the potential for development to deliver additional infrastructure, it is important to look at the key strategic sites in the Plan.

3.15 The Council's A320 North HIF bid identifies 11 development sites which are principally linked with the road construction works. Two of these sites have already been granted permission and are not considered further in this Study, however the Council has requested

that the commercial sites at Byfleet Road and Addlestone West are also tested.

These are:

Pycroft Road, Chertsey (Policy SL6)	- 275 dwellings;
Vets Lab Parcel B (Policy SL11)	- 150 dwellings;
Ottershaw East (Policy SL12)	- 200 dwellings;
Chertsey Bittams A (Policy SL14)	- 175 dwellings;
Chertsey Bittams B (Policy SL15)	- 120 dwellings;
Chertsey Bittams C (Policy SL16)	- 9 dwellings;
Chertsey Bittams D (Policy SL17)	- 125 dwellings;
Chertsey Bittams E (Policy SL18)	- 75 dwellings;
Longcross Garden Village	- (Policy SD10) – see section 5;

Viability assumptions

- 3.16 The assumptions used for the site specific analysis are based principally on those set out in the high level testing including the BCIS construction costs (with related adjustments), indicative new build values, and site specific infrastructure loading as estimated by the Council in Appendices 1 & 2.
- 3.17 The Council has also provided specific anticipated development mixes for each of the sites tested. These are also set out in Appendix 2.

4 Site analyses

Pycroft Road Chertsey (Policy SL6)

- 4.1 This site is located on the western side of Chertsey and is formed from four parcels of land at Chilsey Green Farm, Grange Farm, Grange Farm Retirement Home and St Ann's Lodge. The land is bordered to the north by Pycroft Road, to the south and east by existing housing and to the north and west by commercial development.

TOTAL NUMBER OF UNITS		DENSITY (per hectare)		AFFORDABLE UNITS		
Dwellings	275	Dwellings	39.0		Quantity	% of All Units
% Wheelchair Units				Total	96.3	35%
				Social rent	19.3	7%
				Intermediate	77.0	28%

REVENUE AND COSTS		RESIDUAL VALUE	
Total scheme revenue	£ 113,684,093	Whole scheme	£ 34,154,093
Total scheme costs	£ 79,530,000	Per hectare	£ 4,838,000
		Per dwelling	£ 124,000
		Per market dwelling	£ 191,000

CONTRIBUTION TO REVENUE FROM:		PUBLIC SUBSIDY (GRANT)	
Market housing	£ 95,293,000	Whole Scheme	£ -
Affordable Housing	£ 18,391,093	Per Social Rental dwelling	£ -
- Social rent	£ 1,540,000	Per New Build HomeBuy dwelling	£ -
- New Build HomeBuy	£ 3,844,000	Per Intermediate Rent dwelling	£ -
- Intermediate Rent	£ 7,425,000		
- Discount Market	£ 3,519,000		
- Local Sale	£ 2,063,000		
Capital Contribution	£ -		
Commercial Elements	£ -		

CONTRIBUTION TO COSTS FROM:		ALTERNATIVE SITE VALUES		Against residual
Market housing	£ 55,200,000	Existing Use Value	£ -	£ -
Affordable Housing	£ 18,860,000	Acquisition Cost	£ -	£ -
- Social rent	£ 3,568,000	Alternative Use Value 1	£ -	£ -
- New Build HomeBuy	£ 2,039,000	Alternative Use Value 2	£ -	£ -
- Intermediate Rent	£ 9,176,000	Alternative Use Value 3	£ -	£ -
- Discount Market	£ 2,548,000			
- Local Sale	£ 1,529,000			
Land Finance	£ -			
Planning Obligations	£ 4,970,000			
Total Exceptional Costs	£ 500,000			
Commercial Elements	£ -			

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- 4.2 The scheme generates a residual value of circa £35 million at 35% Affordable Housing, and with a Section 106 requirement (over and above Affordable Housing) of £18,071 per dwelling.
- 4.3 The existing use value of the land is largely garden/agricultural has EUV of circa £130,000. There are also three residential properties within the area which will increase the EUV, probably in excess of £2 million. Nevertheless the uplift even including the residential properties is very significant and will generate very large surplus for local infrastructure.

Vets Lab Parcel B (Policy SL11)

- 4.4 This site forms part of the Veterinary Laboratory site adjacent to the urban area of Row Town. The site itself is owned by DEFRA and is undeveloped. To the east of the site lies a strip of trees protected by a Tree Preservation Order, and the western boundary is formed by open fields and houses on Old Road. The southern boundary

comprises open fields, which are associated with DEFRA owned land, and to the north are houses on Leigh Close.

4.5 The scheme includes two traveller pitches.

TOTAL NUMBER OF UNITS		DENSITY (per hectare)		AFFORDABLE UNITS		
Dwellings	150	Dwellings	41.0		Quantity	% of All Units
% Wheelchair Units				Total	52.5	35%
				Social rent	10.5	7%
				Intermediate	42.0	28%

REVENUE AND COSTS		RESIDUAL VALUE	
Total scheme revenue	£ 48,578,700	Whole scheme	£ 9,088,700
Total scheme costs	£ 39,490,000	Per hectare	£ 2,483,000
		Per dwelling	£ 61,000
		Per market dwelling	£ 93,000

CONTRIBUTION TO REVENUE FROM:		PUBLIC SUBSIDY (GRANT)	
Market housing	£ 39,231,000	Whole Scheme	£ -
Affordable Housing	£ 9,347,700	Per Social Rental dwelling	£ -
- Social rent	£ 840,000	Per New Build HomeBuy dwelling	£ -
- New Build HomeBuy	£ 1,884,000	Per Intermediate Rent dwelling	£ -
- Intermediate Rent	£ 4,050,000		
- Discount Market	£ 1,449,000		
- Local Sale	£ 1,125,000		
Capital Contribution	£ -		
Commercial Elements	£ -		

CONTRIBUTION TO COSTS FROM:		ALTERNATIVE SITE VALUES		AGAINST RESIDUAL
Market housing	£ 26,080,000	Existing Use Value	£ -	£ -
Affordable Housing	£ 10,540,000	Acquisition Cost	£ -	£ -
- Social rent	£ 2,042,000	Alternative Use Value 1	£ -	£ -
- New Build HomeBuy	£ 1,167,000	Alternative Use Value 2	£ -	£ -
- Intermediate Rent	£ 5,252,000	Alternative Use Value 3	£ -	£ -
- Discount Market	£ 1,204,000			
- Local Sale	£ 875,000			
Land Finance	£ -			
Planning Obligations	£ 2,669,000			
Total Exceptional Costs	£ 200,000			
Commercial Elements	£ -			

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4.6 The scheme generates a residual value of circa £9 million at 35% Affordable Housing, and with a Section 106 requirement (over and above Affordable Housing) of £17,796 per dwelling.

4.7 The current use value of this site equates to agricultural at around £87,000 which with a x20 premium gives a BLV of £1.74m, well below RLV.

Ottershaw East (Policy SL12)

4.8 This is a site located to the south east of Ottershaw. The site is planned for 200 dwellings on green field land. The site is 6.6 hectares in total and a high quality development is proposed.

4.9 The scheme includes two traveller pitches.

TOTAL NUMBER OF UNITS		DENSITY (per hectare)		AFFORDABLE UNITS		
Dwellings	200	Dwellings	33.5			
% Wheelchair Units						
				Total	70.0	35%
				Social rent	24.0	12%
				Intermediate	46.0	23%
REVENUE AND COSTS		RESIDUAL VALUE				
Total scheme revenue	£ 79,111,849	Whole scheme	£ 28,572,849			
Total scheme costs	£ 50,539,000	Per hectare	£ 4,786,000			
		Per dwelling	£ 143,000			
		Per market dwelling	£ 220,000			
Contribution to revenue from:		PUBLIC SUBSIDY (GRANT)				
Market housing	£ 68,547,000	Whole Scheme	£ -			
Affordable Housing	£ 10,564,849	Per Social Rental dwelling	£ -			
- Social rent	£ 1,920,000	Per New Build HomeBuy dwelling	£ -			
- New Build HomeBuy	£ 1,410,000	Per Intermediate Rent dwelling	£ -			
- Intermediate Rent	£ 3,750,000					
- Discount Market	£ 1,735,000					
- Local Sale	£ 1,750,000					
Capital Contribution	£ -					
Commercial Elements	£ -					
Contribution to costs from:		Alternative Site Values		Against residual		
Market housing	£ 37,030,000	Existing Use Value	£ -	£ -		
Affordable Housing	£ 9,210,000	Acquisition Cost	£ -	£ -		
- Social rent	£ 3,258,000	Alternative Use Value 1	£ -	£ -		
- New Build HomeBuy	£ 762,000	Alternative Use Value 2	£ -	£ -		
- Intermediate Rent	£ 3,183,000	Alternative Use Value 3	£ -	£ -		
- Discount Market	£ 1,245,000					
- Local Sale	£ 762,000					
Land Finance	£ -					
Planning Obligations	£ 4,099,000					
Total Exceptional Costs	£ 200,000					
Commercial Elements	£ -					

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4.10 The scheme generates a residual value of circa £29 million at 35% Affordable Housing, and with a Section 106 requirement (over and above Affordable Housing) of £20,495 per dwelling.

4.11 The current use value of this site equates to agricultural at around £122,000 with a x 20 premium giving a BLV of £2.44m, well below RLV

Chertsey Bittams (Policies SL14, SL15, SL16, SL17 and SL18)

4.12 The Bittams sites will deliver effective infill development between (to the south) St Peter’s Way, to the east (the M25) and to the west (Guildford Road). All sites are predominantly green field and thus have a very low existing use value.

Chertsey Bittams A includes five traveller pitches;

Chertsey Bittams B includes two traveller pitches;

Chertsey Bittams C includes 11 traveller pitches;

Chertsey Bittams A (Policy SL14)

TOTAL NUMBER OF UNITS		DENSITY (per hectare)		AFFORDABLE UNITS		
Dwellings	175	Dwellings	38.1		Quantity	% of All Units
% Wheelchair Units				Total	61.0	35%
				Social rent	21.0	12%
				Intermediate	40.0	23%

REVENUE AND COSTS		RESIDUAL VALUE	
Total scheme revenue	£ 62,060,750	Whole scheme	£ 19,774,750
Total scheme costs	£ 42,286,000	Per hectare	£ 4,308,000
		Per dwelling	£ 113,000
		Per market dwelling	£ 173,000

CONTRIBUTION TO REVENUE FROM:		PUBLIC SUBSIDY (GRANT)	
Market housing	£ 53,123,000	Whole Scheme	£ -
Affordable Housing	£ 8,937,750	Per Social Rental dwelling	£ -
- Social rent	£ 1,680,000	Per New Build HomeBuy dwelling	£ -
- New Build HomeBuy	£ 1,102,000	Per Intermediate Rent dwelling	£ -
- Intermediate Rent	£ 3,300,000		
- Discount Market	£ 1,356,000		
- Local Sale	£ 1,500,000		
Capital Contribution	£ -		
Commercial Elements	£ -		

CONTRIBUTION TO COSTS FROM:		Alternative Site Values		Against residual
Market housing	£ 30,834,000	Existing Use Value	£ -	£ -
Affordable Housing	£ 8,059,000	Acquisition Cost	£ -	£ -
- Social rent	£ 2,876,000	Alternative Use Value 1	£ -	£ -
- New Build HomeBuy	£ 668,000	Alternative Use Value 2	£ -	£ -
- Intermediate Rent	£ 2,800,000	Alternative Use Value 3	£ -	£ -
- Discount Market	£ 1,047,000			
- Local Sale	£ 668,000			
Land Finance	£ -			
Planning Obligations	£ 2,893,000			
Total Exceptional Costs	£ 500,000			
Commercial Elements	£ -			

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4.13 The scheme generates a residual value of circa £20 million at 35% Affordable Housing, and with a Section 106 requirement (over and above Affordable Housing) of £16,529 per dwelling.

4.14 The current use value of this site equates to agricultural at around £129,500. Assuming a 20 fold return this would give a LVB of £2.6 million, again generating a very large surplus between existing use and residential.

Chertsey Bittams B (Policy SL15)

TOTAL NUMBER OF UNITS		DENSITY (per hectare)		AFFORDABLE UNITS		
Dwellings	120	Dwellings	35.0		Quantity	% of All Units
% Wheelchair Units				Total	42.0	35%
				Social rent	14.0	12%
				Intermediate	28.0	23%

REVENUE AND COSTS		RESIDUAL VALUE	
Total scheme revenue	£ 42,619,125	Whole scheme	£ 13,496,125
Total scheme costs	£ 29,123,000	Per hectare	£ 3,935,000
		Per dwelling	£ 112,000
		Per market dwelling	£ 173,000

Contribution to revenue from:		PUBLIC SUBSIDY (GRANT)	
Market housing	£ 36,401,000	Whole Scheme	£ -
Affordable Housing	£ 6,218,125	Per Social Rental dwelling	£ -
- Social rent	£ 1,120,000	Per New Build HomeBuy dwelling	£ -
- New Build HomeBuy	£ 918,000	Per Intermediate Rent dwelling	£ -
- Intermediate Rent	£ 2,250,000		
- Discount Market	£ 930,000		
- Local Sale	£ 1,000,000		
Capital Contribution	£ -		
Commercial Elements	£ -		

Contribution to costs from:		Alternative Site Values		Against residual
Market housing	£ 21,133,000	Existing Use Value	£ -	£ -
Affordable Housing	£ 5,536,000	Acquisition Cost	£ -	£ -
- Social rent	£ 1,876,000	Alternative Use Value 1	£ -	£ -
- New Build HomeBuy	£ 574,000	Alternative Use Value 2	£ -	£ -
- Intermediate Rent	£ 1,923,000	Alternative Use Value 3	£ -	£ -
- Discount Market	£ 711,000			
- Local Sale	£ 452,000			
Land Finance	£ -			
Planning Obligations	£ 1,954,000			
Total Exceptional Costs	£ 500,000			
Commercial Elements	£ -			

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4.15 The scheme generates a residual value of circa £20 million at 35% Affordable Housing, and with a Section 106 requirement (over and above Affordable Housing) of £16,283 per dwelling.

4.16 The current use value of this site equates to agricultural at around £72,000, and at a 20 fold return to land owner, £1.4 million. The RV is £13.5 million, well above the LVB.

Chertsey Bittams C (Policy SL16)

TOTAL NUMBER OF UNITS		DENSITY (per hectare)		AFFORDABLE UNITS	
Dwellings	9	Dwellings	9.5		
% Wheelchair Units				Quantity	% of All Units
				Total	
				Social rent	
				Intermediate	
REVENUE AND COSTS		RESIDUAL VALUE			
Total scheme revenue	£ 4,454,000	Whole scheme	£ 627,000		
Total scheme costs	£ 3,827,000	Per hectare	£ 660,000		
		Per dwelling	£ 70,000		
		Per market dwelling	£ 70,000		
Contribution to revenue from:		PUBLIC SUBSIDY (GRANT)			
Market housing	£ 4,454,000	Whole Scheme	£ -		
Affordable Housing	£ -	Per Social Rental dwelling	£ -		
- Social rent	£ -	Per New Build HomeBuy dwelling	£ -		
- New Build HomeBuy	£ -	Per Intermediate Rent dwelling	£ -		
- Intermediate Rent	£ -				
- Discount Market	£ -				
- Local Sale	£ -				
Capital Contribution	£ -				
Commercial Elements	£ -				
Contribution to costs from:		Alternative Site Values		Against residual	
Market housing	£ 2,555,000	Existing Use Value	£ -	£ -	
Affordable Housing	£ -	Acquisition Cost	£ -	£ -	
- Social rent	£ -	Alternative Use Value 1	£ -	£ -	
- New Build HomeBuy	£ -	Alternative Use Value 2	£ -	£ -	
- Intermediate Rent	£ -	Alternative Use Value 3	£ -	£ -	
- Discount Market	£ -				
- Local Sale	£ -				
Land Finance	£ -				
Planning Obligations	£ 173,000				
Total Exceptional Costs	£ 1,100,000				
Commercial Elements	£ -				

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4.17 The scheme generates a residual value of circa £0.6 million at 0% Affordable Housing, and with a Section 106 requirement (over and above Affordable Housing) of £19,200 per dwelling.

4.18 The current use value of this site equates to agricultural at around £24,000, which, with a 20 fold return to land owner, generates a LVB of some £0.48 million.

Chertsey Bittams D (Policy SL17)

TOTAL NUMBER OF UNITS		DENSITY (per hectare)		AFFORDABLE UNITS		
Dwellings	125	Dwellings	47.3		Quantity	% of All Units
% Wheelchair Units				Total	44.0	35%
				Social rent	15.0	12%
				Intermediate	29.0	23%

REVENUE AND COSTS		RESIDUAL VALUE	
Total scheme revenue	£ 43,963,125	Whole scheme	£ 14,408,125
Total scheme costs	£ 29,555,000	Per hectare	£ 5,458,000
		Per dwelling	£ 115,000
		Per market dwelling	£ 178,000

CONTRIBUTION TO REVENUE FROM:		PUBLIC SUBSIDY (GRANT)	
Market housing	£ 37,515,000	Whole Scheme	£ -
Affordable Housing	£ 6,448,125	Per Social Rental dwelling	£ -
- Social rent	£ 1,200,000	Per New Build HomeBuy dwelling	£ -
- New Build HomeBuy	£ 918,000	Per Intermediate Rent dwelling	£ -
- Intermediate Rent	£ 2,400,000		
- Discount Market	£ 930,000		
- Local Sale	£ 1,000,000		
Capital Contribution	£ -		
Commercial Elements	£ -		

CONTRIBUTION TO COSTS FROM:		Alternative Site Values		Against residual
Market housing	£ 21,785,000	Existing Use Value	£ -	£ -
Affordable Housing	£ 5,821,000	Acquisition Cost	£ -	£ -
- Social rent	£ 2,042,000	Alternative Use Value 1	£ -	£ -
- New Build HomeBuy	£ 574,000	Alternative Use Value 2	£ -	£ -
- Intermediate Rent	£ 2,042,000	Alternative Use Value 3	£ -	£ -
- Discount Market	£ 711,000			
- Local Sale	£ 452,000			
Land Finance	£ -			
Planning Obligations	£ 1,949,000			
Total Exceptional Costs	£ -			
Commercial Elements	£ -			

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4.19 The scheme generates a residual value of circa £14 million at 35% Affordable Housing, and with a Section 106 requirement (over and above Affordable Housing) of £16,595 per dwelling.

4.20 The current use value of this site equates to agricultural at around £53,000. Assuming a 20 fold return to land owner, the LVB will be circa £1 million.

Chertsey Bittams E (Policy SL18)

TOTAL NUMBER OF UNITS		DENSITY (per hectare)		AFFORDABLE UNITS		
Dwellings	75	Dwellings	42.6		Quantity	% of All Units
% Wheelchair Units				Total	26.0	35%
				Social rent	9.0	12%
				Intermediate	17.0	23%

REVENUE AND COSTS		RESIDUAL VALUE	
Total scheme revenue	£ 26,802,875	Whole scheme	£ 9,066,875
Total scheme costs	£ 17,736,000	Per hectare	£ 5,152,000
		Per dwelling	£ 121,000
		Per market dwelling	£ 185,000

Contribution to revenue from:		PUBLIC SUBSIDY (GRANT)	
Market housing	£ 23,006,000	Whole Scheme	£ -
Affordable Housing	£ 3,796,875	Per Social Rental dwelling	£ -
- Social rent	£ 720,000	Per New Build HomeBuy dwelling	£ -
- New Build HomeBuy	£ 551,000	Per Intermediate Rent dwelling	£ -
- Intermediate Rent	£ 1,350,000		
- Discount Market	£ 426,000		
- Local Sale	£ 750,000		
Capital Contribution	£ -		
Commercial Elements	£ -		

Contribution to costs from:		Alternative Site Values		Against residual
Market housing	£ 13,339,000	Existing Use Value	£ -	£ -
Affordable Housing	£ 3,339,000	Acquisition Cost	£ -	£ -
- Social rent	£ 1,216,000	Alternative Use Value 1	£ -	£ -
- New Build HomeBuy	£ 311,000	Alternative Use Value 2	£ -	£ -
- Intermediate Rent	£ 1,165,000	Alternative Use Value 3	£ -	£ -
- Discount Market	£ 336,000			
- Local Sale	£ 311,000			
Land Finance	£ -			
Planning Obligations	£ 1,059,000			
Total Exceptional Costs	£ -			
Commercial Elements	£ -			

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4.21 The scheme generates a residual value of circa £9 million at 35% Affordable Housing, and with a Section 106 requirement (over and above Affordable Housing) of £14,118 per dwelling.

4.22 The current use value of this site equates to agricultural at around £44,000, giving a LVB (20 fold agricultural) of circa £900,000.

Summary of results

4.27 Table 4 over page summarises the results of the updated analysis for key sites:

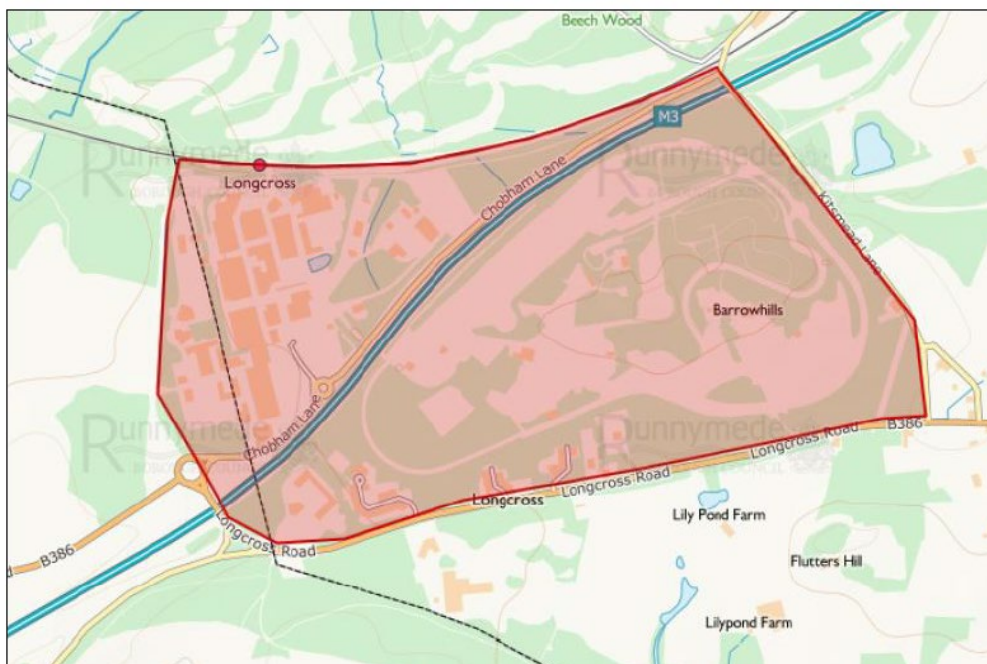
Table 4 Results

	Residual Value	Affordable	S106	EUV	Multiple	Surplus	No of Dwellings	Surplus
		Housing	Other		Agricultural	(RV - EUV)		(RV - EUV)
		(%)	Contributions		(where applic)	Per Hectare		Per Dwelling
			(Per Dwelling)		(X20)			
Chilsey Farm	£34,154,000	35	£18,071	£2,100,000	£2,100,000	£32,054,000	275	£116,560
Vets Lab Site	£9,088,700	35	£17,796	£87,000	£1,740,000	£7,348,700	150	£48,991
Ottershaw East	£28,572,849	35	£20,495	£122,000	£2,440,000	£26,132,849	200	£130,664
CB A	£19,774,700	35	£16,529	£129,500	£2,590,000	£17,184,700	175	£98,198
CB B	£13,496,125	35	£16,283	£72,000	£1,440,000	£12,056,125	120	£100,468
CB C	£627,000	35	£19,200	£24,000	£480,000	£147,000	9	£16,333.33
CB D	£14,408,125	35	£16,595	£53,000	£1,060,000	£13,348,125	125	£106,785
CB E	£9,088,875	35	£14,118	£44,000	£880,000	£8,208,875	75	£109,451.67

- 4.28 The site specific analysis suggests, consistent with the high level testing, that significant surpluses are likely to be generated in association with development.
- 4.29 The level of surplus generated provides considerable scope for development to contribute reasonably and proportionately towards the costs of highway mitigation works proposed for the A320.

5 Longcross Garden Village

- 5.1 A key site in the delivery of the Council's housing development and associated commercial property is the Longcross Garden Village (LGV) site. This site is underway but the Council wishes to know, in the light of the potential additional works to the A320 whether there is scope for this site to make further contributions. This report reflects several stages of progress towards reaching agreement on viability including an initial analysis by AGA, updating of policy requirements by RBC (as of August 2019), a meeting between the viability consultants for Crest, AGA and the Council, and further exchanges of data and information between AGA and Crest. This report does not reflect a final viability outcome, but attempts to demonstrate at examination, the key issues affecting policy, delivery and competitive return.
- 5.2 The site is split into two areas, North and South Longcross, separated by the M3 Motorway:



- 5.3 The AECOM feasibility report (December 2017) states that the 'north site covers 40.5 ha and is masterplanned for approximately 200 homes and 79,000 sq.m of employment space plus a 36,000sq.m data centre. Planning permission was granted in 2014 for the first phase of 108 of the 200 homes, the construction of which has already

begun. This initial phase of the development began prior to Longcross's designation as a Garden Village. Applications for the second phase have now been approved for 88 homes, 16,765sqm of B1a office floorspace and a focal/'Discovery' building of 1,265 sqm comprising a mix of A1-A5, B1, D1 & D2 uses.

5.4 The larger, southern section of the site (82.5ha adjacent to the M3 motorway) has currently been masterplanned to the level of a site-wide development framework, which the developer published in 2012 (also prior to Garden Village designation). Crest, as the site promoter, are proposing some 1360 dwellings for this part of the site along with commercial units. The north and south sites will be linked over the motorway via two pedestrian-vehicle bridges.'

5.5 The indicative masterplan for the south part of the site is shown below:



5.6 The Council estimates that the site yields 72.3 hectares of net developable area.

5.7 The Council's Locally Led Garden Villages Expression of Interest bid document states that the site forming the village 'is the former

Defence Establishment Research Agency (DERA) site, now in use as film studios and which is a previously or partially previously developed site in the Green Belt. There are two distinct parcels of land which form the former DERA site which are bisected by the M3 motorway’.

The economics of the northern part of the site are not assessed here. It is understood that there is additional development for the private rented sector, with some 240 dwellings proposed. The precise viability will need to be dealt with separately. The NPPF makes provision for a separate analysis of private rented versus open market sales approach. However, at face value, I can’t see why these units would necessarily generate a significantly different outcome in terms of the Section 106 contribution to that on the south site. This statement is of course subject to further analysis.

- 5.8 The Council has looked at a range of options for phasing the south part of the site with which this section of the report is concerned. . Initially two main options were considered:

Option 1:

Between 2023/4 to 2025/6
Between 2026/7 to 2028/9
Between 2029/30 and 2031/2.

Option 2:

Between 2023/4 to 2025/6
Between 2026/7 to 2028/9
2029/30.

- 5.9 It was subsequently agreed however that the trajectory for delivery should reflect Crest’s expectations for the site as well as the Council’s Local Plan period. The revisions ensure that all units are delivered within the Plan period to 2030, as follows:

Year	Longcross South
2021/2022	50
2022/2023	150
2023/2024	150
2024/2025	170
2025/2026	175
2026/2027	175
2027/2028	150
2028/2029	150
2029/2030	150
Total	1320

5.10 The planned phasing is shown below and reflects the Council's updated requirements from 27th August 2019:

Phase	Expected Residential Completions	Other floorspace	Infrastructure Costs
2021/22 to 2023/24	350 dwellings 10 Travelling Showperson plots	A1 Foodstore – 500sqm A1-A5 Flexible – 500sqm A4 (Pub) – 770sqm B1 – 300sqm C2 – 3,700sqm care home (60 units of extra care) C1 – 150 bed 4* hotel	Off-site highway works £13.25m Longcross Station Improvements £10m Bus Service £0.88m M3 Bridge Improvements £1m On-site 2FE Primary School @ £9.3m Off-site secondary contribution @£2.09 Health £412,655 Community - £319k On-site SANG@£4.38m SAMB@£0.97m Sports/Playing Pitches - £1.91m Allotments - £89k Equipped Playspace - £1.35m Informal Playspace - £195k
2024/25 to 2026/27	520 dwellings	None	Off-site secondary contribution @£1.39m Health £275,103 Allotments - £89k Equipped Playspace - £0.89m

			Informal Playspace - £130k
2027/28 to 2029/30	450 dwellings	None	Off-site secondary contribution @£1.16m Health £229,253 Equipped Playspace - £0.75m Informal Playspace - £109k Stewardship of Community Assets £1m

5.11 Please note that the table above related initially to 1532 dwellings. I have brought forward the dates and dwelling trajectory to within the Plan period whilst maintaining the infrastructure planning as originally envisaged under the 1532 scheme. I don't believe that this makes a significant difference to the overall conclusions on viability although the figures are subject to further adjustment where agreed by all parties. The total contributions amount to £52.2 million.

5.12 The phasing assumes front loading of the commercial development on Longcross South, as well as a significant proportion of the infrastructure requirements on the site. The phasing of the dwellings is also highlighted.

Approach to viability assessment of the Longcross site

5.13 The approach to viability assessment here is in essence the same in principle to that for other sites. That is to say a residual development appraisal where costs are deducted from values and the residual then compared against the land value benchmark.

5.14 With sites that are to be phased, the NPPF allows for phasing to be taken into account, where 'front' or 'back' loading of development can be taken into account, alongside the possibility to make explicit assumptions about the development of values and costs over time. It is agreed with the applicants that the baseline appraisal should make the foundation for the viability appraisal, where values and costs are looked at in the current climate.

5.15 For the purposes of clarity I have used the GLA Toolkit which allows for both a 'static' or non-phased approach to be used, as well as the Discounting Function (DF), where the building programme is made explicit in the calculations.

5.16 The DF measures the flow of income and cost on a year by year basis and arrives, for each year, at an annual residual value. These

residuals are then discounted by a factor to reflect inflation or, for example the opportunity cost of money invested in a site. The DF then provides a net present value for the site which is the residual and hence what should be paid for the site.

- 5.17 If phasing is evened out on a year by year basis, and there are no cost or value inflation or deflation assumptions, then the DF provides the same residual as for the static model result.
- 5.18 By comparing the static result with the phased result it is possible to see how front loaded costs for example are impacting on overall viability. This is because the model adds finance costs where a particular year yields a deficit between values and costs, and adds interest to the finance where values exceed cost for any given year.
- 5.19 It is important to stress that the DF approach is sensitive to the assumptions made about changes in values and costs. Over the long run (since 1979), according to the Nationwide House Price index nationally, prices have risen at around 7% per annum, so while this is the historic position, this looks challenging in the current Brexit climate. Costs are more predictable and a 5% increase on an annual basis (RICS BCIS figures) looks a fair assumption.
- 5.20 The full approach using the DF is given in the GLA Toolkit Guidance Notes.

Key data input assumptions for the LGV site

Gross development value

- 5.21 The selling prices for the dwellings are subject to a number of factors including the location, the rate of sale and competition from other sites. This is difficult to assess precisely and the Council should monitor viability throughout the scheme. I have adopted the Ottershaw sub market indicative selling prices (as for the HLT). This is consistent with the AECOM approach in 2017. The site is not too far away from the Virginia Water sub market, where prices are significantly higher. However, this is a large site, and I can't see that prices will reach those being achieved in that (Virginia Water) location.
- 5.22 The table below summarises the prices on a per square metre basis from AGA's initial review, noting points raised by the developer.

Dwelling Type	Prices	Sq M	Price per Sq M	Prices - Mid Point	Sq M	Price per Sq M	Difference
	Ottershaw Sub Market			LGV North Sold Prices	Projected LGV South		
1 Bed Flats	£249,000	50	£4,980	£295,000	53	£5,577	89
2 Bed Flats	£355,000	68	£5,259	£387,000	72	£5,360	98
2 Bed Houses	£463,000	78	£5,974	£477,500	78	£6,153	97
3 Bed Houses	£548,000	91	£6,055	£630,000	103	£6,105	99
4 Bed Houses	£724,000	120	£6,033	£882,000	146	£6,033	100

5.23 The information provided by Crest has been summarised by taking a mid-point selling price from the development in North Longcross and dividing that by the proposed unit sizes for the dwellings on the south part of the site.

5.24 With the single exception of one bed flats, this shows a very close correlation between the Council's own Local Plan analysis (Ottershaw as the sub market) and the sales prices achieved at Longcross.

5.25 The table below sets out prices which AGA considers to reflect a fair position between Crest and the Council in terms of projected GDP:

Dwelling Types	Price per Sq M	Sq M	Selling Price
		Crest Phase 2	
1 Bed Flats	£5,577	53	£295,000
2 Bed Flats	£5,259	72	£379,719
3 Bed Flats	£5,500	185	£1,015,300
2 Bed Houses	£5,974	78	£463,597
3 Bed Houses	£6,055	103	£625,507
4 Bed Houses	£6,033	146	£882,073
5 Bed Houses	£6,000	253	£1,518,600
	Estimates		

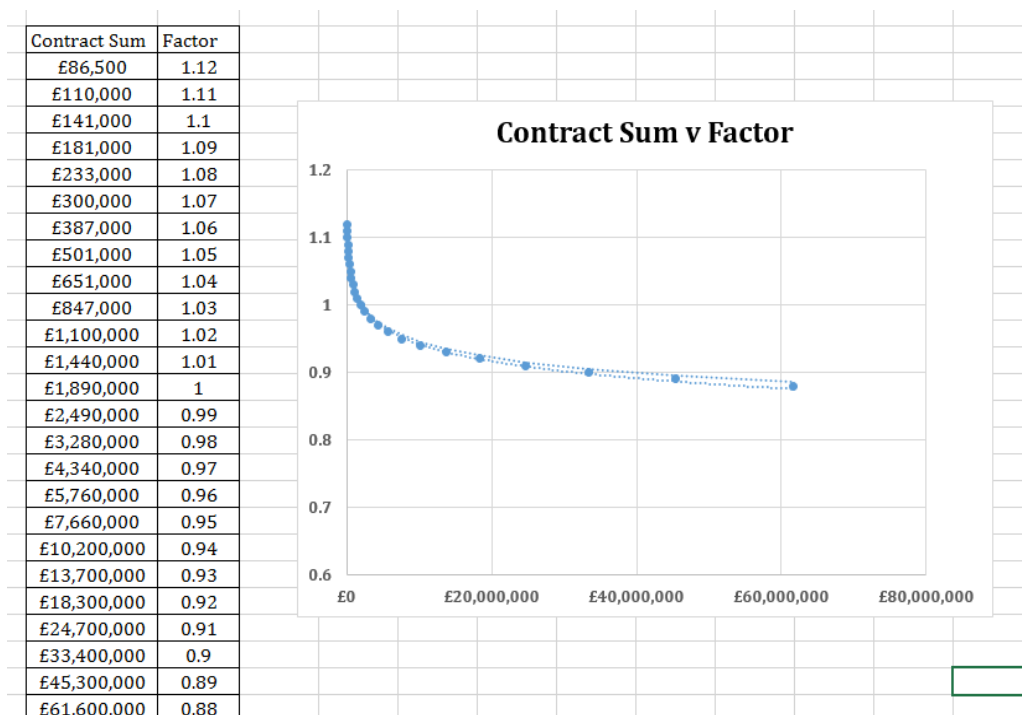
5.26 I have adopted these prices in my appraisal.

Affordable Housing revenue

- 5.27 My current assessment of the value of Affordable Housing is around £2,420 per square metre. This takes into account considerable value by a large proportion of the Affordable element being Intermediate; Shared Ownership Housing here is likely to be valued at a high rate.
- 5.28 The information provided by Turner Morum on behalf of the developer suggests that Affordable Housing should be valued at £1,786 per square metre.
- 5.29 This difference is significant but falls far short of being significant to the overall conclusion on viability (it amounts to some £23 million).
- 5.30 It is accepted that Affordable Housing will be subject to housing association offers as well as to the final mix of development agreed upon.

Construction costs

- 5.31 The starting point for costs, in the absence of further information, should be BCIS. I have followed this approach, as it is consistent with the HLT and the assessment of other large sites. However in this case, I have adjusted costs using the BCIS Scale Factor. As follows:



- 5.32 This (above) allows an estimated contract sum to be adjusted for any given scheme. The chart above suggests that although there are

economies of scale, these tend to level out at contracts of around £20 million.

5.33 Given that this scheme will have a contract sum of circa £200 million I feel that it is not unreasonable to make a deduction of 15% to take account of economies of scale. The estimated (and updated to August 2019) costs) are shown below:

Q2 2019	Baseline - Median BCIS	Externals and Utilities	Sub Total (1)	Runnymede Factor	Sub Total (2)	Scale Factor	Working Cost (per Sq M)
2 Storey Houses	£1,204	£181	£1,385	£208	£1,592	0.85	£1,353
Low Rise Flats	£1,373	£206	£1,579	£237	£1,816	0.85	£1,543

5.34 The calculations for the Scale Factor are shown below:

	Units	Unit Size	Floor Areas	At (per Sq M)	Totals
1 Bed Flats	109	52.9	5766		
2 Bed Flats	331	72.2	23898		
3 Bed Flats	3	184.6	554		
			30218	1543	£46,626,528
2 Bed Houses	249	77.61	19325		
3 Bed Houses	427	103.28	44101		
4 Bed Houses	199	146.18	29090		
5 Bed Houses	42	253.05	10628		
	1360		103143	1353	£139,552,980
Total					£186,179,508

Infrastructure/Abnormal costs

5.35 The developer, via Turner Morum, have set out to AGA a list of what are termed 'Infrastructure/Abnormals'; as follows:

Item	Amount	Reason	Allow
Enabling Works (Decontam, Demo, earthwork)	£21,000,000	83 Hectares - Amounts to £250,000 per Ha - Very High - Allow £100,000 per Ha	£8,300,000
Highways 278	£4,000,000	Covered in Section 106	
On Site Highways	£17,000,000	Covered in External Works	
On Site Cycle Routes	£850,000	Covered in Section 106	
Surface Water Drainage	£4,600,000	Covered in External Works	
Foul Water Drainage	£10,500,000	Covered in External Works	
Utilities	£6,100,000	Covered in External Works	
Ecological Mitigation	£1,500,000	Covered in Section 106	
Public Open Space	£9,500,000	Covered in Section 106	
Landscaping	£150,000	Covered in Section 106	
Community Facilities	£1,750,000	Covered in Section 106	
Highways	£4,000,000	Covered in Section 106	
Prelims	£2,700,000	Covered in BCIS Baseline	
Strategic Planning	£400,000	Covered in fees	
Site Investigations	£1,100,000	Covered in fees	
Site Supervision	£2,600,000	Covered in Prelims/BCIS	
Project Management	£2,100,000	Covered in fees	
Contingency	£4,500,000	Disallow (unless allow for Revenue)	
Total	£94,350,000		
			£8,300,000
Total Allowed			

5.36 I understand that the Council are prepared in principle to accept that these items are likely to be necessary to make the development work. However, many are also covered in the list of Section 106 requirements which are itemised separately.

5.37 I accept that there will be some enabling works for a site like this, although not, I believe, on the scale claimed in the Turner Morum list supplied on behalf of the developer.

5.38 I am aware however, that there are some uncertainties with respect to what the industry standard 15% covers and with larger sites infrastructure connections will not fully cover the whole area.

5.39 I have made an allowance of £10 million for this, calculated as follows:

Dwellings	DPH	
1360	35	38.857143
Infrastructure Costs per Ha		200000
Cost		£7,771,429

Allow	£10,000,000
-------	-------------

Ground rents for flats

5.40 There will be a ground rent on the flats included within the scheme. Calculated as follows:

- 430 flats, at say £300 ground rent per annum = rental income of £129,000. Capitalised at 5%, giving a capital value of £2,580,000.

5.42 This assumption may need to be agreed still with Crest.

Development mix and tenure

5.43 The Council initially anticipated a policy compliant mix as follows:

- 65% Market Housing
- 35% Affordable Housing split as: -
- 60% Affordable Rent;
 - 10% Social Rent;
 - 15% Shared Ownership;
 - 15% Starter Homes.

5.44 The precise split which was initially anticipated is shown in the screenshot below - housing mix for 1,500 units:

----- Tenure Mix -----

Clear

You can distribute units across the tenures in two ways:

Input by Percentages

Input by Quantity

Affordable Units							
Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Units allocated
65%	3%	3%	5%		21%	4%	100%
993.0	41.0	41.0	83.0		318.0	56.0	1532.0

Total units to enter:	1532
Total units entered:	1532

Ref.	Description	Units
1	One Bed Flats	148
2	Two Bed Flats	309
3	2 Bed Houses	302
4	3 Bed Houses	573
5	4 Bed Houses	200

50.0	21.0	22.0	41.0			14.0	148.0
149.0	10.0	10.0	21.0		106.0	13.0	309.0
148.0	10.0	9.0	21.0		102.0	12.0	302.0
446.0					110.0	17.0	573.0
200.0							200.0

5.45 The developer has also supplied AGA with its current view of a preferred housing mix – as set out in the left half of the table:

	Crest Proposed			RBC Preferred			% Difference
	Units	Total Units	Percentages	Units	Total Units	Percentages	
1 Bed Flats	90	1360	6.62	148	1532	9.66	3.04
2 Bed Flats	391	1360	28.75	309	1532	20.17	-8.58
3 Bed Flats	5	1360	0.37	0	1532	0.00	-0.37
2 Bed Houses	231	1360	16.99	302	1532	19.71	2.73
3 Bed Houses	359	1360	26.40	573	1532	37.40	11.01
4 Bed Houses	196	1360	14.41	200	1532	13.05	-1.36
5 Bed Houses	88	1360	6.47	0	1532	0.00	-6.47
Total	1360		100.00	1532		100.00	

5.46 This shows a very close fits between the two expectations. The main difference is the greater percentage of two bed flats in the Crest mix and the greater percentage of three bed houses in the RBC mix. The

differences are also affected by the inclusion of five bed dwellings in the Crest mix which are not included in the Council's mix.

5.47 Running with one or the other mix in a rigid fashion at this stage is, I believe, an incorrect approach. It is more practical to see a sensible (mid-point) compromise which can be honed at final application stage. To this end, I suggest the following mix, at the policy compliant Affordable Housing position and is based in the 1320 units:

Suggested mid point mix:

	Mid Point Mix			Market	Affordable					Total Check
	Units	Total Units	Percentages		LCS	ES	SO	AR	SR	
1 Bed Flats	109	1360	8.01	34	16	16	29	0	11	106
2 Bed Flats	331	1360	24.34	154	10	10	19	111	17	321
3 Bed Flats	3	1360	0.22	3	0	0	0	0	0	3
2 Bed Houses	249	1360	18.31	116	9	9	19	80	9	242
3 Bed Houses	427	1360	31.40	319	0	0	0	82	13	414
4 Bed Houses	199	1360	14.63	193	0	0	0	0	0	193
5 Bed Houses	42	1360	3.09	41	0	0	0	0	0	41
Total	1360		100.00	860	35	35	67	273	50	1320
				860	35	35	67	273	50	
				1320	1320	1320	1320	1320	1320	
Percentages				65.15	2.65	2.65	5.08	20.68	3.79	100.00

5.48 I have adopted the mix in the red data.

Unit sizes

5.49 I have adopted the unit sizes suggested by Turner Morum on behalf of the developer:

	Units	Unit Size
1 Bed Flats	109	52.9
2 Bed Flats	331	72.2
3 Bed Flats	3	184.6
2 Bed Houses	249	77.61
3 Bed Houses	427	103.28
4 Bed Houses	199	146.18
5 Bed Houses	42	253.05

Commercial property element

5.50 The applicants have confirmed the proposed areas for the south site, which are set out in the table below. As previously, it should be stressed that this element is intrinsically difficult to project viability for, not least because the current mix is uncertain in terms of its users, operators, nature and quality.

Longcross South Commercial District:

Use	Use Class	GIA ft2	Residual Land Value
Food / convenience store	A1	5,382	108,546
Small retail units	A1, A2, A3, A4, A5	5,382	(304,189)
Pub	A4	8,288	500,000
Office units	B1	3,229	(101,353)
Care Home	C2	39,827	1,200,000
Health centre	D1	5,382	625,000
Nursery school	D1	5,382	400,000
Total Non-Residential		72,872	2,428,004

5.51 I have adopted a range of assumptions based on market reports, web based sources and local authority viability assessments. I have taken BCIS tender prices for typical end uses assumed here.

5.52 The table below (from the Toolkit) sets out the results

----- Contribution from -----
-- Commercial Elements --

Clear

This page allows the user to input data relating to a commercial property element of a scheme. The user will need to complete the white boxes relating to size of scheme, rent, yield and capital value. In addition cost related data will need to be inputted

Revenues	Office	Industrial	Retail	Hotel	Leisure/Community Services	Other
Net area in Sq. m	500	300	500		770	
Rent (£ per sq.m per annum)	£ 200.00	£ 200.00	£ 300.00		£ 250.00	
Yield (%)	6.0%	7.0%	5.0%		5.0%	
Capital value	£ 1,666,667	£ 857,143	£ 3,000,000	£ -	£ 3,850,000	£ -

Costs	Office	Industrial	Retail	Hotel	Leisure/Community Services	Other
Gross Internal Area in Sq. m	500	300	500		770	
Build costs (£ per GIA sq m)	£ 2,000	£ 2,000	£ 1,750		£ 2,250	
Professional fees (% of Build Costs)	12.00%	12.00%	12.00%		12.00%	
Interest Rate (% of Build Costs)	6%	6%	6%		6%	
Marketing fees (% of Capital Value)	3%	2%	2%		3%	
Return (% of Capital Value)	20%	15%	15%		20%	

Total build costs	£ 1,000,000	£ 600,000	£ 875,000	£ -	£ 1,732,500	£ -
Professional, other fees and finance costs	£ 230,000	£ 125,143	£ 217,500	£ -	£ 427,350	£ -
Return	£ 333,333	£ 128,571	£ 450,000	£ -	£ 770,000	£ -
Total development costs	£ 1,666,333	£ 853,714	£ 1,542,500	£ -	£ 2,929,850	£ -
Site value for commercial element	£ 103,333	£ 3,429	£ 1,457,500	£ -	£ 920,150	£ -
Total site value for all commercial Elements	£ 2,484,412					

5.53 Critically this latest submission from Crest does not include a hotel. This reduces the overall viability of the commercial element significantly. I agree with Turner Morum on behalf of the developer, that the residual values for offices and smaller retail may be marginal. However I think the valuation for the convenience store and the care home are too low.

5.54 My calculations for the care home are set out in the table below:

https://content.knightfrank.com/resources/knightfrank.co.uk/commercial/brochure/kf_care-homes-perf-report-2013.pdf

Care Home		
Gross Income per room		£36,000
EBITDARM AT 30%		£10,800
Yield		6
YP in Perp		16.66
cv		£179,928
Say CV per Unit		£180,000
Net Area - 25 Sq M per Room		25
Total Net Area (see below)		2405
No of Rooms		96.2
Say 100		100
Total CV		£18,000,000
Costs		
Floor Area - Total - Sq M (GIA)		3700
BCIS GIA costs (Per Sq M)		2000
Total Construction Costs		£7,400,000
Fees at 12%		£888,000
Finance at 6%		£497,280
Marketing (3% GDV)		£540,000
Developer Margin at 15% of GDV		£2,700,000
Total Development Costs		£12,025,280
Residual Value		£5,974,720
Say		£6,000,000

- 5.55 The calculation is probably most sensitive to the nature of the care home developed. There are some 150 beds predicted and these will generate substantial value. The care home will also have significant value, although this will depend on the manner of disposal, and in particular, whether it is valued as an 'up and running' concern or whether it is marketed speculatively.
- 5.56 The commercial element overall is likely to have a positive impact on the overall scheme, although the precise timing will have an effect on the cash flow appraisal. That being said, I don't anticipate that the timing will be significant in the big picture of viability as the commercial floor space is a relatively small constituent of the overall scheme.

I agree the valuations on the health centre and the nursery school. The residual values for these elements and the care home have been entered as a capital contribution in the Toolkit appraisal.

Results

- 5.57 The results are presented in a similar form to previously, using the static viability approach, although also here with the additional discounting results.

Static approach

- 5.58 The screenshot below shows the result of the static appraisal for the 1320 units and associated commercial development.

← ----- Results -----

Site	Longcross Garden Village - 1320 Dwellings - Trajectory as agreed E Maik 29th Aug 2019 - From	Site Reference Number	
Address	1320 Dwellings with Range of Commercial Development	Application Number	
Scheme Description		NLUD Ref. Number	
		UPRN or Grid Ref.	

Save Results
View Results
Discounting Function
Floor Space Analysis
Costs Analysis
Child Occupancy & Bedrooms

RESIDUAL before land finance	£190,278,000
RESIDUAL after land finance	£131,292,000
Per hectare	£1,816,000
Per dwelling	£99,000
Per market dwelling	£153,000
Per habitable room	£28,000
Per bedspace	£38,000

SCHEME UNITS		per ha.
No. of Dwellings	1320	18
No. of Habitable rooms	4727	65
No. of Bedrooms	3460	48
Total floorspace (m2)	129,472	1791
% Wheelchair Units		

SCHEME REVENUE		£661,984,000
Contribution to revenue from:		
Market housing	£557,369,000	
Affordable Housing	£85,636,000	
- Low Cost Sale	£8,750,000	
- Equity Share	£8,995,000	
- Shared Ownership	£22,941,000	
- Intermediate Rent		
- Affordable Rent	£40,950,000	
- Social Rent	£4,000,000	
Grant		
Capital Contribution	£9,605,000	
Commercial Elements	£9,374,000	

LAND FINANCE		
Total land finance		£58,986,000

AFFORDABLE UNITS							
	Low Cost	Equity	Shared	Intermediate	Affordable	Social Rent	Total
Units	35	35	67		273	50	460
Units %	3%	3%	5%		21%	4%	35%
Hab rooms	2%	2%	4%		19%	3%	30%
Bedrooms							
Persons	2%	2%	4%		19%	3%	30%
Floorspace	2%	2%	3%		18%	3%	27%

SCHEME COSTS		£471,706,000
Contribution to costs from:		
Market housing	£312,944,000	
Affordable Housing	£81,404,000	
- Low Cost Sale	£7,709,000	
- Equity Share	£7,709,000	
- Shared Ownership	£9,659,000	
- Intermediate Rent		
- Affordable Rent	£48,047,000	
- Social Rent	£8,280,000	
Planning Obligations	£52,168,000	
Community Infrastructure Levy		
Exceptional Development Costs	£18,300,000	
Commercial Elements	£6,889,000	

PUBLIC SUBSIDY (GRANT)		
Whole scheme	£	-
Per Social Rent dwelling	£	-
Per Shared Ownership dwelling	£	-
Per Intermediate Rent dwellings	£	-
Per Affordable Rent dwelling	£	-

Alternative Site Values		Against residual
Existing Use Value	£ 60,000,000	£71,292,000
Acquisition Cost	£ -	
Value for offices	£ -	
Value for industrial	£ -	
Value as hotel site	£ -	
Value as other alternative	£ -	

5.59 The appraisal reflects:

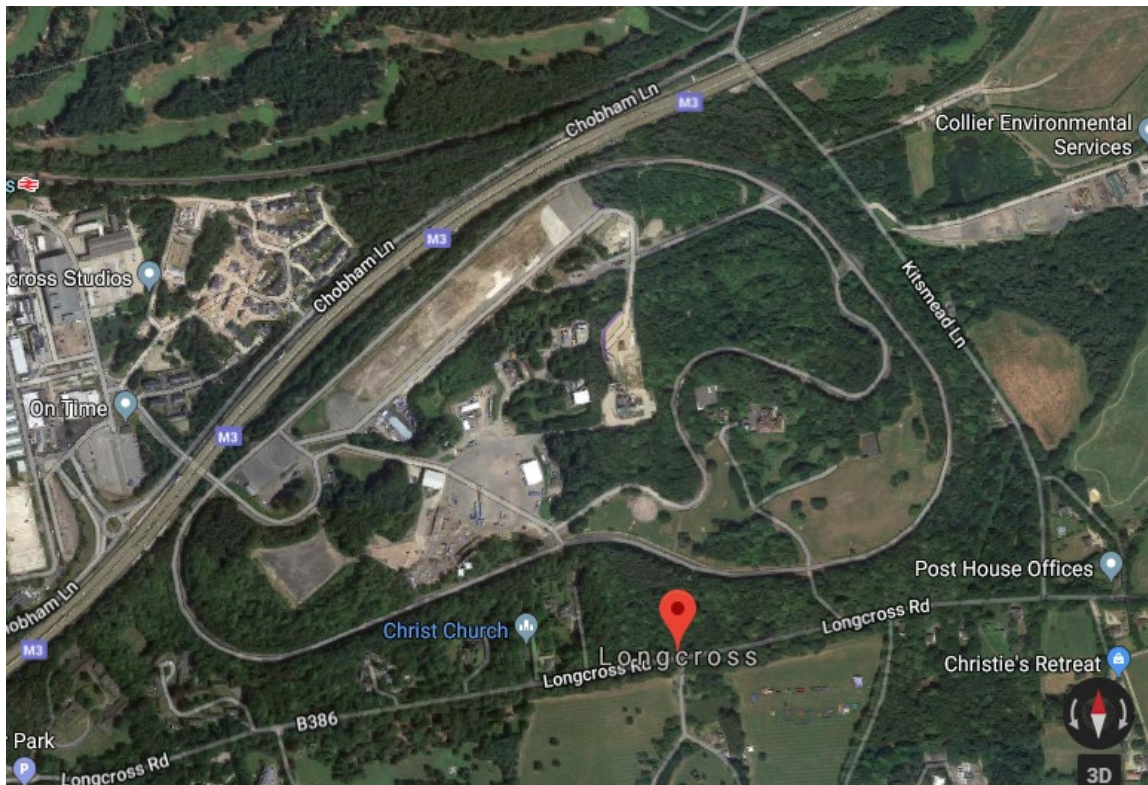
- 35% Affordable Housing;
- Developer profit margin of 20% on gross development value;
- Affordable Housing profit margin of 6%;
- £52,168,000 of additional Section 106 contributions;
- Commercial development including foodstore flexible A use class floorspace, a pub, and a care home.

5.60 The residual value is £131,292,000 on a static basis.

5.61 As I understand it, the AECOM study estimated a site value of circa £100m.

Land value benchmark and viability

5.62 It is understood that the development proposal relates to the area south of the M3. This area is shown in the aerial picture below:



- 5.63 The area contains a mix of land and building which are mostly associated with the testing track and incorporate storage sheds, light industrial units and other ancillary buildings. There is no full schedule currently available from which to draw up a full rental list which can then be capitalised to a land value benchmark.
- 5.64 The lawful use currently is not housing, but can be gleaned from the Council's officer's report of 25th May 2005. In this, the officer sets out some of the historic problems associated with the site not least relating to the noise created by military as well as commercial vehicles using the track. The question of Crown Immunity is raised in relation to any nuisance emanating from the site. The conclusions of the officer's report are set out below:

From officers report 25th May 2005

Conclusion

5.55 It is therefore considered that in light of all the evidence, then on the balance of probability a Certificate of Lawfulness should be issued for the following uses:

- (1) The testing and evaluation of tracked and wheeled military vehicles.
- (2) Driver training courses using military vehicles.
- (3) Subject to (i) and (ii) below and between the hours of 08.00 to 12.00 (midnight) and for a maximum of four occasions between the hours of 12.00 (midnight) to 08.00 Monday to Friday for film and media work including the filming of television shows.
- (4) Subject to (i) below and between the hours of 08.00 to 18.00 Monday to Friday for:
 - (A) Civilian commercial automotive vehicle testing and other specialist tasks relating to the testing of new and used motor vehicles, heavy goods vehicles, emergency service vehicles and motorcycles;
 - (B) Automotive club events including associated static exhibitions and shows of all makes and models of vehicle;
 - (C) Corporate driving events including recreation, entertainment and corporate hospitality events; and
 - (D) Driver training courses using civilian vehicles
- (5) Subject to (i) below and between the hours of 08.00 to 18.00 for a maximum of ten motor rally events (such events to include Sprints and Trials) per annum to be held no more frequently than one event every four weeks and each event to last no longer than two days including setting up and testing the facilities.
 - (i) The qualifying level for vehicles not exceeding 100dB, measured in accordance with the standard RAC method of Stage Rallies, ie 0.5m and at 45° from the exhaust of a static vehicle with the engine running at 5,000 rpm; and

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-
- (ii) Any use of motor vehicles between the hours of 18.00 and 08.00 not to amount to a common law or statutory nuisance and any noise, vibration, light, smoke or fumes caused by any of the above events and the use of any motor vehicle to be limited to such emissions as are reasonably associated with the traffic of a normal urban carriageway between such hours.

5.65 From this it is clear that the Council wished to permit a mix of activities including military vehicle testing but with some 'leeway' to exploit the site for commercial purposes, not least driver training courses, rally activities and some filming.

5.66 The use is however restricted by hours, presumably to minimise the noise impact. The site is therefore not fully commercial but a hybrid between community or military use, and commercial, although it should be stated that there is no military use there at the moment (which potentially reduces its EUV). Without having a view of the relevant accounts, it is difficult to be precise about the EUV as it stands.

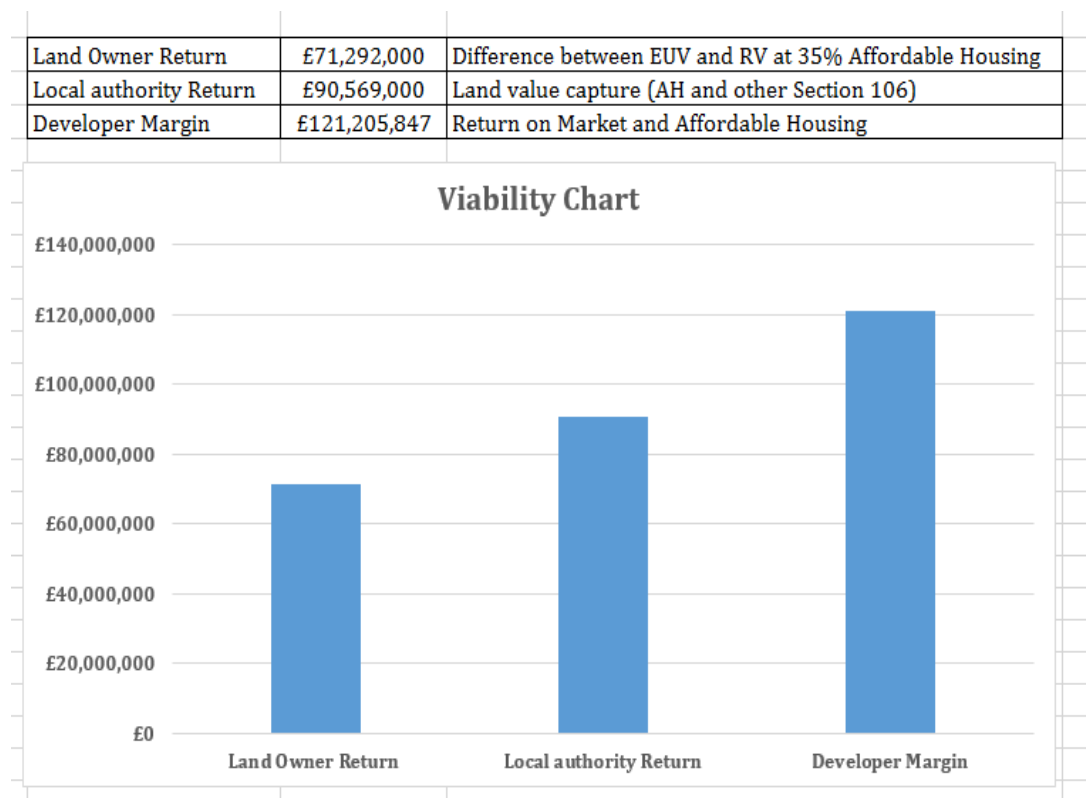
5.67 As the site falls between different uses, it would be appropriate to capitalise it at a reduced commercial rate. Based on the previous assumptions, a value of £1 million per hectare in relation to the partial hard standing area within the track would seem to be appropriate. This amounts to around 59 hectares and with some additional value for the green area around – some 13 hectares at woodland/agricultural value – say £20,000 a hectare.

5.68 A full EUV would then be arrived at, at around £60 million. In response, Turner Morum have stated on behalf of Crest that they believe that income over the past 3 years has been on average £8.4 million, and on this basis, a LVB of £60 million ‘looks pretty conservative’.

5.69 It is not clear what the trajectory of income here is – whether it is diminishing in the most recent years or not. Assuming £8 million is a fair figure, it would be difficult to capitalise the income at anything less than 10%, and between 11% and 12% probably being more realistic meaning that an LVB of circa £60 million is broadly robust as the LVB.

Viability returns

5.70 The chart below shows the relative returns to the land owner, the local authority and the developer.



- 5.71 The largest return is for the developer (£123 million).
- 5.72 The return to the local authority is around the same level as that to the land owner significantly less – at £83 million. This (return to the local authority) is the difference in residual value between 100% Market Housing and at 35% Affordable Housing and the other Section 106 contributions.
- 5.73 The full static appraisal is shown at Appendix 3.

Phased development results

- 5.74 The table below shows the residual values and the relevant surpluses over and above the land value benchmark:

House Prices	Build Costs	Scenarios	RV	EUV	Surplus
7%	5%	Historic	£237,287,791	£60,000,000	£177,287,791
2%	7%	Pessimistic	£88,399,391	£60,000,000	£28,399,391
10%	4%	Optimistic	£245,088,918	£60,000,000	£185,088,918

- 5.75 These results show very significant surpluses based even on relatively pessimistic scenarios.
- 5.76 The results demonstrate clearly how important the performance of the housing market will be to the viability of the site.

6 Conclusions

- 6.1 This Viability Study has reviewed the viability of sites in the vicinity of the A320 highway.
- 6.2 The analysis has looked at High Level Testing across the Borough, at key sites and specifically at the large allocation at Longcross Garden Village.
- 6.3 Viability is dependent on the relationship between the residual value generated by new development and the land value benchmark of sites. A key piece of guidance (NPPG, 2018), has now shifted the viability debate in favour of an approach which is focused on existing use value (EUUV), rather than hope value for residential development, which in the past has driven plans and scheme specific negotiations.
- 6.4 The sub markets involved in the A320 area are mid value for Runnymede Borough. That being said, they are very high value by national standards, whereas build costs vary relatively little from one part of the country to another. This means that very significant residual values are generated from development across the Borough.
- 6.5 This analysis undertaken in the Viability Update Study underlines the findings of the 2017 Viability Report; that ambitious Section 106 requirements are deliverable whilst still providing developers and land owners with very large returns.
- 6.6 The scale of the potential surpluses are significant. The conclusion is that in all cases, including the case of Longcross, which has a very low existing use value, road infrastructure could be viably delivered from land uplift.
- 6.7 The scale of any additional contributions in the case of Longcross (or indeed any other large site) will depend very much on the performance of the housing market over time. The analysis demonstrates how sensitive the residuals are to changes in prices and costs, and for this reason it will be important for the Council, wherever possible to conclude overage or similar agreements with the applicants.

AJ Golland

Dr Andrew Golland BSc (Hons) PhD MRICS

Appendix 1 High Level Testing assumptions

PCS	Sub Market	Detached			Semi Detached						Flats/Maisonettes			Bungalows	
		5 Bed	4 Bed	3 Bed	4 Bed	3 Bed	2 Bed	4 Bed	3 Bed	2 Bed	3 Bed	2 Bed	1 Bed	3 Bed	2 Bed
GU25 4	Wentworth	£2,115,000	£1,797,000	£1,439,000	£1,562,000	£1,360,000	£1,155,000	£1,445,000	£1,256,000	£1,150,000	£1,098,000	£880,000	£616,000	£1,631,000	£1,387,000
GU25 4	Virginia Water	£1,127,000	£959,000	£767,000	£833,000	£725,000	£615,000	£771,000	£670,000	£613,000	£586,000	£469,000	£328,000	£869,000	£740,000
TW20 0	Englefield Green	£910,000	£774,000	£619,000	£672,000	£585,000	£497,000	£622,000	£541,000	£495,000	£473,000	£378,000	£264,000	£702,000	£597,000
KT16 0	Ottershaw	£852,000	£724,000	£579,000	£630,000	£548,000	£465,000	£582,000	£506,000	£463,000	£442,000	£355,000	£249,000	£657,000	£558,000
KT15 3	Woodham	£784,000	£666,000	£533,000	£579,000	£503,000	£428,000	£536,000	£465,000	£426,000	£406,000	£326,000	£228,000	£603,000	£514,000
KT16 8	Chertsey	£754,000	£642,000	£513,000	£557,000	£485,000	£412,000	£516,000	£448,000	£410,000	£393,000	£314,000	£219,000	£582,000	£495,000
KT16 9															
TW20 9	Egham	£753,000	£641,000	£513,000	£556,000	£484,000	£411,000	£515,000	£447,000	£409,000	£392,000	£313,000	£218,000	£582,000	£494,000
KT15 1	Addlestone	£683,000	£581,000	£464,000	£505,000	£439,000	£373,000	£466,000	£405,000	£370,000	£355,000	£284,000	£199,000	£526,000	£448,000
KT15 2															
TW18 3	Staines Border & North	£670,000	£569,000	£455,000	£495,000	£431,000	£365,000	£457,000	£399,000	£364,000	£349,000	£279,000	£195,000	£517,000	£440,000
TW20 8															

Source: HM Land Registry

Development mixes

30 DPH	1 Bed Flats	2 Bed Terrace	3 Bed Semi	4 Bed Detached		
Market Housing	1	6	8	4		
Affordable Rent	2	2	1	0		
Social Rent	1	1	1	0		
Shared Ownership	1	0	0	0		
Starter Homes	1	0	0	0		
Discount Market	1	0	0	0		
	7	9	10	4		30
40 DPH	1 Bed Flats	2 Bed Terrace	3 Bed Semi	4 Bed Detached		
Market Housing	1	8	12	5		
Affordable Rent	3	2	2	0		
Social Rent	1	1	1	0		
Shared Ownership	1	1	0	0		
Starter Homes	1	0	0	0		
Discount Market	1	0	0	0		
	8	12	15	5		40

Source: Runnymede BC Policy SL19

Construction Costs

March of 2019					
	Baseline	Externals	Sub Total	Runnymede Factor	Total
2 Storey Houses	£1,134	£170	£1,304	£196	£1,500
Bungalows	£1,267	£190	£1,457	£219	£1,676
Low Rise Flats	£1,308	£196	£1,504	£226	£1,730

NB: The costs are adjusted by location to take into account costs which are higher/lower than the national average.
 Serviced plot costs for gypsies and travellers at £100,000.

Source: RICS BCIS

Other development costs

Other Development Costs			
You can enter your own values in the white cells below. Enter 0% for non-applicable items.			
Where cells are left blank, the Toolkit value for that row will be used.			
	Toolkit Values	User Values	
Professional Fees %	12.00%		of build costs
Internal Overheads	5.00%	0.00%	of build costs (Market and Discount Market units)
Interest Rate (Market)	7.00%	6.75%	of build Costs (Market, Discount Market and Low Cost Sale units)
Interest Rate (Affordable Housing)	7.00%	6.75%	of build costs (SR, HB, IR units)
Marketing Fees	3.00%		of market value (Market and Discount Market units)
Developers Return	15.00%	20.00%	of market value (Market and Discount Market units)
Contractors Return	6.00%		of development costs (SR, HB, IR and LCS units)

Unit Sizes

March of 2019		
	Market	Affordable
1 Bed Flats	50	50
2 Bed Flats	70	65
2 Bed Terraces	79	75
3 Bed Terraces	84	84
3 Bed Semis	93	88
3 Bed Detached	108	102
4 Bed Detached	125	115
5 Bed Detached	145	135

Source: Runnymede BC

Affordable Housing revenue

March of 2019		
Revenues		Notes
Social Rent	£80,000	Going Rate - AJG
Affordable Rent	£150,000	Workshop feedback
Shared Ownership	As per Table below - 65% OMV	
Shared Ownership		
	1 Bed	SO at 65%
Wentworth	£616,000	£400,400
Virginia Water	£328,000	£213,200
Englefield Green	£264,000	£171,600
Ottershaw	£249,000	£161,850
Woodham	£228,000	£148,200
Chertsey	£219,000	£142,350
Egham	£218,000	£141,700
Addlestone	£199,000	£129,350
Staines Border & North	£195,000	£126,750
Starter Homes		
	1 Bed	
Wentworth	£250,000	
Virginia Water	£250,000	
Englefield Green	£250,000	
Ottershaw	£249,000	
Woodham	£228,000	
Chertsey	£219,000	
Egham	£218,000	
Addlestone	£199,000	
Staines Border & North	£195,000	
Discount Market		
	1 Bed	SO at 65%
Wentworth	£616,000	£492,800
Virginia Water	£328,000	£262,400
Englefield Green	£264,000	£211,200
Ottershaw	£249,000	£199,200
Woodham	£228,000	£182,400
Chertsey	£219,000	£175,200
Egham	£218,000	£174,400
Addlestone	£199,000	£159,200
Staines Border & North	£195,000	£156,000

Appendix 2 Site specific analysis assumptions

Infrastructure requirements:

<p>Policy SL6 - Chilsey Green Farm (275 dwellings + 5 Traveller Pitches)</p> <p>Gross Site Area – 8.95ha</p> <p>Net Developable Area – 7.06ha</p>	<p>£1.12m</p>	<p>£185,089 (EY)</p> <p>£854,980 (P)</p> <p>£929,584 (S)</p>	<p>£168,550</p>	<p>Equipped play space - £548,970</p> <p>Informal play space - £79,822</p> <p>Sports/Playing pitches - £350,659</p> <p>Allotments - £32,523</p>	<p>£560,000 for SANG</p> <p>£176,400 for SAMP</p>	<p>£5.06m or £18,071 per dwelling</p>
<p>Policy SL11 - Vet Labs Parcel B (150 dwellings + 2 Traveller Pitches)</p> <p>Gross Site Area – 4.7ha</p> <p>Net Developable Area – 3.66ha</p>	<p>£608,000</p>	<p>£102,304 (EY)</p> <p>£459,888 (P)</p> <p>£498,095 (S)</p>	<p>£91,730</p>	<p>Equipped play space - £295,000</p> <p>Informal play space - £43,010</p> <p>Sports/Playing pitches - £189,483</p> <p>Allotments - £17,656</p>	<p>£304,000 for SANG</p> <p>£95,760 for SAMP</p>	<p>£2.7m or £17,796 per dwelling</p>

<p>Policy SL12 - Ottershaw East (200 units + 2 Traveller pitches)</p> <p>Gross Site Area – 6.6ha</p> <p>Net Developable Area – 5.97ha</p>	<p>£808,000</p>	<p>£135,956 (EY)</p> <p>£615,426 (P)</p> <p>£669,160 (S)</p>	<p>New health centre on 0.1ha of land.</p>	<p>Equipped play space £394, 110 (0.113ha)</p> <p>Informal play space - £57,305 (0.25ha)</p> <p>Sports/Playing pitches - £252,459 (0.735ha)</p> <p>Allotments - £23,231 (0.1ha)</p>	<p>Provide SANG on-site for 9.15ha @ £1.06m</p> <p>SAMM cost @ £127,260</p>	<p>£4.14m or £20,495 per dwelling</p>
<p>Policy SL14 - Chertsey Bittams A (175 dwellings + 5 Traveller Pitches)</p> <p>Gross Ste Area – 7ha</p> <p>Net Developable Area – 4.59ha</p>	<p>£720,000</p>	<p>£121,149 (EY)</p> <p>£549,257 (P)</p> <p>£595,934 (S)</p>	<p>£108,984</p>	<p>Equipped play space - £354,960</p> <p>Informal play space - £51,612</p>	<p>£360,000 for SANG</p> <p>£113,400 for SAMM</p>	<p>£2.98m or £16,529 per dwelling</p>
<p>Policy SL15 - Chertsey Bittams B (120 dwellings + 2 Traveller pitches)</p> <p>Gross Site Area – 3.9ha</p> <p>Net Developable Area – 3.43ha</p>	<p>£440,000</p>	<p>£82,112 (EY)</p> <p>£368,597 (P)</p> <p>£398,600 (S)</p>	<p>£72,923</p>	<p>Equipped play space - £237,510</p> <p>Informal play space - £34,535</p> <p>Contribution to community hub building^{vi} at Parcel A, Chertsey Bittams of £31,373</p>	<p>£244,000 for SANG</p> <p>£76,860 for SAMM</p>	<p>£1.99m or £16,283 per dwelling</p>

<p>Policy SL16 - Chertsey Bittams C (9 dwellings + 11 Traveller pitches)</p> <p>Gross Site Area – 1.31ha</p> <p>Net Developable Area – 0.95ha</p>	<p>£80,000</p>	<p>£13,461 (EY)</p> <p>£77,288 (P)</p> <p>£78, 189(S)</p>	<p>£16,027</p>	<p>Equipped play space £52,200</p> <p>Informal play space £7,590</p> <p>Contribution to community hub building^{vi} at Parcel A, Chertsey Bittams of £5,569</p>	<p>£40,000 for SANG</p> <p>£13,660 for SAMP</p>	<p>£384k or £19,200 per dwelling</p>
<p>Policy SL17 - Chertsey Bittams D (125 dwellings)</p> <p>Gross Site Area – 2.86ha</p> <p>Net Developable Area – 2.64ha</p>	<p>£500,000</p>	<p>£84,131 (EY)</p> <p>£373,127 (P)</p> <p>£405,219 (S)</p>	<p>£74,258</p>	<p>Equipped play space - £241,860</p> <p>Informal play space - £35,167</p> <p>Contribution to community hub building^{vi} at Parcel A, Chertsey Bittams of £31,837</p>	<p>£250,000 for SANG</p> <p>£78,750 for SAMP</p>	<p>£2.07m or £16,595 per dwelling</p>
<p>Policy SL18 - Chertsey Bittams E (75 dwellings)</p> <p>Gross Site Area – 2.37ha</p> <p>Net Developable Area – 1.76ha</p>	<p>£300,000</p>	<p>£50,479 (EY)</p> <p>£222,943 (P)</p> <p>£242,635 (S)</p>	<p>£45,547</p>	<p>Equipped play space - £154,860</p> <p>Informal play space - £22,517</p> <p>Contribution to community hub building^{vi} at Parcel A, Chertsey Bittams of £17,914</p>	<p>£150,000 for SANG</p> <p>£47,250 for SAMP</p>	<p>£1.06m or £14,118 per dwelling</p>

<p>Policy IE1 – Byfleet Road, New Haw</p> <p>Assume 5,000sqm B1c, 2,000sqm B2 and 13,000sqm of B8</p> <p>Gross Site Area – 7.7ha</p> <p>Net Developable Area – 6ha</p>	<p>£634,678</p> <p>Based on total of 374 workers</p>	N/A	N/A	N/A	N/A	£634,678 or £31.7 per sqm.
<p>Policy IE8 – Addlestone West</p> <p>Assume 70 flats, 500sqm A1 & replace 1,500sqm of D2 health/day centre.</p> <p>Gross Site Area – 0.8ha</p> <p>Net Developable Area – 0.8ha</p>	£304,666	<p>£47,114 (EY)</p> <p>£67,267 (P)</p> <p>£57,918 (S)</p>	To be re-provided on site	£242,473	<p>£140,000 for SANG</p> <p>£47,810 for SMM</p>	£907,248 or £12,960 per dwelling


Indicative development mixes

Site	Total Units	Market	Affordable					Total					
			SR	AR	SO	ST	DM	1BF	2BF	2BH	3BH	4BH	
SL11 – Vet Labs	150	5 x 1BF	6 x 1BF	7 x 1BF	2 x 1BF	2 x 1BF	2 x 1BF	24					
		14 x 2BF	3 x 2BF	3 x 2BF	2 x 2BF	2 x 2BF	2 x 2BF		26				
		15 x 2BH	3 x 2BH	2 x 2BH	2 x 2BH	1 x 2BH	1 x 2BH			24			
		44 x 3BH	6 x 3BH	5 x 3BH							55		
		19 x 4BH	2 x 4BH									21	

SL12 – Ottershaw East	200	6 x 1BF 20 x 2BF 19 x 2BH 59 x 3BH 26 x 4BH	8 x 1BF 4 x 2BF 3 x 2BH 7 x 3BH 2 x 4BH	9 x 1BF 5 x 2BF 4 x 2BH 7 x 3BH	4 x 1BF 2 x 2BF 1 x 2BH	4 x 1BF 2 x 2BF 1 x 2BH	4 x 1BF 2 x 2BF 1 x 2BH	35	35	29	73	28
SL14 – Bittams A	175	6 x 1BF 17 x 2BF 17 x 2BH 51 x 3BH 23 x 4BH	7 x 1BF 3 x 2BF 3 x 2BH 6 x 3BH 2 x 4BH	8 x 1BF 4 x 2BF 4 x 2BH 6 x 3BH	3 x 1BF 2 x 2BF 1 x 2BH	3 x 1BF 2 x 2BF 1 x 2BH	3 x 1BF 2 x 2BF 1 x 2BH	30	30	27	63	25
SL15 – Bittams B	120	4 x 1BF 12 x 2BF 11 x 2BH 35 x 3BH 16 x 4BH	5 x 1BF 2 x 2BF 2 x 2BH 4 x 3BH 1 x 4BH	5 x 1BF 3 x 2BF 3 x 2BH 4 x 3BH	2 x 1BF 2 x 2BF 1 x 2BH	2 x 1BF 1 x 2BF 1 x 2BH	2 x 1BF 1 x 2BF 1 x 2BH	20	21	19	43	17
SL16 – Bittams C	9	3 x 2BH 4 x 3BH 2 x 4BH								3	4	2
SL17 – Bittams D	125	5 x 1BF 12 x 2BF 12 x 2BH	5 x 1BF 2 x 2BF 2 x 2BH	6 x 1BF 3 x 2BF 2 x 2BH	2 x 1BF 2 x 2BF 1 x 2BH	2 x 1BF 1 x 2BF 1 x 2BH	2 x 1BF 1 x 2BF 1 x 2BH	22	21	19		

		36 x 3BH 16 x 4BH	5 x 3BH 1 x 4BH	5 x 3BH							46	17
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Appendix 3 Longcross Static appraisal

----- **Site Details** -----  *Use these arrows to navigate Toolkit pages. You should ensure there are no warning messages on a page before continuing.*

Site Address	Longcross Garden Village - 1320 Dwellings - Trajectory as agreed E Maik 29th Aug 2019 - From Katherine Jones
Site Reference	
Application Number	
NLUD Reference	
UPRN or Grid Reference	
Scheme Description	1320 Dwellings with Range of Commercial Development

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Development Control Model - Greater London Authority - 2015

For queries on viability, development schemes and the Toolkit generally, please contact Dr Andrew Golland - Tel: 01162 701 772 and E-Mail: drajg@btopenworld.com

For queries on spreadsheets and technical aspects of the Toolkit (including bug reports and feature requests), please contact Dr Adam Watkins - Tel: 07746 809 748, and E-Mail: Toolkits@Dread-IT.co.uk

----- Basic Site Information -----

Clear

You must complete this page

Site Area	
Total Size of Site In Hectares	72.3

Dwellings	
<input checked="" type="radio"/> Number of Dwellings (Density is then calculated)	1320
<input type="radio"/> Density (Enter a value, or choose from the listbox)	18.26
	users own value

You can test a percentage increase or decrease on the resulting density by either entering a value in the box below, or by using the buttons.

Percentage increase/decrease	%	Reset
Resulting Number of Dwellings	1320	
Resulting Density	18 dph	

----- Unit Types & Details -----

Clear

Enter the details for each type of unit in the cells below. You can specify up to 40 types of unit, one per row. Each row must be either fully completed or left fully blank. Note: For wheelchair units; the Toolkit uses the size of the unit as entered by the user. Build costs for wheelchair and non-wheelchair units are the same.

Ref.	Description of Unit Type (for the users reference only)	Number of Bed - rooms	Person Occupancy		Habitable Rooms		Wheel- chair Unit?	Is a Flat?	No. Of Storeys (1-99)	Size in sq m
			Bench - mark	User value	Bench - mark	User value				
1	One Bed Flats	1	2		2		NO	YES	2	52.9
2	Two Bed Flats	2	3		3		NO	YES	2	72.2
3	Three Bed Flats	3	4		4		NO	YES	2	184.6
4	Two Bed Houses	2	3		3		NO	NO	n/a	77.6
5	Three Bed Houses	3	4		4		NO	NO	n/a	103.3
6	Four Bed Houses	4	6		6		NO	NO	n/a	146.2
7	Five Bed Houses	5					NO	NO	n/a	253
8										
9										
10										

----- Tenure Mix -----

Clear

You can distribute units across the tenures in two ways:

Input by Percentages

Input by Quantity

#REF!

Affordable Units							
Sale	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	Units allocated
65%	3%	3%	5%		21%	4%	100%
860.0	35.0	35.0	67.0		273.0	50.0	#REF!

Ref.	Description	Units
1	One Bed Flats	106
2	Two Bed Flats	321
3	Three Bed Flats	3
4	Two Bed Houses	242
5	Three Bed Houses	414
6	Four Bed Houses	193
7	Five Bed Houses	41
0		

34.0	16.0	16.0	29.0			11.0	106.0
154.0	10.0	10.0	19.0		111.0	17.0	321.0
3.0							
116.0	9.0	9.0	19.0		80.0	9.0	242.0
319.0					82.0	13.0	414.0
193.0							193.0
41.0							41.0
							#REF!

----- **Market Values** -----

Ensure you enter market values for all unit types in the scheme under the Sale Tenure.

Sale

You can adjust all market values by entering a percentage in the box to the right (this affects other tenures):

Ref.	Description of Unit Type
1	One Bed Flats
2	Two Bed Flats
3	Three Bed Flats
4	Two Bed Houses
5	Three Bed Houses
6	Four Bed Houses
7	Five Bed Houses
8	
9	

Total Units	User Market Value	Adjusted Market Value
34	£ 295,000	£ 295,000
154	£ 379,719	£ 379,719
3	£ 1,015,300	£ 1,015,300
116	£ 463,597	£ 463,597
319	£ 625,507	£ 625,507
193	£ 882,073	£ 882,073
41	£ 1,518,600	£ 1,518,600
		£ -
		£ -

← ----- Development Costs ----- →

Clear

Toolkit values will be used unless you enter your own value in the white cells. The CSH level is for reference purposes only.

Build Costs per sq m		
Building Type	Toolkit Values	User Values
Flats (40+ storeys)	£3,739	
Flats (16-40 storeys)	£3,001	
Flats (6-15 storeys)	£2,331	
Flats (5 & less storeys)	£1,713	£1,543.00
Houses <= 75m2	£1,274	£1,353.00
Houses > 75m2	£1,116	£1,353.00
Code for Sustainable Homes level (3-6)		

Other Development Costs			
Additional Cost	Toolkit Values	User Values	
Professional Fees %	12.0%		of build costs
Interest rate (Market)	6.75%		of build costs (Sale, Equity Share and Low Cost Sale units)
Interest Rate (Affordable Hou	6.75%		of build costs Rental tenures and Shared Ownership)
Marketing Fees	3.0%		of market value
Developers Return	20.0%		of market value applies to market housing
Contractors Return	6.0%		of development costs (excl finance) (affordable housing)
Construction Period (1+ Years)		9.00	

Exceptional Development Costs	
Total For Scheme	
Cost per dwelling	
Cost per hectare	
Cost per habitable room	No Info

You may also enter SCHEME totals for other exceptional costs. Enter the name of the cost in the left hand cells and the SCHEME value in the right hand cell

Costs incurred for Sustainable homes level of 3,4, 5 or 6	£	-
Servicing Site - Estimate	£	10,000,000
Enabling Works	£	8,300,000
<Enter cost description>	£	-

← ----- Planning Obligations ----- →

Clear

For each type of contribution you may either enter a total figure (for that row) or you may enter values per unit (for each tenure). If you choose the second option, the Toolkit will calculate the total obligation 'cost' for the scheme.

To enter one total value for a row, tick the corresponding box in the "Enter Total?" column and enter a value in the "User Total" column : To enter the values by tenure leave the box un-ticked

	Input by Total		Input by Unit						Calculated Total (Affordable and Sale)
	Enter Total?	User Total	Sale	Affordable					
			Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	
Education Contribution	<input checked="" type="checkbox"/>	£13,940,000							£13,940,000
Highway works	<input checked="" type="checkbox"/>	£14,250,000							£14,250,000
Contribution to public transport	<input type="checkbox"/>								£0
Contribution to community facilities	<input checked="" type="checkbox"/>	£2,199,000							£2,199,000
Provision for open space	<input checked="" type="checkbox"/>	£10,862,000							£10,862,000
Contribution to public art	<input type="checkbox"/>								£0
Environmental improvements	<input type="checkbox"/>								£0
Town centre improvements	<input checked="" type="checkbox"/>	£10,000,000							£10,000,000
Waterfront improvements	<input type="checkbox"/>								£0
Support for employment development	<input type="checkbox"/>								£0
Employment related training	<input type="checkbox"/>								£0
Other	<input checked="" type="checkbox"/>	£917,011							£917,011

Does CIL apply on this scheme? Please select Yes or No

Total for Scheme	£52,168,011
Total for Scheme per hectare	£721,549
Total for Scheme divided by total number of units	£39,521
Total for Scheme divided by number of sale units	£60,660

----- Capital Contributions -----

Clear

For each type of contribution you may either enter a total figure (for that row) or you may enter values per unit (for each tenure). If you choose the second option, the Toolkit will calculate the total obligation 'cost' for the scheme.

To enter one total value for a row, tick the corresponding box in the "Enter Total?" column and enter a value in the "User Total" column : To enter the values by tenure leave the box un-ticked

	Input by Total		Input by Unit						Calculated Total (Affordable and Sale)	
	Enter Total?	User Total	Sale	Affordable						
				Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable rent		Social Rent
European Union funding	<input type="checkbox"/>									£0
Local Authority capital grant	<input type="checkbox"/>									£0
Other regeneration funding	<input type="checkbox"/>									£0
English Heritage grant	<input type="checkbox"/>									£0
Lottery grant	<input type="checkbox"/>									£0
Contribution from Payment in Lieu fund	<input type="checkbox"/>									£0
Employer contribution	<input type="checkbox"/>									£0
Capitalised ground rent figure	<input checked="" type="checkbox"/>	£2,580,000								£2,580,000
Other (1)	<input checked="" type="checkbox"/>	£6,000,000								£6,000,000
Other (2)	<input checked="" type="checkbox"/>	£1,025,000								£1,025,000
Other (3)	<input type="checkbox"/>									£0

Total for Scheme	£9,605,000
Total for Scheme per hectare	£132,849
Total for Scheme divided by total number of units	£7,277
Total for Scheme divided by number of sale units	£11,169

----- Known Payments for -----
-- Affordable Housing --

Clear

Enter the fixed payments for each tenure below.

	Affordable Housing Tenures						Total
	Low Cost Sale	Equity Share	Shared Ownership	Intermediate Rent	Affordable Rent	Social Rent	No. Of Affordable Units
Number of units	35.0	35.0	67.0	0.0	273.0	50.0	460
Payment By Unit	£ 250000	£ 257000	£ 342397		£ 150000	£ 80000	
Or Payment By Tenure							
Or Scheme Total	Enter a lump sum payment for all Affordable Housing Tenures						
Tenure Total	£ 8750000	£ 8995000	£22940599	£	£40950000	£ 4000000	
Method by which Affordable Housing Revenue is calculated	By Unit	By Unit	By Unit	N/A	By Unit	By Unit	
Total Known Payment for Affordable Housing	£85635599						

Please select one of the below options;

There is no grant, or it is included in the above values
(in which case grant will not be shown separately on the results page)

Grant is included in the above value and I would like to show it separately on the Results page for information (Total revenue for the tenure will use figures in table above, grant shown on the next page will not be added)

----- Contribution from -----
 -- Commercial Elements --

Clear

This page allows the user to input data relating to a commercial property element of a scheme. The user will need to complete the white boxes relating to size of scheme, rent, yield and capital value. In addition cost related data will need to be inputted

Revenues	Office	Industrial	Retail	Hotel	Leisure/Community Services	Other
Net area in Sq. m	500	300	500		770	
Rent (£ per sq.m per annum)	£ 200.00	£ 200.00	£ 300.00		£ 250.00	
Yield (%)	6.0%	7.0%	5.0%		5.0%	
Capital value	£ 1,666,667	£ 857,143	£ 3,000,000	£ -	£ 3,850,000	£ -
Costs						
Gross Internal Area in Sq. m	500	300	500		770	
Build costs (£ per GIA sq m)	£ 2,000	£ 2,000	£ 1,750		£ 2,250	
Professional fees (% of Build Costs)	12.00%	12.00%	12.00%		12.00%	
Interest Rate (% of Build Costs)	6%	6%	6%		6%	
Marketing fees (% of Capital Value)	3%	2%	2%		3%	
Return (% of Capital Value)	20%	15%	15%		20%	
Total build costs	£ 1,000,000	£ 600,000	£ 875,000	£ -	£ 1,732,500	£ -
Professional, other fees and finance costs	£ 230,000	£ 125,143	£ 217,500	£ -	£ 427,350	£ -
Return	£ 333,333	£ 128,571	£ 450,000	£ -	£ 770,000	£ -
Total development costs	£ 1,563,333	£ 853,714	£ 1,542,500	£ -	£ 2,929,850	£ -
Site value for commercial element	£ 103,333	£ 3,429	£ 1,457,500	£ -	£ 920,150	£ -
Total site value for all commercial Elements	£ 2,484,412					

←
→

Land Finance & Site Value Comparisons

Land Finance

Values entered below will be shown on the results page compared to the scheme residual. These values cannot be calculated by the toolkit.

Existing use value	£	60,000,000
Acquisition cost	£	-
Value for offices	£	-
Value for industrial	£	-
Value as hotel site	£	-
Value as other alternative use	£	-

Indicative reductions to apply to the final Site Residual value (shown on the Results Page)

Site Development Time (Years)	Reduction
1	10%
2	13%
3	16%
4	19%
5	22%
6	25%
7	28%
8	31%

Results

Site	Longcross Garden Village - 1320 Dwellings -	Site Reference Number	
Address	Trajectory as agreed E Mailk 29th Aug 2019 - From	Application Number	
Scheme Description	1320 Dwellings with Range of Commercial Development	NLUD Ref. Number	
		UPRN or Grid Ref.	

Save Results
View Results
Discounting Function
Floor Space Analysis
Costs Analysis
Child Occupancy & Bedrooms

RESIDUAL before land finance	£190,278,000
RESIDUAL after land finance	£131,292,000
Per hectare	£1,816,000
Per dwelling	£99,000
Per market dwelling	£153,000
Per habitable room	£28,000
Per bedspace	£38,000

SCHEME UNITS		per ha.
No. of Dwellings	1320	18
No. of Habitable rooms	4727	65
No. of Bedrooms	3460	48
Total floorspace (m2)	129,472	1791
% Wheelchair Units		

LAND FINANCE	
Total land finance	£58,986,000

SCHEME REVENUE		£661,984,000
Contribution to revenue from:		
Market housing		£557,369,000
Affordable Housing		£85,636,000
- Low Cost Sale		£8,750,000
- Equity Share		£8,995,000
- Shared Ownership		£22,941,000
- Intermediate Rent		
- Affordable Rent		£40,950,000
- Social Rent		£4,000,000
Grant		
Capital Contribution		£9,605,000
Commercial Elements		£9,374,000

AFFORDABLE UNITS							
	Low Cost	Equity	Shared	Intermediate	Affordable	Social Rent	Total
Units	35	35	67		273	50	460
Units %	3%	3%	5%		21%	4%	35%
Hab rooms	2%	2%	4%		19%	3%	30%
Bedrooms							
Persons	2%	2%	4%		19%	3%	30%
Floorspace	2%	2%	3%		18%	3%	27%

SCHEME COSTS		£471,706,000
Contribution to costs from:		
Market housing		£312,944,000
Affordable Housing		£81,404,000
- Low Cost Sale		£7,709,000
- Equity Share		£7,709,000
- Shared Ownership		£9,659,000
- Intermediate Rent		
- Affordable Rent		£48,047,000
- Social Rent		£8,280,000
Planning Obligations		£52,168,000
Community Infrastructure Levy		
Exceptional Development Costs		£18,300,000
Commercial Elements		£6,889,000

PUBLIC SUBSIDY (GRANT)	
Whole scheme	£ -
Per Social Rent dwelling	£ -
Per Shared Ownership dwelling	£ -
Per Intermediate Rent dwellings	£ -
Per Affordable Rent dwelling	£ -

Alternative Site Values		Against residual
Existing Use Value	£ 60,000,000	£71,292,000
Acquisition Cost	£ -	
Value for offices	£ -	
Value for industrial	£ -	
Value as hotel site	£ -	
Value as other alternative	£ -	

