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Appendix 5 to Additional Sustainability Appraisal of North Essex Section 1 Local Plan

Detailed results of Stage 1 SA of alternative strategic sites

Prepared by LUC
July 2019

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1 Introduction

- 1.1 This document is an appendix to the Additional Sustainability Appraisal (SA) of the North Essex Authorities (NEA) Section 1 Local Plan. It sets out the detailed Stage 1a and Stage 1c sustainability appraisal (SA) findings for strategic sites that could form part of alternative spatial strategies for the North Essex Authorities (NEA) Section 1 Local Plan.

2 Results of Stage 1a - GIS-based SA of strategic sites

- 2.1 For each alternative strategic site appraised during Stage 1a of the SA, this section provides the detailed results tables from the GIS-based assessment. These tables show the proportion of each site falling within the different 'access to services and facilities' (Table 2.1) and 'risk of environmental harm' (Table 2.2) scoring categories described in chapter 2 of the main SA report. The findings of Stage 1a are summarised and described in chapter 3 of the main SA report.

Table 2.1: Proportion of sites within Stage 1a 'access to services and facilities' scoring categories

Site	GP surgeries/ health centres	A1				Primary or middle schools	A2				Secondary schools	A3			
		Desirable	Acceptable	Maximum	Unacceptable		Desirable	Acceptable	Maximum	Unacceptable		Desirable	Acceptable	Maximum	Unacceptable
ALTGC2	Preferred Maximum	6.2	0.0	48.4	45.4	Preferred Maximum	8.1	0.0	42.2	49.7	Unacceptable	0.0	0.0	0.0	100.0
ALTGC3	Unacceptable	0.0	0.0	4.0	96.0	Unacceptable	0.9	0.0	6.0	93.0	Unacceptable	1.0	0.0	19.3	79.7
ALTGC4	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	12.4	2.7	18.0	67.0	Unacceptable	0.0	0.0	3.6	96.4
ALTGC6	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	7.5	0.0	32.2	60.3	Unacceptable	0.0	0.0	0.0	100.0
ALTGC7	Unacceptable	1.2	0.0	35.3	63.5	Preferred Maximum	23.5	2.3	42.7	31.5	Preferred Maximum	0.0	0.0	91.6	8.4
ALTGC8	Unacceptable	5.2	0.0	24.5	70.4	Unacceptable	9.4	0.0	29.1	61.5	Preferred Maximum	9.4	0.0	75.3	15.3
ALTGC9	Unacceptable	0.0	0.0	0.3	99.7	Unacceptable	0.0	0.0	1.8	98.2	Unacceptable	0.0	0.0	32.0	68.0
ALTGC10	Unacceptable	8.0	0.0	29.2	62.8	Unacceptable	4.9	0.0	22.0	73.2	Preferred Maximum	2.5	0.0	55.9	41.6
ALTGC11	Unacceptable	0.0	0.0	1.1	98.9	Unacceptable	8.9	3.8	15.3	71.9	Unacceptable	0.0	0.0	24.1	75.9
C1	Acceptable	37.9	12.2	49.3	0.6	Acceptable	29.3	21.5	47.3	1.9	Unacceptable	0.0	0.0	0.0	100.0
C2	Acceptable	45.9	4.2	49.9	0.0	Desirable	75.5	16.1	8.4	0.0	Unacceptable	0.0	0.0	0.0	100.0
C3	Unacceptable	16.5	0.6	29.3	53.7	Unacceptable	16.8	1.0	30.4	51.8	Unacceptable	0.0	0.0	0.0	100.0
C4	Unacceptable	0.0	0.0	0.0	100.0	Desirable	53.6	27.7	18.7	0.0	Unacceptable	0.0	0.0	0.0	100.0
NEAGC1	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	2.5	0.0	10.6	86.8	Unacceptable	0.0	0.0	0.0	100.0
NEAGC2	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	10.1	0.7	21.7	67.4	Unacceptable	0.0	0.0	0.4	99.6
NEAGC3	Unacceptable	1.3	0.0	7.6	91.1	Unacceptable	0.6	0.0	15.1	84.3	Unacceptable	0.0	0.0	29.7	70.3
SUE1	Unacceptable	2.2	0.0	14.1	83.7	Unacceptable	12.1	0.1	36.7	51.0	Preferred Maximum	15.7	0.2	63.7	20.5
SUE2	Unacceptable	0.0	0.0	0.0	100.0	Preferred Maximum	36.1	3.9	48.3	11.7	Preferred Maximum	19.5	0.0	80.5	0.0
SUE3	Unacceptable	0.0	0.0	0.0	100.0	Preferred Maximum	23.6	5.5	38.9	32.0	Preferred Maximum	7.9	0.0	70.0	22.1
SUE4	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0
VE1	Unacceptable	9.7	0.6	18.6	71.1	Unacceptable	2.6	0.0	12.5	84.8	Unacceptable	0.0	0.0	0.3	99.7
VE4	Unacceptable	0.0	0.0	0.0	100.0	Preferred Maximum	26.2	0.9	42.8	30.1	Unacceptable	0.0	0.0	0.0	100.0
VE5	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.6	99.4	Unacceptable	0.0	0.0	0.0	100.0

Site	Further and higher education facilities	A4				Local centres	A5				Town centres	A6			
		Desirable	Acceptable	Maximum	Unacceptable		Desirable	Acceptable	Maximum	Unacceptable		Desirable	Acceptable	Maximum	Unacceptable
ALTGC2	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	
ALTGC3	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	
ALTGC4	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.6	99.4	Unacceptable	0.0	0.0	0.0	100.0	
ALTGC6	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	2.3	14.8	82.9	Unacceptable	0.0	0.0	0.0	100.0	
ALTGC7	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	15.8	84.2	Unacceptable	0.0	0.0	0.0	100.0	
ALTGC8	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	
ALTGC9	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	
ALTGC10	Preferred Maximum	22.2	0.2	70.5	7.2	Unacceptable	0.0	7.1	92.9	Unacceptable	0.0	0.0	0.0	100.0	
ALTGC11	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	
C1	Unacceptable	0.0	0.0	0.0	100.0	Preferred Maximum	0.0	98.2	1.8	Unacceptable	0.0	0.0	0.0	100.0	
C2	Unacceptable	0.0	0.0	0.0	100.0	Preferred Maximum	3.3	86.3	10.4	Unacceptable	0.0	0.0	0.0	100.0	
C3	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	21.8	78.2	Unacceptable	0.0	0.0	0.0	100.0	
C4	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	
NEAGC1	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	
NEAGC2	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.5	4.1	95.3	Unacceptable	0.0	0.0	0.0	100.0	
NEAGC3	Unacceptable	5.5	0.0	29.6	64.9	Unacceptable	0.0	1.3	98.7	Unacceptable	0.0	0.0	0.0	100.0	
SUE1	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	2.7	0.0	22.9	74.3	
SUE2	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	
SUE3	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	
SUE4	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	
VE1	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	15.1	84.9	Unacceptable	0.0	0.0	0.0	100.0	
VE4	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	
VE5	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	0.0	0.0	100.0	Unacceptable	0.0	0.0	0.0	100.0	

Site	Railway stations	A7				Bus stops	A8				Cycle paths	A9			
		Desirable	Acceptable	Maximum	Unacceptable		Desirable	Acceptable	Maximum	Unacceptable		Desirable	Acceptable	Maximum	Unacceptable
ALTGC2	Unacceptable	0.0	0.0	0.0	100.0	Preferred Maximum	17.1	1.5	58.9	22.5	Unacceptable	0.0	0.0	0.0	100.0
ALTGC3	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	2.1	0.7	11.7	85.5	Unacceptable	0.0	0.0	0.0	100.0
ALTGC4	Unacceptable	2.5	0.0	21.4	76.0	Preferred Maximum	17.9	10.0	31.2	41.0	Unacceptable	0.0	0.0	0.0	100.0
ALTGC6	Preferred Maximum	13.1	3.5	36.8	46.5	Unacceptable	9.7	3.0	26.0	61.2	Unacceptable	0.0	0.0	0.0	100.0
ALTGC7	Unacceptable	0.0	0.0	0.0	100.0	Preferred Maximum	27.9	11.3	60.8	0.0	Unacceptable	5.0	0.9	31.9	62.2
ALTGC8	Unacceptable	0.0	0.0	1.6	98.4	Preferred Maximum	15.7	4.6	72.5	7.3	Unacceptable	7.8	1.7	22.8	67.8
ALTGC9	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	8.9	3.3	35.7	52.2	Unacceptable	0.1	0.0	14.1	85.7
ALTGC10	Unacceptable	3.5	0.0	33.0	63.5	Acceptable	40.2	16.8	38.9	4.1	Acceptable	35.7	29.2	34.1	1.0
ALTGC11	Unacceptable	0.0	0.0	0.0	100.0	Preferred Maximum	14.9	3.4	48.7	33.0	Preferred Maximum	19.7	16.0	36.8	27.4
C1	Desirable	83.0	17.0	0.0	0.0	Acceptable	45.3	12.9	41.8	0.0	Unacceptable	0.0	0.0	0.0	100.0
C2	Desirable	72.0	28.0	0.0	0.0	Preferred Maximum	19.1	3.3	74.8	2.8	Unacceptable	0.0	0.0	0.0	100.0
C3	Desirable	61.1	38.9	0.0	0.0	Acceptable	40.4	16.6	42.2	0.8	Unacceptable	0.0	0.0	0.0	100.0
C4	Desirable	62.8	37.2	0.0	0.0	Acceptable	38.6	12.2	41.7	7.5	Unacceptable	0.0	0.0	0.0	100.0
NEAGC1	Unacceptable	0.0	0.0	0.0	100.0	Unacceptable	8.8	3.4	17.8	69.9	Unacceptable	1.7	0.0	9.4	88.9
NEAGC2	Unacceptable	5.0	0.9	18.1	76.0	Unacceptable	14.1	7.7	28.0	50.2	Unacceptable	0.0	0.0	0.0	100.0
NEAGC3	Unacceptable	0.0	0.0	6.1	93.9	Preferred Maximum	22.5	9.7	33.8	34.0	Unacceptable	15.3	8.4	23.7	52.7
SUE1	Unacceptable	0.0	0.0	0.0	100.0	Preferred Maximum	17.6	1.8	53.0	27.6	Unacceptable	0.0	0.0	0.0	100.0
SUE2	Preferred Maximum	0.0	0.0	74.9	25.1	Preferred Maximum	22.8	4.1	61.7	11.4	Preferred Maximum	18.8	1.7	45.0	34.4
SUE3	Preferred Maximum	14.1	0.7	54.4	30.8	Preferred Maximum	24.4	5.8	54.5	15.3	Unacceptable	12.4	3.2	31.1	53.3
SUE4	Unacceptable	0.0	0.0	0.0	100.0	Preferred Maximum	12.2	3.0	55.8	29.1	Unacceptable	0.0	0.0	0.0	100.0
VE1	Preferred Maximum	13.3	1.9	53.3	31.4	Unacceptable	9.8	3.0	21.5	65.6	Unacceptable	0.0	0.0	0.0	100.0
VE4	Desirable	52.7	19.1	28.1	0.0	Acceptable	46.0	20.6	30.9	2.4	Unacceptable	0.0	0.0	0.0	100.0
VE5	Unacceptable	0.0	0.0	0.0	100.0	Acceptable	39.4	18.4	36.9	5.2	Preferred Maximum	18.1	20.2	26.9	34.8

Site	Open spaces and sports centres	A10_Desirable	A10_Acceptable	A10_Maximum	A10_Unacceptable	Public Rights of Way (PRoW)	A11_Desirable	A11_Acceptable	A11_Maximum	A11_Unacceptable	Centres of employment including employment areas and town centres	A12_Desirable	A12_Acceptable	A12_Maximum	A12_Unacceptable
ALTGC2	Desirable	54.7	6.7	38.4	0.3	Acceptable	31.5	59.7	8.8	0.0	Preferred Maximum	18.3	0.0	62.4	19.3
ALTGC3	Unacceptable	12.0	1.3	19.7	66.9	Acceptable	27.0	69.4	3.5	0.0	Unacceptable	0.2	0.0	19.6	80.2
ALTGC4	Preferred Maximum	17.1	7.5	25.8	49.7	Acceptable	28.6	62.6	8.7	0.0	Preferred Maximum	32.3	15.9	46.6	5.2
ALTGC6	Acceptable	38.6	17.4	27.2	16.8	Acceptable	26.3	65.1	8.6	0.0	Preferred Maximum	35.1	12.8	48.9	3.3
ALTGC7	Desirable	54.7	12.7	32.6	0.0	Acceptable	32.3	54.4	13.3	0.0	Acceptable	44.0	8.4	47.5	0.0
ALTGC8	Acceptable	37.0	62.7	0.3	0.0	Acceptable	18.1	81.4	0.5	0.0	Preferred Maximum	0.0	0.0	87.2	12.8
ALTGC9	Preferred Maximum	32.2	2.2	35.3	30.3	Acceptable	29.7	58.7	11.6	0.0	Preferred Maximum	0.0	0.0	67.8	32.2
ALTGC10	Acceptable	27.6	56.4	14.8	1.2	Acceptable	33.6	34.5	31.8	0.1	Preferred Maximum	24.0	14.5	59.1	2.4
ALTGC11	Preferred Maximum	21.4	12.1	33.5	33.1	Acceptable	26.6	68.9	4.5	0.0	Desirable	53.7	42.9	3.4	0.0
C1	Acceptable	42.8	57.2	0.0	0.0	Desirable	52.1	38.9	9.0	0.0	Unacceptable	0.0	0.0	0.0	100.0
C2	Acceptable	49.7	50.2	0.0	0.0	Acceptable	29.9	63.7	6.4	0.0	Acceptable	43.9	56.1	0.0	0.0
C3	Preferred Maximum	28.7	15.9	39.3	16.1	Acceptable	42.0	50.2	7.8	0.0	Unacceptable	0.0	0.0	0.0	100.0
C4	Acceptable	49.4	50.6	0.0	0.0	Acceptable	35.9	57.6	6.5	0.0	Unacceptable	0.0	0.0	0.0	100.0
NEAGC1	Unacceptable	5.7	1.0	20.6	72.8	Acceptable	29.2	34.2	35.3	1.2	Unacceptable	0.0	0.0	5.1	94.9
NEAGC2	Preferred Maximum	19.8	6.9	24.7	48.6	Acceptable	32.9	57.4	9.7	0.0	Preferred Maximum	29.9	13.3	40.8	15.9
NEAGC3	Preferred Maximum	26.8	21.3	31.3	20.6	Acceptable	31.8	43.4	24.8	0.0	Preferred Maximum	8.2	2.0	61.2	28.6
SUE1	Acceptable	47.9	45.0	7.1	0.0	Acceptable	27.8	59.8	12.4	0.0	Acceptable	25.6	31.4	43.0	0.0
SUE2	Acceptable	43.9	29.7	25.3	1.1	Acceptable	26.2	65.6	8.2	0.0	Preferred Maximum	0.0	0.0	92.1	7.9
SUE3	Acceptable	41.2	19.6	23.1	16.2	Acceptable	17.8	79.2	3.0	0.0	Preferred Maximum	4.2	0.5	58.1	37.1
SUE4	Unacceptable	15.2	4.3	26.0	54.5	Acceptable	33.8	61.0	5.2	0.0	Acceptable	48.7	51.3	0.0	0.0
VE1	Preferred Maximum	24.5	16.5	29.1	29.9	Acceptable	30.7	58.6	10.7	0.0	Preferred Maximum	28.6	9.9	61.5	0.0
VE4	Acceptable	45.2	54.3	0.5	0.0	Acceptable	26.4	71.7	1.9	0.0	Unacceptable	0.0	0.0	0.0	100.0
VE5	Acceptable	41.6	9.5	40.1	8.9	Acceptable	37.6	45.2	17.1	0.0	Acceptable	37.8	41.0	21.2	0.0

Table 2.2: Proportion of sites within Stage 1a 'risk of environmental harm' scoring categories

Site	Proximity to heritage assets: allocations outside of existing settlements	E2			Proximity to wildlife or geological sites: internationally or nationally designated site - allocations outside existing settlements	E4				Proximity to wildlife or geological sites: locally designated wildlife sites and ancient woodland	E5			Proximity to wildlife or geological sites: Priority Habitat Inventory (PHI) or local Biodiversity Action Plan (BAP) habitat	E6		
		High	Medium	Low		Perc	High	Medium	Low		High	Medium	Low		High	Medium	Low
ALTGC2	High	69.6	30.4	0.0	Medium	100.0	0.0	100.0	0.0	Medium	0.0	22.1	77.9	Low	0.0	0.0	100.0
ALTGC3	High	74.5	25.5	0.0	Medium	100.0	0.0	100.0	0.0	High	7.9	31.3	60.8	Medium	0.0	11.8	88.2
ALTGC4	High	71.3	28.7	0.0	Medium	0.2	0.2	96.4	3.5	Medium	0.1	13.3	86.6	Low	0.0	0.5	99.5
ALTGC6	High	73.1	26.9	0.0	Medium	99.8	0.0	99.8	0.2	Low	0.0	0.0	100.0	Low	0.0	1.5	98.5
ALTGC7	High	55.0	43.4	1.6	Medium	0.1	0.1	94.0	6.0	Medium	0.0	67.5	32.5	Low	0.0	2.1	97.9
ALTGC8	High	55.9	44.1	0.0	Medium	100.0	0.0	100.0	0.0	High	8.8	67.8	23.4	Medium	0.0	17.1	82.9
ALTGC9	High	47.2	52.8	0.0	Medium	100.0	0.0	100.0	0.0	Medium	1.7	54.3	44.1	Medium	0.0	7.2	92.8
ALTGC10	High	33.3	59.1	7.6	Medium	100.0	0.0	100.0	0.0	High	10.6	53.5	35.9	Medium	0.0	11.8	88.2
ALTGC11	High	78.6	21.4	0.0	Medium	100.0	0.0	100.0	0.0	Medium	0.0	27.0	73.0	Low	0.0	0.2	99.8
C1	High	81.6	18.4	0.0	Medium	100.0	0.0	100.0	0.0	High	14.0	67.9	18.1	Medium	0.0	6.1	93.9
C2	High	88.5	11.5	0.0	Medium	100.0	0.0	100.0	0.0	Medium	2.9	41.2	55.9	Low	0.0	0.0	100.0
C3	High	55.6	41.8	2.6	Medium	100.0	0.0	100.0	0.0	Medium	2.3	55.3	42.4	Low	0.0	2.9	97.1
C4	High	83.0	17.0	0.0	Medium	100.0	0.0	100.0	0.0	High	5.3	74.2	20.4	Medium	0.0	9.1	90.9
NEAGC1	High	45.9	54.1	0.0	Medium	57.2	0.0	57.2	42.8	Medium	1.8	46.8	51.4	Low	0.0	2.9	97.1
NEAGC2	High	69.0	30.3	0.7	Medium	99.2	0.0	99.2	0.8	Medium	0.0	7.2	92.8	Low	0.0	0.8	99.2
NEAGC3	High	40.7	55.0	4.2	Medium	100.0	0.0	100.0	0.0	Medium	0.7	45.1	54.2	Low	0.0	2.7	97.3
SUE1	High	57.8	42.2	0.0	Medium	93.0	0.0	93.0	7.0	Medium	0.0	14.8	85.2	Low	0.0	2.9	97.1
SUE2	High	26.1	73.9	0.0	Medium	100.0	0.0	100.0	0.0	Medium	1.9	62.1	36.0	Low	0.0	2.7	97.3
SUE3	High	57.5	42.5	0.0	Medium	100.0	0.0	100.0	0.0	Medium	1.7	32.8	65.4	Low	0.0	2.2	97.8
SUE4	High	53.3	46.7	0.0	Low	100.0	0.0	0.0	100.0	Medium	1.8	54.5	43.7	Low	0.0	2.3	97.7
VE1	High	82.5	17.5	0.0	Medium	100.0	0.0	100.0	0.0	Low	0.0	0.4	99.6	Low	0.0	0.8	99.2
VE4	High	47.0	52.4	0.6	Medium	100.0	0.0	100.0	0.0	Medium	0.0	56.1	43.9	Low	0.0	0.1	99.9
VE5	High	78.6	21.4	0.0	Medium	100.0	0.0	100.0	0.0	Low	0.0	3.4	96.6	Low	0.0	3.0	97.0

Site	Proximity to designated landscapes: allocations within existing settlements	E7 High	E7 Medium	E7 Low	E8 Highest Alt	E8 High	E8 Medium	E8 Low	Proximity to designated landscapes: allocations outside of existing settlements	E9 High	E9 Medium	E9 Low	Intersection with Source Protection Zones (SPZs)	E10 High	E10 Medium	E10 Low
ALTGC2	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
ALTGC3	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
ALTGC4	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
ALTGC6	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
ALTGC7	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Medium	0.0	100.0	0.0	Low	0.0	0.0	100.0
ALTGC8	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Medium	0.0	95.7	4.3	Low	0.0	0.0	100.0
ALTGC9	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Medium	0.0	34.0	66.0	Low	0.0	0.0	100.0
ALTGC10	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
ALTGC11	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Medium	0.0	100.0	0.0	Low	0.0	0.0	100.0
C1	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
C2	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Medium	1.5	44.5	54.0
C3	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
C4	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
NEAGC1	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
NEAGC2	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
NEAGC3	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Medium	0.0	23.2	76.8	Low	0.0	0.0	100.0
SUE1	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Medium	1.0	10.8	88.2
SUE2	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
SUE3	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
SUE4	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Medium	0.0	86.2	13.8
VE1	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
VE4	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
VE5	N/A	0.0	0.0	0.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Medium	0.0	15.1	84.9

Site	Intersection with flood risk areas	E11			Likely contribution to road traffic within areas suffering from traffic-related air pollution	E12			Proximity to sources of air pollution	E13			Exposure to noise pollution from roads and railways	E14		
		High	Medium	Low		High	Medium	Low		High	Medium	Low		High	Medium	Low
ALTGC2	Low	0.1	0.0	99.9	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
ALTGC3	Low	0.2	0.1	99.8	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Medium	4.8	7.8	87.5
ALTGC4	Low	1.9	0.3	97.8	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	16.4	16.1	67.5
ALTGC6	Medium	4.9	0.8	94.3	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	25.8	33.0	41.2
ALTGC7	Low	0.0	0.0	100.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	24.7	39.9	35.4
ALTGC8	Low	2.7	0.6	96.7	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	13.9	19.2	66.9
ALTGC9	Low	0.0	0.0	100.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	16.0	20.0	64.0
ALTGC10	High	5.2	1.0	93.8	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	16.6	18.3	65.0
ALTGC11	Low	0.0	0.0	100.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	9.2	24.3	66.5
C1	Low	0.8	0.1	99.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
C2	Low	1.3	0.1	98.6	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
C3	Medium	3.4	2.2	94.4	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Medium	2.2	10.2	87.6
C4	High	10.9	0.3	88.9	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
NEAGC1	Low	0.0	0.0	100.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	1.2	98.8
NEAGC2	Low	1.4	0.3	98.3	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	23.5	23.3	53.1
NEAGC3	Low	0.0	0.0	100.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	17.2	21.4	61.4
SUE1	Low	3.3	0.5	96.1	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Medium	2.8	4.4	92.7
SUE2	Low	0.0	0.0	100.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	20.7	29.4	49.8
SUE3	Low	0.5	0.1	99.4	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	8.6	12.2	79.2
SUE4	Low	0.0	0.0	100.0	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	Low	0.0	0.0	100.0
VE1	Low	0.2	0.0	99.7	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	13.4	10.2	76.4
VE4	Low	1.5	0.6	97.9	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	10.1	20.1	69.8
VE5	Low	0.7	0.1	99.1	N/A	0.0	0.0	0.0	Low	0.0	0.0	100.0	High	23.1	19.0	57.9

Site	Intersection with mineral resources	E15 High	E15 Medium	E15 Low	Intersection with agricultural land	E16 High	E16 Medium	E16 Low
ALTGC2	High	100.0	0.0	0.0	High	100.0	0.0	0.0
ALTGC3	High	82.7	0.0	17.3	High	81.0	13.0	6.0
ALTGC4	High	55.4	0.0	44.6	High	100.0	0.0	0.0
ALTGC6	High	77.7	0.0	22.3	High	59.9	40.1	0.0
ALTGC7	High	93.6	0.0	6.4	High	79.6	12.6	7.8
ALTGC8	High	23.4	0.0	76.6	High	26.8	72.8	0.4
ALTGC9	High	96.0	0.0	4.0	High	74.7	25.3	0.0
ALTGC10	High	69.6	0.0	30.4	High	53.8	41.9	4.3
ALTGC11	High	89.7	0.0	10.3	High	91.5	8.5	0.0
C1	High	93.5	0.0	6.5	High	74.2	25.8	0.0
C2	High	72.6	0.0	27.4	High	50.8	49.2	0.0
C3	High	13.0	0.0	87.0	Medium	0.0	100.0	0.0
C4	High	16.0	0.0	84.0	Medium	0.8	68.8	30.4
NEAGC1	High	75.3	0.0	24.7	High	95.4	4.6	0.0
NEAGC2	High	65.2	0.0	34.8	High	92.0	8.0	0.0
NEAGC3	High	96.1	0.0	3.9	High	79.9	20.1	0.0
SUE1	High	79.7	0.0	20.3	High	22.9	66.9	10.2
SUE2	High	90.1	0.0	9.9	High	100.0	0.0	0.0
SUE3	High	53.3	0.0	46.7	High	91.2	8.8	0.0
SUE4	Low	0.0	0.0	100.0	High	100.0	0.0	0.0
VE1	High	99.8	0.0	0.2	High	99.2	0.8	0.0
VE4	Low	3.0	0.0	97.0	Medium	0.0	100.0	0.0
VE5	High	55.7	0.0	44.3	High	96.0	4.0	0.0

3 Results of Stage 1c - Detailed SA of strategic sites

ALTGC2 Land East of Silver End

Site Context

- 3.1 Site ALTGC2 is a strategic site located to the northeast of Silver End, southeast of Braintree. The site is wholly located within Braintree District and the potential scale of development from this site is up to approximately 2,500 dwellings once fully built. The site also adjoins the Section 2 Local Plan allocated residential site Land North of Western Road, Silver End site of 350 dwellings. In total, the maximum potential scale of development from this site and the neighbouring site Land North of Western Road is up to approximately 2,850 dwellings once fully built.
- 3.2 The site is 16ha and currently comprises primarily arable land. The north of the site is partially occupied by a quarry at the old Rivenhall Airfield site, and the site contains some of the remaining airfield perimeter track and loop hardstands. The nearest settlement to the site (measuring from the site boundary to the nearest edge of each settlement) include Silver End, adjoining the southwest of the site, which is a settlements of approximately 1,551 dwellings, but with no policy-defined local centre; Crossing, approximately 1km to the west, which is a settlement of approximately 226 dwellings, but with no policy-defined local centre; Hawbush Green, approximately 1.4km to the west, which is a settlement with no policy-defined local centre; Bradwell, approximately 1.4km to the north, which is a settlement of approximately 223 dwellings, but with no policy-defined local centre; Rivenhall, approximately 1.6km to the south, which is a settlement of approximately 163 dwellings, but with no policy-defined local centre; Tye Green, approximately 1.8km to the west, which is a settlement of approximately 548 dwellings, but with no policy-defined local centre; Witham, approximately 2.2km to the south, which is a settlement of approximately 11,793 dwellings, and which includes a policy-defined town centre; Braintree (including Bocking and Great Notley), approximately 2.6km to the northwest, which is a settlement of approximately 21,882 dwellings, and which includes a policy-defined town centre; Rivenhall End, approximately 2.8km to the southeast, which is a settlement of approximately 159 dwellings, but with no policy-defined local centre; Kelvedon with Feering, approximately 3.1km to the east, which are settlements of approximately 2,462 dwellings combined, and which include policy-defined local centres; Black Notley, approximately 3.1km to the west, which is a settlement of approximately 1,033 dwellings, but with no policy-defined local centre; White Notley, approximately 3.2km to the southwest, which is a settlement of approximately 229 dwellings, but with no policy-defined local centre; Coggeshall, approximately 3.4km to the northeast, which is a settlement of approximately 2,179 dwellings, and which includes a policy-defined local centre; and Stisted, approximately 3.5km to the north, which is a settlement of approximately 271 dwellings, but with no policy-defined local centre. Witham is the nearest town defined in the draft Braintree Section 2 Local Plan, the centre of which is approximately 5.8km south west of the centre of site ALTGC2 and approximately 4.5km south of the site boundary. Other strategic settlements and destinations nearby include Great Dunmow 19km to the west, Stansted Airport 27km to the west, Chelmsford 17km to the southwest, Maldon, 14km to the southeast, Colchester 19km to the east, and Haverhill 29km to the northwest (approximately measured from centre to centre).
- 3.3 Sheepcotes Lane crosses the centre of the site and travels in a north-south alignment, connecting to Bradwell and the A120 to the north, which connects to Braintree and Coggeshall. Boars Tye Road bounds the northwest of the site and Western Road and Park Gate Road bound the south of the site, connecting to the smaller settlements to the east and west. Temple Lane connects Silver End to Witham Road to the south, which connects to Braintree and Witham. As a predominantly greenfield site, the area is not well served by existing facilities and services. The nearest railway

station is White Notley, which is approximately 3km from the centre of the site, and which connects directly to Braintree and London.

- 3.4 There are no significant residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundary. Within 1km of the site, the Land North of Western Road, Silver End site adjoining the southwest of ALTGC2 is the most significant residential site. This site is allocated in the Braintree Section 2 Local Plan and was permitted at appeal (15/00280/OUT) for up to 350 homes. Three other nearby allocated sites in Silver End will provide approximately 160 more dwellings between them.
- 3.5 Rivenhall Airfield Extraction, which covers much of the site, is an allocated Minerals Extraction Site in the Essex Minerals Local Plan. A planning application (ESS/24/14/BTE) for sand and gravel extraction of part of this site in the north of ALTGC2 was granted by Essex County Council in 2015 and this extraction site is operational. In addition, a planning application (ESS/37/08/BTE) for the development of an integrated waste management facility of part of this site, adjoining the east of ALTGC2 was granted by Essex County Council in 2010. On the 21 December 2016, the Environment Agency issued a refusal notice against the first Environmental Permit Application that had been submitted for this integrated waste management facility, as the Environment Agency indicated that the facility would reduce emissions impacts by raising the stack height of the facility. A planning application (ESS/37/17/BTE) for the continuation of the facility without compliance to the original conditions of the permission in order to amend details resulting from the increased stack height was refused in May 2019 by Essex County Council. There are no details regarding an appeal for this application yet published by Essex County Council.

SA objective	Criterion	ALTGC2	ALTGC2	ALTGC2	ALTGC2
		Stage 1a	Stage 1b	A	B
		N/A	N/A	1800	2500
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	+++?	+++?
SA3 Improve health	Access to GP surgeries/ health centres	Preferred Maximum	Preferred Maximum	+/-?	+/-?
	Access to cycle paths	Unacceptable	Unacceptable		
	Access to open spaces and sports centres	Desirable	Desirable		
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable		
	Potential for harm to Source Protection Zones (SPZs)	Low	Low		
	Potential exposure to flood risk	Low	Low		
	Potential exposure to air pollution	Low	Low		
	Potential exposure to noise pollution	Low	Low		

SA objective	Criterion	ALTGC2	ALTGC2	ALTGC2	ALTGC2
		Stage 1a	Stage 1b	A	B
		N/A	N/A	1800	2500
	from roads and railways				
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+
	Access to town centres	Unacceptable	Unacceptable		
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	++	++
	Access to town centres	Unacceptable	Unacceptable		
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum		
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	-?	-?
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium		
	Potential for harm to PHI or local BAP habitat	Low	Low		
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Preferred Maximum	Preferred Maximum	+?/-?	+?/-?
	Access to primary or middle schools	Preferred Maximum	Desirable		
	Access to secondary schools	Unacceptable	Unacceptable		
	Access to further and higher education facilities	Unacceptable	Unacceptable		
	Access to local centres	Unacceptable	Desirable		
	Access to town centres	Unacceptable	Unacceptable		
	Access to railway stations	Unacceptable	Unacceptable		
	Access to bus stops	Preferred Maximum	Desirable		
	Access to cycle paths	Unacceptable	Unacceptable		
	Access to open spaces and sports centres	Desirable	Desirable		
	Access to Public	Acceptable	Acceptable		

SA objective	Criterion	ALTGC2	ALTGC2	ALTGC2	ALTGC2
		Stage 1a	Stage 1b	A	B
		N/A	N/A	1800	2500
	Rights of Way (PRoW)				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum		
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Preferred Maximum	Preferred Maximum	+?	+?
	Access to primary or middle schools	Preferred Maximum	Desirable		
	Access to secondary schools	Unacceptable	Unacceptable		
	Access to further and higher education facilities	Unacceptable	Unacceptable		
	Access to local centres	Unacceptable	Desirable		
	Access to town centres	Unacceptable	Unacceptable		
	Access to railway stations	Unacceptable	Unacceptable		
	Access to bus stops	Preferred Maximum	Desirable		
	Access to cycle paths	Unacceptable	Unacceptable		
	Access to open spaces and sports centres	Desirable	Desirable		
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable		
Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum			
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Preferred Maximum	Preferred Maximum	+	+
	Access to primary or middle schools	Preferred Maximum	Desirable		
	Access to secondary schools	Unacceptable	Unacceptable		
	Access to further and higher education facilities	Unacceptable	Unacceptable		

SA objective	Criterion	ALTGC2	ALTGC2	ALTGC2	ALTGC2
		Stage 1a	Stage 1b	A	B
		N/A	N/A	1800	2500
	<i>Access to local centres</i>	Unacceptable	Desirable		
	<i>Access to town centres</i>	Unacceptable	Unacceptable		
	<i>Access to railway stations</i>	Unacceptable	Unacceptable		
	<i>Access to bus stops</i>	Preferred Maximum	Desirable		
	<i>Access to cycle paths</i>	Unacceptable	Unacceptable		
	<i>Access to open spaces and sports centres</i>	Desirable	Desirable		
	<i>Access to Public Rights of Way (PRoW)</i>	Acceptable	Acceptable		
	<i>Access to centres of employment including employment areas and town centres</i>	Preferred Maximum	Preferred Maximum		
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?	0/0?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/-?	0/-?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/--	--?/--
	Potential for harm to agricultural land	High	High		

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

- 3.6 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 1 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 3.7 Currently the site is an area of arable farmland, featuring a single farm and part of a quarry at the old Rivenhall Airfield site, as well as some of the remaining airfield perimeter track and loop hardstands. Neighbouring settlements include Silver End (approx. 1,551 dwellings), Cressing (approx. 226 dwellings), Bradwell (approx. 223 dwellings), Rivenhall (approx. 163 dwellings), Tye Green (approx. 548 dwellings), Witham (approx. 11,793 dwellings), Braintree (including Bocking and Great Notley) (approx. 21,882 dwellings), Rivenhall End (approx. 159 dwellings), Kelvedon with Feering (approx. 2,462 dwellings combined), Black Notley (approx. 1,033 dwellings), White Notley (approx. 229 dwellings), Coggeshall (approx. 2,179 dwellings), Stistead (approx. 271 dwellings) and Hawbush Green. Some of these are large enough to offer a local or town centre as defined in the draft Braintree Section 2 Local Plan¹.
- 3.8 It is recognised that the provision of such a large development around and close to the existing small scale communities in the area is likely to result in a significant change to these. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context as development of this scale would result in the creation of a permanent urban character compared to what is a rural character at present. It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements that impacts will generally be negatively perceived by some of the existing surrounding communities. As such, development of this site at all of the potential scales of development (ALTGC2 a/b) will result in significant negative yet uncertain (--?) effects in relation to this SA objective. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

- 3.9 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 3.10 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (ALTGC2a/b).
- 3.11 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.12 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case for all dwelling capacity options (ALTGC2 a/b).
- 3.13 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.14 In addition, the site information form sets out that development at 1,800 and 2,500 dwelling capacities is likely to be viable, which includes the delivery of 30% affordable housing. However, for both capacity options this viability would be dependent on external funding for strategic

¹ https://www.braintree.gov.uk/info/200230/planning_policy/701/new_local_plan/2

infrastructure (RTS and road/junction improvements) or other improvement in site viability such as inflationary impacts or other influences. This results in uncertainty for this development scale as the external funding / improvement to viability has not yet occurred.

- 3.15 In light of the above factors, it is considered that significant positive yet uncertain (++) effects are likely to occur in relation to this SA objective for all dwelling capacity options (ALTGC2 a/b).

SA3: Improve health/reduce health inequalities

- 3.16 As set out in the assumptions framework, all sites are expected to have mixed effects (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.17 As a predominantly greenfield site, there are no existing healthcare facilities within ALTGC2. The nearest GP Surgery is Silver End Surgery within Silver End; however there are also health services provided in the surrounding settlements of Braintree, Coggeshall, Kelvedon and Witham, including Braintree Community Hospital and several other GP Surgeries.
- 3.18 Similarly, there are no sports centres or open spaces located within the site, but designated open spaces are located within the adjoining settlement of Silver End. No cycle paths pass through or adjacent to the site, however the site includes some public rights of way, which provide access to the surrounding countryside. These may provide links to the surrounding countryside and public open space for residents of the new development to utilise for recreation; however, it is not considered that these Public Rights of Way will make a significant contribution to recreation so as to facilitate more healthy lifestyles.
- 3.19 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritises walking, cycling and use of public transport over private car use and includes foot and cycle ways throughout the development and provides open space within the development. The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to this SA objective for all site capacity options (ALTGC2 a/b).
- 3.20 In terms of accessing healthcare, the site is relatively isolated in terms of access to GP Surgeries and health centres because it is a largely rural site (Stage 1a of the SA found that only 6% of the site is within 'desirable' or 'acceptable' walking distance of an existing primary healthcare facility). For all site capacity options (ALTGC2 a/b) the site is not likely to be large enough to support new healthcare facilities, resulting in no adjustment to the minor positive effect (+) identified above.

Exposure to noise pollution

- 3.21 None of the site falls within either a DEFRA strategic noise area of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB so the anticipated effects in relation to exposure to noise pollution from roads or railways for all dwelling capacity options (ALTGC2 a/b) are considered to be negligible. It is noted, however, that the existing adjoining quarry could affect the new community through noise impacts, resulting in uncertain negative effects (-?) in relation to noise pollution.
- 3.22 In accordance with the above commentary anticipated effects on this SA objective, all dwelling capacity options (ALTGC2 a/b) will be mixed with minor positive and uncertain negative implications (+/-?).

SA4: To ensure and improve the vitality & viability of centres

Effects of new centre facilities

- 3.23 In accordance with the site information form, it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to this SA objective, at all potential dwelling scales (ALTGC2 a/b).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.24 The relationship of the site to existing centres is described in the site context above. There are also existing employment areas surrounding the site the provide jobs, which may not be within local or town centres. The nearest employment areas (not within local or town centres) include Allshots Enterprises, located approximately 650m northwest of the site, the employment site at London Road, Kelvedon, located approximately 3.2km southwest of the site, and Eastways Industrial Estate, located approximately 3.2km south of the site.
- 3.25 It is anticipated that the development of the site for more than 2,000 homes will increase the local workforce, providing a greater resource for businesses and organisations. As such, at least minor positive (+) effects are expected for potential dwelling scale ALTGC2b (2,500 dwellings).
- 3.26 Furthermore, in accordance with the site information form, it is considered that development at all potential dwelling scales (ALTGC2 a/b) will be able to support approximately 15ha of employment land within the site. This is a significant amount of new employment land which is likely to make a significant contribution to the local economy, resulting in significant positive (++) effects for all site capacity options.
- 3.27 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.
- 3.28 In accordance with the above commentary anticipated effects on this SA objective, at all site capacity options (ALTGC2 a/b) will be significant positive (++).

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.29 The site does not intersect any designated wildlife site or priority habitat, but more than 5% of the site area falls within 400m of ancient woodland, as well as Storey's Wood and Link's Wood local wildlife sites, and the whole site falls within a SSSI Impact Risk Zone where residential development of 100 units or more could cause harm. Therefore, it is anticipated that effects on the existing habitats may be minor and negative, and may result from amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure, predation by pets.
- 3.30 However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects. As such a minor negative yet uncertain (-?) effect is anticipated in relation to this SA objective. This effect is considered likely to occur in relation to all potential dwelling capacities (ALTGC2 a/b).
- 3.31 Cumulative effects on the identified ecological assets may occur if the permitted planning application at Land North of Western Road comes forward.
- 3.32 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.33 The site is a largely greenfield site which is rural in character. The relationship of the site to existing local centres is described above in the site context section and the accessibility of the site to surrounding facilities and services would, prior to provision of any new transport infrastructure, be primarily dependant on Sheepcotes Lane, Boars Tye Road, Western Road, Park Gate Road and Temple Lane, as well as their connections to the A120, A12 and Witham Road. As set out in the Braintree Infrastructure Delivery Plan Report², the A120 and A12 operate at capacity during peak periods and, as a result, can provide an unreliable level of service. A bus service operates on an approximately half hourly frequency along Boars Tye Road and Western Road, linking Silver End

² https://www.braintree.gov.uk/downloads/file/6491/braintree_infrastructure_delivery_plan_report_october_2017

to Witham to the south, Braintree to the west and Halstead to the north. The nearest railway station is White Notley, which is approximately 3km from the centre of the site, and which connects directly to Braintree and London and offers an hourly service throughout the day. As set out in the Braintree Infrastructure Delivery Plan Report³, the Great Eastern Mainline railway operates at capacity on trains to and from London in the peak hours. The nearest existing primary school is Silver End Primary School, approximately 1km south from the centre of the site, and the nearest secondary school is the Rickstones School, approximately 3.7km south from the centre of the site.

- 3.34 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.35 In accordance with the assumptions framework and as confirmed by the site information form, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council⁴ sets out that there is limited capacity at primary schools in Cressing/Silver End (0 places forecast in 2018-2019). It is therefore considered likely that new primary school(s) will be required to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (ALTGC2 a/b). These services and facilities would serve both new residents and the existing community within the development site.
- 3.36 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at all potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities, secondary schools and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall it is considered likely that the provision of the aforementioned local services and facilities is likely to result in minor positive yet uncertain (+?) effects for all dwelling capacities (ALTGC2 a/b). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.
- 3.37 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to contribute to additional secondary school capacity in accordance with the developer contributions guidance from Essex County Council⁵. In addition the Essex County Council evidence⁶ sets out that in 2028-29 (the final year of the forecast in this schools capacity document) there will be 46 secondary school places in Braintree, but limited capacity at secondary schools in Witham (-52 places forecast) or in Halstead/Hedingham/Coggeshall (-22 places forecast). Given a secondary pupil factor of 0.2 pupils per house, it is likely that some secondary school expansion may be required to meet all dwelling capacity options - ALTGC2a for 1,800 dwellings which is the smallest option will generate approximately 360 secondary pupils. It is therefore considered likely that new secondary school(s) will be required to serve the site at all capacity options. As set out in the assumptions framework, all potential site capacities (ALTGC2 a/b) are too low to be considered capable of delivering new secondary school facilities on the site. As such, the minor positive effects identified in relation to this SA objective are not considered likely to change.

³ https://www.braintree.gov.uk/downloads/file/6491/braintree_infrastructure_delivery_plan_report_october_2017

⁴ Essex School Organisation Service – 10 Year Plan 2019-2028.

⁵ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

⁶ Essex School Organisation Service – 10 Year Plan 2019-2028.

Longer journeys

- 3.38 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.39 For journeys to more distant destinations, the distance to the nearest railway station, White Notley, is located beyond the 'desirable' or 'acceptable' distance as determined by the Stage 1a assessment and as such, this is likely to reduce the potential for trips by rail, which may lead to increased car use and increased congestion for the external journeys. In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken.
- 3.40 The site is split between three middle super output areas (MSOAs) – Braintree 012, Braintree 014 and Braintree 015. According to NOMIS, it is most popular for commuters from these MSOAs to travel to work within each MSOA themselves or in Braintree, Witham or Colchester towns. In addition, 4% and 6% of commuters from Braintree 014 and Braintree 015 respectively travel to work in Chelmsford, and 9% and 5% respectively travel to work in the City of London. As such, if the new residents follow the same pattern, most of the commuting journeys are likely to be carried by local roads identified as being congested, including the A12 and A120. These are predominantly relatively short trips which are less likely to be undertaken by train due to the distance to the nearest station. As such, minor negative yet uncertain (-?) effects are considered likely in relation to all potential dwelling capacities (ALTGC2 a/b). The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters to these locations.
- 3.41 In accordance with the above commentary anticipated effects on this SA objective for all potential dwelling capacities (ALTGC2 a/b) are considered to be mixed with uncertain minor positive and uncertain minor negative implications (+?/-?).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.42 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.
- 3.43 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form for this site, this site is to be supported by the following strategic infrastructure at all potential dwelling capacities - ALTGC2a (1,800 dwellings) and ALTGC2b (2,000 dwellings):
- Early Years
 - Primary School(s)
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Community meeting spaces
- 3.44 The site information form indicates that the site can viably deliver these infrastructure requirements with external funding from transport operating companies or other improvement to site viability.
- 3.45 The supporting infrastructure listed above is confirmed to be viable (on the site information form) and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for all dwelling capacity options (ALTGC2 a/b). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through

further work including the preparation, submission and determination of a planning application. Further uncertainty is also noted as the site information form sets out that external funding or other improvement in viability is required to deliver the rapid transport system, the A120 route option D&E, and the grade-separated A120 junction at Silver End.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 3.46 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 3.47 The Grade II listed Sheepcote Farmhouse is located in the centre of the site. In addition, the Grade II* listed Rivenhall Place, Silver End Conservation Area and associated Grade II listed buildings are located within 500m of the site. In addition, Crossing Conservation Area and the Grade I listed Parish Church of All Saints, as well as other Grade II listed buildings, are located within 1km of the site.
- 3.48 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.
- 3.49 More than 5% of the site area is within 500m of heritage assets including the Grade II listed Sheepcote Farmhouse, Silver End Conservation Area and the Grade II* listed Rivenhall Place. Taking a precautionary approach to this assessment, potential significant negative yet uncertain effects (--?) are anticipated in relation to all potential dwelling capacity options (ALTGC2 a/b). The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.50 With regards to townscape, the boundary of the site adjoins the settlement of Silver End. At all dwelling capacity options, ALTGC2a (1,800 dwellings) and ALTGC2b (2,000 dwellings), the site would increase the number of dwellings compared to Silver End by more than 10%.
- 3.51 This is likely to significantly change the character of the settlement, but whether this change will be positive or negative will depend on the quality of design of the new development. Therefore, the effects in relation to the townscape element of this SA objective are uncertain (?).
- 3.52 In accordance with the above commentary anticipated effects on this SA objective, in relation to all potential dwelling capacity options (ALTGC2 a/b) are considered to be mixed, with uncertain significant negative and uncertain implications (--?/?).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.53 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.54 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities (ALTGC2 a/b) is likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 3.55 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 3.56 The site is entirely outside source protection zones, and as such it is not considered likely that the development of the site will affect ground water stores and therefore negligible effects (0) are anticipated in relation to ground water for all potential dwelling capacity options (ALTGC2 a/b).

Water scarcity and water treatment

- 3.57 With regard to water supply, the Braintree Water Cycle Study⁷ identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. However the study is based on assumptions of growth from 'preferred development allocations' within Braintree's Local Plan (para 1.4) as well as the Garden Communities of Marks Tey and West of Braintree (para 6.3).
- 3.58 On the basis of this growth, the study identifies four Water Recycling Centres (WRCs) that do not have sufficient headroom to accommodate growth. However, given that site ALTGC2 was not allocated either within the Section 1 Plan (as a Garden Community) or allocated within Braintree's Section 2 Local Plan, growth at this location was not taken into account for this study. There is therefore some uncertainty over capacity at specific Water Recycling Centres (WRCs), and the results of the study should be interpreted with caution for the purposes of assessing this site.
- 3.59 It is not entirely clear from the study which catchment area the site would lie within. Geographically it lies closest to White Notley WRC, which is identified as having exceeded its headroom by approximately 570 dwellings and would require treatment process upgrades (using conventional treatment technologies) prior to 2022 to cater to growth in the plan period.
- 3.60 As such, the effects in relation to this SA objective are considered to be negligible yet uncertain (0?) at all capacity options. The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application.
- 3.61 In accordance with the above commentary, the effects in relation to this SA objective are considered to be mixed negligible and negligible yet uncertain (0/0?) at all dwelling capacity options (ALTGC2 a/b). The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.62 None of the site is at medium or high risk of ground water flooding and only small areas of the site (<25%) are within Flood Zone 2 and 3. Additionally, only small areas of the site (<25%) are at risk of surface water flooding, which is considered to be a negligible amount. Furthermore, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.63 It is therefore considered that the effects in relation to this SA objective are likely to be negligible (0) for all potential dwelling capacity options (ALTGC2 a/b).

SA13: To improve air quality

- 3.64 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 3.65 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated for all potential dwelling capacity options (ALTGC2 a/b).

⁷ https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

Potential contribution to road traffic within areas suffering from air pollution

- 3.66 The site is split between three middle super output areas (MSOAs) – Braintree 012, Braintree 014 and Braintree 015. According to NOMIS, it is most popular for commuters from these MSOAs to travel to work within each MSOA itself or to Braintree, Witham or Colchester towns. In addition, 4% and 6% of commuters from Braintree 014 and Braintree 015 respectively travel to work in Chelmsford, and 9% and 5% respectively travel to work in the City of London. As such, if the new residents follow the same pattern, it is likely that commuting patterns will lead to increased vehicular trips through the Chelmsford Army and Navy AQMA within Chelmsford town, as well as the Central Corridors and Lucy Lane North AQMAs within Colchester. As such, a minor negative effect is considered likely (-?) at all potential dwelling capacity options (ALTGC2 a/b). However, uncertainty exists as it is not known exactly how and where people will travel.
- 3.67 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options (ALTGC2 a/b) will be mixed with negligible and uncertain minor negative implications (0/-?).

SA14: To conserve and enhance the quality of landscapes

- 3.68 The site is not located near any designated landscapes or proposed extensions to these.
- 3.69 The area has been assessed by landscape officers of the NEAs, and has been found to be of moderate landscape character. Development related landscape issues include a generally open landscape that allows long distance views; the gravel pit extends over the airfield and is exposed to views, and there is potential for residential expansion to impact views and horizon lines. These factors resulted in the landscape area being assessed as having a moderate-high sensitivity to change. In light of this and in line with the stated assumptions, it is considered that development of the site at all potential dwelling capacity options (ALTGC2 a/b) is likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 3.70 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 3.71 The site is wholly within a mineral safeguarding area for sand and gravel deposits, and overlaps the Bradwell Quarry 'Permission to Extract' zone and part of the quarry at the old Rivenhall Airfield site. This means that the development of this site could result in a significant sterilisation of mineral resources. Due to the large area of mineral resources that may be affected, the effects are considered to be significant negative yet uncertain (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential dwelling capacity options (ALTGC2 a/b), because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

- 3.72 The site is wholly on Grade 2 agricultural land, meaning the development of this site would result in the loss of a significant amount of high quality agricultural land. In light of the above, a significant negative (--) effect is anticipated. The effect is considered to be the same for all potential dwelling capacity options (ALTGC2 a/b), because the location of the development within the site boundary for each capacity option is unknown.
- 3.73 In accordance with the above commentary, the effects in relation to this SA objective at all potential dwelling capacity options (ALTGC2 a/b) will be mixed with uncertain significant negative and significant negative implications (--?/--).

Summary of significant effects

- 3.74 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out at capacity - ALTGC2a – 1,800 dwellings and ALTGC2b – 2,000 dwellings

- 3.75 Effects once the site is fully built out to these two site capacities are found to be broadly the same, given the similar scale of these options. Significant positive effects are anticipated in relation to:
- SA1 Community cohesion, due to the potential to provide community cohesion within the new development;
 - SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
 - SA5 Economy, through the provision of jobs within the local area; and
- 3.76 The potential for significant negative effects arises at these scales in relation to:
- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
 - SA9 Historic environment and townscape, due to potential impacts on the setting of nearby heritage assets;
 - SA14 Landscape, due to the moderate-high sensitivity to change of the landscape character area; and
 - SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and loss of Grade 1 or 2 agricultural land.
- 3.77 In summary, the fully built site at either capacity (ALTGC2a – 1,800 dwellings and ALTGC2b – 2,000 dwellings) is likely to be able to provide a sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered likely to be able to support a range of services and facilities for residents and workers within the site and is likely to support a larger range of jobs. However, the site is not likely to be large enough at this time to provide higher order services such as a secondary school or health facilities. As such, development in this location at the end of the plan period or when built to the lower capacity option will result in more travel out of the site to access these services and some jobs than when the site is fully built. This is likely to add traffic to the A120 / A12, resulting in increased congestion and relatively increased carbon emissions compared to a more self-contained site.
- 3.78 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area in terms of the character of the area. The potential for significant negative environmental effects exists in relation to the historic environment, landscape, mineral resources, and high quality agricultural land.

ALTGC3 – Monks Wood

Site Context

- 3.79 Site ALTGC3 ('Monks Wood') is a 909 hectare strategic site entirely within Braintree DC, centred around the existing Pattiswick Estate and promoted ahead of the NEA Section 1 Local Plan but not taken forward into the draft plan. Several different capacity options are considered here – 2,000 dwellings, 5,500 dwellings, and 13,500 dwellings. It is expected that a maximum of 2,500 dwellings can be delivered by the end of the plan period (2033).
- 3.80 The site is on the existing Pattiswick Estate and is currently largely arable land and scattered woodland blocks (mainly around the perimeter), with only a few isolated buildings. It lies between the town of Braintree to the west and the settlement of Coggeshall to the east, and is bound to the south by the strategic A120 road.
- 3.81 The dispersed buildings that make up the small village of Pattiswick lie within the site clustered around the site of the Church of St Mary the Virgin. Aside from Pattiswick, the nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are: Coggeshall (approximately 2,215 existing dwellings), around 40m to the south east; Bradwell (approximately 223 existing dwellings), around 80m to the south west; Stisted (approximately 271 existing dwellings), around 200m to the west; Greenstead Green (approximately 273 existing dwellings), around 1.8km to the north; Cressing Tye Green (approximately 548 existing dwellings), 2.5 - 3.3km to the south west; Silver End (approximately 1,551 existing dwellings), around 2.7km to the south; Earls Colne (approximately 1,641 existing dwellings), around 3.8km to the north east; Kelvedon and Feering, (approximately 2,462 existing dwellings), around 4.2km to the south; Black Notley (approximately 1,033 existing dwellings), around 4.5km to the south west; and Gosfield (approximately 649 existing dwellings), around 4.8km to the north west. In addition there are a number of scattered, smaller-scale settlements (<200 dwellings), including Rivenhall and Surrex.
- 3.82 Nearby local centres, as defined by the Section 2 Local Plans, are located in Coggeshall, Earls Colne, and Kelvedon. The nearest policy-defined town centres are in Braintree (approximately 6.5 km to the west of the site's centre-point) and Halstead (approximately 6.3km to the north). Colchester town centre also lies around 16.7km to the east.
- 3.83 For public transport connections, the nearest train station is in Kelvedon, providing links south toward London (via Chelmsford) and east to Colchester. The two Braintree stations lie to the west (Braintree and Braintree Freeport) (roughly 6.2km from the centre-point of the site) and Marks Tey lies to the east of the site (9.5km from the centre-point). Braintree provides connections south to London and Marks Tey provides links north/east to Colchester and further on to coastal settlements.
- 3.84 For road connections, the major transport route serving the site is the A120 trunk road (single carriageway) which lies immediately south of the site, and connects the towns of Braintree and Colchester (via Coggeshall and Marks Tey). Destinations to the north, including Halstead, are reached either via local roads or via Braintree using the A131. The site is crossed only by minor local roads.
- 3.85 Aside from the employment generated within local and town centres, there are a number of nearby major employment sites. These include: Earls Colne Airfield, a large 24 hectare rural business park to the north of the site; the 25 hectare Bluebridge Industrial Estate on the eastern fringes of Halstead; and smaller scale sites on the fringes of Coggeshall (Priors Way) and Earls Colne (Atlas Works).
- 3.86 There are no significant residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundary, or within 1km of the site.
- 3.87 Rivenhall Airfield (the Bradwell Quarry) - the border of which lies around 1km to the south of the site boundary - is an allocated Minerals Extraction Site for sand and gravel in the Essex Minerals Local Plan.

SA objective	Criterion	ALTGC3	ALTGC3	ALTGC3	ALTGC3	ALTGC3	ALTGC3
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	5500	13500
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment		N/A	--?/++	--?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment		N/A	++	++	++?	++?
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Desirable	+/0	+/0	++/0	++/0
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Unacceptable	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Potential for harm to Source Protection Zones (SPZs)	Unacceptable	Low				
	Potential exposure to flood risk	Unacceptable	Low				
	Potential exposure to air pollution	Unacceptable	Low				
Potential exposure to noise pollution from roads and railways	Unacceptable	Medium					
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+	+
	Access to town centres	Unacceptable	Unacceptable				
SA5 Achieve a prosperous	Access to local centres	Unacceptable	Desirable	+	++	++	++

SA objective	Criterion	ALTGC3	ALTGC3	ALTGC3	ALTGC3	ALTGC3	ALTGC3
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	5500	13500
us, sustainable economy	Access to town centres	Unacceptable	Unacceptable				
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable				
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	--?	--?	--?	--?
	Potential for harm to locally designated wildlife sites and ancient woodland	High	High				
	Potential for harm to PHI or local BAP habitat	Medium	Medium				
SA7 Achieve more sustainable behaviour	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?/-?	++?/-?	+++?/-?	+++?/-?
	Access to primary or middle schools	Unacceptable	Desirable				
	Access to secondary schools	Unacceptable	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Unacceptable	Unacceptable				
	Access to bus stops	Unacceptable	Desirable				
	Access to cycle	Unacceptable	Unacceptable				

SA objective	Criterion	ALTGC3	ALTGC3	ALTGC3	ALTGC3	ALTGC3	ALTGC3				
		Stage 1a	Stage 1b	A	B	C	D				
		N/A	N/A	2000	2500	5500	13500				
	paths										
	Access to open spaces and sports centres	Unacceptable	Desirable								
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable								
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable								
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Desirable								
	Access to primary or middle schools	Unacceptable	Desirable								
	Access to secondary schools	Unacceptable	Desirable								
	Access to further and higher education facilities	Unacceptable	Unacceptable								
	Access to local centres	Unacceptable	Desirable								
	Access to town centres	Unacceptable	Unacceptable					+	+	+	+
	Access to railway stations	Unacceptable	Unacceptable								
	Access to bus stops	Unacceptable	Desirable								
	Access to cycle paths	Unacceptable	Unacceptable								
	Access to open spaces and sports centres	Unacceptable	Desirable								
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable								
	Access to centres of employment	Unacceptable	Unacceptable								

SA objective	Criterion	ALTGC3	ALTGC3	ALTGC3	ALTGC3	ALTGC3	ALTGC3
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	5500	13500
	<i>ent including employment areas and town centres</i>						
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	<i>Access to GP surgeries/ health centres</i>	Unacceptable	Desirable				
	<i>Access to primary or middle schools</i>	Unacceptable	Desirable				
	<i>Access to secondary schools</i>	Unacceptable	Desirable				
	<i>Access to further and higher education facilities</i>	Unacceptable	Unacceptable				
	<i>Access to local centres</i>	Unacceptable	Desirable				
	<i>Access to town centres</i>	Unacceptable	Unacceptable				
	<i>Access to railway stations</i>	Unacceptable	Unacceptable	+	+	+	+
	<i>Access to bus stops</i>	Unacceptable	Desirable				
	<i>Access to cycle paths</i>	Unacceptable	Unacceptable				
	<i>Access to open spaces and sports centres</i>	Unacceptable	Desirable				
	<i>Access to Public Rights of Way (PRoW)</i>	Acceptable	Acceptable				
	<i>Access to centres of employment including employment areas and town</i>	Unacceptable	Unacceptable				

SA objective	Criterion	ALTGC3	ALTGC3	ALTGC3	ALTGC3	ALTGC3	ALTGC3
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	5500	13500
	<i>centres</i>						
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/?	0/?	0/?	0/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/0	0/0	0/0	0/0
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	Low	High	--?/--	--?/--	--?/--	--?/--
	Potential for harm to agricultural land	Low	High	--?/--	--?/--	--?/--	--?/--

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.88 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 1 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.89 Currently the site is a large area of arable farmland, featuring only the scattered buildings of Pattiswick village. Therefore, these existing elements of development within the site are considered to comprise a dispersed rural community. Neighbouring settlements and groupings of houses and employment include Coggeshall, Bradwell, Stistead, Greenstead Green, Crossing Tye Green, Surrex, Silver End, Earls Colne, Kelvedon and Feering, Black Notley, Rivenhall and Gosfield. Local centres, as defined in the draft Braintree Section 2 Local Plan, are provided in Coggeshall, Earls Colne and Kelvedon. The scale of these settlements is set out in the Site Context section above.

3.90 It is recognised that the provision of such a large development around and close to the existing small scale communities in the area is likely to result in a significant change to these. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context as development of this scale would result in the creation of a permanent urban character compared to what is a rural character at present. The existing developed areas within the site boundary will be subject to the most significant degree of change. It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements that impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all of the potential scales of development including the potential maximum capacity at the end of the plan period will result in significant negative yet uncertain (--?) effects in relation to the existing community. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

3.91 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.

3.92 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (ALTGC3a/b/c/d).

3.93 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

3.94 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for all dwelling capacity options.

3.95 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.

3.96 In addition, the site information form sets out that development at 5,500 & 13,500 dwelling capacities is likely to be viable, which includes the delivery of 30% affordable housing. However, for these capacity options this viability would be dependent on external funding for strategic infrastructure (RTS and strategic road improvements) or other improvements to scheme viability such as inflationary impacts or other influences. This results in uncertainty for this development scale as the external funding / improvement to viability has not yet occurred.

3.97 The site information form sets out that at 2,000 dwelling capacity (ALTGC3a), no external funding or other improvement in site viability is required. It is assumed that all of this would also apply to a site capacity of 2,500 dwellings (ALTGC3b) given it is a similar scale to 2,000 dwellings.

3.98 In light of the above, this site is considered likely to deliver housing which is safe and accessible, as well as policy compliant affordable housing. This is considered likely to result in significant positive effects in relation to all potential dwelling capacity options. Therefore options ALTGC3a (2,000 dwellings) and ALTGC3b (2,500 dwellings) are considered to result in significant positive (++) effects. Sites ALTGC3c (5,500 dwellings) and ALTGC3d (13,500 dwellings) are considered to result in significant positive yet uncertain (++) effects.

SA3: Improve health/reduce health inequalities

- 3.99 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.100 As a greenfield site, there are no existing healthcare facilities within ALTGC3. The nearest GP surgery is in Coggeshall. However there are more health services provided in Braintree, including Braintree Community Hospital, the William Julien Courtauld Hospital and St Michael's Hospital, as well as several further GP Surgeries.
- 3.101 Similarly, given the undeveloped nature of the site, there is no existing public open space within the site. On the fringes of the site there are small areas of amenity space, allotments and recreation spaces located within the villages of Bradwell and Stisted, and clusters of spaces within the settlement of Coggeshall.
- 3.102 The site does not link to any existing dedicated cycle paths either local or national, which are confined to areas within the built-up area of Braintree to the west. Several public rights of way (PROW) cross the site area. These may provide links to the surrounding countryside for residents of the new development to utilise for recreation; however, it is not considered that these PROW in themselves will make a significant contribution to recreation so as to facilitate more healthy lifestyles.
- 3.103 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritises walking, cycling and use of public transport over private car use, includes foot and cycle ways throughout the development and provides open space within the development. The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to this SA objective for all site capacity options.
- 3.104 In terms of accessing healthcare, the site is relatively isolated in terms of access to GP Surgeries and health centres, because it is a largely rural site. For capacity options ALTGC3a (2,000 dwellings) and ALTGC3b (a maximum of 2,500 dwellings at the end of the plan period), the site is not likely to be large enough to support new healthcare facilities, resulting in no adjustment to the minor positive effect (+) identified above.
- 3.105 However in accordance with the assumptions framework the dwelling capacity option ALTGC3c (5,500 dwellings) is considered likely to support a new Primary Care Spoke within the site, and dwelling capacity ALTGC3d (13,500 dwellings) is considered able to support a new Primary Care Hub. Therefore, at these scales the sites should be supported by new, up to date healthcare facilities, and a significant positive (++) rather than minor positive (+) effect is anticipated in relation to access to health and recreation facilities.

Exposure to noise pollution

- 3.106 Just under 5% of the site area falls within a DEFRA strategic noise area of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB, and a further 8% falls within a DEFRA strategic noise area of $L_{night} 50.0-54.9$ dB, or $L_{aeq,16} 55.0-59.9$ dB. In accordance with stated assumptions (as less than 5% of the site falls within the former, and less than 50% within the latter), a negligible effect (0) is anticipated in relation to exposure to noise pollution, both at the end of the plan period and at all site capacity options.
- 3.107 As a result, the overall effect anticipated for this SA objective is mixed and varies by capacity option, as shown in tabulated form above. In general, slightly more positive effects are anticipated at the two higher capacity options (ALTGC3c – 5,500 dwellings; and ALTGC3d – 13,500 dwellings).

SA4: To ensure and improve the vitality & viability of centres

- 3.108 In accordance with the assumptions framework for all strategic sites at all scales and as confirmed by the site information form it is considered that development will be supported by suitable

provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to SA objective 4 at all potential dwelling scales.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.109 The relationship of the site to existing centres is described in the site context above. There are also existing employment areas surrounding the site, which provide for jobs which may not be within local or town centres. In the vicinity of the site, the major employment areas (not within local or town centres) are Earls Colne Airfield (approximately 3.1km from the site's centre point) and the Bluebridge Industrial Estate on the fringes of Halstead (approximately 6km from the site's centre point).
- 3.110 It is anticipated that the development of the site at all potential scales (ALTGC3a/b/c/d) will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.
- 3.111 Furthermore, the site information form indicates that dwelling capacity ALTGC3b (a maximum of 2,500 dwellings at the end of the plan period) will be able to support approximately 11ha of employment land, and dwelling capacities ALTGC3c (5,500 dwellings) and ALTGC3d (13,500 dwellings) will be able to support approximately 25ha of employment land within the site. In line with stated assumptions, this is considered likely to make a significant contribution to the local economy, resulting in significant positive (++) effects in relation to SA objective 5. Capacity option ALTGC3a (2,000 dwellings) is anticipated to provide only approximately 9ha of employment land, which is not considered to make a significant contribution to the local economy, resulting in only minor positive (+) effects.
- 3.112 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.113 The site intersects with a number of designated environmental assets, predominantly in the north of the site: both the Great Monks Wood Local Wildlife Site (LWS)/ BAP priority habitat and the Bungate Wood LWS/BAP priority habitat lie within the site, and the 'Blackwater Plantation West' lies on the south western boundary. Within 400m of the boundary lie further protected sites: the Markshall Woodlands LWS/BAP priority habitat; a small part of the 'Squire's Plantation' LWS; further areas of the Blackwater Plantation LWS; and part of the 'Tilkey Road' LWS on the fringes of Coggeshall. The whole site also lies within SSSI Impact Risk Zones for residential development of 100 units or more, highlighting the potential for impacts on the interest features of the SSSIs (Belcher's & Broadfield Woods and Chalkney Wood).
- 3.114 As such, development of this site may result in impacts to these local designations and habitats. It is anticipated that effects on the existing habitats may be significant and negative, and may result from amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure, predation by pets. However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects.
- 3.115 In total, approximately 8% of the site area intersects with locally designated sites, and as such, and in line with stated assumptions, a significant negative yet uncertain (--?) effect is anticipated in relation to SA objective 6. This effect is considered likely to occur in relation to all potential dwelling capacities. The uncertainty arises because site-specific or plan-wide mitigation measures may overcome these effects, but the implications are not known.

- 3.116 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.117 The site is a largely greenfield site which is rural in character. The relationship of the site to existing local centres is described above in the site context and the accessibility of the site to surrounding facilities and services would, prior to provision of any new transport infrastructure, be primarily dependent on the A120 on the southern boundary of the site. As set out in the Braintree Infrastructure Delivery Plan⁸, the A120 is congested in both directions in morning and afternoon peak periods, and suffers from poor journey time reliability.
- 3.118 Given the nature of the site, there are no bus stops within the site, with the closest existing stop being the 'Mill View' stop serving the village of Bradwell, adjacent to the site's south west boundary. However the area is served by several strategic bus services operating along the A120. One provides a service with connections to Colchester and Chelmsford (via Braintree) roughly every 30 minutes. Another provides a roughly hourly service between Colchester and Stansted Airport. There are also bus stops in Stisted village to the west of the site, however only a community bus operating every 2 weeks services this stop. Other services provide more limited schedules.
- 3.119 The nearest railway station to western parts of the site is Braintree, which is at the terminus of the Braintree Branch Line. This offers an hourly service to London throughout the day. However the nearest railway station to eastern parts of the site is Kelvedon, from which a service runs to London roughly every 30 minutes throughout the day.
- 3.120 The nearest existing primary schools are Stisted C of E School in Stisted and St Peter's C of E School in Coggeshall. The nearest secondary school is the Honywood Community Science School, also in Coggeshall.
- 3.121 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.122 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council⁹ sets out that there is limited capacity at Primary Schools in the Braintree town area (-59 places forecast in 2028-29) and only a little more capacity in the Kelvedon/Feering area (-32 places forecast for 2028-29) so it is considered likely that new primary school(s) will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (ALTGC3a/b/c/d). These services and facilities would serve both new residents and the existing community within the development site.
- 3.123 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at all potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall it is considered likely that the provision of the local services and facilities mentioned above is likely to result in minor positive yet uncertain (+?) effects for all dwelling capacities (ALTGC3a/b/c/d). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the

⁸ https://www.braintree.gov.uk/downloads/file/6491/braintree_infrastructure_delivery_plan_report_october_2017

⁹ Essex School Organisation Service – 10 Year Plan 2019-2028.

preparation, submission and determination of a planning application. It is notable that sites over 4,500 dwellings in size are anticipated to provide new health centre facilities, however this is not considered likely to change the effect from minor positive in relation to this SA objective.

- 3.124 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to provide secondary school facilities in accordance with the developer contributions guidance from Essex County Council¹⁰. In relation to this, the Essex County Council evidence¹¹ sets out that in 2028-29 (the final year of the forecast in this schools capacity document) there will be 46 secondary school places in Braintree, and -22 places in the Coggeshall area. Given a secondary pupil factor of 0.2 pupils per dwelling, at the lowest capacity option (2,000 dwellings), 600 additional places will be required, while at the others either 1,100, or (at the highest capacity) 2,700 additional places will be required. As such, it is likely that some secondary school expansion may be required to meet all dwelling capacity options.
- 3.125 The site capacity options ALTGC3b (2,500 dwellings maximum at the end of the plan period), ALTGC3c (5,500 dwellings) and ALTGC3d (13,500 dwellings) are considered capable of delivering new secondary school facilities on the site, which provides further opportunities for sustainable travel. It is assumed that although ALTGC3b is lower than the 4,500 threshold for new secondary facilities set out in the assumptions framework, phased provision can be made as the full site capacity (either ALTGC3c – 5,500 dwellings or ALTGC3d – 13,500 dwellings) will be able to support a new secondary school.
- 3.126 Furthermore, as set out above, it is considered that capacity options ALTGC3b/c/d will all be able to support at least 10 hectares of employment land as part of the site. This, combined with the delivery of a new secondary school in the site is likely to create significant opportunities for sustainable travel within the site, resulting in anticipated significant positive yet uncertain (++?) effects. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 3.127 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.128 For journeys to more distant destinations, the distance to the nearest railway stations, Braintree and Kelvedon, is > 2km and found to be 'unacceptable' in the Stage 1 assessment. This is likely to reduce the potential for trips by rail, which may lead to increased car use and increased congestion for the external journeys.
- 3.129 In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site is split (roughly equally east/west) between two middle super output areas (MSOAs) – Braintree 012 (in the west) and Braintree 014 (in the east). Given the low density of residents currently residing within this site, the data should be treated with caution as a reflection of potential future commuting patterns from within the site boundary. However, according to NOMIS, the most popular destination for commuters living in western parts of the site are: central Braintree (approximately 20%), the local area (i.e. the eastern fringes of Braintree) (9%), and Witham (7%). For those currently residing in the eastern parts of the site, the most popular destinations are the local area – including Coggeshall and Kelvedon (17%), London (8.5%), Witham (5.5%), Chelmsford (4%), and Colchester (4%). On the whole, we can observe generally that commuting from these areas generates significant movement in peak hours from the site to the centre of Braintree (including for train connections to London) as well as some movement south toward Witham. With currently available infrastructure, it is likely that much of this movement would be made by private car using the A120 and other strategic roads, although in principle the strategic bus routes could serve some commuters into Braintree.

¹⁰ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

¹¹ Essex School Organisation Service – 10 Year Plan 2019-2028.

- 3.130 As such, if the new residents follow the same pattern as existing commuters, the majority of the commuting journeys are likely to be carried by local roads and the already congested A120 in the vicinity of Braintree. These could not be undertaken on a train as the infrastructure does not exist, although part of the longer commuting journeys may be made by train. As such, minor negative effects with uncertainty (-?) are considered likely, both at the end of the plan period and when the site is fully built for all site capacities. The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters to the most popular commuting destinations.
- 3.131 As such the anticipated overall effects on SA objective 7 are mixed with uncertainty, and vary depending on the scale of development (as shown in tabulated form above). In general, slightly more positive effects are anticipated at the higher capacity options (ALTGC3c – 5,500 dwellings, and ALTGC3d – 13,500 dwellings).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.132 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.
- 3.133 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form for this site, this site is to be supported by the following local and strategic infrastructure at the following dwelling capacities:
- 3.134 ALTGC3a (2,000 dwellings) and also assumed to apply to ALTGC3b given that it is a similar scale (maximum 2,500 dwellings at the end of the plan period):
- Early Years
 - Primary School(s)
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Community meeting spaces
 - Sustainable transport link to Kelvedon station
- 3.135 The site information form indicates that the site can viably deliver these infrastructure requirements.
- 3.136 ALTGC3c (5,500 dwellings):
- Early Years
 - Primary School(s)
 - Secondary School
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Community meeting spaces
 - Sustainable transport link to Kelvedon station
 - A120 realignment and upgrade (either Option A or alternative option)

- Rapid Transport System link.
- 3.137 The site information form indicates that the site can viably deliver these infrastructure requirements with external funding from transport operating companies (or other improvement in site viability).
- 3.138 ALTGC3D (13,500 dwellings):
- Early Years
 - Primary School(s)
 - Secondary School
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Healthcare facilities
 - Community meeting spaces
 - Sustainable transport link to Kelvedon station
 - A120 realignment and upgrade (either Option A or alternative option)
 - Rapid Transport System link
- 3.139 The site information form indicates that the site can viably deliver these infrastructure requirements with external funding from transport operating companies. Alternatively, viability improvements to the scheme via another mechanism could also potentially provide sufficient viability.
- 3.140 The supporting infrastructure listed above is confirmed to be viable by the site information form and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for all dwelling capacity options. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is noted in relation to site capacity options ALTGC3c (5,500 dwellings) and ALTGC3d (13,500 dwellings) as the site information form sets out that external funding (or other improvement in site viability) is required to deliver the rapid transport system and the A120 realignment and upgrade.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 3.141 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 3.142 The site itself intersects one Grade II* listed building (the redundant Church of St Mary the Virgin in Pattiswick village) and 13 Grade II listed buildings. The Stisted Conservation Area abuts the site to the west, whilst a number of Grade II listed buildings are located within the immediate vicinity of the site. The Grade I listed Parish Church of All Saints is located approximately 430m from the site boundary, with a number of further heritage assets located between 500m and 1km from the site boundary: the Grade II* listed Stisted Hall, Clavering's Farm Scheduled Monument and Coggeshall Conservation Area (itself containing a cluster of listed buildings, including the Grade I-listed Paycocke's building).
- 3.143 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.

3.144 In total, approximately 75% of the site area falls within 500m of a heritage asset, and a further 25% lies between 500m and 1km from an asset. Taking a precautionary approach, a significant negative effect with uncertainty (--?) is anticipated in relation to cultural heritage assets, both at the end of the plan period and when fully built at all capacity options. Uncertainty in relation to this arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

3.145 With regards to townscape, the boundary of the lies less than 200m from the settlement of Coggeshall (which includes the aforementioned Coggeshall Conservation Area). In line with stated assumptions, given that the proposed settlement (at all capacity options) implies an increase of 10% or more on the size of neighbouring Coggeshall, the development is likely to significantly change the character of the settlement. However whether this change will be positive or negative will depend on the quality of design of the new development, therefore the effect is anticipated as uncertain (?).

3.146 In accordance with the above, an overall mixed negative/uncertain effect (--?/?) is anticipated in relation to SA objective 9, both at the end of the plan period and when fully built at all capacities.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

3.147 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.

3.148 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities is likely to result in minor positive (+) effects in relation to SA objective 10.

SA11: To improve water quality and address water scarcity and sewerage capacity

3.149 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

3.150 The site is entirely outside source protection zones, and as such it is not considered likely that the development of the site will affect ground water resources and therefore negligible effects (0) are anticipated in relation to ground water, both at the end of the plan period and at all fully built capacities.

Water scarcity and water treatment

3.151 With regard to water supply, the Braintree Water Cycle Study¹² identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. However the study is based on assumptions of growth from 'preferred development allocations' within Braintree's Local Plan (para 1.4) as well as the Garden Communities of Marks Tey and West of Braintree (para 6.3). Since site ALTGC3 was not allocated either with the Section 1 Plan (as a Garden Community) or allocated with Braintree's Section 2 Local Plan, growth at this location was not taken into account for this study. The Integrated Water Management Strategy (IWMS), which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume

¹² https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

that the proposed growth at ALTGC3 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (ALTGC3a/b/c/d) in relation to water scarcity.

- 3.152 There is therefore some uncertainty over capacity at specific Water Recycling Centres (WRCs), and the results of the study should be interpreted with caution for the purposes of assessing this site. On the basis of this growth, the study identifies four Water Recycling Centres (WRCs) that do not have sufficient headroom to accommodate growth.
- 3.153 It is not entirely clear from the study which catchment area the site would lie within. Geographically it lies between the Bocking WRC (to the west) and the Coggeshall WRC (to the east). The Bocking WRC is identified as having headroom for only up to 2,570 dwellings and would require treatment process upgrades (using conventional treatment technologies) from 2026. Coggeshall WRC is identified as having headroom for only up to 100 dwellings, and could require treatment process upgrades (using conventional treatment technologies) from 2019. Whilst expansion is possible at this location, the study only considers growth of 1,350 dwellings for Coggeshall WRC to cater to during the plan period.
- 3.154 As such, the effects in relation to this SA objective are considered to be uncertain (?) in relation to the lower potential dwelling capacity options that fall within the projected growth of the plan period (ALTGC3a/b). The uncertainty arises from the fact that the Braintree WCS study does not provide sufficient evidence regarding the specific impact of further growth at ALTGC3 on local water treatment infrastructure as it is not clear which facility would be served by. Uncertainty also arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application.
- 3.155 For the higher potential dwellings capacity options, effects in relation to water treatment are also expected to be uncertain (?). The IWMS indicates that the Bocking WRC would be able to cater to growth beyond the plan period, but as previously mentioned, it is not clear if this site would be served by the Bocking WRC and the Coggeshall WRC.
- 3.156 As such, an overall mixed negligible and uncertain effect (0/?) is expected in relation to this SA objective for all potential dwelling capacity options.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.157 A negligible proportion of the site (less than 1%) intersects with Environment Agency Flood Zones 2 and 3. The entire site area is assessed as at low risk of ground water flooding, and < 25% of the site area is identified as being at risk of surface water flooding. Furthermore, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.158 It is therefore considered that the effects in relation to this SA objective are likely to be negligible (0) at the end of the plan period and at all capacity options.

SA13: To improve air quality

- 3.159 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 3.160 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated, both at the end of the plan period and at all final capacity options.

Potential contribution to road traffic within areas suffering from air pollution

- 3.161 As described under SA objective 7, the site is split between two middle super output areas (MSOAs) – Braintree 012 (in the west) and Braintree 014 (in the east) and a high-level analysis of current commuting patterns suggested that major commuting destinations from the site are central areas of Braintree and Witham (see SA objective 7).
- 3.162 As such, if the new community follows the commuting behaviour of the present community, most of this commuter traffic is likely to be carried by local roads and the A120 in the vicinity of

Braintree and Witham. However there are no AQMAs in this area and so the site at the end of the plan period and when fully built at all capacity options is considered likely to result in negligible effects (0) in relation to this part of the SA objective.

- 3.163 As such, an overall negligible effect (0/0) is anticipated for SA objective 13, both at the end of the plan period and when fully built at all capacity options.

SA14: To conserve and enhance the quality of landscapes

- 3.164 The site is not located near any designated landscapes or proposed extensions to these.
- 3.165 The area forms part of the High Garrett/Mark's Hall Wooded Farmland and Blackwater River Valley landscape character areas (LCA) and has been assessed by landscape officers of the NEAs. The High Garrett/Mark's Hall Wooded Farmland area has a strong landscape character with issues associated with development including that new development would be highly visible in the open landscapes away from the river, including visibility from river floor; impact on historic settlement pattern and integrity; and increased traffic on lanes. These result in high sensitivity to large new development. The Blackwater River Valley area has a moderate-strong landscape character with issues associated with development including potential intrusion of new development on skyline; and impact on tranquillity of development, resulting in high sensitivity to change..
- 3.166 In light of this identified high sensitivity to change, and in line with the stated assumptions, significant negative effects with uncertainty (--?) are anticipated in relation to SA objective 14. There is uncertainty about this effect as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 3.167 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 3.168 Approximately 83% of the site area is within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site would result in a significant sterilisation of mineral resources. Due to the large area of mineral resources that may be affected, the effects are considered to be significant negative yet uncertain (--?) in relation to mineral resources. The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential dwelling capacity options, because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

- 3.169 A total of 81% of the site is identified as Grade 1 or Grade 2 agricultural land, meaning the development of this site would result in the loss of a significant amount of excellent or very good quality agricultural land. In light of the above, a significant negative (--) effect is anticipated in relation to agricultural land. The effect is considered to be the same for all potential dwelling capacity options, because the location of the development within the site boundary for each capacity option is unknown.
- 3.170 As such, an overall negative effect with some uncertainty (--?/--) is anticipated for SA objective 15, both at the end of the plan period and when fully built at all capacity options

Summary of significant effects

- 3.171 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out at capacity ALTGC3a – 2,000 dwellings:

- 3.172 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to the potential to provide community cohesion within the new development; and
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;

3.173 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA6 Biodiversity and geological diversity, due to the fact that there are several designated sites and BAP priority habitats within and immediately adjacent to the site, particularly in the north;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby listed buildings and the Coggeshall Conservation Area;
- SA14 Landscape, due to the significant change which would occur to the sensitivity of the High Garrett/Mark's Hall Wooded Farmland and Blackwater River Valley LCAs; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and loss of Grade 1 or 2 agricultural land.

3.174 In summary the site at this scale is likely to be able to provide sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this capacity option to provide higher order services such as a secondary school, health care facilities or likely to be able to support a large number of jobs. As such, development in this location at 2,000 dwellings will result in more travel out of the site to access these services and jobs compared to a higher level of development. This is likely to decrease opportunities for sustainable travel (particularly in the absence of an easily accessible railway station) and result in a less self-contained development.

3.175 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. It is considered that at 2,000 dwellings, the effects will be less extreme than the larger capacity options, as the impacts will be less, however there will also be fewer benefits in terms of new services and facilities.

3.176 Several significant negative effects have been identified in relation to environmental assets, cultural heritage assets, and mineral resources/agricultural land; however this scale of development may result in reduced effects on sensitive environmental receptors compared to the larger dwelling capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features.

Effects when fully built out at capacity ALTGC3c – 5,500 dwellings and ALTGC3d – 13,500 dwellings:

3.177 Effects once the site is fully built out to these two site capacities are found to be broadly the same, given the similar scale of these options. Significant positive effects are anticipated in relation to:

- SA1 Community cohesion, due to the potential to provide community cohesion within the new development; and
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
- SA3 Health, as development of this scale should be able to support new health facilities, as well as open spaces and opportunities for active travel;
- SA5 Economy, through the provision of jobs within the local area; and
- SA7 Sustainable travel, as a significant level of services and facilities are anticipated to come forward as part of the site, reducing the need to travel.

3.178 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA6 Biodiversity and geological diversity, due to the fact that there are several designated sites and BAP priority habitats within and immediately adjacent to the site, particularly in the north;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby listed buildings and the Coggeshall Conservation Area;
- SA14 Landscape, due to the significant change which would occur to the sensitivity of the High Garrett/Mark's Hall Wooded Farmland and Blackwater River Valley LCAs; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and loss of Grade 1 or 2 agricultural land.

3.179 In summary, the fully built site at either capacity option ALTGC3c (5,500 dwellings) or ALTGC3d (13,500 dwellings) is likely to result in a development which can support a significant number of services, including health care facilities, primary and secondary schools, and a centre (or centres) which are large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs. At these scales, and if supported by appropriate infrastructure / employment provision, it is considered that the site could form a new settlement in its own right. This is likely to result in some self-containment which is likely to provide opportunities for more sustainable travel behaviour. However as a large site, its development will put pressure on surrounding transport infrastructure, particularly the A120, resulting in increased congestion, which would need to be addressed by the planned upgrade, which is reliant on external funding (or other improvement in site viability). The site is not currently accessible by high quality sustainable travel services and this may also lead to a dependence on the private car for journeys to and from destinations outside the site.

3.180 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.

3.181 Development of this site is likely to affect a number of other sensitive receptors which are present either within the site or very near to it, including biodiversity assets, heritage assets, excellent or very good quality agricultural land, and mineral resources – it is important to note that effects in relation to these are likely simply because these form the site context, however delivering a high dwelling capacity within a fixed site boundary may make it more difficult to mitigate the potential impacts.

Effects at the end of the plan period (maximum 2,500 dwellings)

3.182 In summary the anticipated significant effects at the end of the plan period are broadly similar to those for the ALTGC3a (2,000 dwelling) capacity option described above.

3.183 The site at the end of the plan period is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this time to provide higher order services such as health facilities or likely to be able to support a large number of jobs. As such, development in this location at the end of the plan period will result in more travel out of the site to access these services and jobs than when the site is fully built. This is likely to add traffic to the A120, resulting in increased congestion and relatively increased carbon emissions compared to a more self-contained site. Having said this, a phased / early delivery of some infrastructure items such as secondary schools may help to provide more opportunities for sustainable travel.

3.184 The smaller scale of development at the end of the plan period (compared to the final capacity) may result in reduced effects on sensitive environmental receptors compared to the fully built out capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features – albeit on a temporary basis.

ALTGC4 – Land at Marks Tey Option 1

Site Context

- 3.185 Site ALTGC4 is a 1,000-hectare strategic site that lies to the north and west of the existing settlement of Marks Tey (itself to the west of Colchester). It is bound to the south by the A12 strategic road between Braintree and Colchester and is bisected by both the A120 and a branch of the Great Eastern Mainline railway. The site lies mostly within Colchester BC, with a smaller western section lying within Braintree BC. It was promoted for allocation in the Local Plan. The potential scale of development from this site is for 2,000 – 4,500 homes, with an expectation that the full quantum will be delivered within the Plan Period (up to 2033).
- 3.186 The site is largely arable land surrounding the road infrastructure, with some small-scale washed over linear housing developments.
- 3.187 The nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are: Marks Tey (approximately 1,140 existing dwellings), adjacent to the site's eastern boundaries; Coggeshall (approximately 2,179 existing dwellings), around 400m to the west; Great Tey (approximately 393 existing dwellings), around 800m to the north; Kelvedon with Feering (approximately 2,462 existing dwellings), around 1.2km to the south west; Copford/Copford Green (approximately 671 existing dwellings), around 1.5km to the east; Chappel/Wakes Colne (approximately 444 existing dwellings), around 2.8km to the north; Eight Ash Green (approximately 740 existing dwellings), around 3.3km to the east; Fordham (approximately 341 existing dwellings), around 3.7km to the north east; Tiptree (approximately 4,139 existing dwellings), around 3.9km to the south; and Earls Colne (approximately 1,641 existing dwellings), around 4km to the north. In addition there are a number of scattered smaller settlements (<200 dwellings), including Aldham Ford Street, Easthorpe, Hardy's Green and Messing.
- 3.188 Nearby local centres, as defined by the Section 2 Local Plans are at: London Road (Marks Tey); Villa Road (Stanway); Blackberry Road (Stanway), Coggeshall; and Kelvedon and Feering. Colchester is the nearest policy-defined town centre, as defined in the draft Section 2 Local Plans, the centre of which is approximately 8.6 km east of the centre of site ALTGC4. Other strategic settlements and destinations include Braintree 13km to the west along the A120, Witham 11km to the south west along the A12 and Halstead, around 10km to the north.
- 3.189 Aside from employment generated in the town and local centres, there are a number of small-scale employment zones in the immediate vicinity of the site. These include Andersons Timber (adjacent to Marks Tey), Poplar Nurseries (within the boundaries of ALTGC4), the Tey Brook Centre (on the site's northern boundary) and a number of industrial sites clustered around road infrastructure at Stanway, approximately 5km east of the site's centre point. Further employment uses lie to the west, in the north of Coggeshall at the Coggeshall Industrial Area (approximately 3.4km west of the site's centre point, and at Kelvedon (including the Kelvedon and Gold Key Industrial estates), 4-5km to the south-west.
- 3.190 The A12 (London Road) runs along the southern edge of the site, linking Colchester with settlements to the south and providing a road link to London. The Marks Tey interchange, the main intersection between the A12 and A120 also lies on the eastern edge of the site. As such, the site is strongly embedded in local road transport connections. Marks Tey railway station is also close to the eastern edge of the site boundary, providing connections along the Great Eastern Main Line north toward Norwich (via Colchester) and south toward London (Liverpool Street Station). Average journey times to Colchester town centre are roughly 30 minutes, and roughly 1 hour to London.
- 3.191 To the south west of the site boundary (at a distance of approximately 1.2km) there are a cluster of sites on the edges of the settlement of Feering belonging to the Crown Estate and allocated for development in Braintree's Section 2 Local Plan. These sites are allocated as a strategic residential growth location for 750 homes within the Plan Period (as per Policy LPP 17).

SA objective	Criterion	ALTGC4	ALTGC4	ALTGC4	ALTGC4	ALTGC4	ALTGC4
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	17000	21000
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/++	--?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++?	++?
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Desirable	+/-	+/-	++/-	++/-
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Preferred Maximum	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	<i>Potential for harm to Source Protection Zones (SPZs)</i>	Low	Low				
	<i>Potential exposure to flood risk</i>	Low	Low				
	<i>Potential exposure to air pollution</i>	Low	Low				
	Potential exposure to noise pollution from roads and railways	High	High				
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+	+
	Access to town centres	Unacceptable	Unacceptable				
SA5 Achieve a prosperous	Access to local centres	Unacceptable	Desirable	+	+	++	++

SA objective	Criterion	ALTGC4	ALTGC4	ALTGC4	ALTGC4	ALTGC4	ALTGC4
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	17000	21000
us, sustainable economy	Access to town centres	Unacceptable	Unacceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium				
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium	-?	-?	-?	-?
	Potential for harm to PHI or local BAP habitat	Low	Low				
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Desirable				
	Access to primary or middle schools	Unacceptable	Desirable				
	Access to secondary schools	Unacceptable	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable	+?/-?	+?/-?	+++/-?	+++/-?
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Unacceptable	Unacceptable				
	Access to bus stops	Preferred Maximum	Desirable				
	Access to cycle	Unacceptable	Unacceptable				

SA objective	Criterion	ALTGC4	ALTGC4	ALTGC4	ALTGC4	ALTGC4	ALTGC4
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	17000	21000
	paths						
	Access to open spaces and sports centres	Preferred Maximum	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Desirable				
	Access to primary or middle schools	Unacceptable	Desirable				
	Access to secondary schools	Unacceptable	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable	+	+	+	+
	Access to railway stations	Unacceptable	Unacceptable				
	Access to bus stops	Preferred Maximum	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Preferred Maximum	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment	Preferred Maximum	Preferred Maximum				

SA objective	Criterion	ALTGC4	ALTGC4	ALTGC4	ALTGC4	ALTGC4	ALTGC4
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	17000	21000
	<i>ent including employment areas and town centres</i>						
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	<i>Access to GP surgeries/ health centres</i>	Unacceptable	Desirable				
	<i>Access to primary or middle schools</i>	Unacceptable	Desirable				
	<i>Access to secondary schools</i>	Unacceptable	Desirable				
	<i>Access to further and higher education facilities</i>	Unacceptable	Unacceptable				
	<i>Access to local centres</i>	Unacceptable	Desirable				
	<i>Access to town centres</i>	Unacceptable	Unacceptable				
	<i>Access to railway stations</i>	Unacceptable	Unacceptable	+	+	+	+
	<i>Access to bus stops</i>	Preferred Maximum	Desirable				
	<i>Access to cycle paths</i>	Unacceptable	Unacceptable				
	<i>Access to open spaces and sports centres</i>	Preferred Maximum	Desirable				
	<i>Access to Public Rights of Way (PRoW)</i>	Acceptable	Acceptable				
	<i>Access to centres of employment including employment areas and town</i>	Preferred Maximum	Preferred Maximum				

SA objective	Criterion	ALTGC4	ALTGC4	ALTGC4	ALTGC4	ALTGC4	ALTGC4
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	17000	21000
	<i>centres</i>						
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?	0/0?	0/0?	0/0?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/-?	0/-?	0/-?	0/-?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/--	--?/--	--?/--	--?/--
	Potential for harm to agricultural land	High	High				

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.192 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.193 Currently the site is a large area of arable farmland bisected by road infrastructure and containing limited scattered housing and businesses, however it lies adjacent to the existing settlement of Marks Tey, and development at this site would effectively extend the latter significantly toward the west. The configuration and scale of surrounding settlements is described above in the site context.

3.194 It is recognised that the provision of such a large development around and close to the existing small scale communities in the area is likely to result in a significant change to these. The existing developed areas within the site boundary and immediately adjacent to it will be subject to the

most significant degree of change. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context as development of this scale would result in the creation of a permanent urban character compared to what is a semi-rural character at present. It is considered likely that, due to the scale of the proposed site compared to the existing surrounding settlements, impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all of the potential scales of development (ALTGC4a/b/c/d), including the potential maximum capacity at the end of the plan period, will result in significant negative yet uncertain (--?) effects in relation to the existing communities. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

- 3.195 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 3.196 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (ALTGC4a/b/c/d).
- 3.197 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.198 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for all dwelling capacity options.
- 3.199 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.200 In addition, the site information form sets out that development at 2,000, 17,000 & 21,000 dwelling capacities (ATGC4a/c/d) is likely to be viable, which includes the delivery of 30% affordable housing. However for capacity options ALTGC4c (17,000 dwellings) and ALTGC4d (21,000 dwellings), this viability would be dependent on external funding from transport operating companies for the Rapid Transit System (RTS) link (or other improvement in site viability). This results in uncertainty for these development scales as the external funding / improvement to viability has not yet occurred.
- 3.201 The site information form sets out that at 2,000 dwelling capacity (ALTGC4a), no external funding or other improvement in site viability is required. It is assumed that all of this would also apply to a site capacity of 2,500 dwellings (ALTGC4b) given it is a similar scale to 2,000 dwellings.
- 3.202 In light of the above, this site is considered likely to deliver housing which is safe and accessible, as well as policy compliant affordable housing. This is considered likely to result in significant positive effects in relation to all potential dwelling capacity options. Therefore options ALTGC4a (2,000 dwellings) and ALTGC4b (2,500 dwellings) are considered to result in significant positive (++) effects. Sites ALTGC4c (17,000 dwellings) and ALTGC4d (21,000 dwellings) are considered to result in significant positive yet uncertain (++?) effects.

SA3: Improve health/reduce health inequalities

3.203 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.204 There are currently no existing healthcare facilities within the site or within 'acceptable' walking distance, with the nearest GP surgeries in Coggeshall to the west, on the fringes of Colchester to the east, and in Kelvedon to the south west. The most accessible hospital is Essex County Hospital in central Colchester.
- 3.205 As a greenfield site, there are also no publicly accessible areas of green space within the site boundaries. However there are a number of small-scale existing green spaces within and around the settlement at Marks Tey, which lies adjacent to the site boundaries – a mixture of children's play spaces, amenity green space and the Jubilee sports ground. There is a further amenity greenspace at London Road (Copford) – approximately 1.2km from the site's eastern boundary, and at Gravel Pit Wood – approximately 1.8km from the site boundary.
- 3.206 The site is not currently integrated with any national or local cycle networks, the nearest of which lie to the east on the fringes of Colchester and to the south-west in Witham. The site is crossed by public rights of way (PROW), providing links to the surrounding countryside that residents of the new development would be able use for recreational purposes. However it is not considered that these PROW in themselves will make a significant contribution to recreation and the promotion of more healthy lifestyles.
- 3.207 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. It is recognised that the severance challenges posed by both the A12 and A120 roads and the railway line running through the site may prove a barrier to providing well integrated opportunities for active transport. Nevertheless, it should be noted that there is scope for mitigating against this severance through design interventions.
- 3.208 The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in at least minor positive (+) effects in relation to health and recreation facilities for all site capacity options (ALTGC4a/b/c/d).
- 3.209 In terms of accessing healthcare, the site is relatively isolated in terms of access to GP Surgeries and health centres and none are within 'acceptable' walking distance of the site. For capacity options ALTGC4a (2,000 dwellings) and ALTGC4b (2,500 dwellings at end of plan period), the site is not likely to be large enough to support new healthcare facilities, resulting in no adjustment to the minor positive effect (+) identified above.
- 3.210 However in accordance with the assumptions framework, the dwelling capacity option ALTGC4c (17,000 dwellings) is considered to provide sufficient critical mass to support a new Primary Care Hub within the site, and dwelling capacity option ALTGC4d (21,000 dwellings) is considered able to support a new 'Community Hub'. Therefore, at these higher scales (ALTGC4c and ALTGC4d) the sites should be supported by new, up to date healthcare facilities, and a significant positive (++) rather than minor positive (+) effect is anticipated in relation to access to health and recreation facilities.

Exposure to noise pollution

- 3.211 Due to the presence of nearby strategic roads, approximately 16% of the site area falls within a DEFRA strategic noise area of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB, and a further 16% falls within a DEFRA strategic noise area of $L_{night} 50.0-54.9$ dB, or $L_{aeq,16} 55.0-59.9$ dB. As such, in line with stated assumptions, the anticipated effects in relation to exposure to noise pollution are minor negative (-), both at the end of the plan period and for all capacity options (ALTGC4a/b/c/d).

3.212 As such, overall mixed effects are anticipated in relation to SA objective 3, depending on the scale of development proposed (as shown in tabulated form above). In general, the higher capacity options (ALTGC4c – 17,000 dwellings, and ALTGC4d – 21,000 dwellings) are anticipated to have slightly more positive effects in relation to this SA objective on the basis of access to healthcare facilities.

SA4: To ensure and improve the vitality & viability of centres

3.213 In accordance with the assumptions framework for all strategic sites at all scales and as confirmed by the site information form it is considered that development will be supported by suitable provision of services and facilities within a new local cen. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases, and that any new facilities would complement rather than cannibalise existing ones. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to SA objective 4, at all potential dwelling scales (ALTGC4a/b/c/d).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

3.214 The relationship of the site to existing centres within local and town centres is described in the site context above. Both Coggeshall and Kelvedon host industrial estates. In addition there are some small-scale employment areas within the Marks Tey settlement and a cluster of industrial sites at Stanway on the nearby fringes of Colchester.

3.215 It is anticipated that the development of the site at all potential scales (ALTGC4a/b/c/d) will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.

3.216 Furthermore, in accordance with the site information form, it is considered that dwelling capacity options ALTGC4c (17,000 dwellings) and ALTGC4d (21,000 dwellings) will both be able to support approximately 40ha of employment land within the site. This is a significant amount of new employment land which is likely to make a significant contribution to the local economy, resulting in significant positive (++) effects at these higher capacities. As dwelling capacity option ALTGC4a (2,000 dwellings) is considered to support no employment land and capacity option ALTGC4b (2,500 dwellings at end of plan period) is considered to support approximately 6ha of employment land (less than 10ha of employment land) there will be no adjustment to the minor positive (+) effects identified.

3.217 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

3.218 The site intersects with a very small area of one designated SSSI at Marks Tey Brick Pit (a former clay extraction site, designated as a geological SSSI). The entirety of the site intersects with SSSI Impact Risk Zones for residential development of 100 units or more, whilst a small proportion of the site falls into a SSSI IRZ for any new residential development. This highlights the potential for impacts on the interest features of the SSSI. In addition, it intersects with two further designated local wildlife sites (LWS) – the Stonefield Strip and the Little Tey Churchyard – as well as scattered areas of BAP priority habitat.

3.219 As such, development of this site may result in impacts to these local designations and habitats. It is anticipated that effects on the existing habitats may be minor and negative, and may result from amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure, predation by pets. However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects.

- 3.220 In total, less than 5% of the site area intersects with a SSSI and locally designated wildlife sites. As such, and in line with stated assumptions, minor negative yet uncertain (-?) effects are anticipated in relation to SA objective 6. This effect is considered likely to occur in relation to all potential dwelling capacities (ALTGC4a/b/c/d).
- 3.221 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.222 While the site is primarily agricultural greenfield land, it is in relatively close proximity to both a major road intersection and to Marks Tey railway station. The relationship of the site to existing local centres is described above in the site context. However overall, as set out in Colchester's Infrastructure Delivery Plan, the car dominates modal share across Colchester, with 63% of people travelling to work by car.¹³
- 3.223 The site is served by road by two strategic trunk roads - the A120 (for links west to Coggeshall/Braintree) and the A12 (for links to Colchester and south to Chelmsford/London). As set out in the Colchester Infrastructure Delivery Plan¹⁴, both the A12 and the A120 operate at peak capacity and, as a result, provide an unreliable level of service. Funding has been committed by Highways England (RIS1)¹⁵ to widen the A12 to three lanes from Chelmsford to junction 25 (Marks Tey). Marks Tey railway station lies close to the eastern boundary of the site, with trains running east to Colchester, and southwest to London via Chelmsford. As set out in the Colchester Infrastructure Delivery Plan (IDP)¹⁶, the Great Eastern Mainline line operates at capacity on trains to and from London in the peak hours. The IDP also notes that the station experiences issues with access to all of its platforms.
- 3.224 A bus service operating approximately every 30 minutes (with higher frequency at rush hour) passes along the A120/ B1408 that bisects the site, connecting Braintree and Colchester (via Coggeshall). Further services operate along the A12 to the south. Bus services are less regular southwards along the A12 to Witham/Chelmsford.
- 3.225 There is an existing primary school within the settlement of Marks Tey – the St Andrew's Church of England Primary School (less than 200m from the site boundary). The next nearest primary schools are located in Great Tey, Copford, Coggeshall and Feering. The nearest secondary schools to the site are located in Coggeshall (the Honeywood Community Science School) and on the fringes of Colchester (the Stanway School).
- 3.226 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.227 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council¹⁷ sets out that the significant increase in demand for school places across Essex is predicted to continue. The evidence sets out that there is some limited capacity at nearby primary schools in the 'Colchester rural northwest' region (24 places forecast in 2028/29), with no projects in the pipeline for new schools other than those associated with planned new garden communities. However at a primary pupil ratio of 0.2 pupils per dwelling, even the lower capacity option ALTGC4a (2,000 dwellings) would create additional

¹³

https://www.braintree.gov.uk/downloads/file/6992/cbc0006_colchester_infrastructure_delivery_plan_final_report_%E2%80%93_updated_october_2017

¹⁴

https://www.braintree.gov.uk/downloads/file/6992/cbc0006_colchester_infrastructure_delivery_plan_final_report_%E2%80%93_updated_october_2017

¹⁵ <https://www.gov.uk/government/collections/road-investment-strategy>

¹⁶

https://www.braintree.gov.uk/downloads/file/6992/cbc0006_colchester_infrastructure_delivery_plan_final_report_%E2%80%93_updated_october_2017

¹⁷ Essex School Organisation Service – 10 Year Plan 2019-2028.

demand for 400 places, so it is considered likely that new primary school(s) will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (ALTGC4a/b/c/d). These services and facilities would serve both new residents and the existing community within the development site.

- 3.228 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at all potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall it is considered likely that the provision of the local services and facilities mentioned above is likely to result in at least minor positive yet uncertain (+?) effects for all dwelling capacities (ALTGC4a/b/c/d). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. It is notable that sites over 4,500 dwellings in size are anticipated to provide new health centre facilities, however this is not considered likely to change the effect from minor positive in relation to this SA objective.
- 3.229 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to provide secondary school facilities in accordance with the developer contributions guidance from Essex County Council¹⁸. In relation to this, In addition the Essex County Council evidence¹⁹ sets out that there will be significant pressure on secondary school places at Honywood Community Science School and surrounding schools in the Halstead/Hedingham/Coggeshall area, with a forecast of -106 places by 2024/25. Due to increasing demand from new garden communities, the Ramsey Academy in Halstead is planned to expand from 2019/20. Similarly, the Stanway School and surrounding schools will experience significant pressure on capacity from 2019 onwards, with a forecast of -359 places by 2028/29. Given a secondary pupil factor of 0.2 pupils per dwelling, it is likely that some secondary school expansion may be required by the end of the plan period (perhaps temporarily and also subject to feasibility and expansion capacity at existing schools). The site capacity options ALTGC4c (17,000 dwellings) and ALTGC4d (21,000 dwellings) are considered capable of delivering new secondary school facilities on the site, which provides further opportunities for sustainable travel. It is assumed that although ALTGC4b (2,500 dwellings by the end of the plan period) is lower than the 4,500 threshold for new secondary facilities set out in the assumptions framework, that phased provision can be made as the full site capacity (either ALTGC4c – 17,000 dwellings or ALTGC4d – 21,000 dwellings) will be able to support a new secondary school.
- 3.230 Furthermore, as set out above, it is considered that capacity options ALTGC4c – 17,000 dwellings and ALTGC4d – 21,000 dwellings will be able to support at least 10 ha of employment land as part of the site. This, combined with the delivery of a new secondary school in the site is likely to create significant opportunities for sustainable travel within the site, resulting in anticipated significant positive yet uncertain (++) effects for these two higher capacity options. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 3.231 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.

¹⁸ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

¹⁹ Essex School Organisation Service – 10 Year Plan 2019-2028.

- 3.232 For journeys to more distant destinations, the eastern boundary of the site is in close proximity to Marks Tey railway station, providing for sustainable modes of transport to nearby employment, amenities and services without relying on road infrastructure. However given the scale of the site, the majority of the site area does not fall within 'acceptable' walking distance of the station, and the severance created by road and rail routes through the site should be taken into account.
- 3.233 In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site is split between two middle super output areas (MSOAs) – Colchester 010 (eastern portion) and Braintree 014 (western portion). According to NOMIS (using 2011 data), the most popular destination for commuters in the eastern half is Colchester, with a significant proportion (around 15%) working more locally. Commuters in the western half of the site are most likely to commute to Braintree (roughly 5%), Witham (5%) and Chelmsford (4%). From both MSOAs, a significant number of commuters work in London (between 8-10%). In general, we can observe that the area generates significant movement from the site eastward to Colchester, as well as west to Braintree and southwest toward London (via Witham and Chelmsford).
- 3.234 The rail link at Marks Tey suggests that commuting to Colchester can be served by rail. According to the Colchester Infrastructure Development Plan (IDP), around 8% of people across the Borough use the train to commute to work (para 6.18), and there are significant levels of commuting from the site area to London along the Great Eastern Mainline. However, as noted above, these services tend to be operating at capacity during peak hours, and Marks Tey station is not within 'acceptable' walking distance of the majority of the site. Journeys to Braintree and Witham/Chelmsford are more likely to rely on the already congested A12 and A120. In the light of this, overall minor negative yet uncertain (-?) effects are considered likely in relation to longer journeys, both at the end of the plan period and when fully built at all capacity options. The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters to the most popular commuting destinations.
- 3.235 As such, overall mixed effects are anticipated in relation to SA objective 7, depending on the scale of development proposed. In general, slightly more positive effects are anticipated for the higher capacity options ALTGC4c (17,000 dwellings) and ALTGC4d (21,000 dwellings).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.236 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.
- 3.237 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form for this site, this site is to be supported by the following local and strategic infrastructure at the following dwelling capacities:
- 3.238 ALTGC4a (2,000 dwellings) and also assumed to apply to ALTGC4b given that it is a similar scale (maximum 2,500 dwellings at the end of the plan period):
- Early Years
 - Primary School(s)
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Community meeting spaces
- 3.239 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.240 ALTGC4c (17,000 dwellings) and ALTGC4d (21,000 dwellings):

- Rapid Transport System links to Braintree Town, Braintree Freeport and Stansted
- Realignment and upgrading of A120 route and junctions to accommodate traffic generated
- Early Years
- Primary School(s)
- Secondary School
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Medical facilities
- Community meeting spaces

3.241 The site information form sets out that the site can viably deliver these infrastructure requirements with external funding from transport operating companies required for RTS provision. Viability improvements to the scheme via another mechanism could also potentially provide sufficient viability.

3.242 The supporting infrastructure listed above is confirmed to be viable by the site information form and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for all dwelling capacity options (ALTGC4a/b/c/d). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is noted in relation to site capacity options ALTGC4c (17,000 dwellings) and ALTGC4d (21,000 dwellings) as the site information form sets out that external funding, or other mechanism to improve scheme viability is required to deliver the rapid transport system.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.243 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

3.244 There are 24 listed buildings within the site boundary, including one Grade I listed building (Church of St James) and one Grade II* listed building (the barn to the south west of Little Tey House). In the vicinity of the site (within 500m of the boundary), there is a further Grade I-listed building (the Church of St Andrew), a Scheduled Monument (the circular brick kilns to the east of the site boundary) and a number of Grade II listed buildings. Looking further afield (within 1km of the site boundary) there are two designated conservation areas (the Coggeshall Conservation Area and the Great Tey Conservation Area), a scheduled Roman Villa (south of Warren's Farm) and a number of scattered listed buildings both within and outside the conservation areas.

3.245 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.

3.246 In total, approximately 71% of the site area falls within 500m of a heritage asset, and a further 29% lies between 500m and 1km from an asset. As such, and taking a precautionary approach to this assessment, significant negative yet uncertain effects (--?) are anticipated in relation to all potential dwelling capacity options (ALTGC4a/b/c/d). The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.247 With regards to townscape, the site boundary of the site is adjacent to the existing settlement of Marks Tey. In line with stated assumptions, given that the proposed settlement (at all capacity options) implies an increase of 10% or more on the size of neighbouring Marks Tey, the development is likely to significantly change the character of the settlement. However whether this change will be positive or negative will depend on the quality of design of the new development, therefore the effect is anticipated as uncertain (?).
- 3.248 In accordance with the above, an overall mixed negative/uncertain effect (--?/?) is anticipated in relation to SA objective 9, both at the end of the plan period and when fully built at all capacities (ALTGC4a/b/c/d).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.249 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.250 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities (ALTGC4a/b/c/d) is likely to result in minor positive (+) effects in relation to SA objective 10.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 3.251 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 3.252 The site is entirely outside source protection zones (SPZs) and is a significant distance from any SPZs in the surrounding area. As such it is not considered likely that the development of the site will affect ground water resources and therefore negligible effects (0) are anticipated in relation to ground water.

Water scarcity and water treatment

- 3.253 With regard to water supply, this site straddles the boundary between Colchester BC and Braintree BC. As such, growth is taken into account both in the Colchester and Braintree published Water Cycle Studies. Both the Braintree Water Cycle Study (WCS)²⁰ and the Colchester WCS²¹ identify that there is sufficient water supply accounting for the growth that was planned in 2016/2017 over the plan period. The WCS for Braintree assumes planned growth of 14,113 dwellings and the WCS for Colchester assumes planned growth of 16,144 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that site ALTGC4 was not allocated in the Section 1 Local Plan, and as such was not taken into account in the either WCS. As such, the results of this study should be interpreted with caution in relation to this site.
- 3.254 The Integrated Water Management Strategy (IWMS)²², which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options,

²⁰ https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

²¹ https://www.braintree.gov.uk/downloads/file/6983/cbc0048_colchester_borough_council_water_cycle_study_final_report

²² https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume that the proposed growth at ALTGC4 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (ALTGC4a/b/c/d) in relation to water scarcity.

- 3.255 It is reasonable to assume here that the Colchester Water Recycling Centre (WRC) would serve site ALTGC4, given that the Braintree WCS assumed that this facility would serve the 'Marks Tey' Garden Community allocated in the Section 1 Local Plan, which covers a similar area. The WCS only assessed growth up to 2033, and assumes that 2,500 dwellings will be delivered over the plan period (up to 2033). The WCS identified that Colchester WRC has sufficient headroom under the current permit to accept the additional wastewater flow from growth in the Marks Tey garden community proposed within the plan period (para 6.3 of the Braintree WCS).
- 3.256 In accordance with the above, the effects in relation this part of the SA objective at the end of the plan period (ALTGC4b – max 2,500 dwellings) and at the lowest capacity option (ALTGC4a – 2,000 dwellings) are anticipated to be uncertain negligible (0?). Additionally, the IWMS indicates that the Colchester WRC will be able to cater growth beyond the extent of the plan period. As such, uncertain negligible effects (0?) are also expected for the higher potential dwelling capacities (ALTGC4c/d) in relation to water treatment. The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application and because specific growth at ALTGC4 was not assessed as part of the study.
- 3.257 Overall, mixed negligible and uncertain negligible effects (0/0?) are expected in relation to this SA objective for all potential dwelling capacities (ALTGC4a/b/c/d).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.258 Only a small proportion of the site area (approximately 2%) intersects with an Environment Agency Flood Zones 2 and 3 in the south and north east of the site. The entirety of the site is considered to be at low risk from ground water flooding and <25% of the site is identified as being at high risk of flooding from surface water. Furthermore, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.259 It is therefore considered that the effects in relation to SA objective 12 are likely to be negligible (0) at all capacity options.

SA13: To improve air quality

- 3.260 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 3.261 This site does not intersect with any AQMAs and as such, negligible (0) effects are anticipated.

Potential contribution to road traffic within areas suffering from air pollution

- 3.262 As set out under SA objective 7, the site is split between two middle super output areas (MSOAs) – Colchester 010 (eastern portion) and Braintree 014 (western portion). According to NOMIS (2011 data), commuters currently living in the area tend to commute to Colchester, Braintree, Witham/Chelmsford and further southwest to London. It is likely that many of the London commuters, and potentially some of those commuting to Colchester/Witham/Chelmsford), will use rail services. However the Colchester Infrastructure Delivery Plan (IDP)²³ notes (in para 6.3) that the car dominates the modal share in most areas of the borough, with 63% of people travelling to

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https://www.braintree.gov.uk/downloads/file/6992/cbc0006_colchester_infrastructure_delivery_plan_final_report_%E2%80%93_updat ed_october_2017

work by car. The Braintree IDP also notes that rural areas (which would include the western parts of NEAGC2) are currently reliant on the car.

- 3.263 As such, if the new community follows the commuting behaviour of the present community, much of this commuter traffic is likely to be carried by local roads, the A12 and the A120 between surrounding settlements.
- 3.264 The nearest AQMA to the site (Lucy Lane North, Stanway) lies on the commuting route along the A12 between the site and Colchester – a key commuting destination from the site area. In addition, the 'Central Corridors' AQMA in Colchester town centre could be affected by further car-based commuting into the town from the site. As such, the site at the end of the plan period and when fully built at all capacity options is considered likely to result in an uncertain minor negative effect with uncertainty (-?) in relation to this part of the SA objective. The uncertainty stems from the lack of clarity so far as to the community patterns and public transport options available to the new community living at the site, which has the potential to reduce car-based commuting into Colchester.
- 3.265 Overall mixed effects (0/-?) are anticipated in relation to SA objective 13, both at the end of the plan period and for all fully built capacity options.

SA14: To conserve and enhance the quality of landscapes

- 3.266 The site is not located near any designated landscapes or proposed extensions to these.
- 3.267 Site ALTGC4 resulted from the amalgamation of former site options ALTGC4 and ALTGC5. These former site options had been assessed by landscape officers of the NEAs, and together cover two landscape character areas – the LCA 'Easthorpe Farmland Plateau' and the LCA 'Easthorpe Farmland Plateau (B2a)'. The former was found to be of moderate strength character with locally high sensitivity to change along the river valley and away from the A12, while the latter was found to have weak-moderate character with locally moderate sensitivity to change away from the A12 and A120. In line with stated assumptions, a significant negative effect with some uncertainty (--?) is anticipated in relation to SA objective 14, both at the end of the plan period and at all fully built capacities (ALTGC4a/b/c/d). There is uncertainty about this effect as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 3.268 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 3.269 A large proportion of the site (approximately 55%) lies within a mineral safeguarding area for sand and gravel deposits. This means that the development of this site would result in a significant sterilisation of mineral resources if these were not extracted before development.
- 3.270 Due to the large area of mineral resources that may be affected, the effects are considered to be significant negative yet uncertain (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential dwelling capacity options (ALTGC4a/b/c/d), because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

- 3.271 The entire site area is classified as Grade 2 agricultural land, meaning the development of this site would result in the loss of a significant amount of very good quality agricultural land. In light of the above, a significant negative (--) effect is anticipated in relation to agricultural land. The effect is considered to be the same for all potential dwelling capacity options (ALTGC4a/b/c/d), because the location of the development within the site boundary for each capacity option is unknown.

3.272 As such, overall significant negative effects with some uncertainty (---/---) are anticipated in relation to SA objective 15, both at the end of the plan period and at all capacity options (ALTGC4a/b/c/d).

Summary of significant effects

3.273 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out at capacity ALTGC4a – 2,000 dwellings:

3.274 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to the potential to provide community cohesion within the new development; and
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;

3.275 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby listed buildings and conservation areas;
- SA14 Landscape, due to the significant change which would occur to highly sensitive landscape areas; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and the loss of Grade 1 or 2 agricultural land.

3.276 In summary the site at this scale is likely to be able to provide sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this capacity option to provide higher order services such as a secondary school, health care facilities or likely to be able to support a large number of jobs. As such, development in this location at 2,000 dwellings will result in more travel out of the site to access these services and jobs compared to a higher level of development. This is likely to decrease opportunities for sustainable travel and result in a less self-contained development.

3.277 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. It is considered that at 2,000 dwellings, the effects will be less extreme than the larger capacity options, as the impacts will be less, however there will be fewer benefits in terms of new services and facilities.

3.278 Several significant negative effects have been identified in relation to environmental assets; however this scale of development may result in reduced effects on sensitive environmental receptors compared to the larger dwelling capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features.

Effects when fully built out at capacity ALTGC4c – 17,000 dwellings and ALTGC4d – 21,000 dwellings:

3.279 Effects once the site is fully built out to these two site capacities are found to be broadly the same, given the similar scale of these options. Significant positive effects are anticipated in relation to:

- SA1 Community cohesion, due to the potential to provide community cohesion within the new development.
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;

- SA3 Health, as development of this scale should be able to support new health facilities, as well as open spaces and opportunities for active travel;
- SA5 Economy, through the provision of jobs within the local area; and
- SA7 Sustainable travel, as a significant level of services and facilities are anticipated to come forward as part of the site, reducing the need to travel over shorter journeys.

3.280 The potential for significant negative effects arises at these scales in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby listed buildings and conservation areas;
- SA14 Landscape, due to the significant change which would occur to highly sensitive landscape areas; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and loss of Grade 2 agricultural land.

3.281 In summary, the fully built site at either of the two higher capacity options (ALTGC4c – 17,000 dwellings or ALTGC4d – 21,000 dwellings) is likely to result in a development which can support a significant number of services, including health care facilities, primary and secondary schools, and a centre (or centres) which are large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs. At these scales, and if supported by appropriate infrastructure / employment provision, it is considered that the site could form a new settlement in its own right. This is likely to result in some self-containment which is likely to provide opportunities for more sustainable travel behaviour. However as a large site, its development will put pressure on surrounding transport infrastructure, particularly the A120 / A12, resulting in increased congestion. Despite the presence on its eastern boundary of Marks Tey railway station, the barriers created by road and rail routes and the distance from the station to much of this large site mean that the station is not currently easily accessible by high quality sustainable travel services and this may also lead to a dependence on the private car for journeys to and from destinations outside the site.

3.282 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.

3.283 Development of this site is likely to affect a number of other sensitive receptors which are present either within the site or very near to it, including biodiversity assets, highly sensitive landscapes, heritage assets, very good quality agricultural land, and mineral resources – it is important to note that effects in relation to these are likely simply because these form the site context, however delivering a high dwelling capacity within a fixed site boundary may make it more difficult to mitigate the potential impacts.

Effects at the end of the plan period (ALTGC4b - maximum 2,500 dwellings)

3.284 In summary, the anticipated significant effects at the end of the plan period are broadly similar to those for the ALTGC4a (2,000 dwelling) capacity option described above. However slightly more positive effects are anticipated in relation to SA7 Sustainable Travel, given that the site when fully built (at either ALTGC4c – 17,000 dwellings, or ALTGC4d – 21,000 dwellings) would be able to deliver a greater number of local services within the site, many of which are assumed to have been delivered in phases at suitable scale by the end of the plan period.

3.285 The site at the end of the plan period is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this time to provide higher order services such as health facilities or likely to be able to support a large number of jobs. As such, development in this location at the end of the plan period will result in more travel out of the site to access these services and jobs than when the site is fully built. This is likely to add traffic to the A120 / A12, resulting in increased congestion and relatively increased carbon emissions compared to a more self-contained site. Having said

this, a phased / early delivery of some infrastructure items such as secondary schools may help to provide more opportunities for sustainable travel.

- 3.286 The smaller scale of development at the end of the plan period (compared to the final capacity) may result in reduced effects on sensitive environmental receptors compared to the fully built out capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features – albeit on a temporary basis.

ALTGC6 – Land at Marks Tey Option 3

Site Context

- 3.287 Site ALTGC6 is a 326-hectare strategic site located to the west of the town of Colchester. It lies directly south of the settlement of Marks Tey but is separated from the existing settlement by the strategic road infrastructure of the A12 (London Road) which provides the site's northern boundary. The majority of the site lies within Colchester BC; however a small area on the western boundary of the site falls within Braintree BC.
- 3.288 The site is in single ownership, and was promoted as an option for development during the drafting of the Local Plan. The site is being assessed for potential development scales of 2,000, 3,500 or 5,000 dwellings, with an expectation that a total of 2,500 will be delivered within the Plan Period (up to 2033). The site is primarily arable land and does not wash over any existing settlements.
- 3.289 The nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are: Easthorpe (approximately 100 existing dwellings), adjacent to the south; Marks Tey (approximately 1,140 existing dwellings), around 300m north; Copford and Copford Green (approximately 671 existing dwellings), around 400-500m to the east; Eight Ash Green (approximately 740 existing dwellings), around 2.9km to the north east; Great Tey (approximately 393 existing dwellings), around 3km to the north; Kelvedon and Feering (approximately 2,462 existing dwellings), around 3km to the south west; and Coggeshall (approximately 2,215 existing dwellings), around 4.4km to the west. Within 5km of the site boundary there are also a number of scattered small-scale settlements (<200 dwellings), including Layer Breton, Messing, Aldham, and Little Tey.
- 3.290 Nearby local centres, as defined by the Section 2 Local Plans, can be found in: London Road (Marks Tey); Villa Road (Stanway); Blackberry Road (Stanway); Coggeshall; and Kelvedon and Feering. Colchester is the nearest policy-defined town centre, the centre of which is approximately 8km east of the centre of site ALTGC6.
- 3.291 Aside from employment opportunities within the local centres and town centres, a number of small-scale employment zones lie in the immediate vicinity of the site. These include Andersons Timber and Poplar Nurseries within Marks Tey, the Tey Brook Centre 3km to the north, and a number of industrial sites clustered around road infrastructure at Stanway, approximately 3.5km to the east on the fringes of Colchester. Further employment uses lie to the west, in the north of Coggeshall at the Coggeshall Industrial Area (approximately 6km to the west along the A120), and at Kelvedon, including the Kelvedon and Gold Key Industrial estates, approximately 6km to the south-west along the A12. Other strategic settlements and destinations include Braintree roughly 15km to the west along the A120, Witham 13km to the south west along the A12 and Halstead, around 13km to the north.
- 3.292 In the north east, the site is adjacent to the Marks Tey junction, where the dualled A12 (London Road) and single-laned A120 (Coggeshall Road) intersect. The A12 runs along the northern boundary of the site and links Colchester in the north with London in the south (via Witham and Chelmsford); the A120 links Colchester with the town of Braintree (via Coggeshall). As such the site is strongly embedded in road transport connections. The site's norther boundary is also close to Marks Tey railway station, which provides connections along the Great Eastern Main Line north toward Norwich (via Colchester) and south toward London (Liverpool Street Station). Average journey times to Colchester town centre are roughly 30 minutes, and roughly 1 hour to London.
- 3.293 The only significant allocated sites in the vicinity of site ALTGC6 are the cluster of sites on the edges of the settlement of Feering, which belong to the Crown Estate and allocated for Braintree's Section 2 Local Plan. These sites are allocated as a strategic residential growth location for 750 homes within the Plan Period (as per Policy LPP 17).
- 3.294 In addition, there are two allocated mineral extract sites approximately 3km from the site's boundaries – the 'Birch revised sites area' and the 'Fiveways Fruit Farm' site.

SA objective	Criterion	ALTGC6	ALTGC6	ALTGC6	ALTGC6	ALTGC6	ALTGC6
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	3500	5000
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/++	--?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	+++?	+++?	+++?	+++?
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?/-	+?/-	+?/-	+++?/-
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Acceptable	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	<i>Potential for harm to Source Protection Zones (SPZs)</i>	Low	Low				
	<i>Potential exposure to flood risk</i>	Medium	Medium				
	<i>Potential exposure to air pollution</i>	Low	Low				
	Potential exposure to noise pollution from roads and railways	High	High				
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+	+
	Access to town centres	Unacceptable	Unacceptable				
SA5 Achieve a prosperous	Access to local centres	Unacceptable	Desirable	+	+	+	+

SA objective	Criterion	ALTGC6	ALTGC6	ALTGC6	ALTGC6	ALTGC6	ALTGC6
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	3500	5000
us, sustainable economy	Access to town centres	Unacceptable	Unacceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium				
	Potential for harm to locally designated wildlife sites and ancient woodland	Low	Low	-?	-?	-?	-?
	Potential for harm to PHI or local BAP habitat	Low	Low				
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Desirable				
	Access to primary or middle schools	Unacceptable	Desirable				
	Access to secondary schools	Unacceptable	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable	+?/-?	+?/-?	+?/-?	+?/-?
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Preferred Maximum	Preferred Maximum				
	Access to bus stops	Unacceptable	Desirable				
	Access to cycle	Unacceptable	Unacceptable				

SA objective	Criterion	ALTGC6	ALTGC6	ALTGC6	ALTGC6	ALTGC6	ALTGC6
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	3500	5000
	paths						
	Access to open spaces and sports centres	Acceptable	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Desirable				
	Access to primary or middle schools	Unacceptable	Desirable				
	Access to secondary schools	Unacceptable	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable	+?	+?	+?	+?
	Access to railway stations	Preferred Maximum	Preferred Maximum				
	Access to bus stops	Unacceptable	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Acceptable	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment	Preferred Maximum	Preferred Maximum				

SA objective	Criterion	ALTGC6	ALTGC6	ALTGC6	ALTGC6	ALTGC6	ALTGC6
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	3500	5000
	<i>ent including employment areas and town centres</i>						
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	<i>Access to GP surgeries/ health centres</i>	Unacceptable	Desirable				
	<i>Access to primary or middle schools</i>	Unacceptable	Desirable				
	<i>Access to secondary schools</i>	Unacceptable	Desirable				
	<i>Access to further and higher education facilities</i>	Unacceptable	Unacceptable				
	<i>Access to local centres</i>	Unacceptable	Desirable				
	<i>Access to town centres</i>	Unacceptable	Unacceptable				
	<i>Access to railway stations</i>	Preferred Maximum	Preferred Maximum	+	+	+	+
	<i>Access to bus stops</i>	Unacceptable	Desirable				
	<i>Access to cycle paths</i>	Unacceptable	Unacceptable				
	<i>Access to open spaces and sports centres</i>	Acceptable	Desirable				
	<i>Access to Public Rights of Way (PRoW)</i>	Acceptable	Acceptable				
	<i>Access to centres of employment including employment areas and town</i>	Preferred Maximum	Preferred Maximum				

SA objective	Criterion	ALTGC6	ALTGC6	ALTGC6	ALTGC6	ALTGC6	ALTGC6
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	3500	5000
	<i>centres</i>						
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?	0/0?	0/0?	0/0?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Medium	Medium	0	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/-?	0/-?	0/-?	0/-?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/--	--?/--	--?/--	--?/--
	Potential for harm to agricultural land	High	High				

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.295 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.296 Currently the site is largely arable farmland lying south of the road infrastructure. The site's northern boundary lies only around 300m from the existing small settlement of Marks Tey, and industrial uses lie in the gap between the two. Development at the site at any of the proposed scales would effectively constitute a significant expansion of the existing settlement of Marks Tey (approximately 1,140 existing dwellings), although the presence of the railway line and A12 road infrastructure would have a separating effect.

3.297 It is recognised that the provision of such a large development around and close to the existing small scale communities in the area is likely to result in a significant change to these. The existing

developed areas immediately adjacent to the site boundary will be subject to the most significant degree of change. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context as development of this scale would result in the creation of a permanent urban character compared to what is a semi-rural character at present. It is considered likely that, due to the scale of the proposed site compared to the existing surrounding settlements, impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all of the potential scales of development, including the potential maximum capacity at the end of the plan period (ALTGC6a/b/c/d), are anticipated to result in significant negative yet uncertain (--?) effects in relation to the existing community. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

- 3.298 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 3.299 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (ALTGC6a/b/c/d).
- 3.300 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.301 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for all dwelling capacity options.
- 3.302 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.303 In addition, the site information form sets out that development at 2,000, 3,500 and 5,000 dwelling capacities (ALTGC6a/c/d) is likely to be viable, which includes the delivery of 30% affordable housing. However for all capacity options this viability would be dependent on external funding for strategic infrastructure (RTS and strategic road improvements) or other improvements to site viability such as inflation in house prices. This results in uncertainty for this development scale as the external funding / improvement to viability has not yet occurred. It is assumed that these considerations would also apply to a site of 2,500 dwellings (ALTGC6b) given it is a similar scale to 2,000 dwellings. As a result, significant positive effects with uncertainty (++?) are anticipated in relation to SA objective 2 at all potential dwelling scales.

SA3: Improve health/reduce health inequalities

- 3.304 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.305 There are currently no existing healthcare facilities within the site or within 'acceptable' walking distance, with the nearest GP surgeries in Coggeshall to the west, on the fringes of Colchester to the east, and in Kelvedon to the south west. The most accessible hospital is Essex County Hospital in central Colchester.
- 3.306 As a greenfield site, there are no existing publicly accessible green spaces within the site area. However in the immediate vicinity there are a number of small-scale existing green spaces within and around the settlement at Marks Tey, which lies immediately to the north of the site – a mixture of children's play spaces, amenity green space and the Jubilee sports ground. There is a further amenity greenspace at London Road (Copford) - approximately 1.6km from the site's centre point, and at Gravel Pit Wood - approximately 1.7km from the site's centre point.
- 3.307 The site is not currently integrated with any national or local cycle networks, the nearest of which lie to the east on the fringes of Colchester and to the south-west in Witham. The site is crossed by three public rights of way (PROW), providing links to the surrounding countryside that residents of the new development would be able use for recreational purposes. However it is not considered that these PROW in themselves will make a significant contribution to recreation and the promotion of more healthy lifestyles.
- 3.308 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. Marks Tey road junction and the A12 separate the site from Marks Tey railway station, posing an obstacle to integrating active transport modes with public transport infrastructure. Nevertheless, there is scope for mitigating this severance through design interventions.
- 3.309 Overall, the delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive effects with uncertainty (+?) in relation to this part of SA objective at the end of the plan period and when fully built at all capacity options (ALTGC6a/b/c/d). The uncertainty arises because of questions over the capability of design interventions to overcome the severance created by the A12 and Marks Tey road junction.
- 3.310 In terms of accessing healthcare, only at the higher capacity option (ALTGC6d - 5,000 dwellings) is the site likely to be large enough in scale to support new healthcare facilities, resulting in no adjustment to the minor positive effect (+?) identified above for the lower capacity options. However at 5,000 dwellings the site should be supported by new, up to date healthcare facilities, so that a significant positive effect with uncertainty (++?).

Exposure to noise pollution

- 3.311 Due to the presence of the A12 on the site's boundary, approximately 17% of the site area falls within a DEFRA strategic noise area of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB, and a further 29% falls within a DEFRA strategic noise area of $L_{night} 50.0 - 54.9$ dB, or $L_{aeq,16} 55.0-59.9$ dB. As such, and in line with the assumptions framework, a minor negative effect (-) is identified in relation to noise pollution, both at the end of the plan period and at all capacity options (ALTGC6a/b/c/d).
- 3.312 As such, the anticipated overall effects in relation to SA objective 3 are mixed and vary depending on the capacity option, with a slightly more positive effect at the highest capacity option (ALTGC6d - 5,000 dwellings). They are shown in tabulated form above.

SA4: To ensure and improve the vitality & viability of centres

- 3.313 In accordance with the assumptions framework for all strategic sites at all scales and as confirmed by the site information form it is considered that development will be supported by suitable provision of services and facilities within a new local cen. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases, and that any new facilities would complement rather than cannibalise existing ones. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to SA objective 4, at all potential dwelling scales (ALTGC6a/b/c/d).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.314 The relationship of the site to existing centres within local and town centres is described in the site context above. Both Coggeshall and Kelvedon host industrial estates. In addition there are some small-scale employment areas within the Marks Tey settlement and a cluster of industrial sites at Stanway on the nearby fringes of Colchester.
- 3.315 It is anticipated that the development of the site at all potential scales (ALTGC6a/b/c/d) will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.
- 3.316 In accordance with the site information form, it is considered that all dwelling capacity options (ALTGC6a/b/c/d) will be able to support less than 10ha of employment land. As such, and in line with the assumptions framework, there is no change to the minor positive effects (+) anticipated for SA objective 5, both at the end of the plan period and for all dwelling capacity options.
- 3.317 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.318 The site intersects with numerous relatively small-scale areas of BAP Priority Habitat (largely deciduous woodland). Within 400m of the site boundaries, there are a number of further small-scale areas of BAP Priority Habitat, in addition to a corner of the Marks Tey Brickpit SSSI (a former clay extraction site and geological SSSI). The entirety of the site intersects with SSSI Impact Risk Zones for residential development of 100 units or more, whilst a very small proportion of the site falls into a SSSI IRZ for any new residential development. This highlights the potential for impacts on the interest features of the SSSI.
- 3.319 As such, development of this site may result in adverse impacts on these local designations and habitats. It is anticipated that effects on the existing habitats may be minor and negative, and may result from amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure, predation by pets. However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects.
- 3.320 Given that the entire site area falls within relevant SSSI IRZs, a minor negative uncertain effect (-?) is anticipated in relation to SA objective 6, both at the end of the plan period and at all fully built capacity options (ALTGC6a/b/c/d).
- 3.321 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.322 While the site is primarily agricultural greenfield land, it is in close proximity to both a major road intersection and in the north is close to Marks Tey railway station. The relationship of the site to existing local centres is described above in the site context above. However overall, as set out in Colchester's Infrastructure Delivery Plan, the car dominates modal share across Colchester, with 63% of people travelling to work by car.²⁴
- 3.323 The site is served by road by two strategic trunk roads - the A120 (for links west to Coggeshall/Braintree) and the A12 (for links to Colchester and south to Chelmsford/London). As

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set out in the Colchester Infrastructure Delivery Plan²⁵, both the A12 and the A120 operate at peak capacity and, as a result, provide an unreliable level of service. The A12 is congested in both directions in morning and afternoon peak periods, and suffers from poor journey time reliability. Funding has been committed by Highways England (RIS1)²⁶ to widen the A12 to three lanes from Chelmsford to junction 25 (Marks Tey).

- 3.324 Marks Tey railway lies immediately to the northeast, separated from the site by Marks Tey junction. Trains run from the station both north to Colchester and south to London (via Chelmsford). As set out in the Colchester Infrastructure Delivery Plan (IDP)²⁷, the Great Eastern Mainline line operates at capacity on trains to and from London in the peak hours. The IDP also notes that the station experiences issues with access to all of its platforms.
- 3.325 There are few existing bus services passing the site along the A12 on its northern boundary. However buses run from Marks Tey station (in the north of the site), from where it is possible to reach central Colchester in around 35 minutes, Witham in around 40 minutes, Braintree in around 45 minutes, and Chelmsford in around 70 minutes.
- 3.326 As a greenfield site, there are no existing schools within the site boundaries. The nearest primary schools are the Copford C of E Primary School (approximately 900m from the site's centre point) and the St Andrew's C of E Primary School (within the settlement of Marks Tey, approximately 1.4km from the site's centre point but severed from the site by the A12). The nearest secondary schools to the site are located on the fringes of Colchester (the Stanway School) and in Coggeshall (the Honywood Community Science School) – none of the above are considered to be within 'acceptable' walking distance of the site.
- 3.327 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.328 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council²⁸ sets out that there is some limited capacity at nearby primary schools in the 'Colchester rural northwest' region (24 places forecast in 2028/29). However at a primary pupil ratio of 0.3 pupils per dwelling, even the lower capacity option for this site (ALTGC6a - 2,000 dwellings) would create additional demand for 600 places and new primary schools will be required to serve the site (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (ALTGC6a/b/c/d). These services and facilities would serve both new residents and the existing community within the development site.
- 3.329 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at all potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. In addition, the severance created by the road infrastructure separating the site from Marks Tey railway station will need to be mitigated in order to provide a successfully integrated network of active transport for the site; the site information form confirms that provision of infrastructure delivering 'improved connectivity to Marks Tey station' would be a requirement of development. Overall it is considered likely that the provision of the local services and facilities mentioned above is likely to result in minor positive yet uncertain (+?) effects for all

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²⁶ <https://www.gov.uk/government/collections/road-investment-strategy>

²⁷

https://www.braintree.gov.uk/downloads/file/6992/cbc0006_colchester_infrastructure_delivery_plan_final_report_%E2%80%93_update_october_2017

²⁸ Essex School Organisation Service – 10 Year Plan 2019-2028.

dwelling capacities (ALTGC6a/b/c/d). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application, as well as due to questions over the ability of site design to mitigate against severance challenges. It is notable that sites over 4,500 dwellings in size are anticipated to provide new health centre facilities, however this is not considered likely to change the effect from minor positive in relation to this SA objective.

- 3.330 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to provide secondary school facilities in accordance with the developer contributions guidance from Essex County Council²⁹. Essex County Council evidence³⁰ sets out that there will be significant pressure on secondary school places at the Honywood Community Science School and surrounding schools in the Halstead/Hedingham/Coggeshall area, with a forecast of -106 places by 2024/25. Given a secondary pupil factor of 0.2 pupils per dwelling, it is likely that some secondary school expansion may be required by the end of the plan period (perhaps temporarily and also subject to feasibility and expansion capacity at existing schools). The largest site capacity option, ALTGC6d (5,000 dwellings), is considered capable of delivering new secondary school facilities on the site, which provides further opportunities for sustainable travel. It is assumed that although ALTGC6b (2,500 dwellings by the end of the plan period) is lower than the 4,500 threshold for new secondary facilities set out in the assumptions framework, phased provision will be possible as the final site capacity will be able to support a new secondary school. The lower capacity options (ALTGC6a – 2,000 dwellings, and ALTGC6c – 3,500 dwellings) are not considered sufficient in scale to deliver a new secondary school, either at the end of the plan period or at the fully built capacity.

Longer journeys

- 3.331 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.332 For journeys to more distant destinations, the northern edge of the site is close to Marks Tey railway station, providing for sustainable modes of transport to nearby employment, amenities and services without relying on road infrastructure.
- 3.333 In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site lies almost entirely within the Colchester 010 middle super output area (MSOA). According to NOMIS (based on 2011 census data), the most popular destinations for commuters currently residing in this area are: various parts of central Colchester (17%); the local area, including Coggeshall (around 15%); and London (5%). The local rail link at Marks Tey suggests that commuting patterns to Colchester can be served by rail - according to the Colchester Infrastructure Development Plan (IDP), around 8% of people across the Borough use the train to commute to work (para 6.18), and there are significant levels of commuting from the site area to London along the Great Eastern Mainline. However, as noted above, these services tend to be operating at capacity during peak hours, and the IDP also notes heavy reliance on the private car across the Borough. Further, the Stage 1 assessment showed that significantly less than half of the site area (around 17%) is located within 'desirable' or 'acceptable' walking distance of the station.
- 3.334 If the new residents follow the same pattern, most of the commuting journeys are likely to be carried by a combination of strategic roads and some rail journeys – however existing rail capacity constraints and the distance of much of the site from the station limit the latter option. As such, minor negative effects with uncertainty (-?) are considered likely both at the end of the plan period and when the site is fully built at all site capacities. The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters to the most popular commuting destinations.

²⁹ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

³⁰ Essex School Organisation Service – 10 Year Plan 2019-2028.

3.335 As such, and in line with the assumptions framework, overall mixed (+?/-?) effects are anticipated for SA objective 7 for all dwelling capacity options.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

3.336 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.

3.337 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form for this site, this site is to be supported by the following local and strategic infrastructure at the following dwelling capacities:

3.338 ALTGC6a (2,000 dwellings) and also assumed to apply to ALTGC6b given that it is a similar scale (maximum 2,500 dwellings at the end of the plan period):

- Early Years
- Primary School(s)
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces
- Realignment of the A12
- Improved connectivity to Marks Tey station.

3.339 The site information form sets out that the site can viably deliver these infrastructure requirements with external funding for major strategic road improvements.

3.340 ALTGC6c (3,500 dwellings):

- Early Years
- Primary School(s)
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces
- Realignment of the A12
- Improved connectivity to Marks Tey station
- Rapid Transit System (RTS) to Braintree Town, Braintree Freeport and Colchester.

3.341 The site information form sets out that the site can viably deliver these infrastructure requirements with external funding from transport operating companies for the RTS, and external funding for major strategic road improvements. Alternatively, viability improvements to the scheme via another mechanism could also potentially provide sufficient viability.

3.342 ALTGC6d (5,000 dwellings) will be supported by the same infrastructure as ALTGC6c (3,500 dwellings) with the addition of a secondary school. Similarly, the site information form sets out that the site can viably deliver these infrastructure requirements with external funding from transport operating companies for the RTS, and external funding for major strategic road

improvements. Alternatively, viability improvements to the scheme via another mechanism could also potentially provide sufficient viability.

- 3.343 The supporting infrastructure listed above is confirmed to be viable by the site information form and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for all dwelling capacity options (ALTGC6a/b/c/d). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is noted in relation to all site capacity options as the site information form sets out that external funding (or alternative mechanism for improving scheme viability) is required to deliver the RTS and major strategic road upgrades.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 3.344 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 3.345 There is one Grade II* listed building within the site (Barn South of Marks Tey Hall') and three Grade II listed buildings in the north east of the site. In addition, within 500m of the site boundary there are a number of further heritage assets, including the Grade I listed Church of St Mary and three Grade II* listed buildings (Easthorpe Hall, St Mary's Grange and Badcocks Farmhouse), as well as a number of Grade II listed buildings. Between 500m and 1km of the site boundary is the Grade I listed Church of St Andrew and a number of Grade II listed buildings.
- 3.346 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.
- 3.347 In total, approximately 73% of the site area falls within 500m of a heritage asset, and a further 27% lies between 500m and 1km from an asset. As such, and taking a precautionary approach to this assessment, significant negative effects with uncertainty (--?) are anticipated both at the end of the plan period and at all fully built scales in relation to cultural heritage assets. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.348 With regards to townscape, the site boundary of the site is adjacent to the existing settlement of Marks Tey and, as noted above, in relatively close proximity to the designated Copford Conservation Area. In line with stated assumptions, given that the proposed settlement (at all capacity options) constitutes an increase of 10% or more on the size of neighbouring Marks Tey, the development is likely to significantly change the character of the settlement. However whether this change will be positive or negative will depend on the quality of design of the new development, therefore the effect is anticipated as uncertain (?).
- 3.349 In accordance with the above, an overall mixed negative/uncertain effect (--?/?) is anticipated in relation to SA objective 9, both at the end of the plan period and when fully built at all capacities (ALTGC6a/b/c/d).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.350 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.351 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design,

renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities (ALTGC6a/b/c/d) is likely to result in minor positive (+) effects in relation to SA objective 10.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 3.352 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 3.353 The site is entirely outside source protection zones (SPZs), and is a significant distance from any SPZs in the surrounding area. As such it is not considered likely that the development of the site will affect ground water resources and therefore negligible effects (0) are anticipated in relation to ground water.

Water scarcity and water treatment

- 3.354 With regard to water supply, the Colchester WCS³¹ identifies that there is sufficient water supply accounting for the growth that was planned in 2017 over the plan period. The WCS for Braintree assumes planned growth of 14,113 dwellings and the WCS for Colchester assumes planned growth of 16,144 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that site ALTGC6 was not allocated in the Section 1 Local Plan, and as such was not taken into account in the either WCS. As such, the results of this study should be interpreted with caution in relation to this site
- 3.355 The Integrated Water Management Strategy (IWMS)³², which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume that the proposed growth at ALTGC6 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (ALTGC6a/b/c/d) in relation to water scarcity.
- 3.356 It is reasonable to assume here that the Colchester Water Recycling Centre (WRC) would serve site ALTGC6, given that the Braintree WCS assumed that this facility would serve the 'Marks Tey' Garden Community allocated in the Section 1 Local Plan. The WCS only assess growth up to 2033, and assumes that 2,500 dwellings will be delivered over the plan period (up to 2033). The WCS identified that Colchester WRC has sufficient headroom under the current permit to accept the additional wastewater flow from growth in the Marks Tey garden community proposed within the plan period (para 6.3 of the Braintree WCS). As such, uncertain negligible (0?) effects are anticipated for capacities ALTGC6a (2,000 dwellings) and ALTGC6b (2,500 dwellings at the end of the plan period).
- 3.357 Additionally, the IWMS indicates that the Colchester WRC will be able to cater growth beyond the extent of the plan period. As such, uncertain negligible effects (0?) are also expected for the higher potential dwelling capacities (ALTGC6c/d) in relation to water treatment. The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application and because specific growth at ALTGC6 was not assessed as part of the study.
- 3.358 Overall, mixed negligible and uncertain negligible effects (0/0?) are expected in relation to this SA objective for all potential dwelling capacities (ALTGC6a/b/c/d).

³¹ https://www.braintree.gov.uk/downloads/file/6983/cbc0048_colchester_borough_council_water_cycle_study_final_report

³² https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.359 A very small proportion of the site (approximately 2%) of the site intersects with an Environment Agency Flood Zones 2 and 3 around the Domsey Brook, which flows through the south west of the site. The entire site is also identified as being at low risk from ground water flooding, and < 25% of the site area is identified as being at risk of flooding from surface water. Furthermore, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.360 It is therefore considered that the effects in relation to SA objective 12 are likely to be negligible (0) both at the end of the plan period and when fully built at all capacity options (ALTGC6a/b/c/d).

SA13: To improve air quality

- 3.361 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 3.362 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated in relation to this part of the SA objective.

Potential contribution to road traffic within areas suffering from air pollution

- 3.363 As set out under SA objective 7, the site lies almost entirely within the Colchester 010 middle super output area (MSOA). According to NOMIS (based on 2011 census data), the most popular destinations for current commuters from this area are various parts of central Colchester, the local area, and London. While the rail link from Marks Tey suggests that some of these commuters may travel by sustainable means, the Colchester Infrastructure Delivery Plan (IDP)³³ notes (in para 6.3) that the car dominates the modal share in most areas of the borough, with 63% of people travelling to work by car, and less than half of site ALTGC6 is within 'desirable' or 'acceptable' walking distance of the station. These issues limit the potential for rail-based travel in the area. Marks Tey station also lies on the other side of strategic road infrastructure that may cause severance challenges although infrastructure to improve connectivity would be delivered as part of all capacity options.
- 3.364 If the new community follows the commuting behaviour of the present community, much of this commuter traffic is likely to be carried by local roads, the A12 and the A120, with some rail-based commuting. The nearest AQMA to the site (Lucy Lane North, Stanway) lies on the commuting route along the A12 between the site and Colchester – a key commuting destination. In addition, the 'Central Corridors' AQMA in Colchester town centre could be affected by further car-based commuting into the town from the site.
- 3.365 As such, the site at the end of the plan period and when fully built at all capacity scales is considered likely to result in uncertain minor negative effects (-?) in relation to this part of the SA objective. The uncertainty stems from the lack of clarity as to the community patterns and public transport options available to the new community living at the site, which has the potential to reduce car-based commuting into Colchester.
- 3.366 Overall, a mixed effect (0/-?) is anticipated for SA objective 13, both at the end of the plan period and at all fully built capacity options.

SA14: To conserve and enhance the quality of landscapes

- 3.367 The site is not located near any designated landscapes or proposed extensions to these.
- 3.368 The area has been assessed by landscape officers of the NEAs, and the landscape character area (LCA) within which the site is located (the Easthorpe Farmland Plateau) has been found to be of

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moderate strength away from the A12. Major issues identified included visual and auditory disturbance close to the A120/A12 junction and pressure for further development at Mark's Tey into the farmed landscape. The site was assessed as having locally high sensitivity to change along Domsey Brook and close to Easthorpe and towards Copford Green.

- 3.369 In line with the stated assumptions, uncertain significant negative effects (--?) are anticipated in relation to SA objective 14, both at the end of the plan period and at all capacity options (ALTGC6a/b/c/d). There is uncertainty about this effect as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 3.370 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 3.371 Approximately 98% of the site area falls within a mineral safeguarding area for sand and gravel deposits. This means that the development of this site would result in a significant sterilisation of mineral resources if these were not extracted before development.
- 3.372 Due to the large area of mineral resources that may be affected, the effects are considered to be significant negative yet uncertain (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential dwelling capacity options (ALTGC6a/b/c/d), because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

- 3.373 Approximately 59% of the site area is classified as Grade 2 agricultural land, with the remainder classified as Grade 3 agricultural land, meaning the development of this site would result in the loss of a significant amount of high quality agricultural land. In light of the above, and in line with stated assumptions, a significant negative (--) effect is anticipated in relation to agricultural land. The effect is considered to be the same for all potential dwelling capacity options (ALTGC6a/b/c/d), because the location of the development within the site boundary for each capacity option is unknown.
- 3.374 As such, an overall significant negative effect with some uncertainty (--?/--) is anticipated for SA objective 15, both at the end of the plan period and at both fully built capacity options, (ALTGC6a/b/c/d).

Summary of significant effects

- 3.375 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out at capacity ALTGC6a – 2,000 dwellings, or ALTGC6c – 3,500 dwellings:

- 3.376 The potential for significant positive effects arises in relation to:
- SA1 Community cohesion, due to the potential to provide community cohesion within the new development; and
 - SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
- 3.377 The potential for significant negative effects arises in relation to:
- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community surrounding the site (in particular Marks Tey);
 - SA9 Historic environment and townscape, due to potential impacts on the setting of nearby listed buildings and the Copford Conservation Area;

- SA14 Landscape, due to the significant change which would occur to highly sensitive landscape areas; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and the loss of Grade 1 or 2 agricultural land.

3.378 In summary the site at this scale is likely to be able to provide sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered likely to be able to support a range of services and facilities for residents and workers within the site, particularly the sensitive landscape context. However, the site is not likely to be large enough at this scale to provide higher order services such as a secondary school, health care facilities, nor is it likely to be able to support a large number of jobs. As such, development in this location at 2,000 dwellings will result in more travel out of the site to access these services and jobs compared to a higher level of development. This is likely to decrease opportunities for sustainable travel and result in a less self-contained development.

3.379 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly sensitive parts of the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. It is considered that at 2,000 dwellings, the effects will be less extreme than the larger capacity options, as the impacts will be less, however there will be fewer benefits in terms of new services and facilities.

3.380 Several significant negative effects have been identified in relation to landscape, heritage assets, agricultural land and mineral resources; however in some cases this scale of development may result in reduced effects on sensitive environmental receptors compared to the larger dwelling capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features.

Effects when fully built out at capacity ALTGC6d – 5,000 dwellings:

3.381 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to due to the potential to provide community cohesion within the new development; and
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
- SA3 Health, as development of this scale should be able to support new health facilities, as well as open space and opportunities for active travel;
- SA5 Economy, through the provision of jobs within the local area; and
- SA7 Sustainable travel, as a significant level of services and facilities are anticipated to come forward as part of the site, reducing the need to travel over shorter journeys.

3.382 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community surrounding the site (in particular Marks Tey);
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby listed buildings and the Copford Conservation Area;
- SA14 Landscape, due to the significant change which would occur to sensitive areas of the Easthorpe Farmland Plateau; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and the loss of Grade 1 or 2 agricultural land.

3.383 In summary, the fully built site at the highest capacity option (ALTGC6d – 5,000 dwellings) is likely to result in a development which can support a significant number of services, including primary health care facilities, primary and secondary schools, and a centre (or centres) which are large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs. At this scale, and if supported by appropriate infrastructure / employment provision, it is considered that the site could form a new settlement in its own right.

This is likely to result in some self-containment which is likely to provide opportunities for more sustainable travel behaviour. However as a larger site, its development will put relatively more pressure on surrounding transport infrastructure, particularly the A12, resulting in increased congestion. Despite the presence on its northern boundary of Marks Tey railway station, due to the configuration of the site, the majority of the site area is not currently easily accessible by high quality sustainable travel services and (depending on final site layout and the feasibility of increased connectivity to the station) this may also lead to a dependence on the private car for journeys to and from destinations outside the site.

- 3.384 The delivery of this site is likely to significantly impact on the existing community in the area (particularly the existing settlement of Marks Tey), with major changes to the character of the area. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.
- 3.385 Development of this site is likely to affect a number of other sensitive receptors which are present either within the site or very near to it, including landscape, heritage assets, high quality agricultural land, and mineral resources – it is important to note that effects in relation to these are likely simply because these form the site context, however delivering a high dwelling capacity within a fixed site boundary may make it more difficult to mitigate the potential impacts.

Effects at the end of the plan period (ALTGC6b - maximum 2,500 dwellings)

- 3.386 In summary the anticipated significant effects at the end of the plan period are broadly similar to those for the ALTGC6a (2,000 dwelling) capacity option described above. However slightly more positive effects may be anticipated in relation to SA7 Sustainable Travel if the highest final capacity option is assumed (ALTGC6d - 5,000 dwellings), because this highest capacity option would be able to deliver a greater number of local services within the site, even if they will not be fully delivered by the end of the plan period (at ALTGC6b). However if the final capacity is envisaged only at the middle option of ALTGC6c (3,500), the benefits in relation SA7 Sustainable Travel at the end of the plan period would be lower, as the final site would not be of a sufficient scale to justify higher order services (notably a secondary school on site).
- 3.387 The site at the end of the plan period is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this time to provide higher order services such as health facilities or likely to be able to support a large number of jobs. As such, development in this location at the end of the plan period will result in more travel out of the site to access these services and jobs than when the site is fully built. This is likely to add traffic to the A12, resulting in increased congestion and relatively increased carbon emissions compared to a more self-contained site. Having said this, a phased / early delivery of some infrastructure items such as secondary schools may help to provide more opportunities for sustainable travel.
- 3.388 The smaller scale of development at the end of the plan period (compared to the final capacity) may result in reduced effects on sensitive environmental receptors compared to the fully built out capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features – albeit on a temporary basis.

ALTGC7 – Land at East of Colchester Option 1

Site Context

- 3.389 Site ALTGC7 is a strategic site located to the east of Colchester. It is a greenfield site, divided from north to south by the A137, which was promoted for inclusion in the submitted Section 1 Local Plan as Land at East of Colchester Option 1. The site is split between two authority areas, with the northern half of the site being located in the Tendring District and the southern half of the site being located in the Colchester Borough. The potential scale of development from this site is up to approximately 4,000 dwellings once fully built. The north-western boundary of the site is adjacent to a site permitted for up to 120 dwellings (North of Betts Colchester Fringe). An allocated mineral extraction site lies to the north (Slough Farm, Ardleigh), just beyond the A120, and Colchester town, adjoining the southwest of the site, is allocated in the Colchester Section 2 Local Plan for 2,018 dwellings.
- 3.390 The entirety of the site (132 ha) is located on arable land with a small local road located in the north eastern corner of the site. The nearest settlements to the site (measured from the site boundary to the nearest edge of settlements) include Colchester, which the site is adjacent to on its southern and western boundaries and is a settlement of around 58,651 dwellings and includes a policy defined town centre, district centre and local centres; Elmstead Market, around 3.8km to the south-east, which is a settlement of approximately 877 dwellings and includes a policy defined local centre; Ardleigh, around 2.3km to the north-east, which is a settlement of around 917 dwellings but with no policy defined local centre; Wivenhoe, around 3.8km to the south-east, which is a settlement of approximately 3,560 dwellings and includes a policy defined local centre; Rowhedge, around 4.9km to the south, which is a settlement of around 1,037 dwellings but with no policy defined local centre; Great Bromley, around 4.8km to the east of the site, which is a settlement of around 422 dwellings but with no policy defined local centre. Other strategic settlements nearby include Clacton-on-Sea 15km to the southeast, Braintree 25km to the west, Ipswich 18km to the northeast, Sudbury 20km to the northwest, and Chelmsford 34km to the southwest.
- 3.391 The A120 runs adjacent to the northern boundary of the site, connecting the area to settlements to the east and west. The site is crossed by the A137 road which provides access to Colchester town and settlements to the north and south. Land within the site boundary is not currently well connected by local roads due to it being occupied by agricultural land, which also means that it is not currently well served by existing services and facilities. The nearest railway station is Hythe, which is located around 3km south of the site and connects to the main London-Ipswich line at Colchester.
- 3.392 Wick Farm, located 1km to the north, and Martell's Quarry, located around 1.5km to the north-east of the site are allocated Minerals Extraction Sites in the Essex Minerals Local Plan.

SA objective	Criterion	ALTGC7	ALTGC7	ALTGC7	ALTGC7	ALTGC7
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	4000
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++?
SA3 Improve health	Access to GP surgeries/	Unacceptable	Unacceptable	+/-	+/-	+/-

SA objective	Criterion	ALTGC7	ALTGC7	ALTGC7	ALTGC7	ALTGC7
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	4000
	health centres					
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Desirable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Potential for harm to Source Protection Zones (SPZs)	Low	Low			
	Potential exposure to flood risk	Low	Low			
	Potential exposure to air pollution	Low	Low			
	Potential exposure to noise pollution from roads and railways	High	High			
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
SA5 Achieve a prosperous / sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable			
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	--?	--?	--?
	Potential for harm to locally designated	Medium	Medium			

SA objective	Criterion	ALTGC7	ALTGC7	ALTGC7	ALTGC7	ALTGC7
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	4000
	wildlife sites and ancient woodland					
	Potential for harm to PHI or local BAP habitat	Low	Low			
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Unacceptable			
	Access to primary or middle schools	Preferred Maximum	Desirable			
	Access to secondary schools	Preferred Maximum	Preferred Maximum			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable	+?/-?	+?/-?	+?/-?
	Access to bus stops	Preferred Maximum	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Desirable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable			
	SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Unacceptable		
Access to primary or middle schools		Preferred Maximum	Desirable	+	+	+
Access to secondary		Preferred Maximum	Preferred Maximum			

SA objective	Criterion	ALTGC7	ALTGC7	ALTGC7	ALTGC7	ALTGC7
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	4000
	<i>schools</i>					
	<i>Access to further and higher education facilities</i>	Unacceptable	Unacceptable			
	<i>Access to local centres</i>	Unacceptable	Desirable			
	<i>Access to town centres</i>	Unacceptable	Unacceptable			
	<i>Access to railway stations</i>	Unacceptable	Unacceptable			
	<i>Access to bus stops</i>	Preferred Maximum	Desirable			
	<i>Access to cycle paths</i>	Unacceptable	Unacceptable			
	<i>Access to open spaces and sports centres</i>	Desirable	Desirable			
	<i>Access to Public Rights of Way (PRoW)</i>	Acceptable	Acceptable			
	<i>Access to centres of employment including employment areas and town centres</i>	Acceptable	Acceptable			
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/0	--?/0	--?/0
SA10 Use energy efficiently and reduce greenhouse gas emissions	<i>Access to GP surgeries/health centres</i>	Unacceptable	Unacceptable			
	<i>Access to primary or middle schools</i>	Preferred Maximum	Desirable			
	<i>Access to secondary schools</i>	Preferred Maximum	Preferred Maximum	+	+	+
	<i>Access to further and higher education facilities</i>	Unacceptable	Unacceptable			
	<i>Access to local centres</i>	Unacceptable	Desirable			

SA objective	Criterion	ALTGC7	ALTGC7	ALTGC7	ALTGC7	ALTGC7
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	4000
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable			
	Access to bus stops	Preferred Maximum	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Desirable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable			
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?	0/0?	0/0?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/-?	0/-?	0/-?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Medium	Medium	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/--	--?/--	--?/--
	Potential for harm to agricultural land	High	High			

Commentary on SA objectives

SA1: Create safe environments which improve quality of life and community cohesion

- 3.393 Consideration of the effects in relation to this SA objective is divided between the anticipated effects on existing communities and those on the new communities that will be formed as a result of development. Commentary on these two matters is set out below.

Effects on existing communities

- 3.394 The site is comprised almost entirely greenfield land, with the A137 and one local road located in the eastern part of the site and small areas of woodland. The existing area within the site can therefore be considered to contribute to the rural setting of settlements within 5km, which includes Colchester, Elmstead Market, Ardleigh, Wivenhoe, Rowhedge, Great Bromley, Alresford and High Park Corner. Colchester, Wivenhoe, Elmstead Market and Alresford are large enough to offer a local, district or town centre as defined in the Tendring and Colchester Section 2 Local Plans. Further information about the location and scale of the surrounding settlements is included in the site context above.
- 3.395 If development came forward at ALTGC7, it is likely that the provision of such a large scale development in close proximity to existing small scale communities in the area would result in significant adverse effects. Potential effects resulting from development can be separated into those associated with the construction stage, which are likely to be temporary effects, and those that are likely to occur after development has been completed. For the former, these effects are likely to include increased traffic, light pollution, noise and vibration impacts from construction activities. For the latter, the effects are likely to also include increased traffic, light/noise/air pollution as well as significant disruption to the existing landscape character due to urbanisation of the area.
- 3.396 There are multiple settlements within 5km of the site where the housing quantities proposed for the end of the plan period (ALTGC7b – 2,500 dwellings) and at both site capacity options (ALTGC7a – 2,000 dwellings and ALTGC7c – 4,000 dwellings) amount to over 10% of their overall housing stock. It is considered likely that, due to the scale of the proposed site compared to the existing surrounding settlements, impacts will generally be negatively perceived by the existing communities. As such, uncertain significant negative effects (--?) are expected in relation to this objective. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effects on new community

- 3.397 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 3.398 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (ALTGC7a/b/c).
- 3.399 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.400 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period (ALTGC7b

– 2,500 dwellings) and when fully built out at both site capacity options (ALTGC7a – 2,000 dwellings and ALTGC7c – 4,000 dwellings).

- 3.401 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.402 The site information form for ALTGC7 indicates that the development at capacities of 2,000 and 4,000 dwellings are likely to be viable and will be able to support the delivery of 30% affordable housing. However, for dwelling capacity ALTGC7c 4,000 dwellings, this viability would be dependent on external funding from transport operating companies for the Rapid Transit System (RTS) link (or other improvement in site viability). This results in uncertainty for this development scale as the external funding / improvement to viability has not yet occurred. The site information form sets out that at 2,000 dwelling capacity (ALTGC7a), no external funding or other improvement in site viability is required. It is assumed that all of this would also apply to a site capacity of 2,500 dwellings (ALTGC7b) given it is a similar scale to 2,000 dwellings.
- 3.403 In light of the above, this site is considered likely to deliver housing which is safe and accessible, as well as policy compliant affordable housing. This is considered likely to result in significant positive effects in relation to all potential dwelling capacity options. Therefore options ALTGC7a (2,000 dwellings) and ALTGC7b (2,500 dwellings) are considered to result in significant positive (++) effects. Site capacity ALTGC7c (4,000 dwellings) is considered likely to result in significant positive yet uncertain (++) effects due to the requirement for improved scheme viability.

SA3: Improve health/reduce health inequalities

- 3.404 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives.

Access to health and recreation facilities

- 3.405 Almost all of the site is greenfield and it does not, therefore, contain existing health services. The nearest GP surgeries (measured from the centre of the site) are Bluebell Surgery and Highwoods Surgery, both located around 1.6km west, and Parsons Health Medical Centre, located around 1.5km to the south. There are further healthcare facilities within 5km, a number of which are located within Colchester to the south-west. The Stage 1a assessment found that the majority of the site is within an 'unacceptable' walking distance of GP surgeries and health centres.
- 3.406 The south-western corner of the site contains an area of public open space (St Johns Close Playing Field). The Stage 1a assessment found that over 50% of the site is within an 'acceptable' walking distance of open spaces and sports centres. There are no cycle routes located within the site boundaries but there are cycle routes located within 500m of the west and north-west and the Stage 1a assessment found the majority of the site is within an 'unacceptable' walking distance of cycle paths. The site also contains several PRoW that connect the area to the surrounding countryside. It is considered that the existing open space and cycle routes within and adjoining the site are likely to offer recreational opportunities to potential residents of the site. It is recognised that the severance challenges posed by the A137 road running through the site may prove a barrier to providing well integrated opportunities for active transport. Nevertheless, it should be noted that there is scope for mitigating against this severance through design interventions.
- 3.407 In accordance with the site information form, this site is expected to be delivered in a way that provides for more sustainable transport, prioritisation of walking/cycling and use of public transport over private car use. It is assumed that this will include provision of foot and cycle ways throughout the development and provision of public and open space also. The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to this SA objective for all capacity options (ALTGC7a/b/c).
- 3.408 The rural location of the site means that sustainable access to existing GP surgeries is currently fairly limited. It is considered unlikely that any of the site capacity options will be of a sufficient size to support new healthcare facilities onsite, resulting in no alteration to the minor positive effects expected.

Exposure to noise pollution

- 3.409 The Stage 1a assessment found the majority of the site is at either medium or high risk from exposure to noise pollution. As such, as between 5-25% of the site falls within a DEFRA strategic noise area of $L_{night} \geq 55.0\text{dB}$ or $L_{aeq} 16 \geq 60.0\text{dB}$, minor negative effects (-) are expected in accordance with the assumptions framework. The noise pollution is present due to the A120 being located to the immediate north of the site. These effects are expected for the site at all capacity options (ALTGC7a/b/c).
- 3.410 Overall, mixed minor effects (+/-) are therefore anticipated in relation to this SA objective, both at the end of the plan period and at all fully built capacity options.

SA4: To ensure and improve the vitality & viability of centres

- 3.411 In accordance with the assessment assumptions and confirmed by the site information form, the site at all scales will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and therefore minor positive effects (+) are expected in relation to this SA objective, at all potential dwelling capacities (ALTGC7a/b/c).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.412 The relationship to existing centres is described in the commentary for SA objective 4 above. There are also existing employment areas surrounding the site, which may not be within local or town centres, but also have the potential to provide jobs to residents at the site. Severall's Business Park is located 900m away to the north-west (measured from the centre of the site). The Stage 1a assessment found that over 50% of the site is within a 'desirable' or 'acceptable' walking distance of centres of employment including employment areas and town centres.
- 3.413 It is expected that the development of the site at all potential scales (ALTGC7a/b/c) will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive effects (+) in relation to this SA objective.
- 3.414 The site information form indicates that there will be no employment land provision within the development at all capacity options, resulting in no increase to the minor positive effects expected.
- 3.415 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.416 The site contains two areas of priority habitat (Deciduous Woodland) within its boundaries in the eastern half. Bullock Wood, a designated Site of Special Scientific Interest (SSSI) is adjacent to the western boundary of the site and over 60% of the site falls into the SSSI's impact risk zone (IRZ) for residential developments of 100 units or more. Just under 25% of the site falls into the SSSI IRZ for residential developments of 50 units or more. The site is also within 400m of further natural environment assets including Local Wildlife Sites and further areas of Priority Habitat (Deciduous Woodland). Development of the site may result in adverse impacts to these designations and habitats. The effects on these natural environment assets could include total or partial loss, reduced quality resulting from pollution, increased disturbance to wildlife and predation by pets.
- 3.417 Although the site does not intersect with any designated biodiversity sites, potential negative effects are judged to be significant rather than minor. This reflects the fact that development of ALTGC7 would completely isolate Bullock Wood SSSI from surrounding habitats and associated ecological networks, given that the western boundary of the SSSI already adjoins Colchester

urban fringe and development is already permitted to the north of the SSSI. The effects are significant negative with uncertainty (--) at all potential scales (ALTGC7a/b/c) as the development proposal may include mitigation to reduce or overcome negative effects.

- 3.418 Reference should be made to the separate HRA for the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.419 The site is almost entirely greenfield and therefore it can be considered rural in character. The relationship of the site to existing local centres is described above in the commentary for SA objective 4. The accessibility of the site to surrounding facilities would, prior to the provision of any new transport infrastructure, be primarily dependent on the A120 to the immediate north of the site boundary. As set out in the Tendring Infrastructure Delivery Plan³⁴, the A120 is the only trunk road in the District that facilitates strong movement of people from Tendring into urban Colchester and operates at capacity during peak periods leading to congestion. As the area is largely rural, there is heavy reliance on private cars and development at the site will contribute to increased pressure on the already burdened transport network. For more sustainable trips, the A137 is likely to act as a barrier to walking and cycling, as this does not feature formal crossing opportunities. The nearest railway station is Hythe, which is located around 2.8km to the south of the site and connects to the main London-Ipswich line at Colchester. The site is also served by the 104 bus, which is a half hourly service into Colchester Town Centre.
- 3.420 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter Journeys

- 3.421 It is assumed that all sites will provide contributions to new primary and secondary facilities in accordance with guidance from Essex County Council³⁵. Evidence from Essex County Council³⁶ indicates that there is likely to be limited capacity at primary schools in the Colchester north and rural north-east area (-58 reception places forecast in 2028-29) and therefore it is likely that new primary school places will be required to serve the site at all capacity options. Additionally, the evidence from the same report indicates that in 2028-29, there will be -359 year 7 secondary places in the Colchester town area. Given a secondary school pupil factor of 0.2 pupils per house, increased secondary provision will be necessary for all site capacity options (ALTGC7a/b/c).
- 3.422 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within the site to meet its needs. With the exceptions of primary healthcare facilities (assumed not be provided until 4,500 dwellings have been built), it is likely that this infrastructure will be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements both by the end of the plan period (ALTGC7b) and at both site capacity options (ALTGC7a and ALTGC7c). It is likely that these services and facilities would serve both new residents and the existing community within the development site.
- 3.423 As such, opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site. However, uncertainty in relation to infrastructure provision results from the fact that the exact infrastructure requirements of development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

³⁴ Tendring Infrastructure Delivery Plan Report, May 2017, available from: https://www.tendringdc.gov.uk/sites/default/files/documents/planning/Planning_Policy/TDC_006%20Infrastructure%20Delivery%20Plan%20May%202017.pdf

³⁵ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from: [The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from: https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf](https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf)

³⁶ Essex School Organisation Service – 10 Year Plan 2019-2028, available from: <https://www.essex.gov.uk/Education-Schools/Schools/Delivering-Education-Essex/School-Organisation-Planning/Documents/10-year-plan-Essex-schools-places.pdf>

3.424 Stage 1a and 1b of the assessment found that over 50% of the site is within acceptable or 'desirable' walking distance of existing employment. However, the majority (>90%) of the site is not within acceptable or 'desirable' walking distance of a secondary school. At the end of the plan period (ALTGC7b) and at both site capacity options (ALTGC7a and ALTGC7c), it is considered likely that the site will be of a sufficient size to have provided a new primary school onsite and development contributions to expand existing secondary schools. The site is not of a sufficient capacity (<4,500 dwellings) to deliver secondary facilities on-site. It is anticipated that it will still be necessary to travel to destination outside of the site to access primary healthcare facilities, secondary schools, and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall, it is considered likely that the provision of some local services and facilities by the end of the plan period is likely to result in uncertain minor positive effects (+?) in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work, including the preparation, submission and determination of a planning application.

Longer Journeys

- 3.425 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.426 The distance to the nearest rail station (Hythe) is over 2km, but it is likely that the majority of commuters will be directed to Colchester Station due to its connection to the Great Eastern Mainline. The distance of these stations from the site is likely to reduce the potential for trips by rail, which may result in increased reliance on private car use and increased congestion for external journeys. In terms of the potential for external trips, a review of commuter behaviour in the area has been undertaken. The site is split between two MSOAs, with Colchester 022 in the southern half and Tendring 005 in the northern half. According to NOMIS, the largest proportion of people (18.7%) from the Colchester 022 MSOA commute to Colchester 007, which is Colchester town centre, and the second largest proportion (9.9%) of people commute to Colchester 002, which is located in the north of Colchester town. For the Tendring 005 MSOA, the largest proportion (11.4%) of commuter trips are within the MSOA itself and the second largest proportion (10.7%) are to Colchester 007 (Colchester town centre). As such, if new residents follow the same commuting patterns, most journeys are likely to be carried by existing, adjacent roads (the A120 and the A137) and the A1232 via a new Ipswich Road-Harwich Road link road that would be required per the site information form. These are relatively short trips and it is unlikely these trips would be taken by rail as the nearest railway station is over 3km from the centre of the site. In line with the assessment framework, uncertain minor negative effects (-?) are expected for the end of the plan period (ALTGC7b) and for both site capacity options (ALTGC7a and ALTGC7c) in relation to this SA objective. Uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters into Colchester.
- 3.427 Overall, mixed minor positive and minor negative effects with uncertainty (+?/-?) are expected in relation to this SA objective at all capacity options.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.428 This SA objective contains elements that also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable locations are not repeated here.
- 3.429 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and/ or provide environmental mitigation. According to the site specific information provided by the NEAs, the site is to be supported by the following infrastructure at the following dwelling capacities:

3.430 ALTGC7a (2,000 dwellings) and also assumed to apply to ALTGC7b given that it is a similar scale (maximum 2,500 dwellings at the end of the plan period):

- Link road between Ipswich Road and Harwich Road
- Early Years
- Primary School(s)
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces

3.431 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.432 ALTGC7c (4,000 dwellings)

- RTS links to Colchester
- Link road between Ipswich Road and Harwich Road (assumed to be required at higher capacity option in addition to RTS links since required at lower capacity option per the site information form)
- Early Years
- Primary School(s)
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces

3.433 The site information form sets out that the site can viably deliver these infrastructure requirements with external funding for RTS links from transport operating companies. Alternatively, viability improvements to the scheme via another mechanism could also potentially provide sufficient viability.

3.434 This infrastructure is anticipated to be delivered by the development at an appropriate phase, (with the exception of primary healthcare facilities, as explained under SA objective 7), resulting in uncertain minor positive effects (+?). Uncertainty arises in relation to infrastructure provision due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is noted in relation to site capacity options ALTGC7b (4,000 dwellings) as the site information form sets out that external funding (or other improvement in site viability) would be required to deliver the required rapid transport system. These effects are expected at all site capacity options (ALTGC7a/b/c).

SA9: To conserve and enhance historic and cultural heritage, assets and townscape character

Effects on cultural heritage assets

3.435 There are two Grade II listed building located within the site boundaries, which are Fen Farmhouse in the north-eastern corner of the site and Plains Farmhouse located in the north-western corner of the site. The Stage 1a assessment found that over 50% of the site is within 500m of designated heritage assets. Heritage assets within 1km of the site boundaries include Grade II* listed Spring Valley Mill just over 500m to the east and multiple Grade II listed buildings located to the west in Colchester town.

- 3.436 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.
- 3.437 Taking a precautionary approach to this assessment, uncertain significant negative effects (--?) are expected for the end of the plan period (ALTGC7b) and for both of the site capacity options (ALTGC7a and ALTGC7c) in relation to this SA objective. The uncertainty in these anticipated effects is present as the details of any mitigation strategies are to be finalised in further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.438 With regards to townscape, site is 500m from Colchester. However, Colchester is of a sufficient size to suggest that development at the site would not have significant effects on the existing townscape. As such, negligible effects are expected for all site capacity options (ALTGC7a/b/c) in relation to this SA objective.
- 3.439 Overall, the site is expected to have mixed uncertain significant negative and negligible effects (--?/0) in relation to this SA objective at the end of the plan period and for both of the site capacity options.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.440 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.441 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner that considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. Therefore minor positive (+) effects are anticipated in relation to this SA objective at all site capacity options (ALTGC7a/b/c).

SA11: To improve water quality and address water scarcity and sewerage capacity

Water quality

- 3.442 The site is entirely outside source protection zones and therefore it is not considered likely that the development of the site will affect groundwater resources. As such, negligible effects (0) are expected in relation to groundwater for all site capacity options (ALTGC7a/b/c).

Water scarcity and water treatment

- 3.443 With regard to water supply, the Tendring Water Cycle Study³⁷ and the Colchester Water Cycle Study³⁸ have identified that there is likely to be adequate water supply to cater to growth over the plan period. The studies are based on assumptions of growth from 'preferred development allocations' within Tendring and Colchester's Local Plans. This includes NEAGC3, a strategic site allocated in the Section 1 Local Plan. Due to the similar locations of NEAGC3 and ALTGC7, these water cycle studies can be considered a reasonable evidence base to use. The WCS for Tendring assumes planned growth of 12,001 dwellings and the WCS for Colchester assumes planned growth of 16,144 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that site ALTGC7 was not allocated in the Section 1 Local Plan, and as such was not taken into account in the either WCS. As such, despite the similar location of ALTGC7 and NEAGC3, the results of this study should be interpreted with caution in relation to this site.

³⁷ <https://www.tendringdc.gov.uk/sites/default/files/Tendring%20Water%20Cycle%20Study%20-%20Final%20Report%20Sept%202017.pdf>

³⁸ https://www.braintree.gov.uk/downloads/file/6983/cbc0048_colchester_borough_council_water_cycle_study_final_report

- 3.444 The Integrated Water Management Strategy (IWMS)³⁹, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume that the proposed growth at ALTGC7 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (ALTGC7a/b/c) in relation to water scarcity.
- 3.445 With regard to water treatment, it is reasonable to assume that as ALTGC7 is in a similar location to NEAGC3, it would also be served by the Colchester Water Recycling Centre (WRC). The WCS sets out that it will be feasible for the existing Colchester WRC to serve the NEAGC3 site within the current limits of conventional treatment and therefore uncertain negligible effects (0?) are anticipated in relation to this for ALTGC7a (2,000 dwellings) and ALTGC7b (2,500 dwellings). Additionally, the IWMS indicates that the Colchester WRC will be able to cater growth beyond the extent of the plan period. As such, uncertain negligible effects (0?) are also expected for the higher potential dwelling capacity (ALTGC7c – 4,000 dwellings) in relation to water treatment. The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application and because the study did not specifically assess the effect of growth at ALTGC7.
- 3.446 Overall, mixed negligible and uncertain negligible effects (0/0?) are expected in relation to this SA objective for all potential dwelling capacities (ALTGC7a/b/c).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.447 The site does not contain any land in Flood Zone 2 or 3 and does not contain any land at high risk from groundwater flooding. Around 2% of the site's area is at medium risk from groundwater flooding, but this is not considered to make a significant contribution to flood risk within the site. The site does contain some small areas at risk from surface water flooding, but these amount to less than 5% of the site's overall area. As such, the site is at low risk from flooding should development come forward. It is anticipated that all strategic sites would be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage. The Stage 1a assessment found that 100% of the site is at low risk from flooding.
- 3.448 Therefore, negligible effects (0) are expected in relation to this SA objective for all site capacity options (ALTGC7a/b/c).

SA13: To improve air quality

- 3.449 As set out in the assumptions framework, assessment against this SA objective relates to two elements – intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on this is provided below.

Intersection with AQMAs

- 3.450 The site does not intersect with any AQMAs and therefore negligible effects (0) are expected.

Potential contribution to road traffic within areas suffering from air pollution

- 3.451 The site is split between two MSOAs, with the western half located within Colchester 022 and the eastern half located within Tendring 005. For the Colchester 022 MSOA, the largest proportion (18.7%) of commuter trips are to Colchester 007, which is Colchester Town Centre and second largest proportion (9.9%) of commuter trips are to Colchester 002, which is located in the north of Colchester town. For the Tendring 005 MSOA the largest proportion (11.4%) of commuter trips are within the MSOA itself and the second largest proportion (10.75%) of commuter trips are to Colchester 007 (Colchester Town Centre). Colchester 007 contains two AQMAs and therefore if residents follow the same commuting patterns, there is potential for development of the site to result in increased vehicular trips through these AQMAs (Harwich Rd/St. Andrew's Avenue

³⁹ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Junction; East St and the adjoining lower end of Ipswich Rd; the Central Corridors). As such, uncertain minor negative effects (-?) are expected for the end of the plan period (ALTGC7b) and at both site capacity options (ALTGC7a and ALTGC7c) in relation to this SA objective. The effects are uncertain as it is not clear exactly how and where people will travel at this stage.

- 3.452 Overall, mixed negligible and minor negative uncertain effects (0/-?) are expected in relation to this SA objective.

SA14: To conserve and enhance the quality of landscapes

- 3.453 The site is not located near any designated landscape or proposed extensions to these.
- 3.454 Land at Bromley Heath has been assessed by landscape officers of the NEAs, and is considered to be of moderate character strength landscape character and highly sensitive to visual intrusion due to wide views. The potential issues of developing within this landscape include loss of landscape features, road improvements, expansion at the edge of Colchester, communication masts and light pollution.
- 3.455 As a result of this landscape assessment, and in line with the stated assumptions, uncertain significant negative effects (--?) are expected in relation to this SA objective for the end of the plan period (ALTGC7b) and for both site capacity options (ALTGC7a and ALTGC7c). There is uncertainty present in the expected effects as these impacts will depend of the particular design of the development proposals that come forward, including the massing, layout and height of buildings, the building materials used and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits

- 3.456 Consideration of effects against this SA objective relates to two separate factors, which are mineral resources and the quality of agricultural land. This results in two components to the SA score.

Mineral resources

- 3.457 The vast majority of land within the site boundaries is located within a Mineral Safeguarding Area for Sand and Gravel (Glacial Deposits), which means that development of this site would result in sterilisation of a significant amount of mineral resources if these were not extracted before development. While it is recognised that the site at the end of the plan period (and at the lower site capacity option) will involve less development compared to the final built out capacity of 4,000 dwellings, the location of this within the site boundary is not known and effects are considered to be therefore as potentially significant as the fully built out development. As such, due to the potential for loss of mineral resources, uncertain significant negative effects (--?) are expected in relation to this SA objective for the end of the plan period (ALTGC7b) and at both site capacity options (ALTGC7a and ALTGC7c). The effects are uncertain as there may be potential to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery.

High quality agricultural land

- 3.458 Approximately 80% of land within the site is located on Grade 2 agricultural land, with remaining land within the site being located on Grade 3 agricultural land. Development of this site would result in the loss of a significant amount high quality agricultural land. Therefore, significant negative effects (--) are expected in relation to this SA objective for all site capacity options (ALTGC7a/b/c).
- 3.459 Whilst it is recognised that the site at the end of the plan period (or at the lower capacity option) will involve less development than the potential final capacity of 4,000 dwellings (and therefore potentially a lesser effect), the phasing / location of the development within the site boundary is not known and effects are considered to therefore be as potentially significant as the fully built capacity option.
- 3.460 Overall, significant negative effects with some uncertainty (--?/--) are expected in relation to this SA objective.

Summary of significant effects

3.461 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by infrastructure or other mitigation practices, which are yet to be designated in detail and / or implemented.

Effects when fully built out at capacity ALTGC7a – 2,000 dwellings, ALTGC7b – 2,500 dwellings (max at end of plan period) and ALTGC7c – 4,000 dwellings.

3.462 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to the potential for the site to provide development in line with Garden City Principles and include provision of a youth centre and community meeting facilities; and
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures and safe accessible housing.

3.463 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA6 Biodiversity and geological diversity, due to the potential effect on Bullock Wood SSSI;
- SA9 Historic environment and townscape, due to the potential effects on listed buildings inside the site boundary and within 500m of it;
- SA14 Landscape, due to the high sensitivity of the landscape to visual intrusion; and
- SA15 Soil and mineral resources, due to the site being located within a mineral safeguarding area and loss of Grade 1 or 2 agricultural land.

3.464 In summary, development at these scales is able to provide a sufficient amount of housing and an appropriate tenure mix. In addition, the site is also considered to be likely to be able to support a range of services and facilities within the site, including youth centre and community meeting places provision. However, the size is not likely to be large enough to provide higher order services such as a secondary school or healthcare facilities onsite. As such, it is possible that development of this site may result in less sustainable travel amongst residents due to the need to access services outside of the site boundaries.

3.465 The site is large and is therefore likely to significantly impact on the existing community, the character of the area and the landscape context. There are both negative and positive effects that may arise in relation to these factors, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. The lower capacity site option (ALTGC7a – 2,000 dwellings) may result in reduced effect in regard to these considerations.

3.466 Significant negative environmental effects have been identified in relation to the site's potential effects on biodiversity, landscape, land loss of mineral resources and high quality agricultural land. The lower capacity site option (ALTGC7a) is likely to result in reduced impacts on these sensitive receptors.

ALTGC8 – Land at East of Colchester Option 2

Site Context

- 3.467 Site ALTGC8 is a strategic site located to the east of Colchester. It is a greenfield site that was promoted for inclusion in the submitted Section 1 Local Plan as Land at East of Colchester Option 4. The site is split between two authorities, with the northwest, north and east of the site being located in the Tendring District and the south-western part of the site being located in the Colchester Borough. The potential scale of development from this site is up to approximately 2,000 dwellings once fully built. The site is adjacent to a permitted residential site (Bromley Road) of 145 dwellings to the south and an allocated mineral extraction site to the north (Slough Farm, Ardleigh), just beyond the A120. In total, the potential scale of development from this site and the nearby site along Bromley Road is up to approximately 2,145 dwellings.
- 3.468 The vast majority of the 151ha site is arable land, with small areas of residential development and agricultural buildings distributed throughout the site. The eastern half of the site is predominantly occupied by a large wooded area. The nearest settlements to the site (measuring from the site boundary to the nearest edge of settlements) include Colchester, which the site is adjacent to on its south-western boundary and is a settlement of approximately 58,651 dwellings and includes a policy defined town centre, district centre and local centre; Elmstead Market, around 2.8km to the south-east, which is a settlement of approximately 877 dwellings and includes a policy defined local centre; Ardleigh, around 2.1km to the north-east, which is a settlement of around 917 dwellings but with no policy defined local centre; Wivenhoe, around 2.8km to the south-east, which is a settlement of approximately 3,560 dwellings and includes a policy defined local centre; Rowhedge, around 4.2km to the south, which is a settlement of around 1,037 dwellings but with no policy defined local centre; Great Bromley, around 3.8km to the east of the site, which is a settlement of around 422 dwellings but with no policy defined local centre. Other strategic settlements nearby include Clacton-on-Sea 15km to the southeast, Braintree 25km to the west, Ipswich 18km to the northeast, Sudbury 20km to the northwest, and Chelmsford 34km to the southwest.
- 3.469 The A120 runs adjacent to the northern boundary of the site, connecting the area to Colchester Town and settlements to the west and east. Smaller local roads within the site also connect the area to the north-eastern part of Colchester. Due to the site being almost entirely greenfield, it is not well served by existing services and facilities. The nearest railway station is Hythe, which located around 2.8km to the south-west of the site and connects to the main London-Ipswich line at Colchester.
- 3.470 There are no significant residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundary. Within 1km of the site, Bromley Road is the only significant residential site. Bromley Road, located adjacent to the southern boundary of the site, is a site granted at appeal (17/00080/REFUSE) for up to 145 homes. In addition, Colchester town, adjoining the southwest of the site, is allocated in the Colchester Section 2 Local Plan for 2,018 dwellings.
- 3.471 Martell's Quarry, located 600m to the east and 1km north-east, and Allen's Farm, located around 1.8km south-east of the site are allocated Minerals Extraction Sites in the Essex Minerals Local Plan.

SA objective	Criterion	ALTGC8	ALTGC8	ALTGC8
		Stage 1a	Stage 1b	A
		N/A	N/A	2000
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/++

SA objective	Criterion	ALTGC8	ALTGC8	ALTGC8
		Stage 1a	Stage 1b	A
		N/A	N/A	2000
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+/-
	Access to cycle paths	Unacceptable	Unacceptable	
	Access to open spaces and sports centres	Acceptable	Desirable	
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable	
	Potential for harm to Source Protection Zones (SPZs)	Low	Low	
	Potential exposure to flood risk	Low	Low	
	Potential exposure to air pollution	Low	Low	
SA4 Ensure and improve viability of centres	Potential exposure to noise pollution from roads and railways	High	High	+
	Access to local centres	Unacceptable	Desirable	
SA5 Achieve a prosperous, sustainable economy	Access to town centres	Unacceptable	Unacceptable	+
	Access to local centres	Unacceptable	Desirable	
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum	
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	--?
	Potential for harm to locally designated wildlife sites and ancient woodland	High	High	
	Potential for harm to PHI or local BAP habitat	Medium	Medium	
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?/-?
	Access to primary or middle schools	Unacceptable	Desirable	
	Access to secondary schools	Preferred Maximum	Preferred Maximum	
	Access to further and higher education facilities	Unacceptable	Unacceptable	
	Access to local centres	Unacceptable	Desirable	
	Access to town centres	Unacceptable	Unacceptable	
	Access to railway stations	Unacceptable	Unacceptable	
	Access to bus stops	Preferred Maximum	Desirable	
	Access to cycle paths	Unacceptable	Unacceptable	
	Access to open spaces and sports centres	Acceptable	Desirable	
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable	
Access to centres of employment including employment areas and	Preferred Maximum	Preferred Maximum		

SA objective	Criterion	ALTGC8	ALTGC8	ALTGC8
		Stage 1a	Stage 1b	A
		N/A	N/A	2000
	town centres			
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?
	Access to primary or middle schools	Unacceptable	Desirable	
	Access to secondary schools	Preferred Maximum	Preferred Maximum	
	Access to further and higher education facilities	Unacceptable	Unacceptable	
	Access to local centres	Unacceptable	Desirable	
	Access to town centres	Unacceptable	Unacceptable	
	Access to railway stations	Unacceptable	Unacceptable	
	Access to bus stops	Preferred Maximum	Desirable	
	Access to cycle paths	Unacceptable	Unacceptable	
	Access to open spaces and sports centres	Acceptable	Desirable	
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable	
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum	
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/0
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+
	Access to primary or middle schools	Unacceptable	Desirable	
	Access to secondary schools	Preferred Maximum	Preferred Maximum	
	Access to further and higher education facilities	Unacceptable	Unacceptable	
	Access to local centres	Unacceptable	Desirable	
	Access to town centres	Unacceptable	Unacceptable	
	Access to railway stations	Unacceptable	Unacceptable	
	Access to bus stops	Preferred Maximum	Desirable	
	Access to cycle paths	Unacceptable	Unacceptable	
	Access to open spaces and sports centres	Acceptable	Desirable	
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable	
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum	

SA objective	Criterion	ALTGC8	ALTGC8	ALTGC8
		Stage 1a	Stage 1b	A
		N/A	N/A	2000
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	-?
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/-?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Medium	Medium	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	-?/--
	Potential for harm to agricultural land	High	High	

Commentary on SA objectives

SA1: Create safe environments which improve quality of life and community cohesion

3.472 Consideration of the effects in relation to this SA objective is divided between the anticipated effects on existing communities and those on the new communities that will be formed as a result of development. Commentary on these two matters is set out below.

Effects on existing communities

3.473 The site is comprised of almost entirely agricultural land with a wooded area in the eastern half and sparsely distributed residential development and agricultural buildings. The existing areas within the site can therefore be characterised as a dispersed rural community. Settlements within 5km include Colchester, Elmstead Market, Ardleigh, Wivenhoe, Rowhedge, Great Bromley, Alresford and High Park Corner. Colchester, Wivenhoe, Elmstead Market and Alresford are large enough to offer a local, district or town centre as defined in the Tendring and Colchester Section 2 Local Plans. The location of these settlements relative to the site and their scale is set out in the site context section above.

3.474 If development came forward at ALTGC8, it is likely that the provision of such a large scale development in close proximity to existing small scale communities in the area would result in significant adverse effects. Potential effects resulting from development can be separated into those associated with the construction stage, which are likely to be temporary effects, and those that are likely to occur after development has been completed. For the former, these effects are likely to include increased traffic, light pollution, noise and vibration impacts from construction activities. For the latter, the effects are likely to also include increased traffic, light/noise/air pollution as well as significant disruption to the existing landscape character due to urbanisation of the area.

3.475 There are multiple settlements within 5km of the site where the housing quantity proposed (ALTGC8 – 2,000 dwellings) amounts to over 10% of their overall housing stock. It is considered likely that, due to the scale of the proposed site compared to the existing surrounding settlements, impacts will generally be negatively perceived by the existing communities. As such, uncertain significant negative effects (--?) are expected in relation to this objective. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effects on new community

3.476 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.

3.477 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at the proposed scale of development (2000 dwellings).

3.478 In accordance with the above commentary anticipated effects on this SA objective will be mixed, with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

3.479 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available.

3.480 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.

3.481 The site form for ALTGC8 indicates that the development at all capacities is likely to be viable and will be able to support the delivery of 30% affordable housing. External funding or improvements to site viability through other mechanisms are not required to deliver policy compliant development or strategic infrastructure.

3.482 As such, it is likely that development will result in significant positive effects (++) in relation to this SA objective at this site capacity (2,000 dwellings).

SA3: Improve health/reduce health inequalities

3.483 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives.

Access to health and recreation facilities

3.484 The vast majority of the site is greenfield apart from some sparsely distributed residential development, some agricultural buildings and some small local roads. The nearest GP surgeries (measured from the centre of the site) are Parsons Health Medical Practice 500m south-west and The Hawthorn Surgery 1km south. There are further healthcare facilities within 5km, a number of which are located within Colchester to the south-west. The Stage 1a assessment found that the majority (>70%) of the site is within an 'unacceptable' walking distance of GP surgeries and health centres.

3.485 The north-eastern part of the site contains an area of public open space (Walls Wood) and is adjacent to a cycle path on its southern boundary. The Stage 1a assessment found that over 60% of the site is within an 'acceptable' walking distance of open space. However, the assessment also

found that over 60% of the site is within an 'unacceptable' walking distance of cycle paths. The site contains multiple PROW that can provide access to Colchester to the south-west and to the surrounding countryside. It is considered that the existing open space and cycle route within and adjoining the site are likely to offer recreational opportunities to potential residents of the site.

- 3.486 In accordance with the site information form, this site is expected to be delivered in a way that provides for more sustainable transport, prioritisation of walking/cycling and use of public transport over private car use. It is assumed that this will include provision of foot and cycle ways throughout the development and provision of public an open space also. The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to this SA objective at this site capacity (2,000 dwellings).
- 3.487 The rural location of the site means that access to existing GP surgeries is currently fairly limited. It is considered unlikely at this site capacity that the site is of a sufficient size to support new healthcare facilities, resulting in no alteration to the minor positive score.

Exposure to noise pollution

- 3.488 The Stage 1a assessment found that around 14% of the site is at high risk from exposure to noise pollution from roads and railways. Therefore, as 5-25% of the site falls within a DEFRA strategic noise area of Lnight ≥ 55.0 dB or Laeq 16 ≥ 60.0 dB, minor negative effects (-) are expected in accordance with the assumptions framework. The sources of the noise pollution are the A120, which is adjacent to the northern boundary of the site, and a railway line, which passes through the north-western corner of the site.
- 3.489 Overall, mixed minor positive and minor negative effects (+/-) are expected in relation to this SA objective.

SA4: To ensure and improve the vitality & viability of centres

- 3.490 In accordance with the site information form it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and therefore minor positive effects (+) are expected in relation to this SA objective for this site capacity (2,000 dwellings).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.491 The relationship to existing centres is described in the commentary for SA objective 4 above. There are also existing employment areas surrounding the site, which may not be within local or town centres, but also have the potential to provide jobs to residents at the site. The nearest employment areas to the site (measured from the centre of the site are located 2.1km north-west (Severalls Park) and 1.7km north-east (Martell's Pit). The Stage 1a assessment found that the majority of the site is not within an 'acceptable' walking distance of centres of employment.
- 3.492 It is expected that the development of the site at this scale will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive effects (+) in relation to this SA objective.
- 3.493 The site information form indicates that there will be no employment land provision within the development at all capacity options, resulting in no increase to the minor positive effects expected.
- 3.494 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.495 There is a Local Wildlife Site contained within north-eastern part of the site that covers over 15% of the site area. Furthermore, this Local Wildlife Site also contains an area of Ancient Woodland. There are also multiple Local Wildlife Sites, areas of Priority Habitat (deciduous woodland) and Ancient Woodland within 400m of the site boundaries. The entire site falls into an SSSI impact risk zone (IRZ) for residential developments of 100 units or more.
- 3.496 Development of the site may result in adverse impacts to these designations and habitats. The effects on these natural environment assets could include total or partial loss, reduced quality resulting from pollution, increased disturbance to wildlife and predation by pets. In line with the assessment framework, uncertain significant negative effects (--?) are expected in relation to this SA objective at this capacity (2,000 dwellings) due to over 5% of the site intersecting with a Local Wildlife Site. The effects are uncertain as the development proposal may include mitigation to reduce or overcome negative effects.
- 3.497 Reference should be made to the separate HRA for the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

The site is almost entirely greenfield and therefore it can be considered rural in character. The relationship of the site to existing local centres is described above in the commentary for SA objective 4. The accessibility of the site to surrounding facilities would, prior to the provision of any new transport infrastructure, be primarily dependant on the A120 to the immediate north of the site boundaries. As set out in the Tendring Infrastructure Delivery Plan⁴⁰, the A120 is the only trunk road in the District that facilitates strong movement of people from Tendring into urban Colchester and operates at capacity during peak periods leading to congestion. As the area is largely rural, there is heavy reliance on private cars and development at the site will contribute to increased pressure on the already burdened transport network. The nearest railway station is Hythe, which is located around 2.8km to the south-west of the site and connects to the main London-Ipswich line at Colchester. Bromley Road at the southern end of the site is served by the 1 bus, which provides access into Colchester town centre on a less than half-hourly basis.

- 3.498 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter Journeys

- 3.499 It is assumed that all sites will provide contributions to new primary and secondary facilities in accordance with guidance from Essex County Council⁴¹. Evidence from Essex County Council⁴² indicates that there is likely to be limited capacity at primary schools in the Colchester north and rural north-east area (-58 reception places forecast in 2028-29) and therefore it is likely that new primary school places will be required to serve the site at all capacity options. Additionally, the evidence from the same report indicates that in 2028-29, there will be -359 year 7 secondary places in the Colchester town area. Given a secondary school pupil factor of 0.2 pupils per house, increased secondary provision will be necessary for this site capacity (2,000 dwellings). The Stage 1a assessment found that the majority of the site is not within an 'acceptable' walking distance of primary or secondary schools.
- 3.500 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within the site to meet its needs. With

⁴⁰ Tendring Infrastructure Delivery Plan Report, May 2017, available from: https://www.tendringdc.gov.uk/sites/default/files/documents/planning/Planning_Policy/TDC_006%20Infrastructure%20Delivery%20Plan%20May%202017.pdf

⁴¹ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from: [The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from: https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf](https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf)

⁴² Essex School Organisation Service – 10 Year Plan 2019-2028, available from: <https://www.essex.gov.uk/Education-Schools/Schools/Delivering-Education-Essex/School-Organisation-Planning/Documents/10-year-plan-Essex-schools-places.pdf>

the exception of primary healthcare facilities (assumed not to be provided until 4,500 dwellings have been built), it is likely that this infrastructure will be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements at this site capacity (2,000 dwellings). It is likely that these services and facilities would serve both new residents and the existing community within the development site.

- 3.501 As such, opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site. However, uncertainty in relation to infrastructure provision results from the fact that the exact infrastructure requirements of development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.
- 3.502 A development of 2,000 dwellings is considered likely to provide a new primary school onsite, development contributions to expand existing secondary schools, local centre facilities, open space and bus services to accommodate its needs. However, it is anticipated that it will still be necessary to travel to destinations outside of the site to access primary healthcare facilities, secondary schools, and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall, it is considered likely that the provision of some local services and facilities by the end of the plan period is likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work, including the preparation, submission and determination of a planning application.
- 3.503 The site is not expected to be of sufficient capacity (>4,500 dwellings) to support the development of a new secondary school onsite.

Longer Journeys

- 3.504 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.505 The distance to the nearest rail station (measured from the centre of the site), which is Hythe, is approximately 2.8km away. Although Hythe Station is the closest, it is likely that the majority of commuter traffic will be directed towards Colchester Station due to its better connections with the Great Eastern Mainline. In both cases, the distance to these stations is likely to reduce the potential for trips by rail, which may result in increased reliance on private car use and increased congestion for external journeys. In terms of the potential for external trips, a review of commuter behaviour in the area has been undertaken. The site is split between two MSOAs, with Colchester 022 in the western half and Tendring 005 in the eastern half of the site. According to NOMIS, the largest proportion of people (18.7%) from the Colchester 022 MSA commute to Colchester 007, which is Colchester Town Centre, and the second largest proportion (9.9%) of people commute to Colchester 002, which is located in the north of Colchester town. For the Tendring 005 MSA, the largest proportion (11.4%) of commuter trips are within the MSA itself and the second largest proportion (10.7%) are to Colchester 007 (Colchester Town Centre). As such, if new residents follow the same commuting patterns, most journeys are likely to be carried by local roads and the A120. These are relatively short trips and it is unlikely these trips would be taken by rail as the nearest railway station is approximately 2.8km from the centre of the site. As such, uncertain minor negative effects (-?) are expected at this site capacity (2,000 dwellings) in relation to this SA objective. The effects are uncertain due to the difficulties present in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters into Colchester.
- 3.506 Overall, mixed minor positive and minor negative effects with uncertainty (+?/-?) are expected in relation to this SA objective.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.507 This SA objective contains elements that also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable locations are not repeated here.
- 3.508 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and/ or provide environmental mitigation. According to the site specific information provided by the NEAs, this site is to be supported by the following infrastructure:
- 3.509 ALTGC8a (2,000 dwellings):
- Early Years
 - Primary School(s)
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Community meeting spaces
- 3.510 The site information form sets out that the site can viably deliver these infrastructure requirements
- 3.511 The supporting infrastructure listed above is confirmed to be viable (on site information form) and therefore it is anticipated to be delivered at an appropriate phase, resulting in uncertain minor positive effects (+?) for this dwelling capacity option. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the detail of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

SA9: To conserve and enhance historic and cultural heritage, assets and townscape character

Effects on cultural heritage assets

- 3.512 The southern half of the site contains a Colchester archaeology site within its boundaries (Crockleford Mill). There are further heritage assets within 500m of the site boundaries, including Grade II* listed Spring Valley Mill 250m to the north, four Grade II listed buildings located to the north of the site boundaries and two Grade II listed buildings to the south-east of the site boundaries. The Stage 1a assessment found that over 50% of the site is within 500m of heritage assets.
- 3.513 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.
- 3.514 Taking a precautionary approach to this assessment, uncertain significant negative effects (--?) are anticipated at this site capacity (2,000 dwellings) in relation to this SA objective due to the potential for development to cause disruption to these historic environment assets, particularly in the case of the Crockleford Mill located onsite. The uncertainty present in these anticipated effects is present as the details of any mitigation strategies are to be finalised in further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.515 With regards to townscape, the boundary of the site is within 500m of Colchester. However, Colchester is of a sufficient size to suggest that development at the site would not have a significant effect on the existing townscape. As such, negligible effects are expected for this site capacity (2,000 dwellings) in relation to this SA objective.

- 3.516 Overall, the site is expected to have mixed uncertain significant negative and negligible effects (–/?/0) in relation to this SA objective.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.517 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.518 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner that considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. Therefore minor positive (+) effects are anticipated in relation to this SA objective at this site capacity (2,000 dwellings).

SA11: To improve water quality and address water scarcity and sewerage capacity
Water quality

- 3.519 The site is entirely outside source protection zones and therefore it is not considered likely that the development of the site will affect groundwater resources. As such, negligible effects (0) are expected in relation to groundwater for this site capacity (2,000 dwellings).

Water scarcity and water treatment

- 3.520 With regard to the water supply, the Tendring Water Cycle Study⁴³ and the Colchester Water Cycle Study⁴⁴ have identified that there is likely to be adequate water supply to cater to growth over the plan period. The studies are based on assumptions of growth from 'preferred development allocations' within Tendring and Colchester's Local Plans. This includes NEAGC3, a strategic site allocated in the Section 1 Local Plan. Due to the similar location of NEAGC3 and ALTGC8, these water cycle studies can be considered a reasonable evidence base to use. The WCS for Tendring assumes planned growth of 12,001 dwellings and the WCS for Colchester assumes planned growth of 16,144 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that site ALTGC8 was not allocated in the Section 1 Local Plan, and as such was not taken into account in the either WCS. As such, despite the similar location of ALTGC8 and NEAGC3, the results of this study should be interpreted with caution in relation to this site
- 3.521 With regard to water treatment, it is reasonable to assume that as ALTGC8 is in a similar location to NEAGC3, it would also be served by the Colchester Water Recycling Centre (WRC). The WCS sets out that it will be feasible for the existing Colchester WRC to serve the NEAGC3 site within the current limits of conventional treatment and therefore uncertain negligible effects (0?) are anticipated in relation to this for ALTGC8a (2,000 dwellings) as this potential dwelling capacity is within the level of growth assessed with the water cycle study for the end of the plan period. The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application and because the WCS did not specifically assess the effect of growth at ALTGC8.
- 3.522 Overall, mixed negligible and uncertain negligible effects (0/0?) are expected in relation to this SA objective for this site capacity (2,000 dwellings).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.523 Due to Salary Brook passing through the site from north to south, 5-25% of the site is located within Flood Zone 3 and these areas are therefore at high risk from flooding. The site does not contain any land at high risk from groundwater flooding. There is almost 6% of the site's area that is at medium risk from groundwater flooding, but it is not considered that this will make a

⁴³ <https://www.tendringdc.gov.uk/sites/default/files/Tendring%20Water%20Cycle%20Study%20-%20Final%20Report%20Sept%202017.pdf>

⁴⁴ https://www.braintree.gov.uk/downloads/file/6983/cbc0048_colchester_borough_council_water_cycle_study_final_report

significant contribution to flood risk within the site. There are some areas within the site at risk from surface water flooding. However, these amount to less than 5% of the site's area and therefore also do not make a significant contribution to flood risk within the site. It is expected that all strategic sites would be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.

- 3.524 As such, uncertain minor negative effects (-?) are expected in relation to this SA objective for this site capacity (2,000 dwellings) due to the site being located in Flood Zone 3.

SA13: To improve air quality

- 3.525 As set out in the assumptions framework, assessment against this SA objective relates to two elements – intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on this is provided below.

Intersection with AQMAs

- 3.526 The site does not intersect with any AQMAs and therefore negligible effects (0) are expected.

Potential contribution to road traffic within areas suffering from air pollution

- 3.527 The site is split between two MSOAs, with the western half located within Colchester 022 and the eastern half located within Tendring 005. For the Colchester 022 MSOA, the largest proportion (18.7%) of commuter trips are to Colchester 007, which is Colchester Town Centre and second largest proportion (9.9%) of commuter trips are to Colchester 002, which is located in the north of Colchester town. For the Tendring 005 MSOA the largest proportion (11.4%) of commuter trips are within the MSOA itself and the second largest proportion (10.75) of commuter trips are to Colchester 007 (Colchester Town Centre). Colchester 007 contains two AQMAs and therefore if residents follow the same commuting patterns, there is potential for development of the site to result in increased vehicular trips through these AQMAs.
- 3.528 As such, uncertain minor negative effects (-?) are expected for this site capacity (2,000 dwellings) in relation to this SA objective. The effects are uncertain as it is not clear exactly how and where people will travel at this stage.
- 3.529 Overall, mixed negligible and minor negative uncertain effects (0/-?) are expected in relation to this SA objective.

SA14: To conserve and enhance the quality of landscapes

- 3.530 The site is not located near any designated landscapes or proposed extensions to these.
- 3.531 Land at Bromley Heath has been assessed by landscape officers of the NEAs, and is considered to be of moderate strength landscape character and highly sensitive to visual intrusion due to wide views. The potential issues of developing within this landscape include loss of landscape features, road improvements, expansion at the edge of Colchester, communication masts and light pollution. As a result of this landscape assessment, and in line with the stated assumptions, uncertain significant negative effects (--?) are expected in relation to this SA objective for this site capacity (2,000 dwellings). There is uncertainty present in the anticipated effects as these impacts will depend on the particular design of the development proposals that come forward, including the massing, layout and height of buildings, the building materials used and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits

- 3.532 Consideration of effects against this SA objective relates to two separate factors, which are mineral resources and the quality of agricultural land. This results in two components to the SA score.

Mineral resources

- 3.533 There is between 5-25% of land within the site boundaries (located in the east and west) located within a Mineral Safeguarding Area (Sand and Gravel, Glacial Deposits), which means that development of this site would result in sterilisation of some mineral resources if these were not extracted before development. As such, due to the potential for loss of mineral resources, uncertain minor negative effects (-?) are expected in relation to this SA objective for this site

capacity. The effects are uncertain as there may be potential to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery.

High quality agricultural land

- 3.534 More than 25% of land within the site that is located on Grade 2 agricultural land, with remaining land within the site being located on Grade 3 agricultural land. Development of this site would result in the loss of high quality agricultural land. Therefore, significant negative effects (--) are expected in relation to this SA objective for this site capacity (2,000 dwellings).
- 3.535 Whilst it is recognised that the site at the end of the plan period (or at the lower capacity option) will involve less development than the potential final capacity of 2,500 dwellings (and therefore potentially a lesser effect), the phasing / location of the development within the site boundary is not known and effects are considered to therefore be as potentially significant as the fully built capacity option.
- 3.536 Overall, mixed minor negative with uncertainty and significant negative effects (-?/--) are expected in relation to this SA objective.

Summary of significant effects

- 3.537 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by infrastructure or other mitigation practices, which are yet to be designated in detail and / or implemented.

Effects when fully built out at ALTGC8a – 2,000 dwellings:

- 3.538 The potential for significant positive effects arises in relation to:
- SA1 Community cohesion, due to the potential for the site to provide development in line with Garden City Principles and include provision of a youth centre and community meeting facilities; and
 - SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures and safe accessible housing.
- 3.539 The potential for significant negative effects arises in relation to:
- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
 - SA6 Biodiversity and geological diversity, due to the fact that there are several designated sites and BAP priority habitats within and immediately adjacent to the site;
 - SA9 Historic environment and townscape, due to potential impacts on an archaeological site within the site boundary and on the setting of nearby heritage assets;
 - SA14 Landscape; due to the high sensitivity of the landscape to visual intrusion; and
 - SA15 Soil and mineral resources, due to the site being located within a mineral safeguarding area; and loss of Grade 2 agricultural land.
- 3.540 In summary, development at this scale (2,000 dwellings) is able to provide a sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered to be likely to be able to support a range of services and facilities within the site, including youth centre and community meeting places provision. However, at this scale, the site is not likely to be large enough to provide higher order services such as a secondary school or healthcare facilities onsite. As such, there is potential for development of this capacity to result in more travel outside of the site compared to a higher capacity development.
- 3.541 The site is large and is therefore likely to significantly impact on the existing community, the character of the area and the landscape context. There are both negative and positive effects that may arise in relation to these factors, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.
- 3.542 The potential for significant negative effects has been identified in relation to natural and historic environment assets in the area. There is potential for development at this scale (compared to

other larger strategic sites) to result in reduced effects on these sensitive receptors due to the opportunity to provide greater physical separation within the site between them and development.

ALTGC9 – Land at East of Colchester Option Three

Site Context

- 3.543 Site ALTGC9 is a strategic site located to the directly to the east of Colchester, with the north-eastern boundary of the site adjacent to the A120. The entirety of the site is located within the Tendring District and was promoted for inclusion in the Section 1 Local Plan as Land at East of Colchester Option Three. The potential scale of development from this site is approximately up to 3,000 dwellings, with 2,500 dwellings capable of being delivered during the Plan Period (up to 2033). A permitted residential site for 145 dwellings lies approximately 150m to the west of the site (Bromley Road Ardleigh). The potential scale of development from this site and the nearby site along Bromley Road is up to 3,145 dwellings once fully built.
- 3.544 The site area is 213ha and is comprised almost entirely of agricultural land with sparse residential development distributed in the western half of the site. The nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are Colchester, approximately 400m to the west, which is a settlement of around 58,651 dwellings and includes a policy-defined town centre (Section 2 Local Plans), district centre and local centres; Wivenhoe, around 1,600m to the south, which is a settlement that contains approximately 3,560 dwellings and includes a policy defined district centre and local centre; Elmstead Market, around 1km to the south-east, which is a settlement of approximately 877 dwellings and includes a policy defined local centre; Ardleigh, around 2.3km to the north, which is a settlements of approximately 917 dwellings, but with no policy defined local centre; Great Bromley, around 2.6km to the east, which is a settlement of approximately 422 dwellings, but with no policy-defined local centre. Other strategic settlements nearby include Clacton-on-Sea 13.5km to the south-east, Braintree around 26km to the west, Ipswich around 18km to the north-east, Sudbury around 20km north-west and Chelmsford around 35km to the south-west.
- 3.545 The A120 bounds the north-eastern boundary of the site and travels in an east-west alignment, connecting Colchester to Harwich to the east, and connecting to the A12, providing strategic links to settlements to the west such as Braintree and Chelmsford. The site is almost entirely greenfield and therefore it is not currently well served by existing facilities and services. The nearest railway station to the site is Hythe, which is located around 2.3km to the south-west. This railway station connects to the main London-Ipswich line at Colchester.
- 3.546 There are no significant residential, employment or mixed sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundary. Within 1km of the site, Bromley Road Ardleigh and Colchester town are the only significant Section 2 Local Plan allocations or permitted sites. Bromley Road Ardleigh, located 150m south-west of ALTGC9 at its closest point, is a site granted at appeal (17/00080/REFUSE) for up to 145 homes. In addition, Colchester town, approximately 400m to the west of the site, is allocated in the Colchester Section 2 Local Plan for 2,018 dwellings.
- 3.547 Slough Farm, which is located around 200m north of the site, is an allocated Minerals Extraction Site in the Essex Minerals Local Plan.

SA objective	Criterion	ALTGC9	ALTGC9	ALTGC9	ALTGC9	ALTGC9
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	3000
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++?	++?

SA objective	Criterion	ALTGC9	ALTGC9	ALTGC9	ALTGC9	ALTGC9
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	3000
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+/-	+/-	+/-
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Preferred Maximum	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Potential for harm to Source Protection Zones (SPZs)	Low	Low			
	Potential exposure to flood risk	Low	Low			
	Potential exposure to air pollution	Low	Low			
Potential exposure to noise pollution from roads and railways	High	High				
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
SA5 Achieve a prosperous / sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum			
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	-?	-?	-?

SA objective	Criterion	ALTGC9	ALTGC9	ALTGC9	ALTGC9	ALTGC9
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	3000
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium			
	Potential for harm to PHI or local BAP habitat	Medium	Medium			
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?/-?	+?/-?	+?/-?
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Unacceptable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable			
	Access to bus stops	Unacceptable	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Preferred Maximum	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum			
SA8 Accessibility, sustainable location, infrastructure	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?	+?	+?
	Access to primary or	Unacceptable	Desirable			

SA objective	Criterion	ALTGC9	ALTGC9	ALTGC9	ALTGC9	ALTGC9
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	3000
provision	<i>middle schools</i>					
	<i>Access to secondary schools</i>	Unacceptable	Unacceptable			
	<i>Access to further and higher education facilities</i>	Unacceptable	Unacceptable			
	<i>Access to local centres</i>	Unacceptable	Desirable			
	<i>Access to town centres</i>	Unacceptable	Unacceptable			
	<i>Access to railway stations</i>	Unacceptable	Unacceptable			
	<i>Access to bus stops</i>	Unacceptable	Desirable			
	<i>Access to cycle paths</i>	Unacceptable	Unacceptable			
	<i>Access to open spaces and sports centres</i>	Preferred Maximum	Desirable			
	<i>Access to Public Rights of Way (PRoW)</i>	Acceptable	Acceptable			
	<i>Access to centres of employment including employment areas and town centres</i>	Preferred Maximum	Preferred Maximum			
	SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/0	--?/0
SA10 Use energy efficiently and reduce greenhouse gas emissions	<i>Access to GP surgeries/ health centres</i>	Unacceptable	Unacceptable			
	<i>Access to primary or middle schools</i>	Unacceptable	Desirable	+	+	+
	<i>Access to secondary schools</i>	Unacceptable	Unacceptable			
	<i>Access to further and higher education facilities</i>	Unacceptable	Unacceptable			

SA objective	Criterion	ALTGC9	ALTGC9	ALTGC9	ALTGC9	ALTGC9
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	3000
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable			
	Access to bus stops	Unacceptable	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Preferred Maximum	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum			
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?	0/0?	0/0?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/-?	0/-?	0/-?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Medium	Medium	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/--	--?/--	--?/--
	Potential for harm to agricultural land	High	High			

Commentary on SA objectives

SA1: Create safe environments which improve quality of life and community cohesion

- 3.548 Consideration of the effects in relation to this SA objective is divided between the anticipated effects on existing communities and those on the new communities that will be formed as a result of development. Commentary on these two matters is set out below.

Effect on existing communities

- 3.549 Due to the site being comprised of agricultural land with sparsely distributed residential development, the area within the site is considered to comprise a dispersed rural community. Settlements within 5km include Colchester, Wivenhoe, Elmstead Market, Ardleigh, Rowhedge, Great Bromley, Alresford and High Park Corner. Colchester, Wivenhoe and Elmstead Market are large enough to offer a local, district or town centre as defined in the draft Tendring and Colchester Section 2 Local Plans. Further information about the location and scale of the surrounding settlements is included in the site context above.
- 3.550 If the site (ALTGC9) was developed, it is likely that the provision of such large scale development in close proximity to the existing small scale communities in the area would result in significant adverse effects. Potential effects resulting from development can be separated into those associated with the construction stage, which are likely to be temporary effects, and those that are likely to occur after development has been completed. For the former, these effects are likely to include increased traffic, light pollution, noise and vibration impacts from construction activities. For the latter, the effects are likely to also include increased traffic, light/noise/air pollution as well as significant disruption to the existing landscape character due to urbanisation of the area.
- 3.551 For all site capacities (ALTGC9a/b/c), there are multiple settlements within 5km where the housing quantities proposed amount to over 10% of their overall housing stock. It is considered likely that, due to the scale of the proposed site compared to the existing surrounding settlements, impacts will generally be negatively perceived by the existing communities. As such, uncertain significant negative effects (--?) are expected in relation to this objective. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

- 3.552 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 3.553 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (ALTGC9a/b/c).
- 3.554 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.555 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at all site capacity options (ALTGC9a/b/c).

- 3.556 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.557 The site information form for ALTGC9 indicates that the development at all capacities is likely to be viable and will be able to support the delivery of 30% affordable housing. However it also sets out that development at 3,000 dwellings (ALTGC9c) is likely to require external funding or another mechanism to improve scheme viability, in order to deliver requisite infrastructure and policy compliant affordable housing, this largely relates to the cost of RTS. This results in uncertainty for this development scale as the external funding / improvement to viability has not yet occurred. Due to the similar scale, it is also assumed this would apply to ALTGC9b (2,500 dwellings). The site information form sets out that at 2,000 dwelling capacity (ALTGC9a), no external funding or other improvement in site viability is required.
- 3.558 In light of the above, this site is considered likely to deliver housing which is safe and accessible, as well as policy compliant affordable housing. This is considered likely to result in significant positive effects in relation to all potential dwelling capacity options. In particular, dwelling capacity option ALTGC9a (2,000 dwellings) is considered to result in significant positive (++) effects. dwelling capacity option ALTGC9b (2,500 dwellings) and ALTGC9c (3,000 dwellings) are considered to result in significant positive yet uncertain (++) effects.

SA3: Improve health/reduce health inequalities

- 3.559 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.560 The site is almost entirely greenfield, apart from sparsely distributed residential development and minor roads, and therefore there are no existing healthcare facilities onsite. The nearest GP surgeries are The Hawthorn Surgery and Parsons Health Medical Practice, which are around 2.2km to the west of the site (measured from the centre of the site) with there being further healthcare facilities available within 5km of the site in Colchester and other nearby settlements. The Stage 1a assessment found that the entirety of the site is not within an 'acceptable' walking distance of GP surgeries or health centres.
- 3.561 The site does not contain any areas of public open space within its boundaries and does not link to any existing dedicated cycle paths. The Stage 1a assessment found that around 30% of the site is within a 'desirable' walking distance of open space. The assessment also found that the majority (>80%) of the site is not within an 'acceptable' walking distance of cycle paths. The site contains two Public Rights of Way and is adjacent to several more that provide access to the surrounding countryside and could potentially be used for recreational purposes by residents in the new development. However, it is not considered that Public Rights of Way will make a significant contribution to recreation so as to facilitate more healthy lifestyles in residents.
- 3.562 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritisation of walking/cycling and use of public transport over private car use. It is assumed that this will include provision of foot and cycle ways throughout the development and provision of public open space also. The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to this SA objective at the end of the plan period (ALTGC9b) and when fully built out at both capacity options (ALTGC9a and ALTGC9c).
- 3.563 It is apparent from the Stage 1a assessment that there are no healthcare facilities that are within an 'acceptable' walking distance of the site. Furthermore, at the end of the plan period (ALTGC9b – 2,500 dwellings) and for both site capacity options (ALTGC9a and ALTGC9c - 2,000 and 3,000 dwellings), the site is unlikely to be large enough (threshold 4,500 dwellings) to support new healthcare facilities resulting in no adjustment to the minor positive (+) effect identified above.

Exposure to noise pollution

- 3.564 The Stage 1a assessment found that around 16% of the site is at high risk from exposure to noise pollution. As such, as between 5 to 25% of the site area falls within a DEFRA strategic noise area of $L_{night} \geq 55.0$ dB or $L_{aeq 16} \geq 60.0$ dB, minor negative (-) effects are expected in accordance with the assumptions framework. The source of the noise pollution is the A120, which is adjacent to the northern boundary of the site. This effect applies for the site at all capacity options (ALTGC9a/b/c).
- 3.565 Overall, mixed minor positive and minor negative effects (+/-) are expected in relation to SA objective 3.

SA4: To ensure and improve the vitality & viability of centres

- 3.566 In accordance with the assessment assumptions and confirmed by the site information form, the site at all scales will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and therefore minor positive effects (+) are expected in relation to this SA objective, at all potential dwelling capacities (ALTGC9a/b/c).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.567 The relationship to existing centres is described in the commentary for SA objective 4 above. The site is not in close proximity to existing employment centres, with the closest being Martell's Pit, located around 2km to the north (measured from the centre of the site). Further existing employment is located in Colchester further to the south-west. The Stage 1a assessment found that the entirety of the site is not within an 'acceptable' walking distance of centres of employment.
- 3.568 It is expected that the development of the site at all potential scales (ALTGC9a/b/c) will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive effects (+) in relation to this SA objective.
- 3.569 The site information form indicates that there will be no employment land provision within the development at all capacity options, resulting in no increase to the minor positive effects expected.
- 3.570 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.571 There is an area in the eastern half of the site that contains part of a Local Wildlife Site, which also contains ancient woodland, and there are two further narrow areas of Local Wildlife Sites contained within the site boundaries. However, the Stage 1a assessment found that there is less than 5% of the site that intersects with these Local Wildlife Sites. There are also Local Wildlife Sites within 400m to the south-west and north-west of the site. There are several areas of Priority Habitat (deciduous woodland) located within the site boundaries. The entire site falls within an SSSI impact risk zone (IRZ) for residential developments of 100 units or more.
- 3.572 Development of this site may result in adverse impacts to these local designations and habitats. The effects on these natural environment assets could include total or partial loss, reduced quality resulting from pollution, increased disturbance to wildlife and predation by pets. As such, uncertain minor negative (-?) effects are expected for the site at the end of the plan period (ALTGC9b) and for both capacity options (ALTGC9a and ALTGC9c) in relation to this SA objective. The effects are uncertain as the development proposal may include mitigation to reduce or overcome negative effects.

- 3.573 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.574 The site is almost entirely greenfield and therefore it is rural in character. The relationship of the site to existing local centres is described above in the commentary for SA objective 4. The accessibility of the site to surrounding facilities would, prior to the provision of any new transport infrastructure, be primarily dependant on the A120 to the immediate north of the site and the A133 further to the south. As set out in the Tendring Infrastructure Delivery Plan⁴⁵, the A120 is the only trunk road in the district that facilitates strong movement of people from Tendring into urban Colchester and operates at capacity during peak periods leading to congestion. As the area is largely rural, there is heavy reliance on private cars and development at the site will contribute to increased pressure on the already burdened transport network. The nearest railway station is Hythe, which is located around 3.2km to the south-west of the site's centre and connects to the main London-Ipswich line at Colchester. The area is served by the 105 bus that provides access into Colchester town centre on an approximately hourly service.
- 3.575 Overall, a mixed score to reflect the effects in relation to shorter journeys and longer journeys is anticipated as follows.

Shorter Journeys

- 3.576 In accordance with the assumptions framework, it is assumed that this site will provide new primary and secondary school capacity in accordance with the developer contributions guidance from Essex County Council⁴⁶. Evidence from Essex County Council⁴⁷ indicates that there is likely to be limited capacity at Primary Schools in the Colchester north and rural northeast area (-58 reception places forecast in 2028-29) and therefore it is likely that new primary schools will be required to serve the site at all capacity options. Additionally, the same evidence indicates that in 2028-29, there will be -359 Year 7 secondary places in the Colchester town area. Given a secondary pupil factor of 0.2 pupils per house, increased secondary provision will be necessary for the end of the plan period (ALTGC9b) and for both site capacity options (ALTGC9a and ALTGC9c). The Stage 1a assessment found that the entirety of the site is not within an 'acceptable' walking distance of primary or secondary schools.
- 3.577 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within the site to meet its needs. With the exception of primary healthcare facilities (assumed not to be provided until 4,500 dwellings have been built), it is likely that this infrastructure will be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements both by the end of the plan period (ALTGC9b) and when built out to both site capacity options (ALTGC9a and ALTGC9c). It is likely that these services and facilities would serve both new residents and the existing community within the development site.
- 3.578 As such, opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site. However uncertainty in relation to infrastructure provision results from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.
- 3.579 The site is not within 'acceptable' walking distance of any existing secondary schools or any existing areas of employment. The site at all development scales is considered likely to provide a new primary school onsite, developer contributions to expand existing secondary schools, local centre facilities, open space, and bus services to accommodate its needs. However it is

⁴⁵ Tendring Infrastructure Delivery Plan Report, May 2017, available from: https://www.tendringdc.gov.uk/sites/default/files/documents/planning/Planning_Policy/TDC_006%20Infrastructure%20Delivery%20Plan%20May%202017.pdf

⁴⁶ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from: <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

⁴⁷ Essex School Organisation Service – 10 Year Plan 2019-2028, available from: <https://www.essex.gov.uk/Education-Schools/Schools/Delivering-Education-Essex/School-Organisation-Planning/Documents/10-year-plan-Essex-schools-places.pdf>

anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities, secondary schools, and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall it is considered likely that the provision of some local services and facilities by the end of the plan period is likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer Journeys

- 3.580 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.581 The distance to the nearest rail station (Hythe) is over 2km, but it is likely that the majority of commuters will be directed to Colchester Station due to its connection to the Great Eastern Mainline. The distance of these stations from the site is likely to reduce the potential for trips by rail, which may result in increased reliance on private car use and increased congestion for external journeys. In terms of the potential for external trips, a review of commuter behaviour in the area has been undertaken. The site is located within the Tendring 005 Middle Super Output Area. According to NOMIS, the largest proportion (11.4%) of commuters from this MSOA commute within Tendring 005, a similar proportion (10.7%) commute to Colchester town centre and the remaining most popular destinations from Tendring 005 are also located within Colchester. As such, if new residents follow the same commuting patterns, most journeys are likely to be carried by local roads and in the A120. These are relatively short trips and it is unlikely these trips would be taken by rail as the nearest railway station is over 2km to the south. As such, uncertain minor negative effects (-?) are expected for the end of the plan period (ALTGC9b) and for both full built site capacity options (ALTGC9a and ALTGC9c). The effects are uncertain due to the difficulties present in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters into Colchester.
- 3.582 Overall, mixed minor positive and minor negative effects with uncertainty (+?/-?) are expected in relation to this SA objective at all capacity options.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.583 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.
- 3.584 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site specific information provided by the NEAs, this site is to be supported by the following infrastructure at the following dwelling capacities:
- 3.585 ALTGC9a (2,000 dwellings) and also assumed to apply to ALTGC9b given that it is a similar scale (maximum 2,500 dwellings the end of the plan period):
- Early Years
 - Primary School(s)
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities

- Community meeting spaces
- 3.586 The site information form sets out that the site can viably deliver these infrastructure requirements.
- 3.587 ALTGC9c (3,000 dwellings):
- RTS links to Colchester
 - Early Years
 - Primary School(s)
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Community meeting spaces
- 3.588 The site information form sets out that the site can viably deliver these infrastructure requirements with external funding from transport operating companies. Alternatively, viability improvements to the scheme via another mechanism could also potentially provide sufficient viability.
- 3.589 The supporting infrastructure listed above is confirmed to be viable (by the site information form) and therefore it is anticipated to be delivered at an appropriate phase, resulting in uncertain minor positive effects (+?) for all dwellings capacity options (ALTGC9a/b/c). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the detail of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is noted in relation to site capacity option ALTGC9b (3,000 dwellings) as the site information form sets out that external funding (or other improvement in scheme viability) is required to deliver the rapid transport system.

SA9: To conserve and enhance historic and cultural heritage, assets and townscape character

Effects on cultural heritage assets

- 3.590 There are two Grade II listed building located within the site boundaries in the western half. There are also further heritage assets within 500m of the site, including Crockleford Mill, a Colchester archaeology site that is around 300m west of the site, a cluster of four Grade II listed building located to the immediate south west of the site and a Grade II listed building located to the immediate east of the site. Additionally, there is a Grade II* (Elmstead Hall) and Grade I listed building (Church of St Anne and St Lawrence around 1km to the east of the site and multiple further Grade II listed buildings located to the north of the site. The Stage 1a assessment found that around 47% of the site is within 500m of heritage assets.
- 3.591 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.
- 3.592 Taking a precautionary approach to this assessment, uncertain significant negative effects (--?) are anticipated both at the end of the plan period (ALTGC9b) and for the two fully built site capacity options (ALTGC9a and ALTGC9c) in relation to this SA objective due to the potential for development to cause disruption to these historic environment assets. The uncertainty present in these anticipated effects is present as the details of any mitigation strategies are to be finalised in further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.593 With regards to townscape, the boundary of the site is within 500m of Colchester. However, it is considered that Colchester is of a sufficient size to assume that development at the site will not have a significant effect on the existing townscape. As such, negligible effects (0) are expected for all site capacity options (ALTGC9a/b/c).

- 3.594 Overall, the site is expected to have mixed uncertain significant negative and negligible effects (-- ?/0) in relation to this SA objectives for all capacity options (ALTGC9a/b/c).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.595 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.596 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner that considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. Therefore minor positive (+) effects are anticipated in relation to this SA objective for all site capacity options.

SA11: To improve water quality and address water scarcity and sewerage capacity
Water quality

- 3.597 The site is entirely outside source protection zones and therefore it is not considered likely that the development of the site will affect groundwater resources. As such, negligible effects (0) are expected in relation to groundwater for all site capacity options (ALTGC9a/b/c).

Water scarcity and water treatment

- 3.598 With regard to water supply, the Tendring Water Cycle Study⁴⁸ identifies that there is likely to be adequate water supply to cater to growth over the plan period. The study is based on assumptions of growth from 'preferred development allocations' within Tendring's Section 1 Local Plan. This includes NEAGC3, a strategic site allocated in the Section 1 Local Plan, which was considered in the Colchester Water Cycle Study and Tendring Water Cycle Study for combined growth of 2,900 dwellings during the plan period (1,650 dwellings in Colchester and 1,250 dwellings in Tendring). Due to the similar location of NEAGC3 and ALTGC9, this water cycle study can be considered a reasonable evidence base to use. The WCS for Tendring assumes planned growth of 12,001 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that site ALTGC9 was not allocated in the Section 1 Local Plan, and as such was not taken into account in the either WCS. As such, despite the similar location of ALTGC9 and NEAGC3, the results of this study should be interpreted with caution in relation to this site.
- 3.599 The Integrated Water Management Strategy (IWMS)⁴⁹, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume that the proposed growth at ALTGC9 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (ALTGC9a/b/c) in relation to water scarcity.
- 3.600 With regard to water treatment, it is reasonable to assume that as ALTGC9 is in a similar location to NEAGC3, it would also be served by the Colchester Water Recycling Centre (WRC). The WCS sets out that it will be feasible for the existing Colchester WRC to serve the NEAGC3 site within the current limits of conventional treatment and therefore uncertain negligible effects (0?) are anticipated in relation to this for ALTGC9a (2,000 dwellings) and ALTGC9b (2,500 dwellings) as this potential dwelling capacity is within the level of growth assessed with the water cycle study for the end of the plan period. Additionally, the IWMS indicates that the Colchester WRC will be able to cater growth beyond the extent of the plan period. As such, uncertain negligible effects (0?) are also expected for the higher potential dwelling capacity (ALTGC9c – 3,000 dwellings) in

⁴⁸ <https://www.tendringdc.gov.uk/sites/default/files/Tendring%20Water%20Cycle%20Study%20-%20Final%20Report%20Sept%202017.pdf>

⁴⁹ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

relation to water treatment. The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application and because the WCS did not specifically assess the effect of growth at ALTGC9.

- 3.601 Overall, mixed negligible and uncertain negligible effects (0/0?) are expected in relation to this SA objective for site capacities (ALTGC9a/b/c).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.602 The site does not contain any land that is located within flood zones or any land that is at high risk from groundwater flooding. There is a small area (3%) of the site that is at medium risk from groundwater flooding, but it is not considered that this will make a significant contribution to flood risk within the site. There are small areas within the site boundary at risk from surface water flooding, but these amount to less than 5% of the area within the site. As set out in the assumptions framework all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.603 As such, negligible effects (0) are expected in relation to this SA objective for all site capacity options (ALTGC9a/b/c).

SA13: To improve air quality

- 3.604 As set out in the assumptions framework, assessment against this SA objective relates to two elements – intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on this is provided below.

Intersection with AQMAs

- 3.605 The site does not intersect with any AQMAs and therefore negligible effects (0) are expected.

Potential contribution to road traffic within areas suffering from air pollution

- 3.606 The site is located entirely within the Tendring 005 MSOA and, according to NOMIS, the largest proportion of commuter trips from this MSOA are within the MSOA itself. However, the second largest proportion of commuter trips from this MSOA are to Colchester 007 MSOA (Colchester Town Centre) in which there are two AQMAs. If residents follow the same commuting patterns, there is potential for development of this site to result in increased vehicular trips through these AQMAs. As such, uncertain minor negative effects (-?) are expected for the end of the plan period (ALTGC9b) and the two site capacity options (ALTGC9a and ALTGC9c) in relation to this objective. The effects are uncertain as it is not clear exactly how and where people will travel at this stage.

SA14: To conserve and enhance the quality of landscapes

- 3.607 The site is not located near any designated landscapes or proposed extensions to these.
- 3.608 The varying landscapes within the site boundaries have been assessed by landscape officers of the NEAs. The Bromley Heath LCA is considered to be of moderate character strength and highly sensitive to visual intrusion due to wide views. The Wivenhoe Farmland Plateau LCA is considered to be of moderate character strength and highly sensitive to large new development in open landscapes on the plateau. The Ardleigh Valley System LCA is considered to be of moderate character strength and highly sensitive to large new development, especially on Roman River slopes and in open landscapes on the plateau.
- 3.609 As a result of this and in line with the stated assumptions, uncertain significant negative effects (-?) are expected in relation to this SA objective for the end of the plan period (ALTGC9b) and for both site capacity options (ALTGC9a and ALTGC9c). There is uncertainty present in the anticipated effects as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits

- 3.610 Consideration of effects against this SA objective relates to two separate factors, which are mineral resources and the quality of agricultural land. This results in two components to the SA score.

Mineral resources

- 3.611 The entirety of the site is within a Minerals Safeguarding Area (Glacial Deposits), which means that development of this site would result in a significant sterilisation of mineral resources if these were not extracted before development. While it is recognised that the site at the end of the plan period (and at the lower site capacity option) will involve less development compared to the final built out capacity of 3,000 dwellings, the location of this within the site boundary is not known and effects are considered to therefore be as potentially significant as the fully built out development.
- 3.612 As such, due to the potential for loss of mineral resources, uncertain significant negative effects (-?) are expected in relation to this SA objective for all site capacity options (ALTGC9a/b/c). The effects are uncertain as there may be potential to extract some or all of the mineral resources before development, depending on factors such as site layout and phasing of housing delivery.

High quality agricultural land

- 3.613 Approximately 80% of the site is Grade 1 or Grade 2 agricultural land, which means that development of the site would result in the loss of a significant amount of high quality agricultural land. Therefore, significant negative effects (--) are expected in relation to this SA objective for all site capacity options (ALTGC9a/b/c).
- 3.614 Whilst it is recognised that the site at the end of the plan period will involve less development than the potential final capacity of 3,000 dwellings (and therefore potentially a lesser effect), the phasing / location of the development within the site boundary is not known and effects are considered to therefore be as potentially significant as the fully built capacity option but with uncertainty relating to phasing.
- 3.615 Overall, significant negative effects with some uncertainty (--?/--) are expected in relation to this SA objective.

Summary of significant effects

- 3.616 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by infrastructure or other mitigation practices, which are yet to be designed in detail and / or implemented.

Effects when fully built out at ALTGC9a – 2,000 dwellings, ALTGC9b – 2,500 dwellings and ALTGC9c – 3,000 dwellings:

- 3.617 Effects once the site is fully built out are likely to be fairly similar all the potential site capacities.
- 3.618 Significant positive effects are anticipated in relation to:
- SA1 Community cohesion, due to the potential for the site to provide development in line with Garden City Principles and include provision of a youth centre and community meeting facilities; and
 - SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing.
- 3.619 The potential for significant negative effects arises at these scales in relation to:
- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
 - SA9 Historic environment and townscape, due to potential impacts on Grade II listed buildings within the site and on the setting of nearby heritage assets;
 - SA14 Landscape, due to the high sensitivity of the landscape to development; and
 - SA15 Soil and mineral resources, due to the intersection with mineral resources and the loss of Grade 1 or 2 agricultural land.
- 3.620 In summary, all site capacity options have the potential to provide development that can support a number of services including primary schools, developer contributions to secondary schools and a local centre. All capacities are also considered likely to be able to provide a sufficient amount of affordable housing and an appropriate tenure mix. At this scale, the site is not likely to be large

enough to provide higher order services such as a secondary school or healthcare facilities onsite. As such, there is potential for development of this capacity to result in more travel outside of the site by private car trips.

- 3.621 The site is large and is therefore likely to significantly impact on the existing community, the character of the area and the landscape context. There are both negative and positive effects that may arise in relation to these factors, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.
- 3.622 Significant negative effects have been identified in relation to natural and historic environment assets in the area. There is potential for development at this scale to result in reduced effects on these sensitive receptors due to the opportunity to provide greater physical separation within the site between them and development.

ALTGC10 – Land at East of Colchester Option 4

Site Context

- 3.623 Site ALTGC10 is a strategic site located to the east of Colchester. It was promoted for inclusion in the submitted Section 1 Local Plan as Land at East of Colchester Option 4. The site is split between two authorities, with the western half within the Colchester Borough and the eastern half within the Tendring District. The potential scale of development from this site is up to approximately 4,500 dwellings once fully built. A permitted residential site for 145 dwellings (Bromley Road Ardleigh) lies approximately 250m to the north-west and a number of from a granted residential site. In total, the potential scale of development from this site, and the nearby site along Bromley Road is up to approximately 4,645 dwellings.
- 3.624 The vast majority of the site is arable land, with small areas of residential development distributed throughout the site. The A133 Colchester Road runs through the southern half of the site in and other smaller roads also. The nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) include Colchester, which the site is adjacent to on its western boundary and is a settlement of approximately 58,651 dwellings and includes a policy defined town centre, district centre and local centres; Wivenhoe, around 250m to the south of the site, which is a settlement of approximately 3,560 dwellings and includes a policy defined local centre; Elmstead Market, around 800m east of the site, which is settlement approximately 877 dwellings and includes a policy defined local centre; Ardleigh, approximately 3.8km to the north of the site, which is a settlement of around 917 dwellings but with no policy defined centre; Rowhedge, around 2km to the south of the site, which is a settlement of around 1,037 dwellings but with no policy defined local centre; Great Bromley, around 3.6km to the north-east of the site, which is a settlement of around 422 dwellings but with no policy defined local centre; Alresford, around 2.6km to the south-east of the site, which is a settlement of around 810 dwellings and includes a policy defined local centre; High Park Corner, around 3km to the south of the site, which has no policy defined local centre. Additionally, the southern boundary of the site is adjacent to the University of Essex Colchester Campus. Other strategic settlements nearby include Clacton-on-Sea 13km to the southeast, Braintree 25km to the west, Ipswich 18km to the northeast, Sudbury 20km to the northwest, and Chelmsford 34km to the southwest.
- 3.625 The A133 Colchester Road runs through the southern half of the site, connecting the area to Colchester Town to the west and Elmstead Market and onwards to Clacton-on-Sea to the east. The southern boundary of the site is adjacent to the B1027, which connects the site to settlements to the south, including Wivenhoe and Alresford. Due to the site being almost entirely greenfield, it is not well served by existing services and facilities. The nearest railway station is Hythe, which is located around 2km from the centre of the site to the west and connects to the main London-Ipswich line at Colchester.
- 3.626 There are no significant residential, employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundary. Within 1km of the site, Bromley Road, Wivenhoe and Colchester are the only significant Section 2 Local Plan allocations or permitted sites. Bromley Road, located 250m north-west of ALTGC10 at its closest point, is a site granted at appeal (17/00080/REFUSE) for up to 145 homes. Wivenhoe, a settlement located approximately 250m to the south of ALTGC10 at its closest point, is allocated in the Colchester Section 2 Local Plan for 250 dwellings. In addition, Colchester town, adjoining the west of the site, is allocated in the Colchester Section 2 Local Plan for 2,018 dwellings. A number of permitted residential sites are also located around Elmstead Market just over 1km to the east of the site boundary, with a combined capacity of approximately 185 dwellings.
- 3.627 Sunnymead, Elmstead and Heath Farms, located around 950m south-east of the site is an allocated Minerals Extraction Site in the Essex Minerals Local Plan.

SA objective	Criterion	ALTGC10	ALTGC10	ALTGC10	ALTGC10	ALTGC10
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	4500

SA objective	Criterion	ALTGC10	ALTGC10	ALTGC10	ALTGC10	ALTGC10
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	4500
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++?
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Desirable	+/-	+/-	++/-
	Access to cycle paths	Acceptable	Acceptable			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Potential for harm to Source Protection Zones (SPZs)	Low	Low			
	Potential exposure to flood risk	High	High			
	Potential exposure to air pollution	Low	Low			
Potential exposure to noise pollution from roads and railways	High	High				
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum			
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	--?	--?	--?
	Potential for harm to locally designated wildlife sites and ancient woodland	High	High			
	Potential for harm to PHI or local BAP habitat	Medium	Medium			
SA7 Achieve	Access to GP surgeries/ health	Unacceptable	Desirable	+?/-?	+?/-?	+?/-?

SA objective	Criterion	ALTGC10	ALTGC10	ALTGC10	ALTGC10	ALTGC10
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	4500
more sustainable travel behaviour	centres					
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Preferred Maximum	Desirable			
	Access to further and higher education facilities	Preferred Maximum	Preferred Maximum			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable			
	Access to bus stops	Acceptable	Desirable			
	Access to cycle paths	Acceptable	Acceptable			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum			
	SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Desirable		
Access to primary or middle schools		Unacceptable	Desirable			
Access to secondary schools		Preferred Maximum	Desirable			
Access to further and higher education facilities		Preferred Maximum	Preferred Maximum			
Access to local centres		Unacceptable	Desirable			
Access to town centres		Unacceptable	Unacceptable			
Access to railway stations		Unacceptable	Unacceptable	+?	+?	+?
Access to bus stops		Acceptable	Desirable			
Access to cycle paths		Acceptable	Acceptable			
Access to open spaces and sports centres		Acceptable	Desirable			
Access to Public Rights of Way (PRoW)		Acceptable	Acceptable			
Access to centres of employment including employment areas and town centres		Preferred Maximum	Preferred Maximum			
SA9 Conserve and enhance the historic environment and townscape		Potential for harm to heritage assets	High	High	--?/?	--?/?

SA objective	Criterion	ALTGC10	ALTGC10	ALTGC10	ALTGC10	ALTGC10			
		Stage 1a	Stage 1b	A	B	C			
		N/A	N/A	2000	2500	4500			
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Desirable						
	Access to primary or middle schools	Unacceptable	Desirable						
	Access to secondary schools	Preferred Maximum	Desirable						
	Access to further and higher education facilities	Preferred Maximum	Preferred Maximum						
	Access to local centres	Unacceptable	Desirable						
	Access to town centres	Unacceptable	Unacceptable						
	Access to railway stations	Unacceptable	Unacceptable				+	+	+
	Access to bus stops	Acceptable	Desirable						
	Access to cycle paths	Acceptable	Acceptable						
	Access to open spaces and sports centres	Acceptable	Desirable						
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable						
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum						
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?	0/0?	0/0?			
SA12 Potential exposure to flood risk	Potential exposure to flood risk	High	High	-?	-?	-?			
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/-?	0/-?	0/-?			
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?			
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/--	--?/--	--?/--			
	Potential for harm to agricultural land	High	High						

Commentary on SA objectives

SA1: Create safe environments which improve quality of life and community cohesion

- 3.628 Consideration of the effects in relation to this SA objective is divided between the anticipated effects on existing communities and those on the new communities that will be formed as a result of development. Commentary on these two matters is set out below.

Effects on existing communities

- 3.629 The site is comprised almost entirely of agricultural land with sparsely distributed residential development and can therefore be considered a dispersed rural community. Settlements within 5km include Colchester, Wivenhoe, Elmstead Market, Ardleigh, Rowhedge, Great Bromley, Alresford and High Park Corner. Colchester, Wivenhoe, Elmstead Market and Alresford are large enough to offer a local, district or town centre as defined in the Tendring and Colchester Section 2 Local Plans. The location of surrounding settlements relative to the site, and the scale of these is set out in the site context above.
- 3.630 If the site (ALTGC10) was developed, it is likely that the provision of such a large scale development in close proximity to existing small scale communities in the area would result in significant adverse effects. Potential effects resulting from development can be separated into those associated with the construction stage, which are likely to be temporary effects, and those that are likely to occur after development has been completed. For the former, these effects are likely to include increased traffic, light pollution, noise and vibration impacts from construction activities. For the latter, the effects are likely to also include increased traffic, light/noise/air pollution as well as significant disruption to the existing landscape character due to urbanisation of the area.
- 3.631 For at the end of the plan period (ALTGC10b) and for both site capacity options (ALTGC10a and ALTGC10c), there are multiple settlements within 5km where the housing quantities proposed amount to over 10% of their overall housing stock. It is considered likely that, due to the scale of the proposed site compared to the existing surrounding settlements, impacts will generally be negatively perceived by the existing communities. As such, uncertain significant negative effects (--?) are expected in relation to this objective. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effects on the new community

- 3.632 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 3.633 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (ALTGC10a/b/c).
- 3.634 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.635 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at all site capacities (ALTGC10a/b/c).

- 3.636 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.637 The site form for ALTGC10 indicates that the development at 2,000 and 4,000 dwelling capacity is likely to be viable and will be able to support the delivery of 30% affordable housing. However it also sets out that development at 4,000 dwellings (ALTGC10c) is likely to require external funding or another mechanism to improve scheme viability, in order to deliver requisite infrastructure and policy compliant affordable housing, this largely relates to the cost of RTS. This results in uncertainty for this development scale as the external funding / improvement to viability has not yet occurred. The site information form sets out that at 2,000 dwelling capacity (ALTGC10a), no external funding or other improvement in site viability is required. It is assumed that all of this would also apply to a site capacity of 2,500 dwellings (ALTGC10b) given it is a similar scale to 2,000 dwellings.
- 3.638 In light of the above, this site is considered likely to deliver housing which is safe and accessible, as well as policy compliant affordable housing. This is considered likely to result in significant positive effects in relation to all potential dwelling capacity options. In particular, dwelling capacity options ALTGC10a (2,000 dwellings) and ALTGC10b (2,500 dwellings) are considered to result in significant positive (++) effects. Dwelling capacity option ALTGC10c (4,500 dwellings) is considered to result in significant positive yet uncertain (++?) effects as the requisite scheme funding / viability improvements have not yet occurred.

SA3: Improve health/reduce health inequalities

- 3.639 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.640 The vast majority of the site is greenfield apart from some sparsely distributed residential development, one major road and smaller local roads. The nearest GP surgeries (measured from the centre of the site) are The Hawthorn Surgery, which is around 1.8km east, and the University of Essex Medical Centre, which is located around 1.3km to the south. There are further healthcare facilities available within 5km, a number of which are located within Colchester Town to the west. The Stage 1a assessment found that the majority of the site (>60%) of the site is within an 'unacceptable' walking distance of GP surgeries and health centres.
- 3.641 The site contains two areas of public open space within its boundaries and also adjoins multiple cycle routes on its southern and western boundaries. Furthermore, the site contains several PROW that can provide access to the surrounding countryside. It is considered that the existing open space and cycle routes within and adjoining the site are likely to offer recreational opportunities to potential residents of the site.
- 3.642 In accordance with the site information form, this site is expected to be delivered in a way that provides for more sustainable transport, prioritisation of walking/cycling and use of public transport over private car use. It is assumed that this will include provision of foot and cycle ways throughout the development and provision of public open space also. The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in at least minor positive (+) effects in relation to this SA objective at the end of the plan period (ALTGC10b) and when fully built out at both capacity options (ALTGC10a and ALTGC10c).
- 3.643 As the site is rural, access to existing GP surgeries is fairly limited. For the lower capacity option (ALTGC10a – 2,000 dwellings) and at the end of the plan period (ALTGC10c 2,500 dwellings), it is unlikely that the sites will be large enough to support new healthcare facilities. In accordance with the assumptions framework, the high capacity site option (ALTGC10c 4,500 dwellings) is of a sufficient size to support a new Primary Care Spoke. As such, significant positive effects (++) are expected in relation to this SA objective for the higher capacity option rather than the minor positive (+) effects that are expected for the low capacity option and the end of the plan period.

Exposure to noise pollution

- 3.644 The Stage 1a assessment found that around 17% of the site is at high risk from exposure to noise pollution. As 5-25% of the site area falls within a DEFRA strategic noise area of $L_{night} \geq 55.0dB$ or $L_{aeq} 16 \geq 60.0dB$, minor negative effects (-) are expected in accordance with the assumptions framework. The source of the noise pollution is the A133, which passes through the southern half the site. This effect applies for the site at all capacity options (ALTGC10a/b/c).
- 3.645 Overall, mixed positive and negative effects are therefore expected in relation to this SA objective, as set out in the scoring table.

SA4: To ensure and improve the vitality & viability of centres

- 3.646 In accordance with the assessment assumptions and confirmed by the site information form, the site at all scales will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and therefore minor positive effects (+) are expected in relation to this SA objective, at all potential dwelling capacities (ALTGC10a/b/c).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.647 The relationship to existing centres is described in the commentary for SA objective 4 above. There are also existing employment areas surrounding the site, which may not be within local or town centres, but also have the potential to provide jobs to residents at the site. The nearest employment areas to the site are located to the south-west and west, with the closest being a science park 'Colchester Knowledge Gateway', adjacent to the boundary at the University of Essex campus. The Stage 1a assessment found that only around 24% of the site is within a 'desirable' walking distance of centres of employment and therefore the majority of the site is not within an 'acceptable' distance of centres of employment.
- 3.648 It is expected that the development of the site at all potential scales (ALTGC10a/b/c) will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in minor positive effects (+) in relation to this SA objective.
- 3.649 The site information form indicates that there will be no employment land provision within the development at all capacity options, resulting in no increase to the minor positive effects expected.
- 3.650 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.651 The site contains three Local Wildlife Sites within its boundaries, which includes Salary Brook on the full length of the western boundary of the site. The Stage 1a assessment found that around 11% of the site's area intersects with Local Wildlife Sites. The site also contains several areas of two types of priority habitat within its boundaries (coastal and floodplain grazing marsh and deciduous woodland). Additionally, there are further biodiversity assets within 400m of the site boundaries, which include a Local Wildlife Site to the immediate south and a large area of Ancient Woodland to the immediate north (Churn Wood). The entire site falls within impact risk zones (IRZ) for residential development of 100 units or more.
- 3.652 Development of the site may result in adverse impacts to these local designations and habitats. The effects on these natural environment assets could include total or partial loss, reduced quality resulting from pollution, increased disturbance to wildlife and predation by pets. As such, uncertain significant negative effects (--?) are expected in relation to this SA objective due to over 5% of the site intersecting with Local Wildlife Sites. These effects apply to the site at the end

of the plan period (ALTGC10b) and for both site capacity options (ALTGC10a and ALTGC10c). The effects are uncertain as the development proposal may include mitigation to reduce or overcome negative effects. Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.653 The site is almost entirely greenfield and therefore it is rural in character. The relationship of the site to existing local centres is described above in the commentary for SA objective 4. The accessibility of the site to surrounding facilities would, prior to the provision of any new transport infrastructure, be primarily dependant on the A133 in the southern half of the site. As set out in the Tendring Infrastructure Delivery Plan⁵⁰, it is expected that there will be a requirement to introduce new link roads between the A133 and the A120 further to the north to support development projected in the area. The area to the east of the Colchester is largely rural, which means there is heavy reliance on private cars. Development of the site would contribute to increased pressure on the already burdened transport network. The nearest railway station is Hythe, which is located around 2.2km to the west of the site's centre and connects the main London-Ipswich line at Colchester. There are bus routes on Colchester Road in the southern half of the site that operate on approximately a 15-30min service providing access into Colchester Town centre.
- 3.654 Overall, a mixed score to reflect the effects in relation to shorter journeys and longer journeys is anticipated as follows.
- Shorter journeys*
- 3.655 In accordance with the assumptions framework and confirmed by the site information form, it is assumed that this site will provide new primary and secondary school capacity in accordance with the developer contributions guidance from Essex County Council⁵¹. Evidence from Essex County Council⁵² indicates that there is likely to be limited capacity at Primary Schools in the Colchester north and rural northeast area (-58 reception places forecast in 2028-29) and therefore it is likely that new primary schools will be required to serve the site at all capacity options. Additionally, the same evidence indicates that in 2028-29, there will be -359 Year 7 secondary places in the Colchester town area. Given a secondary pupil factor of 0.2 pupils per house, increased secondary provision will be necessary for the end of the plan period (ALTGC10b) and for both site capacity options (ALTGC10a and ALTGC10c). The Stage 1a assessment found that the majority of the site is not within an 'acceptable' walking distance of primary or secondary schools.
- 3.656 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within the site to meet its needs. It is likely that this infrastructure will be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements both by the end of the plan period (ALTGC10b) and when built out to both site capacity options (ALTGC10a and ALTGC10c).
- 3.657 As such, opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site. However uncertainty in relation to infrastructure provision results from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.
- 3.658 At the end of the plan period, a development scale of 2,500 dwellings (ALTGC10b) is considered likely to have provided a new primary school onsite, developer contributions to expand existing secondary schools, local centre facilities, open space and bus services to accommodate its needs. However it is anticipated that it will still be necessary to travel to destinations outside the site to

⁵⁰ Tendring Infrastructure Delivery Plan Report, May 2017, available from: https://www.tendringdc.gov.uk/sites/default/files/documents/planning/Planning_Policy/TDC_006%20Infrastructure%20Delivery%20Plan%20May%202017.pdf

⁵¹ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from: <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

⁵² Essex School Organisation Service – 10 Year Plan 2019-2028, available from: <https://www.essex.gov.uk/Education-Schools/Schools/Delivering-Education-Essex/School-Organisation-Planning/Documents/10-year-plan-Essex-schools-places.pdf>

access primary healthcare facilities and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall it is considered likely that the provision of some local services and facilities by the end of the plan period is likely to result in minor positive yet uncertain (+?) effects in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

- 3.659 For the lower site capacity option (ALTGC10a - 2,000 dwellings), uncertain minor positive effects (+?) are also expected, as this capacity is likely to provide a similar level of local services and facilities onsite as ALTGC10b. In the case of the higher site capacity option (ALTGC10c - 4,500 dwellings), the site is considered to be of sufficient size to support the development of a new secondary school onsite, which will help to reduce the need for private car trips outside of the site. However, there is no increase in the minor positive effects expected as the site is not within an 'acceptable' walking distance of employment sites and the site information form indicates that employment land will not be supplied onsite as part of development.

Longer Journeys

- 3.660 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.661 The majority of the site (approximately 65%) is within an 'unacceptable' distance to the nearest rail station (Hythe), which is over 2km from the site centre. Although Hythe is the closest station, the majority of commuters are likely to be directed to Colchester due to its connection to the Great Eastern Mainline. The distance of these stations from the site is likely to reduce the potential for trips by rail and increase reliance on private car use for external journeys. In relation to the potential for external trips, a review of commuter behaviour in the area has been undertaken. The site is split between two MSOAs, with Colchester 017 in the western half and Tendring 005 in the eastern half of the site. According to NOMIS, the largest proportion (22.5%) of people from the Colchester 017 MSOA commute within the Colchester 017 MSOA and the second largest proportion (14.4%) of people commute to the Colchester 007 MSOA, which is Colchester Town Centre. Similar commuting patterns are apparent in the Tendring 005 MSOA where the largest proportion (11.4%) of people commute within the MSOA and the second largest proportion (10.4%) also commute to Colchester 007. As such, if new residents follow the same commuting patterns, most journeys are likely to be carried by local roads and the A133. These are relatively short trips and it is unlikely these trips would be taken by rail as the nearest railway station is over 2km from the centre of the site. As such, uncertain minor negative effects (-?) are expected for the end of the plan period (ALTGC10b) and for both site capacity options in relation to this SA objective (ALTGC10a and ALTGC10c). The effects are uncertain due to the difficulties present in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters into Colchester.
- 3.662 Overall, mixed minor uncertain effects (+?/-?) are expected in relation to this SA objective.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.663 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable locations are not repeated here.
- 3.664 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site specific information provided by the NEAs, this site is to be supported by the following infrastructure at the following dwelling capacities:

3.665 ALTGC10a (2,000 dwellings) and also assumed to apply to ALTGC10b given that it is a similar scale (maximum 2,500 dwellings at the end of the plan period):

- Early Years
- Primary School(s)
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces

3.666 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.667 ALTGC10c (4,500 dwellings):

- RTS links to Colchester
- Early Years
- Primary School(s)
- Secondary School
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces

3.668 The site information form sets out that the site can viably deliver these infrastructure requirements with external funding from transport operating companies. Alternatively, viability improvements to the scheme via another mechanism could also potentially provide sufficient viability.

3.669 The supporting infrastructure listed above is confirmed to be viable (on the site information form) and therefore it is anticipated to be delivered at an appropriate phase, resulting in uncertain minor positive effects (+?) for all dwellings capacity options (ALTGC10a/b/c). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the detail of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is noted in relation to site capacity option ALTGC10c (4,500 dwellings) as the site information form sets out that external funding is required (or another mechanism, to improve scheme viability) to deliver the rapid transport system.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.670 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

3.671 The site does not contain any Listed Buildings, Registered Parks and gardens, Conservation Areas or Scheduled Monuments within its boundaries. However, the site does contain Greenstead Mill in its western half, which is a Colchester archaeology asset. Heritage assets within 500m of the site boundary include Wivenhoe Park (a Registered Park and Garden); Wivenhoe House, a Grade II* listed building around 250m to the south with three associated Grade II listed buildings, and other Grade II listed buildings and locally designated assets. Additionally, there are multiple heritage assets within 1km of the site, which includes two Colchester Conservation Areas around 600m to

the west and 800m to the south-west, the former of which contains a high concentration of listed buildings. The Stage 1a assessment found that around 33% of the site is within 500m of heritage assets.

- 3.672 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.
- 3.673 Taking a precautionary approach to this assessment, uncertain significant negative effects (--?) are anticipated both at the end of the plan period (ALTGC10b) and for the two site capacity options (ALTGC10a and ALTGC10c) in relation to this SA objective due to the potential for development to cause disruption to these historic environment assets, particularly those located within 500m or those onsite. The uncertainty present in these anticipated effects is present as the details of any mitigation strategies are to be finalised in further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.674 With regards to townscape, the boundary of the site is within 500m of Colchester and Wivenhoe. It is considered that Colchester is of a sufficient size to assume that development at the site will not have significant effects on the existing townscape. However, in the case of Wivenhoe, it is possible that development of the site at all capacities (ALTGC10a/b/c) may result in significant changes to the existing townscape. As such, uncertain effects (?) are expected as it is not clear at this stage whether the changes to townscape will be positive or negative as this will depend on the quality of the design of the new development.
- 3.675 Overall, the site is expected to have mixed uncertain significant negative and uncertain effects (-- ?/?) in relation to this SA objective at all site capacity options (ALTGC10a/b/c).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.676 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.677 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner that considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. Therefore minor positive (+) effects are anticipated in relation to this SA objective at all site capacity options (ALTGC10a/b/c).

SA11: To improve water quality and address water scarcity and sewerage capacity

Water quality

- 3.678 The site is entirely outside source protection zones and therefore it is not considered likely that the development of the site will affect groundwater resources. As such, negligible effects (0) are expected in relation to groundwater for all site capacity options (ALTGC10a/b/c).

Water scarcity and water treatment

- 3.679 With regard to water supply, the Tendring Water Cycle Study⁵³ and the Colchester Water Cycle Study⁵⁴ have identified that there is likely to be adequate water for water supply companies to cater to growth over the plan period. However, the studies are based on assumptions of growth from 'preferred development allocations' within Tendring and Colchester's Local Plans. This includes NEAGC3, a strategic site allocated in the Section 1 Local Plan which was considered in the Colchester Water Cycle Study and Tendring Water Cycle Study for combined growth of 2,900 dwellings during the plan period (1,650 dwellings in Colchester and 1,250 dwellings in Tendring). Due to the similar location of NEAGC3 and ALTGC10, these water cycle studies can be considered

⁵³ <https://www.tendringdc.gov.uk/sites/default/files/Tendring%20Water%20Cycle%20Study%20-%20Final%20Report%20Sept%202017.pdf>

⁵⁴ https://www.braintree.gov.uk/downloads/file/6983/cbc0048_colchester_borough_council_water_cycle_study_final_report

a suitable evidence base to use, but there is some uncertainty as growth at ALTGC10 was not assessed as part of the study.

- 3.680 The Integrated Water Management Strategy (IWMS)⁵⁵, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume that the proposed growth at ALTGC10 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (ALTGC10a/b/c) in relation to water scarcity.
- 3.681 With regard to water treatment, it is reasonable to assume that, as ALTGC10 is in a similar location to NEAGC3, it would also be served by the Colchester Water Recycling Centre (WRC). The WCS sets out that it will be feasible for the existing Colchester WRC to serve the NEAGC3 site within the current limits of conventional treatment and therefore uncertain negligible effects (0?) are anticipated in relation to this for ALTGC10a (2,000 dwellings) and ALTGC10b (2,500 dwellings) as these potential dwelling capacity is within the level of growth assessed with the water cycle study for the end of the plan period. Additionally, the IWMS indicates that the Colchester WRC will be able to cater growth beyond the extent of the plan period. As such, uncertain negligible effects (0?) are also expected for the higher potential dwelling capacity (ALTGC10c) in relation to water treatment. The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application and because the WCS did not specifically assess the effect of growth at ALTGC10.
- 3.682 Overall, mixed negligible and uncertain negligible effects (0/0?) are expected in relation to this SA objective for all potential dwelling capacities (ALTGC10a/b/c).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.683 Due to the presence of Salary Brook along the full length of the western boundary of the site, between 5-25% of the site is located within Flood Zone 3 and is therefore at high risk from flooding. There are also small areas of land in close proximity to Salary Brook at risk from surface flooding, but these amount to less than 5% of the site's overall area. The site does not contain any land at high risk from groundwater flooding. There is around 0.2% of the site at medium risk from groundwater flooding, but this is not expected to make a significant contribution to flood risk within the site. It is expected that all strategic sites would be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.684 As such, uncertain minor negative effects (-?) are expected in relation to this SA objective for the end of the plan period (ALTGC10b) and at both site capacity options (ALTGC10a and ALTGC10c).

SA13: To improve air quality

- 3.685 As set out in the assumptions framework, assessment against this SA objective relates to two elements – intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on this is provided below.

Intersection with AQMAs

- 3.686 The site does not intersect with any AQMAs and therefore negligible effects (0) are expected.

Potential contribution to road traffic within area suffering from air pollution

- 3.687 The site is split between two MSOAs, with the western half located within Colchester 017 and the eastern half located within Tendring 005. For the Colchester 017 MSOA, the largest proportion of commuter trips are within the MSOA itself. However, the second largest proportion of commuter trips from Colchester 017 are to Colchester 007, which is Colchester Town Centre. For the Tendring 005 MSOA, the largest proportion of commuter trips are also within the MSOA itself.

⁵⁵ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

However, the second largest proportion of commuter trips are also to Colchester 007. Colchester 007 (Colchester Town Centre) contains two AQMAs. If residents follow the same commuting patterns, there is potential for development of the site to result in increased vehicular trips through these AQMAs. As such, uncertain minor negative effects (-?) are expected for the end of the plan period (ALTGC10b) and at both site capacity options (ALTGC10a and ALTGC10c) in relation to this SA objective. The effects are uncertain as it is not clear exactly how and where people will travel at this stage.

SA14: To conserve and enhance the quality of landscapes

- 3.688 The site is not located near any designated landscapes or proposed extensions to these.
- 3.689 Bromley Heath LCA has been assessed by landscape officers of the NEAs, and is considered to be of moderate strength landscape character and highly sensitive to visual intrusion due to wide views. Wivenhoe Farmland Plateau LCA has been assessed and is considered to be of moderate landscape character and highly sensitive to large new development in the open landscape on the plateau. Ardleigh Valley System LCA has also been assessed and is considered to be of moderate landscape character and highly sensitive to large new development, especially in the Roman River valley and slopes and in open landscapes on the plateau.
- 3.690 As a result of this, and in line with the stated assumptions, uncertain significant negative effects (--?) are expected in relation to this SA objective at all site capacity options (ALTGC10a/b/c). There is uncertainty present in the anticipated effects as these impacts will depend on the particular design of the development proposals that come forward, including the massing, layout and height of buildings, the building materials used and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits

- 3.691 Consideration of effects against this SA objective relates to two separate factors, which are mineral resources and the quality of agricultural land. This results in two components to the SA score.

Mineral resources

- 3.692 Approximately 75% of the site is located in a Minerals Safeguarding Area (Sand and Gravel, Glacial Deposits), which means that development of this site would result in a significant sterilisation of mineral resources if these were not extracted before development. While it is recognised that the site at the end of the plan period (and at the lower site capacity option) will involve less development compared to the final built out capacity of 4,500 dwellings, the location of this within the site boundary is not known and effects are considered to be therefore be as potentially significant as the fully built out development. As such, due to the potential for loss of mineral resources, uncertain significant negative effects (--?) are expected in relation to this SA objective for the end of the plan period (ALTGC10b) and at both site capacity options (ALTGC10a and ALTGC10c). The effects are uncertain as there may be potential to extract some or all of the mineral resources before development, depending on factors such as site layout and phasing of housing delivery.

High quality agricultural land

- 3.693 Approximately 60% of the site is located on Grade 1 agricultural land, which means that development of the site would result in the loss of a significant amount of high quality agricultural land. Therefore, significant negative effects (--) are expected in relation to this SA objective for the end of the plan period (ALTGC10b) and at both site capacity options (ALTGC10a and ALTGC10c). The remaining land located in the western half of the site is Grade 3 agricultural land.
- 3.694 Whilst it is recognised that the site at the end of the plan period (or at the lower capacity option) will involve less development than the potential final capacity of 4,500 dwellings (and therefore potentially a lesser effect), the phasing / location of the development within the site boundary is not known and effects are considered to therefore be as potentially significant as the fully built capacity option.

Summary of significant effects

3.695 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by infrastructure or other mitigation practices, which are yet to be designated in detail and / or implemented.

Effects when fully built out at capacity ALTGC10a – 2,000 dwellings and ALTGC10b 2,500 dwellings (max at end of plan period):

3.696 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to the potential for the site to provide development in line with Garden City Principles and include provision of a youth centre and community meeting facilities; and
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures and safe accessible housing.

3.697 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA6 Biodiversity and geological diversity, due to the fact that there are several designated sites and BAP priority habitats within and immediately adjacent to the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby heritage assets;
- SA14 Landscape, due to the high sensitivity of the landscape to development; and
- SA15 Soil and mineral resources, due to the site being located within a mineral safeguarding area; and loss of Grade 1 or 2 agricultural land.

3.698 In summary, development at this scale (ALTGC10a – 2,000 dwellings and ALTGC10b – 2,500 dwellings) is able to provide a sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered to be likely to be able to support a range of services and facilities within the site, including youth centre and community meeting places provision. However, at this scale, the site is not likely to be large enough to provide higher order services such as a secondary school or healthcare facilities onsite. As such, there is potential for development of this capacity to result in more travel outside of the site compared to a higher capacity development.

3.699 The site is large and is therefore likely to significantly impact on the existing community, the character of the area and the landscape context. There are both negative and positive effects that may arise in relation to these factors, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. However, compared to the larger capacity option (ALTGC10c – 4,500 dwellings), it is expected that these effects will be less extreme, but benefits may be reduced in terms of new services and facilities.

3.700 Significant negative effects have been identified in relation to natural and historic environment assets in the area. There is potential for development at this scale to result in reduced effects on these sensitive receptors due to the opportunity to provide greater physical separation within the site between them and development.

Effects when fully built out at capacity ALTGC10c (4,500 dwellings):

3.701 The potential for significant positive effects at this capacity arises due to:

- SA1 Community cohesion, due to the potential for development to provide development in line with Garden City Principles and include provision of a youth centre and community meeting facilities;
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures and safe accessible housing; and
- SA3 Health, as development of this scale should be able to support new health facilities, as well as open spaces and opportunities for active travel.

3.702 The potential for significant negative effects arises at this scale due to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA6 Biodiversity and geological diversity, due to the fact that there are several designated sites and BAP priority habitats within and immediately adjacent to the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby heritage assets;
- SA14 Landscape, due to the high sensitivity of the landscape to development; and
- SA15 Soil and mineral resources, due to the site being located within a mineral safeguarding area; and loss of Grade 1 or 2 agricultural land.

3.703 In summary development at this scale (ALTGC10c – 4,500 dwellings) is able to offer a significant amount of services, including healthcare facilities, primary and secondary schools. Sustainable travel is more likely at this development capacity due to the potential to provide a healthcare centre and secondary school onsite, which may contribute to the development becoming a settlement in its own right. However, congestion has been identified as an issue on the A133 and development of this scale will increase pressure on this road significantly. There is also the potential for there to be high dependence on private car trips within the new development due to the distance from railway stations.

3.704 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.

3.705 Development of this site is likely to affect a number of other sensitive receptors which are present either within the site or very near to it, including biodiversity assets, heritage assets, high quality agricultural land, and mineral resources – it is important to note that effects in relation to these are likely simply because these form the site context, however delivering a high dwelling capacity within a fixed site boundary may make it more difficult to mitigate the potential impacts.

ALTGC11 – Langham Garden Village

Site Context

- 3.706 Site ALTGC11 is a strategic site located to the north of Colchester. It was promoted for inclusion in the submitted Section 1 Local Plan as Langham Garden Village. The site is located within the Colchester Borough, with the border of Tendring District adjacent to the eastern boundary. The potential scale of development from this site is up to approximately 5,000 dwellings once fully built. There are three small allocations in the Colchester Local Plan located adjacent to the northern boundary of the site in Langham, which are Land at Wick Road (10 dwellings) and two sites at Land at School Road (70 dwellings). However, the sites do not make a significant difference to potential cumulative effects with ALTGC11, should it come forward.
- 3.707 The entirety of the site (347ha) is located on arable land with small local roads distributed throughout the site. There is an existing residential area to the south, which the boundaries of the site surround and the northern boundary of the site is also adjacent to existing residential development. The nearest settlements to the site (measuring from the site boundary to the nearest edge of settlements) include Colchester, which the site is 250m away from to the south on the other side of the A12 road and is a settlement of approximately 58,651 dwellings and includes a policy defined town centre, district centre and local centres; Ardleigh, which is located 2.5km to the east of the site and is settlement of 917 dwellings but with no policy defined local centre; Langham, which is adjacent to the northern boundary of the site and contains 430 dwellings but does not contain a policy defined local centre; Great Horkeley, which is located around 2.2km to the west and is a settlement of around 1,060 dwellings with no policy defined local centre. Other strategic settlements nearby include Clacton-on-Sea 15km to the southeast, Braintree 25km to the west, Ipswich 18km to the northeast, Sudbury 20km to the northwest, and Chelmsford 34km to the southwest.
- 3.708 The A12 runs adjacent to the eastern and southern boundaries of the site, connecting the area to Colchester Town and settlements to the north, as well as also connecting to the A120, providing access to settlements to the east in the Tendring District. Land within the site is connected by several local roads but it is not currently well served by services and facilities. The majority of the site is over 5km from Colchester town centre. The nearest railway station is Colchester, which is located around 5km south of the site (measured from the centre of the site) and connects to the main London-Ipswich line.
- 3.709 There are no significant residential, employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundaries.
- 3.710 There are allocated Mineral Extraction Sites in the Essex Minerals Local Plan located 1km and 2.8km to the south east of the site boundaries (Wick Farm and Martell's Quarry).

SA objective	Criterion	ALTGC11	ALTGC11	ALTGC11	ALTGC11	ALTGC11
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	5000
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++?
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Desirable	+/-	+/-	++/-

SA objective	Criterion	ALTGC11	ALTGC11	ALTGC11	ALTGC11	ALTGC11
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	5000
	Access to cycle paths	Preferred Maximum	Preferred Maximum			
	Access to open spaces and sports centres	Preferred Maximum	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Potential for harm to Source Protection Zones (SPZs)	Low	Low			
	Potential exposure to flood risk	Low	Low			
	Potential exposure to air pollution	Low	Low			
	Potential exposure to noise pollution from roads and railways	High	High			
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
	Access to centres of employment including employment areas and town centres	Desirable	Desirable			
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	-?	-?	-?
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium			
	Potential for harm to PHI or local BAP habitat	Low	Low			
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?/-?	++?/-?	++?/-?
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Desirable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable			
	Access to bus stops	Preferred Maximum	Desirable			

SA objective	Criterion	ALTGC11	ALTGC11	ALTGC11	ALTGC11	ALTGC11
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	5000
	Access to cycle paths	Preferred Maximum	Preferred Maximum			
	Access to open spaces and sports centres	Preferred Maximum	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Desirable	Desirable			
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?	+?	+?
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Desirable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable			
	Access to bus stops	Preferred Maximum	Desirable			
	Access to cycle paths	Preferred Maximum	Preferred Maximum			
	Access to open spaces and sports centres	Preferred Maximum	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Desirable	Desirable			
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Desirable	+	+	+
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Desirable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			

SA objective	Criterion	ALTGC11	ALTGC11	ALTGC11	ALTGC11	ALTGC11
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	5000
	Access to railway stations	Unacceptable	Unacceptable			
	Access to bus stops	Preferred Maximum	Desirable			
	Access to cycle paths	Preferred Maximum	Preferred Maximum			
	Access to open spaces and sports centres	Preferred Maximum	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Desirable	Desirable			
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?	0/0?	0/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/-?	0/-?	0/-?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Medium	Medium	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/--	--?/--	--?/--
	Potential for harm to agricultural land	High	High			

Commentary on SA objectives

SA1: Create safe environments which improve quality of life and community cohesion

3.711 Consideration of the effects in relation to this SA objective is divided between the anticipated effects on existing communities and those on the new communities that will be formed as a result of development. Commentary on these two matters is set out below.

Effects on existing communities

3.712 The site is comprised of almost entirely greenfield land, with a few local roads distributed throughout the site and therefore be considered a dispersed rural community. Settlements within 5km include Colchester, Great Horkeley, Ardleigh and Langham. Colchester is large enough to offer local, district and a town centre as defined in the Colchester Section 2 Local Plans. Further

information about the location and scale of the surrounding settlements is included in the site context above.

- 3.713 If development came forward at ALTGC11, it is likely that the provision of such a large scale development in close proximity to existing small scale communities in the area would result in significant adverse effects. Potential effects resulting from development can be separated into those associated with the construction stage, which are likely to be temporary effects, and those that are likely to occur after development has been completed. For the former, these effects are likely to include increased traffic, light pollution, noise and vibration impacts from construction activities. For the latter, the effects are likely to also include increased traffic, light/noise/air pollution as well as significant disruption to the existing landscape character due to urbanisation of the area.
- 3.714 There are multiple settlements within 5km of the site where the housing quantities proposed for the end of the plan period (ALTGC11b – 2,500 dwellings) and at both full site capacity options (ALTGC11a – 2,000 dwellings and ALTGC11c – 5,000 dwellings) amount to over 10% of their overall housing stock. It is considered likely that, due to the scale of the proposed site compared to the existing surrounding settlements, impacts will generally be negatively perceived by the existing communities. As such, uncertain significant negative effects (--?) are expected in relation to this objective. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effects on new community

- 3.715 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 3.716 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (ALTGC11a/b/c).
- 3.717 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.718 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period (ALTGC11b) and when fully built out for ALTGC11a (2,000 dwellings) and ALTGC11c (5,000 dwellings).
- 3.719 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.720 The site form for ALTGC11 indicates that the development at all capacities is likely to be viable and will be able to support the delivery of 30% affordable housing. However, for a dwelling capacity ALTGC11c 5,000 dwellings, this viability would be dependent on external funding from transport operating companies for the Rapid Transit System (RTS) link (or other improvement in site viability). This results in uncertainty for this development scale as the external funding / improvement to viability has not yet occurred. The site information form sets out that at 2,000 dwelling capacity (ALTGC11a), no external funding or other improvement in site viability is required. It is assumed that all of this would also apply to a site capacity of 2,500 dwellings (ALTGC11b) given it is a similar scale to 2,000 dwellings. In light of the above, this site is

considered likely to deliver housing which is safe and accessible, as well as policy compliant affordable housing. This is considered likely to result in significant positive effects in relation to all potential dwelling capacity options. Therefore options ALTGC11a (2,000 dwellings) and ALTGC11b (2,500 dwellings) are considered to result in significant positive (++) effects. Site capacity ALTGC11c (5,000 dwellings) is considered likely to result in significant positive yet uncertain (++) effects due to the requirement for improved scheme viability.

SA3: Improve health/reduce health inequalities

- 3.721 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives.

Access to health and recreation facilities

- 3.722 The entirety of the site is greenfield apart from a few small local roads distributed throughout the site. The nearest GP surgery (measured from the centre of the site) is the Bluebell surgery located around 2.4km to the south of the site. There are further healthcare facilities also within 5km, which are located to the south in Colchester. The Stage 1a assessment found that the entirety of the site is not within an 'acceptable' walking distance of GP surgeries and health centres.
- 3.723 The site does not contain any areas of public open space within its boundaries. There are school recreation grounds located to the immediate north of the site and there is a playing field around 600m to the south in Colchester. The Stage 1a assessment found that around 30% of the site is within an 'acceptable' walking distance of open space. There is a cycle route that runs along the western boundary of the site and connects to multiple cycle routes to the south in Colchester. The Stage 1a assessment found that around 35% of the site is within an 'acceptable' walking distance of cycle routes. There are also multiple PROW located within the site boundaries that connect the area to the surrounding countryside. It is considered that cycle routes adjoining the site are likely to provide recreational opportunities to potential residents of the site.
- 3.724 In accordance with the site information form, this site is expected to be delivered in a way that provides for more sustainable transport, prioritisation of walking/cycling and use of public transport over private car use. It is assumed that this will include provision of foot and cycle ways throughout the development and provision of public and open space also. The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to this SA objective at the end of the plan period (ALTGC11b) and at both site capacity options (ALTGC11a and ALTGC11c).
- 3.725 The rural location of the site means that access to existing GP surgeries is currently fairly limited. For the end of the plan period (ALTGC11b) and for the lower site capacity option (ALTGC11a), it is considered unlikely that the sites will be large enough to support new healthcare facilities onsite, resulting in no alteration to the minor positive score.
- 3.726 For the higher capacity site option (ALTGC11c), it is assumed that the site is of a sufficient size (>4,500 dwellings) to provide a new Primary Care Spoke as part of the development. As such, significant positive effects (++) are expected in relation to this objective due to the potential for enhanced access to healthcare onsite.

Exposure to noise pollution

- 3.727 The Stage 1a assessment found that around 9% of the site is at high risk from exposure to noise pollution. As such, as there is between 5-25% of land within the site that falls within a DEFRA strategic noise area of $L_{night} \geq 55.0\text{dB}$, minor negative effects (-) are expected in accordance with the assumptions framework. The source of the noise pollution is the A12, which is adjacent to the eastern and southern boundaries of the site. These effects are expected for the site at the end of the plan period (ALTGC11b) and at both site capacity options (ALTGC11a and ALTGC11c).
- 3.728 Overall, mixed positive and negative effects are expected in relation to this SA objective, as set out in the table above.

SA4: To ensure and improve the vitality & viability of centres

- 3.729 In accordance with the assessment assumptions and confirmed by the site information form, it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to this SA objective, at all potential dwelling scales (ALTGC11a/b/c).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.730 The relationship to existing centres is described in the commentary for SA objective 4 above. There are also existing employment areas surrounding the site, which may not be within local or town centres, but also have the potential to provide jobs to residents at the site. The Stage 1a assessment found that approximately 97% of the site is within an 'acceptable' or 'desirable' walking distance of employment centres at Langham Airfield (near the site centre) and Severalls Park (south of the A12).
- 3.731 In accordance with the information provided by the NEAs, it is anticipated that the site will not include employment provision onsite as part of development. However, despite there being no new employment land provision, it is expected that delivery of the site will result in residents at the new development becoming a valuable resource for employers in the area and the wider surrounding area. It is also considered the development itself will result in temporary benefits to the economy through employment trades and jobs relating to suppliers and related services.
- 3.732 As such, minor positive effects (+) are expected in relation to this SA objective for the end of the plan period (ALTGC11b) and for both site capacity options (ALTGC11a and ALTGC11c) as they have the potential to increase the local workforce, providing greater resources for local businesses and organisations.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.733 The site does not contain any natural environment designations within its boundaries. However, there are multiple designations within 400m, including a Local Wildlife Site enclosed by the southern boundaries of the site (Kiln Wood), a Local Wildlife Site around 230m to the south west of the site, a Local Wildlife Site to the immediate east of the site, multiple areas of Ancient Woodland and multiple areas of Priority Habitat (Deciduous Woodland). The effects on these natural environment assets could include total or partial loss, reduced quality resulting from pollution, increased disturbance to wildlife and predation by pets. The closest SSSI is just under 1km to the south east (Bullock Wood) and the entire site falls within impact risk zones (IRZ) for residential developments of 100 units or more associated with Bullock Wood SSSI.
- 3.734 As such, uncertain minor negative effects (-?) are expected at all site capacities (ALTGC11a/b/c). The effects are uncertain as the development proposal may include mitigation to reduce or overcome negative effects. Reference should be made to the separate HRA for the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.735 The vast majority of the site is greenfield and therefore it can be considered rural in character. The relationship of the site to surrounding facilities would, prior to provision of any transport infrastructure, be primarily dependent on the A12 to the immediate east of the eastern boundary and adjacent to the southern boundary. As set out in the Colchester Infrastructure Plan⁵⁶, the A12, which is a strategic road for the area, operates at capacity in peak periods and, as a result,

⁵⁶ Colchester Infrastructure Delivery Plan Report, October 2017, available from: https://www.braintree.gov.uk/downloads/file/6992/cbc0006_colchester_infrastructure_delivery_plan_final_report_%E2%80%93_updated_october_2017

provides an unreliable level of service. As the area is largely rural, there is heavy reliance on private cars and development at the site will contribute to increased pressure on the already burdened transport network. The nearest railway station is Colchester, which is located approximately 4.9km south of the site's centre point and connects to the main London-Ipswich line at Colchester. Langham, located at the northern boundary of the site is served by the 81 bus, which is an hourly service into the centre of Colchester Town.

- 3.736 Overall a mixed score to reflect the effects in relation to short and longer journeys is anticipated as follows.

Shorter Journeys

- 3.737 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops/routes and open space facilities will be provided within the site to meet its needs. With the exception of primary healthcare facilities (assumed not to be provided until 4,500 dwellings have been built), it is likely that this infrastructure will be provided in phases in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements both by the end of the plan period (ALTGC11b) and for both site capacity options (ALTGC11a and ALTGC11c). It is assumed that all sites will provide contributions to new primary and secondary capacity in accordance with guidance from Essex County Council⁵⁷. Evidence from Essex County Council⁵⁸ indicates that there is likely to be limited capacity at primary schools in the Colchester north and rural north and rural north-east area (-58 reception places forecast in 2028-29) and therefore it is likely that new primary schools will be required to serve the site at all capacity options. At all site capacity options (ALTGC11a/b/c), it is considered likely that the site will be of a sufficient size to provide a new primary school onsite, addressing the lack of existing provision within 'desirable' or 'acceptable' walking distance (Stage 1a found that only 5% of the site is within these distances of a primary school). It is likely that these services and facilities would serve both new residents and the existing community within the development site.
- 3.738 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at all potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities and further / higher education facilities, and most likely higher order services and employment. It is possible that these journeys could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall it is considered likely that the provision of the aforementioned local services and facilities is likely to result in minor positive yet uncertain (+?) effects for all dwelling capacities (ALTGC11a/b/c). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. It is notable that sites over 4,500 dwellings in size are anticipated to provide new health centre facilities, however this is not considered likely to change the effect from minor positive in relation to this SA objective.
- 3.739 Further to the considerations above, in accordance with the assumptions framework, it is assumed that all strategic sites will be required to provide additional secondary school capacity in accordance with the developer contributions guidance from Essex County Council. Additionally, the Essex County Council⁵⁹ report indicates that in 2028-29, there will be -359 year 7 secondary places in the Colchester town area. Given a secondary school pupil factor of 0.2 pupils per house, increased secondary provision will be necessary at all site capacities (ALTGC11a/b/c). Stage 1a of the assessment found that the majority of the site is not within an 'acceptable' walking distance of a secondary school but in the case of the higher capacity site option (ALTGC11c), the site is considered to be of a sufficient size (>4,500 dwellings) to be able to support a new secondary school onsite. Pro-rata provision is also assumed by the end of the plan period (ALTGC11b). For

⁵⁷ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from: The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from:

<https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

⁵⁸ Essex School Organisation Service – 10 Year Plan 2019-2028, available from: <https://www.essex.gov.uk/Education-Schools/Schools/Delivering-Education-Essex/School-Organisation-Planning/Documents/10-year-plan-Essex-schools-places.pdf>

⁵⁹ Essex School Organisation Service – 10 Year Plan 2019-2028, available from: <https://www.essex.gov.uk/Education-Schools/Schools/Delivering-Education-Essex/School-Organisation-Planning/Documents/10-year-plan-Essex-schools-places.pdf>

the smaller fully built option, ALTGC11a, it is assumed that contributions would be made to provision of additional, offsite secondary school capacity.

- 3.740 In relation to access to employment, no employment land is proposed to be provided onsite. However, the Stage 1a assessment found that the majority (approximately 97%) of the site is within 'desirable' or 'acceptable' walking distance of a centre of employment. This, combined with the delivery of a new secondary school in the site is likely to create significant opportunities for sustainable travel within the site, resulting in anticipated significant positive yet uncertain (++?) effects for ALTGC11b/c. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer Journeys

- 3.741 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.742 The nearest railway station to the site Colchester, approximately 4.9km south of the site's centre point and therefore this is likely to reduce the potential for trips by rail, which may result in increased reliance on private car use and increased congestion for external journeys. In terms of the potential for external trips, a review of commuter behaviour in the area has been undertaken. The site is located in the Colchester 001 MSOA. According to NOMIS, the largest proportion (11%) of commuter trips are within the MSOA itself and the second largest proportion (10.9%) of commuter trips are to Colchester 007, which is Colchester Town Centre. As such, if new residents follow the same commuting pattern, most journeys are likely to be carried by local roads and the A12. These are relatively short trips and it is unlikely these trips would be taken by rail due to the distance to the nearest railway station. As such, uncertain minor negative (-?) effects are expected at all site capacity options (ALTGC11a/b/c) in relation to this SA objective. Uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters into Colchester.
- 3.743 Overall, a mixture of positive and negative effects is expected in relation to this SA objective, as set out in the table above.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.744 This SA objective contains elements that also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable locations are not repeated here.
- 3.745 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and/ or provide environmental mitigation. According to site specific information provided by the NEAs, this site is to be supported by the following infrastructure at the following dwelling capacities.
- 3.746 ALTGC11a (2,000 dwellings) and also assumed to apply to ALTGC11b given that it is a similar scale (maximum 2,500 dwellings at the end of the plan period):
- Early Years
 - Primary School(s)
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Community meeting spaces

- 3.747 The site information form sets out that the site can viably deliver these infrastructure requirements.
- 3.748 ALTGC11c (5,000 dwellings):
- RTS links to Colchester
 - Early Years
 - Primary School(s)
 - Secondary School
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Community meeting spaces
- 3.749 The site information form sets out that the site can viably deliver these infrastructure requirements with external funding from transport operating companies. Alternatively, viability improvements to the scheme via another mechanism could also potentially provide sufficient viability.
- 3.750 This infrastructure is anticipated to be delivered by the development at an appropriate phase, (with the exception of primary healthcare facilities, as explained under SA objective 7), resulting in uncertain minor positive effects (+?) at all site capacities (ALTGC11a/b/c). Uncertainty in relation to infrastructure provision results from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. It is noted that the site information form for ALTGC11 indicates that RTS links for the ALTGC11c capacity (5,000 dwellings) will require external funding from transport operating companies (or other scheme viability improvement), which also contributes to uncertainty in the expected effects.

SA9: To conserve and enhance historic and cultural heritage, assets and townscape character

- 3.751 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 3.752 There are two Grade II listed buildings located within the northern half of the site (Langham Oak Cottage and Park Lane Farmhouse) and there are multiple Grade II listed buildings adjacent to the western, northern and eastern boundaries. There are multiple further Grade II listed buildings located within 500m of the site boundaries. The Stage 1a assessment found that almost 80% of the site is within 500m of heritage assets.
- 3.753 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.
- 3.754 Taking a precautionary approach to this assessment, uncertain significant negative effects (--?) are anticipated both at all capacity options (ALTGC11a/b/c) in relation to this SA objective due to the potential for development to cause disruption to these historic environment assets. The uncertainty present in these anticipated effects is present as the details of any mitigation strategies are to be finalised in further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.755 Langham, a settlement of around 570 dwellings, is located to the immediate north of the site boundaries. As such, there is potential for the development to have a significant effect on the

existing townscape of the settlement at all site capacity options (ALTGC11a/b/c). Uncertain (?) effects are expected as whether this effect will be positive or negative will depend on the quality of design of the new development.

- 3.756 Overall, mixed significant negative with uncertainty and uncertain effects (--?/?) are expected in relation to this SA objective.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.757 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.758 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities (ALTGC11a/b/c/) is likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 3.759 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 3.760 The site is entirely outside source protection zones, and as such it is not considered likely that the development of the site will affect groundwater resources and therefore negligible effects (0) are anticipated in relation to groundwater for all potential dwelling capacity options (ALTGC11a/b/c).

Water scarcity and water treatment

- 3.761 With regard to water supply, the Colchester Water Cycle Study⁶⁰ identified that there is likely to be adequate water for water supply to cater to growth in the area that was planned in 2017 up to the end of the plan period. The study is based on assumptions of growth from 'preferred development allocations' within Colchester's Local Plans. The WCS for Colchester assumes planned growth of 16,144 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that site ALTGC11 was not allocated in the Section 1 Local Plan, and as such was not taken into account in the either WCS. As such, the results of this study should be interpreted with caution in relation to this site.
- 3.762 The Integrated Water Management Strategy (IWMS)⁶¹, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume that the proposed growth at ALTGC11 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (ALTGC11a/b/c) in relation to water scarcity.
- 3.763 In regard to waste water treatment, it is assumed that the site would be served by the Langham Water Recycling Centre. The Colchester WCS identified that the Langham WRC is already exceeding its current flow permit and therefore it does not have the capacity under its current

⁶⁰ https://www.braintree.gov.uk/downloads/file/6983/cbc0048_colchester_borough_council_water_cycle_study_final_report

⁶¹ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

permit to accommodate for additional wastewater flow from the planned growth. However, the study also indicates that the necessary upgrades to the WRC should be feasible and therefore, uncertain negligible effects (0?) are expected for potential dwelling capacities ALTGC11a (2,000 dwellings) and ALTGC11b (2,500 dwellings). The uncertainty arises in the expected effects as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application and due to the fact that the WCS did not assess the specific growth of ALTGC11 during the plan period.

- 3.764 For the high potential dwelling capacity option (ALTGC11c – 5,000 dwellings), uncertain effects (?) are expected as the WCS has not assessed growth beyond the end of the plan period.
- 3.765 Overall, mixed negligible and uncertain negligible effects (0/0?) are expected in relation to this SA objective for the potential dwelling capacity options up to the end of the plan period (ALTGC11a/b). For the higher potential dwelling capacity option (ALTGC11c), the effects are expected to be mixed negligible and uncertain (0/?) in relation to this SA objective.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.766 Although the site contains a river there is no land located within Flood Zone 2 or 3 adjacent to this within the site boundary. The site does contain some areas at risk from surface water flooding but these amount to less than 5% of the of the site's area. The site does not contain any areas at high risk from groundwater flooding. It is also anticipated that all strategic sites would be developed in a manner so as to be flood resilient and provide for sustainable urban drainage.
- 3.767 Therefore, negligible effects (0) are expected in relation to this SA objective at all site capacity options (ALTGC11a/b/c).

SA13: To improve air quality

- 3.768 As set out in the assumptions framework, assessment against this SA objective relates to two elements – intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on this is provided below.

Intersection with AQMAs

- 3.769 The site does not intersect with any AQMAs and therefore negligible effects (0) are expected.

Potential contribution to road traffic within areas suffering from air pollution

- 3.770 The site is located in the Colchester 001 MSOA, which consists of the rural area to the north of Colchester Town. According to NOMIS, the largest proportion (11%) of commuter trips from Colchester 001 are within the MSOA itself. However, the second largest proportion (10.9%) of commuter trips are to Colchester 007, which is Colchester Town Centre. Colchester 007 contains two AQMAs and therefore if residents follow the same commuting patterns, there is potential for development of the site to result in increased vehicular trips through these AQMAs. As such, uncertain minor negative (-?) are expected at all site capacity options (ALTGC11a/b/c) in relation to this SA objective. The uncertainty arises as it is not clear exactly how and where people will travel at this stage.

SA14: To conserve and enhance the quality of landscapes

- 3.771 The northern boundary of the site is located adjacent to Stour Vale Study Area, which is a proposed extension to Dedham Vale AONB located 600m north and north-east of the site boundaries. The site is located on the Langham Farmland Plateau, which has been assessed by landscape officers from the NEAs. It is considered to be of moderate strength landscape character and development related issues for the LCA include pressure for built development and pressure on lane network. The area is assessed as highly sensitive to visual intrusion due to wide views. As a result of this landscape assessment, and in line with the stated assumptions, uncertain significant negative effects (--?) are expected in relation to this SA objective for all site capacity options (ALTGC11a/b/c). There is uncertainty present in the expected effects as these impacts will depend on the particular design of the development proposals that come forward, including the massing, layout and height of buildings, the building materials used and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits

3.772 Consideration of effects against this SA objective relates to two separate factors, which are mineral resources and the quality of agricultural land. This results in two components to the SA score.

Mineral resources

3.773 Over 80% of the land within the site boundaries is located within a Mineral Safeguarding Area for Sand and Gravel (Glacial Deposits), which means that development of the site would result in sterilisation of a significant amount of mineral resources if these were not extracted before development. While it is recognised that the site at the end of the plan period (ALTGC11b) and at the lower site capacity option (ALTGC11a) will involve less development compared to the final built out capacity of 5,000 dwellings, the location of this within the site boundary is not known and effects are considered to be therefore as potentially significant as the fully built out development. As such, due to the potential for loss of mineral resources, uncertain significant negative effects (--?) are expected for all site capacity options (ALTGC11a/b/c) in relation to this SA objective. The effects are uncertain as there may be potential to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery.

High quality agricultural land

3.774 Approximately 90% of land within the site is Grade 2 agricultural land, with the remaining land in the south of the site Grade 4 agricultural land. Development of the site would therefore result in the loss of high quality agricultural land and significant negative effects (--) are expected in relation to this SA objective for all site capacity options (ALTGC11a/b/c).

3.775 Whilst it is recognised that the site at the lower capacity option (ALTGC11a) and at the end of the plan period (ALTGC11b) will involve less development than the potential final capacity of 5,000 dwellings (and therefore potentially a lesser effect), the phasing / location of the development within the site boundary is not known and effects are considered to therefore be as potentially significant as the fully built capacity option.

Summary of significant effects

3.776 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by infrastructure or other mitigation practices, which are yet to be designated in detail and / or implemented.

Effects when fully built out at capacity ALTGC11a – 2,000 dwellings and ALTGC11b – 2,500 dwellings (max at the end of the plan period):

3.777 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to the potential for development to provide development in line with Garden City Principles and include provision of a youth centre and community meeting facilities; and
- SA2 Housing Provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing.

3.778 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape due to the Grade II listed buildings within and close to the site;
- SA14 Landscape due to the high sensitivity of the Langham Farmland Plateau LCA and the site's location adjacent to the proposed extension to Dedham Vale AONB; and
- SA15 Soil and mineral resources, due to the site being located within a mineral safeguarding area; and loss of Grade 1 or 2 agricultural land

3.779 In summary, the site at this scale is likely to be able to provide a sufficient amount of affordable housing and an appropriate tenure mix. It is also considered that the site will be likely to support

a range of services and facilities to support residents and workers within the site. However, the smaller fully built option (ALTGC11a) is not likely to be of a sufficient size (>4,500 dwellings) to support a secondary school or healthcare centre onsite, although phased secondary school provision by the end of the plan period may be possible for ALTGC11b. As such, development in this location at 2,000 or 2,500 dwellings is likely to result in an increase in less sustainable travel among residents due to there being a need to access services and facilities outside of the site.

- 3.780 The site is large and therefore its delivery is likely to have significant impacts on the existing community in the area, which may result in changes to landscape character and context. This may result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. Whilst these effects may be reduced at the lower capacity option compared to ALTGC11c, there is likely to be less benefit in terms of new services and facilities within the site.
- 3.781 Significant negative effects have been identified in relation to the historic environment, mineral deposits and high quality agricultural land. This scale of development may result in reduced effects on these sensitive receptors compared to the larger dwelling capacity option (ALTGC11b).

Effects when fully built out at capacity ALTGC11c – 5,000 dwellings:

- 3.782 Significant positive effects are expected in relation to:
- SA1 Community cohesion, due to the potential to provide community cohesion within the new development through Garden City Principles and the provision of a youth centre and community meeting facilities;
 - SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
 - SA3 Health, as development of this scale should be able to support new health facilities, as well as open spaces and opportunities for active travel; and
 - SA7 Sustainable travel, as a significant level of services and facilities are anticipated to come forward as part of the site, reducing the need to travel.
- 3.783 The potential for significant negative effect arises at this scale in relation to:
- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
 - SA9 Historic environment and townscape due to due to the Grade II listed buildings within and close to the site;
 - SA14 Landscape due to the high sensitivity of the Langham Farmland Plateau LCA and the site's location adjacent to the proposed extension to Dedham Vale AONB; and
 - SA15 Soil and mineral resources, due to the site being located within a mineral safeguarding area; and loss of Grade 1 or 2 agricultural land.
- 3.784 In summary, the fully built site at this capacity (5,000 dwellings) is likely to result in development that can support a significant number of services, including healthcare facilities and primary and secondary schools and opportunities for employment. Due to the potential for increased provision of services and facilities onsite, there is likely to be less need to for trips using private cars outside of the site. However, there is greater potential at this site capacity for significant additional pressure on the A120, which is likely to result in increased congestion along these routes.
- 3.785 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.
- 3.786 Significant negative effects have been identified in relation to the historic environment, mineral deposits and high quality agricultural land. This scale of development may result in increased effects on these sensitive receptors compared to the lower dwelling capacity options (ALTGC11a and ALTGC11b).

C1 - CAUSE Alresford

Site Context

- 3.787 Site C1 (CAUSE Alresford) is a 119-hectare site that is one of four sites that make up the proposed 'Metro Plan'. All of these sites are focused around nodes along the Colchester-Clacton railway line, which links Colchester with coastal settlements – in this case the station of Alresford, the third stop travelling east out of Colchester. The site lies entirely within Tendring BC; however the border with Colchester BC lies approximately 500m to the west of the site boundary.
- 3.788 The site was not allocated in the draft Section 1 Local Plan drawn up by the NEA but was instead proposed as an alternative location for growth by the Campaign Against Urban Sprawl in Essex (CAUSE). The potential scale of development from this site is for either 700 dwellings (lower end capacity), 2,000 dwellings (middle capacity) or 2,500 dwellings (higher end capacity) and it is estimated that the full quantum of development could be delivered within the Plan Period (up to 2033). Site C1 'wraps around' the existing village of Alresford and currently consists of the arable land and blocks of woodland, as well as a cluster of lakes used for fishing in the north west.
- 3.789 Aside from the village of Alresford itself (approximately 935 existing dwellings), the nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are: Wivenhoe (3,560 existing dwellings), around 1.2km to the west; Thorrington (918 existing dwellings), around 2km to the south east; Elmstead Market (877 existing dwellings), around 2km to the north; Frating (approximately 236 existing dwellings), around 2.2km to the north east; Rowhedge (1,037 existing dwellings), around 2.2 km to the west; Great Bentley (1,053 existing dwellings), around 3.2km to the east; Fingringhoe (334 existing dwellings), around 3.3km to the west; and Great Bromley (approximately 422 existing dwellings), around 4km to the north.
- 3.790 Nearby local centres, as defined by the Section 2 Local Plans, are located in: Alresford Village Centre, which lies at the centre of the site; Vine Parade, Wivenhoe; Elmstead Market; and Great Bentley.
- 3.791 The nearest policy-defined towns are Brightlingsea (which lies at the mouth of the River Colne, approximately 4.3 km to the south) and Colchester (which lies approximately 6.5km to the north west). In addition, there is a policy-defined Rural District Centre in Wivenhoe (approximately 2.6 km to the west).
- 3.792 Aside from the employment generated within local and town centres, there are a number of nearby major employment sites. These include a cluster of sites located on the fringes of Colchester approximately 5-6km to the north west (Whitehall Road Industrial Estate, B&Q Lightship Way, former Paxman's site, and sites around Hythe station etc.) as well as the University of Essex 'Knowledge Gateway' site (a research and technology park on the edge of the campus), which lies approximately 4.6 km to the north west. To the south, the Morses Lane and Shipyard Estate employment sites in Brightlingsea are approximately 3.9km and 5.6km from the site respectively. The Plough Centre employment site is in Great Bentley, approx. 4.7 km to the west, and the Frating Employment area lies approximately 3.5km to the north east.
- 3.793 Further afield, other strategic settlements and destinations include Clacton-on-Sea (approximately 12km to the south east) and the major international port at Harwich, which lies around 20km to the north east. The University of Essex Colchester Campus lies approximately 3-3.5km north west of the site at Wivenhoe Park.
- 3.794 For public transport connections, Alresford station lies on the Colchester-Clacton railway line, providing connections by rail to Clacton-on-Sea (a roughly 25 minutes journey, with a service running every 30 minutes) and to Colchester (a roughly 12 minute journey on an hourly service). From Colchester, passengers can transfer and reach central London stations in roughly one hour. There are three existing level crossings within the site – on Church Road, Coach Road, and the B1027.
- 3.795 For road-based connections, the B1027 runs through the north-eastern portion of the site and links the site with Colchester (to the north west) and the coastal town of Clacton-on-Sea (to the south east). The B1029 branches off the B1027 to link the site to Brightlingsea to the south.
- 3.796 Three sites around the edges of Alresford and adjacent to the inner boundary of site C1 have already been granted planning permission by Tendring DC: 'Land South of Cockaynes Lane' (145

dwellings),⁶² 'Land North of Cockaynes Lane' (84 dwellings)⁶³, and 'St Andrews Close' (45 dwellings).⁶⁴ To the west, Colchester's draft Section 2 Local Plan has allocated 250 dwellings to be built in the nearby settlement of Wivenhoe by 2033. There are also clusters of sites that have been granted planning permission around the fringes of the nearby settlements of Elmstead, Thorrington and Great Bentley.

3.797 The site overlaps in its northern portion, with an allocated mineral extraction site ('Sunnymead, Elmstead & Heath Farms', Alresford).

SA objective	Criterion	C1	C1	C1	C1	C1
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/+	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++
SA3 Improve health	Access to GP surgeries/ health centres	Acceptable	Acceptable	++/0	++/0	++/0
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Desirable	Desirable			
	Potential for harm to Source Protection Zones (SPZs)	Low	Low			
	Potential exposure to flood risk	Low	Low			
	Potential exposure to air pollution	Low	Low			
	Potential exposure to noise pollution from roads and railways	Low	Low			
SA4 Ensure and improve viability of centres	Access to local centres	Preferred Maximum	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
SA5 Achieve a prosperous,	Access to local centres	Preferred Maximum	Desirable	+	+	+

⁶² Planning reference: 14/01823/OUT

⁶³ Planning reference: 18/00367/FUL

⁶⁴ Planning reference: 17/00658/DETAIL

SA objective	Criterion	C1	C1	C1	C1	C1
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
sustainable economy	Access to town centres	Unacceptable	Unacceptable			
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable			
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium			
	Potential for harm to locally designated wildlife sites and ancient woodland	High	High	--?	--?	--?
	Potential for harm to PHI or local BAP habitat	Medium	Medium			
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Acceptable	Acceptable			
	Access to primary or middle schools	Acceptable	Desirable			
	Access to secondary schools	Unacceptable	Unacceptable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Preferred Maximum	Desirable			
	Access to town centres	Unacceptable	Unacceptable	+?/+++	+?/+++	+?/+++
	Access to railway stations	Desirable	Desirable			
	Access to bus stops	Acceptable	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Desirable	Desirable			
	Access to centres of employment including	Unacceptable	Unacceptable			

SA objective	Criterion	C1	C1	C1	C1	C1			
		Stage 1a	Stage 1b	A	B	C			
		N/A	N/A	700	2000	2500			
	employment areas and town centres								
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Acceptable	Acceptable						
	Access to primary or middle schools	Acceptable	Desirable						
	Access to secondary schools	Unacceptable	Unacceptable						
	Access to further and higher education facilities	Unacceptable	Unacceptable						
	Access to local centres	Preferred Maximum	Desirable						
	Access to town centres	Unacceptable	Unacceptable						
	Access to railway stations	Desirable	Desirable				+	+	+
	Access to bus stops	Acceptable	Desirable						
	Access to cycle paths	Unacceptable	Unacceptable						
	Access to open spaces and sports centres	Acceptable	Desirable						
	Access to Public Rights of Way (PRoW)	Desirable	Desirable						
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable						
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?			
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Acceptable	Acceptable						
	Access to primary or middle schools	Acceptable	Desirable						
	Access to secondary schools	Unacceptable	Unacceptable				+	+	+
	Access to further and higher education facilities	Unacceptable	Unacceptable						

SA objective	Criterion	C1	C1	C1	C1	C1
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
	<i>Access to local centres</i>	Preferred Maximum	Desirable			
	<i>Access to town centres</i>	Unacceptable	Unacceptable			
	<i>Access to railway stations</i>	Desirable	Desirable			
	<i>Access to bus stops</i>	Acceptable	Desirable			
	<i>Access to cycle paths</i>	Unacceptable	Unacceptable			
	<i>Access to open spaces and sports centres</i>	Acceptable	Desirable			
	<i>Access to Public Rights of Way (PRoW)</i>	Desirable	Desirable			
	<i>Access to centres of employment including employment areas and town centres</i>	Unacceptable	Unacceptable			
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/?	0/?	0/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/0	0/0	0/0
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/--	--?/--	--?/--
	Potential for harm to agricultural land	High	High			

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.798 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 1 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.799 This site with final capacity for 700 to 2,500 dwellings is small in scale relative to many of the other site options considered by the SA. However, development at this site (at any scale) would significantly expand the edges of the existing settlement of Alresford (approximately 935 existing dwellings). Even at the smallest capacity option C1a (700 dwellings), this site would imply an increase of over 70% in the size of Alresford, while the larger scale option C1b (2,500 dwellings) would increase the size of Alresford by three. Other nearby settlements likely to be affected by the expansion include Wivenhoe, Brightlingsea, Thorrington, Great Bentley and Elmstead Market. However it is the existing developed areas within Alresford which will be subject to the most significant degree of change.

3.800 Development of this site would result in a significant change to the existing settlement at Alresford and to surrounding settlements. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context.

3.801 There are multiple settlements within 5km of the site where the housing quantities proposed (C1a – 700, C1b – 2,500 and C1c – 2,500 dwellings) amount to over 10% of their overall housing stock. It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements that impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all potential capacities (C1a/b/c) is anticipated to result in significant negative yet uncertain (--?) effects in relation to the effect on existing communities. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

3.802 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities (C1a/b/c). It is considered that this will help to foster a sense of community. As set out in the site information form, the site is expected to be able to provide both youth centre facilities and community meeting places at C1b (2,000 dwellings) and C1c (2,500 dwellings). These are considered likely to bring forward enhanced community cohesion, resulting in significant positive effects (++)). However, whilst the site is likely to be able to deliver general community meeting places at C1a (700 dwellings), it is not likely it will be able to deliver a new youth centre at this potential dwelling capacity. Therefore, the effects at this potential dwelling capacity are expected to be minor positive (+).

3.803 In accordance with the above commentary, overall anticipated effects on SA objective 1 will be mixed uncertain significant negative and minor positive for C1a (--?/+). For C1b and C1c, the effects in relation to this SA objective are expected to be mixed uncertain significant negative and significant positive (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

3.804 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out at all dwelling capacity options.

- 3.805 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.806 The site information form sets out that development at any of the proposed dwelling capacities (C1a/b/c) is likely to be viable, which includes the delivery of 30% affordable housing. External funding is not required to deliver policy compliant development or strategic infrastructure. As a result, significant positive (++) effects are anticipated in relation to SA objective 2 at both potential dwelling scales.

SA3: Improve health/reduce health inequalities

- 3.807 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.808 The settlement of Alresford is served by an existing GP practice (the Coach Road Surgery), which is identified as being within 'acceptable' walking distance of the site. There are additional facilities provided with a radius of 5km at nearby settlements of Elmstead, Wivenhoe, Elmstead Market, and Great Bentley. The most accessible hospital for the site is the Essex County Hospital in central Colchester (roughly 8.1km from the centre of the site and accessible by rail). The Oaktree Manor hospital, which specialises in mental health services, lies 7.6km to the north east.
- 3.809 Within the site boundary, there is an existing recreation ground (containing a designated play area) in the south-west corner and one semi-natural green space to the north west (Cockaynes Wood). Within the existing settlement of Alresford, there is a further small allotment site (Alresford Allotments). Roughly 500m from the site boundary to the north east there is a woodland area (Captains Wood) and further afield there are a number of substantial natural and semi-natural green spaces in the neighbouring settlement of Wivenhoe (accessible by rail) – they include Broad Lane Sports Ground, King George V Playing Field, Wivenhoe Park and Wivenhoe Wood alongside the River Colne.
- 3.810 The site is not currently integrated with any national or local cycle networks. The nearest branch of the national/local cycle network terminates approximately 900m to the north of the site boundary at Englishes Farm. If this connection were to be extended to Alresford, the route (Route 51 of the National Cycle Network) would provide a (mostly off-road) cycle link into Colchester via Wivenhoe, and an on-road cycling link north/east toward Harwich via Elmstead Market.
- 3.811 A number of public rights of way (PROW) around the edges of the site provide links to the surrounding countryside that residents of the new development would be able use for recreational purposes. However it is not considered that these PROW in themselves will make a significant contribution to recreation and the promotion of more healthy lifestyles.
- 3.812 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritises walking, cycling and use of public transport over private car use, includes foot and cycle ways throughout the development and provides open space within the development. It should be considered that the railway infrastructure bisecting the site may present a challenge in overcoming severance problems when providing for an integrated network of active transport routes; however it is recognised that two level crossings are already provided within the village (on Station Road and Coach Road). Further, the nature of the site boundary (consisting of a 'walk shed' around the rail station) limits the impact of this severance.
- 3.813 Overall, the delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to access to health and recreation, both at the end of the plan period and when fully built at both capacity options.
- 3.814 In terms of accessing healthcare, the site is located within an 'acceptable' walking distance (401-800m) from an existing GP surgery (see Stage 1 assessment scores). As a result, significant

positive (++) rather than minor positive (+) effects are anticipated in relation to access to health and recreation facilities for all capacity options (C1a/b/c).

Exposure to noise pollution

- 3.815 None of the site falls within a DEFRA strategic noise area of $L_{night} \geq 55.0$ dB, or $L_{aeq, 16} \geq 60.0$ dB or a DEFRA strategic noise area of $L_{night} 50.0-54.9$ dB, or $L_{aeq, 16} 55.0-59.9$ dB. As such, in accordance with the assumptions framework, the anticipated effects in relation to exposure to noise pollution are anticipated to be negligible (0) when fully built at all capacity options.
- 3.816 As such, the anticipated overall effects on SA objective 3, when fully built at all capacity options (C1a/b/c), will be mixed (++/0).

SA4: To ensure and improve the vitality & viability of centres

- 3.817 In accordance with the assumptions framework for all strategic sites at all scales and as confirmed by the site information form it is considered that development will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases, and that new facilities would complement rather than cannibalise existing local centres. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive (+) effects in relation to SA objective 4, at both potential dwelling scales.
- 3.818 As such, for all fully built site options (C1a/b/c), it is anticipated that suitable local centre facilities will be provided, resulting in minor positive (+) effects.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.819 The relationship of the site to existing centres is described in the site context above. There are also existing employment areas surrounding the site, which provide for jobs which may not be within local or town centres. These include a cluster of sites (and a new University of Essex 'Knowledge Gateway') on the fringes of Colchester, the Morses Lane and Shipyard estates in Brightlingsea, the Plough Centre in Great Bentley, and the Frating Employment Area.
- 3.820 It is anticipated that the development of the site at all potential scales (from 700 to 2,500 dwellings) will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.
- 3.821 In addition, the site information form states that 6.5% of the site is allowed for employment land, totalling an estimated 7.7 hectares on this site. In line with the assumptions framework this is not considered to be of a large enough scale to make a significant contribution to the local economy and as a result there is no upgrade to the minor positive (+) effects identified, for either capacity option.
- 3.822 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.823 The site intersects with three designated local wildlife sites (LWS), two of which are brownfield sites as a legacy of the area's quarrying history:
- the Villa Farm Quarry in the west of the site (a brownfield site and disused sand and gravel pit with ponds grassland, scrub and an area of ancient woodland);
 - the Alresford Lodge Pits in the south west (a brownfield site and disused gravel pit made up of ponds, areas of reed, woodland, scrub and accompanying grassland); and
 - Crestland Wood in the south (a block of ancient woodland).

- 3.824 In addition, the site is within 400m of a further four LWSs: parts of Oldhall Wood (ancient replanted woodland); Tenpenny Farm Wood (woodland and hedges); parts of Alresford Grange (trees and shrubs); the edges of Hockley Farm Woods (small woods and hedges); and a small-scale site at St. Peter's Church (grassland around derelict church). The large-scale Colne Estuary SSSI/SPA/Ramsar lies approximately 550m from the site boundary to the south and west and the site falls within associated IRZs for residential development of 100 units or more, highlighting the potential for impacts on the interest features of the SSSI and/or the interest features of the co-located European sites. In total, approximately 40% of the site area lies within 400m of a designated site.
- 3.825 As such, development of this site may result in impacts to these local designations and habitats. It is anticipated that effects on the existing habitats may be significant and negative, and may result from amongst other things, the total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure and predation by pets.
- 3.826 In total, approximately 14% of the site area overlaps with locally designated protected areas, and a further 68% lies within 400m of a locally designated site. As such a significant negative yet uncertain (---?) effect is anticipated in relation to this SA objective when fully built at all capacity options (C1a/b/c). The uncertainty reflects the fact that the development proposals may include mitigation to reduce or overcome negative effects.
- 3.827 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.828 The CAUSE Alresford site is focussed around Alresford railway station on the Colchester-Clacton line, providing links to Colchester (in roughly 12 minutes) and Clacton-on-Sea (a roughly 20-25 minute journey). It is also served by the B1027 which provides road links north west to Colchester and south to Clacton-on-Sea (with the B1029 branch providing links to the town of Brightlingsea). The relationship of the site to other existing local centres is described above in site context. More generally for the district, the Tendring Infrastructure Delivery Plan (IDP, para 6.1)⁶⁵ notes that the movement of people into urban Colchester is significantly road-based (para 6.1), and the road network across Tendring is over capacity in peak periods (para 6.4).
- 3.829 Bus services leave the site approximately every 10-20 minutes during peak hours from stops along Wivenhoe Road – routes travel to Brightlingsea (approximately 20 minute journey south); to Wivenhoe/University of Essex campus (approximately 10-15 minute journey); and further to central Colchester (30-40 minutes journey). A further bus service leaves infrequently from a stop on Station Road and appears to mainly transport school children.
- 3.830 There is an existing primary school within the site at Alresford village – Alresford Primary School. The next nearest primary schools are located in Wivenhoe (approximately 1.9km to the west), Rowhedge (3.8km to the west), and Great Bentley (4.5km to the east). The nearest secondary schools to the site are the Colne Community School in Brightlingsea (approximately 4.2km from the centre of the site); the Colchester Academy (approximately 6.1km away); and the Thomas Lord Audley School and Language College (approximately 6.7km away).
- 3.831 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.832 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council⁶⁶ sets out that the significant increase in demand for school places across Essex is predicted to continue and that Alresford Primary School (current capacity 147) has limited capacity (-58 in 2028/29). Given an assumption of 0.3 primary

⁶⁵ https://www.braintree.gov.uk/downloads/file/6958/tdc023_tendring_infrastructure_delivery_plan_report_october_2017

⁶⁶ Essex School Organisation Service – 10 Year Plan 2019-2028.

pupils per dwelling, the smallest capacity option C1a (700 dwellings) will generate demand for 600 new primary places, and the larger capacity option C1b (2,500 dwellings) will generate demand for 210 new primary places. As such, it is considered likely that new primary school(s) will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (C1a/b/c). These services and facilities would serve both new residents and the existing community within the development site.

- 3.833 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at both potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site to further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure/infrastructure upgrades are provided but this is not assumed in the site assessment. The potential effects of rail upgrades are considered in the appraisal of the CAUSE Metro Plan spatial strategy rather than the appraisals of individual strategic sites. Overall it is considered likely that the provision of the local services and facilities mentioned above is likely to result in minor positive yet uncertain (+?) effects for all dwelling capacities (C1a/b/c). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.
- 3.834 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to provide secondary school facilities in accordance with the developer contributions guidance from Essex County Council⁶⁷. In relation to this, the Essex County Council evidence⁶⁸ sets out that in 2028-29 (the final year of the forecast in this schools capacity document) Colne Community School (current capacity 1,488) will have a -35 pupil capacity. The Colchester Academy is in an area with more limited capacity (a forecast of -359 across the area by 2028/29). Given a secondary pupil factor of 0.2 pupils per dwelling, it is projected that the site would generate demand for between 140 and 500 secondary pupils, depending on the proposed capacity option. This would require some offsite secondary school expansion in order to absorb the new demand. However this site alone (at any of the final capacity options) is not of sufficient scale to deliver a new secondary school, as all capacities are below the 4,500 dwelling threshold for new secondary facilities set out in the assumptions framework. This means that residents would need to make use of existing secondary schools in nearby settlements (in Brightlingsea and Colchester), which may result in longer journeys and increased car dependence.
- 3.835 As set out above, it is considered that the site at any capacity option would not be able to support within the site either 10 hectares or more of employment land, or a new secondary school. As such, in line with the assumptions framework, there is no change to the minor significant positive yet uncertain (+?) effects anticipated in relation to shorter journeys, at any capacity option (C1a/b/c)). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 3.836 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.

⁶⁷ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

⁶⁸ Essex School Organisation Service – 10 Year Plan 2019-2028.

- 3.837 For journeys to more distant destinations, the proximity to the railway station in Alresford village provides good potential for trips by rail, which generates opportunities to decrease car use and limit congestion for external journeys.
- 3.838 In terms of potential for external trips, a review of the commuter behaviour of the current community has been undertaken. The site lies almost entirely within the Tendring 009 middle super output area (MSOA). According to NOMIS (based on 2011 census data), the most popular employment destinations for residents of this area: the local area i.e. Alresford, Great Bentley and the Frating employment area (roughly 14%); central Colchester (11%); Wivenhoe, including the University of Essex campus (roughly 5%); and north Colchester, including the Severalls Park employment zone (roughly 5%). Commuters into both Wivenhoe and central Colchester are well served by rail lines, providing an opportunity for sustainable transport modes. However commuters to the north of Colchester are more likely to use the road network, as are those commuting within the local area.
- 3.839 If the new residents follow the same pattern, commuting journeys are likely to be carried by a combination of rail journeys (capacity allowing) and some road journeys. Given the strong accessibility of railway stations from the site, and because the site information form provided finds that work to increase the frequency of service on the Colchester to Clacton/Walton branch line is viable for all capacity options, significant positive effects (++?) are considered likely when the site is fully built for all proposed site capacities (C1a/b/c). The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters to the most popular commuting destinations.
- 3.840 As such the anticipated overall effects on SA objective 7, when fully built at all capacity options (C1a/b/c) will be mixed but broadly positive with uncertainty (+?/++?).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.841 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.
- 3.842 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form, this site is to be supported by the following local and strategic infrastructure at a dwelling capacity of 2,000 dwellings (C1b). This is also assumed to be the case for C1c (2,500 dwellings), given its similar scale, and for C1a (700 dwellings), given the site information form's assessment of a similar 500 dwellings capacity, which is to be supported by the same infrastructural elements:
- Early Years
 - Primary School(s)
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Community meeting spaces
 - Increased frequency of trains utilising the Colchester to Clacton/Walton branch line
- 3.843 The site information form sets out that the site can viably deliver these infrastructure requirements.
- 3.844 The supporting infrastructure listed above is confirmed to be viable by the site information form and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for SA objective 8 for all dwelling capacity options (C1a/b/c). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be

finalised through further work including the preparation, submission and determination of a planning application.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 3.845 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 3.846 The site overlaps a Grade II listed building (the 'Milestone On Western Verge Approximately 100 Metres South East Of Junction With Cockaynes Lane'). One Scheduled Monument (Remains of St Peter's Church) lies less than 100m south of the site boundary, and further grade II listed buildings are present in Alresford village and in the 0-500m and 500-1,000 buffers surrounding the site. There is also a Grade II* listed building within 500-1,000m of the site boundary. In total, approximately 82% of the site area falls within 500m of a heritage asset, and a further 18% lies between 500m and 1km from an asset.
- 3.847 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.
- 3.848 It is assumed that no site will necessarily result in physical alteration of the designated heritage assets outlined above, however it is considered that development in the surrounding area could impact the setting of these assets. As such, and taking a precautionary approach to this assessment, significant negative effects with uncertainty (--?) are anticipated in relation to cultural heritage assets, at all dwelling capacities (C1a/b/c). Uncertainty in relation to this arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.849 With regards to townscape, this site lies immediately adjacent to the existing settlement of Alresford (approximately 935 existing dwellings). Given the proximity of existing nearby settlements, the building out of this development is likely to significantly change the character of the local townscape. However whether this change will be positive or negative will depend on the quality of design provided, therefore the effect on townscape is scored as uncertain (?).
- 3.850 In accordance with the above, the site scores an overall mixed effect (--?/?) in relation to SA objective 9, at all capacity options (C1a/b/c).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.851 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.852 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities (C1a/b/c) is likely to result in minor positive (+) effects in relation to SA objective 10.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 3.853 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 3.854 The site is entirely outside source protection zones, and as such it is not considered likely that the development of the site will affect groundwater resources and therefore negligible effects (0) are anticipated in relation to ground water, for all dwelling capacities.

Water scarcity and water treatment

- 3.855 With regard to water supply, the Tendring Water Cycle Study (WCS)⁶⁹ identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The WCS assumes planned growth of 10,627 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that the CAUSE sites were not allocated in the Section 1 Local Plan, and as such their specific locations were not taken into account in the Tendring WCS. As such, the results of this study should be interpreted with caution in relation to this site.
- 3.856 It is not entirely clear from the study which catchment area the site would lie within. The Tendring Green WRC is geographically the closest to the site, however the study identifies this as 'no growth is allocated'. As such, the effects in relation to this SA objective are considered to be uncertain (?) at all capacity options. The uncertainty arises from the fact that the Tendring WCS study does not provide sufficient evidence regarding the specific impact of further growth at Alresford on local water treatment infrastructure.
- 3.857 As such, an overall mixed effect (0/?) is therefore expected for SA objective 11, at both at all capacity options (C1a/b/c).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.858 A small proportion of the site area (less than 1%) intersects with Environment Agency Flood Zones 2 and 3 around Sixpenny Brook, which runs through the southwest edge of the site. None of the site is identified as being at medium or high risk of ground water flooding, and only very small parts of the site (< 25%) are identified as being at risk of flooding from surface water. Further, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.859 In light of the above, and in line with stated assumptions, it is therefore considered that the effects in relation to SA objective 12 are anticipated to be negligible (0) at all capacity options (C1a/b/c).

SA13: To improve air quality

- 3.860 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 3.861 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated at both capacity options.

Potential contribution to road traffic within areas suffering from air pollution

- 3.862 The site lies almost entirely within the Tendring 009 middle super output area (MSOA). As set out under SA objective 7, according to NOMIS (based on 2011 census data) the most popular destinations for commuters travelling out of this area are central and northern Colchester, and the Wivenhoe area (including the University of Essex campus). There are a number of AQMAs in central Colchester; however given that the Alresford site provides an accessible train connection for commuters into Colchester, the site is not considered likely to contribute to air quality issues in the area.

⁶⁹ <https://www.tendringdc.gov.uk/sites/default/files/Tendring%20Water%20Cycle%20Study%20-%20Final%20Report%20Sept%202017.pdf>

- 3.863 As such, if the new community follows the commuting behaviour of the present community, a significant portion of commuter traffic is likely to be carried either by rail or in areas with no existing AQMAs. Therefore the site at any of the proposed capacity scales (700 – 2,500 dwellings) is considered likely to result in a negligible effect (0) in relation to this part of the SA objective.
- 3.864 As a result, an overall negligible effect (0/0) is therefore expected for SA objective 13, at all capacity options (C1a/b/c).

SA14: To conserve and enhance the quality of landscapes

- 3.865 The site is not located near any designated landscapes or proposed extensions to these.
- 3.866 The area around the site has been assessed by landscape officers of the NEAs (desktop assessment only). The site lies within the LCA Bromley Heath. The LCA was found to have moderate landscape character strength and be highly sensitive to visual intrusion due to wide views. Key issues were identified as the following: Loss of landscape features, including elm in 1970's, heaths, acid grasslands etc.; road improvements; conifer shelter belts; pressure for large expansion at edge of Colchester; communication masts; light pollution causing urbanisations; visual sensitivity especially at valley edges.
- 3.867 In light of this, and in line with the stated assumptions, significant negative effects with uncertainty (--?) are anticipated in relation to SA objective 14 at all capacity options (C1a/b/c). There is uncertainty about this effect as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 3.868 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 3.869 A significant proportion of the site (>25%) is within a mineral safeguarding area for sand and gravel deposits and parts are also permitted for minerals extraction. Development of this site could, therefore, result in some sterilisation of mineral resources if these were not extracted before development. Given that more than 25% of the site is within a safeguarding area, the effects at both capacity options are anticipated to be significant negative with uncertainty (--?) in relation to mineral resources. The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential dwelling capacity options (C1a/b/c) because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

- 3.870 More than 25% of the site is classified as Grade 2 agricultural land and the remainder is Grade 3, meaning that the building out of this site would result in the loss of a significant amount of very good quality agricultural land. In light of the above, a significant negative (-) effect is anticipated in relation to agricultural land, at all capacity options.
- 3.871 As such, an overall significant negative effect with some uncertainty (--?/--) is therefore expected in relation to SA objective 15, at all capacity options (C1a/b/c).

Summary of significant effects

- 3.872 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out (at C1a – 700 dwellings, C1b - 2,000 dwellings, or C1c - 2,500 dwellings)

- 3.873 Effects once the site is fully built are likely to be very similar for the three potential fully built out site capacities (700, 2,000 and 2,500 dwellings). . Significant positive effects are anticipated in relation to:
- SA1 Community cohesion, due to the provision of sustainable development and of youth centre facilities and community meeting places;
 - SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
 - SA3 Health, as development should be able to access existing health facilities, as well as open spaces and opportunities for active travel; and
 - SA7 Sustainable travel, largely due to the strong accessibility by rail to major commuting destinations, reducing reliance on the private car.
- 3.874 The potential for significant negative effects arises at these scales in relation to:
- SA1 Community cohesion, due to the potential impact of relatively large-scale development on the existing community in Alresford;
 - SA6 Biodiversity and geological diversity, due to Local Wildlife Sites within the site boundary;
 - SA9 Historic environment and townscape, due to the potential impact on Grade II-listed buildings and a Scheduled Monument inside and within 500m of the site;
 - SA14, due to the potential impact on the landscapes within and surrounding the site (the high sensitivity of the LCA Bromley Heath); and
 - SA 15 Soil and mineral resource, due to the potential sterilisation of safeguarded sand and gravel mineral resources and loss of very high quality agricultural land within the site.
- 3.875 In summary, the fully built site at any capacity (C1a/b/c) is likely to result in a development which can support new provision of or provide local access to a significant number of services, including existing health care, a new primary school, a new or expanded local centre (or centres) large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs. All of this is backed up by the aspirations outlined in the Garden Communities Charter.⁷⁰ However the development is not capable of delivering over 10 hectares of employment land and is not within 'acceptable' walking distance of existing employment areas, limiting the potential for internalisation of journeys and contribution to the local economy. Similarly, the scale of the proposed development is not considered capable of delivering new healthcare facilities or a new secondary school, and does not lie within 'acceptable' walking distance of the existing facilities in neighbouring settlements. As such, it is likely that residents will need to travel to external destinations for health care, secondary schools, employment and higher order services. However the strong rail connections mean there is good potential for some of these trips to be made by sustainable means, and key external commuting destinations are also well linked to the site by rail and to nearby town centres. It should be recognised that the rail infrastructure bisecting the site will required mitigation through design in order to overcome any obstacles to an integrated network of active transport routes within the site. However the layout of the site as a 'walk shed' around the railway station lessens the severance risk in terms of accessing key locations and transport hubs.
- 3.876 Given the significant expansion of the existing settlement of Alresford that this site would constitute, there would inevitably be major changes to the character of the area as a result of the development. This would include the landscape context - given the sensitive character of the surrounding LCA Bromley Heath. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. The impact on this count should be considered cumulatively with the allocations for development around the settlement boundary of Alresford in the Tendring Section 2 Local Plan, as well as those in nearby Wivenhoe. This will increase the total quantum of

⁷⁰ https://www.braintree.gov.uk/downloads/file/5787/garden_communities_charter

development (and as such the impact on the existing settlement and townscape) but will also provide a higher quantum of dwellings to support new facilities and amenities of a higher order in the local area, as well as more local employment space.

- 3.877 Potential significant negative effects have been identified in relation to environmental assets, notably Local Wildlife Sites within the site boundary; heritage assets within and close to the site; safeguarded mineral resources and very high quality agricultural land. The precise nature of these impacts would depend upon the layout of the site and any opportunities to provide physical separation and thus reduce harm to sensitive features. In addition, the potential effects on mineral resources have some scope for mitigation through the phasing of the development.

C2 - CAUSE Great Bentley

Site Context

- 3.878 The 119-hectare C2 site (CAUSE Great Bentley) is one of four sites that make up the proposed 'Metro Plan'. All of these sites are focused around transit nodes along the Colchester-Clacton railway line, which links Colchester with coastal settlements – in this case the station of Great Bentley, the fourth station travelling east out of Colchester. The site lies entirely within Tendring DC.
- 3.879 The site was not allocated in the draft Section 1 Local Plan drawn up by the NEA, but was instead proposed as an alternative location for growth by the Campaign Against Urban Sprawl in Essex (CAUSE). The potential scale of development from this site is for either 700 dwellings (lower end capacity), 2,000 dwellings (middle capacity) or 2,500 dwellings (higher end capacity) and it is estimated that the full quantum of development could be delivered within the Plan Period (up to 2033). Site C2 'wraps around' the existing village of Great Bentley and is primarily arable land surrounding the urban edge of the south of the village, including the Plough Road Business Centre (cluster of industrial units).
- 3.880 Aside from the village of Great Bentley itself (approximately 1,053 existing dwellings), the nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are: Thorrington (approximately 918 existing dwellings), around 1.3km to the south west; Frating (approximately 236 existing dwellings), around 1.7km to the north; Weeley (580 existing dwellings), around 2.6km to the east; Weeley Heath (317 existing dwellings), around 2.7km to the east; Little Clacton (1,452 existing dwellings), around 4.6km to the south east; Alresford (935 existing dwellings), around 3km to the west; Tendring (approximately 281 existing dwellings), around 3.3km to the east; Elmstead Market (877 existing dwellings), around 4.4km to the north west; Great Bromley (approximately 422 existing dwellings), around 4.4km to the north; and St Osyth (2,435 existing dwellings), around 4.6km to the south. In addition there are a number of scattered, smaller-scale settlements (<200 dwellings), including Little Bentley.
- 3.881 Nearby local centres, as defined by the Section 2 Local Plans, are located in: Great Bentley itself; Alresford; Elmstead Market; Thorpe-le-Soken; and Little Clacton. The three nearest policy-defined towns are Brightlingsea (around 5km to the south west), Clacton-on-Sea (around 9km to the south) and Colchester (around 11km to the north west).
- 3.882 Nearby major employment sites include the Plough Road Centre within Great Bentley itself, which contains small-scale industrial units and is currently permissioned for redevelopment as a mixed use site. In addition, the Frating employment area lies approximately 2.5 km to the north of the site's centre point boundary, and the Morses Lane employment site (Brightlingsea) lies approximately 4.2km from the site's centre point. Further afield there are clusters of employment sites on the south east fringes of Colchester (including the University of Essex 'Knowledge Gateway') - all of which are accessible by rail - and further retail parks, industrial estates and business parks in Clacton-on-Sea, roughly 7.5km to the south.
- 3.883 Other strategic settlements and destinations nearby include Walton-on-the-Naze (around 14km to the east) and Harwich (around 15km to the north east).
- 3.884 For public transport connections, the Colchester-Clacton rail line bisects the site east-west, providing connections to Colchester (a roughly 15 minute journey) and to Clacton-on-Sea (a roughly 20 minutes journey), with a roughly hourly service. From Colchester the railway provides connections to central London, which can be reached in roughly another hour. There are two existing crossing points on Plough Road and an unnamed road running parallel to the west across farm land.
- 3.885 For road-based connections - Plough Road, Thorrington road and Beckford's Road are the main access routes passing through the site. Heckfords road provides a route north to connect with Colchester Road, which becomes the A133, joins the trunk road A120 and provides a road connection west toward the north of Colchester via the bypass. The A133 southbound connects the site to Clacton-on-Sea, skirting the edge of the neighbouring village of Weeley. Road connections south to Brightlingsea are made via Thorrington Road and the B1029 (Brightlingsea Road).

3.886 A number of sites on the edges of Great Bentley have already been granted planning permission (outline or full) by Tendring DC: Admirals Farm,⁷¹ Heckfords Road⁷² and land east of Heckfords Road⁷³ (cumulative capacity of around 125 dwellings); and Station Field⁷⁴ on the site of the existing Plough Road Business Centre to the south of the village (150 dwellings plus employment space). This constitutes total proposed growth of 275 dwellings in Great Bentley. In addition there are a number of areas where planning permission has been granted within and around surrounding settlements, or where development has been allocated by the Section 2 Local Plan – including a cluster of sites with cumulative capacity for around 270 dwellings around Alresford; permission for 190 dwellings north of St Osyth; and a significant mixed use site allocated by the Section 2 Local Plan east of Weeley village, with capacity for 280 dwellings and 1 hectare of employment land (see Policy SAMU5).

SA objective	Criterion	C2	C2	C2	C2	C2
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/+	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++
SA3 Improve health	Access to GP surgeries/ health centres	Acceptable	Acceptable	++/0	++/0	++/0
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	<i>Potential for harm to Source Protection Zones (SPZs)</i>	Medium	Medium			
	<i>Potential exposure to flood risk</i>	Low	Low			
	<i>Potential exposure to air pollution</i>	Low	Low			
	Potential exposure to noise pollution from roads and railways	Low	Low			
SA4 Ensure and	Access to local centres	Preferred Maximum	Desirable	+	+	+

⁷¹ Planning reference: 16/01912/DETAIL

⁷² Planning reference: 17/01759/DETAIL

⁷³ Planning reference: 16/01999/OUT

⁷⁴ Planning reference: 14/01750/OUT

SA objective	Criterion	C2	C2	C2	C2	C2
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
improve viability of centres	Access to town centres	Unacceptable	Unacceptable			
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Preferred Maximum	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable			
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	-?	-?	-?
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium			
	Potential for harm to PHI or local BAP habitat	Low	Low			
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Acceptable	Acceptable	+?/+++?	+?/+++?	+?/+++?
	Access to primary or middle schools	Desirable	Desirable			
	Access to secondary schools	Unacceptable	Unacceptable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Preferred Maximum	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Desirable	Desirable			
	Access to bus stops	Preferred Maximum	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to	Acceptable	Acceptable			

SA objective	Criterion	C2	C2	C2	C2	C2
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
	Public Rights of Way (PRoW)					
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable			
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Acceptable	Acceptable	+?	+?	+?
	Access to primary or middle schools	Desirable	Desirable			
	Access to secondary schools	Unacceptable	Unacceptable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Preferred Maximum	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Desirable	Desirable			
	Access to bus stops	Preferred Maximum	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable			
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Acceptable	Acceptable	+	+	+
	Access to primary or middle schools	Desirable	Desirable			
	Access to secondary	Unacceptable	Unacceptable			

SA objective	Criterion	C2	C2	C2	C2	C2
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
	<i>schools</i>					
	<i>Access to further and higher education facilities</i>	Unacceptable	Unacceptable			
	<i>Access to local centres</i>	Preferred Maximum	Desirable			
	<i>Access to town centres</i>	Unacceptable	Unacceptable			
	<i>Access to railway stations</i>	Desirable	Desirable			
	<i>Access to bus stops</i>	Preferred Maximum	Desirable			
	<i>Access to cycle paths</i>	Unacceptable	Unacceptable			
	<i>Access to open spaces and sports centres</i>	Acceptable	Desirable			
	<i>Access to Public Rights of Way (PRoW)</i>	Acceptable	Acceptable			
	<i>Access to centres of employment including employment areas and town centres</i>	Acceptable	Acceptable			
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Medium	Medium	-?/0?	-?/?	-?/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	-?	-?	-?
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/0	0/0	0/0
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/--	--?/--	--?/--
	Potential for harm to agricultural land	High	High			

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.887 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 1 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.888 This site, with a final capacity of between 700 and 2,500 dwellings, is small in scale relative to many of the other site options considered by the SA. However, development at this site (at any capacity option) would significantly expand the edges of the existing settlement of Great Bentley (approximately 1,053 existing dwellings). At the smallest capacity option C2a (700 dwellings), this site would constitute an increase of the size of Great Bentley of more than 60%, and the largest scale option C2c (2,500 dwellings) would constitute an increase of over 250%. Other nearby settlements likely to be affected by the expansion include Weeley, Alresford, Thorrington and Frating. However it is the existing developed areas within Great Bentley which will be subject to the most significant degree of change.

3.889 Development of this site would result in a significant change to the existing settlement at Great Bentley and to surrounding settlements. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context

3.890 There are multiple settlements within 5km of the site where the housing quantities proposed (C2a – 700, C2b – 2,500 and C2c – 2,500 dwellings) amount to over 10% of their overall housing stock. It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements that impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all dwelling capacities (C2a/b/c) will result in significant negative yet uncertain (--?) effects in relation to the effect on existing communities. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

3.891 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities (C2a/b/c). It is considered that this will help to foster a sense of community. As set out in the site information form, the site is expected to be able to provide both youth centre facilities and community meeting places at C2b (2,000 dwellings) and C2c (2,500 dwellings). These are considered likely to bring forward enhanced community cohesion, resulting in significant positive effects (++)). However, whilst the site is likely to be able to deliver general community meeting places at C1a (700 dwellings), it is not likely it will be able to deliver a new youth centre at this potential dwelling capacity. Therefore, the effects at this potential dwelling capacity are expected to be minor positive (+).

3.892 In accordance with the above commentary, overall anticipated effects on SA objective 1 will be mixed uncertain significant negative and minor positive for C2a (--?/+). For C2b and C2c, the effects in relation to this SA objective are expected to be mixed uncertain significant negative and significant positive (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

3.893 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for both dwelling capacity options.

- 3.894 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.895 In addition, the site information form sets out that development at all dwelling capacities (C2a/b/c) is likely to be viable, which includes the delivery of 30% affordable housing. External funding is not required to deliver policy compliant development or strategic infrastructure. As a result, significant positive (++) effects are anticipated in relation to SA objective 2 at all potential dwelling scales (C2a/b/c).

SA3: Improve health/reduce health inequalities

- 3.896 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.897 The settlement of Great Bentley is served by an existing GP practice (the Great Bentley Surgery), which is identified as being within 'acceptable' walking distance of the site. The next closest primary health facility is the GP surgery in neighbouring Alresford village (around 4.3km to the west and accessible by rail). The most accessible general hospital for this site is in Colchester, over 10km away and reasonably accessible by rail. The Oaktree Manor hospital also lies around 5.3km to the north east, however this is a specialist mental health services centre.
- 3.898 Great Bentley village is relatively well endowed with green space (resulting in a 'desirable' rating during the Stage 1 assessment). The village green is a large amenity green space at the heart of the village, which includes a green play area. There are also the Hall View allotments on the southern edge of the village. Further afield there are two substantial woodland blocks - Little Bentleyhall Wood (around 2.7km to the north) and Captains Wood (around 3.6km to the west) - and St Osyth Country Park lies around 3.6km to the south.
- 3.899 The site does not link to any existing dedicated cycle paths, either local or national. Several public rights of way (PROW) cross the site and provide access to the surrounding countryside. These may provide links to the surrounding countryside for residents of the new development to utilise for recreation, however it is not considered that these PROW will make a significant contribution to recreation so as to facilitate more healthy lifestyles.
- 3.900 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritises walking, cycling and use of public transport over private car use, includes foot and cycle ways throughout the development and provides open space within the development. The railway infrastructure bisecting the site (and limited crossing points) may present a challenge in overcoming severance problems when providing for an integrated network of active transport routes, however the nature of the site boundary (consisting of a 'walk shed' around the rail station) limits the impact of this severance.
- 3.901 Overall, the delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to access to health and recreation, both at the end of the plan period and when fully built at all capacity options (C2a/b/c).
- 3.902 In terms of accessing healthcare, all areas of the site are located within an 'acceptable' walking distance (401-800m) from an existing GP surgery (see Stage 1 assessment scores). As a result a significant positive (++) rather than minor positive (+) effects are anticipated in relation to access to health and recreation facilities for all capacity options.

Exposure to noise pollution

- 3.903 In accordance with the assumptions framework, as less than 50% of the site falls within a DEFRA strategic noise area of Ln_{night} 50.0-54.9 dB, or Laeq,16 55.0-59.9 dB, and as less than 5% of the site falls within either a DEFRA strategic noise area of Ln_{night} ≥55.0 dB, or Laeq,16 ≥ 60.0 dB, the anticipated effects in relation to exposure to noise pollution at the end of the plan period and at any site capacity option are considered to be negligible (0).

3.904 As such, the anticipated overall effects on SA objective 3, when fully built at all capacity options (C2a/b/c) will be mixed (++/0).

SA4: To ensure and improve the vitality & viability of centres

3.905 In accordance with the assumptions framework for all strategic sites at all scales and as confirmed by the site information form it is considered that development will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases, and that new facilities would complement rather than cannibalise existing local centres. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive (+) effects in relation to SA objective 4, at all potential dwelling scales.

3.906 As such, for all capacity options (C2a/b/c), it is anticipated that suitable local centre facilities will be provided, resulting in minor positive (+) effects.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

3.907 The relationship of the site to existing centres is described in the site context above. There are also existing employment areas surrounding the site, which provide for jobs which may not be within local or town centres. These include the Plough Road Centre within Great Bentley itself, further sites at the Frating employment area, the Morses Lane employment site in Brightlingsea and clusters of sites on the eastern fringes of Colchester (including the University of Essex 'Knowledge Gateway') and Clacton-on-Sea.

3.908 It is anticipated that the development of the site at all potential scales will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.

3.909 In addition, the site information form states that 6.5% of the site is allowed for employment land, totalling an estimated 7.7 hectares on this site. In line with the assumptions framework, this is not considered to be of a large enough scale to make a significant contribution to the local economy, and as a result there is no upgrade to the minor positive (+) effects identified, for any capacity option (C2a/b/c).

3.910 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

3.911 The site intersects with one designated local wildlife site (LWS) along Bentley Brook – a linear corridor of habitats which runs across the west of the site. The site also lies within 400m of three other protected sites: the Great Bentley Pumping Station LWS and BAP Priority Habitat (arable, wood and grassland); an area of woodland BAP priority habitat to the south; and a small traditional orchard to the immediate east of the site boundary at St Mary's Farm. In total, approximately 3% of the site area overlaps with locally designated protected areas and a further 41% lies within 400m of these areas.

3.912 The large-scale Colne Estuary SSSI lies approximately 2.1km from the site boundary to the south and the site falls within associated IRZs for residential development of 100 units or more, highlighting the potential for impacts on the interest features of the SSSI and/or the interest features of the co-located European sites.

3.913 It is anticipated that negative effects on these biodiversity assets may result from amongst other things, the total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure and predation by pets.

- 3.914 However the extent of the effects is unknown as the development proposals may include mitigation to reduce or overcome negative effects. As such a minor negative yet uncertain (-?) effect is anticipated in relation to SA objective 6. This effect is considered likely to occur when fully built at all capacity options (C2a/b/c).
- 3.915 Reference should be made to the separate [HRA](#) of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.916 The CAUSE Great Bentley site is focussed around Great Bentley railway station on the Colchester-Clacton line, providing links to Colchester (in roughly 15 minutes) and Clacton-on-Sea (a roughly 20 minute journey). The site is also served by the A133 (Colchester Road) which lies approximately 1km to the north and east and provides connections to Colchester to the north west (via the strategic A120) and to Clacton-on-Sea to the south. Road connections south to Brightlingsea are made via Thorrington Road and the B1029 (Brightlingsea Road). The relationship of the site to other existing local centres is described above in site context. More generally for the district, the Tendring Infrastructure Delivery Plan (IDP, para 6.1)⁷⁵ notes that the movement of people into urban Colchester is significantly road-based (para 6.1), and the road network across Tendring is over capacity in peak periods (para 6.4).
- 3.917 Bus services from Great Bentley to surrounding settlements are not regular. Infrequent bus services leave from Great Bentley station north to Colchester (via Frating and Elmstead Market) and south to St Osyth/Brightlingsea a few times a day, meaning that journeys not made by rail are likely to be dependent on the local road network.
- 3.918 There is an existing primary school – Great Bentley Primary School – in the centre of Great Bentley opposite the train station. However the nearest secondary schools are in Brightlingsea (the Colne Community School and College) and Colchester (various).
- 3.919 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.920 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council⁷⁶ sets out that the significant increase in demand for school places across Essex is predicted to continue and that the catchment area for Great Bentley Primary School has limited capacity (-58 forecast for 2028/29). Given an assumption of 0.3 primary pupils per household, even the smallest capacity option C2a (700 dwellings) will generate demand for 140 new primary places, and the largest capacity option C2c (2,500 dwellings) will generate demand for 750 new primary places. As such, it is considered likely that new primary school(s) will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (C2a/b/c). These services and facilities would serve both new residents and the existing community within the development site.
- 3.921 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at both potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site to access further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure/infrastructural upgrades are provided but this is not assumed in the site assessment. The potential effects of rail upgrades are considered in the appraisal of the CAUSE Metro Plan spatial strategy rather than the appraisals of individual

⁷⁵ https://www.braintree.gov.uk/downloads/file/6958/tdc023_tendring_infrastructure_delivery_plan_report_october_2017

⁷⁶ Essex School Organisation Service – 10 Year Plan 2019-2028.

strategic sites. Overall it is considered likely that the provision of the aforementioned local services and facilities is likely to result in minor positive yet uncertain (+?) effects for all dwelling capacities. The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

- 3.922 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to provide secondary school facilities in accordance with the developer contributions guidance from Essex County Council⁷⁷. In relation to this, the Essex County Council evidence⁷⁸ sets out that Colne Community School (current capacity 1,488) is forecast for a -35 pupil capacity by 2028/29, and in 2021/22 is planning a 2 form entry expansion. The Colchester Academy is in an area with more limited capacity (a forecast of -359 across the area by 2028/29). Given a secondary pupil factor of 0.2 pupils per house, it is projected that the site would generate demand for at least 140 secondary pupils (at the smaller capacity option C2a) and up to 500 pupils (at the largest capacity option C2c). This would require some offsite secondary school expansion in order to absorb the new demand. However this site alone (at either final capacity option) is not of sufficient scale to deliver a new secondary school, as all are below the 4,500 dwelling threshold for new secondary facilities set out in the assumptions framework. This means that residents would need to make use of existing secondary schools in nearby settlements (in Brightlingsea and Colchester), which may result in longer journeys and increased car dependence. The Colchester Royal Grammar School (in central Colchester) is geographically more distant, but may be more easily accessible by rail.
- 3.923 As set out above, it is considered that none of the capacity options will be able to support more than 10 hectares of employment land as part of the site, and none would be able to deliver a new secondary school. As such, in line with the assumptions framework, there is no change to the minor significant positive yet uncertain (+?) effects anticipated in relation to shorter journeys, at any capacity option (C2a/b/c). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 3.924 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.925 For journeys to more distant destinations, the proximity to the railway station in Great Bentley village provides strong potential for trips by rail, which generates opportunities to decrease car use and limit congestion for external journeys.
- 3.926 In terms of potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site lies entirely within the Tendring 009 middle super output area (MSOA). According to NOMIS (based on 2011 census data), the most popular employment destinations for residents of this area: the local area i.e. Alresford, Great Bentley and the Frating employment area (roughly 14%); central Colchester (11%); Wivenhoe, including the University of Essex campus (roughly 5%); and north Colchester, including the Severalls Park employment zone (roughly 5%). Commuters into both Wivenhoe and central Colchester are well served by rail lines, providing an opportunity for sustainable transport modes. However commuters to the north of Colchester are more likely to use the road network, as are those commuting within the local area.
- 3.927 If the new residents follow the same pattern, commuting journeys are likely to be carried by a combination of rail journeys (capacity allowing) and some road journeys. Given the strong accessibility of railway stations from the site, significant positive effects (++?) are considered likely when the site is fully built for any site capacity. The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there.

⁷⁷ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

⁷⁸ Essex School Organisation Service – 10 Year Plan 2019-2028.

In principle, there is potential for existing bus routes to serve some commuters to the most popular commuting destinations.

- 3.928 As such the anticipated overall effects on SA objective 7, at any capacity option (C2a/b/c), will be mixed but broadly positive with uncertainty (+?/+?).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.929 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.
- 3.930 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form, this site is to be supported by the following local and strategic infrastructure at all dwelling capacities (c2a/b/c):
- Early Years
 - Primary School(s)
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Community meeting spaces
 - Increased frequency of trains utilising the Colchester to Clacton/Walton branch line
- 3.931 The site information form sets out that the site can viably deliver these infrastructure requirements. The supporting infrastructure listed above is confirmed to be viable by the site information form and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for all dwelling capacity options (C2a/b/c). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 3.932 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

- 3.933 The site overlaps in limited areas with the Great Bentley Conservation Area, and the Grade I-listed Church of St Mary lies on the edge of the site boundary. Various Grade II-listed buildings are present within 0-500m and 500-1,000 m of the site boundary, the greatest concentration of these being within the conservation area. In total, approximately 89% of the site area lies within 500m of a designated heritage asset, and a further 11% lies within 500m to 1km of asset.
- 3.934 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.
- 3.935 It is assumed that no site will necessarily result in physical alteration of the designated heritage assets outlined above but it is considered that development in the surrounding area could impact the setting of these assets. As such, and taking a precautionary approach to this assessment, potential significant negative effects (--?) are anticipated at all fully built scales in relation to heritage assets. Uncertainty in relation to this arises because the details of any mitigation of these

potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.936 With regards to townscape, this site 'wraps around' the existing settlement of Great Bentley (approximately 1,053 existing dwellings). Given the proximity of existing nearby settlements, the building out of this development is likely to significantly change the character of the local townscape. However whether this change will be positive or negative will depend on the quality of design provided, therefore the effect on townscape is scored as uncertain (?).
- 3.937 In accordance with the above, the an overall mixed effect (--?/?) is anticipated in relation to SA objective 9 when fully built at all capacity options (C2a/b/c).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.938 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.939 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities (C2a/b/c) is likely to result in minor positive (+) effects in relation to SA objective 10.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 3.940 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 3.941 While only a small isolated part of the site overlaps with a Source Protection Zone (SPZ) Zone 1, a significant proportion of the site overlaps with Zones 2 and 3 of the nearby SPZ. As such a minor negative effect with uncertainty (-?) is anticipated in relation to groundwater resources, at all capacity options (C2a/b/c). The uncertainty arises because site specific mitigation may overcome significant issues.

Water scarcity and water treatment

- 3.942 With regard to water supply, the Tendring Water Cycle Study (WCS)⁷⁹ identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The WCS assumes planned growth of 10,627 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that the CAUSE sites were not allocated in the Section 1 Local Plan, and as such their specific locations were not taken into account in the Tendring WCS. As such, the results of this study should be interpreted with caution in relation to this site.
- 3.943 Geographically, the closest WRC to the CAUSE Great Bentley site is the Thorrington WRC, which is identified as having flow and treatment capacity for all proposed growth with some flow capacity for further growth. The residual housing capacity for the Thorrington WRC is estimated at 1,100 dwellings. The study explains (para 4.6.1) that 'growth in these WRC catchments would not compromise either of the WFD objective and, hence, there is no barrier to delivering the proposed growth. However, the proposed growth assessed within the Tendring WCS was for 669 additional

⁷⁹ <https://www.tendringdc.gov.uk/sites/default/files/Tendring%20Water%20Cycle%20Study%20-%20Final%20Report%20Sept%202017.pdf>

dwellings to be served by Thorrington WRC, which amounts to the potential to serve 1,769 additional dwellings when factoring in the residual headroom.

- 3.944 As such, uncertain negligible effects are expected for C2a (700 dwellings) as this potential dwelling capacity is within the range that is shown could be accommodated by the Thorrington WRC. The uncertainty arises from the fact that the Tendring WCS assessed capacity based on proposed growth allocated in the Section 1 Local Plan, which did not allocate the CAUSE sites and because the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application. For C2b (2,000 dwellings) and C2c (2,500 dwellings), the effects are expected to be uncertain (?) as there is no evidence in the Tendring WCS to suggest that the Thorrington WRC can accept wastewater at these potential dwelling capacities.
- 3.945 As such, an overall mixed uncertain minor negative and uncertain negligible effect (-?/0?) is expected for C2a in relation to this SA objective. For C2b and C2c, the effects are expected to be mixed uncertain minor negative and uncertain (-?/?).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.946 A very small proportion of the site (less than 2%) intersects with Environment Agency Flood Zones 2 and 3 around Bentley Brook in the west of the site, which is considered to be a negligible amount, and < 25% of the site is identified as being at risk of flooding from surface water. However approximately 32% of the site is identified as at medium risk of ground water flooding. Nevertheless, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.947 It is therefore considered that the effects in relation to this SA objective are likely to be minor negative with uncertainty (-?) at all capacity scales (C2a/b/c). The uncertainty arises because site-specific mitigation may overcome significant issues.

SA13: To improve air quality

- 3.948 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 3.949 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated at all potential capacities.

Potential contribution to road traffic within areas suffering from air pollution

- 3.950 The site lies almost entirely within the Tendring 009 middle super output area (MSOA). As set out under SA objective 7, according to NOMIS (based on 2011 census data) the most popular destinations for commuters travelling out of this area are central and northern Colchester, and the Wivenhoe area (including the University of Essex campus). There are a number of AQMAs in central Colchester; however given that the Great Bentley site provides an accessible train connection for commuters into Colchester, the site is not considered likely to contribute to air quality issues in the area.
- 3.951 As such, if the new community follows the commuting behaviour of the present community, a significant portion of commuter traffic is likely to be carried either by rail or in areas with no existing AQMAs. Therefore the site at either of the two capacity scales (2,000 and 2,500 dwellings) is considered likely to result in a negligible effect (0) in relation to this part of the SA objective.
- 3.952 Overall, negligible effects (0/0) are anticipated in relation to SA objective 13 at all capacity options (C2a/b/c).

SA14: To conserve and enhance the quality of landscapes

- 3.953 The site is not located near any designated landscapes or proposed extensions to these.

- 3.954 The area around the site has been assessed by landscape officers of the NEAs (desktop assessment only). The site lies within the LCA St Osyth/Great Bentley Heaths and LCA Alresford Valley System. The LCA St Osyth/Great Bentley Heaths was found to be of moderate landscape character which is moderately sensitive to change. Key issues identified were: the loss of woodland and other landscape features; neglect/loss of management; road improvements; light pollution; and visual sensitivity of the plateau due to its openness. The LCA Alresford Valley System was found to be of strong landscape character which is moderately sensitive to change. Key issues identified were: the reduction in woodland management; coniferous planting; development encroaching; gravel extraction; little pedestrian access to riverside; and that the valleys are sensitive to character change but not so visually sensitive due to hidden, woody character.
- 3.955 In light of this and in line with the stated assumptions, significant negative effects with uncertainty (--?) are anticipated in relation to this SA objective, at all capacity options (C2a/b/c). There is uncertainty about this effect as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 3.956 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 3.957 Approximately 73% of the site is within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site would result in a significant sterilisation of mineral resources if these were not extracted before development.
- 3.958 Due to the large area of mineral resources that may be affected, the effects at all capacity options (C2a/b/c) are considered to be significant negative with uncertainty (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential dwelling capacity options because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

- 3.959 Approximately 51% of the site is Grade 2 agricultural land, with the remainder (49%) designated as Grade 3 agricultural land. This means that the development of this site would result in the loss of a significant amount of high quality agricultural land. In light of the above, significant negative (--) effects are anticipated in relation to agricultural land, at all capacity options.
- 3.960 As such, an overall significant negative effect with some uncertainty (--?/--) is therefore expected for SA objective 15, at all capacity options (C2a/b/c).

Summary of significant effects

- 3.961 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out at either C2a (700 dwellings), C2b (2,000 dwellings), or C2c (2,500 dwellings)

- 3.962 Effects once the site is fully built are likely to be very similar for all potential fully built out site capacities (from 700 to 2,500 dwellings). The potential for significant positive effects arises in relation to:
- SA1 Community cohesion, due to the provision of sustainable development and of youth centre facilities and community meeting places;
 - SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;

- SA3 Health, as the site lies within 'acceptable' walking distance of an existing GP surgery;
- SA7 Sustainable travel, given the walking distance to Great Bentley railway station and the significant level of services and facilities anticipated to come forward as part of the site, reducing the need to travel.

3.963 The potential for significant negative effects arises at these scales in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape, due to potential impacts on the Great Bentley Conservation Area and nearby listed buildings;
- SA15 Soil and mineral resources, due to the intersection with a sand and gravel mineral safeguarding area, and the loss of Grade 2 agricultural land.

3.964 In summary, the fully built site at any capacity option (C2a/b/c) is likely to result in a development which can support new provision of or local access to a significant number of services, including existing health care, a new primary school, a new or expanded local centre large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs. All of this is backed up by the aspirations outlined in the Garden Communities Charter.⁸⁰ While the scale of the proposed development is not considered capable of delivering new healthcare facilities, it does lie within 'acceptable' walking distance of the existing facilities within Great Bentley, providing easily accessible healthcare if satisfactorily upgraded. This is likely to result in some self-containment which is likely to provide opportunities for more sustainable travel behaviour. However the rail infrastructure bisecting the site may pose a severance obstacle that must be mitigated through site design in order to enable an integrated active transport network within the site. While it is likely that residents will need to travel to external destinations for secondary schools and for higher order services, the strong rail connections mean there is good potential for these trips to be made by sustainable means. Key commuting destinations are also well linked to the site by rail.

3.965 The site is not of a large enough in scale (at either capacity option) to deliver over 10 hectares of employment land, limiting the impact of the development on the local economy and potentially leading to greater travel externally for employment purposes.

3.966 Given the significant expansion of the existing settlement of Great Bentley that this site would constitute, there would inevitably be major changes to the character of the area as a result of the development, however the landscape context is considered to be only moderately sensitive to new development. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.

3.967 Several potentially significant negative effects have been identified in relation to environmental assets. These relate to a number of heritage assets (including overlap with and proximity to Great Bentley Conservation Area), loss of very high quality agricultural land and the sterilisation of mineral resources, however the latter has some scope for mitigation through the phasing of the development.

⁸⁰ https://www.braintree.gov.uk/downloads/file/5787/garden_communities_charter

C3 - CAUSE Weeley

Site Context

- 3.968 The 132-hectare site C3 (CAUSE Weeley) is one of four sites that make up the proposed 'Metro Plan'. All of these sites are focused around transit nodes along the Colchester-Clacton railway line, which links Colchester with coastal settlements – in this case Weeley station, the fifth station travelling east out of Colchester and the second travelling north/east out of Clacton-on-Sea. The site lies entirely within Tendring DC.
- 3.969 The site was not allocated in the draft Section 1 Local Plan drawn up by the NEA, but was instead proposed as an alternative location for growth by the Campaign Against Urban Sprawl in Essex (CAUSE). The potential scale of development from this site is for either 700 dwellings (lower end capacity), 2,000 dwellings (middle capacity) or 2,500 dwellings (higher end capacity), and it is estimated that the full quantum of development could be delivered within the Plan Period (up to 2033). The site occupies an area of land lying in between the villages of Weeley (approximately 580 existing dwellings) and the smaller Weeley Heath (approximately 317 existing dwellings) to the south. The site is primarily arable land with scattered woodland blocks surrounding the urban edge, with the A133 trunk road lies immediately west of the site boundary. The site boundary skirts around and excludes the Weeley Bridge Holiday Park (a 'park home' development) to the north of the railway line.
- 3.970 Other than Weeley and Weeley Heath, the next nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are: Little Clacton (approximately 1,452 dwellings), around 1.5km to the south east; Tendring (approximately 281 existing dwellings), around 1.7km to the north; Great Bentley (approximately 1,053 existing dwellings), around 1.9km to the west; Thorpe-le-Soken (approximately 935 existing dwellings), around 2.4km to the east; Frating (approximately 236 existing dwellings), around 3.6km to the north west; Thorrington (approximately 918 existing dwellings), around 4.3km to the south west; and St Osyth (approximately 2,435 dwellings), around 5km to the south. In addition there are a number of scattered, smaller-scale settlements (<200 dwellings), including Beaumont-cum-Moze and Little Bentley.
- 3.971 Nearby local centres, as defined by the Section 2 Local Plans, are located in: Little Clacton (around 3.4km from the site's centre point); Thorpe-le-Soken (also around 3.4 km away), Great Bentley (also around 3.4 km away) and St Osyth (around 6.3 km away).
- 3.972 The two nearest policy-defined town centres to the site are Clacton-on-Sea (approximately 6km to the south) and Brightlingsea (approximately 6.7 km to the south west), with Colchester lying more distant to the north west. Other strategic settlements and destinations nearby include Walton-on-the-Naze (around 10km to the east) and Harwich (around 14km to the north east).
- 3.973 Aside from the employment generated within local and town centres, there are a number of nearby major employment sites. Nearby significant employment sites include: the Plough Business Centre in Great Bentley (approximately 2.2km to the west and accessible by rail; the Frating employment area (approximately 3.7km to the north west and likely accessed by the A133 northbound); and the Oakwood and Crusader Business Park/Brook Retail Park on the fringes of Clacton-on-Sea (approximately 4.2-4.3km to the south and likely accessed by the A133 southbound).
- 3.974 For public transport connections, Weeley station is within walking distance of the site and lies on the Colchester-Clacton railway line, providing connections by rail to Clacton-on-Sea (a roughly 15 minute journey, with a service running every 30 minutes) and to Colchester (a roughly 20 minute journey on an hourly service). From Colchester, passengers can transfer and reach central London stations in roughly one hour. There is only one existing crossing point across the rail infrastructure that bisects the site, along the Weeley Bypass/Clacton Road.
- 3.975 For road connections, the A133 (Colchester Road) skirts the western edge of the site, providing connections south to Clacton-on-Sea and north to Colchester. The B1441 (Weeley Bypass) runs through the site north-south, providing links to Clacton-on-Sea to the south. At a junction on the northern edge of the site it joins the A133 to provide connections north. The B1033 provides connections east to the village of Thorpe-le-Soken and further to the coastal settlements of

Frinton-on-Sea and Walton-on-the-Naze. Connections to Brightlingsea can be made on local and B-roads via Bentley Road.

3.976 A substantial site to the east of the existing settlement of Weeley (adjacent to the site boundary) has already been granted planning permission – Land South of Thorpe Road.⁸¹ The site was allocated in Tendring’s Section 2 Local Plan (Policy SAMU5) as a mixed use development with a capacity for at least 280 new homes, 1 hectare of employment land, 1 hectare of public open space, and land for a new primary school/childcare facility (to be secured through S106 obligations). An application for outline planning permission (for 280 dwellings, 3,000sqm of B1 office space, a 2-form entry primary school and 56 nursery places) was received in April 2019. There are also clusters of sites with planning permission around the edges of the neighbouring villages of Great Bentley (totalling 275 dwellings) and Thorpe-le-Soken (totalling 187 dwellings).

SA objective	Criterion	C3	C3	C3	C3	C3
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/+	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?/0	+?/0	+?/0
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Potential for harm to Source Protection Zones (SPZs)	Low	Low			
	Potential exposure to flood risk	Medium	Medium			
	Potential exposure to air pollution	Low	Low			
SA4 Ensure and	Access to local centres	Unacceptable	Desirable	+	+	+

⁸¹ Planning reference: 19/00524/OUT

SA objective	Criterion	C3	C3	C3	C3	C3
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
improve viability of centres	Access to town centres	Unacceptable	Unacceptable			
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable			
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	--?	--?	--?
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium			
	Potential for harm to PHI or local BAP habitat	Low	Low			
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?/+++?	+?/+++?	+?/+++?
	Access to primary or middle schools	Desirable	Desirable			
	Access to secondary schools	Unacceptable	Unacceptable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Desirable	Desirable			
	Access to bus stops	Acceptable	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to	Acceptable	Acceptable			

SA objective	Criterion	C3	C3	C3	C3	C3
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
	Public Rights of Way (PRoW)					
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable			
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Unacceptable			
	Access to primary or middle schools	Desirable	Desirable			
	Access to secondary schools	Unacceptable	Unacceptable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Desirable	Desirable	+?	+?	+?
	Access to bus stops	Acceptable	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable			
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Unacceptable			
	Access to primary or middle schools	Desirable	Desirable	+	+	+
	Access to secondary	Unacceptable	Unacceptable			

SA objective	Criterion	C3	C3	C3	C3	C3
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
	<i>schools</i>					
	<i>Access to further and higher education facilities</i>	Unacceptable	Unacceptable			
	<i>Access to local centres</i>	Unacceptable	Desirable			
	<i>Access to town centres</i>	Unacceptable	Unacceptable			
	<i>Access to railway stations</i>	Desirable	Desirable			
	<i>Access to bus stops</i>	Acceptable	Desirable			
	<i>Access to cycle paths</i>	Unacceptable	Unacceptable			
	<i>Access to open spaces and sports centres</i>	Acceptable	Desirable			
	<i>Access to Public Rights of Way (PRoW)</i>	Acceptable	Acceptable			
	<i>Access to centres of employment including employment areas and town centres</i>	Unacceptable	Unacceptable			
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/?	0/?	0/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Medium	Medium	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/0	0/0	0/0
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	-?/-	-?/-	-?/-
	Potential for harm to agricultural land	Medium	Medium	-?/-	-?/-	-?/-

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.977 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 1 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.978 This site, with a final capacity of between 700 and 2,500 dwellings is small in scale relative to many of the other site options considered by the SA. However, development at this site (at either scale) would significantly expand the edges of the existing settlement of Weeley (approximately 580 existing dwellings) and Weeley Heath (approximately 317 existing dwellings). Even at the smallest capacity option C3a (700 dwellings), this site would imply an increase of the size of Weeley of over 120%, and the larger scale option C3c (2,500 dwellings) would imply an increase of over 400%. Other nearby settlements likely to be most affected by the expansion include Tendring, Little Clacton, Great Bentley and Thorpe-le-Soken. However it is the existing developed areas immediately adjacent to the site which will be subject to the most significant degree of change.

3.979 Development of this site would result in a significant change to the existing settlement at Weeley/Weeley Heath and to surrounding settlements. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context.

3.980 There are multiple settlements within 5km of the site where the housing quantities proposed (C3a – 700, C3b – 2,500 and C3c – 2,500 dwellings) amount to over 10% of their overall housing stock. It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements that impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all capacities (C3a/b/c) will result in significant negative yet uncertain (--?) effects in relation to existing communities. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

3.981 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities (C3a/b/c). It is considered that this will help to foster a sense of community. As set out in the site information form, the site is expected to be able to provide both youth centre facilities and community meeting places at C3b (2,000 dwellings) and C3c (2,500 dwellings). These are considered likely to bring forward enhanced community cohesion, resulting in significant positive effects (++)). However, whilst the site is likely to be able to deliver general community meeting places at C3a (700 dwellings), it is not likely it will be able to deliver a new youth centre at this potential dwelling capacity. Therefore, the effects at this potential dwelling capacity are expected to be minor positive (+).

3.982 In accordance with the above commentary, overall anticipated effects on SA objective 1 will be mixed uncertain significant negative and minor positive for C3a (--?/+). For C3b and C3c, the effects in relation to this SA objective are expected to be mixed uncertain significant negative and significant positive (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

3.983 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for both dwelling capacity options.

- 3.984 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.985 In addition, the site information form sets out that development any of the proposed capacity options is likely to be viable, which includes the delivery of 30% affordable housing. External funding is not required to deliver policy compliant development or strategic infrastructure. As a result, significant positive (++) effects are anticipated in relation to SA objective 2 at all potential dwelling scales (C3a/b/c).

SA3: Improve health/reduce health inequalities

- 3.986 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.987 There are no existing healthcare facilities within the village of Weeley. The nearest GP surgeries are in the neighbouring villages of Thorpe-le-Soken (3.3km from the centre of the site) and Great Bentley (3.5km away). The nearest hospital is the Essex County Hospital in central Colchester (accessible by rail). The Oaktree Manor hospital lies approximately 4.6km north of the site, which provides specialist mental health services.
- 3.988 The site contains one area of public open space – an amenity green space at Weeley Village Hall, including a small play area. Another play area (Hilltop Crescent) lies within the existing settlement at Weeley, and a crematorium lies to the immediate north of the site. Further afield, there are further scattered amenity green spaces in the existing settlements of Great Bentley, Thorpe-le-Soken and Little Clacton.
- 3.989 The site does not link to any existing cycle path network, either local or national (National cycle route 51 lies 3.7km north of the site boundary). Several public rights of way (PROW) cross the site and provide access to the surrounding countryside. These may provide links to the surrounding countryside for residents of the new development to utilise for recreation, however it is not considered that these PROW will make a significant contribution to recreation so as to facilitate more healthy lifestyles.
- 3.990 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritises walking, cycling and use of public transport over private car use, includes foot and cycle ways throughout the development and provides open space within the development. The barrier posed by the rail line that runs through the site area (with only one crossing point) may limit the opportunities for active travel routes, as would the A133 which poses a barrier on the western edge of the site. However it is possible that these obstacles can be mitigated against to a certain extent through design.
- 3.991 Overall, the delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive but uncertain (+?) effects in relation to access to health and recreation, at all capacity options (C3a/b/c). The uncertainty arises from questions over the ability of site design to mitigate against severance posed by physical obstacles to active travel.
- 3.992 In terms of accessing healthcare, the Stage 1 assessment found that the site is an 'unacceptable' distance from existing healthcare facilities (given the need to travel to neighbouring villages), and both capacity options for this site fail to deliver a high enough quantum of housing to justify the delivery of a new healthcare facility (even when taking into account the adjacent development at 'Land South of Thorpe Road' which has been allocated by Tendring's Section 2 Local Plan). As such, there is no adjustment to the minor positive effects with uncertainty (+?) anticipated for this part of the SA objective.

Exposure to noise pollution

- 3.993 Despite the presence of the A133 on the site's boundary, in accordance with the assumptions framework, only approximately 2% of the site falls within either a DEFRA strategic noise area of

Lnight \geq 55.0 dB, or Laeq,16 \geq 60.0 dB , and a further 10% a DEFRA strategic noise area of Lnight 50.0-54.9 dB, or Laeq,16 55.0-59.9 dB. As such, and in line with stated assumptions, anticipated effects in relation to exposure to noise pollution at the end of the plan period and at all site capacity options are considered to be negligible (0).

- 3.994 As a result, the anticipated overall effects on this SA objective, when fully built at all capacity options (C3a/b/c) will be mixed (+?/0).

SA4: To ensure and improve the vitality & viability of centres

- 3.995 In accordance with the assumptions framework for all strategic sites at all scales and as confirmed by the site information form it is considered that development will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases, and that new facilities would complement rather than cannibalise existing local centres. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive (+) effects in relation to SA objective 4, at all potential dwelling scales (C3a/b/c).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.996 The relationship of the site to existing centres is described in the site context above. There are also existing employment areas surrounding the site, which provide for jobs which may not be within local or town centres. Significant nearby sites include the Plough Business Centre in Great Bentley, the Frating employment area, and the Oakwood and Crusader Business Park/Brook Retail Park on the fringes of Clacton-on-Sea.
- 3.997 It is anticipated that the development of the site at all potential scales (C3a/b/c) will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.
- 3.998 The site information form states that the site will provide 6.5% of its area for employment uses, which gives an estimated 8.6 hectares of employment land that will be supported by the site. This is not considered to be a significant amount of new employment land (as it is < 10 hectares), and as such there is no upgrade to the already identified minor positive (+) effects, for all site capacity options (C3a/b/c).
- 3.999 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.1000 The site intersects to the south with one designated local wildlife site (LWS) – Gutteridge Wood (containing ancient woodland) – and several areas of BAP priority habitat (at Gutteridge Wood and two other small areas of deciduous woodland. The site also lies within 400m of a number of further protected sites: the Island and Roger’s Grove LWS (an area of ancient woodland); the Weeleyhall Wood SSSI; the Oakhurst Wood LWS; and a linear LWS of verges and woodland running along either side of the Weeley Bypass. The site is also located within IRZs for residential development of 100 units or more associated with several SSSIs, including those associated with Weeleyhall Wood SSSI, approximately 200m to the south east. This highlights the potential for impacts on the interest features of SSSIs and/or the interest features of the co-located European sites.
- 3.1001 As such, development of this site may result in impacts to these local designations and habitats. It is anticipated that effects on the existing habitats may be significant and negative, and may result from amongst other things, the total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure and predation by pets.

3.1002 However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects. In total, approximately 5% of the site area overlaps with locally designated wildlife sites, and a further 74% lies within 400m of these sites. . As such, and in line with stated assumptions, a significant negative yet uncertain (--?) effect is anticipated in relation to SA objective 6. This effect is considered likely to occur at all capacity options (C3a/b/c).

3.1003 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

3.1004 The CAUSE Thorpe-le-Soken site is focused around Thorpe-le-Soken railway station on the Colchester-Clacton line, providing links to Clacton-on-Sea (in roughly 20 minutes) and to Colchester (in roughly 20 minutes).

3.1005 The site is also served by the A133 (Colchester Road) which skirts the western edge of the site, providing connections south to Clacton-on-Sea and north to Colchester. The B1441 (Weeley Bypass) runs through the site north-south, providing links to Clacton-on-Sea to the south. The B1033 provides connections east to Thorpe-le-Soken and further to the coastal settlements of Frinton-on-Sea and Walton-on-the-Naze. The relationship of the site to other existing local centres is described above in the site context above. More generally for the district, the Tendring Infrastructure Delivery Plan (IDP, para 6.1)⁸² notes that the movement of people into urban Colchester is significantly road-based (para 6.1), and the road network across Tendring is over capacity in peak periods (para 6.4).

3.1006 Buses leave from Weeley every 20-40 minutes south east to Clacton-on-Sea/Walton-on-the-Naze, and north to Colchester centre (via Frating and the University of Essex). A similar service departs around every 30 minutes north to Colchester and south to Jaywick (via Clacton-on-Sea). Another less frequent bus departs roughly every couple of hours north to Manningtree. An additional bus that operates a limited service links Weeley to Frinton-on-Sea via Thorpe-le-Soken, and to Colchester via Clacton-on-Sea, St Osyth, Thorrington, the university and Essex County Hospital.

3.1007 There is an existing primary school – the Weeley St Andrew’s CofE Primary School - just south of the train station, between Weeley and Weeley Heath. The nearest secondary schools are in Clacton-on-Sea and in Colchester, in addition to Tendring Technology College in the neighbouring village of Thorpe-le-Soken, a middle school serving Years 7-9.

3.1008 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

3.1009 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council⁸³ sets out that the significant increase in demand for school places across Essex is predicted to continue and that the catchment area for Weeley St Andrew’s C of E primary school has somewhat limited capacity (-28 forecast for 2028/29). Given an assumption of 0.3 primary pupils per household, the smallest capacity option at C3a (700 dwellings) will generate demand for 210 new primary places, and the largest capacity option C3c (2,500 dwellings) will generate demand for 750 new primary places. As such, it is considered likely that a new primary school will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (C3a/b/c). These services and facilities would serve both new residents and the existing community within the development site. In addition, it should be recognised that the site ‘South

⁸² https://www.braintree.gov.uk/downloads/file/6958/tdc023_tendring_infrastructure_delivery_plan_report_october_2017

⁸³ Essex School Organisation Service – 10 Year Plan 2019-2028.

of Thorpe Road' on the edge of Weeley village allocated in the Section 2 plan is required to provide a new primary school as part of the development.

- 3.1010 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at both potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities, secondary schools, and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. The potential effects of rail upgrades are considered in the appraisal of the CAUSE Metro Plan spatial strategy rather than the appraisals of individual strategic sites. Overall it is considered likely that the provision of the aforementioned local services and facilities is likely to result in minor positive yet uncertain (+?) effects for all dwelling capacities (C3a/b/c). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.
- 3.1011 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to provide secondary school facilities in accordance with the developer contributions guidance from Essex County Council⁸⁴. In relation to this, the Essex County Council evidence⁸⁵ sets out that existing secondary schools in Clacton will have limited capacity going forward (-63 places forecast for 2028/29). Given a secondary pupil factor of 0.2 pupils per house, it is projected that the site would generate demand for at least 140 secondary pupils (at the smallest capacity C3a) and up to 500 pupils (at the largest capacity C3c). This would require some offsite secondary school expansion in order to absorb the new demand.
- 3.1012 However this site alone (at either final capacity option) is not of sufficient scale to deliver a new secondary school, as all capacity options are below the 4,500 dwelling threshold for new secondary facilities set out in the assumptions framework. This means that residents would need to make use of existing secondary schools in nearby settlements - in Clacton-on-Sea or in Colchester (or, for Years 7 to 9, in the nearer Thorpe-le-Soken). This may result in longer journeys and increased car dependence.
- 3.1013 As set out above, it is considered that neither capacity option will be able to support at least 10 hectares of employment land as part of the site nor a secondary school. In line with the assumptions framework, there is no change to the minor significant positive yet uncertain (+?) effects anticipated in relation to shorter journeys, at any capacity option (C3a/b/c). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 3.1014 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.1015 For journeys to more distant destinations, the proximity to the railway station in Weeley village provides good potential for trips by rail, which generates opportunities to decrease car use and limit congestion for external journeys. While the absence of a secondary school within the immediate vicinity is a negative, secondary schools in nearby Clacton-on-Sea are accessible from Weeley by rail.
- 3.1016 In terms of potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site lies in the western portion of the Tendring 007 middle super output area (MSOA). According to NOMIS (based on 2011 census data), the most popular commuting

⁸⁴ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

⁸⁵ Essex School Organisation Service – 10 Year Plan 2019-2028.

destination for residents of this MSOA is Clacton-on-Sea (27% of commuters). In addition, roughly 14% of commuters currently residing in this area work locally (an area covering neighbouring settlements of Weeley and Little Clacton) and another 5% commute into central Colchester. Commuters into both Clacton-on-Sea and Colchester are well served by rail lines, providing an opportunity for sustainable transport modes.

- 3.1017 If the new residents follow the same pattern, commuting journeys are likely to be carried by a combination rail journeys (capacity allowing) and some road journeys. Given the strong accessibility of railway stations from the site, significant positive effects (++?) are considered likely when the site is fully built for all site capacities (C3a/b/c). The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters to the most popular commuting destinations.
- 3.1018 As such the anticipated overall effects on SA objective 7, when fully built at all capacity options (C3a/b/c) will be mixed but broadly positive with uncertainty (+?/++?).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.1019 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.
- 3.1020 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form, this site is to be supported by the following local infrastructure at all dwelling capacities (C3a – 700 dwellings, C3b – 2,000 dwellings, and C3c – 2,500 dwellings):
- Early Years
 - Primary School(s)
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Community meeting spaces
 - Increased frequency of trains utilising the Colchester to Clacton/Walton branch line

- 3.1021 The site information form sets out that the site can viably deliver these infrastructure requirements.
- 3.1022 The supporting infrastructure listed above is confirmed to be viable (on the site information form) and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for SA objective 8 for all dwelling capacity options (C3a/b/c). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

- 3.1023 The potential effect of strategic sites will be scored in relation to two aspects of this SA objective, resulting in a double score as follows:

Effects on cultural heritage assets

- 3.1024 The site overlaps with no designated heritage assets. However one Grade II*-listed building (the Church of St Andrew) and a number of Grade II-listed buildings within 500m of the site boundary.

- 3.1025 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.
- 3.1026 It is assumed that no site will necessarily result in physical alteration of the designated heritage assets outlined above; however it is considered that development in the surrounding area could impact the setting of these assets. In total, approximately 56% of the site area falls within 500m of a heritage asset, and a further 42% lies between 500m and 1km from an asset. As such, and taking a precautionary approach to this assessment, significant negative effects with uncertainty (---?) are anticipated in relation to cultural heritage assets, at all dwelling capacities (C3a/b/c). Uncertainty in relation to this arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.1027 With regards to townscape, this site lies immediately adjacent to the existing settlements of Weeley (approximately 580 existing dwellings) and Weeley Heath (approximately 317 existing dwellings). Given the proximity of existing nearby settlements, the building out of this development is likely to significantly change the character of the local townscape. However whether this change will be positive or negative will depend on the quality of design provided, therefore the effect on townscape is scored as uncertain (?).
- 3.1028 In accordance with the above, the site scores an overall mixed effect (---?/?) in relation to SA objective 9, at all capacity options (C3a/b/c).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.1029 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.1030 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the Site Information Form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities (C3a/b/c) is likely to result in minor positive (+) effects in relation to SA objective 10.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 3.1031 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 3.1032 The site is entirely outside source protection zones, and as such it is not considered likely that the development of the site will affect ground water stores and therefore negligible effects (0) are anticipated in relation to ground water, for all dwelling capacities.

Water scarcity and water treatment

- 3.1033 With regard to water supply, the Tendring Water Cycle Study (WCS)⁸⁶ identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The WCS assumes planned growth of 10,627 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that the CAUSE sites were not allocated in the

⁸⁶ <https://www.tendringdc.gov.uk/sites/default/files/Tendring%20Water%20Cycle%20Study%20-%20Final%20Report%20Sept%202017.pdf>

Section 1 Local Plan therefore their specific locations were not taken into account in the Tendring WCS. As such, the results of this study should be interpreted with caution in relation to this site.

- 3.1034 It is not entirely clear from the study which catchment area the site would lie within. The Tendring Green WRC is geographically the closest to the site, however the study identifies this as 'no growth is allocated'. As such, the effects in relation to this SA objective are considered to be uncertain (?) at both capacity options. The uncertainty arises from the fact that the Tendring WCS study does not provide sufficient evidence regarding the specific impact of further growth at Weeley on local water treatment infrastructure.
- 3.1035 As such, an overall mixed effect (0/?) is therefore expected for SA objective 11, at all capacity options (C3a/b/c).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.1036 A small proportion of the site area (approximately 6%) intersects with Environment Agency Flood Zones 2 and 3 around Weeley Brook, which bisects the site east-west. Only 3 % of lies within Flood Zone 3. In addition, only a small area of the site (under 25%) is identified as being at medium risk of ground water flooding, and < 25% of the site area is identified as being at risk of flooding from surface water. Further, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.1037 In light of the above, and in line with stated assumptions, it is therefore considered that the effects in relation to SA objective 12 are anticipated to be negligible (0) at all capacity options (C3a/b/c).

SA13: To improve air quality

- 3.1038 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 3.1039 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated at all capacity options.

Potential contribution to road traffic within areas suffering from air pollution

- 3.1040 The site lies in the western portion of the Tendring 007 middle super output area (MSOA). According to NOMIS (based on 2011 census data), the most popular commuting destination for current residents of the area is Clacton-on-Sea, with the remainder largely working in the local area or commuting into central Colchester. There are no AQMAs identified in Clacton-on-Sea or on the route there from the site. While there are some identified AQMAs within the Colchester 007 MSOA (a minor commuter destination from this site), there are also accessible rail connections to Colchester from the site, which has the potential to reduce travel by private car for work.
- 3.1041 As such, if the new community follows the commuting behaviour of the present community, a significant portion of commuter traffic is likely to be carried either by rail or in areas with no existing AQMAs, and a negligible effect (0) in relation to this part of the SA objective, at all capacity options.
- 3.1042 As a result, an overall negligible effect (0/0) is therefore expected for SA objective 13, at all capacity options (C3a/b/c).

SA14: To conserve and enhance the quality of landscapes

- 3.1043 The site is not located near any designated landscapes or proposed extensions to these.
- 3.1044 The area around the site has been assessed by landscape officers of the NEAs (desktop assessment only). The site lies within the LCA Holland Valley System and LCA Clacton and the Sokens Clay Plateau. The LCA Holland Valley System was found to be of strong landscape character and moderately sensitive to change, with key issues identified as the following: the encroachment of development; loss of management of landscape and heritage features; loss of

lane character; and declining tranquillity. The LCA Clacton and the Sokens Clay Plateau was found to have a weak/poor landscape character but was highly sensitive to visual intrusion by large-scale new development and vertical structures. Key issues identified were: the loss of elms in the past; loss and neglect of woodland, village greens, pasture, historic buildings etc.; ribbon development; urban fringe uses; and light pollution.

3.1045 In light of this, and in line with the stated assumptions, significant negative effects with uncertainty (--?) are anticipated in relation to SA objective 14 at all capacity options (C3a/b/c). There is uncertainty about this effect as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

3.1046 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

3.1047 A number of small areas around the edges of the site (covering approximately 13% of the site) lie within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site would result in some sterilisation of mineral resources if these were not extracted before development. In line with the assumptions framework, the effects at both capacity options are anticipated to be minor negative with uncertainty (-?) in relation to mineral resources. The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential dwelling capacity options (C3a/b/c) because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

3.1048 The entirety of the site is classified as Grade 3 agricultural land, meaning that development of this site would result in the loss of some good to moderate quality agricultural land. In light of the above, a minor negative (-) effect is anticipated in relation to agricultural land, at all capacity options.

3.1049 As such, an overall minor negative effect with some uncertainty (-?/-) is therefore expected in relation to SA objective 15, at all capacity options (C3a/b/c).

Summary of significant effects

3.1050 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out (at C3a - 700 dwellings, C3b - 2,000 dwellings, or C3c - 2,500 dwellings)

3.1051 Effects once the site is fully built are likely to be very similar for all potential fully built out site capacities (from 700 to 2,500 dwellings). . Significant positive effects are anticipated in relation to:

- SA1 Community cohesion, due to the provision of sustainable development and of youth centre facilities and community meeting places;
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing; and
- SA7 Sustainable travel, largely due to the strong accessibility by rail to major commuting destinations, reducing reliance on the private car.

3.1052 The potential for significant negative effects arises at these scales in relation to:

- SA1 Community cohesion, due to the potential impact of relatively large-scale development on the existing community in Weeley and Weeley Heath;

- SA9 Historic environment and townscape, due to the potential impact on the Grade II*-listed Church of St Andrew and a variety of Grade II-listed buildings within 500m of the site; and
- SA14, due to the potential impact on the sensitive landscapes surrounding the site (the strong character of the LCA Holland Valley System and the sensitivity of the LCA Clacton and the Sokens Clay Plateau).

3.1053 In summary, the fully built site at all capacity options (C3a/b/c) is likely to result in a development which can support new provision or local access to a significant number of services, including a new primary school, a new or expanded local centre large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs. All of this is backed up by the aspirations outlined in the Garden Communities Charter.⁸⁷ However the development is not capable of delivering over 10 hectares of employment land and is not within 'acceptable' walking distance of existing employment areas, limiting the potential for internalisation of journeys and contribution to the local economy. Similarly, the scale of the proposed development is not considered capable of delivering new healthcare facilities or a new secondary school, and does not lie within 'acceptable' walking distance of the existing facilities in neighbouring settlements. As such, it is likely that residents will need to travel to external destinations for health care, secondary schools, employment and higher order services. However, the strong rail connections provides good potential for some of these trips to be made by sustainable means, and key external commuting destinations are also well linked to the site by rail and to nearby town centres. It should be recognised that the rail infrastructure bisecting the site will required mitigation through design in order to overcome any obstacles to an integrated network of active transport routes within the site. However the layout of the site as a 'walk shed' around the railway station lessens the severance risk in terms of accessing key locations and transport hubs.

3.1054 Given the significant expansion of the existing settlements of Weeley and Weeley Heath that this site would constitute, there would inevitably be major changes to the character of the area as a result of the development. This would include the landscape context - given the 'strong' character of the surrounding LCA Holland Valley System and the sensitivity of the LCA Clacton and the Sokens Clay Plateau. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. The impact on this count should be considered cumulatively with the substantial allocation for development to the east of the settlement of Weeley, as allocated in the Tendring Section 2 Local Plan. This will increase the total quantum of development (and as such the impact on the existing settlement and townscape) but will also provide a higher quantum of dwellings to support new facilities and amenities of a higher order in the local area, as well as more local employment space.

3.1055 The site has the potential for a significant negative effect on heritage assets (largely relating to nearby listed buildings). The precise nature of this impact would depend upon the layout of the site and any opportunities to provide physical separation and thus reduce harm to sensitive features.

⁸⁷ https://www.braintree.gov.uk/downloads/file/5787/garden_communities_charter

C4 - CAUSE Thorpe-le-Soken

Site Context

- 3.1056 The 180-hectare site C4 (CAUSE Thorpe-le-Soken) is one of four sites that make up the proposed 'Metro Plan'. All of these sites are focused around transit nodes along the Colchester-Clacton railway line, which links Colchester with coastal settlements – in this case Thorpe-le-Soken station, the sixth station travelling east out of Colchester and the first travelling north/east out of Clacton-on-Sea. The site lies entirely within Tendring DC.
- 3.1057 The site was not allocated in the draft Section 1 Local Plan drawn up by the NEA, but was instead proposed as an alternative location for growth by the Campaign Against Urban Sprawl in Essex (CAUSE). The potential scale of development from this site is for either 700 dwellings (lower end capacity), 2,000 dwellings (middle capacity) or 2,500 dwellings (higher end capacity), and it is estimated that the full quantum of development could be delivered within the Plan Period (up to 2033). While the other CAUSE sites 'wrap around' existing villages, this site lies adjacent to the village of Thorpe-le-Soken to the south. The site is focussed around Thorpe-le-Soken railway station, which sits within the small cluster of dwellings at 'Thorpe Station & Maltings' (approximately 22 existing dwellings) and around 800m–1km south of the larger settlement of Thorpe-le-Soken itself (approximately 935 existing dwellings). The site is primarily arable land with scattered woodland blocks and agricultural buildings.
- 3.1058 Other than 'Thorpe Station & Maltings' and Thorpe-le-Soken itself, the nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are: Little Clacton (approximately 1,452 existing dwellings), around 600m to south west; Weeley Heath (approximately 317 existing dwellings), around 1.6km to the west; Weeley (approximately 580 existing dwellings), around 1.8km to the west; Tendring (approximately 281 existing dwellings), around 1.8km to the north; Great Holland (approximately 353 existing dwellings), around 2.6km to the south east; and Kirby-le-Soken (approximately 618 existing dwellings) around 3.2km to the east. In addition there are a number of scattered, smaller-scale settlements (<200 dwellings), including Beaumont-cum-Moze.
- 3.1059 Nearby local centres, as defined by the Section 2 Local Plans, are located in: Thorpe-le-Soken (around 1.2km from the site's centre point); and Little Clacton. The site is relatively close to policy-defined town centres – both Clacton-on-Sea and Frinton-on-Sea are approximately 6km from the site. Other strategic settlements and destinations include the Hamford Water National Nature Reserve (around 3km to the north east), Walton-on-the-Naze (around 6.6km to the east) and Harwich (around 14km to the north east).
- 3.1060 Aside from the employment generated within local and town centres, there are a number of nearby major employment sites. Nearby significant employment sites are concentrated on the fringes of Clacton-on-Sea (the Oakwood and Crusader Business Park, the Gorse Lane Industrial Estate and two retail parks), in Kirby Cross (the Kirby Cross Trading Estate), and in the retail centre of Frinton-on-Sea. All destinations are linked with the site by local rail infrastructure.
- 3.1061 For public transport connections, Thorpe-le-Soken station lies on the Colchester-Clacton railway line, providing connections by rail to Clacton-on-Sea (a roughly 10 minutes journey, with a service running every 30 minutes) and to Colchester (a roughly 20 minute journey on an hourly service). From Colchester, passengers can transfer and reach central London stations in roughly one hour. Currently there is only one clear crossing point across railway infrastructure within the site (along Harwich Road). A further potential crossing point may be identified along a public right of way (PROW) near the site's western boundary.
- 3.1062 For road-based connections, the site does not lie directly on the network of strategic trunk roads and is around 2km west of the A133. As such, connections to neighbouring settlements are largely via B-roads. The B1414 (Harwich Road) bisects the site north-south, and provides connections south to Clacton-on-Sea (via Little Clacton). Northbound it links the site to Thorpe-le-Soken village. However, the A133 links to the A120 to provide connections to Colchester and the A120 eastbound provides road connections north east to Harwich.

3.1063 There are no sites with existing planning permission within the site boundaries; however there is a cluster of sites which have been granted planning permission on the eastern fringes of the village of Thorpe-le-Soken⁸⁸ which cumulatively have capacity for 187 dwellings. In addition, a substantial mixed-use allocation was made by Policy SAMU3 of Tendring's Section 2 Plan approximately 1.7km south of the site boundary on the fringes of Clacton-on-Sea. Oakwood Park has been allocated for 750 dwellings, with 500 of those built by 2033. Finally, the Section 2 Plan (Policy SAMU5) also allocates a substantial site in the neighbouring village of Weeley (approximately 1.8km west of the site boundary) for a mixed use development including at least 280 dwellings and 1 hectare of employment land.

SA objective	Criterion	C4	C4	C4	C4	C4
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/+	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?/0	+?/0	+?/0
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Preferred Maximum	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	<i>Potential for harm to Source Protection Zones (SPZs)</i>	Low	Low			
	<i>Potential exposure to flood risk</i>	High	High			
	<i>Potential exposure to air pollution</i>	Low	Low			
	Potential exposure to noise pollution from roads and railways	Low	Low			
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			

⁸⁸ Frinton Road, TLS (16/00838/OUT); Land North of Abbey Street, TLS (13/01481/FUL); and Landmere Road, TLS (16/01169/OUT).

SA objective	Criterion	C4	C4	C4	C4	C4
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	++	++	++
	Access to town centres	Unacceptable	Unacceptable			
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable			
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	--?	--?	--?
	Potential for harm to locally designated wildlife sites and ancient woodland	High	High			
	Potential for harm to PHI or local BAP habitat	Medium	Medium			
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?/+++?	+?/+++?	+?/+++?
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Unacceptable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Desirable	Desirable			
	Access to bus stops	Acceptable	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Preferred Maximum	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			

SA objective	Criterion	C4	C4	C4	C4	C4
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable			
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?	+?	+?
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Unacceptable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Desirable	Desirable			
	Access to bus stops	Acceptable	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Preferred Maximum	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable			
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+	+	+
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Unacceptable			
	Access to further and	Unacceptable	Unacceptable			

SA objective	Criterion	C4	C4	C4	C4	C4
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	700	2000	2500
	<i>higher education facilities</i>					
	<i>Access to local centres</i>	Unacceptable	Desirable			
	<i>Access to town centres</i>	Unacceptable	Unacceptable			
	<i>Access to railway stations</i>	Desirable	Desirable			
	<i>Access to bus stops</i>	Acceptable	Desirable			
	<i>Access to cycle paths</i>	Unacceptable	Unacceptable			
	<i>Access to open spaces and sports centres</i>	Preferred Maximum	Desirable			
	<i>Access to Public Rights of Way (PRoW)</i>	Acceptable	Acceptable			
	<i>Access to centres of employment including employment areas and town centres</i>	Unacceptable	Unacceptable			
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/?	0/?	0/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	High	High	-?	-?	-?
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/0	0/0	0/0
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	-?/-	-?/-	-?/-
	Potential for harm to agricultural land	Medium	Medium	-?/-	-?/-	-?/-

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.1064 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 1 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.1065 This site, with final capacity for between 700 and 2,500 dwellings, is small in scale relative to many of the other site options considered by the SA. However, development at this site (at either scale) would constitute a significant expansion of both the cluster of dwellings around the station (approximately 22 dwellings) and the adjacent settlement of Thorpe-le-Soken (approximately 935 existing dwellings). Other nearby settlements likely to be most affected by the expansion include Little Clacton, Weeley/Weeley Heath, Great Holland, Beaumont-cum-Moze, and Tendring. However it is the existing developed areas which will be either surrounded by the development, or lie immediately adjacent to it, which will be subject to the most significant degree of change.

3.1066 Development of this site would result in a significant change to the existing settlement at Thorpe-le-Soken and to surrounding settlements. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context.

3.1067 There are multiple settlements within 5km of the site where the housing quantities proposed (C4a – 700, C4b – 2,500 and C4c – 2,500 dwellings) amount to over 10% of their overall housing stock. It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements that impacts will generally be negatively perceived by the existing communities. As such, the development of this site at any capacity option (C4a/b/c) will result in significant negative yet uncertain (--?) effects in relation to existing communities. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

3.1068 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities (C4a/b/c). It is considered that this will help to foster a sense of community. As set out in the site information form, the site is expected to be able to provide both youth centre facilities and community meeting places at C4b (2,000 dwellings) and C4c (2,500 dwellings). These are considered likely to bring forward enhanced community cohesion, resulting in significant positive effects (++). However, whilst the site is likely to be able to deliver general community meeting places at C4a (700 dwellings), it is not likely it will be able to deliver a new youth centre at this potential dwelling capacity. Therefore, the effects at this potential dwelling capacity are expected to be minor positive (+).

3.1069 In accordance with the above commentary, overall anticipated effects on SA objective 1 will be mixed uncertain significant negative and minor positive for C4a (--?/+). For C4b and C4c, the effects in relation to this SA objective are expected to be mixed uncertain significant negative and significant positive (--?/+).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

3.1070 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for both dwelling capacity options.

3.1071 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.

3.1072 In addition, the site information form sets out that development at all capacity options (C4a/b/c) is likely to be viable, which includes the delivery of 30% affordable housing. External funding is not required to deliver policy compliant development or strategic infrastructure. As a result, significant positive (++) effects are anticipated in relation to SA objective 2 at all potential dwelling scales (C4a /b/c).

SA3: Improve health/reduce health inequalities

3.1073 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

3.1074 There is an existing GP surgery in Thorpe-le-Soken village (the Thorpe-le-Soken Surgery), which lies approximately 1.2km from the site's centre point. The Stage 1 analysis found that this was an unacceptable walking distance for new residents at the site. The most accessible general hospital to the site is the Essex County Hospital in central Colchester, which is approximately 19km away but is accessible by rail. The Oaktree Manor hospital lies closer (approximately 6.6km north west of the site) and provides specialist mental health services.

3.1075 The site itself only contains a negligible area of public open space – part of the Lady Nelson Playing Field, which lies on the site's northern border. In the immediate vicinity of the site there is also a cemetery at St Michael's Church, a small play area within Lady Nelson Playing Field, and further afield there is the Parish Fields at Plough Corner (approximately 1km from the site boundary) and the Holland Haven Country Park (approximately 1.4km south east of the site boundary and extending down toward the coast).

3.1076 The site does not link to any existing cycle path network, either local or national. Two public rights of way (PROW) cross the site and provide access to the surrounding countryside. These may provide links to the surrounding countryside for residents of the new development to utilise for recreation; however, it is not considered that these PROW will make a significant contribution to recreation so as to facilitate more healthy lifestyles.

3.1077 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritises walking, cycling and use of public transport over private car use, includes foot and cycle ways throughout the development and provides open space within the development. The barrier posed by the rail line and river that bisect the site area (with only one clear crossing point in the case of the railway line) may limit the opportunities for active travel routes. However it is possible that these obstacles can be mitigated against to a certain extent through design.

3.1078 Overall, the delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive but uncertain (+?) effects in relation to access to health and recreation, at all capacity options (C4a/b/c). The uncertainty arises from questions over the ability of site design to mitigate against severance posed by physical obstacles to active travel.

3.1079 In terms of accessing healthcare, the Stage 1 assessment found that the site is with an 'unacceptable' distance from existing healthcare facilities in Thorpe-le-Soken, and all capacity options for this site (C4a/b/c) fail to deliver a high enough quantum of housing to justify the delivery of a new healthcare facility within the site. As such, there is no adjustment to the minor positive effects with uncertainty (+?) anticipated in relation to access to healthcare.

Exposure to noise pollution

3.1080 Given its distance from major trunk roads, and in accordance with the assumptions framework, no area of the site falls within a DEFRA strategic noise area of Lnight 50.0-54.9 dB, or Laeq,16 55.0-59.9 dB or a DEFRA strategic noise area of Lnight >=55.0 dB, or Laeq,16 >= 60.0 dB. As such, the anticipated effects in relation to exposure to noise pollution at any site capacity option are considered to be negligible (0).

3.1081 As a result, the anticipated overall effects on SA objective 3, when fully built at all capacity options (C4a/b/c), will be mixed (+?/0).

SA4: To ensure and improve the vitality & viability of centres

3.1082 In accordance with the assumptions framework for all strategic sites at all scales and as confirmed by the site information form it is considered that development will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases, and that new facilities would complement rather than cannibalise existing local centres. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive (+) effects in relation to SA objective 4, at all potential dwelling scales.

3.1083 As such, for all the capacity options (C4a/b/c), it is anticipated that suitable local centre facilities will be provided, resulting in minor positive (+) effects.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

3.1084 The relationship of the site to existing centres is described in the site context above. There are also existing employment areas surrounding the site, which provide for jobs which may not be within local or town centres. These include business parks, retail parks and industrial estates on the fringes of Clacton-on-Sea, Kirby Cross, and in Frinton-on-Sea.

3.1085 It is anticipated that the development of the site at both potential scales will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.

3.1086 The site information form states that the site will provide 6.5% of its area for employment uses, which gives an estimated 11.7 hectares of employment land. This is considered a significant amount of new employment land which is likely to make a significant contribution to the local economy, resulting in significant positive (++) effects, at all capacity options (C4a/b/c).

3.1087 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

3.1088 The site intersects with a number of designated local wildlife sites (LWS) and BAP priority habitats. The Upper Holland Brook LWS weaves through the site from south east to north west and also contains areas of BAP priority habitat of coastal and floodplain grazing marsh in the south east of the site. Within the site there are also numerous areas of BAP priority deciduous woodland habitat, and a small area of traditional orchard. Surrounding the site (within 400m of its boundaries) are two further LWS – Lower Botany Farm and St Michael’s Churchyard – and further patches of deciduous woodland. In total, approximately 5% of the site area overlaps with LWS, and a further 74% lies within 400m of the LWSs.

3.1089 The site is also located within IRZs for residential development of 50 units or more and 100 units or more associated with several SSSIs, including those associated with Holland Haven Marshes SSSI, approximately 1.4km to the south east, and Weeleyhall Wood SSSI, approximately 800m to the west. This highlights the potential for impacts on the interest features of SSSIs and/or the interest features of the co-located European sites.

3.1090 As such, development of this site may result in impacts to these local designations and habitats. It is anticipated that effects on the existing habitats may be significant and negative, and may result from amongst other things, the total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure and predation by pets.

- 3.1091 However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects. In line with the assumptions framework, significant negative yet uncertain (---?) effects are anticipated in relation to SA objective 6. This effect is considered likely to occur when fully built at all capacity options (C4a/b/c).
- 3.1092 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.1093 The CAUSE Thorpe-le-Soken site is focused around Thorpe-le-Soken railway station on the Colchester-Clacton line, providing links to Clacton-on-Sea (in roughly 10 minutes), to Frinton-on-Sea (in roughly 8 minutes), and to Colchester (in roughly 20-25 minutes).
- 3.1094 The site does not lie directly on the network of strategic trunk roads and is around 2km west of the A133. As such, connections to neighbouring settlements are largely via B-roads. The B1414 (Harwich Road) bisects the site north-south, and provides connections south to Clacton-on-Sea (via Little Clacton). Northbound it links the site to Thorpe-le-Soken village. However, the A133 links to the A120 to provide connections to Colchester and the A120 eastbound provides road connections north east to Harwich. The relationship of the site to other existing local centres is described above in the commentary for SA objective 4. More generally for the district, the Tendring Infrastructure Delivery Plan (IDP, para 6.1)⁸⁹ notes that the movement of people into urban Colchester is significantly road-based (para 6.1), and the road network across Tendring is over capacity in peak periods (para 6.4).
- 3.1095 Two bus services leave on school days only from Station Road (within the site) – one hourly bus departs south to Clacton-on-Sea and north to Harwich (via Beaumont-cum-Moze), and another departs for Weeley via Little Clacton. For other services, residents of the site would have to connect in Thorpe-le-Soken village to travel to Colchester (roughly 45 minutes via intervening villages), to Frinton-on-Sea (roughly 20 minutes), and to Clacton via Little Clacton (roughly 30 minutes).
- 3.1096 There is an existing primary school (the Rolph CofE Primary School) within Thorpe-le-Soken village, and a middle school – one of the campuses of Tendring Technology College – which provides education for Years 7 to 9.
- 3.1097 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.1098 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council⁹⁰ sets out that the significant increase in demand for school places across Essex is predicted to continue and that the catchment area for Rolph CofE Primary School has somewhat limited capacity (-28 forecast for 2028/29). Given an assumption of 0.3 primary pupils per household, the smallest capacity option C4a (700 dwellings) will generate demand for 210 new primary places, and the largest capacity option C4c (2,500 dwellings) will generate demand for 750 new primary places. As such, it is considered likely that a new primary school will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (C4a/b/c). These services and facilities would serve both new residents and the existing community within the development site.
- 3.1099 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site

⁸⁹ https://www.braintree.gov.uk/downloads/file/6958/tdc023_tendring_infrastructure_delivery_plan_report_october_2017

⁹⁰ Essex School Organisation Service – 10 Year Plan 2019-2028.

at both potential dwelling capacities. However, it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities, secondary schools, and further / higher education facilities, and most likely higher order services and employment (notwithstanding on-site provision). It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. The potential effects of rail upgrades are considered in the appraisal of the CAUSE Metro Plan spatial strategy rather than the appraisals of individual strategic sites. Overall it is considered likely that the provision of the aforementioned local services and facilities is likely to result in minor positive yet uncertain (+?) effects for all dwelling capacities (C4a/b/c). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

3.1100 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to provide secondary school facilities in accordance with the developer contributions guidance from Essex County Council⁹¹. In relation to this, the Essex County Council evidence⁹² sets out that existing secondary schools in Clacton will have limited capacity going forward (-63 places forecast for 2028/29), however expansion plans are being finalised, including more places at Clacton Coastal Academy in 2019/20 and temporary 'bulge' classes. Given a secondary pupil factor of 0.2 pupils per house, it is projected that the site would generate demand for at least 140 secondary pupils (at the smallest capacity C4a) or 500 pupils (at the largest capacity C4c). This would require some offsite secondary school expansion in order to absorb the new demand.

3.1101 However, this site alone (at any of the final capacity options) is not of sufficient scale to deliver a new secondary school as both capacity options are below the 4,500 dwelling threshold for new secondary facilities set out in the assumptions framework. This means that residents would need to make use of existing secondary schools in nearby settlements (in Clacton-on-Sea or Frinton-on-Sea), which may result in longer journeys and increased car dependence.

3.1102 As set out above, it is considered that any capacity option at this site will be able to support at least 10 hectares of employment land as part of the site. However given that the site will not be able to deliver a new, on-site secondary school in line with the assumptions framework there is no change to the minor significant positive yet uncertain (+?) effects anticipated in relation to shorter journeys, at any capacity option (C4a/b/c). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

3.1103 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.

3.1104 For journeys to more distant destinations, the proximity to the Thorpe-le-Soken railway station in provides good potential for trips by rail, which generates opportunities to decrease car use and limit congestion for external journeys. For destinations not lying along the rail line, reasonably regular bus services also provide opportunities for sustainable travel to nearby local centres, services, and schools for those not served by the local offer.

3.1105 In terms of potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site lies centrally within the Tendring 007 middle super output area (MSOA). According to NOMIS (based on 2011 census data), the most popular commuting destination for residents of this MSOA is Clacton-on-Sea (27% of commuters). In addition, roughly 14% of commuters currently residing in this area work locally (an area covering neighbouring settlements of Weeley and Little Clacton) and another 5% commute into central

⁹¹ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

⁹² Essex School Organisation Service – 10 Year Plan 2019-2028.

Colchester. Commuters into both Clacton-on-Sea and Colchester are well served by rail lines, providing an opportunity for sustainable transport modes.

3.1106 If the new residents follow broadly the same pattern (notwithstanding on-site employment provision), commuting journeys are likely to be carried by a combination of rail journeys (capacity allowing) and some road journeys. Given the strong accessibility of railway stations from the site, significant positive effects (++?) are considered likely when the site is fully built for all site capacity options (C4a/b/c). The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters to the most popular commuting destinations.

3.1107 As such the anticipated overall effects on SA objective 7, when fully built at all capacity options (C4a/b/c), will be mixed but broadly positive with uncertainty (+?/+?).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

3.1108 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.

3.1109 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form, this site is to be supported by the following local/strategic infrastructure at all dwelling capacities (C4a – 700 dwellings, C4b – 2,000 dwellings, and C4c – 2,500 dwellings):

- Early Years
- Primary School(s)
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces
- Increased frequency of trains utilising the Colchester to Clacton/Walton branch line

3.1110 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.1111 The supporting infrastructure listed above is confirmed to be viable (on the site information form) and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for SA objective 8 at all dwelling capacity options (C4a/b/c). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.1112 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

3.1113 There is a significant overlap in the north between this site and the Thorpe-le-Soken Conservation Area and Registered Park and Garden, as well as small areas of the Thorpe-le-Soken Station and Maltings Conservation Site, which would be surrounded by the development at this site. In addition, a number of Grade-II* listed buildings in the village of Thorpe-le-Soken lie within 500m of the site boundaries (The Parish Church of St Michael, the Bell Hotel, and The Abbey), as well as

Grade II listed buildings. Further listed buildings are located within 1km of the site boundaries (e.g. the 'Comarques' building).

3.1114 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.

3.1115 It is assumed that no site will necessarily result in physical alteration of the designated heritage assets outlined above; however, it is considered that development in the surrounding area could impact the setting of these assets. In total, approximately 83% of the site area falls within 500m of a heritage asset, and a further 17% falls within 500m to 1km of an asset. In line with stated assumptions, and taking a precautionary approach to this assessment, potential significant negative effects (--?) are anticipated at all capacity options (C4a/b/c) in relation to SA objective 9. Uncertainty in relation to this arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

3.1116 With regards to townscape, this site lies immediately adjacent to the existing settlements of Thorpe-le-Soken Station and Maltings (approximately 22 existing dwellings) and Thorpe-le-Soken (approximately 935 existing dwellings). Given the proximity of existing nearby settlements, the building out of this development is likely to significantly change the character of the local townscape. However, whether this change will be positive or negative will depend on the quality of design provided, therefore the effect on townscape is scored as uncertain (?).

3.1117 In accordance with the above, the site scores an overall negative effect with uncertainty (--?/?) in relation to SA objective 9 when fully built at all capacity options (C4a/b/c).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

3.1118 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.

3.1119 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities (C4a/b/c) is likely to result in minor positive (+) effects in relation to SA objective 10.

SA11: To improve water quality and address water scarcity and sewerage capacity

3.1120 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

3.1121 The site is entirely outside source protection zones, and as such it is not considered likely that the development of the site will affect ground water stores and therefore negligible effects (0) are anticipated in relation to ground water for all dwelling capacity options.

Water scarcity and water treatment

3.1122 With regard to water supply, the Tendring Water Cycle Study (WCS)⁹³ identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The WCS assumes planned growth of 10,627 dwellings within the Plan Period (2017

⁹³ <https://www.tendringdc.gov.uk/sites/default/files/Tendring%20Water%20Cycle%20Study%20-%20Final%20Report%20Sept%202017.pdf>

to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that the CAUSE sites were not allocated in the Section 1 Local Plan therefore their specific locations were not taken into account in the Tendring WCS. As such, the results of this study should be interpreted with caution in relation to this site.

- 3.1123 It is not entirely clear from the study which catchment area the Thorpe-le-Soken site would lie within. It lies roughly equidistant from three WRCs – Clacton-Holland Haven, Tendring Green, and Walton on the Naze. Only Clacton-Holland Haven is flagged up as requiring treatment processes upgrades from 2024 using conventional treatment technologies, however, the precise impact of growth at this specific site remains unclear as it was not assessed as part of the WCS.
- 3.1124 It is expected all dwellings for site C4 will be delivered within the plan period (and thus the period assessed by the WCS). However, it is not clear which WRC the site would be served by and therefore uncertain (?) effects are expected in relation to water treatment at all potential dwelling capacities.
- 3.1125 As such, an overall negligible and uncertain (0/?) is therefore expected for SA objective 11, at all capacity options (C4a/b/c).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.1126 Part of the site (11%) intersects with Environment Agency Flood Zones 2 and 3 around Holland Brook, which bisects the site. However, no part of the site is identified as being of high risk of groundwater flooding and <25% of the site is identified as being at high risk of flooding from surface water. Further, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient, and provide for sustainable urban drainage.
- 3.1127 In light of the above, and in line with stated assumptions, it is considered that the effects in relation to SA objective 12 are likely to be minor negative with uncertainty (-?) at all capacity options (C4a/b/c). The uncertainty arises because site specific mitigation may overcome significant issues.

SA13: To improve air quality

- 3.1128 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 3.1129 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated at all capacity options.

Potential contribution to road traffic within areas suffering from air pollution

- 3.1130 The site lies in the western portion of the Tendring 007 middle super output area (MSOA). As set out under SA objective 7, according to NOMIS (based on 2011 census data) the most popular commuting destination for current residents is Clacton-on-Sea, with the remainder largely working in the local area or commuting into central Colchester. There are no AQMAs identified in Clacton-on-Sea or on the route there from the site. While there are some identified AQMAs within the Colchester 007 MSOA (a minor commuter destination from this site), there are also accessible rail connections to Colchester from the site, which has the potential to reduce travel by private car for work.
- 3.1131 As such, if the new community follows the commuting behaviour of the present community, a significant portion of commuter traffic is likely to be carried either by rail or in areas with no existing AQMAs, and a negligible effect (0) is anticipated in relation to this part of the SA objective for all capacity options.
- 3.1132 Overall, negligible effects (0/0) are anticipated in relation to SA objective 13 at all capacity options (C4a/b/c).

SA14: To conserve and enhance the quality of landscapes

- 3.1133 The site is not located near any designated landscapes or proposed extensions to these.
- 3.1134 The area around the site has been assessed by landscape officers of the NEAs (desktop assessment only). The site lies within both the LCA Holland Brook and the LCA Holland Valley System. The LCA Holland Brook was found to be of strong landscape character and highly sensitive to change, with key issues identified as the following: lack of pedestrian access, and sensitivity to change. The LCA Holland Valley System was found to be of strong landscape character and moderately sensitive to change, with key issues identified as the following: the encroachment of development; loss of management of landscape and heritage features; loss of lane character; and declining tranquillity.
- 3.1135 In light of this and in line with the stated assumptions, significant negative effects with uncertainty (--?) are anticipated in relation to SA objective 14 at all capacity options (C4a/b/c). There is uncertainty about this effect as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 3.1136 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 3.1137 Isolated areas within the site (covering approximately 16% of the site in total) lie within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site would result in some sterilisation of mineral resources if these were not extracted before development. In line with the assumptions framework, the effects at all capacity options are anticipated to be minor negative with uncertainty (-?) in relation to mineral resources. The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential dwelling capacity options (C4a/b/c) because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

- 3.1138 Only a negligible proportion of the site (in the south) consists of Grade 2 agricultural land, with the remainder either Grade 3 (approximately 69%) or Grade 4 (30%). Given that >25% of the site area falls within Grade 3 agricultural land, a minor negative (-) effect is anticipated in relation to agricultural land, at all capacity options.
- 3.1139 As such, an overall minor negative effect with some uncertainty (-?/-) is therefore expected for SA objective 15, at all capacity options (C4a/b/c).

Summary of significant effects

- 3.1140 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out – C4a (700 dwellings), C4b (2,000 dwellings), or C4c (2,500 dwellings)

- 3.1141 Effects once the site is fully built are likely to be very similar for all potential fully built out site capacities (C4a/b/c). Significant positive effects are anticipated in relation to:
- SA1 Community cohesion, due to the provision of sustainable development and of youth centre facilities and community meeting places;
 - SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
 - SA5 Economy, due to the site's ability to deliver over 10 hectares of employment land and as such significantly contribute to the local economy;

- SA7 Sustainable travel, largely due to the strong accessibility by rail to major commuting destinations, reducing reliance on the private car.

3.1142 The potential for significant negative effects arises at these scales in relation to:

- SA1 Community cohesion, due to the potential impact of relatively large-scale development on the existing community in Thorpe-le-Soken;
- SA6 Biodiversity and geological diversity, due to the impact on designated local wildlife sites (although allowing for uncertainty over mitigation);
- SA9 Historic environment and townscape, due in large part to the potential impact on 'Thorpe-le-Soken' and 'Thorpe-le-Soken Station and Maltings' Conservation Areas; and
- SA14, due to the potential impact on the sensitive landscapes surrounding the site (Holland Brook LCA and the Holland Valley System LCA).

3.1143 In summary, the fully built site at any of the proposed capacities (C4a/b/c) is likely to result in a development which can support new provision of or local access to a significant number of services, including a new primary school, a new or expanded local centre large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs. All of this is backed up by the aspirations outlined in the Garden Communities Charter.⁹⁴ The development is capable of delivering over 10 hectares of employment land, leading to a strong degree of internalisation of commuting journeys and a strong contribution to the local economy. However, the scale of the proposed development is not considered capable of delivering new healthcare or secondary school facilities on-site and it does not lie within 'acceptable' walking distance of existing facilities. As such, it is likely that residents will need to travel to external destinations for health care, secondary schools and for higher order services. The strong rail connections mean there is good potential for some of these trips to be made by sustainable means. Key external commuting destinations are also well linked to the site by rail and to nearby town centres. It should be recognised that the rail infrastructure and river bisecting the site will require mitigation through design in order to overcome any obstacles to an integrated network of active transport routes within the site. However, the layout of the site as a 'walk shed' around the railway station lessens the severance risk in terms of accessing key locations and transport hubs.

3.1144 Given the significant expansion of the existing settlement of Thorpe-le-Soken and the cluster of buildings at 'Thorpe Station and Maltings' that this site would constitute, there would inevitably be major changes to the character of the area as a result of the development. This would include the landscape context, given the 'strong' character of the surrounding LCA Holland Brook and the LCA Holland Valley System. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.

3.1145 In addition to the potential effects on landscape character described above, the potential for significant negative effects on environmental assets exists in relation to the locally designated wildlife site around Holland Brook and to two nearby designated conservation areas and associated clusters of listed buildings. The precise nature of these effects would depend upon the layout of the site and any opportunities to provide physical separation and thus reduce harm to sensitive features.

⁹⁴ https://www.braintree.gov.uk/downloads/file/5787/garden_communities_charter

NEAGC1 – West of Braintree

Site Context

- 3.1146 Site NEAGC1 is a strategic site located to the west of Braintree, with an anticipated maximum capacity of 10,000 dwellings. It was allocated in the submitted Section 1 Local Plan as the West of Braintree Garden Community. The site boundary is drawn against the boundary of Braintree district, but it is important to note that the planned development in this location is cross boundary - between Braintree and Uttlesford Districts. An allocation for 3,500⁹⁵ dwellings is proposed within the draft Uttlesford District Plan, effectively forming an extension to this site. In total the maximum potential scale of development from this site, and the neighbouring site in Uttlesford is approximately 13,500 dwellings.
- 3.1147 The site is currently primarily arable land, and as it is a large site (496ha) it includes some existing residential properties and businesses, which are generally dispersed reflecting the rural character of the area. The nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are Rayne, approximately 500m to the southeast, which is a settlement of approximately 920 dwellings, but with no policy-defined local centre; Great Saling, which is approximately 800m to the north of the site, and is a settlement of approximately 140 dwellings, again with no policy-defined local centre; Stebbing Green in Uttlesford District, which is 1km to the west, which is a settlement of approximately 400 dwellings; and Panfield, which is a settlement of approximately 390 dwellings, with no policy-defined local centre, and is located approximately 1.6km east of the site. In addition there are additional, smaller groupings of dwellings and employment sites including Blake End to the immediate south of the site boundary, Gransmore Green 650m to the south, Watch House Green 1.6km to the south, Duckend Green 400m to the east, Jaspers Green 1.5km to the northeast, Shalford Green 1.6km to the north, and Crow's Green 1.7km to the north. Braintree is the nearest town defined in the draft Braintree Section 2 Local Plan, the centre of which is approximately 4.7km east of the centre of site NEAGC1, and 4.2km east of the site boundary. Other strategic settlements and destinations nearby include Great Dunmow 8.5km to the west, Stansted Airport 15km to the west, Chelmsford 18km to the south, Haverhill 20km to the north, Colchester 29km to the east and Harlow 30km to the southwest (approximately measured from centre to centre).
- 3.1148 An unnamed road which becomes 'The Street' in Great Saling bisects the site and travels in a north-south alignment, connecting to Great Saling in the north and the B1256 in the south. The B1256 links to the A120, which provides strategic connections to Great Dunmow, Stansted and the M11 to the west, and Braintree and Colchester to the east. The A120 links to the A131 at Braintree, providing a strategic link to settlements to the south such as Chelmsford. As a greenfield site, the area is not well served by existing facilities and services. The nearest train station to the site is Braintree, which is approximately 5.5km from the centre of the site and is the terminus of the Braintree Branch line, which connects to the main London-Ipswich line at Witham.
- 3.1149 Approximately 400m to the north west of the site is Andrewsfield Airfield, a community airfield which provides for small planes and gliders. Use of the clubhouse and flight training courses are also available at the airfield.
- 3.1150 There are no significant residential, employment, or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundary, or within 1km of the site.
- 3.1151 Broadfield Farm within the site boundary is an allocated Minerals Extraction Site in the Essex Minerals Local Plan. A planning application (ESS/19/17/BTE) for sand and gravel extraction of this site is presently being considered by Essex County Council. This was given a resolution to grant subject to legal agreement at the committee of 15 December 2017 and whilst the legal agreement is still pending, further resolutions to grant were given on 22nd June 2018 and 26th April 2019. The sand and gravel extraction allocation / application area covers a large proportion of the proposed allocation.

⁹⁵ Regulation 19 plan available from https://uttlesford.gov.uk/media/8248/Uttlesford-Regulation-19-Pre-submission-Local-Plan/pdf/Reg_19_local_plan_21.06.18_low_res_for_web.pdf

SA objective	Criterion	NEAGC1	NEAGC1	NEAGC 1	NEAGC 1	NEAGC 1	NEAGC 1	NEAGC 1
		Stage 1a	Stage 1b	A	B	C	D	E
		N/A	N/A	2000	2500	5500	7500	10000
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/++	--?/++	--?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++?	++?	++?
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Desirable	+/-?	+/-?	++/-?	++/-?	++/-?
	Access to cycle paths	Unacceptable	Unacceptable					
	Access to open spaces and sports centres	Unacceptable	Desirable					
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable					
	Potential for harm to Source Protection Zones (SPZs)	Low	Low					
	Potential exposure to flood risk	Low	Low					
	Potential exposure to air pollution	Low	Low					
	Potential exposure to noise pollution from roads and railways	Low	Low					
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+	+	+
	Access to town centres	Unacceptable	Unacceptable					
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	++	++	++
	Access to town centres	Unacceptable	Unacceptable					
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable					

SA objective	Criterion	NEAGC1	NEAGC1	NEAGC 1	NEAGC 1	NEAGC 1	NEAGC 1	NEAGC 1
		Stage 1a	Stage 1b	A	B	C	D	E
		N/A	N/A	2000	2500	5500	7500	10000
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	--?	--?	--?	--?	--?
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium					
	Potential for harm to PHI or local BAP habitat	Low	Low					
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?/-?	+?/-?	++?/-?	++?/-?	++?/-?
	Access to primary or middle schools	Unacceptable	Desirable					
	Access to secondary schools	Unacceptable	Desirable					
	Access to further and higher education facilities	Unacceptable	Unacceptable					
	Access to local centres	Unacceptable	Desirable					
	Access to town centres	Unacceptable	Unacceptable					
	Access to railway stations	Unacceptable	Unacceptable					
	Access to bus stops	Unacceptable	Desirable					
	Access to cycle paths	Unacceptable	Unacceptable					
	Access to open spaces and sports centres	Unacceptable	Desirable					
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable					
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable					
SA8 Accessibility, sustainable location,	Access to GP surgeries/ health centres	Unacceptable	Desirable	+	+	+	+	+

SA objective	Criterion	NEAGC1	NEAGC1	NEAGC 1	NEAGC 1	NEAGC 1	NEAGC 1	NEAGC 1
		Stage 1a	Stage 1b	A	B	C	D	E
		N/A	N/A	2000	2500	5500	7500	10000
infrastructure provision	Access to primary or middle schools	Unacceptable	Desirable					
	Access to secondary schools	Unacceptable	Desirable					
	Access to further and higher education facilities	Unacceptable	Unacceptable					
	Access to local centres	Unacceptable	Desirable					
	Access to town centres	Unacceptable	Unacceptable					
	Access to railway stations	Unacceptable	Unacceptable					
	Access to bus stops	Unacceptable	Desirable					
	Access to cycle paths	Unacceptable	Unacceptable					
	Access to open spaces and sports centres	Unacceptable	Desirable					
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable					
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable					
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/0	--?/0	--?/0	--?/0	--?/0
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Desirable					
	Access to primary or middle schools	Unacceptable	Desirable					
	Access to secondary schools	Unacceptable	Desirable	+	+	+	+	+
	Access to further and higher education facilities	Unacceptable	Unacceptable					
	Access to local centres	Unacceptable	Desirable					
	Access to town centres	Unacceptable	Unacceptable					

SA objective	Criterion	NEAGC1	NEAGC1	NEAGC 1	NEAGC 1	NEAGC 1	NEAGC 1	NEAGC 1
		Stage 1a	Stage 1b	A	B	C	D	E
		N/A	N/A	2000	2500	5500	7500	10000
	Access to railway stations	Unacceptable	Unacceptable					
	Access to bus stops	Unacceptable	Desirable					
	Access to cycle paths	Unacceptable	Unacceptable					
	Access to open spaces and sports centres	Unacceptable	Desirable					
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable					
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable					
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?	0/0?	0/0?	0/0?	0/0?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/0	0/0	0/0	0/0	0/0
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High					
	Potential for harm to agricultural land	High	High	--?/--	--?/--	--?/--	--?/--	--?/--

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.1152 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of the anticipated effects on existing communities and on

the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

- 3.1153 Currently the site is a large area of arable farmland featuring scattered houses and businesses, comprising a dispersed rural community. Neighbouring settlements and groupings of houses and employment uses include Rayne (approx. 955 dwellings), Great Saling (approx. 139 dwellings), Stebbing Green, Panfield (approx. 387 dwellings), Blake End, Gransmore Green, Watch House Green, Duckend Green, Jaspers Green, Shalford Green and Crow's Green. None of these settlements offer local centre facilities which result in their definition as a local centre in the draft Braintree Section 2 Local Plan⁹⁶ or Uttlesford Draft Local Plan⁹⁷.
- 3.1154 Nearby Andrewsfield Airfield provides local amenity in the form of a private airfield and the associated café and other club facilities used by the community (listed in 2018 as an Asset of Community Value). The NEAGC1 site boundary lies approximately 400 metres from the airfield perimeter at its closest point. Since the sites do not overlap, NEAGC1 would not directly lead to loss of flight operations facilities, community facilities, or historic assets forming part of the current airfield site. The NEAs have confirmed that development of NEAGC1 would be compatible with continuation of flying activity at the airfield in terms of operational safety and the development would not, therefore, result in loss of this amenity. It is assumed that since airfield operations predate development proposals, development of NEAGC1 would be required to take into account and implement appropriate mitigation of aircraft noise effects on future residents; as such no effects are recognised in relation to the potential for aircraft noise issues to lead to limitation or loss of airfield operations and loss of associated community facilities. Potential noise effects from the airfield are also considered below under SA3 Health. NEAGC1 has been assessed on its own merits and the SA scores reflect the effects of the development option alone. However, it is recognised that there is a potential cumulative effect from allocation of NEAGC1 together with that part of West of Braintree Garden Community in Uttlesford District (Policy SP8 of Uttlesford Local Plan). As currently mapped in the Uttlesford Local Plan submitted for Examination, this could result in closure of the flying facilities at Andrewsfield Airfield, loss of community facilities, and potential harm to the historic assets associated with the former World War Two airfield but this is uncertain, pending any modifications to the Uttlesford Local Plan at Examination and subject to masterplanning of the specific proposals that come forward.
- 3.1155 It is recognised that the provision of such a large development around and close to the existing small scale communities in the area within 5km (which is over 10% of the current scale of some of these for all capacity options), is likely to result in a significant change to these. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context as development of this scale would result in the creation of a permanent urban character compared to what is a rural character at present. The existing developed areas within the site boundary will be subject to the most significant degree of change.
- 3.1156 It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements that impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all of the potential scales of development (NEAGC1 a/b/c/d/e) including the potential maximum capacity at the end of the plan period will result in significant negative yet uncertain (--?) effects in relation to this SA objective. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

- 3.1157 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.

⁹⁶ http://www.braintree.gov.uk/download/downloads/id/6455/publication_draft_lp_section_2_june_17.pdf

⁹⁷ <https://www.uttlesford.gov.uk/article/6009/ULP-Uttlesford-Local-Plan>

- 3.1158 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and, as such, the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (NEAGC1a/b/c/d/e).
- 3.1159 In accordance with the above commentary, anticipated effects on this SA objective at all potential dwelling capacity options will be mixed with uncertain significant negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.1160 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for all dwelling capacity options (NEAGC1a/b/c/d/e).
- 3.1161 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.1162 In addition, the site information form sets out that development at 2,000, 5,500, 7,500 and 10,000 dwelling capacities is likely to be viable, which includes the delivery of 30% affordable housing. However, for capacity options NEAGC1c (5,500 dwellings), NEAGC1d (7,500 dwellings) and NEAGC1e (10,000 dwellings), delivering sustainable development including policy compliant affordable housing provision is reliant on improvements in scheme viability, such as through securing external funding for strategic infrastructure (e.g. RTS and A120 junction improvements), inflationary impacts or other influences. Scores for these three options are therefore subject to uncertainty, reflecting that this funding or improved scheme viability has yet to be secured. The site information form does not indicate any similar viability issue for site capacity options NEAGC1a (2,000 dwellings) or NEAGC1b (2,500 dwellings).
- 3.1163 The North Essex Local Plans (Section 1) Viability Assessment Update prepared by HYAS associates ltd (June 2019) sets out that dwelling capacity option NEAGC1e (10,000 dwellings) is likely to be viable which supports the content of the site information form.
- 3.1164 In light of the above factors, it is considered that significant positive effects (++) are anticipated in relation to NEAGC1a and NEAGC1b. However, whilst similar effects are anticipated for site capacity options NEAGC1c/d/e, uncertainty arises due to the need for external funding / the scheme viability to improve in order to deliver sustainable development as defined in the site information form, resulting in significant positive yet uncertain (++?) effects.

SA3: Improve health/reduce health inequalities

- 3.1165 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.1166 As a greenfield site, there are no existing healthcare facilities within NEAGC1. The nearest GP Surgery is in Great Notley; however, there are also health services provided in Braintree including Braintree Community Hospital and several other GP Surgeries.
- 3.1167 Similarly, there is no public open space within the site and the site does not link to any existing dedicated cycle paths. The site includes several public rights of way, which provide access to the surrounding countryside. These may provide links to the surrounding countryside for residents of the new development to utilise for recreation; however, it is not considered that these Public

Rights of Way will make a significant contribution to recreation so as to facilitate more healthy lifestyles.

- 3.1168 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritises walking, cycling and use of public transport over private car use, and includes foot and cycle ways throughout the development and providing open space within the development. The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to this SA objective for all site capacity options (NEAGC1a/b/c/d/e).
- 3.1169 In terms of accessing healthcare, the site is relatively isolated in terms of access to GP Surgeries and health centres because it is a largely rural site. For capacity options NEAGC1a (2,000 dwellings) and NEAGC1b (a maximum of 2,500 dwellings at the end of the plan period), the site is not likely to be large enough to support new healthcare facilities, resulting in no adjustment to the minor positive effect (+) identified above.
- 3.1170 In accordance with the assumptions framework the dwelling capacity options NEAGC1c (5,500 dwellings) and NEAGC1d (7,500 dwellings) are considered to provide sufficient critical mass to support a new primary care spoke within the site, and dwelling capacity NEAGC1d (10,000 dwellings) is considered able to support a new primary care hub. Therefore, at these scales the sites should be supported by new, up to date healthcare facilities, and a significant positive (++) rather than minor positive (+) effect is anticipated in relation to access to health and recreation facilities and therefore this SA objective.

Exposure to noise pollution

- 3.1171 In accordance with the assumptions framework, as less than 50% of the site falls within a DEFRA strategic noise area of Lnight 50.0-54.9 dB, or Laeq,16 55.0-59.9 dB, and as less than 5% of the site falls within either a DEFRA strategic noise area of Lnight \geq 55.0 dB, or Laeq,16 \geq 60.0 dB, the anticipated effects in relation to exposure to noise pollution for all dwelling capacity options (NEAGC1a/b/c/d/e) are considered to be negligible (0).
- 3.1172 There is also the risk that continuation of current levels of operational activity at nearby Andrewsfield Airfield would result in adverse noise pollution effects on future residents of NEAGC1 but this is uncertain in the absence of noise contour maps or similar data. A minor negative effect with uncertainty (-?) is therefore recognised in relation to SA3 Health at all capacity options. In order to understand these noise pollution risks in more detail and inform any necessary mitigation, it is recommended that any allocation policy for NEAGC1 requires development proposals to carry out EIA in relation to the effects of aircraft noise on future residents and to implement appropriate site layout, landscaping and building design measures to mitigate aircraft noise issues as appropriate.
- 3.1173 The potential for adverse aircraft noise pollution effects on future residents of NEAGC1 from current flight operations at Stansted Airport has been ruled out on the basis that the current published noise envelopes do not intersect with the site. A further check was made of predicted future noise envelopes for Stansted, as set out in the Environmental Statement⁹⁸ that accompanied the 2018 planning application for airport expansion. 'Onset of community annoyance' is described as being associated with the 57 dB LAeq,16h noise contour. This noise contour does not extend into the NEA plan area either for the 'Do Minimum' scenario (expected increase in aircraft movements within currently permitted limits) or if the proposed airport expansion is permitted. There is also the possibility that Stansted flight paths could be altered if development of NEAGC1 led to flight operations at Andrewsfield Airfield ceasing since it is understood that there is currently a no fly zone to an altitude of 2,000 feet over the airfield. However, since allocation of NEAGC1 alone would not require flight operations at Andrewsfield Airfield to cease (as confirmed by the NEAs) and since the effects of any future changes to Stansted flight paths would be subject to their own environmental assessment before being permitted, it is judged that it is not appropriate to recognise effects from this possible future scenario in the SA of the site option NEAGC1 in the NEA Section 1 Local Plan. Potential noise effects on future residents in relation to SA3 3 Health from Stansted Airport flights paths crossing NEAGC1 are therefore judged to be negligible.

⁹⁸ <https://www.uttlesford.gov.uk/article/5831/Key-documents-for-the-Stansted-Airport-application>

- 3.1174 Overall, anticipated effects on this SA objective at dwelling capacity options NEAGC1a (2,000 dwellings) and NEAGC1b (a maximum of 2,500 dwellings at the end of the plan period) will be mixed with minor positive and negligible implications (+/-?).
- 3.1175 The anticipated effects on this SA objective for the capacity options NEAGC1c (5,500 dwellings), NEAGC1d (7,500 dwellings) and NEAGC1e (10,000 dwellings) will also be mixed, but with greater positive effects (++)/-?).

SA4: To ensure and improve the vitality & viability of centres

- 3.1176 In accordance with the site information form it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to this SA objective, at all potential dwelling scales (NEAGC1a/b/c/d/e).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.1177 The relationship of the site to existing centres is described in the site context above. There are also existing employment areas surrounding the site, which provide for jobs which may not be within local or town centres. Within Braintree district, the nearest employment areas (not within local or town centres) include Skyline Business Park approximately 1.5km to the southeast of the site in Great Notley and Springwood Industrial Estate 2.4km to the east of the site in Rayne.
- 3.1178 It is anticipated that the development of the site at all potential scales (NEAGC1a/b/c/d/e) will provide new homes in the area, which will increase the local workforce providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.
- 3.1179 Based on the site information form and informed by a 'central' scenario⁹⁹ for site NEAGC1 in the 2019 CEBR employment report, it is estimated that approximately 9ha of employment land will be required by 2033 at dwelling capacity option NEAGC1b (a maximum of 2,500 dwellings at the end of the plan period), approximately 18ha at NEAGC1c (5,500 dwellings), approximately 26ha at NEAGC1d (7,500 dwellings) and approximately 43ha at NEAGC1e (10,000 dwellings). No employment land is to be provided alongside dwelling capacity option NEAGC1a (2,000 dwellings). As such, as capacity options NEAGC1c, NEAGC1d and NEAGC1e are expected to provide over 10ha of employment land, they are likely to make a significant contribution to the local economy, resulting in significant positive (++) effects. At dwelling capacity options NEAGC1a and NEAGC1b there will be no adjustment to the minor positive (+) effects identified as NEAGC1b provides less than 10ha employment land and NEAGC1a does not deliver any.
- 3.1180 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in the sustainability score for the site due to the short term implications.
- 3.1181 In accordance with the above commentary, anticipated effects on this SA objective at dwelling capacity options NEAGC1a (2,000 dwellings) and NEAGC1b (a maximum of 2,500 dwellings at the end of the plan period) will be minor positive (+), whilst the anticipated effects on this SA objective for the capacity options NEAGC1c (5,500 dwellings), NEAGC1d (7,500 dwellings) and NEAGC1e (10,000 dwellings) will be significant positive (++).

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.1182 The site intersects with three local wildlife sites: Rumley Wood, Golden Grove (both of which contain ancient woodland) and Blackbush Wood. In addition, the site is within 400m of other local

⁹⁹ The CEBR's 'Cebr central' scenario is based on dwelling trajectories for each Garden Community, and takes a midpoint of the employment-to-population between the two economic scenarios considered – the 'investment-led' scenario and the 'lifestyle-led' scenario.

wildlife sites including Pods Brook complex and Flitch Way local wildlife sites, and is adjacent to Boxted Wood Local Wildlife Site (parts of which are ancient woodland). The related development sites in Uttlesford also border the Boxted Wood Local Wildlife Site. NEAGC1 includes isolated areas of deciduous woodland BAP priority habitat.

- 3.1183 As such, development of this site may result in impacts to these local designations and habitats. As more than 5% of the site area falls within a locally designated wildlife site and less than 5% of the site area intersects priority habitat, but more than 5% of the site area falls within 400m of a locally designated wildlife site and a Site of Special Scientific Interest Impact Risk Zone where residential development of 100 units or more could cause harm, it is anticipated that effects on the existing habitats may be significant and negative, and may result from amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure, predation by pets. However, the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects. As such a significant negative yet uncertain (--?) effect is anticipated in relation to this SA objective. This effect is considered likely to occur in relation to all potential dwelling capacities (NEAGC1a/b/c/d).
- 3.1184 Cumulative effects on the identified ecological assets may occur if the proposed allocation in Uttlesford to extend this site comes forward.
- 3.1185 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.1186 The site is a largely greenfield site which is rural in character. The relationship of the site to existing local centres is described above in the site context section and the accessibility of the site to surrounding facilities and services would, prior to provision of any new transport infrastructure, be primarily dependant on the B1256 and the A120. As set out in the Braintree Infrastructure Delivery Plan¹⁰⁰, the A120 is congested in both directions in morning and afternoon peak periods, and suffers from poor journey time reliability. A bus service operates on an approximately hourly frequency along the B1256, linking to Rayne and Braintree to the east and Felsted, Little Dunmow and Stansted to the west. The nearest railway station is Braintree, which is at the terminus of the Braintree Branch Line. This offers an hourly service to London throughout the day. The nearest existing primary school is Rayne School.
- 3.1187 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.1188 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council¹⁰¹ sets out that there is limited capacity at Primary Schools in the Braintree town area (-59 places forecast in 2028-29) so it is considered likely that new primary school(s) will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (NEAGC1a/b/c/d/e). These services and facilities would serve both new residents and the existing community within the development site.
- 3.1189 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at all potential dwelling capacities. However, it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities and further / higher education facilities, and most likely higher order services and employment. It is possible that

¹⁰⁰ https://www.braintree.gov.uk/downloads/file/6491/braintree_infrastructure_delivery_plan_report_october_2017

¹⁰¹ Essex School Organisation Service – 10 Year Plan 2019-2028.

these journeys could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall it is considered likely that the provision of the aforementioned local services and facilities is likely to result in minor positive yet uncertain (+?) effects for all dwelling capacities (NEAGC1a/b/c/d/e). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. It is notable that sites over 4,500 dwellings in size are anticipated to provide new health centre facilities, however this is not considered likely to change the effect from minor positive in relation to this SA objective.

3.1190 Further to the considerations above, in accordance with the assumptions framework, it is assumed that all strategic sites will be required to provide additional secondary school capacity in accordance with the developer contributions guidance from Essex County Council¹⁰². In relation to this, the Essex County Council evidence¹⁰³ sets out that in 2028-29 (the final year of the forecast in this schools capacity document) there will be 46 secondary school places in Braintree. Given a secondary pupil factor of 0.2 pupils per house, it is likely that some secondary school expansion may be required to meet all dwelling capacity options - NEAGC1a for 2000 dwellings which is the smallest option will generate approximately 400 secondary pupils. The site capacity options NEAGC1b (2,500 dwellings maximum at the end of the plan period), NEAGC1c (5,500 dwellings), NEAGC1d (7,500 dwellings) and NEAGC1e (10,000 dwellings) are considered capable of delivering new secondary school facilities on the site, which provides further opportunities for sustainable travel. It is assumed that although NEAGC1b is lower than the 4,500 threshold for new secondary facilities set out in the assumptions framework, that phased provision can be made as the full site capacity (between 5,500 and 10,000 dwellings) will be able to support a new secondary school.

3.1191 Furthermore, as set out above, it is considered that capacity options NEAGC1c (5,500 dwellings), NEAGC1d (7,500 dwellings) and NEAGC1e (10,000 dwellings) will be able to support at least 10ha of employment land as part of the site. This, combined with the delivery of a new secondary school in the site is likely to create significant opportunities for sustainable travel within the site, resulting in anticipated significant positive yet uncertain (++?) effects for NEAGC1cd/e. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

3.1192 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.

3.1193 For journeys to more distant destinations, the distance to the nearest railway station, Braintree, is more than 2km and as such, this is likely to reduce the potential for trips by rail, which may lead to increased car use and increased congestion for the external journeys. In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site is split between two middle super output areas (MSOAs) – Braintree 005 and 010. According to NOMIS, the majority of commuters from both of these MSOAs travel to work in Braintree town itself, as well as London Stansted Airport. As such, if the new residents follow the same pattern, most of the commuting journeys are likely to be carried by local roads and the A120 in the vicinity of Braintree and Stansted. These are relatively short trips which could not be undertaken on a train as the infrastructure does not exist. As such, minor negative yet uncertain (-?) effects are considered likely in relation to all potential dwelling capacities (NEAGC1a/b/c/d/e). The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters into Braintree.

¹⁰² The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

¹⁰³ Essex School Organisation Service – 10 Year Plan 2019-2028.

3.1194 Overall, a mixture of positive and negative effects is expected in relation to this SA objective as set out in the scoring table above, with generally more positive effects for the larger capacity options NEAGC1c/d/e.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

3.1195 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.

3.1196 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form for this site provided by the NEAs, this site is to be supported by the following infrastructure at the following dwelling capacities:

3.1197 NEAGC1a (2,000 dwellings) and also assumed to apply to NEAGC1b given it is a similar scale (maximum 2,500 dwellings at the end of the plan period) and NEAGC1c(5,500 dwellings):

- Early Years
- Primary School(s)
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces

3.1198 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.1199 NEAGC1d (7,500 dwellings) and NEAGC1e (10,000 dwellings):

- Rapid Transport System links to Braintree Town, Braintree Freeport and Stanstead
- Early Years
- Primary School(s)
- Secondary School
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces

3.1200 The site information form indicates that the site can viably deliver these infrastructure requirements with external funding from transport operating companies, or other improvement to the viability of the site.

3.1201 The delivery of the supporting infrastructure listed above is confirmed to be viable (on the site information form) and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for all dwelling capacity options (NEAGC1a/b/c/d/e). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty also arises in relation to site capacity options NEAGC1c (5,500 dwellings), NEAGC1d (7,500 dwellings) and NEAGC1e (10,000 dwellings) as the site information form indicates that external funding or other improvement in site viability is required to deliver the rapid transport system and grade separated A120 junction.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.1202 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

3.1203 There are several Grade II listed buildings located within the site, including those at Blake End in the southwest of the site, and at Onchor's Farm Cottages and Parkes in the north of the site. In addition, the Conservation Areas of Great Saling and Rayne are in relatively close proximity, being approximately 370m and 950m from the site boundary. There are also several listed buildings in the vicinity of the site. Furthermore, the Saling Grove (Grade II) Listed Park and Garden is immediately to the north of the site boundary – and Great Saling (Grade II) Listed Park and Garden is to the north of Great Saling, approximately 1.1km from the site boundary.

3.1204 The NEAGC1 site boundary lies approximately 400 metres from Andrewsfield Airfield perimeter at its closest point. Since the sites do not overlap, NEAGC1 would not directly lead to loss of historic assets forming part of the current airfield site. NEAGC1 has been assessed on its own merits and the SA scores reflect the effects of the development option alone. However, it is recognised that there is a potential cumulative effect from allocation of NEAGC1 together with that part of West of Braintree Garden Community in Uttlesford District (Policy SP8 of Uttlesford Local Plan). As currently mapped in the Uttlesford Local Plan submitted for Examination, this could result in potential harm to the historic assets associated with the former World War Two airfield but this is uncertain, pending any modifications to the Uttlesford Local Plan at Examination and subject to masterplanning of the specific proposals that come forwards.

3.1205 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.

3.1206 More than 5% of the site area is within 500m of heritage assets including Great Saling Conservation Area, Saling Grove (Grade II) Listed Park and Garden, and several Grade II listed buildings. Taking a precautionary approach to this assessment, potential significant negative yet uncertain effects (--?) are anticipated in relation to all potential dwelling capacity options (NEAGC1a/b/c/d/e). The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

3.1207 With regards to townscape, the boundary of the site is approximately 550m from Rayne (which includes the Rayne Conservation Area). In line with the assumptions framework, the townscape of Rayne is not assumed to be altered due to this separation and the effects in relation to all potential dwelling capacity options (NEAGC1a/b/c/d/e) are considered to be negligible (0).

3.1208 In accordance with the above commentary anticipated effects on this SA objective, in relation to all potential dwelling capacity options (NEAGC1a/b/c/d/e) are considered to be mixed, with uncertain significant negative and negligible implications (--?/0).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

3.1209 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.

3.1210 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities (NEAGC1a/b/c/d/e) is likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

3.1211 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

3.1212 The site is entirely outside source protection zones, and as such it is not considered likely that the development of the site will affect ground water stores and therefore negligible effects (0) are anticipated in relation to ground water for all potential dwelling capacity options (NEAGC1a/b/c/d/e).

Water scarcity and water treatment

3.1213 With regard to water supply, the Braintree Water Cycle Study¹⁰⁴ identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period (2,500 dwellings). As such, uncertain negligible effects (0?) are expected for NEAGC1a/b in relation to water scarcity. For the higher potential dwelling capacities (NEAGC1b/c/d/e), the Integrated Water Management Strategy (IWMS)¹⁰⁵, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. As such, uncertain negligible effects are also expected for the higher potential dwelling capacity options in relation to water scarcity.

3.1214 With regard to wastewater treatment, site NEAGC1 falls within the catchment area of the Bocking WRC. The Braintree Water Cycle study indicates that the Bocking WRC has sufficient flow headroom in its existing discharge permit to accept development of approximately 2,570 dwellings, which means that the discharge permit will be exceeded in 2026. The study suggests upgrades will be required before 2026 to accept and treat all of the additional wastewater flow by the end of the plan period, but these are likely to be feasible. Additionally, the IWMS identifies that growth beyond the plan period at NEAGC1 could also be accommodated through either increasing capacity at Bocking WRC or the development of a new WRC, which are both thought to be feasible. As such, uncertain negligible effects (0?) are expected at all potential dwelling capacities (NEAGC1a/b/c/d/e). The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application.

3.1215 In accordance with the above, the effects in relation to this SA objective are considered to be mixed negligible and negligible yet uncertain (0/0?) for all potential dwelling capacities.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

3.1216 A very small proportion of the site (less than 0.2%) of the site intersects with Environment Agency Flood Zones 2 and 3, which is considered to be a negligible amount. In addition, only small areas of the site (<25%) are at medium risk of ground water flooding and only small areas of the site (<25%) are at risk of surface water flooding. Furthermore, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.

3.1217 It is therefore considered that the effects in relation to this SA objective are likely to be negligible for all potential dwelling capacity options (NEAGC1a/b/c/d/e).

SA13: To improve air quality

3.1218 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

¹⁰⁴ https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

¹⁰⁵ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Intersection with AQMAs

3.1219 This site does not intersect with any AQMAs and as such, negligible (0) effects are anticipated for all potential dwelling capacity options (NEAGC1a/b/c/d/e).

Potential contribution to road traffic within areas suffering from air pollution

3.1220 The site is split between two middle super output areas (MSOAs) – Braintree 005 and 010. According to NOMIS, the majority of commuters from both of these MSOAs travel to work in Braintree town itself, as well as Stansted Airport. As such, if the new community follows the commuting behaviour of the present community, the majority of this commuter traffic is likely to be carried by local roads and the A120 in the vicinity of Braintree and Stansted. There are no AQMAs in this area and so it is considered that development of the site at all potential dwelling capacity options (NEAGC1a/b/c/d/e) is likely to result in negligible effects (0) in relation to this SA objective.

SA14: To conserve and enhance the quality of landscapes

3.1221 The site is not located near any designated landscapes or proposed extensions to these.

3.1222 The area has been assessed by landscape officers of the NEAs, and has been found to be of moderate–strong landscape character which is visually sensitive in terms of the flat plateau landscape and skyline views from valley floor, which merits conservation and enhancement. In light of this and in line with the stated assumptions, it is considered that development of the site at all potential dwelling capacity options (NEAGC1a/b/c/d/e) is likely to result in significant negative yet uncertain (--?) effects in relation to this SA objective. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

3.1223 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

3.1224 Approximately 75% of the site is within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site could result in a significant sterilisation of mineral resources. This is particularly significant given the Minerals Site Allocation and live planning application at Broadfield Farm for sand / gravel extraction. Due to the large area of mineral resources that may be affected, the effects are considered to be significant negative yet uncertain (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential dwelling capacity options (NEAGC1a/b/c/d/e), because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

3.1225 Approximately 95% of the site is Grade 1 or Grade 2 agricultural land, meaning the development of this site would result in the loss of a significant amount of high quality agricultural land. In light of the above, a significant negative (--) effect is anticipated. The effect is considered to be the same for all potential dwelling capacity options (NEAGC1a/b/c/d/e), because the location of the development within the site boundary for each capacity option is unknown.

Summary of significant effects

3.1226 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out at capacity NEAGC1a – 2,000 dwellings:

3.1227 The potential for significant positive effects arises in relation to:

- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;

3.1228 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA6 Biodiversity and geological diversity, due to the fact that there are several designated sites and BAP priority habitats within and immediately adjacent to the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby heritage assets;
- SA14 Landscape, due to the significant change which would occur to the moderate-strong landscape character quality; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and planning application at Broadfield Farm; and loss of Grade 1 or 2 agricultural land.

3.1229 In summary the site at this scale is likely to be able to provide a sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this time to provide higher order services such as a secondary school, health care facilities or likely to be able to support a large number of jobs. As such, development in this location at 2,000 dwellings will result in more travel out of the site to access these services and jobs compared to a higher level of development. This is likely to decrease opportunities for sustainable travel and result in a less self-contained development.

3.1230 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. It is considered that at 2,000 dwellings, the effects will be less extreme than the larger capacity options, as the impacts will be less, however there will be less benefit in terms of new services and facilities.

3.1231 Several significant negative effects have been identified in relation to environmental assets, however this scale of development may result in reduced effects on sensitive environmental receptors compared to the larger dwelling capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features.

Effects when fully built out at capacity NEAGC1c (5,500 dwellings), NEAGC1d (7,500 dwellings) and NEAGC1e (10,000 dwellings):

3.1232 Effects once the site is fully built out to these two site capacities are found to be broadly the same, given the similar scale of these options. Significant positive effects are anticipated in relation to:

- SA1 Community cohesion, due to the potential to provide community cohesion within the new development.
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
- SA3 Health, as development of this scale should be able to support new health facilities, as well as open spaces and opportunities for active travel;
- SA5 Economy, through the provision of jobs within the local area (NEAGC1d and NEAGC1e only); and
- SA7 Sustainable travel, as a significant level of services and facilities are anticipated to come forward as part of the site, reducing the need to travel (NEAGC1d and NEAGC1e only).

3.1233 The potential for significant negative effects arises at these scales in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA6 Biodiversity and geological diversity, due to the fact that there are several designated sites and BAP priority habitats within and immediately adjacent to the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby heritage assets;
- SA14 Landscape, due to the significant change which would occur to the moderate-strong landscape character quality; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and planning application at Broadfield Farm; and loss of Grade 1 or 2 agricultural land.

3.1234 In summary, the fully built site at all larger capacities (NEAGC1c - 5,500 dwellings, NEAGC1d – 7,500 dwellings, or NEAGC1e – 10,000 dwellings) is likely to result in a development which can support a significant number of services, including health care facilities, primary and secondary schools, and a centre (or centres) which are large enough to provide some variety for goods and comparison retail, and employment sites (NEAGC1d/e only) to support a larger range of jobs. At these scales, and if supported by appropriate infrastructure / employment provision, it is considered that the site could form a new settlement in its own right. This is likely to result in some self-containment which is likely to provide opportunities for more sustainable travel behaviour. However as a large site, its development will put pressure on surrounding transport infrastructure, particularly the A120 / A131, resulting in increased congestion. The site is not currently accessible by high quality sustainable travel services and this may also lead to a dependence on the private car for journeys to and from destinations outside the site.

3.1235 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.

3.1236 Development of this site is likely to affect a number of other sensitive receptors which are present either within the site or very near to it, including biodiversity assets, heritage assets, high quality agricultural land, and mineral resources – it is important to note that effects in relation to these are likely simply because these form the site context, however delivering a high dwelling capacity within a fixed site boundary may make it more difficult to mitigate the potential impacts.

Effects at the end of the plan period (maximum 2,500 dwellings)

3.1237 The potential for significant positive effects arises in relation to:

- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;

3.1238 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA6 Biodiversity and geological diversity, due to the fact that there are several designated sites and BAP priority habitats within and immediately adjacent to the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby heritage assets;
- SA14 Landscape, due to the significant change which would occur to the moderate-strong landscape character quality; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and planning application at Broadfield Farm; and loss of Grade 1 or 2 agricultural land.

3.1239 In summary the anticipated significant effects at the end of the plan period are broadly similar to those for the NEAGC1a (2,000 dwelling) capacity option described above.

- 3.1240 The site at the end of the plan period is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this time to provide higher order services such as health facilities or likely to be able to support a large number of jobs. As such, development in this location at the end of the plan period will result in more travel out of the site to access these services and jobs than when the site is fully built. This is likely to add traffic to the A120 / A131, resulting in increased congestion and relatively increased carbon emissions compared to a more self-contained site. Having said this, a phased / early delivery of some infrastructure items such as secondary schools may help to provide more opportunities for sustainable travel.
- 3.1241 The smaller scale of development at the end of the plan period (compared to the final capacity) may result in reduced effects on sensitive environmental receptors compared to the fully built out capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features – albeit on a temporary basis.
- 3.1242 For development at all scales, it is recommended that any allocation policy for NEAGC1 requires development proposals to carry out EIA in relation to the effects of aircraft noise from operations at Andrewsfield Airfield on future residents and to implement appropriate site layout, landscaping and building design measures to mitigate aircraft noise issues as appropriate.

NEAGC2 – Colchester/Braintree Borders Garden Community (Marks Tey)

Site Context

- 3.1243 Site NEAGC2 is a 1,285-hectare strategic site straddling the border between Colchester DC and Braintree DC. Geographically, it is centrally located within the Plan area and was allocated in the submitted Section 1 Local Plan (Policy SP 9) as the Colchester/Braintree Borders Garden Community. The potential scale of development from this site, as outlined in the Local Plan, is for 15,000-24,000 homes, with the expectation that 2,500 of those will be delivered within the plan Period (up to 2033). It is the largest in scale of the three proposed garden communities and represents a cross-boundary allocation between Braintree DC and Colchester BC.
- 3.1244 The site is primarily arable land and large in scale and washes over existing small-scale settlements at the villages of Marks Tey (approximately 1,140 existing dwellings) and the smaller Little Tey. Another small settlement at Easthorpe (approximately 100 existing dwellings) lies adjacent to the southern boundary. Development is generally rural in character and dispersed.
- 3.1245 Other than the washed over settlements and Easthorpe, the nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are: Copford and Copford Green (approximately 671 existing dwellings), around 400m to the east; Kelvedon and Feering (approximately 2,462 existing dwellings), around 500m to the south west; Great Tey (approximately 393 existing dwellings), around 850m to the north east; Coggeshall (approximately 2,215 existing dwellings), around 1 km to the west; Aldham (approximately 217 existing dwellings), around 1.7 km to the north east; Tiptree (approximately 4,139 existing dwellings), around 3.3 km to the south; Chappel and Wakes Colne (approximately 444 existing dwellings), around 3.4 km to the north; Eight Ash Green (approximately 740 existing dwellings), around 3.7 km to the east; Birch (approximately 340 existing dwellings), around 4.1 km to the south east; Fordham (approximately 341 existing dwellings), around 4.3 km to the north east; and Earls Colne (approximately 1,641 existing dwellings), around 4.3 km to the north. In addition, there are a number of scattered smaller settlements (<200 existing dwellings) in the vicinity, including Surrex, Messing and Smythe's Green.
- 3.1246 Nearby local centres, as defined in the Section 2 Local Plans, are located at London Road (Marks Tey), Kelvedon with Feering and Coggeshall. Colchester is the nearest policy-defined town centre (approximately 10km to the east), while Braintree lies slightly more distant (13km) to the west. Other strategic settlements and destinations include Witham, around 15.5km to the south west along the A12 and Sudbury (Suffolk), around 23.5km to the north.
- 3.1247 A number of small-scale employment zones lie on the edge of the site, including Andersons Timber and Poplar Nurseries within Marks Tey, the Tey Brook Centre 250m to the north, and a number of industrial sites clustered around road infrastructure at Stanway, approximately 2.4km to the east. Further employment uses lie to the west, in the north of Coggeshall at the Coggeshall Industrial Area (approximately 1.5km to the west along the A120), and at Kelvedon, including the Kelvedon and Gold Key Industrial estates, approximately 2.2km to the south-west along the A12.
- 3.1248 The site is bisected east-west by the strategic A12 (London Road) linking Colchester with London (via Chelmsford) to the south. The site is also bisected by the A120 (Coggeshall Road), which links Colchester with Braintree (and, further west, Bishop's Stortford). The two roads converge at the Marks Tey junction on the north-eastern edge of the site. As such, the site is strongly embedded in road-based transport connections. In addition, there is a railway station at Marks Tey which lies close to the eastern edge of the site and provides connections along the Great Eastern Main Line north toward Norwich (via Colchester) and south toward London (Liverpool Street Station).
- 3.1249 To the south west of the site (at a distance of approximately 500m from the site boundary) there is a cluster of sites on the edges of the settlement of Feering belonging to the Crown Estate and allocated for Braintree's Section 2 Local Plan. These sites are allocated as a strategic residential growth location for 750 homes within the Plan Period (as per Policy LPP 17).

SA objective	Criterion	NEAGC2	NEAGC2	NEAGC 2	NEAGC 2	NEAGC 2	NEAGC 2	NEAGC 2
		Stage 1a	Stage 1b	A	B	C	D	E
		N/A	N/A	2500	5500	15000	21000	27000
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/++	--?/++	--?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++?	++?	++?	++?
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Desirable	+/-?	++/-?	++/-?	++/-?	++/-?
	Access to cycle paths	Unacceptable	Unacceptable					
	Access to open spaces and sports centres	Preferred Maximum	Desirable					
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable					
	<i>Potential for harm to Source Protection Zones (SPZs)</i>	Low	Low					
	<i>Potential exposure to flood risk</i>	Low	Low					
	<i>Potential exposure to air pollution</i>	Low	Low					
Potential exposure to noise pollution from roads and railways	High	High						
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+	+	+
	Access to town centres	Unacceptable	Unacceptable					
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	++	++	++
	Access to town centres	Unacceptable	Unacceptable					
	Access to centres of employment including employment areas and	Preferred Maximum	Preferred Maximum					

SA objective	Criterion	NEAGC2	NEAGC2	NEAGC 2	NEAGC 2	NEAGC 2	NEAGC 2	NEAGC 2
		Stage 1a	Stage 1b	A	B	C	D	E
		N/A	N/A	2500	5500	15000	21000	27000
	town centres							
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium					
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium	-?	-?	-?	-?	-?
	Potential for harm to PHI or local BAP habitat	Low	Low					
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Desirable					
	Access to primary or middle schools	Unacceptable	Desirable					
	Access to secondary schools	Unacceptable	Desirable					
	Access to further and higher education facilities	Unacceptable	Unacceptable					
	Access to local centres	Unacceptable	Desirable					
	Access to town centres	Unacceptable	Unacceptable	+?/-?	+?/-?	+++/-?	+++/-?	+++/-?
	Access to railway stations	Unacceptable	Unacceptable					
	Access to bus stops	Unacceptable	Desirable					
	Access to cycle paths	Unacceptable	Unacceptable					
	Access to open spaces and sports centres	Preferred Maximum	Desirable					
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable					
	Access to centres of employment	Preferred Maximum	Preferred Maximum					

SA objective	Criterion	NEAGC2	NEAGC2	NEAGC 2	NEAGC 2	NEAGC 2	NEAGC 2	NEAGC 2					
		Stage 1a	Stage 1b	A	B	C	D	E					
		N/A	N/A	2500	5500	15000	21000	27000					
	including employment areas and town centres												
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Desirable										
	Access to primary or middle schools	Unacceptable	Desirable										
	Access to secondary schools	Unacceptable	Desirable										
	Access to further and higher education facilities	Unacceptable	Unacceptable										
	Access to local centres	Unacceptable	Desirable										
	Access to town centres	Unacceptable	Unacceptable										
	Access to railway stations	Unacceptable	Unacceptable						+	+	+	+	+
	Access to bus stops	Unacceptable	Desirable										
	Access to cycle paths	Unacceptable	Unacceptable										
	Access to open spaces and sports centres	Preferred Maximum	Desirable										
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable										
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum										
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?	--?/?	--?/?					
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Desirable	+	+	+	+	+					
	Access to primary or	Unacceptable	Desirable										

SA objective	Criterion	NEAGC2	NEAGC2	NEAGC 2	NEAGC 2	NEAGC 2	NEAGC 2	NEAGC 2
		Stage 1a	Stage 1b	A	B	C	D	E
		N/A	N/A	2500	5500	15000	21000	27000
	<i>middle schools</i>							
	<i>Access to secondary schools</i>	Unacceptable	Desirable					
	<i>Access to further and higher education facilities</i>	Unacceptable	Unacceptable					
	<i>Access to local centres</i>	Unacceptable	Desirable					
	<i>Access to town centres</i>	Unacceptable	Unacceptable					
	<i>Access to railway stations</i>	Unacceptable	Unacceptable					
	<i>Access to bus stops</i>	Unacceptable	Desirable					
	<i>Access to cycle paths</i>	Unacceptable	Unacceptable					
	<i>Access to open spaces and sports centres</i>	Preferred Maximum	Desirable					
	<i>Access to Public Rights of Way (PRoW)</i>	Acceptable	Acceptable					
	<i>Access to centres of employment including employment areas and town centres</i>	Preferred Maximum	Preferred Maximum					
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?	0/0?	0/0?	0/0?	0/0?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/-?	0/-?	0/-?	0/-?	0/-?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?	--?	--?

SA objective	Criterion	NEAGC2	NEAGC2	NEAGC 2	NEAGC 2	NEAGC 2	NEAGC 2	NEAGC 2
		Stage 1a	Stage 1b	A	B	C	D	E
		N/A	N/A	2500	5500	15000	21000	27000
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/--	--?/--	--?/--	--?/--	--?/--
	Potential for harm to agricultural land							

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.1250 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.1251 The site is currently a large area of arable farmland bisected by strategic road infrastructure and washes over the existing settlement at Marks Tey (roughly 1,140 existing dwellings) and a smaller linear housing development at Little Tey. A number of other settlements (as described in the site context) lie within 5km of the site boundaries, including a number of local centres. The existing developed areas within the site boundary will be subject to the most significant degree of change.

3.1252 It is recognised that the provision of such a large development around and close to the existing small scale communities in the area is likely to result in a significant change to these. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context as development of this scale would result in the creation of a permanent urban character compared to what is a rural character at present.

3.1253 It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements within 5km (which is over 10% of the current scale of some of these for all capacity options), impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all of the potential scales of development (NEAGC2a/b/c/d/e), including the potential maximum capacity at the end of the plan period, will result in significant negative yet uncertain (--?) effects in relation to SA objective 1. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

3.1254 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.

3.1255 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (NEAGC2a/b/c/d/e).

3.1256 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with uncertain significant negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

3.1257 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for all dwelling capacity options.

3.1258 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.

3.1259 In addition, the site information form indicates that development at 5,500, 15,000, 21,000 & 27,000 dwelling capacities, this site is likely to be viable, which includes the delivery of 30% affordable housing. However, for these capacity options, delivering sustainable development including policy compliant affordable housing provision is reliant on improvements in scheme viability, such as through securing external funding for strategic infrastructure (e.g. RTS and A12 junction improvements), inflationary impacts or other influences. The site information form does not indicate any similar viability issue for site capacity option NEAGC2a (2,500 dwellings).

3.1260 The site information form is supported by the North Essex Local Plan (Strategic) Section 1 Viability Assessment Update Report by Hyas Associates (June 2019), which sets out that NEAGC2d (21,000 dwellings) in this location can viably provide 30% affordable housing (and other infrastructure requirements) with success in the current bid for government funding via the Housing Infrastructure Fund (HIF) and positive inflation, in order to lift residual land values (para 5.7).

3.1261 In light of the above factors, it is considered that significant positive effects are likely to occur as a result of NEAGC2a (2,000 dwellings). For sites NEAGC2 b/c/d/e significant positive yet uncertain (++?) effects are likely to occur. The uncertainty arises due to the need for the scheme viability to improve in order to deliver sustainable development as defined in the site information form and North Essex Local Plan (Strategic) Section 1 Viability Assessment Update Report by Hyas Associates (June 2019).

SA3: Improve health/reduce health inequalities

3.1262 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

3.1263 Despite the site containing some existing settlements, there are currently no existing healthcare facilities within the site. The nearest GP surgeries are in Coggeshall to the west, on the fringes of Colchester to the east, and in Kelvedon to the south west.

3.1264 There are a number of small-scale, existing green spaces within and around the settlement at Marks Tey, which would be washed over by the proposed development – a mixture of children’s play spaces, amenity green space and the Jubilee sports ground. The site is not currently integrated with any national or local cycle networks, the nearest of which lie to the east on the fringes of Colchester and to the south-west in Witham. The site is crossed by several public rights of way (PROW), including both footpaths and bridleways, providing links to the surrounding countryside that residents of the new development can use for recreational purposes. However it is not considered that these PROW in themselves will make a significant contribution to recreation and the promotion of more healthy lifestyles.

3.1265 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritises walking, cycling and use of public transport

over private car use and includes foot and cycle ways throughout the development and provides open space within the development. It is recognised that the severance challenges posed by both the A12 and A120 roads and the railway line running through the site may prove a barrier to providing well integrated opportunities for active transport. However Policy SP 9 of the Section 1 Local Plan requires that the design of the site includes features that address these severance challenges.

- 3.1266 As such, the delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to this SA objective at the end of the plan period and when fully built at all capacity options (NEAGC2a/b/c/d/e).
- 3.1267 In terms of accessing healthcare, the site once fully developed is likely to be large enough to support new healthcare facilities at all capacities, and Policy SP 9 outlines that primary healthcare facilities will be provided to serve the new development. At the end of the plan period, the site is unlikely to be large enough to support new healthcare facilities, resulting in no adjustment to the minor positive effect (+) identified above. However, in accordance with the assumptions framework, final capacity options NEAGC2b (5,500 dwellings), NEAGC2c (15,000 dwellings) and NEAGC2d (21,000 dwellings) are considered able to support a new Primary Care Spoke, and capacity option NEAGC2d (27,000 dwellings) is considered able to support a new 'Community Hub' healthcare facility within the site. As such, the site at these scales should be supported by new, up to date healthcare facilities, and a significant positive (++) rather than minor positive effect is anticipated in relation to access to health and recreation facilities.

Exposure to noise pollution

- 3.1268 Due to the presence of the A12 and A120 road within the site, 23.5% of the site area falls within a DEFRA strategic noise area of $L_{night} \geq 55.0$ dB, or $L_{aeq, 16} \geq 60.0$ dB, and a further 23.3% falls within a DEFRA strategic noise area of $L_{night} 50.0-54.9$ dB, or $L_{aeq, 16} 55.0-59.9$ dB. As such, minor negative effects with uncertainty (-?) are anticipated both at the end of the plan period and when fully built at all capacity options. The uncertainty arises because it is recognised that the road widening planned for this stretch of the A12 may impact on local noise levels, however it is unclear what impact this will have and how successfully it can be mitigated.
- 3.1269 As such, overall mixed effects are anticipated for SA objective 3, with the effect varying depending on the scale of development (as shown in tabulated form above). In general, slightly less positive effects are anticipated for the site at the end of the plan period (NEAGC2a - 2,500 dwellings) compared to the fully built capacity options (NEAGC2b/c/d/e).

SA4: To ensure and improve the vitality & viability of centres

- 3.1270 In accordance with the assumptions framework for all strategic sites at all scales and as confirmed by the site information form it is considered that development will be supported by suitable provision of services and facilities within a new local cen. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to SA objective 4, at all potential dwelling scales.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.1271 The relationship of the site to existing centres within local and town centres is described in the site context above. Both Coggeshall and Kelvedon host industrial estates. In addition there are existing employment areas which provide job opportunities, notably some small-scale sites within the Marks Tey settlement, the cluster of industrial sites at Stanway 2.4km to the east of the site. It is anticipated that the development of the site at all potential scales will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.

- 3.1272 Based on the site information form and informed by a 'central' scenario¹⁰⁶ for site NEAGC2 in the 2019 CEBR employment report, the NEAs estimated that approximately 4ha of employment land will be required by at dwelling capacity options NEAGC2a (2,500 dwellings at the end of the plan period), approximately 8ha will be provided at NEAGC2b (5,500 dwellings), and approximately 37ha of employment land will be required by 2050 at dwelling capacity options NEAGC2c (15,000 dwellings), NEAGC2d (21,000 dwellings) and NEAGC2e (27,000 dwellings). As such, as capacity options NEAGC2c, NEAGC2d and NEAGC2e are expected to provide over 10ha of employment land, they are likely to make a significant contribution to the local economy, resulting in significant positive (++) effects. For NEAGC2a and NEAGC2b there will be no adjustment to the minor positive (+) effects identified.
- 3.1273 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.1274 The site intersects with one local wildlife site (LWS) – the Little Tey Churchyard in the parish of Marks Tey - although this only represents a very small proportion of the site area (less than 1%). In addition, the site is within 400m range of two further LWSs – the Stonefield Strip and Marks Tey Brick Pit. The Marks Tey Brick Pit, which is almost adjacent to the site, is designated as a geological SSSI. The entire site falls into SSSI impact risk zones (IRZ) for residential developments of 100 units or more and/or all types of planning application, highlighting the potential for impacts on the interest features of several SSSIs. The site also includes isolated areas of deciduous woodland BAP priority habitat.
- 3.1275 As such, development of this site may result in negative effects which may result from, amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure, predation by pets. However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects.
- 3.1276 In total approximately 7% of the site area falls within 400m of a locally designated wildlife site or ancient woodland. In the light of this, and the intersection with the IRZs, minor negative yet uncertain (-?) effects are anticipated in relation to SA objective 6. This effect is considered likely to occur both at the end of the plan period and when the development is fully built at all capacity options.
- 3.1277 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.1278 While the site is primarily agricultural greenfield land, it wraps around an existing settlement and is located near significant road transport intersections, and relatively close to rail stations. The relationship of the site to existing local centres is described above in the site context. Overall, as set out in Colchester's Infrastructure Delivery Plan, the car dominates modal share across Colchester, with 63% of people travelling to work by car.¹⁰⁷
- 3.1279 The site is served by road by two strategic trunk roads - the A120 (for links west to Coggeshall/Braintree) and the A12 (for links to Colchester and south to Chelmsford/London). As

¹⁰⁶ The CEBR's 'Cebr central' scenario is based on dwelling trajectories for each Garden Community, and takes a midpoint of the employment-to-population between the two economic scenarios considered – the 'investment-led' scenario' and the 'lifestyle-led' scenario.

¹⁰⁷ https://www.braintree.gov.uk/downloads/file/6992/cbc0006_colchester_infrastructure_delivery_plan_final_report_%E2%80%93_updated_october_2017

set out in the Colchester Infrastructure Delivery Plan¹⁰⁸, both the A12 and the A120 operate at peak capacity and, as a result, provide an unreliable level of service. Funding has been committed by Highways England (RIS1)¹⁰⁹ to widen the A12 to three lanes from Chelmsford to Junction 25 (Marks Tey). Marks Tey railway station also lies immediately to the east of the site, with trains running to both Colchester and south to London via Chelmsford. As per the assessment framework, it is assumed that no new railway stations will be provided at any of the options. This includes any plans for the potential relocation of Marks Tey rail station to a more central location within the garden community (referenced in Policy SP 9 of the Section 1 Local Plan). As set out in the Colchester Infrastructure Delivery Plan (IDP)¹¹⁰, the Great Eastern Mainline line operates at capacity on trains to and from London in the peak hours. Regarding disabled access, the IDP also notes that Marks Tey station has access issues to its 'down' platforms (para 6.20).

- 3.1280 A bus service operating approximately every 30 minutes passes through the site along the A120/B1408 between Braintree and Colchester, linking the site to the local centre at Coggeshall. Another service operates approximately every 30 minutes runs from Marks Tey station south past the local centre of Kelvedon on to Chelmsford.
- 3.1281 There is an existing primary school within the settlement of Marks Tey – the St Andrew's C of E Primary School. The next nearest primary schools are located in Copford, Coggeshall and Feering. The nearest secondary schools are located in Coggeshall (the Honywood Community Science School) and other options on the fringes of Colchester.
- 3.1282 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.1283 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council¹¹¹ sets out that there is limited capacity at primary schools in both the Kelvedon/Feering area (-32 places forecast in 2028/29) and the Halstead/Gosfield (-3 in 2028/29) area, both in the vicinity of the site. As such, and given the proposed scale of this site, it is considered likely that new primary school(s) will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options. These services and facilities would serve both new residents and the existing community within the development site.
- 3.1284 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at all potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall it is considered likely that the provision of the local services and facilities mentioned above is likely to result in minor positive yet uncertain (+?) effects for all dwelling capacities. The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. It is notable that sites over 4,500 dwellings in size are anticipated to provide new health centre facilities, however this is not considered likely to change the effect from minor positive in relation to this SA objective.

¹⁰⁸

https://www.braintree.gov.uk/downloads/file/6992/cbc0006_colchester_infrastructure_delivery_plan_final_report_%E2%80%93_updated_october_2017

¹⁰⁹ <https://www.gov.uk/government/collections/road-investment-strategy>

¹¹⁰

https://www.braintree.gov.uk/downloads/file/6992/cbc0006_colchester_infrastructure_delivery_plan_final_report_%E2%80%93_updated_october_2017

¹¹¹ Essex School Organisation Service – 10 Year Plan 2019-2028.

3.1285 The Essex County Council evidence¹¹² sets out that there will be significant pressure on secondary school places at Honywood Community Science School and surrounding schools in the Halstead/Hedingham/Coggeshall area, with a forecast of -106 places by 2024/25. Given a secondary pupil factor of 0.2 pupils per dwelling, it is likely that some secondary school expansion may be required by the end of the plan period (perhaps temporarily and also subject to feasibility and expansion capacity at existing schools). For NEAGC2 all fully built site capacity options (from NEAGC2b 5,500 to NEAGC2e 27,000) are considered capable of delivering new secondary school facilities on the site, as confirmed by the site information form, which provides further opportunities for sustainable travel. It is assumed that although NEAGC2a is lower than the 4,500 threshold for new secondary facilities set out in the assumptions framework, that phased provision can be made at the end of the plan period as the full site capacity will be able to support a new secondary school.

3.1286 Furthermore, as set out under SA objective 5 above, it is considered that three fully built capacity options (NEAGC2c/d/e) will provide at least 10 hectares of employment land as part of the site. This, combined with the delivery of a new secondary school in the site is likely to create significant opportunities for sustainable travel within the site, resulting in anticipated significant positive yet uncertain (++) effects for these options. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

3.1287 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.

3.1288 For journeys to more distant destinations, the eastern edge of the site is adjacent to Marks Tey railway station. However given the configuration and scale of the site, the existing station is not considered to be within 'acceptable' walking distance of the site. In combination with severance challenges posed by road and rail infrastructure (limiting the possibilities for active travel), this may lead to increased car use and increased congestion for both internal and external journeys.

3.1289 In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site is split between two middle super output areas (MSOAs) – Colchester 010 (eastern portion) and Braintree 014 (western portion). According to NOMIS (using 2011 data), the most popular destination for commuters is Colchester, with a significant proportion (around 15%) working more locally. Commuters in the western half of the site are most likely to commute to Braintree (roughly 5%), Witham (5%) and Chelmsford (4%). From both MSOAs, a significant number of commuters work in London (between 8-10%). In general, we can observe that the area generates significant movement from the site eastward to Colchester, as well as west to Braintree and southwest toward London (via Witham and Chelmsford).

3.1290 The rail link at Marks Tey suggests that commuting patterns to Colchester can be served by rail. According to the Colchester Infrastructure Development Plan (IDP), around 8% of people across the Borough use the train to commute to work (para 6.18), and there are significant levels of commuting from the site area to London along the Great Eastern Mainline. However, as noted above, these services tend to be operating at capacity during peak hours, and Marks Tey station is not within 'acceptable' walking distance of the majority of the site. There is likely to be improvements to capacity during the next few decades along this route, but it is not clear at this stage if these will be sufficient to support growth proposed at this site. Journeys to Braintree and Witham/Chelmsford are more likely to rely on the already congested A12 and A120. As such, if the new residents follow the same pattern, most of the commuting journeys are likely to be carried by a combination of strategic roads and some rail journeys – however existing rail capacity constraints limit the latter option. In the light of this, overall minor negative yet uncertain (-?) effects are considered likely at the end of the plan period in relation to longer journeys, both at the end of the plan period and when fully built at all capacity options. The

¹¹² Essex School Organisation Service – 10 Year Plan 2019-2028.

uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters into Colchester.

3.1291 As such, overall mixed effects with are anticipated in relation to SA objective 7, as indicated in the scoring table above, with capacity options NEAGC2c/d/e generally more positive.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

3.1292 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.

3.1293 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form for this site, this site is to be supported by the following local infrastructure at all fully built capacity options (NEAGC2b/c/d/e):

- Early Years
- Primary School(s)
- Secondary School(s)
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Healthcare facilities
- Community meeting spaces
- Rapid Transport System (RTS) links

3.1294 The site information form sets out that the site can viably deliver the local infrastructure requirements, while the Rapid Transit System links will require investment from transport operating companies.

3.1295 In addition, capacity options NEAGC2c (21,000 dwellings) and NEAGC2d (27,000 dwellings) will require further external funding or other improvements to scheme viability such as inflationary impacts or other influences to deliver the grade-separated A12 junction to facilitate enhanced growth (provided through the Housing Infrastructure Fund).

3.1296 The supporting local infrastructure listed above is confirmed to be viable by the site information form and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for all dwelling capacity options (NEAGC2a/b/c/d/e). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is noted for all capacity options, as the site information form sets out that external funding or other improvement in site viability is required to deliver the strategic rapid transport system and grade-separated A12 junction.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.1297 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

3.1298 There are 27 listed buildings within the site, including one Grade I listed building (Church of St James) and two Grade II* listed buildings (Barn to the south west of Little Tey House and Barn

south of Marks Tey Hall). The Grade II listed buildings are spread throughout the site but with a larger proportion located within its northern half. Further listed buildings lie within 500m of the site, including the Church of St Andrew (Grade I listed), several Grade II listed buildings and a scheduled monument/ Area of High Archaeological Potential at the circular brick kilns on Church Lane. Looking more broadly, the Copford Conservation Area lies approximately 700m from the site boundary to the east, and a conservation area in Feering lies approximately 700m to the south-west. Finally, a scheduled Roman Villa (and Area of High Archaeological Potential) lies approximately 700m to the north.

- 3.1299 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.
- 3.1300 In total, approximately 69% of the site area falls within 500m of a heritage asset, and a further 30% lies between 500m and 1km from an asset. As such, and taking a precautionary approach to this assessment, significant negative but uncertain effects (--?) are anticipated in relation to cultural heritage assets, both at the end of the plan period and when the site is fully built. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.1301 With regards to townscape, the site wraps around the existing settlement of Marks Tey, and there are a number of conservation areas within 1km of the site's boundary. Given the valued conservation nature of these surrounding areas, and the scale of the proposed site, this development is likely to significantly change the character of nearby settlements. However whether this change will be positive or negative will depend on the quality of design provided, therefore the effect on townscape is scored as uncertain (?).
- 3.1302 Overall a mixed effect (--?/?) is anticipated in relation to SA objective 9, both at the end of the plan period and when fully built at all capacity options.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.1303 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.1304 In accordance with the assessment framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities is likely to result in minor positive (+) effects in relation to SA objective 10.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 3.1305 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 3.1306 The site is entirely outside source protection zones (SPZs), and is a significant distance from any SPZs in the surrounding area. As such it is not considered likely that the development of the site will affect ground water resources and therefore negligible effects (0) are anticipated in relation to water quality.

Water scarcity and water treatment

- 3.1307 This site straddles the boundary between Colchester BC and Braintree BC. As such, growth is taken into account both in the Colchester and Braintree published Water Cycle Studies. Both the

Braintree Water Cycle Study (WCS)¹¹³ and the Colchester WCS¹¹⁴ identify that there is sufficient water supply accounting for the growth that was planned in 2016/2017 over the plan period. The Colchester WCS assumes planned growth of 1,350 dwellings as a result of the proposed garden communities at 'West Colchester' over the plan period, which appears to refer to site NEAGC2. The Braintree WCS assumes growth of 1,150 dwellings over the plan period at site NEAGC2. Combined, these two figures roughly add up to the 2,500 dwellings assumed here to be delivered within the plan period (NEAGC2a).

- 3.1308 For the higher potential dwelling capacities (NEAGC2b/c/d/e), the Integrated Water Management Strategy (IWMS)¹¹⁵, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options in relation to water scarcity.
- 3.1309 Both studies identify that the Colchester Water Recycling Centre (WRC) would serve this site, and it was found in both cases to have sufficient capacity under its current permit to accept additional wastewater flow from the proposed growth of the garden community up to the end of the plan period. Additionally, the IWMS indicates that it will also be possible to direct all growth from NEAGC2 beyond the plan period to the Colchester WRC, with any upgrades needed considered to be feasible.
- 3.1310 In accordance with the above, the effects in relation to this part of the SA objective at all potential dwelling capacities are anticipated to be negligible yet uncertain (0?). The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application.
- 3.1311 Overall, a mixed negligible and uncertain negligible effect (0/0?) is expected for all potential dwelling capacities (NEAGC2a/b/c/d/e)

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.1312 A very small proportion of the site (under 2%) of the site intersects with Environment Agency Flood Zones 2 and 3, which is considered to be a negligible amount. The entire site is identified as being at low risk of ground water flooding, and < 25% of the site area is at risk of surface water flooding. Furthermore, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.1313 It is therefore considered that the effects in relation to this SA objective are likely to be negligible (0) both at the end of the plan period and at all capacity options.

SA13: To improve air quality

- 3.1314 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 3.1315 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated in relation to this part of the SA objective, both at the end of the plan period and at all fully built capacity options.

Potential contribution to road traffic within areas suffering from air pollution

- 3.1316 As set out under SA objective 7, the site is split between two middle super output areas (MSOAs) – Colchester 010 (eastern portion) and Braintree 014 (western portion). According to NOMIS (2011 data), commuters currently living in the area tend to commute to Colchester, Braintree,

¹¹³ https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

¹¹⁴ https://www.braintree.gov.uk/downloads/file/6983/cbc0048_colchester_borough_council_water_cycle_study_final_report

¹¹⁵ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Witham/Chelmsford and further south to London. It is likely that many of the London commuters, and potentially some of those commuting to Colchester/Witham/Chelmsford), will use rail services. However the Colchester Infrastructure Delivery Plan (IDP)¹¹⁶ notes (in para 6.3) that the car dominates the modal share in most areas of the borough, with 63% of people travelling to work by car. The Braintree IDP also notes that rural areas (which would include the western parts of NEAGC2) are currently reliant on the car.

- 3.1317 As such, if the new community follows the commuting behaviour of the present community, much of this commuter traffic is likely to be carried by local roads, the A12 and the A120 between surrounding settlements.
- 3.1318 The nearest AQMA to the site (Lucy Lane North, Stanway) lies on the commuting route along the A12 between the site and Colchester – a key commuting destination from the site area. In addition, the 'Central Corridors' AQMA in Colchester town centre could be affected by further car-based commuting into the town from the site. As such, the site at the end of the plan period and when fully built at all capacity options is considered likely to result in an uncertain minor negative effect with uncertainty (-?) in relation to this part of the SA objective. The uncertainty stems from the lack of clarity so far as to the community patterns and public transport options available to the new community living at the site, which has the potential to reduce car-based commuting into Colchester.
- 3.1319 Overall mixed effects (0/-?) are anticipated in relation to SA objective 13, both at the end of the plan period and for all fully built capacity options.

SA14: To conserve and enhance the quality of landscapes

- 3.1320 The site is not located near any designated landscapes or proposed extensions to these.
- 3.1321 The surrounding area (the LCA Easthorpe Farmland Plateau) has been assessed by landscape officers of the NEAs, and those areas away from the road and rail corridor along the A12 have been found to be of strong landscape character, which is at risk from pressure for further development at Marks Tey into the farmed landscape, and to risks to the setting of traditional settlements. The area is also sensitive to visual and auditory disturbance from the A120/A12 junction adjacent to the east of the site, and is considered to merit conservation and enhancement. The area closer to the road/rail corridor has been assessed as being of moderate/weak landscape character and is considered to be in need of restoration and enhancement.
- 3.1322 As large parts of the site are considered to be of strong landscape character, significant negative effects with uncertainty (--?) are anticipated in relation to SA objective 14, although the higher sensitivity of the more western part of the site is acknowledged. There is uncertainty about this effect as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 3.1323 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 3.1324 Approximately 65% of the site falls within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site would result in a significant sterilisation of mineral resources if these were not extracted before development. Due to the large area of mineral resources that may be affected, the effects in relation to mineral resources are considered to be significant negative yet uncertain (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential

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https://www.braintree.gov.uk/downloads/file/6992/cbc0006_colchester_infrastructure_delivery_plan_final_report_%E2%80%93_updated_october_2017

dwelling capacity options, because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

3.1325 Approximately 92% of the site is Grade 1 or Grade 2 agricultural land, meaning the development of this site would result in the loss of a significant amount of excellent or very good quality agricultural land. In light of the above, a significant negative (--) effect is anticipated in relation to agricultural land. The effect is considered to be the same for all potential dwelling capacity options, because the location of the development within the site boundary for each capacity option is unknown.

3.1326 As such, overall negative effects with some uncertainty (--?/--) are anticipated in relation to SA objective 15, both at the end of the plan period and at all fully built capacities.

Summary of significant effects

3.1327 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out at capacity NEAGC2b (NEAGC2b), NEAGC2c (15,000 dwellings), NEAGC2d (21,000 dwellings) and NEAGC2e (27,000 dwellings)

3.1328 The potential for significant positive effects arises in relation to:

- SA1 Community Cohesion, due to the potential to provide community cohesion within the new development; and
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
- SA3 Health, as development of this scale should be able to support new health facilities, as well as open spaces and opportunities for active travel;
- SA5 Economy, through the provision of jobs within the local area (except for NEAGC2b); and
- SA7 Sustainable travel, as a significant level of services and facilities are anticipated to come forward as part of the site, reducing the need to travel (except for NEAGC2b).

3.1329 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby heritage assets;
- SA14 Landscape, due to the significant change which would occur to the moderate-strong landscape character of the LCA Easthorpe Farmland Plateau; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and loss of Grade 1 or 2 agricultural land.

3.1330 In summary, the fully built site at any of these capacity options (from 5,500 to 27,000 dwellings) is likely to result in a development which can support a significant number of services, including health care facilities, primary and secondary schools, and a centre (or centres) which are large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs (although NEAGC2b employment land provision would be less significant). At these scales, and if supported by appropriate infrastructure and employment provision, it is considered that the site could form a new settlement in its own right. This is likely to result in some self-containment which is likely to provide opportunities for more sustainable travel behaviour. However as a large site, its development will put pressure on surrounding transport infrastructure, particularly the A120 and A12, resulting in increased congestion. Due to the position of Marks Tey station just beyond the eastern edge of this large site, the site is not currently readily accessible by high quality and frequent sustainable travel services and this may also lead to a dependence on the private car for journeys to and from destinations outside the site.

- 3.1331 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.
- 3.1332 Development of this site is likely to affect a number of other sensitive receptors which are present either within the site or very near to it, including biodiversity assets, heritage assets, excellent or very good quality agricultural land, and mineral resources – it is important to note that effects in relation to these are likely simply because these form the site context, however delivering a high dwelling capacity within a fixed site boundary may make it more difficult to mitigate the potential impacts.

Effects at the end of the plan period NEAGC2a (maximum 2,500 dwellings)

- 3.1333 The site at the end of the plan period is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this time to provide higher order services such as health facilities or likely to be able to support a large number of jobs. As such, development in this location at the end of the plan period will result in more travel out of the site to access these services and jobs than when the site is fully built. This is likely to add traffic to the A120 and A12 in the interim, resulting in increased congestion and relatively increased carbon emissions compared to a more self-contained site. Having said this, a phased / early delivery of some infrastructure items such as secondary schools may help to provide more opportunities for sustainable travel. This is reflected in the scores provided in tabulated form above.
- 3.1334 The smaller scale of development at the end of the plan period (compared to the final capacity) may result in reduced effects on sensitive environmental receptors compared to the fully built out capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features – albeit on a temporary basis.

NEAGC3 – Tendring Colchester Borders Garden Community

Site Context

- 3.1335 Site NEAGC3 is a strategic site located to the east of Colchester. It was allocated in the submitted Section 1 Local Plan as the Tendring/Colchester Borders Garden Community. The site is largely located within Tendring District; however, the south westernmost part of the site is located within Colchester Borough. The potential scale of development from this site is up to approximately 8,000 dwellings once fully built. The site is also 50m along Bromley Road from a permitted residential site of 145 dwellings. In total, the maximum potential scale of development from this site and the neighbouring site along Bromley Road is up to approximately 8,145 dwellings once fully built
- 3.1336 The site is currently primarily arable land, and as it is a large site (519 ha) it includes some existing individual residential properties and businesses, which are generally dispersed reflecting the rural character of the area. The nearest settlements to the site (measuring from the site boundary to the nearest edge of each settlement) include Colchester, approximately 300m to the west, which is a settlement of approximately 58,651 dwellings, and which includes a policy-defined town centre, district centre and local centres; Wivenhoe, approximately 300m to the south, which is a settlement of approximately 3,560 dwellings, and which includes a policy defined district centre and local centre; Elmstead Market, approximately 300m to the east, which is a settlement of approximately 877 dwellings, and which includes a policy defined local centre; Ardleigh, approximately 2km to the north, which is a settlement of approximately 917 dwellings, but with no policy-defined local centre; Rowhedge, approximately 2.2km southwest, which is a settlement of approximately 1,037 dwellings, but with no policy-defined local centre; Great Bromley, approximately 2.2km to the northeast, which is a settlement of approximately 422 dwellings, but with no policy-defined local centre; Alresford, approximately 2.8km to the southeast, which is a settlement of approximately 935 dwellings, and which includes a policy defined local centre; High Park Corner, approximately 2.9km south, which is a settlement with no policy-defined local centre; Frating, approximately 3.7km to the east, which is a settlement of approximately 236 dwellings, but with no policy-defined local centre; St Margaret's Cross, approximately 3.7km to the north, which is a settlement with no policy-defined local centre; Lamb Corner Dedham, approximately 3.8km to the north, which is a settlement with no policy-defined local centre; Fingringhoe, approximately 4.1km to the south, which is a settlement with no policy-defined local centre; Dedham Heath, approximately 4.2km to the north, which is a settlement with no policy-defined local centre; Little Bromley, approximately 4.3km to the northeast, which is a settlement with no policy-defined local centre; Langham Moor, approximately 4.6km to the northwest, which is a settlement with no policy-defined local centre; and Dedham, approximately 4.8km to the north, which is a settlement with no policy-defined local centre. In addition the University of Essex Colchester Campus adjoins the southwest of the site. Colchester is the nearest town defined in the draft Colchester Section 2 Local Plan, the centre of which is approximately 5km west of the centre of site NEAGC3 and approximately 3km west of the site boundary. Other strategic settlements nearby include Clacton-on-Sea 16.5km to the southeast, Braintree 28.5km to the west, Ipswich 22.5km to the northeast, Sudbury 23km to the northwest, and Chelmsford 38.5km to the southwest (approximately measured from centre to centre).
- 3.1337 The A133 crosses the south of the site and travels in an east-west alignment, connecting Colchester to the west and Clacton-on-Sea to the southeast. The A120 bounds the north of the site and travels in an east-west alignment, running from the northern boundary of Colchester to the west to Harwich to the east, and connecting to the A12, providing strategic links to settlements to the west such as Braintree and Chelmsford. As a greenfield site, the area is not well served by existing facilities and services. The nearest railway station to the site is Hythe, which is approximately 3km from the centre of the site, and which connects to the main London to Ipswich line at Colchester.
- 3.1338 There are no significant residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundary. Within 1km of the site, Bromley Road Ardleigh and Wivenhoe are the only significant residential sites either granted planning permission or allocated by the Colchester Section 2 Local Plan. Bromley Road Ardleigh, located 50m west of NEAGC3 at its closest point, is a site granted at appeal (17/00080/REFUSE) for up to 145 homes. Wivenhoe, a settlement located

approximately 300m to the south of NEAGC3 at its closest point and includes four allocations in the adopted Wivenhoe neighbourhood plan for 250 dwellings.

3.1339 Slough Farm, located beyond the A120 approximately 200m north of the site, and Sunnymead, Elmstead & Heath Farms, located approximately 900m southeast of the site, are allocated Minerals Extraction Sites in the Essex Minerals Local Plan.

SA objective	Criterion	NEAGC3	NEAGC3	NEAGC 3	NEAGC 3	NEAGC 3	NEAGC 3
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	7500	8000
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/++	--?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	+++?	+++?
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Desirable	+/-	+/-	++/-	++/-
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Preferred Maximum	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	<i>Potential for harm to Source Protection Zones (SPZs)</i>	Low	Low				
	<i>Potential exposure to flood risk</i>	Low	Low				
	<i>Potential exposure to air pollution</i>	Low	Low				
	Potential exposure to noise pollution from roads and railways	High	High				
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+	+
	Access to town centres	Unacceptable	Unacceptable				
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	++	++
	Access to town centres	Unacceptable	Unacceptable				

SA objective	Criterion	NEAGC3	NEAGC3	NEAGC 3	NEAGC 3	NEAGC 3	NEAGC 3
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	7500	8000
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	-?	-?	-?	-?
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium				
	Potential for harm to PHI or local BAP habitat	Low	Low				
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?/-?	+?/-?	++?/-?	++?/-?
	Access to primary or middle schools	Unacceptable	Desirable				
	Access to secondary schools	Unacceptable	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Unacceptable	Unacceptable				
	Access to bus stops	Preferred Maximum	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Preferred Maximum	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment	Preferred Maximum	Preferred Maximum				

SA objective	Criterion	NEAGC3	NEAGC3	NEAGC 3	NEAGC 3	NEAGC 3	NEAGC 3
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	7500	8000
	areas and town centres						
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?	+?	+?	+?
	Access to primary or middle schools	Unacceptable	Desirable				
	Access to secondary schools	Unacceptable	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Unacceptable	Unacceptable				
	Access to bus stops	Preferred Maximum	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Preferred Maximum	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Desirable	+	+	+	+
	Access to primary or middle schools	Unacceptable	Desirable				
	Access to secondary schools	Unacceptable	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				

SA objective	Criterion	NEAGC3	NEAGC3	NEAGC 3	NEAGC 3	NEAGC 3	NEAGC 3
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	7500	8000
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Unacceptable	Unacceptable				
	Access to bus stops	Preferred Maximum	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Preferred Maximum	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?	0/0?	0/0?	0/0?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/-?	0/-?	0/-?	0/-?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Medium	Medium	--?	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/--	--?/--	--?/--	--?/--
	Potential for harm to agricultural land	High	High				

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.1340 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 1 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.1341 Currently the site is a large area of arable farmland, featuring scattered houses and businesses, comprising a dispersed rural community. Neighbouring settlements include Colchester (approx. 58,651 dwellings), Wivenhoe (approx. 3,560 dwellings), Elmstead Market (approx. 877 dwellings), Ardleigh (approx. 917 dwellings), Rowhedge (approx. 1,037 dwellings), Great Bromley (approx. 422 dwellings), Alresford (approx. 935 dwellings), Fingringhoe (approx. 334 dwellings), Dedham (approx. 492 dwellings), Dedham Heath (approx. 400 dwellings), Little Bromley (approx. 107 dwellings), Lamb Corner Dedham, Langham Moor and High Park Corner. Many of these offer a local, district or town centre as defined in the draft Tendring Section 2 Local Plan¹¹⁷ and draft Colchester Section 2 Local Plan¹¹⁸.

3.1342 It is recognised that the provision of such a large development around and close to the existing small scale communities in the area is likely to result in a significant change to these. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context as development of this scale would result in the creation of a permanent urban character compared to what is a rural character at present. The existing developed areas within the site boundary will be subject to the most significant degree of change.

3.1343 It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements within 5km (which is over 10% of the current scale of some of these for all capacity options), that impacts will generally be negatively perceived by some of the existing surrounding communities. As such, development of this site at all of the potential scales of development (NEAGC3 a/b/c/d) including the potential maximum capacity at the end of the plan period will result in significant negative yet uncertain (--?) effects in relation to this SA objective. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

3.1344 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.

3.1345 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (NEAGC3a/b/c/d).

3.1346 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with uncertain significant negative and significant positive effects (--?/++).

¹¹⁷ <https://www.tendringdc.gov.uk/planning/local-plans-and-policies/view-our-local-plan/local-plan-submission-documents>

¹¹⁸ <https://www.colchester.gov.uk/info/cbc-article/?catid=emerging-local-plan&id=KA-02196>

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.1347 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the maximum capacity at the end of the plan period and when fully built out for all dwelling capacity options (NEAGC3a/b/c/d).
- 3.1348 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.1349 In addition, the site information form sets out that development site at 2,000, 7,500 & 8,000 dwelling capacities is likely to be viable, which includes the delivery of 30% affordable housing. However, for capacity options NEAGC3c (7,500 dwellings) and NEAGC3d (8,000 dwellings), delivering sustainable development including policy compliant affordable housing provision is reliant on improvements in scheme viability, such as through securing external funding for strategic infrastructure (e.g. RTS and A120 to A133 link road with new junctions), inflationary impacts or other influences. The site information form does not indicate any similar viability issue for site capacity option NEAGC3a (2,500 dwellings).
- 3.1350 The site information form is supported by the North Essex Local Plan (Strategic) Section 1 Viability Assessment Update Report by Hyas Associates (June 2019), which sets out that NEAGC3d (7,500 dwellings) in this location can viably provide 30% affordable housing (and other infrastructure requirements) with success in the current bid for government funding via the Housing Infrastructure Fund (HIF) and positive inflation, in order to lift residual land values (para 5.10).
- 3.1351 In light of the above factors, it is considered that significant positive (++) effects are likely to occur as a result of NEAGC3a (2,000 dwellings) and NEAGC3b (2,500 dwellings). For sites NEAGC3c (7,500 dwellings) and NEAGC3d (8,000 dwellings) significant positive yet uncertain (++) effects are likely to occur. The uncertainty arises due to the need for the scheme viability to improve in order to deliver sustainable development as defined in the site information form and North Essex Local Plan (Strategic) Section 1 Viability Assessment Update Report by Hyas Associates (June 2019).

SA3: Improve health/reduce health inequalities

- 3.1352 As set out in the assumptions framework, all sites are expected to have mixed effects (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.1353 As a greenfield site, there are no existing healthcare facilities within NEAGC3. The nearest GP Surgery is at the University of Essex, beyond the A133 dual carriageway to the south of the site, however there are also health services provided in Colchester including Colchester General Hospital and several other GP Surgeries.
- 3.1354 Similarly, there are no sports centres within the site, but Home Wood is partly located within the southwest of the site and Walls Wood is located adjacent to the north of the site. A section of off-road cycle path is located along the A133 crossing the south of the site and the site includes some public rights of way, which provide access to the surrounding countryside, public open space and Colchester to the west. These may provide links to the surrounding countryside and public open space for residents of the new development to utilise for recreation but it is not considered that these Public Rights of Way will make a significant contribution to recreation so as to facilitate more healthy lifestyles.
- 3.1355 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritises walking, cycling and use of public transport over private car use and includes foot and cycle ways throughout the development and provides open space within the development. The delivery of these policy ambitions is likely to result in

increased activity by those in the new development, resulting in at least minor positive (+) effects in relation to this SA objective for all site capacity options (NEAGC3a/b/c/d).

- 3.1356 In terms of accessing healthcare, the site is relatively isolated in terms of access to GP Surgeries and health centres, because it is a largely rural site. For capacity options NEAGC3a (2,000 dwellings) and NEAGC3b (a maximum of 2,500 dwellings at the end of the plan period), the site is not likely to be large enough to support new healthcare facilities, resulting in no adjustment to the minor positive effect (+) identified above.
- 3.1357 In accordance with the assumptions framework the dwelling capacity options NEAGC3c (7,500 dwellings) and NEAGC3d are considered to provide sufficient critical mass to support a new Primary Care Spoke within the site. Therefore, at these scales the sites should be supported by new, up to date healthcare facilities, and a significant positive (++) rather than minor positive (+) effect is anticipated in relation to access to health and recreation facilities and therefore this SA objective.

Exposure to noise pollution

- 3.1358 In accordance with the assumptions framework, as 17% of the site falls within either a DEFRA strategic noise area of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB, the anticipated effects in relation to exposure to noise pollution for all dwelling capacity options (NEAGC3a/b/c/d) are considered to be minor negative (-).
- 3.1359 Overall, anticipated effects on this SA objective at dwelling capacity options NEAGC3a (2000 dwellings) and NEAGC3b (a maximum of 2,500 dwellings at the end of the plan period) will be mixed with minor positive and minor negative implications (+/-).
- 3.1360 The anticipated effects on this SA objective for the capacity options NEAGC3c (7,500 dwellings) and NEAGC3d (8,000 dwellings) will also be mixed, but with greater positive effects (++/-).

SA4: To ensure and improve the vitality & viability of centres

Effects of new centre facilities

- 3.1361 In accordance with the assessment framework and as confirmed by the site information form, it is considered that this strategic site at all scales will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to this SA objective, at all potential dwelling scales (NEAGC3a/b/c/d).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.1362 The relationship of the site to existing centres is described in the site context above. There are also existing employment areas surrounding the site the provide jobs, which may not be within local or town centres. The nearest employment areas (not within local or town centres) include the science park 'Colchester Knowledge Gateway', located approximately 2km southwest of the centre of the site, the Whitehall Road Industrial Estate, approximately 2.9km southwest of the centre of the site, and the Martells Industrial Estate, located approximately 2.5km north of the centre of the site.
- 3.1363 It is anticipated that the development of the site at all potential scales (NEAGC3a/b/c/d) will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.
- 3.1364 The site information form notes that the provision of employment land on this site will be informed by a 2019 CEBR employment report. The latter, estimates that under a 'central' scenario¹¹⁹ for site NEAGC3, approximately 7ha of employment land will be required by 2033 at

¹¹⁹ The CEBR's 'Cebr central' scenario is based on dwelling trajectories for each Garden Community, and takes a midpoint of the employment-to-population between the two economic scenarios considered – the 'investment-led' scenario' and the 'lifestyle-led' scenario.

dwelling capacity option NEAGC3b (a maximum of 2,500 dwellings at the end of the plan period), and approximately 21ha of employment land will be required by 2050 at dwelling capacity options NEAGC3c (7,500 dwellings) and NEAGC3d (8,000 dwellings). No employment land is to be provided alongside dwelling capacity option NEAGC3a (2,000 dwellings). As such, as capacity options NEAGC3c and NEAGC3d are expected to provide over 10ha of employment land, they are likely to make a significant contribution to the local economy, resulting in significant positive (++) effects. At dwelling capacity options NEAGC3a and NEAGC3b there will be no adjustment to the minor positive (+) effects identified.

- 3.1365 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.
- 3.1366 In accordance with the above commentary, anticipated effects on this SA objective at dwelling capacity options NEAGC3a (2,000 dwellings) and NEAGC3b (a maximum of 2,500 dwellings at the end of the plan period) will be minor positive (+), whilst the anticipated effects on this SA objective for the capacity options NEAGC3c (7,500 dwellings) and NEAGC3d (8,000 dwellings) will be significant positive (++).

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.1367 The site intersects with six local wildlife sites including Chapel Lane Verge, Pycats Corner Verges, as well as Home Wood, Church Wood and Wall's Wood (which also contain ancient woodland). Wivenhoe Park local wildlife site is located across the A133 to the south of the site, and the site is within 400m of other local wildlife sites including Salary Brook, Churn Wood Meadow and Thousand Acres. The site includes isolated areas of deciduous woodland BAP priority habitat.
- 3.1368 As such, development of this site may result in impacts to these local designations and habitats. As less than 5% of the site area falls within a locally designated wildlife site and less than 5% of the site area intersects priority habitat, but more than 5% of the site area falls within 400m of a locally designated wildlife site and the whole site falls within a Site of Special Scientific Interest Impact Risk Zone where residential development of 100 units or more could cause harm, it is anticipated that effects on the existing habitats may be minor and negative, and may result from amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure, predation by pets.
- 3.1369 However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects. As such a minor negative yet uncertain (-?) effect is anticipated in relation to this SA objective. This effect is considered likely to occur in relation to all potential dwelling capacities (NEAGC3a/b/c/d).
- 3.1370 Cumulative effects on the identified ecological assets may occur if the permitted planning application on the Bromley Road site comes forward.
- 3.1371 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.1372 The site is a largely greenfield site which is rural in character. The relationship of the site to existing local centres is described above in the site context section and the accessibility of the site to surrounding facilities and services would, prior to provision of any new transport infrastructure, be primarily dependent on Bromley Road, the B1027, the B1028 the A113 and the A120. As set out in the Tendring Infrastructure Delivery Plan Report¹²⁰, the A120 operates at capacity during the peak periods and the plan identifies a requirement for an A120-A133 link road and an extension of the A120-A133 link road to the B1027/B1028. At peak travel times, 15 minute bus

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https://www.tendringdc.gov.uk/sites/default/files/documents/planning/Planning_Policy/TDC_006%20Infrastructure%20Delivery%20Plan%20May%202017.pdf

services operate along the A113 along the south of the site, linking to Colchester to the west and Clacton-on-Sea to the southeast, and an irregular bus service operates along Bromley Road crossing the northwest of the site, linking to Colchester to the west and Walton-on-the-Naze to the east. The nearest railway station is Hythe, which is approximately 3km from the centre of the site, which connects to the main London–Ipswich line at Colchester, and offers a half-hourly service to London most of the day. As set out in the Colchester Infrastructure Delivery Plan Report¹²¹, the Great Eastern Mainline railway operates at capacity on trains to and from London in the peak hours. The nearest existing primary school is Elmstead Primary School, approximately 1.7km east from the centre of the site, and the nearest secondary school is Colchester Academy, approximately 2.2km west from the centre of the site. In addition, the University of Essex Colchester Campus adjoins the southwest of the site.

- 3.1373 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.1374 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council¹²² sets out that there is capacity at primary schools in the Colchester East area (19 places forecast in 2018-2029) but there is limited capacity at primary schools in Brightlingsea/Elmstead (-58 places forecast in 2018-2029), in Wivenhoe (-10 places forecast in 2018-2029) and in Colchester south and southeast (-28 places forecast in 2018-2029). It is therefore considered likely that new primary school(s) will be required to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (NEAGC3a/b/c/d). These services and facilities would serve both new residents and the existing community within the development site.
- 3.1375 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at all potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall it is considered likely that the provision of the aforementioned local services and facilities is likely to result in minor positive yet uncertain (+?) effects for all dwelling capacities (NEAGC3a/b/c/d). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. It is notable that sites over 4,500 dwellings in size are anticipated to provide new health centre facilities, however this is not considered likely to change the effect from minor positive in relation to this SA objective.
- 3.1376 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to provide secondary school facilities in accordance with the developer contributions guidance from Essex County Council¹²³. In addition the Essex County Council evidence¹²⁴ sets out that in 2028-29 (the final year of the forecast in this schools capacity document) there will be limited capacity at secondary schools in Colchester (-329 places forecast). It is therefore considered likely that new secondary school(s) will be required to serve the site at all capacity options. The site capacity options NEAGC3b (2,500 dwellings maximum at the end of the plan period), NEAGC3c (7,500 dwellings) and NEAGC3d (8,000 dwellings) are considered capable of delivering new secondary school facilities on the site, which provides further opportunities for sustainable travel. It is assumed that although NEAGC3b is lower than the 4,500

¹²¹ [https://cbccrmdata.blob.core.windows.net/noteattachment/Colchester Infrastructure Development Plan Final Report 02.06.17.pdf](https://cbccrmdata.blob.core.windows.net/noteattachment/Colchester%20Infrastructure%20Development%20Plan%20Final%20Report%2002.06.17.pdf)

¹²² Essex School Organisation Service – 10 Year Plan 2019-2028.

¹²³ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

¹²⁴ Essex School Organisation Service – 10 Year Plan 2019-2028.

threshold for new secondary facilities set out in the assumptions framework, that temporary provision can be provided as the full site capacity (either NEAGC3c – 7,500 dwellings or NEAGC3d – 8,000 dwellings) will be able to support a new secondary school.

3.1377 Furthermore, as set out above, it is considered that capacity options NEAGC3c (7,500 dwellings) and NEAGC3d (8,000 dwellings) will be able to support at least 10ha of employment land as part of the site. This, combined with the delivery of a new secondary school in the site is likely to create significant opportunities for sustainable travel within the site, resulting in anticipated significant positive yet uncertain (++) effects. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

3.1378 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.

3.1379 For journeys to more distant destinations, the distance to the nearest railway station, Hythe, is located beyond the 'desirable' or 'acceptable' distance as determined by the Stage 1a assessment and as such, this is likely to reduce the potential for trips by rail, which may lead to increased car use and increased congestion for the external journeys. In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site is split between two middle super output areas (MSOAs) – Tendring 005 and Colchester 017. According to NOMIS, the most popular commuting destinations from both of these MSOAs are within each MSOA itself or Colchester town. In addition, 3% of commuters from MSOA Colchester 017 travel to work in the City of London. As such, if the new residents follow the same pattern, most of the commuting journeys are likely to be carried by local roads identified as being congested, including the B1027, the B1028, the A113 and the A120. These are relatively short trips which could not be undertaken by train as the infrastructure does not exist. As such, minor negative yet uncertain (-?) effects are considered likely in relation to all potential dwelling capacities (NEAGC3a/b/c/d). The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there.

3.1380 In accordance with the above commentary anticipated effects on this SA objective, at dwelling capacity options NEAGC3a (2,000 dwellings) and NEAGC3c (a maximum of 2,500 dwellings at the end of the plan period) will be mixed with minor positive uncertain and minor negative uncertain implications (+?/-?).

3.1381 The anticipated effects on this SA objective for the capacity options NEAGC3c (7,500 dwellings) and NEAGC3d (8,000 dwellings) are also mixed, but with greater positive effects (++)/(-?).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

3.1382 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.

3.1383 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form for this site, this site is to be supported by the following infrastructure at the following dwelling capacities:

3.1384 NEAGC3a (2,000 dwellings) and also assumed to apply to NEAGC3b given it is a similar scale (maximum 2,500 dwellings at the end of the plan period):

- Early Years
- Primary School
- Youth Centre provision

- Open Space
- Local centre facilities
- Community meeting spaces

3.1385 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.1386 NEAGC3c (7,500 dwellings) and NEAGC3d (8,000 dwellings):

- Early Years
- Primary School(s)
- Secondary School
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Healthcare facilities
- Community meeting spaces

3.1387 The site information form indicates that the site can viably deliver these infrastructure requirements with external funding (or other improvement in site viability) from transport operating companies.

3.1388 The supporting infrastructure listed above is confirmed to be viable (on the site information form) and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for all dwelling capacity options (NEAGC3a/b/c/d). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is noted in relation to site capacity options NEAGC3c (7,500 dwellings) and NEAGC3d (8,000 dwellings) as the site information form sets out that external funding or other improvement in site viability is required to deliver the rapid transport system and the A120-A133 link road.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.1389 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

3.1390 There are six Grade II listed buildings within the site boundaries, with a cluster of four being located within the north-western boundary of the site and the other two located within the northern half of the site. Further heritage assets within 500m include Spring Valley Mill and Wivenhoe House grade II* listed buildings, as well as Crockleford Mill and Greenstead Mill Colchester archaeological monuments. The grade I listed Church of St Anne and St Lawrence and the grade II* listed Elmstead Hall are located within 1km of the site, as well as the Colchester archaeological monument 'Waterfront deposits, riverbank at the Hythe'.

3.1391 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.

3.1392 More than 5% of the site area is within 500m of heritage assets including Spring Valley Mill and Wivenhoe House Grade II* listed buildings. Taking a precautionary approach to this assessment, potential significant negative yet uncertain effects (--?) are anticipated in relation to all potential dwelling capacity options (NEAGC3a/b/c/d). The uncertainty arises because the details of any

mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.1393 With regards to townscape, the boundary of the site is approximately 500m from Elmstead Market and from Wivenhoe. At all potential dwelling capacity options (NEAGC3a/b/c/d) the site would increase the number of dwellings compared to Elmstead Market and Wivenhoe by more than 10%. This is likely to significantly change the character of these settlements, but whether this change will be positive or negative will depend on the quality of design of the new development. Therefore, the effects in relation to the townscape element of this SA objective are uncertain (?).
- 3.1394 In accordance with the above commentary anticipated effects on this SA objective, in relation to all potential dwelling capacity options (NEAGC3a/b/c/d) are considered to be considered to be mixed, with uncertain minor negative and uncertain implications (-?/?).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.1395 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.1396 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities (NEAGC3a/b/c/d) is likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 3.1397 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 3.1398 The site is entirely outside source protection zones, and as such it is not considered likely that the development of the site will affect ground water stores and therefore negligible effects (0) are anticipated in relation to ground water for all potential dwelling capacity options (NEAGC3a/b/c/d).

Water scarcity and water treatment

- 3.1399 With regard to water supply, the Colchester¹²⁵ and Tendring Water Cycle Study (WCS)¹²⁶ identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. It sets out that the Tendring-Colchester Border Garden Community site has been assessed for the combined planned growth by Tendring and Colchester, totalling 2,900 dwellings by the end of the plan period which is slightly above the proposed growth assessed here (a maximum of 2,500 dwellings within the plan period). For the higher potential dwelling capacities (NEAGC3c/d), the Integrated Water Management Strategy (IWMS)¹²⁷, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options in relation to water scarcity.

¹²⁵ https://www.braintree.gov.uk/downloads/file/6983/cbc0048_colchester_borough_council_water_cycle_study_final_report

¹²⁶ https://www.braintree.gov.uk/downloads/file/7115/tdc014_tendring_district_council_water_cycle_study_sept_2017

¹²⁷ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

3.1400 The WCS sets out that the site would be served by the Colchester Water Recycling Centre (WRC) and that it will be feasible for the existing WRC to serve the site within the current limits of conventional treatment up to the end of the plan period. Additionally, the IWMS indicates that it will be possible for the Colchester WRC to also accommodate proposed growth beyond the plan period and that any upgrades necessary will be feasible.

3.1401 In accordance with the above commentary, the effects in relation to this SA objective are considered to be mixed negligible and negligible yet uncertain (0/0?) at all potential dwelling capacity options. The uncertainty arises as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

3.1402 The site is not located within an Environment Agency Flood Zone, only small areas of the site (<25%) are at medium risk of ground water flooding and only small areas of the site (<25%) are at risk of surface water flooding. Furthermore, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.

3.1403 It is therefore considered that the effects in relation to this SA objective are likely to be negligible (0) for all potential dwelling capacity options (NEAGC3a/b/c/d).

SA13: To improve air quality

3.1404 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

3.1405 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated for all potential dwelling capacity options (NEAGC3a/b/c/d).

Potential contribution to road traffic within areas suffering from air pollution

3.1406 The site is split between two middle super output areas (MSOAs) – Tendring 005 and Colchester 017. According to NOMIS, the most popular commuting destinations from both of these MSOAs are the MSOAs themselves or Colchester town. In addition, 3% of commuters from MSOA Colchester 017 travel to work in the City of London. As such, if the new residents follow the same pattern, most of the commuting journeys are likely to be carried by local roads, including the B1027, the B1028 the A113 and the A120, and will pass through the Central Corridors, East St and the adjoining lower end of Ipswich Rd and Harwich Rd/St. Andrew's Avenue Junction AQMAs within Colchester. This will lead to increased vehicular trips through the AQMAs. As such, a minor negative effect is considered likely (-?) at all potential dwelling capacity options (NEAGC3a/b/c/d). However, uncertainty exists as it is not known exactly how and where people will travel.

3.1407 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options (NEAGC3a/b/c/d) will be mixed with negligible and uncertain minor negative implications (0/-?).

SA14: To conserve and enhance the quality of landscapes

3.1408 Dedham Vale Area of Outstanding Natural Beauty (AONB) is located approximately 4km north of the site and a proposed extension to the AONB is located approximately 4.6km northeast of the site. It is also noted that development of the site would largely fill in the gap between Colchester, Wivenhoe and Elmstead Market.

3.1409 The area has been assessed by landscape officers of the NEAs, and has been found to be of moderate landscape character, which is highly sensitive to visual intrusion in the Bromley Heath Plateau landscape area and vulnerable to large new development especially along Salary Brook, close to traditional settlements and in open landscapes. In light of this and in line with the stated assumptions, it is considered that development of the site at all potential dwelling capacity options (NEAGC3a/b/c/d) is likely to result in uncertain significant negative (--?) effects in relation to this SA objective. The uncertainty arises as these impacts will depend on the particular design

of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

3.1410 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

3.1411 The majority of the site (96%) is within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site could result in a significant sterilisation of mineral resources. Due to the large area of mineral resources that may be affected, the effects are considered to be significant negative yet uncertain (--?). The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential dwelling capacity options (NEAGC3a/b/c/d), because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

3.1412 Approximately 80% of the site is Grade 1 or Grade 2 agricultural land, meaning the development of this site would result in the loss of a significant amount of high quality agricultural land. In light of the above, a significant negative (--) effect is anticipated. The effect is considered to be the same for all potential dwelling capacity options (NEAGC3a/b/c/d), because the location of the development within the site boundary for each capacity option is unknown.

3.1413 In accordance with the above commentary, the effects in relation to this SA objective at all potential dwelling capacity options (NEAGC3a/b/c/d) will be mixed with uncertain significant negative and significant negative implications (--?/--).

Summary of significant effects

3.1414 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out at capacity NEAGC3a – 2,000 dwellings

3.1415 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to the potential to provide community cohesion within the new development;
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;

3.1416 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby heritage assets;
- SA14 Landscape; due to the high sensitivity of the landscape to visual intrusion; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and loss of Grade 1 or 2 agricultural land.

3.1417 In summary the site at this scale is likely to be able to provide a sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this time to provide higher order services such as health facilities or likely to be able to support a large number of jobs. As such, development in this location at the end of the plan period or when built to the lower capacity option will result in more travel out of the site to access these services and jobs than when the site is fully built at the larger

development capacities. This is likely to add traffic to the A120 / A133, resulting in increased congestion and relatively increased carbon emissions compared to a more self-contained site.

3.1418 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the historic environment context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. It is considered that at 2,000 dwellings, the effects will be less extreme than the larger capacity options, as the impacts will be less, however there will be less benefit in terms of new services and facilities.

3.1419 Several significant negative effects have been identified in relation to environmental assets; however this scale of development may result in reduced effects on sensitive environmental receptors compared to the larger dwelling capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features.

Effects when fully built out at capacity NEAGC3c – 7,500 dwellings and NEAGC3d – 8,000 dwellings

3.1420 Effects once the site is fully built out to these two site capacities are found to be broadly the same, given the similar scale of these options. Significant positive effects are anticipated in relation to:

- SA1 Community cohesion, due to the potential to provide community cohesion within the new development;
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
- SA3 Health, as development of this scale should be able to support new health facilities, as well as open spaces and opportunities for active travel;
- SA5 Economy, through the provision of jobs within the local area; and
- SA7 Sustainable travel, as a significant level of services and facilities are anticipated to come forward as part of the site, reducing the need to travel.

3.1421 The potential for significant negative effects arises at these scales in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby heritage assets;
- SA14 Landscape; due to the high sensitivity of the landscape to visual intrusion; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and loss of Grade 1 or 2 agricultural land.

3.1422 In summary, the fully built site at either capacity (NEAGC3c – 7,500 dwellings or NEAGC3d – 8,000 dwellings) is likely to result in a development which can support a significant number of services, including health care facilities, primary and secondary schools, and a centre (or centres) which are large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs. At these scales, and if supported by appropriate infrastructure / employment provision, it is considered that the site could form a new settlement in its own right. This is likely to result in some self-containment which is likely to provide opportunities for more sustainable travel behaviour. However as a large site, its development will put pressure on surrounding transport infrastructure, particularly the A120 / A133, resulting in increased congestion. The site is not currently accessible by high quality sustainable travel services and this may also lead to a dependence on the private car for journeys to and from destinations outside the site.

3.1423 As a large site, the delivery of this site is likely to significantly impact on the existing community and businesses in the area, with major changes to the character of the area, particularly the historic environment context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the

positive effects. Development of this site is likely to affect a number of other sensitive receptors which are present either within the site or very near to it, including heritage assets, high quality agricultural land, and mineral resources – it is important to note that effects in relation to these are likely simply because these form the site context, however delivering a high dwelling capacity within a fixed site boundary may make it more difficult to mitigate the potential impacts.

Effects at the end of the plan period (maximum 2,500 dwellings)

3.1424 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to the potential to provide community cohesion within the new development;
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;

3.1425 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby heritage assets;
- SA14 Landscape; due to the high sensitivity of the landscape to visual intrusion; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site and loss of Grade 1 or 2 agricultural land.

3.1426 In summary the anticipated significant effects at the end of the plan period are broadly similar to those for the NEAGC3a (2,000 dwelling) capacity option described above.

3.1427 The site at the end of the plan period is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this time to provide higher order services such as health facilities or likely to be able to support a large number of jobs. As such, development in this location at the end of the plan period or when built to the lower capacity option will result in more travel out of the site to access these services and jobs than when the site is fully built at the larger development capacities. This is likely to add traffic to the A120 / A133, resulting in increased congestion and relatively increased carbon emissions compared to a more self-contained site. Having said this, a phased / early delivery of some infrastructure items such as secondary schools may help to provide more opportunities for sustainable travel.

3.1428 The smaller scale of development at the end of the plan period (compared to the final capacity) may result in reduced effects on sensitive environmental receptors compared to the fully built out capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features – albeit on a temporary basis.

SUE1 – Land at Halstead

Site Context

- 3.1429 Site SUE1 is a 348-hectare strategic site that would extend the urban edge to the north, east and south of the existing secondary settlement of Halstead. The site was not allocated in the North Essex Section 1 Local Plan, while the Braintree Section 2 Local Plan only allocated small-scale growth around and within Halstead to cater for local needs. The site lies entirely within Braintree DC and will be assessed for capacity options of 2,000, 6,000 or 8,500 dwellings, with an assumption that at the two larger scales scale, a minimum of 2,500 dwellings could be completed by the end of the plan period in 2033.
- 3.1430 The site is currently primarily arable land on the settlement edge. It wraps around the Bluebridge Industrial Estate on the eastern fringes of the town, and the land is currently in the ownership of multiple landholders. The River Colne bisects the site east-west.
- 3.1431 Aside from Halstead itself (approximately 5,820 existing dwellings) the nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are: Greenstead Green (approximately 273 existing dwellings), around 700m to the south; Colne Engaine (approximately 402 existing dwellings), around 700m to the east; Earls Colne (approximately 1,641 existing dwellings), around 1.3km to the east; Gosfield (approximately 649 existing dwellings), around 1.4km to the west; Pebmarsh (approximately 236 existing dwellings), around 2.3km to the north east; Stisted (approximately 271 existing dwellings), around 3.5 km to the south; Sible Hedingham (approximately 1,995 existing dwellings), around 4.2km to the north west; and Castle Hedingham (approximately 550 existing dwellings). In addition there are a number of scattered, smaller-scale settlements (<200 dwellings), including Cross End, Clay Hills and Wickham St Paul.
- 3.1432 Of these settlements, local centres (as defined by the Section 2 Local Plan) can be found in Earls Colne and Sible Hedingham.
- 3.1433 The nearest policy-defined town centre is in Halstead itself, with the next nearest in Braintree (approximately 10km from the site's centre point and accessible via the A131). Stansted Airport is located around 28km to the south west.
- 3.1434 Aside from the employment generated within local and town centres, there are a number of nearby major employment sites. Significant nearby sites include: the Bluebridge Industrial Estate (adjacent to the site's western boundary); two smaller-scale sites in Earls Colne – Riverside Industrial Area and Atlas Works; Gosfield Airfield to the west; and the large-scale Earls Colne Airfield in a rural setting to the south.
- 3.1435 For public transport connections, following the closure of the Colne Valley and Halstead Railway (CVHR) in the 1960s, Halstead no longer benefits from any rail links. The nearest railway station is now in Braintree - approximately 10km to the south – from which connections can be made to London via a connection at Witham.
- 3.1436 For road connections, the A131 and the A1124 intersect in the centre of Halstead – the former bisects the site and the latter runs along parts of the site's western boundary. The A131 provides connections to Braintree to the south and Sudbury to the north and the A1124 provides links east to Colchester and north west toward Haverhill.
- 3.1437 There are no large-scale residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundary, or within 1km of the site. However there are a cluster of small-scale sites within and around Halstead have been allocated by the Section 2 Local Plan that account for total growth of around 650 dwellings. The Section 2 Plan for Braintree DC also proposes a 2-hectare extension to the Bluebridge Industrial Estate (Policy LPP 2).

SA objective	Criterion	SUE1	SUE1	SUE1	SUE1	SUE1	SUE1
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	6000	8500

SA objective	Criterion	SUE1	SUE1	SUE1	SUE1	SUE1	SUE1
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	6000	8500
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	-- ?/++	--?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++	++
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Desirable	+ / 0	+ / 0	++ / 0	++ / 0
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Acceptable	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Potential for harm to Source Protection Zones (SPZs)	Medium	Medium				
	Potential exposure to flood risk	Low	Low				
	Potential exposure to air pollution	Low	Low				
Potential exposure to noise pollution from roads and railways	Medium	Medium					
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+	+
	Access to town centres	Unacceptable	Unacceptable				
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	+	+
	Access to town centres	Unacceptable	Unacceptable				
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable				
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	-?	-?	-?	-?
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium				
	Potential for harm to PHI or local BAP habitat	Low	Low				
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?/-?	+++/-?	+++/-?	+++/-?
	Access to primary or middle schools	Unacceptable	Desirable				
	Access to secondary schools	Preferred Maximum	Desirable				
	Access to further and	Unacceptable	Unacceptable				

SA objective	Criterion	SUE1	SUE1	SUE1	SUE1	SUE1	SUE1
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	6000	8500
	higher education facilities						
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Unacceptable	Unacceptable				
	Access to bus stops	Preferred Maximum	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Acceptable	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable				
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Desirable				
	Access to primary or middle schools	Unacceptable	Desirable				
	Access to secondary schools	Preferred Maximum	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Unacceptable	Unacceptable	+?	+?	+?	+?
	Access to bus stops	Preferred Maximum	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Acceptable	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable				
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Desirable				
	Access to primary or middle schools	Unacceptable	Desirable				
	Access to secondary schools	Preferred Maximum	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable	+	+	+	+
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Unacceptable	Unacceptable				
	Access to bus stops	Preferred Maximum	Desirable				

SA objective	Criterion	SUE1	SUE1	SUE1	SUE1	SUE1	SUE1
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	6000	8500
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Acceptable	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable				
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Medium	Medium	0/?	0/?	0/?	0/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/0	0/0	0/0	0/0
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/-	--?/-	--?/-	--?/-
	Potential for harm to agricultural land	High	High	--?/-	--?/-	--?/-	--?/-

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.1438 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 1 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.1439 The site currently consists of arable land around the settlement edge of the existing town of Halstead (approximately 5,820 existing dwellings). It also lies in close proximity to smaller settlements, including Gosfield, Greenstead Green, Earls Colne and Colne Engaine.

3.1440 It is recognised that the provision of such a large development around and close to the existing small scale communities in the area is likely to result in a significant change to these. However the existing developed areas within the immediate vicinity of the site will be subject to the most significant degree of change. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity

and an altered surrounding landscape character / context as development of this scale would result in the creation of a permanent urban character compared to what is a rural character at present. The location of settlements relative to the site, and their current scale is set out in the site context above.

3.1441 It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements within 5km (which is over 10% of the current scale of some of these for all capacity options), that impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all of the potential scales of development (SUE1 a/b/c/d), including the potential maximum capacity at the end of the plan period, will result in significant negative yet uncertain (--?) effects in relation to SA objective 1. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

3.1442 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.

3.1443 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (SUE1a/b/c/d).

3.1444 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

3.1445 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for all dwelling capacity options.

3.1446 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.

3.1447 In addition, the site information form sets out that development at 2,000, 6,000 & 8,500 dwelling capacities is expected to be viable, which includes the delivery of 30% affordable housing. It is assumed that this would also apply to a site of 2,500 dwellings given it is a similar scale to 2,000 dwellings.

3.1448 In light of the above factors, it is considered that significant positive (++) effects are likely to occur in relation to SA objective 2, both at the end of the plan period and for all dwelling capacity options.

SA3: Improve health/reduce health inequalities

3.1449 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.1450 There is one existing healthcare facility within Halstead – the Elizabeth Courtauld Surgery. The town also benefits from hospital facilities at Halstead Hospital.
- 3.1451 The site overlaps with a significant public linear recreational space along the River Colne valley. In addition, there is a significant amount of open space within the adjacent existing settlement of Halstead. This includes clusters of small-scale informal/formal recreation spaces, amenity green space, cemeteries, allotments and designated 'visually important spaces'. It also includes further areas of the linear recreational spaces along the river valley. The town also benefits from an existing leisure centre (the Halstead Leisure Centre).
- 3.1452 The site is crossed by several public rights of way (PROW), which would provide access to the surrounding countryside for residents of the new development to utilise for recreation. However, it is not considered that these PROW in themselves will make a significant contribution to recreation so as to facilitate more healthy lifestyles. The site is not integrated with national or local cycle networks.
- 3.1453 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to access to health and recreation facilities, both at the end of the plan period and for all final site capacity options.
- 3.1454 In terms of accessing healthcare, despite the presence of a GP surgery in Halstead town, the layout of the site means that the surgery is not within 'acceptable' walking distance of the site; because the existing surgery lies in the centre of town, only around 2% of the site lies within walking distance of the facility. Both at the end of the plan period (for all capacity options) and at the lower capacity option of 2,000 dwellings, the site is unlikely to be large enough to support new healthcare facilities, resulting in no adjustment to the minor positive effect (+) identified above. However, in accordance with the assumptions framework, the middle capacity option of 6,000 dwellings is considered able to support a new Primary Care Spoke, and the highest capacity of 8,500 dwellings could support a Primary Care Hub. As such, the site at these two higher scales should be supported by new, up to date healthcare facilities, and a significant positive (++) rather than minor positive (+) effect is anticipated in relation to access to health and recreation facilities.

Exposure to noise pollution

- 3.1455 The site has some limited exposure to noise emanating from the A131 and A1124 roads running through the site. As a result, approximately 3% of the site area falls within a DEFRA strategic noise area of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB, and a further 4% falls within a DEFRA strategic noise area of $L_{night} 50.0-54.9$ dB, or $L_{aeq,16} 55.0-59.9$ dB. However, given that less than 5% falls within the former and less than 50% falls within the latter, negligible effects (0) are anticipated in relation to exposure to noise pollution, both at the end of the plan period and when fully built at all site capacities. It is acknowledged that the construction of the full or partial Halstead Bypass (depending on the capacity option) may impact subsequent levels of noise pollution; however it is assumed that this impact would be appropriately mitigated via design of the scheme.
- 3.1456 As such, mixed effects are anticipated for SA objective 3, with different effects anticipated depending on the scale of development, as shown in tabulated form above. Slightly more positive effects are anticipated for the higher capacity options for the site (6,000 and 8,500 dwellings).

SA4: To ensure and improve the vitality & viability of centres

Effects of new centre facilities

- 3.1457 In accordance with the assumptions framework for all strategic sites at all scales and as confirmed by the site information form it is considered that development will be supported by suitable provision of services and facilities within a new local cen. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to this SA objective, both at the end of the plan

period and at all potential dwelling scales. As only 3% of the site area is within a desirable or acceptable walking distance to Halstead Town Centre, there will be no adjustment to the minor positive (+) effects identified.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.1458 The relationship of the site to existing centres is described in the site context above. There are also existing employment areas surrounding the site, which may not be within local or town centres, and which provide for jobs. The nearest employment areas (not within local or town centres) include: the Bluebridge Industrial Estate (adjacent to the site boundary), the Riverside Industrial Area and Atlas Works, Gosfield Airfield, and the large-scale Earls Colne Airfield in a rural setting to the south.
- 3.1459 It is anticipated that the development of the site at all potential scales will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.
- 3.1460 The site information form provided confirms that the site will provide 'an opportunity to enhance accessibility to (and/or expand) the Bluebridge Industrial Estate'. However, in accordance with the site information form, it is considered that all dwelling capacity options (SUE1a/b/c/d) will be able to support less than 10ha of employment land. As such, and in line with the assumptions framework, there is no change to the minor positive effects (+) anticipated for SA objective 5, both at the end of the plan period and for all dwelling capacity options.
- 3.1461 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.1462 The site intersects scattered areas of BAP Priority Habitat (totalling approximately 3% of the total site area). The most substantial of these is the coastal and floodplain grazing marsh around the River Colne valley. Within 400m of the site boundaries, in addition to further scattered areas of BAP Priority Habitat (largely deciduous woodland), lies two designated local wildlife sites (LWS) – Oxley/Birch Woods in the north and the Ramsey School's 'star stile mosaic' to the west. In addition, almost the entire site lies within SSSI Impact Risk Zones for residential development of 100 units or more, highlighting the potential for impacts on the interest features of the SSSI.
- 3.1463 As such, development of this site may result in impacts to these local designations and habitats. It is anticipated that negative effects may result from amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure, predation by pets. However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects.
- 3.1464 In total, 15% of the area within 400m of the site boundary intersects with LWS areas. Given this is above the 5% threshold set out in the assumptions framework, and given the intersection of the site with relevant IRZs, a minor negative effect with uncertainty (-?) is anticipated for SA objective 6, both at the end of the plan period and for all fully built site capacity options.
- 3.1465 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.1466 The site is an extension of an existing settlement that sits at the intersection of two major roads – the A131 and A1124. The relationship of the site to existing town and local centres is described above in the commentary for SA objective 4, and trips to these and other destinations will be

primarily dependent on these two roads. The Braintree Infrastructure Delivery Plan¹²⁸ (para 6.56) describes how trips from Halstead are largely distributed towards Braintree and Colchester, and because there are no rail service there are congestion issues along routes to both towns. The Blue Bridge Industrial Estate is also mentioned as a significant generator of trips in and out of Halstead.

- 3.1467 The nearest railway station is in Braintree (approximately 10km south of the site's centre point) at the terminus of the Braintree Branch Line. This offers an hourly service to London throughout the day.
- 3.1468 There are three existing primary schools in Halstead town – the Holy Trinity C of E Primary School, the Richard de Clare Community Primary School, and the St. Andrew's C of E Primary School. Halstead also has one secondary school – the Ramsey Academy.
- 3.1469 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.1470 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council¹²⁹ sets out that there is slightly limited capacity at Primary Schools in the Halstead/Gosfield area (-3 places forecast in 2028-29). At a primary pupil factor of 0.3 per dwelling, even the lowest capacity considered (2,000 dwellings) would create demand for 600 primary places. As such, it is considered likely that new primary school(s) will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options. These services and facilities would serve both new residents and the existing community within the development site.
- 3.1471 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at all potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site to access healthcare facilities and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall it is considered likely that the provision of the local services and facilities mentioned above is likely to result in at least minor positive yet uncertain (+?) effects for all dwelling capacities. The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. It is notable that sites over 4,500 dwellings in size are anticipated to provide new health centre facilities, however this is not considered likely to change the effect from minor positive in relation to this SA objective.
- 3.1472 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to provide secondary school facilities in accordance with the developer contributions guidance from Essex County Council¹³⁰. Essex County Council evidence¹³¹ sets out that in 2028-29 (the final year of the forecast in this schools capacity document) there will be -22 secondary school places in the Halstead/Hedingham/Coggeshall area, with a planned expansion of 20 places planned at the Ramsey Academy. Given a secondary pupil factor of 0.2 pupils per dwelling, the lowest capacity option (2,000 dwellings) will create demand for around 400 secondary places. As such, it is likely that some secondary school expansion may be required to meet all dwelling capacity options. The site capacity options SUE1c (6,000 dwellings) and SUE1d (8,500 dwellings), when fully built and at the end of the plan period (2,500 dwellings), are

¹²⁸ https://www.braintree.gov.uk/downloads/file/6491/braintree_infrastructure_delivery_plan_report_october_2017

¹²⁹ Essex School Organisation Service – 10 Year Plan 2019-2028.

¹³⁰ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

¹³¹ Essex School Organisation Service – 10 Year Plan 2019-2028.

considered capable of delivering new secondary school facilities on the site, which provides further opportunities for sustainable travel. It is assumed that although the capacity at the end of the plan period is lower than the 4,500 threshold for new secondary facilities set out in the assumptions framework, that phased provision can be made as the full site capacity (either SUE1c – 6,000 dwellings or SUE1d – 8,500 dwellings) will be able to support a new secondary school.

3.1473 Due to the presence of the Bluebridge Estate adjacent to the site, more than 50% of the site is within 'desirable' or 'acceptable' walking distance of existing employment facilities. In line with the site information form, the site is also assumed to enhance accessibility to and/or expand the Bluebridge Industrial Estate at all capacity options. For the three capacity options that include secondary school provision onsite (SUE1b, SUE1c and SUE1d) these factors, combined with the restoration of the dismantled railway as a cycle and pedestrian route (see SA objective 8) also, is likely to create significant opportunities for sustainable travel within the site, resulting in anticipated significant positive yet uncertain (++?) effects. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

3.1474 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.

3.1475 For journeys to more distant destinations, the distance to the nearest railway station, Braintree, is around 10km away. This is likely to severely limit the potential for trips by sustainable modes of transport.

3.1476 In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken. This site is split between two middle super output areas (MSOAs) on the edges of Halstead, however a more representative indication of likely commuting patterns is assumed to be given by considering existing patterns from within the built-up area of Halstead itself (Braintree 004). According to NOMIS (based on 2011 census data) the most popular destinations for commuters from Halstead are: Halstead itself (approximately 22%); central areas of Braintree (9%); and areas surrounding Halstead, including Sible Hedingham (4%). Based on this, it is likely that the significant proportion of commuting internally within Halstead could be made by sustainable means; however commutes out to Braintree and surrounding areas would likely generate traffic on the A131 and the A1124.

3.1477 As such, if the new residents follow the same pattern, a still significant portion of journeys will be made outside of Halstead and are likely to be made by the congested local road network, in the absence of rail infrastructure. As such, minor negative effects (-?) are anticipated, both at the end of the plan period and when the site is fully built for all site capacities, with uncertainty relating to the difficulty of predicting where people will choose to work and how they will choose to travel. In principle, there is potential for existing bus routes to serve some commuters to the most popular commuting destinations.

3.1478 Therefore, overall mixed effects are anticipated for SA objective 7, with different effects anticipated for different scales of development, as shown in tabulated form above. Slightly more positive effects are anticipated at the end of the plan period (2,500 dwellings) and the higher capacity options (6,000 and 8,500 dwellings).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

3.1479 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.

3.1480 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form for

this site, this site is to be supported by the following strategic and local infrastructure at the following dwelling capacities:

3.1481 SUE1a (2,000 dwellings) and also assumed to apply the site at the end of the plan period given that it is a similar scale (SUE1b):

- Early Years
- Primary School(s)
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces
- Partial delivery of Halstead Bypass (Southern section from Colchester Road to the A131).

3.1482 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.1483 SUE1c (6,000 dwellings) and SUE1d (8,500 dwellings):

- Early Years
- Primary School(s)
- Secondary School
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces
- Full Halstead Bypass
- Restoration of dismantled railway Colchester Road to Tidings Hill as a new cycle and pedestrian route.

3.1484 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.1485 The supporting infrastructure listed above is confirmed to be viable by the site information form and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects, both at the end of the plan period and for all final dwelling capacity options. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.1486 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

3.1487 There is one Grade II listed building that falls within the site – Bushey Leys. Additionally, there are a number of heritage assets that lie within 500m of the site boundaries: the Grade II* listed Bluebridge House, the scheduled monument of the moated site at Stanstead Hall, and a number of Grade II listed buildings. In the wider vicinity (within 500m-1km of the site boundaries), there

is one Grade I listed building (the Church of St Andrew), 7 Grade II* listed buildings, a scheduled monument (Stanley Hall moated site), a large number of Grade II listed buildings and the Halstead Conservation area. The conservation area itself contains a cluster of listed buildings.

3.1488 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.

3.1489 In total, approximately 58% of the site area falls within 500m of a heritage asset, and a further 42% lies between 500m and 1km from an asset.. In line with stated assumptions, and taking a precautionary approach to this assessment, significant negative effects with uncertainty (--?) are anticipated, both at the end of the plan period and when the site is fully built at all scales in relation to heritage assets. The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

3.1490 With regards to townscape, the boundary of the site is adjacent to the existing settlement of Halstead (which includes Halstead Conservation Area). As such, the development of this site is likely to significantly change the character of Halstead and surrounding settlements, but whether this change will be positive or negative will depend on the quality of design of the new development, therefore the effect is anticipated to be uncertain (?).

3.1491 In accordance with the above, an overall mixed effect (--?/?) is anticipated in relation to SA objective 9, both at the end of the plan period and when fully built at all capacities.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

3.1492 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.

3.1493 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site both at the end of the plan period and at all final dwelling capacities is likely to result in minor positive (+) effects in relation to SA objective 10.

SA11: To improve water quality and address water scarcity and sewerage capacity

3.1494 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

3.1495 Approximately 1% of the site area intersects with source protection zone 1 (SPZ1) and a further 11% intersects with source protection zone 2 (SPZ2). However, in line with stated assumptions, because the size of these areas lies under the stated thresholds, negligible effects (0) are anticipated in relation to ground water, both at the end of the plan period and at all fully built site capacity options.

Water scarcity and water treatment

3.1496 With regard to water supply, the Braintree Water Cycle Study (WCS)¹³² identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The Braintree WCS assumes planned growth of 14,113 dwellings by 2033 as a result of growth allocated in the proposed Section 1 Local Plan, including Garden Communities at Marks

¹³² https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

Tey and West of Braintree. It should be noted that site SUE1 was not allocated by the Section 1 Plan (as a Garden Community) and therefore this specific proposal at this location was not taken into account for the WCS. As such, the results of this study should be interpreted with caution in relation to this site.

- 3.1497 The Integrated Water Management Strategy (IWMS)¹³³, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume that the proposed growth at SUE1 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (SUE1a/b/c/d) in relation to water scarcity.
- 3.1498 It is likely that site SUE1 would be served by the Halstead WRC. The WCS identifies that Halstead WRC has sufficient headroom to accommodate projected growth in the area up to the end of the plan period. However, the Halstead WRC was only assessed for 610 dwellings during the plan period and was found to have residual headroom around 760 additional dwellings. This equates to further 1370 dwellings that the Halstead WRC could cater to, which is lower than all the potential dwelling capacities for SUE1. As such, uncertain effects (?) are expected for all potential dwelling options as the WCS does not provide sufficient evidence to suggest that the Halstead WRC could serve SUE1.
- 3.1499 For the higher potential dwelling capacity options (SUE1c – 6,000, and SUE1d – 8,500), the effects are expected to be uncertain (?) as growth beyond the plan period was not assessed as part of the WCS.
- 3.1500 Overall, effects in relation to this SA objective are expected to be negligible in relation to water quality and uncertain in relation to water scarcity and water treatment (0/?).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.1501 As a result of the presence of the River Colne within the site, a small proportion of the site (approximately 4%) intersects with Environment Agency Flood Zones 2 and 3. In addition, only a negligible area of the site is identified as at above 'low' risk of ground water flooding and < 25% of the site is at risk of flooding from surface water. Furthermore, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.1502 In line with the stated assumptions, it is therefore considered that the effects in relation to SA objective 12 are likely to be negligible (0), both at the end of the plan period and at all final capacity options.

SA13: To improve air quality

- 3.1503 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 3.1504 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated, both at the end of the plan period and at all final capacity options.

Potential contribution to road traffic within areas suffering from air pollution

- 3.1505 As outlined under SA objective 7, according to NOMIS data, popular destinations for commuters out of Halstead are Braintree and (to a lesser extent) surrounding smaller settlements. As such, if the new community follows the commuting behaviour of the present community, most of this

¹³³ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

commuter traffic is likely to be carried by local roads and the A131 in the vicinity of Braintree. There are no AQMAs in this area and so negligible effects (0) are anticipated,

3.1506 As such, overall negligible effects (0/0) are anticipated for SA objective 13, both at the end of the plan period and when fully built at all capacity options.

SA14: To conserve and enhance the quality of landscapes

3.1507 The site boundary of SUE1 is around 4.3km west of the designated Stour Valley Project Area.

3.1508 The landscape surrounding the site – which consists of the LCA Wickham Farmland Plateau and the LCA Colne River Valley - has been assessed by landscape officers of the NEAs. The LCA Wickham Farmland Plateau was found to be of moderate strength landscape character and highly sensitive to visual intrusion due to wide views. The LCA Colne River Valley was found to be of strong landscape character, and highly sensitive to visual intrusion and loss of landscape integrity.

3.1509 In light of this, and in line with the stated assumptions, significant negative effects with uncertainty (--?) are anticipated in relation to SA objective 14, both at the end of the plan period and at all final capacity options. The uncertainty arises because landscape impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

3.1510 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

3.1511 Approximately 80% of the site is within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site would result in a significant sterilisation of mineral resources. Due to the large area of mineral resources that may be affected, significant negative effects with uncertainty (--?) are anticipated in relation to mineral resources. The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential dwelling capacity options, because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

3.1512 Approximately 23% of the site is Grade 2 agricultural land, and a further 67% is Grade 3 agricultural land. In line with stated assumptions, a minor negative (-) effect is anticipated in relation to agricultural land.

3.1513 As such, mixed significant negative effects with uncertainty and minor negative effects (--?/-) are anticipated for SA objective 15, both at the end of the plan period and when fully built at all capacity options.

Summary of significant effects

3.1514 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out at capacity SUE1a – 2,000 dwellings:

3.1515 The potential for significant positive effects arises in relation to:

- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;

3.1516 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;

- SA9 Historic environment and townscape, due to potential impacts on nearby Halstead Conservation Area and cluster of listed buildings;
- SA14 Landscape, due to the significant change which would occur to the sensitive LCA Wickham Farmland Plateau and the LCA Colne River Valley; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site.

3.1517 In summary the site at this scale is likely to be able to provide sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this capacity option to provide higher order services such as a secondary school, health care facilities or likely to be able to support a large number of jobs. As such, development in this location at 2,000 dwellings will result in more travel out of the site to access these services and jobs compared to a higher level of development. This is likely to decrease opportunities for sustainable travel and result in a less self-contained development.

3.1518 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. It is considered that at 2,000 dwellings, the effects will be less extreme than the larger capacity options, as the impacts will be less, however there will also be fewer benefits in terms of new services and facilities.

3.1519 Significant negative effects have been identified in relation to heritage assets and sterilisation of mineral resources; however this scale of development may result in reduced effects on sensitive environmental receptors compared to the larger dwelling capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features.

Effects when fully built out at capacity SUE1c – 6,000 dwellings and SUE1d – 8,500 dwellings:

3.1520 Effects once the site is fully built out to these two site capacities are found to be broadly the same, given the similar scale of these options. Significant positive effects are anticipated in relation to:

3.1521 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to the ability to deliver a youth centre and more community meeting places for the new community as a result of the larger scale of development;
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
- SA3 Health, as development of this scale should be able to support new health facilities, as well as open spaces and opportunities for active travel;
- SA7 Sustainable Travel, as a significant level of services and facilities are anticipated to come forward as part of the site at these scales, reducing the need to travel.

3.1522 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape, due to potential impacts on nearby Halstead Conservation Area and cluster of listed buildings;
- SA14 Landscape, due to the significant change which would occur to the sensitive LCA Wickham Farmland Plateau and the LCA Colne River Valley; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site.

3.1523 In summary, the fully built site at either of these two capacities (SUE1c – 6,000 dwellings or SUE1d – 8,500 dwellings) is likely to result in a development which can support a significant number of services, including health care facilities, primary and secondary schools, and a centre

(or centres) which are large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs. At these scales, and if supported by appropriate infrastructure / employment provision, it is considered that the site could achieve some self-containment which is likely to provide opportunities for more sustainable travel behaviour. However as a large site, its development will put pressure on surrounding transport infrastructure, particularly the A131, resulting in increased congestion. The site is not currently accessible by high quality sustainable travel services and this may also lead to a dependence on the private car for journeys to and from destinations outside the site. While these capacity options would support the construction of a full Halstead Bypass, removing traffic from the centre of Halstead, the infrastructure would not enable a shift to more sustainable modes.

- 3.1524 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.
- 3.1525 Development of this site is likely to affect a number of other sensitive receptors which are present either within the site or very near to it, including biodiversity assets, heritage assets, high quality agricultural land, and mineral resources – it is important to note that effects in relation to these are likely simply because these form the site context, however delivering a high dwelling capacity within a fixed site boundary may make it more difficult to mitigate the potential impacts.

Effects at the end of the plan period (SUE1b - maximum 2,500 dwellings)

- 3.1526 In summary the anticipated significant effects at the end of the plan period are broadly similar to those for the SUE1a (2,000 dwellings) capacity option described above.
- 3.1527 The site at the end of the plan period is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this time to provide higher order services such as health facilities or likely to be able to support a large number of jobs. As such, development in this location at the end of the plan period will result in more travel out of the site to access these services and jobs than when the site is fully built. This is likely to add traffic to the A131 in particular, resulting in increased congestion and relatively increased carbon emissions compared to a more self-contained site. Having said this, a phased / early delivery of some infrastructure items such as secondary schools may help to provide more opportunities for sustainable travel.
- 3.1528 The smaller scale of development at the end of the plan period (compared to the final capacity) may result in reduced effects on sensitive environmental receptors compared to the fully built out capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features – albeit on a temporary basis.

SUE2 - Land East of Braintree (including Temple Border)

Site Context

- 3.1529 Site SUE2 is a strategic site located to the east of Braintree. It was promoted for inclusion in the submitted section 1 Local Plan as Land East of Braintree (including Temple Border). The entirety of the site is located within Braintree District. The potential scale of development from this site is up to approximately 5,000 dwellings. There is another, separately assessed, strategic site option (SUE3) with the same border in the northern part but extended further to the south which would provide up to 12,500 dwellings.
- 3.1530 The site is 161 hectares and is comprised of almost entirely arable land with some small areas of woodland. The nearest settlements (measured from the site boundary to the nearest edge of the settlements) are Braintree to the immediate west of the site, which is a settlement of around 21,882 dwellings and contains policy defined local centres and a policy defined district centre and town centre; Tye Green located around 700m to the south, which is a settlement of 396 dwellings but contains no policy defined local centre; Black Notley located around 1.7km to the south-west, which is a settlement containing 1,033 dwellings but no policy defined local centre; Silver End located around 2.3km to the south-east, which is a settlement of 1,551 dwellings but contains no policy defined local centre; Bradwell located around 1.4km to the east of the site, which is a settlement of 223 dwellings with no policy defined local centre; Stisted around 1.6km north-east of the site, which is a settlement of 271 dwellings with no policy defined local centre; Cressing located 850m south-east of the site, which is a settlement of 209 dwellings with no policy defined local centre; White Notley located around 3.1km south of the site, which is a settlement of 229 dwellings with no policy defined local centre; Great Notley, around 3.3km south-west of the site, which is a settlement included in the dwelling quantity for Braintree and includes a policy defined local centre. Other strategic settlements and destinations nearby include Great Dunmow, 13km to the west of the site, Stansted Airport, located around 21km to the west, Chelmsford, located around 12km to the south-west, Haverhill, located around 23km to the north-west and Colchester, located around 2km to the east.
- 3.1531 The northern and western boundaries of the site are adjacent to the A120, which provides strategic connections to Braintree, Great Dunmow, Stansted and the M11 to the west, and Colchester to the east. The A120 links to the A131 and provides a strategic link to settlements to the south such as Chelmsford. As the site is greenfield, it is currently not well served by existing services and facilities. The nearest railway station is Braintree Freeport, which is located around 1.7km to the west (measured from the centre of the site) and connects to the main London-Ipswich line at Witham.
- 3.1532 There are no significant residential, employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundaries. Section 2 allocations close to the site boundary include a retail warehouse allocation at Galley's Corner approximately 300m to the south west; three residential allocations approximately 1.0km to the south at Tye Green providing for approximately 470 dwellings; and a number of residential and employment allocations to within 1km to the west within the Braintree Town built up area.
- 3.1533 There are Minerals Extraction Sites in the Essex Minerals Local Plan located 400m to the north (Hatches Farm), 1.1km to the north (Straits Mill) and 2.5km to the east (Bradwell Quarry).

SA objective	Criterion	SUE2	SUE2	SUE2	SUE2	SUE2
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	5000
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	-- ?/++	-- ?/++	-- ?/++

SA objective	Criterion	SUE2	SUE2	SUE2	SUE2	SUE2
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	5000
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+/-	+/-	++/-
	Access to cycle paths	Preferred Maximum	Preferred Maximum			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Potential for harm to Source Protection Zones (SPZs)	Low	Low			
	Potential exposure to flood risk	Low	Low			
	Potential exposure to air pollution	Low	Low			
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	++
	Access to town centres	Unacceptable	Unacceptable			
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum			
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	-?	-?	-?
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium			
	Potential for harm to PHI or local BAP habitat	Low	Low			
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?/-?	+?/-?	++?/-?
	Access to primary or middle schools	Preferred Maximum	Desirable			
	Access to secondary schools	Preferred Maximum	Preferred Maximum			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Preferred Maximum	Preferred Maximum			
	Access to bus stops	Preferred Maximum	Desirable			
	Access to cycle paths	Preferred Maximum	Preferred Maximum			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way	Acceptable	Acceptable			

SA objective	Criterion	SUE2	SUE2	SUE2	SUE2	SUE2
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	5000
	(PRoW)					
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum			
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?	+?	+?
	Access to primary or middle schools	Preferred Maximum	Desirable			
	Access to secondary schools	Preferred Maximum	Preferred Maximum			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Preferred Maximum	Preferred Maximum			
	Access to bus stops	Preferred Maximum	Desirable			
	Access to cycle paths	Preferred Maximum	Preferred Maximum			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum			
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/0	--?/0	--?/0
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+	+	+
	Access to primary or middle schools	Preferred Maximum	Desirable			
	Access to secondary schools	Preferred Maximum	Preferred Maximum			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Preferred Maximum	Preferred Maximum			
	Access to bus stops	Preferred Maximum	Desirable			
	Access to cycle paths	Preferred Maximum	Preferred Maximum			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town	Preferred Maximum	Preferred Maximum			

SA objective	Criterion	SUE2	SUE2	SUE2	SUE2	SUE2
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	5000
	<i>centres</i>					
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?	0/0?	0/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/0?	0/0?	0/0?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High			
	Potential for harm to agricultural land	High	High	--?/--	--?/--	--?/--

Commentary on SA objectives

SA1: Create safe environments which improve quality of life and community cohesion

3.1534 Consideration of the effects in relation to this SA objective is divided between the anticipated effects on existing communities and those on the new communities that will be formed as a result of development. Commentary on these two matters is set out below.

Effects on existing communities

3.1535 The site is comprised of arable farmland, featuring some small areas of woodland. The existing area within the site contributes to the rural setting of Braintree and other settlements within the area also. These settlements include Braintree, Tye Green, Black, Notley Silver End, Bradwell, Stisted, Cressing, White Notley and Great Notley. Of these settlements, only Braintree and Great Notley are large enough to offer a local, district or town centre as defined in the Braintree Section 2 Local Plan. The location of settlements relative to the site, and their current scale is set out in the site context above.

3.1536 It is recognised that the provision of such a large development in close proximity to existing small scale communities in the area is likely to result in a significant change to these. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context as development of this scale would result in the creation of a permanent urban character compared to what is a rural character at present.

3.1537 It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements within 5km (which is over 10% of the current scale of some of these for

all capacity options), that impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all of the potential scales of development (SUE2a/c) including the potential maximum capacity at the end of the plan period (SUE2b) will result in significant negative yet uncertain (--?) effects in relation to this SA objective. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effects on the new community

- 3.1538 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 3.1539 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (SUE2a/b/c).
- 3.1540 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.1541 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for all dwelling capacity options (SUE2a/b/c).
- 3.1542 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.1543 In addition, the site information form sets out that development sets out that development at both the site capacity options (2,000 and 5,000 dwellings) is likely to be viable, which includes the delivery of 30% affordable housing. In the case of SUE2c (5,000 dwellings), the site information form does suggest that, despite there being no issue or constraints that would prevent the development from taking place, development capacity may be limited by a number of factors, including the physical land take for the new route of the A120, which may prevent the site from being capable of delivering the full 5,000 dwelling capacity. However, this is considered unlikely to prevent the site from achieving the policy compliant level of 30% affordable housing, regardless of the final capacity. The site information form notes that external funding is not required to deliver policy compliant development or strategic infrastructure (RTS links to Braintree Town, Braintree Freeport, and Colchester; A120 Millennium slipways; new route of A120 to provide a free-flow link in place of the Galley's Corner roundabout) to support the larger capacity options (SUE2b/c).
- 3.1544 In light of the above factors, it is considered that significant positive (++) effects are likely to occur in relation to this SA objective for all dwelling capacity options (SUE2a/b/c).

SA3: Improve health/reduce health inequalities

- 3.1545 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.1546 As a greenfield site, there are no existing healthcare facilities within SUE2. The nearest GP Surgery is Blyths Meadow Surgery, which is located 2.3km to the west in Braintree (measured from the centre of the site). There are multiple further healthcare facilities located further to west within Braintree also. The Stage 1a assessment found that the entirety of the site is within an 'unacceptable' walking distance of GP surgeries and health centres.
- 3.1547 There are no areas of public open space located within the site boundaries. The Stage 1a assessment found that the majority of the site is within an 'acceptable' or 'desirable' distance of public open space. The south-western boundary of the site is located adjacent to a cycle route that connects to further cycle routes within Braintree. However, the Stage 1a assessment found that the majority of the site is not within an 'acceptable' walking distance of cycle routes. There are several PROW located within the site boundaries and adjacent to the site, which connects the area to Braintree to the west and the surrounding countryside. Whilst PROW provide access to the surrounding area, it is not considered that they will make a significant contribution to recreation so as to facilitate more healthy lifestyles for residents within the site.
- 3.1548 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to this SA objective for all site capacity options (SUE2a/b/c).
- 3.1549 In terms of accessing healthcare, the site is relatively isolated in terms of access to existing facilities as it is a rural site. For the lower capacity option and the site at the end of the plan period, the site is not likely to be large enough to support new healthcare facilities, resulting in no adjustment to the minor positive effect (+) identified above.
- 3.1550 In accordance with the assumptions framework, the dwelling capacity option SUE2c (5,000 dwellings) is considered to be of a sufficient size to support a new Primary Care Spoke within the site. Therefore, significant positive effects (++) are expected for SUE2c due to access to healthcare facilities onsite.

Exposure to noise pollution

- 3.1551 The Stage 1a assessment found that around 21% of the site is at high risk from exposure to noise pollution. As such, as between 5-25% of land within the site that falls within a DEFRA strategic noise area of $L_{night} \geq 55.0$, or $L_{aeq} \geq 60.0$ dB, minor negative effects (-) are expected in accordance with the assumptions framework. The source of the noise pollution is the presence of the A120 to the immediate north and west of the site. These effects are expected at both site capacities (SUE2a/c) and at the end of the plan period (SUE2b).
- 3.1552 Overall, mixed positive and negative effects are expected in relation to this SA objective, as set out in the table above, with more significant positive effects expected for capacity option SUE2c.

SA4: To ensure and improve the vitality & viability of centres

- 3.1553 In accordance with the site information form, it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to this SA objective, at all potential dwelling scales (SUE2a/b/c).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.1554 There are multiple existing employment areas located around 1.5km to the west of the site in Braintree (measured from the centre of the site), including mixed-use sites at Anglia Way, Lakes Road Industrial Park and Millennium Way Trade Centre. However, the Stage 1a assessment found

that none of the site is within 'desirable' or 'acceptable' walking distance of existing employment centres.

- 3.1555 It is anticipated that the development of the site at all potential scales (SUE2a/b/c), will provide new homes in the area, which will increase the local workforce, providing greater resource for businesses and organisations, resulting in minor positive effects (+) in relation to this SA objective. The site information form for the site indicates that development at both capacity options will include the provision of a range of leisure, employment and retail uses to complement the relocation of Braintree Football Club to the site. For SUE2a (2,000 dwellings), it is indicated that the site has the capacity to deliver around 4ha of employment land as part of the development and around 5ha by the end of the plan period (SUE2b – 2,500 dwellings). However, the larger SUE2c option will likely be able to deliver around 10Ha of employment land when fully built out. As such, the minor positive effects are increased to significant positive (++) for SUE2c in relation to this SA objective.
- 3.1556 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.1557 Approximately 2% of the site area intersects with locally designated wildlife sites and Ancient Woodland (the north-west corner of the site is occupied by Templeborder Wood, which is a Braintree Local Wildlife Site and also contains Ancient Woodland). Further natural environment designations within the site boundaries include an area of the Priority Habitat (Deciduous Woodland) located on the north-east boundary of the site. The entire site falls within a SSSI impact risk zone (IRZ) for residential development of 100 units or more. There are also natural environment designation located within 400m of the site boundaries, including Lanham Wood, a Local Wildlife Site located adjacent to the south-eastern boundary of the site that contains Ancient Woodland and Priority Habitats adjacent to the north-east and southern boundary (Deciduous Woodland and Traditional Orchard respectively).
- 3.1558 As such, development of this site may result in impacts to these local designations and habitats. It is anticipated that impacts on these designations may result from amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure and predation by pets. However, the extent of the effects is unknown as the development proposals may include mitigation to reduce or overcome negative effects. As such, uncertain minor negative effects are expected (-?) in relation to this SA objective due to the presence of a Local Wildlife Site onsite. The effects are considered likely to occur in relation to all potential dwelling capacity options (SUE2a/b/c).
- 3.1559 The effects identified above may be worsened if the larger SUE3c site comes forward for development.
- 3.1560 Reference should be made to the separate HRA or the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.1561 The site is entirely greenfield with some wooded areas distributed throughout the site. The relationship of the site to existing local centres is described above in the site context section and the accessibility of the site to surrounding facilities and services would, prior to the provision of any new transport infrastructure, be primarily dependant on the A120 to the north and the west. As set out in the Braintree Infrastructure Delivery Plan¹³⁴, the A120 is congested in both directions in the morning and afternoon peak periods, and suffers from poor journey time reliability. The nearest railway station (measured from the centre of the site) is Braintree Freeport, which is located around 1.7km to the west. The 70 bus route is located within walking

¹³⁴ https://www.braintree.gov.uk/downloads/file/6491/braintree_infrastructure_delivery_plan_report_october_2017

distance of the north-west corner of the site and operates on a half hourly basis into the centre of Braintree. The south-west corner of the site is located within walking distance of the 38a bus route, which operates on an hourly basis into the centre of Braintree.

- 3.1562 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.1563 In accordance with the assumptions framework and confirmed by the site information form, it is anticipated that local centre facilities, bus stops/routes and open facilities will be provided within the site to meet its needs. Evidence from Essex County Council¹³⁵ sets out there is limited capacity at Primary School in the Braintree town area (-59 places forecast in 2028-29) so it is considered likely that a new primary school(s) will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (SUE2a/b/c). These services and facilities would serve both new residents and the existing community within the development site. The Stage 1a assessment found that the majority of the site is not within an 'acceptable' walking distance of primary or secondary schools.
- 3.1564 It is considered likely that opportunities for using more sustainable modes of travel (thereby reducing congestion) are likely to be provided by the development of the site at all potential dwelling capacities. However, it is anticipated that will still be necessary to travel to destinations outside the site to access primary healthcare facilities and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall, uncertain minor positive effects (+?) are expected in relation to this SA objective for all capacity options (SUE2a/b/c) due to the provision of local services and facilities. The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. It is notable that sites over 4,500 dwellings in size are anticipated to provide new health centre facilities, however this is not considered likely to change the effect from minor positive in relation to this SA objective.
- 3.1565 In addition to the considerations above and in accordance with assumptions framework, it is assumed that all strategic sites will be required to provide contributions to secondary school capacity in accordance with the developer contribution guidance from Essex County Council¹³⁶. The Essex County Council evidence sets out that in 2028-29 (the final year of the forecast in this schools capacity document) there will be 46 secondary school places in Braintree. Given a secondary pupil factor of 0.2 pupils per house, it is likely that some secondary school expansion may be required to meet all dwelling capacity options – SUE2a for 2,000 dwellings, which is the smallest capacity option, will generate approximately 400 secondary pupils. It is considered that SUE2c is of a sufficient size (>4,500 dwellings) to deliver a new secondary school onsite, which provides opportunities for sustainable travel. As previously stated, the largest site capacity (SUE2c) is also expected to be able to provide at least 10ha of employment land as part of the development which together with onsite provision of a secondary school increases the minor positive effect with uncertainty to a significant positive effect with uncertainty (++?) for this capacity option. Phased provision of a secondary school onsite is also expected by the end of the plan period for this site, but SUE2b does not provide sufficient employment land to alter the minor positive effects expected.

Longer journeys

- 3.1566 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the

¹³⁵ Essex School Organisation Service – 10 Year Plan 2019-2028.

¹³⁶ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.

3.1567 For journeys to more distant destinations, the majority of the of the site is not located within an 'acceptable' or 'desired' walking distance of a railway station and as such, this is likely to reduce the potential for trips by rail, which may lead to increased car use and increased congestion for the external journeys. In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site is located in the Braintree 012 MSOA, which consists of largely rural land to the east of Braintree. According to NOMIS, the largest proportion (9%) of commuter trips from the Braintree 012 are within the MSOA itself and the second largest proportion (8.5%) of commuter trips are to Braintree 009, which is Braintree Town Centre. As such, if residents follow the same pattern, most of the commuting journeys are likely to be carried by local roads and the A120. These are relatively short trips which could not be undertaken on a train as the infrastructure does not exist. As such, uncertain minor negative effects (-?) are expected in relation to this SA objective for all dwelling capacity options (SUE2a/b/c). The uncertainty arises due to the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters into Braintree.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

3.1568 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.

3.1569 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form for this site provided by the NEAs, this site is to be supported by the following infrastructure at the following dwelling capacities:

3.1570 SUE2a (2,000 dwellings) and also assumed to apply to SUE2b given that it is a similar scale (maximum 2,500 dwellings at the end of the plan period):

- Early Years
- Primary School(s)
- Youth Centre provision
- Open Space
- Bus Services
- Local centre facilities
- Community meeting spaces

3.1571 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.1572 SUE2c (5,000 dwellings):

- RTS links to Braintree Town, Braintree Freeport and Colchester
- Millennium slipways are required to provide additional capacity for initial phases (Jnes 2020)
- New route of A120 to provide a free-flow link in place of the Galley's Corner roundabout
- Early Years
- Primary School(s)
- Secondary School
- Youth Centre Provision
- Open Space

- Bus services
- Local centre facilities
- Community meeting spaces

3.1573 The site information form sets out that the site can viably deliver these infrastructure requirements with external funding from transport operating companies. Alternatively, viability improvements to the scheme via another mechanism could also potentially provide sufficient viability.

3.1574 The supporting infrastructure listed above is confirmed to be viable (on the site information form) and therefore it is anticipated to be delivered at an appropriate phase, resulting in uncertain minor positive (+?) effects for all dwelling capacity options (SUE2a/b/c) in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is noted in relation to site capacity option SUE2bc as the site information form indicates that the site may deliver less than 5,000 dwellings due to the physical land take for the new route of the A120.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.1575 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

3.1576 The site does not contain any heritage assets within its boundaries. There are heritage assets within 500m of the site boundaries, including Baytree Farmhouse (Grade II* listed) located 100m north-east of the site, a Grade II listed building 100m from the south-western boundary, a cluster of three Grade II listed buildings around 250m east of the site and a cluster of four Grade II listed buildings around 500m to the north. Heritage assets within 1km of the site include a conservation area around 950m to the north and further Grade II listed buildings to the east and south. The Stage 1a assessment found that around 26% of the site is within 500m of heritage assets and over 70% of the site is within 1km of heritage assets.

3.1577 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.

3.1578 Taking a precautionary approach to this assessment, uncertain significant negative effects (--?) are expected in relation to this SA objective for all capacity options (SUE2a/b/c) due to the potential for development to result in adverse impacts on these historic environment assets. The uncertainty arises as the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

3.1579 With regards to townscape, the site is within 500m of Braintree. However, Braintree is of a sufficient size compared to the maximum development capacity for the site to assume that development will not significantly change the character of the existing town. As such, in line with the stated assumptions, this is likely to ensure that the townscape of Braintree is not substantively altered as a result of development. As such, negligible effects are expected for all site capacity options (SUE2a/b/c) in relation to this SA objective.

3.1580 Overall the site is expected to have mixed uncertain significant negative and negligible effects (--?/0) in relation to this SA objective for all capacity options (SUE2a/b/c).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.1581 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.1582 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities (SUE2a/b/c) is likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 3.1583 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality, water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 3.1584 The site is entirely outside source protection zones, and as such it is not considered likely that the development of the site will affect groundwater resources and therefore negligible effects (0) are anticipated in relation to groundwater for all potential dwelling capacity options (SUE2a/b/c).

Water scarcity and water treatment

- 3.1585 With regard to water supply, the Braintree Water Cycle Study¹³⁷ identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The Braintree WCS assumes planned growth of 14,113 dwellings by 2033 as a result of growth allocated in the proposed Section 1 Local Plan, including Garden Communities at Marks Tey and West of Braintree. It should be noted that site SUE2 was not allocated by the Section 1 Plan and therefore this specific proposal at this location was not taken into account for the WCS. As such, the results of this study should be interpreted with caution in relation to this site.
- 3.1586 The Integrated Water Management Strategy (IWMS)¹³⁸, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume that the proposed growth at SUE2 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (SUE2a/b/c) in relation to water scarcity.
- 3.1587 In regard to water treatment, the site is likely to fall within the catchment area of the Braintree WRC. The WCS identifies that the Braintree WRC currently has sufficient flow headroom in its existing discharge permit to accept development of approximately 1,840 dwellings, which means that based on the growth planned in 2017, the existing permit will be exceeded in 2024. The study indicates that the necessary upgrades to accommodate growth within the plan period should be feasible. As such, uncertain negligible effects (0?) are expected for the potential dwelling capacity options SUE2a (2,000 dwellings) and SUE2b (2,500 dwellings). The uncertainty arises in the expected effects as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application and because specific growth at SUE2 was not considered as part of the WCS.

¹³⁷ https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

¹³⁸ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

- 3.1588 For the higher potential dwelling capacity option (SUE2c – 5,000 dwellings), the effects are expected to be uncertain (?) as the WCS does not consider growth beyond the plan period.
- 3.1589 Overall, mixed negligible and uncertain negligible effects (0/0?) are expected in relation to this SA objective for SUE2a and SUE2b. For SUE2c, the effects in relation to this SA objective are expected to be mixed negligible and uncertain (0/?).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.1590 The site does not contain any land located within Flood Zone 2 or 3 or any land at medium or high risk from groundwater flooding. There are small patches of land distributed throughout the site (<5%) at risk from surface water flooding. As set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.1591 It is therefore considered that effects in relation to this SA objective are likely to be negligible (0) for all potential dwelling capacity options (SUE2a/b/c).

SA13: To improve air quality

- 3.1592 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 3.1593 The site does not intersect with any AQMAs and as such, negligible effects (0) are expected for all potential capacity options (SUE2a/b/c).

Potential contribution to road traffic within areas suffering from air pollution

- 3.1594 The site is located within the Braintree 012 MSOA, which is largely rural land to the east of Braintree. According to NOMIS, the largest proportion (9%) of commuter trips from Braintree 012 are within the MSOA itself and the second largest (8.5%) proportion of commuter trips are to Braintree 009, which is Braintree Town Centre. As such, if the new community follows the commuting behaviour of the present community, most of this commuter traffic is likely to be carried by local roads and the A120. There are no AQMAs in this area and so it is considered that the development of the site at all potential dwelling capacity options (SUE2a/b/c) is likely to result in uncertain negligible effects (0?) in relation to this SA objective. The uncertainty arises as it is not known exactly how and where people will travel.

SA14: To conserve and enhance the quality of landscapes

- 3.1595 The site is not located near any designated landscapes or proposed extensions to these.
- 3.1596 The area has been assessed by landscape officers of the NEAs, and has been found to be within the LCA Silver End Farmland Plateau and of moderate character strength. Potential landscape issues identified in relation to development include: generally open landscape allows long distance views; Potential for residential expansion to impact views and horizon line, resulting in moderate-high sensitivity to change. In light of this and in line with the stated assumptions, it is considered that development of the site at all potential dwelling capacity options (SUE2a/b/c) is likely to result in uncertain significant negative effects (--?) in relation to this SA objective. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 3.1597 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

3.1598 Approximately 90% of the site is located within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site could result in a significant sterilisation of mineral resource. As such, uncertain significant negative effects (--?) are expected in relation to for all site capacity options (SUE2a/b/c). The effects are uncertain as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effects are considered to be the same for all potential site capacities as the location of the development with the site boundary for each capacity is unknown.

High quality agricultural land

3.1599 The entirety of the site is located on Grade 2 agricultural land, meaning the development of the site would result in the loss of a significant amount of high quality agricultural land. In light of the above, significant negative effects (--) are expected for all site capacity options. The effects are considered to be the same for all potential dwelling capacity options (SUE2a/b/c) as the location of the development within the site boundary is unknown.

Summary of significant effects

3.1600 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out at capacity SUE2a – 2,000 dwellings and at SUE2b – 2,500 dwellings (the end of the plan period)

3.1601 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to the potential for development to provide development in line with Garden City Principles and include the provision of a youth centre and community meeting facilities; and
- SA2, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures and safe accessible housing.

3.1602 The potential for significant negative effects arises in relation to:

- SA1 Community Cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA6 Biodiversity and geological diversity, due to the fact that there are several designated sites and BAP priority habitats within and immediately adjacent to the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby heritage assets;
- SA14 Landscape due to moderate-high sensitivity to change of the area within the LCA Silver End Farmland Plateau; and
- SA15 Soil and mineral resources, due to the site being located within a mineral safeguarding area; and loss of Grade 1 or 2 agricultural land.

3.1603 In summary, the site at this scale is likely to be able to provide a sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered to be likely to be able to support a range of services and facilities and employment opportunities for residents and workers within the site. However, the site is not likely to be large enough at this time to provide higher order services such as a secondary school or healthcare facilities. As such, development in this location at 2,000 dwellings will result in more travel out of the site to access these services and jobs compared to a higher level of development. This is likely to decrease opportunities for sustainable travel and result in a less self-contained development.

3.1604 The site is large and is therefore likely to significantly impact on the existing community, the character of the area and the landscape context. There are both negative and positive effects that may arise in relation to these factors, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. However, compared to the larger

capacity option (5,000), it is expected that these effects will be less extreme, but benefits may be reduced in terms of new services and facilities.

3.1605 Significant negative effects have been identified in relation to natural and historic environment assets in the area. There is potential for development at this scale to result in reduced effects on these sensitive receptors due to the opportunity to provide greater physical separation within the site between them and development

Effects when fully built out at capacity SUE2c – 5,000 dwellings

3.1606 The potential for significant positive effects at this capacity arises due to:

- SA1 Community cohesion, due to the potential for development to provide development in line with Garden City Principles and include the provision of a youth centre and community meeting facilities;
- SA2, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures and safe accessible housing;
- SA3 Health, as development of this scale should be able to support new health facilities, as well as open spaces and opportunities for active travel;
- SA5 Economy, due to the ability to provide more than 10ha of employment land on-site; and
- SA7 Sustainable travel, due to the reduction in the need to travel supported by on-site provision of both a secondary school and a significant amount of employment land.

3.1607 The potential for significant negative effects at this capacity arises due to:

- SA1 Community Cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA6 Biodiversity and geological diversity, due to the fact that there are several designated sites and BAP priority habitats within and immediately adjacent to the site;
- SA9 Historic environment and townscape, due to potential impacts on the setting of nearby heritage assets;
- SA14 Landscape due to moderate-high sensitivity to change of the area within the LCA Silver End Farmland Plateau; and
- SA15 Soil and mineral resources, due to the site being located within a mineral safeguarding area; and loss of Grade 1 or 2 agricultural land.

3.1608 In summary, development at this scale (SUE3c – 5,000 dwellings) is able to offer a significant amount of services, including healthcare facilities, primary and secondary schools and a centre (or centres) with a variety of employment opportunities. Sustainable travel is more likely at these development scales due to the potential for a healthcare centres and secondary school onsite, which may contribute to the development becoming a settlement in its own right. However, congestion has been identified as an issue on the nearby A120 and A131 and development of this scale will increase pressure on these roads significantly. There is also the potential for there to be high dependence on private car trips within the new development due to the distance from sustainable transport options.

3.1609 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.

3.1610 Development of this site is likely to affect a number of other sensitive receptors which are present either within the site or very near to it, including biodiversity assets, heritage assets, high quality agricultural land, and mineral resources – it is important to note that effects in relation to these are likely simply because these form the site context, however delivering a high dwelling capacity within a fixed site boundary may make it more difficult to mitigate the potential impacts.

SUE3 – Land South East of Braintree

Site Context

- 3.1611 Site SUE3 is a strategic site located to the southeast and east of Braintree. It was promoted for inclusion in the submitted section 1 Local Plan as Land East of Braintree (including Temple Border). The entirety of the site is located within the Braintree District. The potential scale of development from this site is up to approximately 12,500 dwellings. The northern section of the site follows the same boundary as SUE2, which is a smaller strategic site with a potential scale of up to 5,000 dwellings.
- 3.1612 SUE3 is a large site (432ha) located on arable land with some small areas of woodland and agricultural use buildings dispersed throughout the site. The nearest settlements (measured from the site boundary to the nearest edge of the settlements) are Braintree to the immediate west of the site, which is a settlement of around 21,882 dwellings and contains policy defined local centres and a policy defined district centre and town centre; Tye Green, located adjacent to the southern boundary of the site, which is a settlement of 396 dwellings but contains no policy defined local centre; Black Notley, located adjacent the south-western boundary of the site, which is a settlement containing 1,033 dwellings but no policy defined local centre; Silver End, located around 1km to the south-east, which is a settlement of 1,551 dwellings but contains no policy defined local centre; Bradwell located around 700m to the north-east of the site, which is a settlement of 223 dwellings with no policy defined local centre; Stisted around 1.6km north-east of the site, which is a settlement of 271 dwellings with no policy defined local centre; Cressing located adjacent to the south-eastern boundary of the site, which is a settlement of 209 dwellings with no policy defined local centre; White Notley located around 1.9km south of the site, which is a settlement of 229 dwellings with no policy defined local centre; Great Notley, around 2.1km south-west of the site, which is a settlement included in the dwelling quantity for Braintree and includes a policy defined local centre. Other strategic settlements and destinations nearby include Great Dunmow, 13km to the west of the site, Stansted Airport, located around 21km to the west, Chelmsford, located around 12km to the south-west, Haverhill, located around 23km to the north-west and Colchester, located around 2km to the east.
- 3.1613 The northern and western boundaries of the site are adjacent to the A120, which provides strategic connections to Braintree, Great Dunmow, Stansted and the M11 to the west, and Colchester to the east. The A120 links to the A131 and provides a strategic link to settlements to the south such as Chelmsford. As the site is greenfield, it is currently not well served by existing services and facilities. The nearest railway station is Braintree Freeport, which is located around 1.7km to the west (measured from the centre of the site) and connects to the main London-Ipswich line at Witham.
- 3.1614 There are no significant residential / employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs or proposed allocations by the NEA Section 2 Local Plans within the site boundaries. However, there is a Section 2 allocation for up to 200 dwellings (18/00549) located adjacent to the southern boundary of the site at Tye Green, which is currently pending consideration. Other Section 2 allocations close to the site boundary include a retail warehouse allocation at Galley's Corner to the north of the southern part of the site; two more residential allocations approximately at Tye Green/Cressing providing for approximately 170 dwellings between them; and a number of residential and employment allocations within 1km to the west within the Braintree Town built up area.
- 3.1615 There are Minerals Extraction Sites in the Essex Minerals Local Plan located 400m to the north (Hatches Farm), 1.1km to the north (Straits Mill) and 1.7km to the east (Bradwell Quarry).

SA objective	Criterion	SUE3	SUE3	SUE3	SUE3	SUE3	SUE3
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	5000	12500

SA objective	Criterion	SUE3	SUE3	SUE3	SUE3	SUE3	SUE3
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	5000	12500
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	-- ?/++	-- ?/++	-- ?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++?	++?
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Desirable	+/-	+/-	++/-	++/-
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Acceptable	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Potential for harm to Source Protection Zones (SPZs)	Low	Low				
	Potential exposure to flood risk	Low	Low				
	Potential exposure to air pollution	Low	Low				
	Potential exposure to noise pollution from roads and railways	High	High				
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+	+
	Access to town centres	Unacceptable	Unacceptable				
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	++	++
	Access to town centres	Unacceptable	Unacceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	-?	-?	-?	-?
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium				
	Potential for harm to PHI or local BAP habitat	Low	Low				
SA7 Achieve more sustainable travel	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?/-?	+?/-?	++?/-?	++?/-?
	Access to primary or middle schools	Preferred Maximum	Desirable				

SA objective	Criterion	SUE3	SUE3	SUE3	SUE3	SUE3	SUE3
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	5000	12500
behaviour	Access to secondary schools	Preferred Maximum	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Preferred Maximum	Preferred Maximum				
	Access to bus stops	Preferred Maximum	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Acceptable	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?	+?	+?	+?
	Access to primary or middle schools	Preferred Maximum	Desirable				
	Access to secondary schools	Preferred Maximum	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Preferred Maximum	Preferred Maximum				
	Access to bus stops	Preferred Maximum	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Acceptable	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Desirable	+	+	+	+
	Access to primary or middle schools	Preferred Maximum	Desirable				
	Access to secondary schools	Preferred Maximum	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				

SA objective	Criterion	SUE3	SUE3	SUE3	SUE3	SUE3	SUE3
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	5000	12500
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Preferred Maximum	Preferred Maximum				
	Access to bus stops	Preferred Maximum	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Acceptable	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/0?	0/0?	0/?	0/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/0?	0/0?	0/0?	0/0?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High				
	Potential for harm to agricultural land	High	High	--?/--	--?/--	--?/--	--?/--

Commentary on SA objectives

SA1: Create safe environments which improve quality of life and community cohesion

3.1616 Consideration of the effects in relation to this SA objective is divided between the anticipated effects on existing communities and those on the new communities that will be formed as a result of development. Commentary on these two matters is set out below.

Effects on existing communities

3.1617 The site is comprised of arable farmland, featuring some small areas of woodland and agricultural use buildings dispersed throughout the site. The existing area within the site contributes to the rural setting of Braintree and other settlements within the area also. These settlements include

Braintree, Tye Green, Black Notley, Silver End, Bradwell, Stisted, Cressing, White Notley and Great Notley. Of these settlements, only Braintree and Great Notley offer a local, district or town centre as defined in the Braintree Section 2 Local Plan. The location of settlements relative to the site, and their current scale is set out in the site context above.

- 3.1618 It is recognised that the provision of such a large development in close proximity to existing small scale communities in the area is likely to result in a significant change to these. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context as development of this scale would result in the creation of a permanent urban character compared to what is a rural character at present.
- 3.1619 It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements within 5km (which is over 10% of the current scale of some of these for all capacity options), that impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all of the potential scales of development when fully built (SUE3a/c/d) plus the potential maximum capacity at the end of the plan period (SUE3b) will result in significant negative yet uncertain (--?) effects in relation to this SA objective. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effects on the new community

- 3.1620 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 3.1621 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (SUE3a/b/c/d).
- 3.1622 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.1623 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for all dwelling capacity options (SUE3a/b/c/d).
- 3.1624 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.1625 In addition, the site information form sets out that development at all of the site capacity options (2,000, 5,000 and 12,500 dwellings) is likely to be viable, which includes the delivery of 30% affordable housing. However, the viability of capacities 5,000 and 12,000 would be dependent on external funding for strategic infrastructure (RTS and junction improvements), or improvement in the scheme viability via another mechanism. This results in uncertainty for this development scale as the external funding / improvement to viability has not yet occurred. The site information form sets out that at 2,000 dwelling capacity, no external funding or other improvement in site viability is required. It is assumed that all of this would also apply to a site capacity of 2,500 dwellings (SUE3b) given it is a similar scale to 2,000 dwellings.

3.1626 In light of the above, this site is considered likely to deliver housing which is safe and accessible, as well as policy compliant affordable housing. This is considered likely to result in significant positive effects in relation to all potential dwelling capacity options. Therefore options SUE3a (2,000 dwellings) and SUE3b (2,500 dwellings) are considered to result in significant positive (++) effects. Site capacity SUE3c (5,000 dwellings) and SUE3d (12,500 dwellings) are considered likely to result in significant positive yet uncertain (++) effects due to the requirement for external funding / improved scheme viability.

SA3: Improve health/reduce health inequalities

3.1627 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

3.1628 As a greenfield site, there are no existing healthcare facilities within SUE3. The nearest GP Surgery is Blyths Meadow Surgery, which is located 2.4km north-west in Braintree (measured from the centre of the site). There are multiple further healthcare facilities located further to west within Braintree also and also Broadway Surgery located 3.2km south-east in the Silver End. The Stage 1a assessment found that 100% of the site is within an 'unacceptable' walking distance of GP surgeries and health centres.

3.1629 There are no areas of public open space located within the site boundaries. The south-western boundary of the site is located adjacent to a cycle route that connects to further cycle routes within Braintree. There are multiple PROW located within the site boundaries and adjacent to the site, which connects the area to Braintree to the west and the surrounding countryside. Whilst PROW provides access to the surrounding area, it is not considered that they will make a significant contribution to recreation so as to facilitate more healthy lifestyles for residents within the site.

3.1630 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive (+) effects in relation to this SA objective for all site capacity options (SUE3a/b/c/d).

3.1631 In terms of healthcare access, the site is relatively isolated in terms of access to existing facilities as it is a rural site. For the lower capacity option and the site at the end of the plan period, the site is not likely to be large enough to support new healthcare facilities, resulting in no adjustment to the minor positive effect (+) identified above.

3.1632 In accordance with the assumptions framework, the dwelling capacity option SUE3c (5,000 dwellings) is considered to be of a sufficient size to support a new Primary Care Spoke within the site. Additionally, SUE3d is of a sufficient size to support a new Primary Care Hub. Therefore, significant positive effects (++) are expected for SUE3c and SUE3d in relation to this SA objective due to the potential for access to healthcare facilities onsite.

Exposure to noise pollution

3.1633 The Stage 1a assessment found that around 9% of the site is at high risk from exposure to noise pollution. As such. As there is between 5-25% of land within the site that falls within a DEFRA strategic noise area of $L_{night} \geq 55.0$, or $L_{aeq} \geq 60.0$ dB, minor negative effects (-) are expected in accordance with the assumptions framework. The source of the noise pollution is the presence of the A120 to the immediate north and west of the site. These effects are expected at all site capacities (SUE3a/c/d) and at the end of the plan period (SUE3b).

SA4: To ensure and improve the vitality & viability of centres

3.1634 In accordance with the site information form, it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within a new local centre. It is

further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to this SA objective, at all potential dwelling scales (SUE3a/b/c/d).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.1635 There are multiple existing employment areas located around 1.5km to the west of the site in Braintree (measured from the centre of the site), including mixed-use sites at Anglia Way, Lakes Road Industrial Park and Millennium Way Trade Centre. The Stage 1a assessment found that the majority of the site is not within an 'acceptable' walking distance of employment centres.
- 3.1636 It is anticipated that the development of the site at all potential scales (SUE3a/b/c/d), will provide new homes in the area, which will increase the local workforce, providing greater resource for businesses and organisations, resulting in at least minor positive effects (+) in relation to this SA objective. NEA calculations based on the site information form indicate that capacity options SUE3c and SUE3d would be able to provide approximately 12ha and 15ha of employment land respectively. As such, these options are likely to make a significant contribution to the local economy, resulting in significant positive (++) effects. The other capacity options would provide less than 10ha of employment land (SUE3a zero; SUE3b 6ha).
- 3.1637 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.1638 Approximately 2% of land within the site is occupied by locally designated wildlife sites or Ancient Woodland. The north-west corner of the site contains Templeborder Wood, which is Braintree Local Wildlife Site and Ancient Woodland; another Local Wildlife Site (Lanham Wood) is located in the central region of the site. Further natural environment designations within the site boundaries include several areas of the Priority Habitat (Deciduous Woodland and Traditional Orchard) distributed throughout the site. The Stage 1a assessment found that all of the site intersects with a SSSI impact risk zone (IRZ) for residential development. There are also multiple areas of Priority Habitat located within 400m of the site, including a large area of Deciduous Woodland located adjacent to the eastern boundary.
- 3.1639 As such, development of this site may result in impacts to these local designations and habitats. It is anticipated that impacts on these designations may result from amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure and predation by pets. However, the extent of the effects are unknown as the development proposals may include mitigation to reduce or overcome negative effects. In line with the assumptions framework, uncertain minor negative effects are expected (-?) in relation to this SA objective. The effects are considered likely to occur in relation to all potential dwelling capacity options (SUE3a/b/c/d).
- 3.1640 Reference should be made to the separate HRA or the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.1641 The site is entirely greenfield with some wooded areas and agricultural use buildings distributed throughout the site. The relationship of the site to existing local centres is described above in the site context section and the accessibility of the site to surrounding facilities and services would, prior to the provision of any new transport infrastructure, be primarily dependant on the A120 to

the north and the west. As set out in the Braintree Infrastructure Delivery Plan¹³⁹, the A120 is congested in both directions in the morning and afternoon peak periods, and suffers from poor journey time reliability. The nearest railway station (measured from the centre of the site) is Braintree Freeport, which is located around 1.7km to the west. The 70 bus route is located within walking distance of the north-west corner of the site and operates on a half hourly basis into the centre of Braintree. The south-west corner of the site is located within walking distance of the 38a bus route, which operates on an hourly basis into the centre of Braintree.

- 3.1642 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.1643 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops/routes and open facilities will be provided within the site to meet its needs. Evidence from Essex County Council¹⁴⁰ sets out there is limited capacity at Primary School in the Braintree town area (-59 places forecast in 2028-29) and at Cressing and Silver End Primary (0 places forecast in 2028-29) so it is considered likely that a new primary school(s) will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (SUE3a/b/c/d). These services and facilities would serve both new residents and the existing community within the development site. The Stage 1a assessment found that the majority of the site is not within an 'acceptable' walking distance of primary or secondary schools.
- 3.1644 It is considered likely that opportunities for using more sustainable modes of travel (thereby reducing congestion) are likely to be provided by the development of the site at all potential dwelling capacities. However, it is anticipated that will still be necessary to travel to destinations outside the site to access primary healthcare facilities (at capacity SUE3a 2,000 dwellings), further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall, at least uncertain minor positive effects (+) are expected in relation to this SA objective for all capacity options (SUE3a/b/c/d) due to the provision of local services and facilities. The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. It is notable that sites over 4,500 dwellings in size are anticipated to provide new health centre facilities, however this is not considered likely to change the effect from minor positive in relation to this SA objective.
- 3.1645 In addition to the considerations above and in accordance with assumptions framework, it is assumed that all strategic sites will be required to provide contributions to secondary school facilities in accordance with the developer contribution guidance from Essex County Council¹⁴¹. The Essex County Council evidence sets out that in 2028-29 (the final year of the forecast in this schools capacity document) there will be 46 secondary school places in Braintree. Given a secondary pupil factor of 0.2 pupils per house, it is likely that some secondary school expansion may be required to meet all dwelling capacity options – SUE3a for 2,000 dwellings, which is the smallest capacity option, will generate approximately 400 secondary pupils. It is considered that SUE3c (5,000 dwellings) and SUE3d (12,500 dwellings) are of a sufficient size (>4,500 dwellings) to deliver a new secondary school onsite; phased provision of new onsite secondary school facilities is also assumed to be possible by the end of the plan period under SUE3b. As set out under SA5 Employment, SUE3c and SUE3d will provide more than 10ha of employment land and together with onsite secondary school provision, this significantly enhances opportunities for sustainable travel within the site, resulting in uncertain significant positive effects (++?) at these site capacities. The effects are uncertain as the exact infrastructure requirements of a

¹³⁹ https://www.braintree.gov.uk/downloads/file/6491/braintree_infrastructure_delivery_plan_report_october_2017

¹⁴⁰ Essex School Organisation Service – 10 Year Plan 2019-2028.

¹⁴¹ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 3.1646 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.1647 For journeys to more distant destinations, the majority of the of the site is not located within an 'acceptable' or 'desirable' walking distance of a railway station and as such, this is likely to reduce the potential for trips by rail, which may lead to increased car use and increased congestion for the external journeys. In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site is located in the Braintree 012 MSOA, which consists of largely rural land to the east of Braintree. According to NOMIS, the largest proportion (9%) of commuter trips from the Braintree 012 are within the MSOA itself and the second largest proportion (8.5%) of commuter trips are to Braintree 009, which is Braintree Town Centre. As such, if residents follow the same pattern, most of the commuting journeys are likely to be carried by local roads and the A120. These are relatively short trips which are unlikely to be undertaken by train, given the distance to the nearest train station. As such, uncertain minor negative effects (-?) are expected in relation to this SA objective for all dwelling capacity options (SUE3a/b/c/d). The uncertainty arises due to the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters into Braintree.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.1648 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.
- 3.1649 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form for this site provided by the NEAs, this site is to be supported by the following infrastructure at the following dwelling capacities:
- 3.1650 SUE3a (2,000 dwellings) and also assumed to apply to SUE3b given that it is a similar scale (maximum 2,500 dwellings at the end of the plan period):
- Early Years
 - Primary School(s)
 - Youth Centre provision
 - Open Space
 - Bus Services
 - Local centre facilities
 - Community meeting spaces
- 3.1651 The site information form sets out that the site can viably deliver these infrastructure requirements.
- 3.1652 SUE3c (5,000 dwellings) and SUE3d (12,500 dwellings):
- RTS links to Braintree Town, Braintree Freeport and Colchester
 - Grade-separated A120 junction at Galley's corner
 - Early Years
 - Primary School(s)

- Secondary School
- Youth Centre Provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces

3.1653 The site information form set out that the site can viably deliver these infrastructure requirements with external funding from transport operating companies. Alternatively, viability improvements to the scheme via another mechanism could also potentially provide sufficient viability.

3.1654 The supporting infrastructure listed above is confirmed to be viable (on the site information form) and therefore it is anticipated to be delivered at an appropriate phase, resulting in uncertain minor positive (+?) effects for all dwelling capacity options (SUE3a/b/c/d) in relation to this SA objective. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is noted in relation to SUE3c (5,000 dwellings) and SUE3d (12,500 dwellings) as the site information form sets out that external funding (or other scheme viability improvement) will be required for the grade-separated A120 junction at Galley's corner and for the proposed RTS links.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.1655 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

3.1656 The south-eastern corner of the site contains three Grade II listed buildings. There are further heritage assets within 500m of the site boundaries, including Baytree Farmhouse (Grade II* listed) located 100m north-east of the site, Cressing Conservation Area located 200m south of the site which contains the Parish Church of All Saints (Grade I listed), a Scheduled Monument 400m to the south (Henge) and multiple Grade II listed buildings. Heritage assets within 1km of the site boundaries include a Conservation Area located around 950m north of the site, a Grade I listed building (Stanton's Farmhouse) located 800m to the south-west, a Scheduled Monument (moated site and two fishponds) and Grade II* listed building (Church of St Peter and St Paul) located 700m east of the south-western boundary and further Grade II listed buildings. The Stage 1a assessment found that over 50% of the site is within 500m of heritage assets.

3.1657 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.

3.1658 Taking a precautionary approach to this assessment, uncertain significant negative effects (--?) are expected in relation to this SA objective for all capacity options (SUE3a/b/c/d) due to the potential for development to result in adverse impacts on historic environment assets. The uncertainty arises as the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

3.1659 With regards to townscape, the boundary of the site is within 500m of Black Notley, Tye Green and Cressing on the southern boundary, which could result in significant alterations to their existing townscape. However, whether this change is positive or negative will depend on the quality of design of the new development and as such, uncertain effects (?) are expected for all site capacity options (SUE3a/b/c/d). The highest capacity option SUE3d (12,500 dwellings) also

has the potential to have significant effects on the townscape of Braintree, which the site is adjacent to on its western boundary.

- 3.1660 Overall the site is expected to have mixed uncertain significant negative and uncertain effects (-- ?/?) in relation to this SA objective for all capacity options (SUE3a/b/c/d).

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.1661 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.1662 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities (SUE3a/b/c/d) is likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 3.1663 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality, water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 3.1664 The site is entirely outside source protection zones, and as such it is not considered likely that the development of the site will affect groundwater resources and therefore negligible effects (0) are anticipated in relation to groundwater for all potential dwelling capacity options (SUE3a/b/c/d).

Water scarcity and water treatment

- 3.1665 With regard to water supply, the Braintree Water Cycle Study¹⁴² identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The Braintree WCS assumes planned growth of 14,113 dwellings by 2033 as a result of growth allocated in the proposed Section 1 Local Plan, including Garden Communities at Marks Tey and West of Braintree. It should be noted that site SUE3 was not allocated by the Section 1 Plan and therefore this specific proposal at this location was not taken into account for the WCS. As such, the results of this study should be interpreted with caution in relation to this site.
- 3.1666 The Integrated Water Management Strategy (IWMS)¹⁴³, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume that the proposed growth at SUE3 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (SUE3a/b/c/d) in relation to water scarcity.
- 3.1667 In regard to water treatment, the site is likely to fall within the catchment area of either the Braintree or White Notley WRC. The WCS identifies that the Braintree WRC currently has sufficient flow headroom in its existing discharge permit to accept development of approximately 1,840 dwellings, which means that based on the growth planned in 2017, the existing permit will be exceeded in 2024. For the White Notley WRC, the WCS identifies that it does not currently have sufficient flow headroom in its existing discharge permit to accept development and is already

¹⁴² https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

¹⁴³ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

exceeding its existing permit. In both cases, the study indicates that the necessary upgrades to accommodate growth within the plan period should be feasible. As such, uncertain negligible effects (0?) are expected for the potential dwelling capacity options SUE3a (2,000 dwellings) and SUE3b (2,500 dwellings). The uncertainty arises in the expected effects as the specific requirements will be finalised through further work including the preparation, submission and determination of a planning application and because specific growth at SUE2 was not considered as part of the WCS.

3.1668 For the higher potential dwelling capacity option (SUE3c – 5,000 dwellings, SUE3d – 12,500 dwellings), the effects are expected to be uncertain (?) as the WCS does not consider growth beyond the plan period.

3.1669 Overall, mixed negligible and uncertain negligible effects (0/0?) are expected in relation to this SA objective for SUE3a and SUE3b. For SUE3c and SUE3d, the effects in relation to this SA objective are expected to be mixed negligible and uncertain (0/?).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

3.1670 The south western boundary of the site is located adjacent to the River Brain, which means there are small areas of land within the site boundaries that are located in Flood Zone 2 and 3. However, these areas amount to less than 5% of the site's overall area and therefore do not represent a significant flood risk. There are small patches of land distributed throughout the site (<5%) at risk from surface water flooding. As set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.

3.1671 It is therefore considered that effects in relation to this SA objective are likely to be negligible (0) for all potential dwelling capacity options (SUE3a/b/c/d).

SA13: To improve air quality

3.1672 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

3.1673 The site does not intersect with any AQMAs and as such, negligible effects (0) are expected for all potential capacity options (SUE3a/b/c/d).

Potential contribution to road traffic within areas suffering from air pollution

3.1674 The site is located within the Braintree 012 MSOA, which is largely rural land to the east of Braintree. According to NOMIS, the largest proportion (9%) of commuter trips from Braintree 012 are within the MSOA itself and the second largest (8.5%) proportion of commuter trips are to Braintree 009, which is Braintree Town Centre. As such, if the new community follows the commuting behaviour of the present community, most of this commuter traffic is likely to be carried by local roads and the A120. There are no AQMAs in this area and so it is considered that the development of the site at all potential dwelling capacity options (SUE3a/b/c/d) is likely to result in uncertain negligible effects (0?) in relation to this SA objective. The uncertainty arises as it is not known exactly how and where people will travel.

SA14: To conserve and enhance the quality of landscapes

3.1675 The site is not located near any designated landscapes or proposed extensions to these.

3.1676 The northern part of the site (Silver End Farmland Plateau LCA) has been assessed by landscape officers of the NEAs, and has been found to be of moderate character with development-related landscape issues including a generally open landscape that allows long distance views and the potential for residential expansion to impact views and the horizon line. These factors result in a moderate-high sensitivity to change. The southern part of the site (Brain River Valley LCA) has also been assessed by landscape officers of the NEAs, and has been found to be of moderate-strong character with development related landscape issues raised including the skyline of the valley slopes being visually sensitive to development; potential loss of functional floodplain; and

further loss of tranquillity through development, traffic and associated infrastructure. These factors result in a moderate-high sensitivity to change. If the site was fully built out, it is also possible that the gap between Braintree and settlements such as Black Notley, Tye Green and Crossing would be largely filled in, resulting in coalescence between settlements.

3.1677 In light of the information above and in line with the stated assumptions, it is considered that development of the site at all potential dwelling capacity options (SUE3a/b/c/d) is likely to result in uncertain significant negative effects (--?) in relation to this SA objective. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

3.1678 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

3.1679 Approximately 60% of the site in the northern half is located within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site could result in a significant sterilisation of mineral resource. As such, uncertain significant negative effects (--?) are expected in relation to for all site capacity options (SUE3a/b/c/d). The effects are uncertain as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effects are considered to be the same for all potential site capacities as the location of the development with the site boundary for each capacity is unknown.

High quality agricultural land

3.1680 Approximately 90% the site is located on Grade 2 agricultural land, meaning the development of the site would result in the loss of a significant amount of high quality agricultural land. The remaining area within the site boundaries in the south-western corner is located on Grade 3 agricultural land. In light of the above, significant negative effects (--) are expected for all site capacity options. The effects are considered to be the same for all potential dwelling capacity options (SUE3a/b/c/d) as the location of the development within the site boundary is unknown.

Summary of significant effects

3.1681 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out at capacity SUE3a – 2,000 dwellings and at SUE3b – 2,500 dwellings (the end of the plan period)

3.1682 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to the potential for development to provide development in line with Garden City Principles and include provision of a youth centre and community meeting facilities;
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures and safe accessible housing;

3.1683 The potential for significant negative effects arises in relation to:

- SA1 Community Cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape, due to potential impacts on the heritage assets within and close to the site;
- SA14 Landscape, due to the significant change which would occur to the moderate-strong landscape character of Brain Valley LCA and the moderate-high sensitivity of both this LCA and Silver End Farmland Plateau LCA; and

- SA15 Soil and mineral resources, due to the site being located within a mineral safeguarding area; and loss of Grade 2 agricultural land.

3.1684 In summary, the site at this scale is likely to be able to provide a sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered to be likely to be able to support a range of services and facilities and employment opportunities for residents and workers within the site. However, the site is not likely to be large enough at this time to provide higher order services such as a secondary school (although phased provision is assumed to be possible for SUE3b at the end of the plan period) or healthcare facilities. As such, development in this location at 2,000 or 2,500 dwellings will result in more travel out of the site to access these services and jobs compared to a higher level of development. This is likely to decrease opportunities for sustainable travel and result in a less self-contained development.

3.1685 The site is large and is therefore likely to significantly impact on the existing community, the character of the area and the landscape context. There are both negative and positive effects that may arise in relation to these factors, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. However, compared to the larger capacity options (5,000 and 12,500 dwellings), it is expected that these effects will be less extreme, but benefits may be reduced in terms of new services and facilities.

3.1686 Significant negative effects have been identified in relation to natural and historic environment assets in the area. There is potential for development at this scale to result in reduced effects on these sensitive receptors due to the opportunity to provide greater physical separation within the site between them and development.

Effects when fully built out at capacity SUE3c – 5,000 dwellings and SUE3d – 12,500 dwellings

3.1687 The potential for significant positive effects at these capacities arises due to:

- SA1 Community cohesion, due to the potential to provide community cohesion within the new development.
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
- SA3 Health, as development of this scale should be able to support new health facilities, as well as open spaces and opportunities for active travel;
- SA5 Economy, through the provision of jobs within the local area; and
- SA7 Sustainable travel, as a significant level of services and facilities are anticipated to come forward as part of the site, reducing the need to travel.

3.1688 The potential for significant negative effects arises at these scales in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape, due to potential impacts on the heritage assets within and close to the site;
- SA14 Landscape, due to the significant change which would occur to the moderate-strong landscape character of Brain Valley LCA and the moderate-high sensitivity of both this LCA and Silver End Farmland Plateau LCA; and
- SA15 Soil and mineral resources, due to the site being located within a mineral safeguarding area; and loss of Grade 1 or 2 agricultural land.

3.1689 In summary, development at these scales (SUE3c – 5,000 dwellings and SUE3d – 12,500 dwellings) is able to offer a significant amount of services, including healthcare facilities, primary and secondary schools and a centre (or centres) with a variety of employment opportunities. Sustainable travel is more likely at these development scales due to the potential for a healthcare centres and secondary schools onsite, which may contribute to the development becoming a settlement in its own right. However, congestion has been identified as an issue on the nearby A120 and A131 and development of this scale will increase pressure on these roads significantly. There is also the potential for there to be high dependence on private car trips within the new development due to the distance from sustainable transport options.

- 3.1690 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.
- 3.1691 Development of this site is likely to affect a number of other sensitive receptors which are present either within the site or very near to it, including heritage assets, high quality agricultural land, and mineral resources – it is important to note that effects in relation to these are likely simply because these form the site context, however delivering a high dwelling capacity within a fixed site boundary may make it more difficult to mitigate the potential impacts.

SUE4 – Land South of Haverhill

Site Context

- 3.1692 Site SUE4 is a strategic site located to the south of Haverhill, it has an area of 152ha, and it is considered that it could support either 2,000 or 3,500 dwellings. Comparatively it is one of the smaller strategic sites being assessed. The site is currently in agricultural use, although there are a few buildings within the boundary of the site it is not envisaged that these will be redeveloped. These buildings are dispersed reflecting the rural character of the area.
- 3.1693 The town of Haverhill is located within the two-tier authority area of West Suffolk District Council and Suffolk County Council, and is therefore, outside the NEA Section 1 plan area. However, Haverhill lies on the boundary of the Suffolk and NEA planning areas, and therefore this site, which would effectively form an extension to the south of Haverhill, falls within Braintree District and therefore within the NEA plan area.
- 3.1694 West Suffolk Council was created on 1 April 2019 and prior to this Haverhill was within St Edmundsbury District (which was merged with Forest Heath to form West Suffolk district). The extant local plan for the area is the St Edmundsbury Local Plan. This consists of several documents including the Core strategy (adopted 2010), Vision 2031 (adopted 2014), and Joint Development Management Policies Document (2015). The Vision 2031 sets out the locations of strategic growth in Haverhill, which are focussed to brownfield sites within the town and new green field development to its northeast. According to the site information form, technical work for the development of SUE4 envisages it to be part of a wider urban extension to Haverhill but notes that it could also deliver a scheme just within Braintree District. There are no large scale strategic planning applications within Braintree or West Suffolk which surround or link to site SUE4.
- 3.1695 The site is immediately to the south of Haverhill, and the centre of site SUE4 lies approximately 1.7km from the centre of Haverhill town centre (which is 1.3km to the nearest boundary of SUE4). The small settlement of Sturmer is immediately adjacent to the eastern extremity of the site, Steeple Bumpstead is 2.2km to the south of the site, Pale Green is approximately 1.3km to the southwest, Helions Bumpstead is approximately 3.17km to the southwest, Stambourne Chapel End Way is approximately 4.7km to the southeast, and Ridgewell is approximately 5km to the southwest. None of these settlements are defined as local centres in the draft Braintree Section 2 Local Plan.
- 3.1696 At a more strategic scale, the site is approximately 22km from Braintree to the south, 24km from London Stansted to the southwest, 26km from Cambridge to the northwest and Bury St Edmunds to the northeast and 36km from Colchester to the southeast.
- 3.1697 The site is to the south of the Haverhill bypass (the A1017), a strategic road which becomes the A1307 and links to Cambridge to the northwest and Braintree to the south. To the immediate north of the A1017 is a large industrial area, which lies between the site and Haverhill town centre.
- 3.1698 As a greenfield site, there are no existing facilities and services within the site; however its close relationship with Haverhill means that most of the site is within 2km of Haverhill town centre. The nearest train station to the site is Great Chesterfield, which is approximately 16km to the west of the centre of the site and lies on the East Anglia Mainline to London Liverpool Street.

SA objective	Criterion	SUE4	SUE4	SUE4	SUE4	SUE4
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	3500
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	-- ?/++	-- ?/++	--? ?/++

SA objective	Criterion	SUE4	SUE4	SUE4	SUE4	SUE4
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	3500
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+ / 0	+ / 0	+ / 0
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Unacceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Potential for harm to Source Protection Zones (SPZs)	Medium	Medium			
	Potential exposure to flood risk	Low	Low			
	Potential exposure to air pollution	Low	Low			
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	+
	Access to town centres	Unacceptable	Unacceptable			
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable			
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Low	Low	- ?	- ?	- ?
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium			
	Potential for harm to PHI or local BAP habitat	Low	Low			
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+ ? / - ?	+ ? / - ?	+ ? / - ?
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Unacceptable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable			
	Access to bus stops	Preferred Maximum	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Unacceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
Access to centres of employment including employment areas and town	Acceptable	Acceptable				

SA objective	Criterion	SUE4	SUE4	SUE4	SUE4	SUE4
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	3500
	centres					
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?	+?	+?
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Unacceptable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable			
	Access to bus stops	Preferred Maximum	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Unacceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable			
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+	+	+
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Unacceptable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable			
	Access to bus stops	Preferred Maximum	Desirable			
	Access to cycle paths	Unacceptable	Unacceptable			
	Access to open spaces and sports centres	Unacceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable			

SA objective	Criterion	SUE4	SUE4	SUE4	SUE4	SUE4
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	3500
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Medium	Medium	-?/?	-?/?	-?/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	-?	-?	-?
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/-?	0/-?	0/-?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	Low	Low	0/--	0/--	0/--
	Potential for harm to agricultural land	High	High			

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.1699 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.1700 Currently the site is used as farmland, featuring a few scattered houses and businesses, comprising a very small dispersed rural community. Neighbouring settlements and groupings of houses and employment uses include the town of Haverhill immediately to the north (approximately 10,800 dwellings). In addition, the settlement of Sturmer is approx. 130m to the eastern boundary of the site and consists of approximately 200 dwellings, Steeple Bumpstead is 2.2km to the south of the site and consists of approximately 680 dwellings, Pale Green is approximately 1.3km to the southwest, Helions Bumpstead is approximately 3.17km to the southwest and consists of 190 dwellings, Stambourne Chapel End Way is approximately 4.7km to the southeast and consists of 86 dwellings, and Ridgewell is approximately 5km to the southwest. None of these settlements are defined as local centres in the draft Braintree Section 2 plan.

3.1701 It is considered that the provision of such a large development around and close to the existing small scale communities in the NEA plan area (particularly Helions Bumpstead) is likely to result in a significant change to these settlements. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context as development of this scale would result in the creation of a permanent urban character compared to what is a rural

character at present. The few existing developed areas within the site boundary will be subject to the most significant degree of change.

- 3.1702 It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements within 5km (which is over 10% of the current scale of some of these for all capacity options), that impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all of the potential scales of development (SUE4a/b/c) including the potential maximum capacity at the end of the plan period will result in significant negative yet uncertain (--?) effects in relation to this SA objective. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

- 3.1703 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 3.1704 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (SUE4a/b/c).
- 3.1705 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.1706 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for all dwelling capacity options (SUE4a/b/c).
- 3.1707 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.1708 In addition, the site information form sets out that development at dwelling capacities SUE4a (2,000 dwellings) and SUE4b (3,500 dwellings) the site is considered to be viable, which includes the delivery of 30% affordable housing. It is assumed that this would also apply to SUE4b (maximum 2,500 dwellings at the end of the plan period) given it is a similar scale to 2,000 dwellings. External funding is not required to deliver policy compliant development or strategic infrastructure. As a result, significant positive (++) effects are anticipated in relation to this SA objective at all potential dwelling scales including SUE4a/b/c.

SA3: Improve health/reduce health inequalities

- 3.1709 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.1710 As a green field site, there are no existing healthcare facilities within SUE4. The nearest GP Surgery is the Clements Practice in Haverhill, approx. 1.7km to the northwest of the centre of the site.

- 3.1711 Similarly, given that the site is greenfield, there is no existing formal public open space within the site, and the site does not link to any existing dedicated cycle paths. The site is criss-crossed by several Public Rights of Way, which provide access to the surrounding countryside. These may provide links to the surrounding countryside for residents of the new development to utilise for recreation; however, it is not considered that these Public Rights of Way will make a significant contribution to recreation so as to facilitate more healthy lifestyles.
- 3.1712 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. The delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in at least minor positive (+) effects in relation to this SA objective for all site capacity options (SUE4a/b/c).
- 3.1713 In terms of accessing healthcare, the site is relatively isolated in terms of access to GP Surgeries and health centres, with the Stage 1a assessment indicating that all of the site has an 'unacceptable' walking distance to existing facilities. Evidence from the North Essex CCG sets out that strategic sites of 4,500 dwellings capacity and above are able to support new healthcare facilities. This is not likely to be the case for any of the dwelling capacity options for this site, resulting in no adjustment to the minor positive score described above. It may be the case that when combined with the additional development which may come forward within West Suffolk that sufficient dwelling capacity is reached to support new healthcare facilities however this has not influenced the outcome of this assessment, as this assessment relates only to this site in isolation.

Exposure to noise pollution

- 3.1714 In accordance with the assumptions framework, as less than 50% of the site falls within a DEFRA strategic noise area of Lnight 50.0-54.9 dB, or Laeq,16 55.0-59.9 dB, and as less than 5% of the site falls within either a DEFRA strategic noise area of Lnight \geq 55.0 dB, or Laeq,16 \geq 60.0 dB, the anticipated effects in relation to exposure to noise pollution for all dwelling capacity options (SUE4a/b/c) are considered to be negligible (0).
- 3.1715 Overall, mixed minor positive and negligible effects (+/0) are expected in relation to this SA objective.

SA4: To ensure and improve the vitality & viability of centres

- 3.1716 The site is immediately to the south of Haverhill, with the centre of site lying approximately 1.7km from the centre of Haverhill town centre. The distance between the edge of the town centre and the site boundary of SUE4 is approximately 1.2km. There are also a number of surrounding settlements but these have not been designated as local centres in the draft Section 2 Local Plan – it is expected due to the spatial pattern of the site that it will relate mainly to Haverhill for accessing services and facilities.
- 3.1717 In accordance with the information within the site information form it is considered that at dwelling capacities SUE4a (2,000 dwellings) and SUE4b (3,500 dwellings) the site is considered to be viable, which includes the delivery of local centre facilities. It is assumed that this would also apply to SUE4b (maximum 2,500 dwellings at the end of the plan period) given it is a similar scale to 2,000 dwellings. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to this SA objective, at all potential dwelling scales (SUE4a/b/c).

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.1718 The relationship of the site to existing centres is described in the commentary against SA4 and the site context above. There is also a large employment site to the immediate north of the site within Haverhill – a large proportion of the site is within close proximity to this, although the A1017 creates a barrier at present.
- 3.1719 It is anticipated that the development of the site at all potential scales (SUE4a/b/c) will provide new homes in the area, which will increase the local workforce, providing a greater resource for

businesses and organisations, resulting in at least minor positive (+) effects. NEA calculations based on the site information form indicate that the site would be able to provide approximately 6ha of employment land at all capacity options; this is not considered sufficient to change the minor positive score described above.

- 3.1720 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.1721 The site intersects with two local wildlife sites – Greatley Wood and Bex Grove - which are also identified as areas of ancient woodland and which occupy approximately 2% of the site areas. In addition, the site is within 400m of three local wildlife sites, East Town Park, Sturmer End Grassland, and Garlands Wood (also Ancient Woodland), as well as Haverhill Railway Walks local nature reserve. There is no identified priority habitat on the site, other than that within the designations described above. The site is not located within a SSSI Impact Risk Zone where residential development could cause harm.
- 3.1722 As such, development of this site may result in impacts to these local designations and habitats, which may result from, amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure, predation by pets. However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects.
- 3.1723 In accordance with the assumptions framework, it is anticipated that effects on these existing habitats may be minor negative yet uncertain (-?). The uncertainty arises as site specific mitigation will be developed and finalised through further work including the preparation, submission and determination of a planning application. Due to the relatively central location of the ancient woodland, it is considered that the same degree of effect will occur in relation to all potential dwelling capacity options (SUE4a/b/c).
- 3.1724 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.1725 The site is a largely green field site which is rural in character. The relationship of the site to Haverhill Town Centre (which will be the main service centre of the site) is described in the commentary against SA4 and the site context section above. Accessibility of the site to town centre would be different depending on which part of the site is being accessed, however would most likely be via the A1017 and linking to the A143, B1057, A143, Moon Hall Lane or Burton End. For more sustainable trips, the A1017 is likely to act as a barrier to walking and cycling, as this does not feature formal crossing opportunities. Furthermore, there is a lack of attractive walking and cycling routes into the town through the industrial estate area. There is very little bus infrastructure or services which currently existing which serve the site (although the Boundary Road stop is within 200 of the site boundary and has an approximate half hourly or better service, this does not serve the majority of the site, which has no bus stops, aside from the very western end of the site, which offers approximate two hourly services), meaning that the site would need to be served by extended or new services.
- 3.1726 The nearest primary schools to the site are Coupals Primary Academy (approximately 1.7km to the north of the centre of the site) and Clements Primary Academy (approximately 1.9km to the northwest of the centre of the site). The nearest secondary schools include the Castle Manor Academy (2.5km to the north west of the centre of SUE4) and Samuel Ward Academy (2.6km to the north of the centre of SUE4).
- 3.1727 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.1728 In accordance with the assumptions framework and confirmed by the site information form, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Suffolk County Council¹⁴⁴ states that Haverhill is in need of new primary pupil places within the town (this is supported by the Haverhill Infrastructure Plan which sets out that there is insufficient capacity to accommodate pupils from this development at the lowest site capacity option¹⁴⁵) and therefore it is likely that new primary school(s) will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (SU4a/b/c). These services and facilities would serve both new residents and the existing community within the development site.
- 3.1729 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at all potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities, secondary schools and further / higher education facilities, and most likely higher order services. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment, given the current situation which provides poor access by sustainable modes between the site and Haverhill town centre. Overall it is considered likely that the provision of the aforementioned local services and facilities is likely to result in minor positive yet uncertain (+?) effects for all dwelling capacities (SUE4a/b/c). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.
- 3.1730 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to contribute to additional secondary school capacity in accordance with the developer contributions guidance from Essex County Council. It is worthwhile to note that the evidence from Suffolk County Council¹⁴⁶ also sets out that secondary school places in Haverhill are under pressure. This is supported by the Haverhill Infrastructure Plan which sets out that there is insufficient capacity to accommodate pupils from this development at the lowest capacity option¹⁴⁷. Given that the site has a maximum capacity of less than 4,500 dwellings (which is the minimum site capacity required in order to support a new secondary school according to the information from Essex County Council) it is unlikely that a new secondary school could be supported by this site. This is likely to require some expansion of the existing two secondary schools in Haverhill, which will be dependent on existing capacity, site constraints and feasibility.

Longer journeys

- 3.1731 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.1732 For journeys to more distant destinations, the nearest train station to the site is Great Chesterfield, which is approximately 16km to the west of the centre of the site, which may lead to increased car use and increased congestion for the external journeys. In terms of the potential for longer trips outside the site, a review of commuter behaviour of the current community has been undertaken. The site is within the Braintree 001 middle super output area (MSOA). According to NOMIS, the majority of commuters from this MSOA travel to work in Haverhill town itself, as well as destinations in the wider MSOA surrounding and including the site, Saffron Waldon, the area to

¹⁴⁴ <https://www.suffolk.gov.uk/assets/Children-families-and-learning/schools/Education-and-Learning-Infrastructure-Plan/Education-and-Learning-Infrastructure-Plan-Version-3.0.pdf>

¹⁴⁵ https://www.westsuffolk.gov.uk/planning/Planning_Policies/upload/Adopted-Haverhill-IDP-Feb-2014.pdf

¹⁴⁶ <https://www.suffolk.gov.uk/assets/Children-families-and-learning/schools/Education-and-Learning-Infrastructure-Plan/Education-and-Learning-Infrastructure-Plan-Version-3.0.pdf>

¹⁴⁷ https://www.westsuffolk.gov.uk/planning/Planning_Policies/upload/Adopted-Haverhill-IDP-Feb-2014.pdf

the south including Finchingfield & Great Bardfield, and Sudbury. As such, if the new residents follow the same pattern, most of the commuting journeys are likely to be carried by local roads in the vicinity. These are relatively short trips which could not be undertaken on a train as the infrastructure does not exist locally. As such, minor negative yet uncertain (-?) effects are considered likely in relation to all potential dwelling capacities (SUE4a/b/c). The uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters to the most popular commuting destinations.

3.1733 Overall, mixed minor positive effects with uncertainty and minor negative effects with uncertainty (+?/-?) are expected in relation to this SA objective.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

3.1734 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.

3.1735 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form, this site is to be supported by the following strategic infrastructure at dwelling capacities SUE4a (2,000 dwellings) and SUE4c (3,500 dwellings):

- Early Years
- Primary School(s)
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces

3.1736 The site information form set out that the site can viably deliver these infrastructure requirements. It is assumed that this is also the case for site capacity SUE4b (maximum 2,500 dwellings at the end of the plan period), given its similarity to SUE4a.

3.1737 The supporting infrastructure listed above is confirmed to be viable (on the site information form) and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for all dwelling capacity options (SUE4a/b/c). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.1738 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

3.1739 There is scheduled monument within the north-eastern corner of the site identified as 'Bowl barrow 500m north-west of Sturmer Hall'. Furthermore, Sturmer Hall moated site and mill complex are located approximately 170m to the east of the site boundary. There are no listed buildings within the site but the Grade I listed Parish Church of St Mary the Virgin is part of the Sturmer Hall complex and within 500m of the site boundary. A number of Grade II listed buildings are also located within 500m of the site boundary. The Haverhill Hamlet Road Conservation Area is approximately 700m to the north of the site boundary and contains a number of heritage assets.

- 3.1740 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.
- 3.1741 In total, approximately 53% of the site area falls within 500m of a heritage asset, and a further 47% lies between 500m and 1km from an asset. Taking a precautionary approach to this assessment, potential significant negative yet uncertain effects (--?) are anticipated in relation to all potential dwelling capacity options (SUE4a/b/c). The uncertainty arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

- 3.1742 With regards to townscape, the boundary of the site is approximately 130m to the northwest of Sturmer, a settlement of approximately 200 dwellings, and adjacent to the boundary of Haverhill, a town of approximately 10,800 dwellings. In line with the assumptions framework, all site dwelling capacity options (SUE4a/b/c) are greater than 10% of the size of both of these nearby settlements and likely that to significantly change their characters. However, whether this change is positive or negative will depend on the quality of design of the new development and as such, uncertain effects (?) are expected for all site capacity options (SUE4a/b/c).
- 3.1743 Overall, mixed significant negative effects with uncertainty and uncertain effects (--?/?) are expected in relation to this SA objective.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

- 3.1744 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.
- 3.1745 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for potential dwelling capacities SUE4a (2,000 dwellings) and SUE4c (3,500 dwellings) that the site can deliver policy compliant sustainable development. It is assumed that this will also be the case for site SUE4b (maximum 2,500 dwellings at the end of the plan period) given its similar scale to SUE4a. As such, it is considered that the development of this site at all dwelling capacities (SUE4a/b/c) is likely to result in minor positive (+) effects in relation to this SA objective.

SA11: To improve water quality and address water scarcity and sewerage capacity

- 3.1746 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

- 3.1747 Approximately 86% of the site lies within Source Protection Zone 3, and as such it is considered that development of the site has the potential to affect groundwater conditions. It is considered, due to the high proportion of the site within protection Zone 3, that this is likely to result in minor negative yet uncertain (-?) effects in relation to this SA objective. The same effect is considered likely for all dwelling capacity options (SUE4a/b/c) as although lower capacity options may seek to reduce development of areas within the source protection zone, this is unlikely to be feasible given the significant coverage and in any case, the location of the development is not known at this stage. The uncertainty in the assessment results because site specific mitigation may overcome significant issues.

Water scarcity and water treatment

- 3.1748 With regard to water supply, the Braintree Water Cycle Study¹⁴⁸ identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The Braintree WCS assumes planned growth of 14,113 dwellings by 2033 as a result of growth allocated in the proposed Section 1 Local Plan, including Garden Communities at Marks Tey and West of Braintree. It should be noted that site SUE4 was not allocated by the Section 1 Plan and therefore this specific proposal at this location was not taken into account for the WCS. As such, the results of this study should be interpreted with caution in relation to this site.
- 3.1749 The Integrated Water Management Strategy (IWMS)¹⁴⁹, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume that the proposed growth at SUE4 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (SUE4a/b/c) in relation to water scarcity.
- 3.1750 With regard to wastewater treatment, site SUE4 is likely to be served by the Haverhill WRC. The study does not consider the effect of any proposed dwelling at this location, but it is indicated that there is sufficient headroom to accommodate around 2,000 additional dwellings. However, the study does not take account of planned growth outside of the district. Given that around 4,000 homes are allocated in Haverhill, it is likely that the WRC would need to be upgraded to accommodate growth from both districts. There is no evidence available in the WCS that these upgrades will be possible within the plan period to accommodate growth. As such, effects in relation to all potential dwelling capacities are expected to be uncertain (?).
- 3.1751 Overall, mixed minor negative effects with uncertainty and uncertain effect (-?/?) are expected in relation to this SA objective for all potential dwelling capacities (SUE4a/b/c)

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.1752 Although the site does not intersect with any Environment Agency defined flood zones, which relate to fluvial flood risk, a significant proportion of the site (over 25%) is identified as being at medium risk of groundwater flooding. As such, it is considered that minor negative yet uncertain (-?) effects are likely, given the risks of flooding of the site. The uncertainty arises because site specific mitigation will be finalised through further work including the preparation, submission and determination of a planning application.
- 3.1753 Due to the significant intersection with the medium flood risk area, it is considered that these effects are likely to occur in relation to this SA objective for all potential dwelling capacity options (SUE4a/b/c).
- 3.1754 The site also comprises some areas which are identified as being at risk from surface water flooding, but this is marginal and in itself not considered to result in non-negligible effects.

SA13: To improve air quality

- 3.1755 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

- 3.1756 This site does not intersect with any AQMAs and as such, negligible (0) effects are anticipated for all potential dwelling capacity options (SUE4a/b/c).

¹⁴⁸ https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

¹⁴⁹ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Potential contribution to road traffic within areas suffering from air pollution

- 3.1757 The site is within the Braintree 001 middle super output area (MSOA). According to NOMIS, the top five commuting destinations from this MSOA are (in order of decreasing popularity) Haverhill town itself, other destinations in the wider MSOA surrounding and including the site, Saffron Waldon, the area to the south including Finchingfield & Great Bardfield, and Sudbury. The centre of Saffron Waldon is designated as an AQMA, and as such it is considered that if the commuter trends from the site follow the current trends, there is likely to be an increase in traffic within this AQMA as a result of this development. This is likely to result in minor negative yet uncertain (-?) effects. The uncertainty arises due to the difficulty in predicting commuting behaviour.
- 3.1758 As these effects are influenced by site location rather than the scale of the site, it is considered that they will occur for all potential dwelling capacity options (SUE4a/b/c).
- 3.1759 Overall, mixed negligible effects and minor negative effects with uncertainty (0/-?) are expected in relation to this SA objective.

SA14: To conserve and enhance the quality of landscapes

- 3.1760 A significant part of the site (over 50%) intersects with the Stour Valley Project area, associated with the Dedham Vale AONB.
- 3.1761 The landscape assessment work provided by the NEAs identifies a moderate-strong character with moderate-high sensitivity for the Bumpstead Farmland Plateau LCA within which the site is located. Landscape issues for the potential development identified by the officer assessment include potential intrusion of new development on the skyline due to openness across the plateau; the impact on tranquillity of new development; and loss of historic integrity of the traditional dispersed settlement pattern.
- 3.1762 In light of the above and in line with the assessment framework, the potential for uncertain significant negative (--?) effects is identified. The uncertainty arises as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping. As these effects are influenced by site location rather than the scale of the site, it is considered that they will occur for all potential dwelling capacity options (SUE4a/b/c).

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 3.1763 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 3.1764 The site does not intersect with any mineral safeguarding area and therefore negligible (0) effects are anticipated in relation to this element of the SA at all potential dwelling capacity options (SUE4a/b/c).

High quality agricultural land

- 3.1765 100% of the site is identified as Grade 2 Agricultural Land, meaning the development of this site would result in the loss of a significant amount of high quality agricultural land. In light of the above, a significant negative (--) effect is anticipated. Given the total coverage of the high quality agricultural land, the effect is considered to be the same for all potential dwelling capacity options (SUE4a/b/c).
- 3.1766 Overall, mixed negligible effects and significant negative effects (0/--) are expected in relation to this SA objective.

Summary of significant effects

- 3.1767 Development of this site is likely to result in similar effects regardless of the dwelling capacity option pursued. These effects are mixed, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

3.1768 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to the potential to provide community cohesion within the new development;
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing.

3.1769 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape, due to potential impacts on heritage assets within and close to the site;
- SA14 Landscape, due to the potential impacts on the Stour Valley Project area and Bumpstead Farmland Plateau LCA within which the site is located.
- SA15 Soil and mineral resources, due to the loss of Grade 2 agricultural land which would occur from the development of this site.

3.1770 In summary the site at all potential dwelling capacity options is likely to be able to provide sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough to provide higher order services such as a secondary school, health care facilities or likely to be able to support a large number of jobs. As such, development in this location is likely to result in more travel out of the site to access these services and jobs compared to a higher level of development. This is likely to decrease opportunities for sustainable travel and result in a less self-contained development.

3.1771 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of nearby settlements and the surrounding landscape context. This is likely to result in significant negative effects. In addition, there is potential to significantly negatively affect important heritage assets, including a scheduled monument within the site and another close by. Development of the site would also result in the loss of high quality agricultural land.

VE1 – Land at Kelvedon

Site Context

- 3.1772 Site VE1 is a 495-hectare strategic site location, and forms a disjointed extension to the existing settlement of Kelvedon (and adjacent Feering) across a number of different land ownerships. It was promoted during the Local Plan-making process, and is assessed for a proposed scale of either 2,000, 5,000 or 17,000 dwellings. The site lies entirely within Braintree DC but is close to the intersection with two neighbouring authorities - the border with Colchester DC lies around 1km from the site boundary, and Maldon DC (not one of the North Essex Authorities) lies less than 300m from the site boundary to the south east.
- 3.1773 The site lies to the north and west of the existing settlement of Kelvedon and, in the south western part, is bisected by a stretch of the Great Eastern Mainline railway. The land is primarily arable land on the urban edge, and in some places borders existing linear housing developments. However in several places its boundaries are formed by transport infrastructure – including both the rail line and the A12 (London Road).
- 3.1774 Aside from Kelvedon/Feering itself (approximately 2,462 total existing dwellings), the nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are: Coggeshall (approximately 2,215 existing dwellings), around 1.3km to the north; Silver End (approximately 1,551 existing dwellings), around 1.6km to the north west; Tiptree (approximately 4,139 existing dwellings), around 3km to the south east; Bradwell (approximately 223 existing dwellings), around 4km to the north west; and White Notley (approximately 229 existing dwellings), around 4.7km to the west. There are a number of other scattered smaller settlements (< 200 existing settlements) within 5km of the site boundaries, including Messing, Cressing and Little Tey.
- 3.1775 The nearest local centres to the site are in Kelvedon itself, Coggeshall (approximately 6.3km from the site’s centre point) and a District Centre in Tiptree (approximately 5km from the site’s centre point). The nearest town centres are in Witham (approximately 4.9km from the site’s centre point) and Braintree (approximately 10km).
- 3.1776 Aside from employment opportunities within town and local centres, there are a number of significant employment sites in the vicinity of VE1. These include a number of smaller-scale sites within and around Kelvedon – the Kelvedon Industrial Estate, Gold Key Industrial Estate, the ‘Former Polish Campsite’ site and London Road site – as well as larger zones on the fringes of Witham (the Eastways/Crittall Road/Waterside Park and Freebournes/Perry Road Industrial Estates). Further employment areas lie on the outskirts of Tiptree to the east – the Towerhouse Business Park and the Basket Works Site.
- 3.1777 The site lies in close proximity to the A12 strategic road, linking Colchester in the north east with London to the south east (via Witham and Chelmsford). The junction with the B1024 lies on the site’s boundary, and runs through the centre of Kelvedon and links the site to the nearby local centre in Coggeshall to the north. The site also lies in close proximity to Kelvedon rail station on the Great Eastern Mainline, which provides services north to Colchester (in 20-30 minutes) and southbound toward London (in less than one hour).
- 3.1778 The only significant allocated sites in the vicinity of site VE1 are the cluster of sites on the edges of the settlement of Feering – these sites belong to the Crown Estate and were allocated in Braintree’s Section 2 Local Plan. These sites are allocated as a strategic residential growth location for 750 homes within the Plan Period (as per Policy LPP 17).
- 3.1779 The site also overlaps in the north with the Rivenhall Airfield Extraction site (the Bradwell Quarry). The site was allocated as a Minerals Extraction Site for sand and gravel in the Essex Minerals Local Plan.

SA objective	Criterion	VE1	VE1	VE1	VE1	VE1	VE1
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	5000	17000

SA objective	Criterion	VE1	VE1	VE1	VE1	VE1	VE1
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	5000	17000
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	-- ?/++	-- ?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++	++
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?/-	+?/-	++?/-	++?/-
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Preferred Maximum	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Potential for harm to Source Protection Zones (SPZs)	Low	Low				
	Potential exposure to flood risk	Low	Low				
	Potential exposure to air pollution	Low	Low				
	Potential exposure to noise pollution from roads and railways	High	High				
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+	+	+	+
	Access to town centres	Unacceptable	Unacceptable				
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	+	+	++	++
	Access to town centres	Unacceptable	Unacceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	-?	-?	-?	-?
	Potential for harm to locally designated wildlife sites and ancient woodland	Low	Low				
	Potential for harm to PHI or local BAP habitat	Low	Low				
SA7 Achieve more sustainable	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?/-?	+?/-?	+++?/-?	+++?/-?
	Access to primary or	Unacceptable	Desirable				

SA objective	Criterion	VE1	VE1	VE1	VE1	VE1	VE1
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	5000	17000
travel behaviour	middle schools						
	Access to secondary schools	Unacceptable	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Preferred Maximum	Preferred Maximum				
	Access to bus stops	Unacceptable	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Preferred Maximum	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Desirable				
	Access to primary or middle schools	Unacceptable	Desirable				
	Access to secondary schools	Unacceptable	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Preferred Maximum	Preferred Maximum	+?	+?	+?	+?
	Access to bus stops	Unacceptable	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Preferred Maximum	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum					
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse	Access to GP surgeries/ health centres	Unacceptable	Desirable	+	+	+	+
	Access to primary or middle schools	Unacceptable	Desirable				

SA objective	Criterion	VE1	VE1	VE1	VE1	VE1	VE1
		Stage 1a	Stage 1b	A	B	C	D
		N/A	N/A	2000	2500	5000	17000
gas emissions	Access to secondary schools	Unacceptable	Desirable				
	Access to further and higher education facilities	Unacceptable	Unacceptable				
	Access to local centres	Unacceptable	Desirable				
	Access to town centres	Unacceptable	Unacceptable				
	Access to railway stations	Preferred Maximum	Preferred Maximum				
	Access to bus stops	Unacceptable	Desirable				
	Access to cycle paths	Unacceptable	Unacceptable				
	Access to open spaces and sports centres	Preferred Maximum	Desirable				
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable				
	Access to centres of employment including employment areas and town centres	Preferred Maximum	Preferred Maximum				
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/?	0/?	0/?	0/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/0?	0/0?	0/0?	0/0?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High				
	Potential for harm to agricultural land	High	High	--?/--	--?/--	--?/--	--?/--

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.1780 Consideration of the effects in relation to this SA objective is divided between the anticipated effects on existing communities and those on the new community which will move into the new development. Commentary on these two matters is set out below.

Effect on existing communities

- 3.1781 Site VE1 consists of arable farmland around the edges of the existing settlement of Kelvedon. The scale of development proposed, at any of the proposed capacities (VE1a/b/c/d), will constitute a significant expansion of the existing urban edge of Kelvedon/Feering (approximately 2,462 existing dwellings in total). The location of settlements relative to the site, and their current scale is set out in the site context above.
- 3.1782 Such a large development around and close to the existing small scale communities in the area is likely to result in a significant change to these. However the existing developed areas immediately adjacent to the site boundary in Kelvedon will be subject to the most significant degree of change. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context, as development of this scale would result in the creation of a permanent urban character compared to what is a semi-rural character at present.
- 3.1783 It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements within 5km (which is over 10% of the current scale of some of these for all capacity options), that impacts will be negatively perceived by the existing communities and, as such, significant negative effects with uncertainty (--?) are anticipated in relation to the effect on the existing community, both at the end of the plan period and at all fully built capacity options (VE1a/b/c/d). The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

- 3.1784 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 3.1785 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (VE1a/b/c/d).
- 3.1786 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.1787 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built at all capacity options.
- 3.1788 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.1789 The site information form sets out that development of the site at 2,000, 5,000 and 17,000 can be delivered without the need for any external funding. It is assumed that all of this would also apply to a site capacity of 2,500 dwellings.
- 3.1790 In light of the above factors, it is considered that significant positive effects (++) are likely in relation to SA objective 2. This effect is anticipated at the end of the plan period and when the site is fully built at all capacity options.

SA3: Improve health/reduce health inequalities

3.1791 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.1792 There are two existing healthcare facilities within Kelvedon – the Kelvedon & Feering Health Centre, and the Kelvedon Surgery (the Brimpton House Surgery). The two surgeries are within walking distance of each other and are set to merge as of July 2019. However the Stage 1 Assessment identified that, due to the site's configuration, these facilities did not lie within 'acceptable' walking distance of the majority of the site. Other nearby primary health centres are located in the nearby settlements of Coggeshall, Witham and Tiptree. The most accessible hospitals for the site are likely to Colchester Hospital and Broomsfield Hospital in Chelmsford due to the location of the A12, rail and road corridors.
- 3.1793 There is only one small area of publicly accessible green space within the site boundaries – a recreational space adjacent to London Road on the edges of Kelvedon. However in the immediate vicinity of the site there are a number of amenity green spaces, cemeteries, allotments and recreation spaces in the built up area of Kelvedon and Feering.
- 3.1794 The site is crossed by several public rights of way (PROW), which would provide access to the surrounding countryside for residents of the new development. However it is not considered that these PROW in themselves will make a significant contribution to recreation so as to facilitate more healthy lifestyles. The site is not integrated with national or local cycle networks – National Cycle Route 1 lies approximately 3km south east of the site boundary, and local cycle paths end on the edges of nearby Witham (just over 1km from the site boundary).
- 3.1795 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritises walking, cycling and use of public transport over private car use, includes foot and cycle ways throughout the development, and provides open space within the development. However the presence of the railway line bisecting the site (and separating the new development from the existing local centre in Kelvedon) may pose a challenge to delivering an integrated network of active transport infrastructure. In general, the delivery of these policy ambitions is likely to result in increased activity by those living at the new development, resulting in minor positive effects with uncertainty (+?) in relation to health and recreation access, both at the end of the plan period and when fully built at all capacity options. The uncertainty arises from questions over whether design mitigation can overcome the severance challenge posed by railway infrastructure within the site.
- 3.1796 In terms of accessing healthcare, there are relatively nearby facilities in the centre of Kelvedon. However, as discussed above, these facilities are not within 'acceptable' walking distance of the site (the Stage 1 assessment found that only around 10% of the site is within acceptable walking distance of the surgeries). As such it is likely that new facilities would be required within the development in order to provide easy access for all residents.
- 3.1797 Both at the end of the plan period (VE1b) and at the lower final capacity option (VE1a - 2,000 dwellings), the site is unlikely to be large enough to support new healthcare facilities, resulting in no adjustment to the minor positive effect (with uncertainty) identified above. However, in accordance with the assumptions framework, capacity option VE1c (5,000 dwellings) is considered able to support a new Primary Care Spoke, and VE1d (17,000 dwellings) would be expected to deliver a Primary Care Hub. As such, a development at these higher scales should be supported by new, up to date healthcare facilities, and a significant positive effect with uncertainty (++?) is anticipated in relation to health and recreation access.

Exposure to noise pollution

3.1798 As a result of nearby road and rail infrastructure, a total of approximately 10% of the site area falls with a DEFRA strategic noise area of L_{night} 50.0-54.9 dB, or L_{aeq,16} 55.0-59.9 dB, and 13% falls within a DEFRA strategic noise area of L_{night} ≥55.0 dB, or L_{aeq,16} ≥ 60.0 dB. As such, in

accordance with the assumptions framework, a minor negative effect (-) is anticipated in relation to noise pollution, both at the end of the plan period and when fully built at all capacities.

- 3.1799 Overall, mixed effects are anticipated for SA objective 3, depending on the scale of development. They are illustrated in tabulated form above, with slightly more positive effects anticipated for the higher capacity options.

SA4: To ensure and improve the vitality & viability of centres

- 3.1800 The nearest local centres to the site are in Kelvedon itself, Coggeshall (approximately 6.3km from the site's centre point) and a District Centre in Tiptree (approximately 5km from the site's centre point). The nearest town centres to the site are in Witham (approximately 4.9km from the site's centre point) and Braintree (approximately 10km).

- 3.1801 In accordance with the advice provided by the NEAs it is considered that all strategic sites at all scales will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. It is further assumed that these new centre facilities would complement rather than cannibalise the existing facilities within the Kelvedon local centre. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to SA objective 4, both at the end of the plan period and once the site is fully built at all capacity options.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.1802 The relationship of the site to existing centres is described in the commentary for SA objective 4 above. There are also existing employment areas surrounding the site, which may not be within local or town centres, and which provide for jobs. The nearest sites include the Kelvedon Industrial Estate and Gold Key Industrial Estate within Kelvedon itself, and a cluster of larger industrial sites on the eastern fringes of the nearby town of Witham.
- 3.1803 In accordance with the information form provided, it is anticipated that approximately 36 hectares of employment land for B use class (B1, B2 and B8) will be provided within this site if fully built to dwelling capacity options VE1c (5,000 dwellings) or VE1c (17,000 dwellings). This is likely to be provided in the south west of the site (between the A12 and railway line) and potentially in a mixed use district in the vicinity of Kelvedon station and within local centres. As such, the provision of this employment land is considered likely to result in permanently increased job provision in the local area, and is anticipated to have significant positive effects (++). No employment land is to be provided alongside dwelling capacity option VE1a (2,000 dwellings) and only approximately 6ha of employment land is to be provided for capacity option VE1b (2,500 dwellings at the end of the plan period).
- 3.1804 Furthermore, it is considered that by the end of the plan period, and at any of the dwelling capacity options, the residents within the new development on this site will form a valuable resource for employers in these locations and in the wider surrounding area.
- 3.1805 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services.
- 3.1806 At the lower capacity options VE1a (2,000 dwellings) and at the end of the plan period, minor positive effects (+) are therefore anticipated. However at capacities VE1c (5,000 dwellings) or VE1d (17,000 dwellings), significant positive effects (++) are anticipated in relation to SA objective 5. These arise from the anticipated expansion of the local economy based on the provision of this employment land.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.1807 Within the site boundaries, there are small and isolated areas of deciduous woodland BAP Priority Habitat. In the immediate vicinity of the site, in addition to further isolated areas of BAP Priority Habitat, there are also very small areas of the Coggeshall Hall Farm local wildlife site (LWS) and

the Brockwell Meadows LWS. In addition, the site lies entirely within SSSI Impact Risk Zones for residential development of 100 units or more, highlighting the potential for impacts on the interest features of the SSSI.

- 3.1808 As such, development of this site may result in negative effects on these designations and habitats, for example total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife, or predation by pets.
- 3.1809 However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects. Given that the entire site lies within relevant SSSI IRZs, minor negative uncertain (-?) effects are anticipated for SA objective 6, both at the end of the plan period and when fully built at all capacity options.
- 3.1810 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.1811 Site VE1 is both located adjacent to a station on the Great Eastern Mainline (Kelvedon) and adjacent to major strategic road infrastructure (the A12 runs along one of the site boundaries, providing connections north to Colchester and south to London). Journeys to the centres of Witham and Colchester, and further to London, are well served by rail – Kelvedon station offers an hourly service to London throughout the day. However journeys to other centres, such as Coggeshall and Braintree, are more likely to rely on the local road network.
- 3.1812 Bus services run along the B1024 through central Kelvedon toward Colchester in the north and Chelmsford (via Witham) in the south, approximately every 30 minutes. Another, less frequent, service provides connections south east via Tiptree to the coastal settlement of Tollesbury. Finally, the COG1 (Circular) bus serves a route from Kelvedon station north to Coggeshall at selected times during the morning and afternoon peak hours.
- 3.1813 The nearest existing primary schools are in Kelvedon/Feering (the St Mary's C of E Primary School and the Feering C of E Primary School) and in the nearby village of Rivenhall (the Rivenhall C of E Primary School). However none of these schools are within 'acceptable' walking distance of the site. The nearest existing secondary schools are more distant, in Witham (the New Rickstones Academy) and Coggeshall (the Honeywood Community Science School).
- 3.1814 Overall, a mixed score to reflect the effects in relation to shorter journeys and longer journeys is anticipated as follows.

Shorter journeys

- 3.1815 It is assumed that this site will provide new school facilities in accordance with the developer contributions guidance from Essex County Council¹⁵⁰ and the assumptions framework. In relation to this, evidence from Essex County Council¹⁵¹ sets out that there is limited capacity at primary schools in the Kelvedon/Feering area (-32 places forecast in 2028-29) so it is considered likely that new primary school(s) will be required to serve the site at all capacity options. In addition the same evidence sets out that in 2028-29 (the final year of the forecast in this schools capacity document) there will be -52 secondary school places in Witham and -22 places in the area around Coggeshall. Given a secondary pupil factor of 0.2 pupils per dwelling, it is likely that some expansion of neighbouring secondary schools may be required at the lower capacity option of VE1a (2,000 dwellings). By the end of the plan period for the higher capacity options (VE1b 2,500 dwellings) and once the site is fully developed at the higher capacity options VE1c and VE1d (5,000 and 17,000 dwellings), a new secondary school is considered likely to be required (phased provision is assumed for VE1b).
- 3.1816 Furthermore, in accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. It is considered likely that, with the exception of primary healthcare facilities (assumed not

¹⁵⁰ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

¹⁵¹ Essex School Organisation Service – 10 Year Plan 2019-2028.

to be provided until 4,500 dwellings have been built) such infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements, both by the end of the plan period and when fully built at all capacity options. These services and facilities would serve both new residents and the existing community around the development site.

- 3.1817 As such, opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site. However uncertainty in relation to infrastructure provision results from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Additional uncertainty is implied by the challenge of overcoming the severance obstacle of the rail infrastructure bisecting part of the site, and separating the site from the existing local centre in Kelvedon.
- 3.1818 At a development scale of VE1a (2,000 dwellings) and at the end of the plan period for the higher capacity options (VE1b 2,500 dwellings) the site is considered likely to have provided new primary schools, local centre facilities, open space and bus services to accommodate its needs. VE1b is also assumed to have provided new secondary school facilities, phased alongside development. However it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. As such, both for the lower final capacity option (2,000 dwellings) and at the end of the plan period for the higher capacity options (VE1b 2,500 dwellings), it is considered likely that the provision of some local services and facilities by the end of the plan period is likely to result in minor positive yet uncertain (+?) effects in relation to shorter journeys.
- 3.1819 Once the site is fully built at the potential scales of VE1c (5,000 dwellings) and VE1d (17,000 dwellings), it is anticipated that the sites will be large enough to support new primary healthcare facilities and significant employment opportunities, as well as the other services and facilities described above. It is considered that VE1c and VE1d are also of a sufficient size (>4,500 dwellings) to deliver a new secondary school onsite. This combined with the provision of at least 10ha employment onsite significantly enhances opportunities for sustainable travel within the site, resulting in uncertain significant positive effects (++?) at these site capacities. The uncertainty in both cases arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Phased secondary school provision onsite will also occur at the end of the plan period for this site, but there is insufficient provision of employment land for VE1b to alter the minor positive effects expected.

Longer journeys

- 3.1820 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.1821 For journeys to more distant destinations, the nearby Kelvedon railway station is not within 'acceptable' walking distance of the majority of the site. This is likely to limit the potential for trips by rail, which may lead to increased car use and increased congestion for the external journeys. It is possible that this could change if a smaller site boundary was put forward for the smaller capacity site options, excluding those parts of the site furthest from the rail station.
- 3.1822 In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site (and the existing settlement of Kelvedon) lies mainly within the Braintree 014 middle super output area (MSOA). According to NOMIS, the most popular commuting destinations from this MSOA are: the local area i.e. Kelvedon/Feering, Coggeshall and surrounding villages (17%); London (8.5%); Witham (5.5%); Chelmsford (4%); and central Colchester (4%). As such, if the new residents follow the same pattern, many of the commuting journeys could in principle be completed by rail (however the Braintree Infrastructure Delivery Plan (IDP) notes that the Great Eastern Mainline railway operates at capacity on trains to and

from London in the peak hours (para 6.1). Despite the potential for travel by rail, the site is not within an 'acceptable' walking distance of a railway station and therefore it is likely that commuters will still need to travel using local roads. As such, uncertain minor negative effects (-?) are expected. The uncertainty arises due to the difficulty in predicting how and where people will travel. In principle, there is potential for existing bus routes to serve some commuters to the most popular commuting destinations.

3.1823 As such, overall mixed positive and negative effects with some uncertainty are anticipated for SA objective 7, and vary depending on the scale of development. They are presented in tabulated form above, and are anticipated to be slightly more positive at the higher capacity options.

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

3.1824 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.

3.1825 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form provided, this site is to be supported by the following infrastructure at the following dwelling capacities:

3.1826 VE1a (2,000 dwellings) and also assumed to apply to VE1b given it is a similar scale (maximum 2,500 dwellings at the end of the plan period):

- Early Years
- Primary School(s)
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces

3.1827 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.1828 VE1c (5,000 dwellings) and VE1d (17,000):

- Early Years
- Primary School(s)
- Secondary School
- Additional GP Provision
- Youth Centre provision
- Open Space
- Bus services
- Local centre facilities
- Community meeting spaces

3.1829 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.1830 The supporting infrastructure listed above is confirmed to be viable (on the site information form) and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for all dwelling capacity options (VE1a/b/c/d). The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing

infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.1831 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

3.1832 The site contains three Grade II listed buildings: Monk's Farm Cottages; Cotcroft Cottage; and, Park Farmhouse. Within 500m of the site is the Kelvedon Conservation Area (adjacent to the site boundary), which contains two Grade I listed buildings (the Parish Church of St Mary and '1-5 High Street'), six Grade II*-listed buildings and a number of Grade II listed buildings. A further Grade II* listed building is located within 500m of the site boundary, but not within the Kelvedon Conservation Area. Within 1km of the site boundary are several Grade II* and II listed buildings, as well as four scheduled monuments and Braxted Registered Park and Garden.

3.1833 In the absence of evidence about the significance of, and potential impact of, developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.

3.1834 In total, approximately 82% of the site area falls within 500m of a heritage asset, and a further 18% lies between 500m and 1km from an asset. In line with the assumptions framework, and taking a precautionary approach to this assessment, significant negative effects with uncertainty (--?) are anticipated in relation to effects on cultural heritage assets, both at the end of the plan period and when the site is fully built at all scales. Uncertainty in relation to this arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

3.1835 With regards to townscape, the boundary of the site is directly adjacent to the existing settlement of Kelvedon with Feering (approximately 2,462 existing dwellings, and including the aforementioned Kelvedon Conservation Area). In line with the stated assumptions, the development of this site is likely to significantly change the character of Kelvedon and Feering. However whether this change will be positive or negative will depend on the quality of the design of the new development, therefore the effect on townscape is anticipated to be uncertain (?).

3.1836 In accordance with the above, an overall anticipated mixed effect (--?/?) is anticipated in relation SA objective 9, both at the end of the plan period and when fully built at all capacities.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

3.1837 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.

3.1838 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. Therefore minor positive effects (+) are anticipated in relation to SA objective 10, both at the end of the plan period and at all capacity options.

SA11: To improve water quality and address water scarcity and sewerage capacity

Water quality

3.1839 The site lies entirely outside of source protection zones (SPZs), and as such it is not considered likely that the development of the site will affect ground water resources. Therefore negligible effects (0) are anticipated in relation to ground water.

Water scarcity and water treatment

- 3.1840 With regard to water supply, the Braintree Water Cycle Study (WCS)¹⁵² identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The Braintree WCS assumes planned growth of 14,113 dwellings by 2033, as a result of both growth allocated in the Section 2 Local Plan and the proposed Garden Communities at Marks Tey and West of Braintree. It should be noted that VE1 was not allocated either with the Section 1 Plan (as a Garden Community) or by Braintree's Section 2 Local Plan, therefore this specific proposal at this location was not taken into account for the WCS. As such, the results of the study should be interpreted with caution for the purposes of assessing this site.
- 3.1841 The Integrated Water Management Strategy (IWMS)¹⁵³, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume that the proposed growth at VE1 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (VE1a/b/c/d) in relation to water scarcity.
- 3.1842 Geographically, site VE1 lies between the Witham WRC and the Coggeshall WRC. For the Witham WRC, the WCS identified that there is sufficient headroom to account for growth of 2,200 dwellings in the area by the end of the plan period. The study indicates that after growth, there is likely to be residual headroom for approximately 4,240 dwellings. For the Coggeshall WRC, the WCS identifies that there is sufficient flow headroom in its existing discharge permit to accept approximately 100 dwellings, which means that the existing discharge permit would be exceeded in 2019, based on growth planned in 2017. The study suggests that delivery of the necessary upgrades to accommodate growth within the plan period should be feasible. However, the WCS for Braintree only assessed growth at Coggeshall WRC for up to 1,450 dwellings, which is lower than all of the potential dwelling capacities for VE1. Whilst the Witham WRC does have additional headroom available to accommodate growth for VE1b (2,500 dwellings) and VE1c (5,000 dwellings), there is no evidence from the WCS that the Coggeshall WRC can accommodate this growth either within or beyond the plan period and therefore uncertain effects (?) are expected for all potential dwelling capacity options.
- 3.1843 For all potential dwelling capacity options, the effects in relation to this SA objective are expected to be mixed negligible and uncertain (0/?).

SA12: To reduce the risk of fluvial, coastal and surface water flooding

- 3.1844 A very small proportion of the site (less than 1%) intersects with Environment Agency Flood Zones 2 and 3. All areas of the site are identified as being at low risk of ground water flooding, and < 25% of the site area is at risk of flooding from surface water. Furthermore, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.
- 3.1845 It is therefore considered that the effects in relation to SA objective 12 are likely to be negligible (0), both at the end of the plan period and at all capacity scales.

SA13: To improve air quality

- 3.1846 As set out in the assumptions framework, assessment against this SA objective relates to two elements – intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on this is provided below

Intersection with AQMAs

- 3.1847 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated for this part of the SA objective.

¹⁵² https://www.braintree.gov.uk/downloads/file/6195/water_cycle_study_braintree_district_council

¹⁵³ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Potential contribution to road traffic within areas suffering from air pollution

- 3.1848 As outlined under SA objective 7, the majority of the site lies within Braintree 014 middle super output area (MSOA). Major commuting destinations for existing residents of this area are nearby local centres (Coggeshall, Kelvedon with Feering etc.), London, Witham, Chelmsford and central Colchester.
- 3.1849 The only designated AQMAs within and en-route to these destinations are in central Colchester (approximately 4% of commuters from this MSOA travel to Colchester for work). While there is an existing regular rail link between Kelvedon and Colchester, Kelvedon station (as outlined under SA objective 7) is not within 'acceptable' walking distance of the majority of the site, making it more likely that journeys will be made by private car.
- 3.1850 Given the relatively small proportion of commuters who commute from the area to Colchester, and the presence of the rail link (albeit not within walking distance of the majority of the site), negligible effects with uncertainty (0?) are anticipated in relation to this part of the SA objective. The uncertainty arises as it is not known exactly how and where people will travel.
- 3.1851 As such, overall negligible effects (0/0?) are anticipated in relation to SA objective 12, both at the end of the plan period and at all fully built capacity options.

SA14: To conserve and enhance the quality of landscapes

- 3.1852 The site is not located near any designated landscapes or proposed extensions to these.
- 3.1853 The area surrounding the site (the LCA Blackwater River Valley) has been assessed by landscape officers of the NEAs, and has been found to have strong landscape character, with high sensitivity to large-scale new development especially in Blackwater River valley, and in open landscapes beyond. Key issues identified included: new development in the open landscape, visibility from the river floor, and increased traffic on lanes.
- 3.1854 In light of this, and in line with the stated assumptions, significant negative effects with uncertainty (--?) are anticipated in relation to SA objective 14, both at the end of the plan period and when fully built at all scales. There is uncertainty about this effect as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 3.1855 The consideration of effects against this SA objective relates to two separate factors - mineral resources and the quality of agricultural land - resulting in two components to the SA score.

Mineral resources

- 3.1856 Almost the entirety of the site (99.8%) lies within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site would result in a significant sterilisation of mineral resources. As such, significant negative effect with uncertainty (--?) are anticipated for mineral resources, both at the end of the plan period and at all fully built capacity options. Uncertainty in the score reflects that it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery.

High quality agricultural land

- 3.1857 Similarly almost the entirety of the site (99%) of the site is Grade 2 agricultural land, meaning the development of this site would result in the loss of a significant amount of very good quality agricultural land. In light of the above, a significant negative effect (--) is anticipated in relation to agricultural land.
- 3.1858 As such, overall significant negative effects with some uncertainty (--?/--) are anticipated for SA objective 15, both at the end of the plan period and when fully built at all capacity options.

Summary of significant effects

3.1859 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out (at different site capacities)

3.1860 Anticipated effects once the site is fully built differ somewhat depending on the scale of development. In general, significant positive effects are anticipated in relation to:

- SA2 Housing provision (at all scales), due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
- SA3 Health (only at the higher capacities of 5,000 or 17,000 dwellings), as development of this scale should be able to support new health facilities, as well as open spaces and opportunities for active travel;
- SA5 Economy (only at the higher capacities of 5,000 or 17,000 dwellings), through the provision of jobs within the local area; and
- SA7 Sustainable travel (only at the higher capacities of 5,000 or 17,000 dwellings), as a significant level of services and facilities are anticipated to come forward as part of the site at these scales, reducing the need to travel.

3.1861 The potential for significant negative effects arises at these scales in relation to:

- SA1 Community cohesion (at all scales), due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA9 Historic environment and townscape (at all scales), due to potential impacts on the setting of nearby heritage assets in Kelvedon;
- SA14 Landscape (at all scales), due to the significant change which would occur to the strong and highly sensitive landscape character of LCA Blackwater River Valley; and
- SA15 Soil and mineral resources (at all scales), due to the intersection with designated minerals extraction sites and the loss of Grade 2 agricultural land.

3.1862 In summary, the fully built site at capacity options of 5,000 and above is likely to result in a development which can support a significant number of services, including health care, primary and secondary schools, and a centre (or centres) which are large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs. At this scale, and if supported by appropriate infrastructure / employment provision, it is considered that the site will form a new settlement in its own right. This is likely to result in some self-containment which is likely to provide opportunities for more sustainable travel behaviour. However as a large site, its development will put pressure on surrounding transport infrastructure, particularly the A12 and the B1024, resulting in some increased congestion. The site is in relatively close proximity to Kelvedon Station, providing access to Great Eastern Mainline services to key commuting destinations and for higher order services than can be accessed locally. However, due to its configuration, most areas of the site are not within 'acceptable' walking distance of the station. This is particularly the case for the proposed employment area between the A12 and the railway line in the south west of the site, which has some of the characteristics of 'ribbon development' and is likely to be served mainly by road (due to its distance from the nearest railway station). It is possible that the provision of active transport infrastructure within the site could improve the level of accessibility; however this would have to overcome the severance obstacle posed by the railway line bisecting the site. In addition, capacity issues during peak hours have been raised on the Great Eastern Mainline. Unless accessibility to the station and frequency of service is addressed, this may lead to a dependence on the private car for journeys to and from destinations outside the site.

3.1863 At the proposed lower final capacity option (2,000 dwellings), the potential for internalisation of shorter journeys will be more limited, given that this scale of site not likely to be large to provide higher order services such as health facilities or likely to be able to support a large number of jobs. As such, development at this scale would result in more travel out of the site to access these services and jobs. This is likely to add some traffic to the A12 and local roads, resulting in

increased congestion and relatively increased carbon emissions compared to a more self-contained site.

3.1864 As a large site, the delivery of this site at any of the capacity scales is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. Development of this site is likely to affect a number of other sensitive receptors which are present either within the site or very near to it. While there are relatively few sensitive biodiversity assets in the surrounding area, effects are anticipated on heritage assets in Kelvedon, very good quality agricultural land and mineral resources - it is important to note that effects in relation to these are likely simply because these form the site context, however delivering a high dwelling capacity within a fixed site boundary may make it more difficult to mitigate the potential impacts.

3.1865 A smaller scale of development (at 2,000 dwellings) may result in reduced effects on sensitive environmental receptors compared to the higher capacity options, due to greater physical separation and a greater opportunity to avoid sensitive features.

Effects at the end of the plan period (2,500 dwellings)

3.1866 Anticipated significant effects at the end of the plan period are anticipated to be broadly similar to those for the fully built 2,000 dwelling capacity option as described above. The differences in SA scores are tabulated and explained in full above.

VE4 Weeley Garden Village

Site Context

- 3.1867 Site VE4 is a 72-hectare strategic site located to the west of the existing village of Weeley (with approximately 580 existing dwellings). It is made up of three greenfield sites that were promoted for inclusion within the Section 1 Local Plan.¹⁵⁴ The site lies entirely within Tendring DC, and has been identified as having a maximum capacity of 2,000 dwellings. It is expected that the full quantum of development will be delivered within the Plan Period (up to 2033).
- 3.1868 The site is primarily arable land. The main part of the site is bound by the Colchester-Clacton railway line in the south, the A133 trunk road to the west, and the Weeley Bypass to the east. However the site also includes a parcel of land that lies north of the Weeley Bypass.
- 3.1869 The nearest settlements to the site other than Weeley (measuring from the site boundary to the nearest edge of the settlements) are: Tendring (approximately 281 existing dwellings), around 1.3km to the north; Little Clacton (approximately 1,452 dwellings), around 2.2km to the south east; Great Bentley (approximately 1,053 existing dwellings), around 2.1km to the west; Thorpe-le-Soken (approximately 935 existing dwellings), around 3.1km to the east; Frating (approximately 236 existing dwellings), around 3.2km to the north west; and Thorrington (approximately 918 existing dwellings), around 4.3km to the south west. In addition there are a number of scattered, smaller-scale settlements (<200 dwellings), including Little Bentley and Beaumont-cum-Moze.
- 3.1870 Nearby local centres, as defined by the Section 2 Local Plans, are located in Little Clacton, Great Bentley and Thorpe-le-Soken.
- 3.1871 The two nearest policy-defined town centres to the site are Clacton-on-Sea (approximately 6km to the south) and Brightlingsea (approximately 6.7 km to the south west), with Colchester lying more distant to the north west. Other strategic settlements and destinations nearby include Walton-on-the-Naze (around 10km to the east) and Harwich (around 14km to the north east).
- 3.1872 Aside from the employment generated within local and town centres, there are a number of nearby major employment sites. Nearby significant employment sites are: the Plough Business Centre in Great Bentley (approximately 2.6km to the west and accessible by rail); the Frating employment area (approximately 4km to the north west and likely accessed by the A133 northbound); and the Oakwood and Crusader Business Park/Brook Retail Park on the fringes of Clacton-on-Sea (approximately 5.5-6 km to the south and likely accessed by the A133 southbound).
- 3.1873 For public transport connections, Weeley station just outside the southeast corner of the site is on the Colchester-Clacton railway line, providing connections by rail to Clacton-on-Sea (a roughly 15 minute journey, with a service running every 30 minutes) and to Colchester (a roughly 20 minute journey on an hourly service). From Colchester, passengers can transfer and reach central London stations in roughly one hour.
- 3.1874 The A133 (Colchester Road) forms the western boundary of the site in the south, providing connections south to Clacton-on-Sea and north to Colchester. The B1441/B1033 (Weeley Bypass) bisects the site, providing links to Clacton-on-Sea to the south. At a junction on the northern edge of the site it joins the A133 to provide connections north. The B1033 provides connections east to Thorpe-le-Soken and further to the coastal settlements of Frinton-on-Sea and Walton-on-the-Naze. Connections to Brightlingsea can be made on local and B-roads via Bentley Road. The infrastructure associated with the Weeley Bypass (B1033) severs the northern part of the site from the southern part of the site.

A substantial site to the east of the existing settlement of Weeley (adjacent to the site's eastern boundary) has already been granted planning permission – known as 'Land South of Thorpe Road'.¹⁵⁵ The site was allocated in Tendring's Section 2 Local Plan (Policy SAMU5) as a mixed use

¹⁵⁴ a) land off Crow Lane; b) land north of Colchester Road near Hawk Farm; and c) land between Tendring Park Services and Weeley Bridge caravan park.

¹⁵⁵ Planning reference: 19/00524/OUT

development with a capacity for at least 280 new homes, 1 hectare of employment land, 1 hectare of public open space, and land for a new primary school/childcare facility (to be secured through S106 obligations). An application for outline planning permission (for 280 dwellings, 3,000sqm of B1 office space, a 2-form entry primary school and 56 nursery places) was received in April 2019. In addition, there are a number of sites with existing planning permission strung along the B1441 to the south of the site toward Clacton-on-Sea, a number of sites totalling 68 dwellings in Weeley Heath and another cluster of smaller sites in Little Clacton. There are also clusters of sites with planning permission around the edges of the neighbouring villages of Great Bentley (totalling 275 dwellings) and Thorpe-le-Soken (totalling 187 dwellings).

SA objective	Criterion	VE4	VE4	VE4
		Stage 1a	Stage 1b	A
		N/A	N/A	2000
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	--?/+
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?/-
	Access to cycle paths	Unacceptable	Unacceptable	
	Access to open spaces and sports centres	Acceptable	Desirable	
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable	
	Potential for harm to Source Protection Zones (SPZs)	Low	Low	
	Potential exposure to flood risk	Low	Low	
	Potential exposure to air pollution	Low	Low	
SA4 Ensure and improve viability of centres	Access to local centres	Unacceptable	Desirable	+
	Access to town centres	Unacceptable	Unacceptable	
SA5 Achieve a prosperous, sustainable economy	Access to local centres	Unacceptable	Desirable	+
	Access to town centres	Unacceptable	Unacceptable	
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable	
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	-?
	Potential for harm to locally designated wildlife sites and ancient woodland	Medium	Medium	

SA objective	Criterion	VE4	VE4	VE4
		Stage 1a	Stage 1b	A
		N/A	N/A	2000
	Potential for harm to PHI or local BAP habitat	Low	Low	
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?/++?
	Access to primary or middle schools	Preferred Maximum	Desirable	
	Access to secondary schools	Unacceptable	Unacceptable	
	Access to further and higher education facilities	Unacceptable	Unacceptable	
	Access to local centres	Unacceptable	Desirable	
	Access to town centres	Unacceptable	Unacceptable	
	Access to railway stations	Desirable	Desirable	
	Access to bus stops	Acceptable	Desirable	
	Access to cycle paths	Unacceptable	Unacceptable	
	Access to open spaces and sports centres	Acceptable	Desirable	
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable	
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable	
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+?
	Access to primary or middle schools	Preferred Maximum	Desirable	
	Access to secondary schools	Unacceptable	Unacceptable	
	Access to further and higher education facilities	Unacceptable	Unacceptable	
	Access to local centres	Unacceptable	Desirable	
	Access to town centres	Unacceptable	Unacceptable	
	Access to railway stations	Desirable	Desirable	
	Access to bus stops	Acceptable	Desirable	
	Access to cycle paths	Unacceptable	Unacceptable	
	Access to open spaces and sports centres	Acceptable	Desirable	
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable	
	Access to centres of employment including employment areas and town centres	Unacceptable	Unacceptable	
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Unacceptable	+
	Access to primary or middle schools	Preferred Maximum	Desirable	
	Access to secondary schools	Unacceptable	Unacceptable	
	Access to further and higher education facilities	Unacceptable	Unacceptable	
	Access to local centres	Unacceptable	Desirable	
	Access to town centres	Unacceptable	Unacceptable	

SA objective	Criterion	VE4	VE4	VE4
		Stage 1a	Stage 1b	A
		N/A	N/A	2000
	<i>Access to railway stations</i>	Desirable	Desirable	
	<i>Access to bus stops</i>	Acceptable	Desirable	
	<i>Access to cycle paths</i>	Unacceptable	Unacceptable	
	<i>Access to open spaces and sports centres</i>	Acceptable	Desirable	
	<i>Access to Public Rights of Way (PRoW)</i>	Acceptable	Acceptable	
	<i>Access to centres of employment including employment areas and town centres</i>	Unacceptable	Unacceptable	
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Low	Low	0/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/0
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	Low	Low	0/-
	Potential for harm to agricultural land	Medium	Medium	

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.1875 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 1 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.1876 This site is identified as having a final capacity of 2,000 dwellings. Development at this site would significantly expand the edges of the existing settlement of Weeley (approximately 580 existing dwellings) and would constitute an increase in the size of Weeley of roughly 400%. Other nearby settlements likely to be most affected by the expansion include Weeley Heath, Tendring, Little Clacton, Great Bentley and Thorpe-le-Soken. The location of settlements relative to the site, and their current scale is set out in the site context above. However it is the existing developed areas immediately adjacent to the site which will be subject to the most significant degree of change.

3.1877 It is recognised that the building out of this site would result in a significant change to the existing settlement at Weeley/Weeley Heath and to surrounding settlements. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape character / context. Development of this scale would result in the creation of a more permanent urban character compared to what is a semi-rural character at present.

3.1878 It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements (the site represents over 10% of the size of Weeley) that impacts will generally be negatively perceived by the existing communities. As such, the development of this site at a 2,000 dwelling capacity will result in significant negative yet uncertain (--?) effects in relation to existing communities. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

3.1879 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.

3.1880 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++).

3.1881 In accordance with the above commentary, anticipated effects on this SA objective will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

3.1882 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available, when fully built at 2,000 dwellings.

3.1883 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.

3.1884 The site information form sets out that development at the 2,000 dwelling capacity is likely to be viable, which includes the delivery of 30% affordable housing. As a result, significant positive (++) effects are anticipated in relation to SA objective 2 at a final capacity of 2,000 dwellings.

SA3: Improve health/reduce health inequalities

3.1885 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

3.1886 There are no existing healthcare facilities within the village of Weeley. The nearest GP surgeries are in the neighbouring villages of Thorpe-le-Soken (3.3km from the centre of the site) and Great Bentley (3.5km away). The nearest hospital is the Essex County Hospital in central Colchester (accessible by rail). The Oaktree Manor hospital lies approximately 4.6km north of the site, which provides specialist mental health services.

3.1887 The site area itself contains no areas of existing public open space. However on the immediate edges of the site, around the existing village of Weeley, there is an amenity green space at

Weeley Village Hall (including a small play area); another small play area (Hilltop Crescent); and a crematorium. Further afield, there are scattered amenity green spaces in the existing settlements of Great Bentley, Thorpe-le-Soken and Little Clacton.

- 3.1888 The site does not link to any existing cycle path network, either local or national (National cycle route 51 lies 3.7km north of the site boundary). The site is crossed by one public right of way (PROW) that crosses the adjacent A133, and another lies on its northern boundary, providing access to the surrounding countryside. These may provide links to the surrounding countryside for residents of the new development to utilise for recreation, however it is not considered that these PROW will make a significant contribution to recreation so as to facilitate more healthy lifestyles.
- 3.1889 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritises walking, cycling and use of public transport over private car use, includes foot and cycle ways throughout the development and provides open space within the development. The B1441 and the junction with the A133 separating the southern and northern parts of this site are likely to act as barriers to active transport linkages through the site, although these severance issues could be mitigated to a certain extent through design interventions.
- 3.1890 Overall, the delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive but uncertain (+?) effects in relation to access to health and recreation, when fully built at 2,000 dwellings. The uncertainty arises from questions over the ability of site design to mitigate against severance posed by physical obstacles to active travel.
- 3.1891 In terms of accessing health care, the Stage 1 assessment found that the walking distance to existing healthcare facilities from the site is 'unacceptable' (given the need to travel to neighbouring villages), and a capacity of 2,000 dwellings for this site would not support the delivery of a new healthcare facility (even when taking into account the development at 'Land South of Thorpe Road' which has been allocated by Tendring's Section 2 Local Plan, which is adjacent to the site. As such, and in line with stated assumptions, there is no adjustment to the minor positive effects with uncertainty (+?) anticipated in relation to access to healthcare.

Exposure to noise pollution

- 3.1892 Reflecting the presence of the A133 on the site's boundary, approximately 20% of the site area falls within a DEFRA strategic noise area of Lnight 50.0-54.9 dB, or Laeq,16 55.0-59.9 dB, and a further 10% of the site falls within either a DEFRA strategic noise area of Lnight \geq 55.0 dB, or Laeq,16 \geq 60.0 dB. As such, and in line with stated assumptions, the anticipated effects in relation to exposure to noise pollution at 2,000 dwellings are considered to be minor negative (-).
- 3.1893 As a result, the anticipated overall effects on SA objective 3 at a capacity of 2,000 dwellings will be mixed (+?/-).

SA4: To ensure and improve the vitality & viability of centres

- 3.1894 In accordance with the assumptions framework for all strategic sites at all scales and as confirmed by the site information form it is considered that development will be supported by suitable provision of services and facilities within a new local cen. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases, and that new facilities would complement rather than cannibalise existing local centres. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive (+) effects in relation to SA objective 4, at a capacity of 2,000 dwellings.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.1895 The relationship of the site to existing centres is described in the site context above. There are also existing employment areas surrounding the site, which provide for jobs which may not be within local or town centres. Significant nearby sites include the Plough Business Centre in Great Bentley, the Frating employment area, and the Oakwood and Crusader Business Park/Brook Retail Park on the fringes of Clacton-on-Sea.

- 3.1896 It is anticipated that the development of the site at 2,000 dwellings will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.
- 3.1897 In accordance with the site information form, it is considered that the site will provide approximately 1 hectare of B1 employment land at a capacity of 2,000 dwellings. This is not considered to be a significant amount of new employment land, and as such there is no upgrade to the already identified minor positive (+) effects.
- 3.1898 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.1899 The site does not intersect with any internationally, nationally or locally designated wildlife or geological sites. However within 400m of the site boundary there is a linear designated local wildlife site (LWS) of verges and woodland running along either side of the Weeley Bypass. A number of small areas of BAP priority habitat lie within 400m of the site boundary, all areas of deciduous woodland. In addition, the site lies entirely within SSSI Impact Risk Zones for residential development of 100 units or more, highlighting the potential for impacts on the interest features of the SSSI.
- 3.1900 As such, development of this site may result in impacts to these local designations and habitats. It is anticipated that effects on the existing habitats may be minor and negative, and may result from amongst other things, the total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure and predation by pets.
- 3.1901 However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects. In line with stated assumptions, and because the entire site lies within relevant SSSI IRZs and more than 5% of the site lies within 400m of local wildlife sites, a minor negative uncertain effect (-?) is anticipated in relation to SA objective 6, at a capacity of 2,000 dwellings.

Reference should be made to the separate [HRA](#) of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.1902 The Stage 1 assessment found that the majority of VE4 is located within 'desirable' walking distance of Weeley railway station, which lies to the south of the site. The station is on the Colchester-Clacton line, providing links to Colchester (in roughly 20 minutes) and Clacton-on-Sea (in roughly 20 minutes). The site is also served by the A133 (Colchester Road) which bounds the western edge of the site, providing connections south to Clacton-on-Sea and north to Colchester. The B1441 (Weeley Bypass) bisects the southern and northern parts of the site, providing links to Clacton-on-Sea to the south. The B1033 provides connections east to Thorpe-le-Soken and further to the coastal settlements of Frinton-on-Sea and Walton-on-the-Naze.
- 3.1903 The relationship of the site to other existing local centres is described above in the site context. More generally, the Tendring Infrastructure Delivery Plan (IDP, para 6.1)¹⁵⁶ notes that the movement of people into urban Colchester is significantly road-based across the Borough (para 6.1), and the road network across Tendring is over capacity in peak periods (para 6.4).
- 3.1904 Buses leave from Weeley every 20-40 minutes south east to Clacton-on-Sea/Walton-on-the-Naze, and north to Colchester centre (via Frating and the University of Essex). A similar service departs around every 30 minutes north to Colchester and south to Jaywick (via Clacton-on-Sea). Another less frequent bus departs roughly every couple of hours north to Manningtree. An additional bus that operates a limited service on school days only links Weeley to Frinton-on-Sea via Thorpe-le-

¹⁵⁶ https://www.braintree.gov.uk/downloads/file/6958/tdc023_tendring_infrastructure_delivery_plan_report_october_2017

Soken, and to Colchester via Clacton-on-Sea, St Osyth, Thorrington, the university and Essex County Hospital.

3.1905 There is an existing primary school – the St Andrew’s CofE Primary School just south of the train station between Weeley and Weeley Heath. The nearest secondary schools are in Clacton-on-Sea and in Colchester, in addition to Tendring Technology College in the neighbouring village of Thorpe-le-Soken, which serves Years 7-9.

3.1906 Overall, a mixed score to reflect the effects in relation to shorter journeys and longer journeys is anticipated as follows.

Shorter journeys

3.1907 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council¹⁵⁷ sets out that the significant increase in demand for school places across Essex is predicted to continue and that the catchment area for Weeley St Andrew’s C of E primary school has somewhat limited capacity (-28 forecast for 2028/29). Given an assumption of 0.3 primary pupils per dwelling, the capacity option at this site (2,000 dwellings) will generate demand for 600 new primary places. As such, it is considered likely that a new primary school(s) will be provided to serve the site (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements. These services and facilities would serve both new residents and the existing community within the development site. In addition, the site ‘South of Thorpe Road’ on the edge of Weeley village allocated in the Section 2 plan is required to provide a new primary school as part of the development.

3.1908 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at a capacity of 2,000 dwellings. However it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Overall it is considered likely that the provision of the local services and facilities mentioned above is likely to result in minor positive yet uncertain (+?) effects for a capacity of 2,000 dwellings. The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application

3.1909 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to provide secondary school facilities in accordance with the developer contributions guidance from Essex County Council¹⁵⁸. In relation to this, the Essex County Council evidence¹⁵⁹ sets out that existing secondary schools in Clacton will have limited capacity going forward (-63 places forecast for 2028/29). Given a secondary pupil factor of 0.2 pupils per dwelling, it is projected that the site would generate demand for 400 secondary pupils (at the smaller capacity) or 500 pupils (at the larger capacity). This would require some secondary school expansion in order to absorb the new demand. However this site alone (at 2,000 dwellings) is not of sufficient scale to deliver a new secondary school, as it is below the 4,500 dwelling threshold for new secondary facilities set out in the assumptions framework. This means that residents would need to make use of existing secondary schools in nearby settlements such as Clacton-on-Sea or in Colchester (or, for Years 7 to 9, in the nearer Thorpe-le-Soken). This may result in longer journeys and increased car dependence.

3.1910 As set out above, it is not considered that that this site at 2,000 dwellings will be able to support at least 10 hectares of employment land as part of the site. In addition, the site will not be able to deliver a secondary school. As such, and in line with the assumptions framework, there is no

¹⁵⁷ Essex School Organisation Service – 10 Year Plan 2019-2028.

¹⁵⁸ The Essex County Council Developers’ Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

¹⁵⁹ Essex School Organisation Service – 10 Year Plan 2019-2028.

change to the minor significant positive yet uncertain (+?) effects anticipated in relation to shorter journeys. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

- 3.1911 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.
- 3.1912 For journeys to more distant destinations, the proximity to the railway station in Weeley village (found to be within 'desirable' walking distance at Stage 1a) provides good potential for trips by rail, which generates opportunities to increase car use and limit congestion for external journeys. Reasonably regular bus services also provide opportunities for sustainable travel to nearby local centres and services. While the absence of a secondary school within the immediate vicinity is a negative, secondary schools in nearby Thorpe-le-Soken and Clacton-on-Sea are accessible from Weeley by both rail and bus.
- 3.1913 In terms of potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site lies in the western portion of the Tendring 007 middle super output area (MSOA). According to NOMIS (based on 2011 census data), the most popular commuting destination for residents of this MSOA is Clacton-on-Sea (27% of commuters). Roughly 14% of commuters currently residing in this area work locally (an area covering neighbouring settlements of Thorpe-le-Soken and Little Clacton) and another 5% commute into central Colchester. Commuters into both Clacton-on-Sea and Colchester are well served by rail lines, providing an opportunity for sustainable transport modes.
- 3.1914 If the new residents follow the same pattern, commuting journeys are likely to be carried by a combination rail journeys (capacity allowing) and some road journeys. Given the strong accessibility of railway stations from the site, significant positive yet uncertain effects (++?) are considered likely at a capacity of 2,000 dwellings. Uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters to the most popular commuting destinations.
- 3.1915 As such the anticipated overall effects on SA objective 7, at a final capacity of 2,000 dwellings, will be mixed (+?/++?).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

- 3.1916 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.
- 3.1917 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form, this site is to be supported by the following local infrastructure (the site information form confirms that no additional strategic infrastructure would be required for this development):
- Early Years
 - Primary School(s)
 - Youth Centre provision
 - Open Space
 - Bus services
 - Local centre facilities
 - Community meeting spaces

3.1918 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.1919 The supporting infrastructure listed above is confirmed to be viable by the site information form and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for SA objective 8, at a capacity of 2,000 dwellings. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.1920 The potential effect of strategic sites will be scored in relation to two aspects of this SA objective, resulting in a double score as follows:

Effects on cultural heritage assets

3.1921 The site overlaps with no designated heritage assets. However, there are eight Grade II listed buildings within 500m of the site boundary and one Grade I listed building (Church of St Andrew) within 500m-1km of the site boundary, as well as several Grade II listed buildings.

3.1922 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets.

3.1923 In total, approximately 47% of the site area falls within 500m of a heritage asset, and a further 52% lies between 500m and 1km from an asset. Taking a precautionary approach to this assessment, potential significant negative yet uncertain yet uncertain effects (--?) are anticipated. Uncertainty in relation to this arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

3.1924 With regards to townscape, this site lies immediately adjacent to the existing settlement of Weeley (approximately 580 existing dwellings) and in very close proximity (approximately 250m from the site boundary) to Weeley Heath (approximately 317 existing dwellings). Given the proximity of existing nearby settlements, the building out of this development is likely to significantly change the character of the local townscape. However whether this change will be positive or negative will depend on the quality of design provided, therefore the effect on townscape is scored as uncertain (?).

3.1925 In accordance with the above, the overall mixed effects (--?/?) are anticipated in relation to SA objective 9, at a capacity of 2,000 dwellings.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

3.1926 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.

3.1927 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at a capacity of 2,000 dwellings is likely to result in minor positive (+) effects in relation to SA objective 10.

SA11: To improve water quality and address water scarcity and sewerage capacity

3.1928 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

3.1929 The site is entirely outside source protection zones, and as such it is not considered likely that the development of the site will affect ground water resources and therefore negligible effects (0) are anticipated in relation to ground water

Water scarcity and water treatment

3.1930 With regard to water supply, the Tendring Water Cycle Study (WCS)¹⁶⁰ identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The WCS assumes planned growth of 10,627 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that site VE4 was not allocated in the Section 1 Local Plan, and as such it was not taken into account in the Tendring WCS. As such, the results of this study should be interpreted with caution in relation to this site.

3.1931 It is not entirely clear from the study which catchment area the site would lie within. The Tendring Green WRC is geographically the closest to the site, however the study identifies this as 'no growth is allocated'. As such, the effects in relation to this SA objective are considered to be uncertain (?) at this capacity option. The uncertainty arises from the fact that the Tendring WCS study does not provide sufficient evidence regarding the specific impact of further growth at Weeley on local water treatment infrastructure.

3.1932 As such, an overall mixed effect (0/?) is therefore expected in relation to SA objective 11, at a capacity of 2,000 dwellings.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

3.1933 A negligible area of the site (approximately 2%) intersects with an Environment Agency Flood Zones 2 and 3, on the southern boundary around Weeley Brook. Similarly negligible areas are identified as being at 'medium' risk of groundwater flooding' and < 25% of the site area is at risk of flooding from surface water. Further, as set out in the assumptions framework, all strategic sites are assumed to be developed in a manner so as to avoid flood zones, be flood resilient and provide for sustainable urban drainage.

3.1934 Given that less than 5% of the site area intersects with Flood Zones 2 and 3, and less than 25% is at medium risk of groundwater flooding or at risk of surface water flooding, it is therefore considered that the effects in relation to SA objective 12 are likely to be negligible (0) for a capacity of 2,000 dwellings.

SA13: To improve air quality

3.1935 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

3.1936 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated for a capacity of 2,000 dwellings.

Potential contribution to road traffic within areas suffering from air pollution

3.1937 The site lies in the western portion of the Tendring 007 middle super output area (MSOA). According to NOMIS (based on 2011 census data), the most popular commuting destination for current residents of the area is Clacton-on-Sea, with the remainder largely working in the local

¹⁶⁰ <https://www.tendringdc.gov.uk/sites/default/files/Tendring%20Water%20Cycle%20Study%20-%20Final%20Report%20Sept%202017.pdf>

area or commuting into central Colchester. There are no AQMAs identified in Clacton-on-Sea or on the route there from the site. While there are some identified AQMAs within the Colchester 007 MSOA (a minor commuter destination from this site), there are also accessible rail connections to Colchester from the site, which has the potential to reduce travel by private car for work.

3.1938 As such, if the new community follows the commuting behaviour of the present community, a significant portion of commuter traffic is likely to be carried either by rail or in areas with no existing AQMAs, and a negligible effect (0) in relation to this part of the SA objective.

3.1939 As a result, an overall negligible effect (0/0) is therefore expected for SA objective 13, at a capacity of 2,000 dwellings.

SA14: To conserve and enhance the quality of landscapes

3.1940 The site is not located near any designated landscapes or proposed extensions to these.

3.1941 The site area has been assessed by landscape officers of the NEAs and lies within the LCA Clacton and the Sokens Clay Plateau. The LCA Clacton and the Sokens Clay Plateau was found to have a weak/poor landscape character but was highly sensitive to visual intrusion by large-scale new development and vertical structures. Key issues identified were: the loss of elms in the past; loss and neglect of woodland, village greens, pasture, historic buildings etc.; ribbon development; urban fringe uses; and light pollution.

3.1942 In light of this high identified high sensitivity to visual intrusion, and in line with the stated assumptions, significant negative effects with uncertainty (--?) are anticipated in relation to SA objective 14. There is uncertainty about this effect as these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

3.1943 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

3.1944 A small area on the site's eastern (covering approximately 3% of the site) lies within a mineral safeguarding area for sand and gravel deposits. Given that less than 5% of the site lies within a safeguarding area, the effects at a capacity of 2,000 dwellings are considered to be negligible (0).

High quality agricultural land

3.1945 The entirety of the site lies within Grade 3 agricultural land, meaning that the developing of this site would result in the loss of some good to moderate quality agricultural land. In light of this, a minor negative (-) effect is anticipated in relation to agricultural land at a capacity of 2,000 dwellings.

3.1946 As such, an overall minor negative effect with some uncertainty (0/-) is therefore expected in relation to SA objective 15, at a capacity of 2,000 dwellings.

Summary of significant effects

3.1947 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out (at 2,000 dwellings)

3.1948 Significant positive effects are anticipated in relation to:

- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing; and
- SA7 Sustainable travel, largely due to the strong accessibility by rail to major commuting destinations, reducing reliance on the private car.

3.1949 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of relatively large-scale development on the existing community in Weeley and Weeley Heath;
- SA14, due to the potential impact on the sensitive landscape (the LCA Clacton and the Sokens Clay Plateau) surrounding the site.

3.1950 In summary, the fully built site (at 2,000 dwellings) is likely to result in a development which can support a significant number of services, including a primary school, a centre large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs. All of this is backed up by the aspirations outlined in the Garden Communities Charter.¹⁶¹ However the development is not capable of delivering over 10 hectares of employment land and is not within 'acceptable' walking distance of existing employment areas, limiting the potential for internalisation of journeys and contribution to the local economy. Further, the potential severance challenged posed by road infrastructure within the site would need to be addressed by mitigation efforts in order to allow an integrated active transport network to be delivered at the site, providing access to key transport hubs. Similarly, the scale of the proposed development is not considered capable of delivering new healthcare facilities or a new secondary school, and does not lie within 'acceptable' walking distance of the existing facilities in neighbouring settlements. As such, it is likely that residents will need to travel to external destinations for health care, secondary schools, employment and higher order services. However the strong rail connections mean there is good potential for some of these trips to be made by sustainable means, and key external commuting destinations are also well linked to the site by rail and to nearby town centres.

3.1951 Given the significant expansion of the existing settlements of Weeley and Weeley Heath that this site would constitute, there would inevitably be significant changes to the character of the area as a result of the development. This would include the landscape context - given the sensitivity of the LCA Clacton and the Sokens Clay Plateau surrounding the site. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. The impact should be considered cumulatively with the substantial allocation for development to the east of the settlement of Weeley, as allocated in the Tendring Section 2 Local Plan. This will increase the total quantum of development (and as such the impact on the existing settlement and townscape) but will also provide a higher quantum of dwellings to support new facilities and amenities of a higher order in the local area, as well as more local employment space.

¹⁶¹ https://www.braintree.gov.uk/downloads/file/5787/garden_communities_charter

VE5 – Tendring Central Garden Village

Site Context

- 3.1952 Site VE5 is a 387-hectare strategic site at Frating, within Tendring DC and lies to the east of Colchester. The site was considered by Tendring DC at the Issues and Options stage of the Local Plan due to its strategic position at the junction of the A120 and A133, and as the location of a cluster of businesses in the south of the site adjacent to the strategic road infrastructure.
- 3.1953 There are two proposed capacity options at this site. The first would accommodate 2,000 dwellings (on 77 hectares of land) in addition to 40 hectares of employment land east of the slip road. The second would develop the entire site for housing, accommodating a total of 4,500 dwellings.
- 3.1954 The centre of the site is primarily arable land, with the edges occupied by existing industrial units and low-density linear and dispersed housing developments.
- 3.1955 The site overlaps in the south with the existing settlement of Frating (approximately 236 existing dwellings). Aside from Frating, the nearest settlements to the site (measuring from the site boundary to the nearest edge of the settlements) are: Great Bromley (approximately 422 existing dwellings), around 1km to the north; Great Bentley (approximately 1,053 existing dwellings), around 1.5km to the south; Elmstead Market (approximately 877 existing dwellings), around 2km to the west; and Thorrington (approximately 918 existing dwellings), around 2.5km to the south; Alresford (approximately 935 existing dwellings), around 2.7km to the south west; Tendring (approximately 281 existing dwellings), around 3.8km to the east; and Weeley (approximately 580 existing dwellings), around 4km to the south east. In addition there are a number of scattered, smaller-scale settlements (<200 dwellings), including Little Bentley and Little Bromley.
- 3.1956 Nearby local centres, as defined by the Section 2 Local Plans, are located in Great Bentley, Elmstead Market and Alresford. The nearest town centre to the site, as defined in the Section 2 Local Plan, is Colchester town centre, which lies approximately 9.6km to the west and can be accessed via the A133 (Colchester Road). Other strategic settlements and destinations nearby include Harwich (around 19km to the north east), the town of Manningtree (approximately 6.5km to the north), and Clacton-on-Sea (approximately 12km to the south).
- 3.1957 For public transport connections, the site is not within walking distance of rail links. The nearest train station to the site is in Great Bentley, around 3.2km from the centre-point of the site. This line provides links both westbound to Colchester and southbound to Clacton-on-Sea (and Frinton-on-Sea). Alternatively Hyth Station, on the eastern fringes of Colchester, lies approximately 7.8km to the west of the site's centre-point.
- 3.1958 For road connections, the site lies at the strategic intersection between two trunk roads – the A120 and the A133, the junction of which lies on the northern boundary of the site. The site is bisected north-south by the A133, which provides connections west to Colchester (via the bypass) and south to Clacton-on-Sea. The A120 links Colchester to the international port at Harwich. The stretch of the A133 bounding the south of the site also provides connections into central Colchester, via the neighbouring settlement of Elmstead Market.
- 3.1959 Aside from the employment generated within local and town centres, there are a number of nearby major employment sites. The large-scale 'Frating Employment Area' takes up the southern part of the site, bound to the south and east by the A133. The nearest employment areas outside the site are the Lanswoodpark business centre, located approximately 700m west from the edge of the site, and those located on the eastern fringes of Colchester (several sites) and the Plough Road Centre in the neighbouring village of Great Bentley.
- 3.1960 There are no significant residential/employment or mixed use sites (over 100 dwellings) with planning permission from the NEAs, or proposed allocations by the NEA Section 2 Local Plans, within the site boundary or within 1km of the site.

SA objective	Criterion	VE5	VE5	VE5	VE5	VE5
		Stage 1a	Stage 1b	A	B	C

		N/A	N/A	2000	2500	4500
SA1 Create safe, cohesive communities	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	-- ?/++	--?/++	--?/++
SA2 Meet housing need	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	++	++	++?
SA3 Improve health	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?/--	+?/--	++?/--
	Access to cycle paths	Preferred Maximum	Preferred Maximum			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Potential for harm to Source Protection Zones (SPZs)	Medium	Medium			
	Potential exposure to flood risk	Low	Low			
	Potential exposure to air pollution	Low	Low			
SA4 Ensure and improve viability of centres	Potential exposure to noise pollution from roads and railways	High	High			
	Access to local centres	Unacceptable	Desirable	+	+	+
SA5 Achieve a prosperous, sustainable economy	Access to town centres	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable	+	++	++
	Access to town centres	Unacceptable	Unacceptable			
Access to centres of employment including employment areas and town centres	Acceptable	Acceptable				
SA6 Conserve and enhance wildlife and geological sites	Potential for harm to internationally or nationally designated wildlife or geological sites	Medium	Medium	-?	-?	-?
	Potential for harm to locally designated wildlife sites and ancient woodland	Low	Low			
	Potential for harm to PHI or local BAP habitat	Low	Low			
SA7 Achieve more sustainable travel behaviour	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?/-?	++?/-?	++?/-?
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Desirable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable			
Access to bus stops	Acceptable	Desirable				

SA objective	Criterion	VE5	VE5	VE5	VE5	VE5
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	4500
	Access to cycle paths	Preferred Maximum	Preferred Maximum			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable			
SA8 Accessibility, sustainable location, infrastructure provision	Access to GP surgeries/ health centres	Unacceptable	Desirable	+?	+?	+?
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Desirable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable			
	Access to bus stops	Acceptable	Desirable			
	Access to cycle paths	Preferred Maximum	Preferred Maximum			
	Access to open spaces and sports centres	Acceptable	Desirable			
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable			
SA9 Conserve and enhance the historic environment and townscape	Potential for harm to heritage assets	High	High	--?/?	--?/?	--?/?
SA10 Use energy efficiently and reduce greenhouse gas emissions	Access to GP surgeries/ health centres	Unacceptable	Desirable	+	+	+
	Access to primary or middle schools	Unacceptable	Desirable			
	Access to secondary schools	Unacceptable	Desirable			
	Access to further and higher education facilities	Unacceptable	Unacceptable			
	Access to local centres	Unacceptable	Desirable			
	Access to town centres	Unacceptable	Unacceptable			
	Access to railway stations	Unacceptable	Unacceptable			
	Access to bus stops	Acceptable	Desirable			
	Access to cycle paths	Preferred Maximum	Preferred Maximum			
	Access to open spaces and sports centres	Acceptable	Desirable			

SA objective	Criterion	VE5	VE5	VE5	VE5	VE5
		Stage 1a	Stage 1b	A	B	C
		N/A	N/A	2000	2500	4500
	Access to Public Rights of Way (PRoW)	Acceptable	Acceptable			
	Access to centres of employment including employment areas and town centres	Acceptable	Acceptable			
SA11 Improve water quality, water scarcity & sewerage capacity	Potential for harm to Source Protection Zones (SPZs)	Medium	Medium	0/?	0/?	0/?
SA12 Potential exposure to flood risk	Potential exposure to flood risk	Low	Low	0	0	0
SA13 To improve air quality	N/A - SA objective not included Stage 1a or 1b assessment	N/A	N/A	0/-?	0/-?	0/-?
SA14 Potential for harm to designated landscapes	Potential for harm to designated landscapes	Low	Low	--?	--?	--?
SA15 Potential sterilisation of mineral resources or harm to agricultural land	Potential sterilisation of mineral resources	High	High	--?/--	--?/--	--?/--
	Potential for harm to agricultural land	High	High	--?/--	--?/--	--?/--

Commentary on SA objectives

SA1: Create safe environments which improve quality of life, community cohesion

3.1961 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of the anticipated effects on existing communities and on the new community of occupants who will move into the new development. Commentary on this follows.

Effect on existing communities

3.1962 Currently the site is a sizeable area of arable farmland with scattered linear housing developments and industrial uses around the edge, washing over the small settlement at Hare Green in the north. Many of these uses have been developed ad hoc due to the strategic location of the site at the intersection of major trunk roads. Despite the significant presence of the strategic road infrastructure, the site is currently of a semi-rural character. The Frating area (approximately 236 existing dwellings) has no local centre, with the nearest local centres in the neighbouring settlements of Elmstead Market and Great Bentley.

3.1963 It is recognised that the provision of such a large development around and close to the existing small scale communities in the area is likely to result in a significant change to these. Temporary effects are likely to include increased traffic, light, noise and vibration impacts from construction activities. Permanent effects once the development is built out are likely to include increased traffic, light pollution, noise, congestion, general activity and an altered surrounding landscape

character / context as development of this scale would result in the creation of a permanent urban character compared to what is a rural character at present. The existing developed areas within the site boundary will be subject to the most significant degree of change.

- 3.1964 It is considered likely that due to the scale of the proposed site compared to the existing surrounding settlements within 5km (which is over 10% of the current scale of some of these for all capacity options), that impacts will generally be negatively perceived by the existing communities. As such, the development of this site at all of the potential scales of development, including the potential maximum capacity at the end of the plan period (VE5a/b/c), will result in significant negative yet uncertain (--?) effects in relation to SA objective 1. The uncertainty arises as community reaction to new strategic scale development is likely to vary from person to person and therefore the views may not necessarily be negative towards this site.

Effect on the new community

- 3.1965 In accordance with the assumptions framework, and as confirmed in the site information form for this site, it is anticipated that the site can deliver sustainable development at all potential dwelling capacities. It is considered that this will help to foster a sense of community within the site. Therefore, it is considered that community cohesion within the new development is likely to occur.
- 3.1966 Community cohesion in new development sites can be supported by new community facilities and services. In accordance with the site information form, this site is expected to provide both youth centre facilities and more general community meeting facilities. These are considered likely to help foster a greater sense of community cohesion and as such the anticipated effects on the new community are anticipated to be significant positive (++). It is assumed that these youth and community meeting facilities can be provided at all scales of development, and therefore these effects apply to all potential site capacity options (VE5a/b/c).
- 3.1967 In accordance with the above commentary anticipated effects on this SA objective, at all potential dwelling capacity options will be mixed with significant uncertain negative and significant positive effects (--?/++).

SA2: To ensure that everyone has the opportunity to live in a decent, safe home which meets their needs at a price they can afford

- 3.1968 As set out in the assumptions framework, it is considered that the development of the site will result in increased provision of housing within the NEA plan area, which will result in a greater number of homes being available. This would be the case at the end of the plan period and when fully built out for all dwelling capacity options.
- 3.1969 As also set out in the assumptions framework, all sites are anticipated to be developed in a way which provides safe, accessible neighbourhoods, an appropriate mix of housing tenures and affordable housing to policy compliant levels.
- 3.1970 In addition, the site information form sets out that development at 2,000 or 4,500 dwellings is likely to be viable, which includes the delivery of 30% affordable housing. It is assumed that this would also apply to a site of 2,500 dwellings given it is a similar scale to 2,000 dwellings. As a result, significant positive (++) effects are anticipated in relation to SA objective 2, at dwelling scales 2,000 and 2,500.
- 3.1971 However, the site information form indicates that there is a possibility external funding will be sought to support the delivery of the omni-directional Oasis (Trunk Road) Junction for dwelling capacity VE5c (4,500 dwellings). As such, the significant positive effects expected are uncertain (++?) as this funding or other mechanism to improve scheme viability is yet to be secured.

SA3: Improve health/reduce health inequalities

- 3.1972 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 3 based on an assessment of whether the allocation would improve access to health and recreation facilities and whether it would increase exposure to noise pollution, with other health determinants dealt with under other SA objectives. Commentary on these two matters is set out below.

Access to health and recreation facilities

- 3.1973 There are no existing healthcare facilities within site VE5. The nearest GP Surgery is in the nearby village of Great Bentley (approximately 3.4km from the site's centre point) and the nearest general hospital is the Essex County Hospital, around 10.7km to the west (from the site's centre point) in central Colchester. Another hospital – Oaktree Manor hospital – lies closer (around 4.2km to the north east) and provides specialist mental health services.
- 3.1974 Similarly, given the nature of the site, there is no existing public green space within the site. Beyond the boundaries of the site, there are two substantial semi-natural green spaces – the Little Bentleyhall Wood to the east (approximately 1.1km from the centre of the site) and Captains Wood (approximately 2.3km from the centre of the site).
- 3.1975 The site is well integrated into the national cycle network, with Route 51 passing through Hare Green in the north of the site; however there are no existing local cycle routes. The site includes several public rights of way (PROW), which provide access to the surrounding countryside. These may provide links to the surrounding countryside for residents of the new development to utilise for recreation, however, it is not considered that these PROW in themselves will make a significant contribution to recreation so as to facilitate more healthy lifestyles.
- 3.1976 In accordance with the site information form, this site is anticipated to be delivered in a way that provides for more sustainable transport, prioritise walking, cycling and use of public transport over private car use and include foot and cycle ways throughout the development and providing open space within the development. However the severance challenge posed by the presence of the A133 trunk road bisecting the site may limit the opportunities for integrated active transport networks across the site to access services and facilities. Nevertheless, the delivery of these policy ambitions is likely to result in increased activity by those in the new development, resulting in minor positive effects with uncertainty (+?) in relation access to health and recreation, both at the end of the plan period and when fully built at both capacity options. The uncertainty arises from questions over the possibilities to mitigate the severance challenge posed by strategic road infrastructure as part of site design and layout.
- 3.1977 In terms of accessing healthcare, as a semi-rural site VE5 is relatively isolated in terms of access to GP Surgeries and health centres, and the nearest health care facility is 3.4km away. At both the lower capacity option (VE5a - 2,000 dwellings) and at the end of the plan period for the larger capacity option (VE5b - 2,500 dwellings), the site is unlikely to be large enough to support new healthcare facilities, resulting no adjustment to the minor positive effect with uncertainty (+?) identified above. However, in accordance with the assumptions framework, the larger capacity option (VE5c - 4,500 dwellings) is considered able to support a new Primary Care Spoke. As such, the site at this scale should be supported by new, up to date healthcare facilities, and a significant positive with uncertainty (++?) rather than minor positive with uncertainty (+?) effect is anticipated in relation to access to health and recreation facilities.

Exposure to noise pollution

- 3.1978 Due to the impact of the nearby road network, in total, approximately 27% of the site area falls within a DEFRA strategic noise area of $L_{night} \geq 55.0$ dB, or $L_{aeq,16} \geq 60.0$ dB. In accordance with the assumptions framework, the anticipated effects in relation to exposure to noise pollution, both at the end of the plan period and at either site capacity option are considered to be significant negative (--).
- 3.1979 Thus overall for this SA objective, mixed effects are anticipated for all options as tabulated above. In general, the effects are anticipated to be slightly more positive at the higher capacity option (VE5c - 4,500 dwellings).

SA4: To ensure and improve the vitality & viability of centres

Effects of new centre facilities

- 3.1980 In accordance with the site information form it is considered that the site at all scales will be supported by suitable provision of services and facilities within a new local centre. It is further assumed that these facilities will be delivered as they are needed and scaled up appropriately as site capacity increases. This would provide residents of the new development with access to local centre facilities and is likely to result in minor positive effects (+) in relation to SA objective 4, both at the end of the plan period and at all potential dwelling scales.

SA5: To achieve a prosperous and sustainable economy that creates new jobs, improves the vitality and viability of centres and captures the economic benefits of international gateways

- 3.1981 The relationship of the site to existing centres is described in the site context above. There are also existing employment areas surrounding the site, which provide for jobs which may not be within local or town centres. Notably this includes the large-scale Frating Employment Zone, which lies within the site, as well as Lanswoodpark business centre (approximately 700m to the west), the Plough Centre in Great Bentley (approximately 3.3km to the south) and a number of employment sites on the eastern fringes of Colchester (approximately 7-8km to the west).
- 3.1982 It is anticipated that the development of the site at all potential scales will provide new homes in the area, which will increase the local workforce, providing a greater resource for businesses and organisations, resulting in at least minor positive (+) effects.
- 3.1983 Furthermore, in accordance with the site information form, it is considered that dwelling capacity option VE5c (4,500 dwellings) will be able to support a total of approximately 30ha of B1, B2 and B8 employment land within the site, and dwelling capacity VE5b (2,500 dwellings at the end of the plan period) will be able to support a total of approximately 17ha of employment land. This is likely to make a significant contribution to the local economy, resulting in significant positive (++) effects. No employment land is to be provided alongside dwelling capacity option VE5a (2,000 dwellings) and as such there will be no adjustment to the minor positive (+) effects identified.
- 3.1984 It is also considered likely that the construction of the development itself will result in temporary benefits to the economy through the employment of trades and linked jobs relating to suppliers and related services, although this has not been taken into account in determining the effects of this site due to the short term implications.
- 3.1985 Overall a positive effect is anticipated for the various capacity options in relation to SA objective 5 (as shown in tabulated form above). In general, the larger capacity option (VE5c – 4,500 dwellings) is anticipated to have more positive effects.

SA6: To value, conserve and enhance the natural environment, natural resources, biodiversity and geological diversity

- 3.1986 The site intersects with limited scattered areas of BAP priority habitat, however it does not intersect with any internationally, nationally or locally designated wildlife or geological sites. One designated local wildlife site (LWS) lies within 400m of the site boundary - Bentley Brook, a linear corridor of habitats. In addition, the entire site falls within SSSI Impact Risk Zones for residential development of 100 units or more, highlighting the potential for impacts on the interest features of the SSSI.
- 3.1987 As such, development of this site may result in impacts to these local designations and habitats. It is anticipated that effects on the existing habitats may be minor and negative, and may result from amongst other things, total or partial loss of habitat, reduced quality resulting from pollution, increased disturbance to wildlife from recreational pressure, predation by pets. However the extent of the effect is unknown as the development proposals may include mitigation to reduce or overcome negative effects.
- 3.1988 In total only around 3% of the site area falls within BAP priority habitat, and less than 1% falls within 400m of locally designated wildlife sites. However, as the site falls within relevant SSSI IRZs, a minor negative uncertain effect (-?) is anticipated in relation to this SA objective. This effect is considered likely to occur both at the end of the plan period and when the development is fully built at both capacity options (VE5a/b/c).
- 3.1989 Reference should be made to the separate HRA of the Section 1 Local Plan for a more detailed examination of potential effects on European sites.

SA7: To achieve more sustainable travel behaviour, reduce the need to travel and reduce congestion

- 3.1990 The site is a largely greenfield site which is rural in character. The relationship of the site to existing local centres is described above in the site context section and the accessibility of the site to surrounding facilities and services would, prior to provision of any new transport infrastructure,

be primarily dependant on the on the A133 and the A120. As set out in the Tendring Infrastructure Delivery Plan (IDP, para 6.1)¹⁶², the movement of people into urban Colchester is significantly road-based across the Borough (para 6.1), and the road network across Tendring is over capacity in peak periods (para 6.4).

- 3.1991 The nearest railway station is Great Bentley, which lies on the Colchester-Clacton line and runs on a roughly hourly service, providing connections to Frinton-on-Sea. Bus services operate from the south of the site (along the A133) roughly every 30 minutes to Jaywick and Walton-on-the-Naze in the south and to Colchester via the university. From the north of the site (along Harwich Road), bus services run roughly every 30 minutes to both Colchester and coastal settlements (including Clacton-on-Sea). Other services run less regularly.
- 3.1992 The nearest existing primary school is in the village of Great Bromley (St George's C of E Primary School), around 2.2km to the north from the site's centre point - with others in Great Bentley (3.2km to the south) and Alresford (4.5km to the south west). The nearest secondary school is the Colchester Academy, approximately 7.6km to the west, in addition to a campus of Tendring Technology College (serving Years 7 to 9) in Weeley, approximately 5.7km to the south east.
- 3.1993 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 7 based on an assessment of effects in relation to shorter journeys and longer journeys. Commentary on these matters is set out below.

Shorter journeys

- 3.1994 In accordance with the assumptions framework, it is anticipated that local centre facilities, bus stops and routes and open space facilities will be provided within this site to meet its needs. Furthermore, evidence from Essex County Council¹⁶³ sets out that there is limited capacity at Primary Schools in the Brightlingsea/Elmstead area around this site (-58 places forecast in 2028-29). Given an assumption of 0.3 primary pupils per dwelling, at the lower capacity of 2,000 dwellings this site will generate demand for 600 new primary places, and at the higher capacity it would require 1,350 primary places. As such, it is considered likely that new primary school(s) will be provided to serve the site at all capacity options (in accordance with the developer contributions guidance from Essex County Council). It is assumed that this infrastructure would be provided in parallel with housing delivery, so the site should be supported by suitable levels of these infrastructure elements for all dwelling capacity options (VE5a/b/c). These services and facilities would serve both new residents and the existing community within the development site.
- 3.1995 As such, it is considered likely that opportunities for using more sustainable modes of travel (thereby reducing increased congestion) are likely to be provided by the development of this site at all potential dwelling capacities. However it is anticipated that it will still be necessary to travel to destinations outside the site to access primary healthcare facilities and further / higher education facilities, and most likely higher order services and employment. It is possible that these could be made by sustainable means if appropriate infrastructure is provided but this is not assumed in the site assessment. Further, the severance challenges posed by the strategic road infrastructure bisecting the site may prove an additional obstacle to promoting sustainable modes of travel throughout the site. Overall it is considered likely that the provision of the local services and facilities mentioned above is likely to result in minor positive yet uncertain (+?) effects for all dwelling capacities (VE5a/b/c). The uncertainty arises due to the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application, as well as the need to overcome severance obstacles. It is notable that sites over 4,500 dwellings in size are anticipated to provide new health centre facilities, however this is not considered likely to change the effect from minor positive in relation to shorter journeys.
- 3.1996 Further to the considerations above, in accordance with the assumptions framework it is assumed that all strategic sites will be required to provide secondary school facilities in accordance with the developer contributions guidance from Essex County Council¹⁶⁴. In relation to this, the Essex

¹⁶² https://www.braintree.gov.uk/downloads/file/6958/tdc023_tendring_infrastructure_delivery_plan_report_october_2017

¹⁶³ Essex School Organisation Service – 10 Year Plan 2019-2028.

¹⁶⁴ The Essex County Council Developers' Guide to Infrastructure Contributions Revised Edition 2016 available from <https://www.essex.gov.uk/Environment%20Planning/Development-in-Essex/Documents/Developers-guide.pdf>

County Council evidence¹⁶⁵ sets out that in 2028-29 (the final year of the forecast in this schools capacity document) there will be -359 secondary school places in Colchester. Given a secondary pupil factor of 0.2 pupils per dwelling, this site would require 400 secondary places at the lower capacity option, and 900 at the higher capacity option. The site capacity options VE5b (2,500 dwellings maximum at the end of the plan period) and VE5c (4,500 dwellings) are considered capable of delivering new secondary school facilities on the site, which provides further opportunities for sustainable travel. It is assumed that although VE5b is lower than the 4,500 threshold for new secondary facilities set out in the assumptions framework, that phased provision can be made as the full site (4,500 dwellings) will be able to support a new secondary school.

3.1997 Furthermore, as set out above, it is considered that capacity option WE5b (2,500 dwellings) and VE5c (4,500 dwellings) will be able to support at least 10ha of employment land as part of the site. This, combined with the delivery of a new secondary school within the site (phased provision for VE5b) is likely to create significant opportunities for sustainable travel within the site at this capacity, resulting in anticipated significant positive yet uncertain (++?) effect. The uncertainty arises from the fact that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application.

Longer journeys

3.1998 As set out in the appraisal assumptions (in the methodology chapter), the potential benefits of strategic transport infrastructure which is proposed to support multiple sites are addressed in the Stage 2 assessment of alternative spatial strategies rather than for individual strategic sites, as it is understood that individual sites will not support these infrastructure improvements in isolation.

3.1999 For journeys to more distant destinations, the nearest railway station at Great Bentley is not within 'desirable' or 'acceptable' walking distance of the site and as such, this is likely to reduce the potential for trips by rail, which may lead to increased car use and increased congestion for the external journeys.

3.2000 In terms of the potential for external trips, a review of commuter behaviour of the current community has been undertaken. The site is split between two middle super output areas (MSOAs) – Tendring 009 (southern part) and Tendring 005 (northern part), and is on the border with another MSOA – Tendring 003. This split makes it difficult to determine a clear picture of commuting patterns from existing residents of this particular area, which in total covers an area from the northern fringes of Colchester to the fringes of Brightlingsea. As such, the implications of this data should be interpreted cautiously as a reflection of existing commuting patterns. Nevertheless, the most popular commuting destinations from Tendring 009 are: the local area i.e. the north-east edges of Colchester (approximately 22%); central Colchester (7%); northern Colchester (7%); and London (2.9%). The most popular commuting destinations from Tendring 003 are: Clacton-on-Sea (27%); the local area i.e. Alresford/Great Bentley and the existing Frating Employment Zone (14%); and central Colchester (5%). From these patterns, we can broadly say that there is currently likely to be strong movement of commuters into central and northern Colchester (with a minority connecting to London) and some additional movement south toward Clacton-on-Sea. Given existing transport infrastructure, commuting into Colchester from the site is likely to rely on the A133 or driving to Great Bentley train station (into central Colchester) and the A120 bypass to reach the northern fringes. It is also likely that commuters toward the coast are likely to rely on travel by private car, either for the whole journey or to access Great Bentley train station. Furthermore the Tendring Infrastructure Delivery Plan (IDP),¹⁶⁶ highlights capacity challenges on the local road network in peak periods (see above).

3.2001 As such, based on current commuting patterns, a minor negative effect yet uncertain (-?) is anticipated both at the end of the plan period and for both fully built capacity options (VE5a/b/c). Uncertainty arises because of the difficulties in predicting where people will choose to work and how they will choose to travel there. In principle, there is potential for existing bus routes to serve some commuters to the most popular commuting destinations.

¹⁶⁵ Essex School Organisation Service – 10 Year Plan 2019-2028.

¹⁶⁶ https://www.braintree.gov.uk/downloads/file/6958/tdc023_tendring_infrastructure_delivery_plan_report_october_2017

3.2002 As a result, for SA objective 7, the anticipated overall effects will be mixed and will depend on the scale of delivery, as shown in tabulated form above. In general, slightly more positive effects are anticipated at the end of the plan period (VE5b – 2,500 dwellings) and for the larger capacity option VE5c – 4,500 dwellings).

SA8: To promote accessibility, ensure that development is located sustainably and makes efficient use of land, and ensure the necessary infrastructure to support new development

3.2003 This SA objective contains elements which also relate to SA objective 7, and as such, the effects of the site at different scales in relation to accessibility and sustainable location are not repeated here.

3.2004 This SA objective also relates to the timely provision of infrastructure to, for example, increase accessibility and / or provide environmental mitigation. According to the site information form, this site is to be supported by the following local and strategic infrastructure at the following dwelling capacities:

3.2005 VE5a (2,000 dwellings) and also assumed to apply to VE5b given that it is a similar scale (maximum 2,500 dwellings at the end of the plan period):

- Early Years
- Primary School(s)
- Youth Centre provision
- Open Space
- Country Park/Community Woodland
- Bus services
- Local centre facilities
- Community meeting spaces

3.2006 The site information form sets out that the site can viably deliver these infrastructure requirements.

3.2007 VE5c (4,500 dwellings):

- Early Years
- Primary School(s)
- Secondary School
- Youth Centre provision
- Open Space
- Country Park/Community Woodland
- Bus services
- Local centre facilities
- Community meeting spaces
- Improved B10290 to new Metro Plan Station at Thorrington
- Omni-directional access between the A120 and A133 at the Oasis (Trunk Road) Junction

3.2008 The site information form sets out that the site can viably deliver these infrastructure requirements, although with some external public funding for the A120-A133 junction. Viability improvements to the scheme via another mechanism could also potentially provide sufficient viability.

3.2009 The supporting infrastructure listed above is confirmed to be viable by the site information form and therefore is anticipated to be delivered at an appropriate phase, resulting in minor positive yet uncertain (+?) effects for all dwelling capacity options. The uncertainty arises from the fact

that the exact infrastructure requirements of a development, the capacity of existing infrastructure, and the details of the infrastructure to be delivered, will be finalised through further work including the preparation, submission and determination of a planning application. Further uncertainty is noted in relation to site capacity option VE5c (4,500 dwellings) as the site information form sets out that external funding (or other viability improvement) is required to deliver omni-directional access between the A120 and A133 at the Oasis (Trunk Road) Junction.

SA9: To conserve and enhance historic and cultural heritage and assets and townscape character

3.2010 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 9 based on an assessment of effects in relation to cultural heritage assets and townscape. Commentary on these matters is set out below.

Effects on cultural heritage assets

3.2011 The site contains three Grade II listed buildings: Fleece House; Hill House; and, The Thickets. Within 500m of the site is one Grade-II* listed building ('Copley Dene and Wall Attached to Left') and a few Grade II listed buildings. Between 500m and 1km of the site boundary are several Grade II listed buildings.

3.2012 In the absence of evidence about the significance of, and potential impact of developing the site on the surrounding heritage assets, assumptions relating to the proximity of the site to heritage assets have been made to provide some indication of the potential for effects on heritage assets

3.2013 In total, approximately 79% of the site area falls within 500m of a heritage asset, and a further 21% lies between 500m and 1km from an asset. Taking a precautionary approach to this assessment, potential significant negative yet uncertain effects (--?) are anticipated in relation to all potential dwelling capacity options (VE5a/b/c). Uncertainty in relation to this arises because the details of any mitigation of these potential effects will be finalised through further work including the preparation, submission and determination of a planning application.

Effects on townscape

3.2014 With regards to townscape, the settlement of Frating (approximately 236 existing dwellings) lies within the site boundaries, and all capacity options present an increase of over 10% in scale in the size of the settlement. As such, and in line with stated assumptions, development of this site is likely to significantly change the character of Frating, but whether this change will be positive or negative will depend on the quality of the design of the new development, therefore the effect is anticipated as uncertain (?).

3.2015 In accordance with the above, the site scores an overall mixed effect (--?/?) in relation to SA objective 9, both at the end of the plan period and when fully built at the two capacity options.

SA10: To make efficient use of energy and reduce contributions to climatic change through mitigation and adaptation

3.2016 Some of the elements considered in relation to SA objective 7 are also relevant to the consideration of this SA objective, specifically in relation to accessibility and sustainable location. To avoid duplication, the effects of the site at different scales in relation to these matters are not repeated here.

3.2017 In accordance with the assumptions framework, all strategic sites are assumed to be provided in a manner which considers and appropriately mitigates / provides for energy efficient design, renewable energy provision, flood resilience and sustainable urban drainage. In addition the site information form confirms for all potential dwelling capacities that the site can deliver policy compliant sustainable development. As such, it is considered that the development of this site at all dwelling capacities is likely to result in minor positive (+) effects in relation to SA objective 10.

SA11: To improve water quality and address water scarcity and sewerage capacity

3.2018 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 11 based on an assessment of effects in relation to water quality and water scarcity and treatment. Commentary on these matters is set out below.

Water quality

3.2019 In total, approximately 20 % of the site area overlaps with Zone 3 of a Source Protection Zone (SPZ). However given that this is below the threshold of 25% set out in the assumptions framework, negligible effects (0) are anticipated in relation to water quality.

Water scarcity and water treatment

- 3.2020 With regard to water supply, the Tendring Water Cycle Study (WCS)¹⁶⁷ identifies that there is sufficient water supply accounting for the growth that was planned in 2017 up to the end of the plan period. The WCS assumes planned growth of 10,627 dwellings within the Plan Period (2017 to 2033) and bases its assumptions on growth outlined in the Section 1 Local Plan, including the proposed Garden Communities. It should be noted that site VE5 was not allocated in the Section 1 Local Plan, and as such it was not taken into account in the Tendring WCS. As such, the results of this study should be interpreted with caution in relation to this site.
- 3.2021 The Integrated Water Management Strategy (IWMS)¹⁶⁸, which considers the maximum potential growth of all three proposed garden communities (43,720 dwellings at NEAGC1, NEAGC2 and NEAGC3, 2017 estimate), has identified that additional water demand from proposed growth could be accommodated beyond the plan period through a combination of strategic supply options, demand reduction and water efficiency measures. Given the level of growth considered beyond the plan period in this study, it is reasonable to assume that the proposed growth at VE5 beyond the plan period could also be catered to in relation to water supply. As such, uncertain negligible effects (0?) are expected for all potential dwelling capacity options (VE5a/b/c) in relation to water scarcity.
- 3.2022 The Great Bromley WRC is geographically the closest to the site, and the WCS suggests that the facility has sufficient headroom to accommodate growth planned for during the plan period, with a residual capacity for around 300 additional dwellings. However, the Great Bromley WRC was only assessed for accommodating growth of 73 dwellings in the Tendring WCS. As such, uncertain effects (?) are expected in relation to all potential capacity options (VE5a – 2,000 dwellings, VE5b- 2,500 dwellings and VE5c – 4,500 dwellings) as there is not sufficient evidence in the WCS to indicate that Great Bromley WRC would be able to accept additional wastewater from development at these scales.
- 3.2023 As such, mixed negligible and uncertain effects (0/?) are expected for all capacity options in relation to this SA objective.

SA12: To reduce the risk of fluvial, coastal and surface water flooding

3.2024 The site does not intersect with Environment Agency Flood Zones 2 and 3. Similarly, only negligible areas of the site are at medium risk of groundwater flooding and < 25% of the site area is at risk of flooding from surface water. It is therefore considered that the effects in relation to SA objective 12 are likely to be negligible (0) at the end of the plan period and at both fully built capacity scales.

SA13: To improve air quality

3.2025 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 13 based on an assessment of effects in relation to intersection with AQMAs and the potential contribution to road traffic within areas suffering from air pollution. Commentary on these matters is set out below.

Intersection with AQMAs

3.2026 This site does not intersect with any AQMAs and as such, negligible effects (0) are anticipated for this part of the SA objective, both at the end of the plan period and at both final capacity options.

¹⁶⁷ <https://www.tendringdc.gov.uk/sites/default/files/Tendring%20Water%20Cycle%20Study%20-%20Final%20Report%20Sept%202017.pdf>

¹⁶⁸ https://www.braintree.gov.uk/download/downloads/id/7069/eb015_ne_garden_communities_integrated_water_management_strategy_stage_1_aug_2017.pdf

Potential contribution to road traffic within areas suffering from air pollution

- 3.2027 As discussed under SA objective 7, NOMIS data suggests that popular commuter destinations for existing residents of this area are likely to include areas of central Colchester. If the new community follows the commuting behaviour of the present community, and given the absence of easily accessible rail connections, it is likely that much of this commuter traffic will be carried by car along the strategic road infrastructure. This additional traffic could impact the AQMAs in central Colchester and as such a minor negative effect with uncertainty (-?) is anticipated in relation to this part of the SA objective. The uncertainty arises as it is not known exactly how and by what mode new residents of the development will travel.
- 3.2028 As such, an overall mixed effect (0/-?) is therefore expected for SA objective 13, both at the end of the plan period and when fully built at both capacity options.

SA14: To conserve and enhance the quality of landscapes

- 3.2029 The site is not located near any designated landscapes or proposed extensions to these.
- 3.2030 The site area (LCA Bromley Heath) has been assessed by landscape officers of the NEAs, and has been found to be of moderate strength landscape character but locally weak and highly sensitive to visual intrusion due to the open landscape and wide views. Key issues identified included the loss of landscape features, out of character shelter belts, light pollution, and the impact of large buildings and road improvements.
- 3.2031 In light of the identified high sensitivity in line with the stated assumptions, significant negative effects with uncertainty (--?) are anticipated in relation to SA objective 14, both at the end of the plan period and when fully built at both capacity options. The uncertainty arises because these impacts will depend on the particular design of development proposals that come forward, including the massing, layout and height of buildings, the building materials used, and the use of landscaping.

SA15: To safeguard and enhance the quality of soil and mineral deposits?

- 3.2032 As set out in the assumptions framework, all sites will receive a mixed score (e.g. +/-) against SA objective 15 based on an assessment of effects in relation to mineral resources and the quality of agricultural land. Commentary on these matters is set out below.

Mineral resources

- 3.2033 Approximately 50% of the site is within a mineral safeguarding area for sand and gravel deposits, meaning that the development of this site would result in a significant sterilisation of mineral resources. As such, and in line with stated assumptions, the effects in relation to mineral resources are anticipated to be significant negative with uncertainty (--?), both at the end of the plan period and at both final capacity options. The uncertainty arises as it may be possible to extract some or all of the mineral resource before development, depending on factors such as site layout and phasing of housing delivery. The effect is considered to be the same for all potential dwelling capacity options, because the location of the development within the site boundary for each capacity option is unknown.

High quality agricultural land

- 3.2034 Almost the entirety of the site consists of Grade 1 or Grade 2 agricultural land, meaning the development of this site would result in the loss of a significant amount of excellent or very good quality agricultural land. In light of the above, a significant negative (--) effect is anticipated in relation to agricultural land, both at the end of the plan period and once the site is fully built at both capacity options.
- 3.2035 As such, an overall significant negative effect with uncertainty (--?/--) is therefore expected for SA objective 15, both at the end of the plan period and when fully built at both capacity options.

Summary of significant effects

- 3.2036 Development of this site is likely to result in mixed effects, some of which are uncertain due to the fact that these are affected by design, infrastructure or other mitigation practices which are yet to be designed in detail and / or implemented.

Effects when fully built out at capacity VE5a – 2,000 dwellings:

3.2037 The potential for significant positive effects arises in relation to:

- SA1 Community cohesion, due to the provision of sustainable development and provision of youth centre facilities and community meeting places;
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;

3.2038 The potential for significant negative effects arises in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA3 Health, due to the effect of surrounding road infrastructure on noise pollution within the site;
- SA14 Landscape, due to the significant change which would occur to the sensitive LCA Bromley Heath landscape; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site for sand and gravel and the loss of Grade 1 or 2 agricultural land.

3.2039 In summary the site at this scale is likely to be able to provide sufficient amount of affordable housing and an appropriate tenure mix. In addition, it is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this capacity option to provide higher order services such as a secondary school, health care facilities or likely to be able to support a large number of jobs. As such, development in this location at 2,000 dwellings will result in more travel out of the site to access these services and jobs compared to a higher level of development. This is likely to decrease opportunities for sustainable travel and result in a less self-contained development. In addition, the severance obstacle posed by the A133 bisecting the site may limit opportunities for integrated active transport networks.

3.2040 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects. It is considered that at 2,000 dwellings, the effects will be less extreme than the larger capacity options, as the impacts will be less, however there will also be fewer benefits in terms of new services and facilities.

3.2041 In terms of heritage assets and environmental receptors, the site is not particularly sensitive. However significant negative effects have been identified in relation to the loss of mineral resources and the loss of excellent or very good quality agricultural land. Nevertheless it should be noted that there is the potential for the impact on mineral resources by the development to be mitigated against through appropriate phasing.

Effects when fully built out at capacity VE5c – 4,500 dwellings:

3.2042 Significant positive effects are anticipated in relation to:

- SA1 Community cohesion, due to the potential to provide community cohesion within the new development.
- SA2 Housing provision, due to the contribution this site will make to providing affordable housing, a mix of housing types and tenures, and safe accessible housing;
- SA3 Health, as development of this scale should be able to support new health facilities, as well as open spaces and opportunities for active travel;
- SA5 Economy, through the provision of jobs within the local area; and
- SA7 Sustainable travel, (in relation to shorter journeys), as a significant level of services and facilities are anticipated to come forward as part of the site, reducing the need to travel.

3.2043 The potential for significant negative effects arises at these scales in relation to:

- SA1 Community cohesion, due to the potential impact of large-scale development on the existing community within and surrounding the site;
- SA3 Health, due to the effect of surrounding road infrastructure on noise pollution within the site;
- SA14 Landscape, due to the significant change which would occur to the sensitive LCA Bromley Heath landscape; and
- SA15 Soil and mineral resources, due to the intersection with the designated minerals extraction site for sand and gravel and the loss of Grade 1 or 2 agricultural land.

3.2044 In summary, the fully built site at VE5c (4,500 dwellings) is likely to result in a development which can support a significant number of services, including health care facilities, primary and secondary schools, and a centre (or centres) which are large enough to provide some variety for goods and comparison retail, and employment sites to support a larger range of jobs. At this scale, and if supported by appropriate infrastructure / employment provision, it is considered that the site could form a new settlement in its own right. This is likely to result in some self-containment which is likely to provide opportunities for more sustainable travel behaviour. However as a large site, its development will put pressure on surrounding transport infrastructure, particularly the A120 / A131, resulting in increased congestion. The site is not currently accessible by high quality sustainable travel services and this may also lead to a dependence on the private car for journeys to and from destinations outside the site.

3.2045 As a large site, the delivery of this site is likely to significantly impact on the existing community in the area, with major changes to the character of the area, particularly the landscape context. This is likely to result in both negative and positive effects, although it is possible that the negative effects will be perceived by the general public to outweigh the positive effects.

3.2046 Development of this site is likely to significantly affect a number of other sensitive receptors which are present either within the site or very near to it, notably excellent or very good quality agricultural land and mineral resources and concerns over levels of noise pollution from surrounding road – it is important to note that effects in relation to these are likely simply because these form the site context, however delivering a high dwelling capacity within a fixed site boundary may make it more difficult to mitigate the potential impacts.

Effects at the end of the plan period (maximum 2,500 dwellings)

3.2047 In summary the anticipated significant effects at the end of the plan period are broadly similar to those for the VE5a (2,000 dwelling) capacity option described above.

3.2048 The site at the end of the plan period is considered likely to be able to support a range of services and facilities for residents and workers within the site. However, the site is not likely to be large enough at this time to provide higher order services such as health facilities or likely to be able to support a large number of jobs. As such, development in this location at the end of the plan period will result in more travel out of the site to access these services and jobs than when the site is fully built. This is likely to add traffic to the A120 / A131, resulting in increased congestion and relatively increased carbon emissions compared to a more self-contained site. Having said this, a phased / early delivery of some infrastructure items such as secondary schools may help to provide more opportunities for sustainable travel.

3.2049 The smaller scale of development at the end of the plan period (compared to the final capacity) may result in reduced effects on sensitive environmental receptors compared to the fully built out capacity options, due to the opportunity to provide greater physical separation in order to reduce harm to sensitive features – albeit on a temporary basis.

LUC

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