DAC Planning

Castle Point Infrastructure Delivery Plan Addendum

West Canvey Infrastructure Assessment

December 2025

Castle Point BOROUGH COUNCIL

DAC Planning
Version Control

File Name	Castle Point Infrastructure Delivery Plan Addendum – West Canvey Infrastructure Assessment
Prepared For	Castle Point Borough Council
Project Director(s)	Tim Parton
Prepared By	DAC Planning Limited Hop House, Colchester Road, West Bergholt, Colchester, CO6 3TJ United Kingdom dacplanning.com

Date	Version	Prepared by	Approved by
15/10/25	01	AT	TP
11/12/25	02	AT	VW

Contents

1.0 Introduction

1.1 Purpose of this Infrastructure Delivery Plan Addendum

1.1.1 The purpose of this report is to build on the Castle Point Infrastructure Delivery Plan[1] (IDP) (May 2025) solely in respect of the infrastructure requirements arising from the updated West Canvey site proposed for allocation in the emerging Castle Point Plan[2].

1.1.2 Since the May 2025 IDP was finalised Castle Point Borough Council (CPBC), through the Castle Point Plan, increased the proposed dwelling allocation of the West Canvey site from 1,000 homes to 2,700 homes. Of which, 2,000 homes are anticipated to be delivered during the plan period to 2043, with the remaining 700 homes expected to come forward beyond 2043. The May 2025 IDP detailed the infrastructure requirements arising from 1,000 homes at West Canvey. The additional 1,000 homes planned up to 2043 is the subject of this IDP Addendum. The infrastructure requirements arising from the remaining 700 homes will be addressed by future infrastructure studies to support a future local plan covering the period beyond 2043.

1.2 What infrastructure is considered in the IDP Addendum

1.2.1 This IDP does not consider all infrastructure types, but instead focuses on key items of infrastructure which will be required to support the delivery of growth proposed for allocation in the emerging Castle Point Plan. For the purposes of this IDP, 'infrastructure' is defined as physical, social and green items required to enable sustainable development. While not exhaustive, Table 1 provides an indication of the infrastructure types which should be considered to support the delivery of growth in the emerging Castle Point Plan.

Table 1: Items considered as infrastructure

Social	• Education – early years and childcare, primary and secondary schools, further education, adult education • Healthcare – GP surgeries, hospitals, medical centres, emergency ambulance facilities. • Adult social care • Emergency services – policy, fire, ambulance

[1] Castle Point Infrastructure Delivery Plan (May 2025)
[2] Policy C4 of the emerging Castle Point Plan proposes the allocation of the updated West Canvey site

	• Community services – community centres providing facilities for children, elderly people, and people with special needs, cemeteries and crematoria, children's facilities, courts, hostels, places of worship, libraries, post offices • Culture and leisure facilities • Indoor and outdoor sports facilities
Green	• Open Space – parks and country parks, children's play areas, sports pitches and grounds, allotments, green public realm • Biodiversity – local wildlife sites, local nature reserves, private nature reserves, Sites of Special Scientific Interest
Physical	• Transport – highway, rail and bus networks, footpaths, cycle routes, bridleways and waterways, car parking • Energy – gas and electricity generation and distribution, renewable energy projects • Water – water supply, wastewater treatment, drainage, flood defences • Telecommunications, broadband and wireless connections • Security and defence • Waste management - collection, disposal and recycling

1.2.2 IDPs can consider a range of infrastructure suitable to the needs and aspirations of the area being considered, and the particular circumstances of the proposed development sites and stage of preparation of the emerging Castle Point Plan. To appropriately support the progression of the Castle Point Plan at this time, this IDP Addendum covers the following topics:

- **Education** (early years and childcare, primary, secondary, further education and skills)
- **Healthcare** (GP surgeries, hospitals, medical centres)
- **Adult social care** (adult day care, residential care, independent living, supported living, extra care)
- **Green and blue infrastructure** (public parks and gardens, amenity green space, natural and semi natural green space, bodies of water, provision for children and young people)
- **Sports, indoor and built facilities** (Football grass pitches, 3G artificial grass pitches, cricket, rugby, hockey, golf, bowls, tennis, netball, athletics, cycling, MUGAs, indoor and built facilities, sports, community and village halls,

swimming pools, health and fitness suites, indoor tennis, squash, gymnastics, sailing)

- **Transport** (Highways network: strategic road network, local roads; sustainable transport: buses, rail, pedestrian and cycling)
- **Libraries**
- **Emergency Services**

1.2.3 This IDP Addendum focusses on the assessment of infrastructure requirements under each of the above infrastructure types. The contextual background information is retained in the May 2025 IDP and not duplicated in this Addendum.

1.2.4 In preparing the Addendum, we have not identified/ been made aware of any additional updated evidence that confirms any infrastructure implications expected to arise specifically in relation to the additional growth proposed in West Canvey in respect of:

- **Flood management** (Tidal flooding, river flooding, surface water flooding)
- **Utilities** (electricity, gas, communications, potable water and wastewater)
- **Waste Management** (waste collection, waste disposal)

1.3 Emerging Castle Point Plan

1.3.1 To meet local growth needs the emerging draft Castle Point Plan seeks to deliver 6,196 new homes, in addition to the provision of new employment and commercial floorspace, between 2026-2043. As of 1 April 2025, development totalling 480 new homes had the benefit of planning permission. Also, an estimated windfall[3] rate of 45 dwellings per annum, 675 dwellings within the Plan period, is included within the growth strategy.

1.3.2 This IDP Addendum makes use of the same emerging Castle Point Plan growth scenarios as set out in the May 2025 IDP with the only change being the increased number of homes planned for the West Canvey site (policy C4) from 500-1,000 homes to 2,000 homes within the plan period to 2043. Note that while the growth strategy tested in the May 2025 IDP presented a range of 500-1,000 dwellings for the West Canvey site, the site was tested at 1,000 for all infrastructure types. The

[3] 'Windfall' is the term used for the development of land which has not been specifically identified as available through the local plan process. Windfall sites typically comprise previously developed sites or infill sites which become unexpectedly available.

new growth scenarios presented below therefore present an increase of 1,000 dwellings being tested within this IDP Addendum.

1.3.3 The updated total non-residential floorspace and dwelling capacity of the growth scenarios are detailed in Table 2 below.

Table 2: Emerging Castle Point Plan growth scenarios

Growth Scenario	May 2025 IDP		October 2025 IDP Addendum	
	Non-resi floorspace (sqm)	Dwellings	Non-resi floorspace (sqm) (% increase)	Dwellings (% increase)
Scenario 1	20,232	4,862-5,362	20,232 (0%)	6,362 (19-31%)
Scenario 2	53,982	7,019-7,519	53,982 (0%)	8,519 (13-21%)
Scenario 3	53,982	8,345-8,845	53,982 (0%)	9,845 (11-18%)

2.0 Education

2.1 Infrastructure Assessment

2.2 Early Years and Childcare and Primary Education

2.2.1 ECC outlines that the development of 2,000 homes on the West Canvey site will generate the need for around 122 early years and childcare places, which should be provided by new 72 place and 56 place standalone nurseries. Based on ECC's £24,416 per new standalone child place, such provision would cost £3,125,248.

2.2.2 Taking account of the per dwelling pupil product factors for qualifying houses and flats provided by ECC, the 2,000 home West Canvey site would generate an estimated 306 primary school pupils. Applying the costs per pupil (expansion and new standalone primary schools) derived from ECC's Developer's Guide to Infrastructure Contributions (2024 and draft 2025) to the 306 pupils generated would result in infrastructure costs totalling between £6,116,634 (if all pupils accommodated in expanded schools) and £7,302,690 (if all pupils accommodated in new standalone schools). ECC's latest housing scenario testing for the emerging Local Plan in November 2025 (which includes the proposed allocation of the West Canvey site for 2,000 homes), outlines that no land allocations for school use have been identified as necessary to meet the level of demand indicated in this housing scenario.

2.3 Secondary Education

2.3.1 Taking account of the per dwelling pupil product factors for qualifying houses and flats provided by ECC, the 2,000 home West Canvey site would generate an estimated 204 secondary school pupils. Applying the costs per pupil (expansion and new standalone secondary schools) derived from ECC's Developer's Guide to Infrastructure Contributions (2024 and draft 2025) to the 204 pupils generated would result in infrastructure costs totalling between £5,608,368 (if all pupils accommodated in expanded schools) and £5,898,048 (if all pupils accommodated in new standalone schools). As already referenced above, ECC's latest housing scenario testing in November 2025 which includes the proposed allocation of the West Canvey site for 2,000 homes, outlines that no land allocations for school use have been identified as necessary to meet the level of demand indicated in this housing scenario.

2.4 Special Educational Needs and Disability (SEND)

2.4.1 The increased dwelling capacity for West Canvey would result in a slight increase in the total SEND infrastructure required on or near to Canvey Island.

2.4.2 Taking account of the SEND pupil yield per qualifying houses and flats, derived from ECC's Developer's Guide to Infrastructure Contributions (draft 2025), the 2,000 home West Canvey site would generate an estimated 12.92 SEND pupil yield. Applying the SEND costs per pupil (£102,679), per house (£1,951.24), and per flat (£975.62) derived from ECC's response to the Regulation 19 Castle Point Plan consultation to the estimated 12.92 pupils generated would result in infrastructure costs totalling £3,980,184.

3.0 Healthcare

Infrastructure Assessment

3.1.1 Growth being considered within the emerging Castle Point Plan would result in an increase in the local population, and would therefore result in an increase in the demand for and use of primary healthcare services across the Borough. As outlined in the May 2025 IDP, GP surgeries in the area are currently over capacity, and the levels of growth being considered for the new Castle Point Plan will exacerbate this situation without the provision of additional healthcare infrastructure.

3.1.2 Engagement with the Mid and South Essex Integrated Care Board has confirmed the impact of 1,000 additional homes planned in Canvey would generate the need for an additional 165m^2 (net internal area) of GP surgery space in the Canvey area. Table 3 below presents the impacts of the three growth scenarios on primary healthcare capacity in the Canvey area, and demonstrates how the growth scenarios could result in increased capacity deficits without the provision of additional primary healthcare facilities.

Table 3: Capacity of primary care facilities for Canvey

Area	Existing Capacity (net internal area m^2)	Forecasted capacity following Scenario 1 growth (NIA m^2)	Forecasted capacity following Scenario 2 growth (NIA m^2)	Forecasted capacity following Scenario 3 growth (NIA m^2)
Canvey	-1,134	-1,629	-1,629	-1,759

3.1.3 In addition to the above forecast deficits in primary healthcare infrastructure, the Mid and South Essex ICB has noted the 675 dwelling windfall allowance over the plan period would require an additional 111m^2 of GP surgery space across the plan area.

3.1.4 The Mid and South Essex ICB has confirmed that their budgets are severely constrained. Infrastructure improvements in the area would therefore be funded by developer contributions. The ICB has provided an update to the recommended healthcare developer contribution of £500-600 per dwelling, and suggested that healthcare contributions should now equate to £700 per dwelling, based on the

BCIS costings for health centres in Q2 2025. Based on this £700 per dwelling contribution, the estimated total developer contributions which could be sought for each scenario is presented below.

- Scenario 1: (6,362 x £700) £4,453,400
- Scenario 2: (8,519 x £700) £5,963,300
- Scenario 3: (9,845 x £700) £6,891,500

3.1.5 It should be noted that these are high level estimates, which will be updated in future versions of the IDP. The ICB has noted the model of delivering healthcare services is changing in response to publication of the NHS 10 Year Health Plan for England: fit for the future (July 2025)[4]. It makes three big shifts in how the NHS works including moving some services from hospital to community settings. This will impact the estate requirement of healthcare services and the ICB will feed the detail of this into future iterations of the IDP as that model of delivery is developed.

[4] 10 Year Health Plan for England: fit for the future (July 2025)

4.0 Adult Social Care

Infrastructure Assessment

4.1.1 The May 2025 IDP noted ECC Adult Social Care had commissioned Housing LIN to prepare a Supported and Specialist Housing and Accommodation Needs Assessment. At the time the May 2025 IDP was prepared this study was in preparation, and has since been published[5].

4.1.2 Based on assumed housing requirements for each Essex authority, the Accommodation Needs Assessment outlines the indicative long-term specialist and wheelchair accessible housing requirements for emerging local plans across Essex.

4.1.3 However, the Accommodation Needs Assessments does not evidence whether there are any additional infrastructure implications related to adult social care arising solely in relation to the additional growth proposed in West Canvey.

4.1.4 The Accommodation Needs Assessment notes this data should form part of the inputs for Strategic Housing Market Assessments that inform emerging local plans about the housing needs of different groups, including the needs of older and disabled people.

[5] Essex Supported and Specialist Housing and Accommodation Needs Assessment (August 2025)

5.0 Green and Blue Infrastructure

Infrastructure Assessment

Open Space

5.1.1 Based on an assumption of 2.4 people per household, the three draft Castle Point Plan growth scenarios would result in the following possible population increases:

- Scenario 1: 15,269 residents
- Scenario 2: 20,446 residents
- Scenario 3: 23,628 residents

5.1.2 Paragraph 6.2.2 of the May 2025 IDP explains that the Open Space Assessment identifies the contribution for the provision or improvement of open space as £1,779.48 per person. The calculated costs are based on the recommended green space standards identified in Table 6.1.8 of the May 2025 IDP. This means that the total cost of new open space to meet the needs of the growth scenarios being considered range from approximately £27 million - £42 million, as follows:

- Scenario 1: £27,170,880
- Scenario 2: £36,383,248
- Scenario 3: £42,045,553

5.1.3 The following table applies the open space standards per person, as set out in Table 6.2.2 of the May 2025 IDP, to the updated growth scenarios in order to outline the additional amount of each open space typology area required (in m²) to support each growth scenario.

Table 4: Space and costs of open space required per open space typology

Open Space Typology	Scenario 1 Requirements		Scenario 2 Requirements		Scenario 3 Requirements	
	Space (m^2)	Cost	Space (m^2)	Cost	Space (m^2)	Cost
Allotments	30,538	£1,044,400	40,892	£1,398,506	47,256	£1,616,155
Parks and recreation grounds (combined)	167,959	£19,572,262	224,906	£26,208,296	259,908	£30,287,079
Play space (children)	10,688.3	£1,602,283	14,312.2	£2,145,542	16,539.6	£2,479,451
Play space (youth)	10,688.3	£1,745,399	14,312.2	£2,337,182	16,539.6	£2,700,917
Amenity green space	91,614	£1,502,470	122,676	£2,011,886	141,768	£2,324,995
Accessible natural green space	274,842	£1,704,020	368,028	£2,281,774	425,304	£2,636,885
Total	**586,329.6**	**£27,170,834**	**785,126.4**	**£36,383,187**	**907,315.2**	**£42,045,483**

5.1.4 Paragraph 6.2.3 of the May 2025 IDP explains that where new open space is provided, the developer would be expected to provide the open space and either maintain the open space through a management company or other suitably agreed stewardship arrangement. Alternatively, if the site is to be adopted by the local authority, then maintenance fees will be included in the Section 106 legal agreement. Table 6.2.3 of the May 2025 IDP sets out the maintenance cost/m²/annum for each open space typology. This equates to the following total costs for maintenance of open space per annum, to support planned growth:

Table 5: Maintenance cost/open space provision/annum

Open Space Typology	Scenario 1	Scenario 2	Scenario 3
Allotments	£23,208.88	£31,077.92	£35,914.56
Parks and recreation grounds (combined)	£582,817.73	£780,423.82	£901,880.76
Play space (children)	£142,581.92	£190,924.75	£220,638.26
Play space (youth)	£98,439.24	£131,815.36	£152,329.72
Amenity green space	£70,542.78	£94,460.52	£109,161.36
Accessible natural green space	£0	£0	£0
Total	£917,590.56	£1,228,702.37	£1,419,924.66

5.1.5 It is important to note that the total new open space provision required, when using the Open Space Assessment 2023 standards, is significant both in terms of cost and in terms of identifying sufficient land to deliver the provision. For example, Scenario 1 would require 3Ha of allotment land; 16.8Ha of new parks and recreation grounds; and 27.5Ha of Accessible Natural Green Space.

5.1.6 It will be important to consider the impact of the standards on development viability and also to determine whether provision can be made on-site or whether there is land available to make provision off-site. An exercise in mapping new open space typology provision against the existing open space deficit data (Table 6.1.21 in the May 2025 IDP) and the preferred walking distance standards (Table 6.1.8 in the May 2025 IDP), may be of assistance in guiding the location of new open space provision.

5.1.7 In terms of maintenance, it will be important to consider the Council's approach to managing each type of open space to ensure that they are maintained to a standard which allows for safe enjoyment of the land in perpetuity. Maintenance may be delivered through private management companies on a site-by-site basis or for some types of open space, the Council may contribute towards maintenance. A policy approach covering each typology of open space is recommended.

5.1.8 Finally, it is important to note the Natural England Green Infrastructure Standards, including the Urban Greening Factor and Green Infrastructure Standards for England. The Council may consider how these standards and the Urban Greening

Factor are incorporated into site assessments and design, alongside the requirements of Biodiversity Net Gain standards, to be incorporated into policy. Taking these standards into account may result in duplication of provision. Therefore, it is recommended that a holistic approach is identified which considers clear methods to avoid duplication between open space typologies; urban greening and Biodiversity Net Gain.

Recreational disturbance Avoidance and Mitigation (RAMS)

5.1.9 In their response to the IDP consultation process, Natural England commented that "much of the development proposed will occur within the identified Zones of Influence (ZoI) for coastal Habitats Sites ("European Sites"). The Essex Coast Recreational disturbance Avoidance and Mitigation Strategy (RAMS) Supplementary Planning Document (SPD) was created in partnership with 12 local planning authorities and adopted by CPBC in 2020. The SPD applies to new residential dwellings to be built in the ZoI of the Essex coast Habitats Sites, intended to mitigate the 'in combination' effect of recreational pressure created by new residents.

5.1.10 The SPD explains that to deliver the mitigation package proposed, "the current tariff is £125.58 per dwelling as of 2020/21. This will be index linked with a base date of 2019.". The index linked RAMS tariff has increased to £169.45 per net new dwelling for 2025/26. Table 6 provides the contributions required towards the RAMS mitigation package, per growth scenario[6].

Table 6: RAMS mitigation contributions required for each growth scenario

Local Plan Growth Scenario	Total
Scenario 1: 6,362	£1,078,041
Scenario 2: 8,519	£1,443,545
Scenario 3: 9,845	£1,668,235

Green and Blue Infrastructure

5.1.11 As set out in the May 2025 IDP, Natural England's Urban Greening Factor should be taken into account in policy preparation, including increased tree cover to enhance health and wellbeing.

[6] Note that the figure must be index linked correctly to achieve the most up to date chargeable fee at the time

5.1.12 In terms of blue infrastructure, appropriate foul drainage management would be required, and SuDS (Sustainable Drainage Systems) should also be integrated into the design of sites from the outset. Finally, improvements to the diversification of wildlife and habitats are promoted including setting ambitious biodiversity net gain targets and ensuring that wildlife corridors are retained, maintained, enhanced and created.

5.1.13 The Essex Wildlife Trust emphasises the importance of identifying key biodiversity improvement projects from the Biodiversity Action Plan, Local Nature Partnership, Rights of Way Improvement Plan, the Essex Green Infrastructure Study and the Local Nature Recovery Network, where relevant.

6.0 Sports, Indoor and Outdoor Facilities

Infrastructure Assessment

6.1.1 At present, Castle Point Borough Council are preparing a Playing Pitch and Outdoor Sports Strategy (PPOSS). This will provide the necessary robustness and direction to inform decisions affecting relevant provision within the authority area. The PPOSS is not due to be completed until Autumn 2025 and has not at this time been incorporated into the Sport England built sports facilities and playing pitch calculator datasets. Therefore, currently the 2023 updates to the Council's Playing Pitch Strategy and Built Sports Facilities Strategy provide the most up to date data, and have informed the Sport England calculators used to determine potential future needs for the area.

6.1.2 By using the Sport England Playing Pitch Calculator and Built Facilities Calculator, it is possible to identify the quantum and total cost of playing pitch and built facility requirements to support the options for growth. This is shown in the tables below.

Table 7: Sport England Built Sports Facilities Calculator Results

Scenario 1 Population Growth	Pools (sqm)	Pools (£)	Halls (courts)	Halls (£)	Indoor Bowls (rinks)	Indoor Bowls (£)	Tennis Courts (number)	Tennis Courts (£)	Total indoor sports facilities costs (£)
15,269	158.18	£3,408,155	0.94 (3.78)	£2,832,720	0.33	£149,266	1.92	£217,786	£6,607,927

Scenario 2 Population Growth	Pools (sqm)	Pools (£)	Halls (courts)	Halls (£)	Indoor Bowls (rinks)	Indoor Bowls (£)	Tennis Courts (number)	Tennis Courts (£)	Total indoor sports facilities costs (£)
20,446	211.81	£4,563,700	1.26 (5.06)	£3,793,162	0.44	£199,875	2.57	£291,627	£8,848,364

Scenario 3 Population Growth	Pools (sqm)	Pools (£)	Halls (courts)	Halls (£)	Indoor Bowls (rinks)	Indoor Bowls (£)	Tennis Courts (number)	Tennis Courts (£)	Total indoor sports facilities costs (£)
23,628	244.77	£5,273,946	1.46 (5.85)	£4,383,490	0.51	£230,981	2.97	£337,013	£10,225,430

Table 8: Sport England Playing Pitch Calculator Results

Growth Scenario 1 (population)	Natural Grass Pitches (number)	Natural Grass Pitches (£)	Natural Grass Pitch Lifecycle Cost (per annum)	Changing rooms (number)	Changing rooms (£)	Total natural grass pitches and changing room facilities costs (excl. lifecycle cost)
15,269	15.2	£1,465,994	£286,313	14.37	£2,968,728	£4,434,722
Growth Scenario 1 (population)	**Artificial Grass Pitches**	**Artificial Grass Pitches if 3G (£)**	**Artificial Grass Pitch Lifecycle Cost (per annum)**	**Changing rooms (number)**	**Changing rooms (£)**	**Total artificial grass pitches and changing facilities costs (excl. lifecycle cost)**
15,269	0.72	£858,233	£25,242	1.43	£295,816	£1,154,049

Growth Scenario 2 (population)	Natural Grass Pitches (number)	Natural Grass Pitches (£)	Natural Grass Pitch Lifecycle Cost (per annum)	Changing rooms (number)	Changing rooms (£)	Total natural grass pitches and changing room facilities costs (excl. lifecycle cost)
20,446	20.35	£1,963,053	£383,391	19.25	£3,975,322	£5,938,375
Growth Scenario 2 (population)	**Artificial Grass Pitches**	**Artificial Grass Pitches (£)**	**Artificial Grass Pitch Lifecycle Cost (per annum)**	**Changing rooms (number)**	**Changing rooms (£)**	**Total artificial grass pitches and changing facilities costs (excl. lifecycle cost)**
20,446	0.96	£1,149,232	£33,801	1.92	£396,118	£1,545,350

Growth Scenario 3 (population)	Natural Grass Pitches (number)	Natural Grass Pitches (£)	Natural Grass Pitch Lifecycle Cost (per annum)	Changing rooms (number)	Changing rooms (£)	Total natural grass pitches and changing room facilities costs (excl. lifecycle cost)
23,628	23.52	£2,268,560	£443,057	22.24	£4,594,021	£6,862,581
Growth Scenario 3 (population)	**Artificial Grass Pitches**	**Artificial Grass Pitches (£)**	**Artificial Grass Pitch Lifecycle Cost (per annum)**	**Changing rooms (number)**	**Changing rooms (£)**	**Total artificial grass pitches and changing facilities costs (excl. lifecycle cost)**
23,628	1.11	£1,328,079	£39,061	2.22	£457,764	£1,785,843

7.0 Transport

Infrastructure Assessment

7.1.1 CPBC commissioned Systra to prepare a Transport Assessment (TA) as part of the evidence base to support the emerging Castle Point Plan. The transport infrastructure required to mitigate growth scenario 1, as it then was, was identified in the Transport Assessment and incorporated in the May 2025 IDP.

7.1.2 Systra subsequently prepared a TA Addendum (August 2025)[7] to take account of updated growth scenario 1. With no allowances made for mitigation, the TA Addendum found the most concentrated impacts arising from the additional growth in West Canvey were identified on the key distributor routes on and off Canvey Island, the A130 and A127 corridors.

7.1.3 In the Benfleet and Hadleigh area, the main points of AM peak congestion are indicated to include the A130 Canvey Road south of Sadlers Farm roundabout, and to the north of the A127/A129 junction to the north of Thundersley. The A130 Canvey Road north of the Sadlers Farm roundabout, and the smaller roads between the A127 and A13 are noted as approaching capacity. In the PM peak, the A13 south of the Sadlers Farm roundabout, and east of the London Road/High Street junction in Hadleigh are modelled as at capacities over 100%.

7.1.4 In the Benfleet and Hadleigh area, relative queue lengths in the AM peak are noted to be over 100% along the A127 south onto the A129, and on London Road to the east of the Sadlers Farm roundabout, south on High Road. Relative queue lengths in the PM peak are indicated to the east of the Sadlers Farm roundabout along London Road, along the A129 south of the junction with A127, and east-west along the A127 to the east of The Fairway. Relative queue lengths for these latter two routes are indicated at between 90-100%.

7.1.5 In the Canvey Island area, the main points of AM peak congestion are noted to be the B1014 southeast of the Canvey Road/Canvey Way roundabout, Central Wall Road north-south into the Furtherwick Road junction, and Long Road east-west. All of these routes are indicated to be at capacity of over 100%. The main points of PM peak congestion are Long Road east-west and Central Wall Road, and

[7] Castle Point Transport Assessment Addendum (August 2025), TA Addendum Appendix A, TA Addendum Appendix B (Part 1), TA Addendum Appendix B (Part 2), TA Addendum Appendix C

north-south into the Furtherwick Road junction. These routes are also indicated to be at capacities over 100%.

7.1.6 The only notable queue in the Canvey Island area is along the B1014 to the east of the Canvey Way/Canvey Road roundabout with a relative queue length of between 61-74%.

7.1.7 The updated strategic modelling has demonstrated that, even with the “built in” advantages of the West Canvey broad location, the scale of this proposed development still means that there will be very large increases in vehicle trips seeking to move to and from Canvey, and that this demand will affect both the A130 and the route towards Benfleet station. There is also evidence of “knock on” effects on the A13 corridor in particular having very little ability to absorb extra vehicular demand, with the model showing that the B1014 corridor would operate as the most obvious alternative.

7.1.8 The TA Addendum includes a detailed assessment of junctions to consider mitigation measures which could be implemented to support updated growth scenario 1. Further mitigation over and above that set out in the TA is not required in relation to the following junctions:

- London Road / High Street
- London Road / New Road
- Rushbottom Lane / London Road / High Road
- London Road / Kents Hill Road / Kents Hill Road North
- Long Road / Furtherwick Road / Oak Road
- Rayleigh Road / London Road / Benfleet Road / Kiln Road

7.1.9 However, potential mitigation measures have been identified for the following junctions:

- Scrub Lane / Rectory Road / New Road
- Northwick Corner Roundabout

7.1.10 In relation to the Scrub Lane / Rectory Road / New Road junction, physical mitigation is not considered practical due to a lack of available space within the public highway. The TA Addendum recommends that additional measures to

increase the use of sustainable transport options will need to be examined as the Castle Point Plan progresses.

7.1.11 While all arms of the Northwick Corner roundabout are assessed as within capacity, the junction is directly adjacent to the West Canvey site and the volume of traffic expected to use the junction is predicted to substantially increase. The TA Addendum therefore recommends that additional survey work and modelling is required to enable the impacts of the proposed growth to be assessed.

7.1.12 ECC recently consulted on the draft Local Transport Plan 4[8], which includes an updated county wide transport strategy, Strategic Implementation Plan[9], and area specific implementation plans. Castle Point is addressed in the South Essex Implementation Plan[10].

7.1.13 The proposed transport interventions that would be delivered in Castle Point and/or provide benefits within and through the Borough include:

- Bus rapid transit corridor, the precise location of which is yet to be identified
- Bus corridor along the A129 improving sustainable transport accessibility between Castle Point and Rochford, with particular regard to Rayleigh Rail Station
- Improved public and active travel connections between Canvey Island and the rest of Castle Point
- Expansion of community transport services designed to support the mobility of older Castle Point residents
- Improvements to the A13 and A127 corridors to support north-south journeys across Castle Point

7.1.14 It is acknowledged that further work is required before potential impacts, costs and benefits of the transport interventions proposed in the Local Transport Plan 4 can be assessed. It is also worth noting that the emerging Local Transport Plan 4 interventions are not directly linked to the proposed growth within the emerging Castle Point Plan. However, the TA Addendum notes there is a strong alignment between the transport impacts expected to arise from the proposed Castle Point Plan spatial strategy and the proposed transport interventions outlined within the

[8] Essex Local Transport Plan 4 - A Better Connected Essex (July 2025)
[9] Essex Local Transport Plan 4 - Strategic Implementation Plan (July 2025)
[10] Essex Local Transport Plan 4 - South Essex Implementation Plan (July 2025)

draft Local Transport Plan 4, and that there is potential for the growth proposed within the Castle Point Plan to contribute to the delivery of the proposed transport interventions.

8.0 Libraries

Infrastructure Assessment

8.1.1 The range of housing growth across the scenarios for Castle Point varies between 6,362 and 9,845 homes. The sites are distributed across the Borough rather than one single area of growth. On this basis if the highest growth scenario was implemented a new standalone facility is unlikely to be required. Instead contributions towards the existing four libraries would most likely be appropriate to reflect the distribution of growth across the Borough.

8.1.2 The varying levels of contributions that could be pooled based on the three growth scenarios are set out below, presenting maximum library related contributions of £419 per dwelling which may be requested where the upgrading and / or extension to existing library facilities, fitting out, and additional stock and IT equipment are required. It should be noted that where all these improvements may not be required, requested developer contributions towards library infrastructure improvements may be less.

8.1.3 The additional 1,000 homes proposed for the West Canvey broad location site results in an additional library infrastructure contribution of £419,000 (1,000 x £419). The library contributions required of each updated growth scenario is as follows:

- Scenario 1: 6,362 new dwellings x £419 = £2,665,678
- Scenario 2: 8,519 new dwellings x £419 = £3,569,461
- Scenario 3: 9,845 new dwellings x £419 = £4,125,055

8.1.4 Of the above library infrastructure contributions, £419,000 from each growth scenario is required solely in relation to the additional growth proposed for West Canvey during the plan period.

8.1.5 Aim 2 of Everyone's Essex Library Service Plan 2022-26 (ECC, 2022) identifies broad measures to improve communication and infrastructure of libraries across Essex, including improvements to buildings and reducing carbon footprints. There will be an opportunity to identify specific projects which are linked to growth in Castle Point and align with the improvement measures.

9.0 Emergency Services

9.1 Ambulance, Police, and Fire Services

9.1.1 As part of the production of this IDP Addendum the emergency services were contacted to provide them with the opportunity to outline the potential infrastructure impacts arising from the additional 1,000 dwellings being proposed at the West Canvey site. At the time of publication, feedback had been received from the Ambulance and Police services.

9.1.2 The Ambulance and Police services have provided the following updated infrastructure costs information for each scenario taking into account the additional dwelling numbers at the West Canvey site.

Table 9: Estimated developer contributions required to support emergency services infrastructure

Service	Scenario 1	Scenarios 2	Scenarios 3
Ambulance	£2,359,729	£3,159,782	£3,651,609
Police	£2,392,112	£3,203,144	£3,707,345

9.1.3 The Council will continue to engage with the Fire and Rescue service to inform future versions of the IDP and where necessary to support the production and progression of the Castle Point Plan.

9.1.4 However, using the calculations provided by the Fire and Rescue service for the May 2025 IDP to establish financial contributions for each scenario, the following financial contributions toward the Fire and Rescue service can be calculated to be required to support the proposed growth scenarios. Please note that the figures presented below are high-level estimates, subject to further refinement through ongoing engagement with the relevant infrastructure providers.

Table 10: Estimated developer contributions required to support fire and rescue services infrastructure

Service	Per dwelling cost [11]	Scenario 1	Scenarios 2	Scenarios 3
Fire Service[12]	Scenario 1: £342.65 Scenario 2: £350 Scenario 3: £350	£1,573,791	£2,362,500	£2,826,600

[11] As presented within the May 2025 IDP

[12] For each scenario, and as recommended by ECFRS, 1,769 dwellings associated with extant planning permissions, new park homes, and windfall allowance, are not included within the above calculations, and no specific budget is sought for these supply sources.

10.0 Conclusion

10.1 Consideration of the updated growth scenarios

10.1.1 This IDP Addendum has considered the infrastructure related impacts of the updated three Castle Point Plan growth scenarios, reflecting the additional 1,000 dwellings proposed at the West Canvey site allocation. Through the infrastructure assessment presented within this IDP, no significant issues or concerns have been identified which could have an impact on the approach being taken by the Council to determine a growth strategy within the emerging Castle Point Plan. There are currently no infrastructure related 'showstoppers' identified which would suggest that any of the scenarios, either alone or in combination, could not be delivered through allocations within the emerging Castle Point Plan.

10.1.2 There is no additional updated evidence that we are aware of which confirms whether any additional infrastructure implications related to the following types of infrastructure arise solely in relation to the additional growth proposed in West Canvey:

- Flood management
- Utilities (electricity, gas, communications, potable water, wastewater)
- Waste Management
- Fire service (however further information may be provided by the provider)

10.2 Next steps

10.2.1 This addendum to the May 2025 Castle Point Borough IDP has considered the infrastructure implications estimated to arise from the updated growth scenarios. Following the finalisation of the Castle Point Plan growth strategy, the Council will continue to work with infrastructure providers, relevant stakeholders, and developers associated with sites proposed for allocation in the draft Castle Point Plan to update, expand, and improve the information contained within the IDP.

DAC Planning Limited

Hop House,
Colchester Road, West Bergholt,
Colchester, CO6 3TJ
United Kingdom
dacplanning.com
01206 688103

DAC
Planning