

A12 Chelmsford to A120 widening scheme TR010060

6.3 ENVIRONMENTAL STATEMENT APPENDIX 13.3 LAND USE AND ACCESSIBILITY ASSESSMENT TABLES

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A12 Chelmsford to A120 widening scheme

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ENVIRONMENTAL STATEMENT

APPENDIX 13.3 LAND USE AND ACCESSIBILITY ASSESSMENT

TABLES

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1 Boreham land use and accessibility assessment

1.1 Introduction

- 1.1.1 Tables A.1 to A.4 provide an assessment of impacts on land use and accessibility matters for Boreham. This includes all identified assets which coincide with the Order Limits within the both the village of Boreham itself and the civil parish of Boreham.
- 1.1.2 An important assumption to note is that although there may be a major impact on a particular land use and accessibility asset, which would be greatly significant to the owners/users of that asset, this does not imply significance at a decision-making level, as there may be sufficient alternative resource to serve overall community needs. Instead, the assessment of significance considers the combined effect of impacts on assets on the overall resource relating to each land use and accessibility matter. The significance assessment is provided in the top row of each table.
- 1.1.3 All measurements in this assessment are approximate, based on GIS datasets, and do not reflect final details of any land acquisition agreements. Reasonable care has been taken to identify assets and landholdings affected for the purposes of environmental assessment. However, the assessment of impacts on individual assets is based on information available at the time of preparation of the Environmental Statement and does not necessarily reflect final outcomes of negotiations between interested parties and their agents. Nevertheless, it is considered that the information provided is sufficient to provide an overall assessment of significance on land use and accessibility for the purposes of EIA.
- 1.1.4 The assessment is focused on impacts on the type of land use, rather than effects on occupants and businesses. In some cases, the assets identified may no longer be occupied by residents. Reference should also be made to the health assessment in Chapter 13 of the Environmental Statement [TR010060/APP/6.1] for potential health and wellbeing impacts associated with impacts on land use.
- 1.1.5 Key impacts are illustrated on Figure 13.2 of the Environmental Statement [TR010060/APP/6.2]. Full details of where PRoW would be permanently stopped up or diverted, together with any chainages referred to in the following tables are shown on the General Arrangement Plans [TR010060/APP/2.9]. Full details of temporary PRoW and footway diversions are shown on the Construction Phase Plans, which are available in Volume 2 of the DCO application [TR010060/APP/2.15]).

Table A.1 Private property and housing (Boreham)

Overall significance assessment: There are 1,449 existing residential properties within the Boreham community within the land use and accessibility study area. No direct land-take impacts on residential land use of the Boreham community are anticipated. Some intermittent impacts on access affecting three residential properties on Paynes Lane, off Main Road, Boreham are anticipated during the construction phase, but this would not be of a degree that would compromise residential land use and so no change would be noticeable to the overall private property and housing resource. No operational impacts on private property and housing are anticipated. On this basis, the significance of effect to the private property and housing resource in the Boreham community is assessed as neutral significance for both construction and operation.					
Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Three residential properties on Paynes Lane, off Main Road, Boreham	Existing housing.	Medium	Construction: Paynes Lane would be used by the Principal Contractor as access to a site compound and lay down area. There would likely be intermittent inconvenience during construction for these residents, but overall access would be generally maintained, and residential use could continue through the construction stage.	Appropriate temporary or permanent access arrangements would be provided where practicable. Paynes Lane would be reinstated.	Negligible adverse
			Operation: No operational impacts identified.	None required	No change
Chelmsford planning application (ref: 20/00898/OUT)	Site at North Bungalow Elm Way. Permission to construct 9no. dwellings. Application abuts Order Limits south of the existing A12 between Villiers Place and Elm Way.	Medium	Construction: No construction impacts identified.	None required	No change
			Operation: No operational impacts identified.	None required	No change
Chelmsford planning application (ref: 20/00340/FUL)	Land South of 124 Plantation Road. Construction of a single 2-storey dwelling. Main access route to application is from Plantation Road within Order Limits.	Medium	Construction: No construction impacts identified.	None required	No change
			Operation: No operational impacts identified.	None required	No change
Chelmsford planning application (ref: 14/01552/OUT)	Land East of Plantation Road. Application for the construction of 145 residential dwellings. Main access route to application is from Plantation Road within Order Limits.	High	Construction: No construction impacts identified.	None required	No change
			Operation: No operational impacts identified.	None required	No change
Chelmsford planning application (ref: 09/01314/EIA)	Greater Beaulieu Park, White Hart Lane. Outline application for mixed use development with approximately 3600 residential units. Application straddles Order Limits at roundabout and slip road at junction 19 of the existing A12.	Very high	Construction: There would be an interaction with proposals for junction 19, including Generals Lane Bridge, and this large mixed-use development. However, the design of the proposed highway works for the proposed scheme has been designed to tie in with proposals for Greater Beaulieu Park and is complementary. Therefore, no unintended impact is anticipated.	None required	No change
			Operation: No operational impacts identified. The proposed scheme would be complementary to housing development proposals in this area.	None required	No change

Table A.2 Community land and assets (Boreham)

Overall Significance Assessment: No change has been identified for community land and assets within the community of Boreham. On this basis, the significance of effect on community land and assets resource in the Boreham community is assessed as neutral significance for both construction and operation.					
Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Boreham recreation ground, Main Road, Boreham	Site includes a playing field, basketball court and children's playground. This is the principal recreational space serving the Boreham community and is used daily.	High	Construction: No impact is predicted on the recreation ground or its access due to the construction of the proposed scheme.	None required	No change
			Operation: No direct impact is predicted on the recreation ground or its access due to the operation of the proposed scheme. There is a proposal for lower speed restrictions on Main Road, but this would have no notable impact on the recreational asset.	None required	No change
Children's playground, Dukes Wood Close, off Main Road, Boreham	Neighbourhood play space within 50m of the existing A12 corridor. Likely serving young children in the immediate neighbourhood. Although this may be used daily, Boreham recreation ground is within walking distance (<500m) as an alternative resource.	Medium	Construction: During construction there is potential for minor construction activities within the existing A12 corridor to access and install signage and technology along the existing A12. While these activities would be within 50m of the playground, they would be relatively minor in nature, contained within the A12 corridor and shielded from the playground by existing fencing and housing. Therefore, no impact on the playground is anticipated.	None required	No change
			Operation: No direct impact is predicted on the recreation ground or its access due to the operation of the proposed scheme. There is a proposal for lower speed restrictions on Main Road, but this would have no notable impact on the recreational asset.	None required	No change
Boreham Village Hall, Main Road, Boreham	Located adjacent to the recreation ground. Accessed off Main Road which is within the Order Limits.	High	Construction: No impact is predicted on the village hall or its access due to the construction of the proposed scheme.	None required	No change
			Operation: No direct impact is predicted on the village hall or its access due to the operation of the proposed scheme. There is a proposal for lower speed restrictions on Main Road, but this would have no notable impact on the recreational asset.	None required	No change

Table A.3 Development land and business (Boreham)

Overall Significance Assessment: During construction, several businesses located adjacent to junction 19 (Boreham Interchange) are likely to experience short to medium term disruption while works to the interchange take place. Construction works would include large-scale changes to the roundabout and junction arrangement including additional lanes on the overbridge as well as the widening of Boreham Bridge. There would be some minor land-take to allow for widening, earthworks or embankments and landscaping. Most of the adjacent businesses are not likely to be particularly sensitive to construction noise and dust. However, the two Travelodges and Boreham House (wedding venue) may be sensitive, particularly if there are night-time works. No significant impacts on the function of business land has been identified through the assessment and so the combined magnitude of impacts on businesses is assessed as minor during construction and no change during operation.

On this basis the overall effect on development land and business is assessed to be **slight adverse** during construction and **neutral** during operation.

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
North / West of A12 Service Station & lorry park, Boreham interchange Ch. 10600 - 10800	Service station and lorry park which abuts the Order Limits to the west of Generals Lane Roundabout and the A130 in the junction 19 Boreham interchange area.	Medium	Construction: The proposed scheme would require major highway works to junction 19 (Boreham interchange). These works would extend across the verge, down as far as the kerb. No impact is anticipated on the day to day functioning of premises during the works, apart from a nuisance to vehicles parked up, especially close to the perimeter, from noise and potential dust. This would be a particular issue in the event of night-time working as the site is used by lorry drivers for overnight parking.	Provide advance notice to service station operator of any proposed night works via the Community Relations Officer. Measures to control dust and noise as set out in Chapter 6: Air quality, and Chapter 12: Noise and vibration, of this Environmental Statement [TR010060/APP/6.1].	Minor adverse
			Operation: No impact anticipated during operation.	None required	No change
North / West of A12 Premier Inn Chelmsford (Springfield) Boreham interchange Ch. 10750	Premier Inn hotel located adjacent to the service station. The grounds of the hotel abut the Order Limits on the south-west side of Generals Lane Roundabout in the junction 19 Boreham interchange area and the hotel overlooks the A138.	Medium	Construction: Works for the proposed widening of the A138 road embankment would encroach on 70% of the garden area. 50% of the garden area would be acquired permanently. It is not anticipated that this would impact on the function of the hotel. The proposed scheme would bring the highway embankments closer to the hotel building. There is a risk to the hotel business in the event of night-time working as hotel residents may be disturbed.	Provide advance notice to hotel operator of any proposed night works via the Community Relations Officer. Measures to control dust and noise as set out in Chapter 6: Air quality, and Chapter 12: Noise and vibration, of this Environmental Statement [TR010060/APP/6.1].	Minor adverse
			Operation: No impact anticipated during operation.	None required	No change
North / West of A12 McDonalds, Boreham interchange	McDonalds fast-food restaurant with drive through feature located adjacent to the service station. The grounds of the restaurant abuts the Order Limits to the west of Generals Lane Roundabout and the A130 in the junction 19 Boreham interchange area.	Medium	Construction: No direct impact anticipated as limited works immediately adjacent to the restaurant. Indirect impacts on amenity and access. Main construction activities shielded from McDonalds by other business buildings adjacent to the interchange.	Measures to control dust and noise as set out in Chapter 6: Air quality, and Chapter 12: Noise and vibration, of this Environmental Statement [TR010060/APP/6.1].	Negligible adverse
			Operation: No impact anticipated during operation.	None required	No change
North / West of A12 Council Recycling site, Freight House	Chelmsford Council Recycling Site and Freight House Depot Waste Management Service buildings/offices. The grounds of these sites abut the Order Limits on the south-west side of	Medium	Construction: Site works would be undertaken in the verge adjacent to the north-west corner of the car park. No impact on function of the facility is anticipated and facility is not anticipated to be sensitive to amenity impacts.	Measures to control dust and noise as set out in Chapter 6: Air quality, and Chapter 12: Noise and vibration, of this Environmental Statement [TR010060/APP/6.1].	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Depot, off Drovers Way Ch. 10625	Generals Lane Roundabout in the junction 19 Boreham interchange area.		Operation: No impact anticipated during operation.	None required	No change
South of A12 Boss Hoggs, Takeaway immediately south of J19	Fast-food/kebab takeaway van. The grounds of the takeaway van abut the Order Limits to the south of Generals Lane Roundabout and the B1137/Main Road in the junction 19 Boreham interchange area. This business is assigned low value in terms of employment land as it is unlikely to employ many people and can potentially be viable at a different location.	Low	Construction: Short to medium-term disruption to access during the realignment of J19 interchange and associated works.	Appropriate temporary or permanent access arrangements would be provided for customers where practicable.	Minor adverse
			Operation: No impact anticipated during operation.	None required	No change
South-East of A12 Boreham Car Boot Sale	Site of the weekly Boreham Car-Boot Sale. The site abuts the Order Limits to the south of Generals Lane Roundabout and the B1137/Main Road in the junction 19 Boreham interchange area. Boreham Car Boot Sale is open Sundays and Bank Holiday Mondays from March to November. This business is assigned low value in terms of employment sensitivity as it likely provides additional income for people, and due to the nature of the trade, there are likely to be other alternative locations in the wider area.	Low	Construction: The access road into the car boot site lies within the footprint of an extensive haul road, from J19, which leads to a site compound and an extensive area of works further south. The car boot site would be transected by a new access road leading to a new attenuation pond. It is unlikely that the full site could be used, and potentially none of the site would be viable during construction.	None identified Occupation of this site and any potential access for continued use during construction by the owners is subject to negotiation between National Highways, its contractors and the site landowner.	Moderate adverse
			Operation: Once the proposed scheme is operational the site could be returned as a car boot site, albeit with 20% less land available due to the new access road leading to a new attenuation pond.	Appropriate temporary or permanent access arrangements would be provided where practicable between car boot sale land parcels.	Negligible
South of A12 BWBS Ltd, Boreham	BWBS Truck Repair Shop located along a lane south of Generals Farm Roundabout.	Low	Construction: Access to BWBS is off J19 and there would be short to medium-term temporary disruption to the business during the realignment works of J19.	Appropriate alternative temporary or permanent access would be provided for businesses where practicable.	Minor adverse
			Operation: Once the scheme is operational there would be no impact.	None required	No change
South of A12 Boreham House	Grade I Listed mansion set in a grade II historic park and garden. The house is used as a wedding venue. This is assigned a high sensitivity on account of the importance of the setting to the function of the business.	High	Construction: Temporary disruption to access whilst widening works are undertaken to the B1137 Main Road. Potential impacts on setting are assessed in Chapter 7: Cultural heritage, of this Environmental Statement [TR010060/APP/6.1].	Appropriate alternative temporary or permanent access would be provided for businesses where practicable Mitigation measures to protect setting are set out in Chapter 7: Cultural heritage, of this Environmental Statement [TR010060/APP/6.1].	Minor adverse
			Operation: No impact anticipated during operation.	None required	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
South of A12 Sanis Motors	Car repair and maintenance service.	Medium	Construction: Short to medium-term disruption to access off J19 during the realignment of new interchange.	Appropriate alternative temporary or permanent access would be provided for businesses where practicable	Negligible adverse
			Operation: Once the scheme is operational there would be no impact.	None required	No change
South of A12 Premier Inn (Boreham), B1137 Main Road	Premier Inn hotel south of the A12. The grounds of the hotel abut the Order Limits on the east side of Main Road/B1137 Roundabout in the junction 19 Boreham interchange area and the hotel overlooks the A12.	Medium	Construction: Highway realignment and construction of retaining wall for approach to Generals Farm Roundabout would require some permanent and temporary land-take to grounds at the rear of the Premier Inn. Loss of vegetation and construction would affect amenity for hotel users overlooking the highway. However, given the context of the hotel at a major interchange, this is not anticipated to be a key factor influencing business use. There is a risk to the hotel business in the event of night-time working as hotel residents may be disturbed. However, this is anticipated to be only occasional as works would generally take place during daytime hours.	Provide advance notice to hotel operator of any proposed night works. Measures to control dust and noise as set out in Chapter 6: Air quality, and Chapter 12: Noise and vibration, of this Environmental Statement [TR010060/APP/6.1].	Minor adverse
			Operation: The presence of a retaining wall instead of trees/shrubs in the baseline would impact on amenity for some hotel users. However, given the context of the hotel at a major interchange, this is not anticipated to be a key factor influencing business use.	None identified	Negligible adverse
The Grange, Boreham	Pub and restaurant adjacent to the Premier Inn.	Medium	Construction: Highway realignment and construction of retaining wall for approach to Generals Farm Roundabout would require some permanent and temporary land-take to grounds at the rear of the Premier Inn. Loss of vegetation and construction noise could affect amenity for customers, but this is judged unlikely as the kitchen areas are at the rear of the building and not sensitive.	Measures to control dust and noise as set out in Chapter 6: Air quality, and Chapter 12: Noise and vibration, of this Environmental Statement [TR010060/APP/6.1].	Minor adverse
			Operation: No operational impact on function of business land is anticipated.	None required	No change
Small businesses at General Farm	Small businesses located in Generals Farm buildings with vehicular access of Main Road. Includes a small car parking facility (<1ha business building).	Low	Construction: The car park to the west of the Little Generals building would be temporarily occupied during the construction works. The remaining car parking area would be limited.	No mitigation proposed. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply.	Minor adverse
			Operation: There would be permanent access rights to land west of the carpark. It is unclear if this space is used by the adjacent business, however occasional access would be unlikely to affect general day-to-day function of the land.	None identified.	Negligible adverse

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
West of A12 Hanson Aggregates, off Generals Lane. Junction of Generals Lane with the access to road to Hanson Aggregates	Sand and gravel supplier which is accessed by Generals Lane which is within the Order Limits.	High	Construction: The road off Generals Lane, leading to Hanson Aggregates would be used as a haul road for the A12 widening works. This lane also leads to a large residential estate, currently being constructed, and the proposed Longfield Solar Farm (see Chapter 16: Cumulative effects assessment, of this Environmental Statement [TR010060/APP/6.1]). There could be short to medium term disruption to access along this shared road. However, construction access is mainly required for Paynes Lane Footbridge construction and therefore the access impact is not expected to be substantial.	None identified. Access arrangements for use during construction is subject to negotiation between National Highways, its contractors and the site landowner.	Minor adverse
			Operation: No operational impact on function of business land is anticipated.	None required	No change
Chelmsford planning application (ref: 09/01314/EIA) Chelmsford planning application (ref: 10/00021/EIA)	Greater Beaulieu Park, White Hart Lane. Outline application for mixed use development (ref: 09/01314/EIA) expected to provide up to 3,501 jobs (Beaulieu Park Environmental Statement). Application straddles the Order Limits at the roundabout and slip road at junction 19 of the existing A12. Proposed railway (ref: 10/00021/EIA) falls within the overall site north-west of Boreham interchange	Very high	Construction: An access route would be acquired during construction, following an existing track for the most part, but with an area of temporary land-take to allow for soil storage, laydown area and construction of Payne's Lane footbridge. Land would be restored to former use on completion of works. No impact on future employment use of application sites is anticipated.	Liaison with third party developers is ongoing to appropriately plan construction (see Chapter 16 of this Environmental Statement [TR010060/APP/6.1]).	Negligible adverse
			Operation: No impact on future employment use is anticipated from operation of proposed scheme.	None required	No change

Table A.4 Walkers, Cyclists and Horse-riders (WCH) (Boreham)

Overall significance assessment: The proposals for walking, cycling and horse-riding assets would be most significant in and around junction 19 (Boreham interchange). While there would be substantial disruption to walking and cycling routes across Boreham Bridge and Generals Lane Roundabout, once completed, the inclusion of controlled crossing facilities on Boreham Bridge, Generals Farm Roundabout and Generals Lane Roundabout would reduce the severance impact of fast moving, busy traffic conditions on walkers and cyclists, while the proposed Payne's Lane Footbridge would restore bridleways north and south of the existing A12 to a useable route for walkers, cyclists and horse riders. The people who would be most affected by these proposals (adversely during construction, and beneficially during operation) would include active travel commuters and recreational users, including the future population of the Beaulieu Park development. No significant impact is predicted for WCH assets in Boreham itself.

Overall, impacts for WCH are judged to be **moderate adverse** during construction and **moderate beneficial** during operation. This is on the basis that the overall function for WCH would be improved in the long term, which would likely facilitate more use by those who may previously have struggled with or been discouraged by the absence of controlled crossings at junction 19 such as children, women, the elderly and people with disabilities.

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
FP 234_17 (Springfield) includes part of Centenary Circle (regional trail)	Crosses close to the southernmost extent of the Order Limits between Chelmer Village and River Chelmer, just south of Springfield Business Park. This public footpath includes part of Centenary Circle as it crosses the A12 via an underpass. This provides access to the countryside east of the A12 for residents of Chelmer Village, Chelmsford. It is assumed that this route is mostly used for recreational purposes. Evidence from Strava Global Heatmap indicates this is a well-used route by walkers and cyclists (presumably mountain bikers), although this is a public footpath, not a bridleway.	High	Construction: No significant disruption is anticipated to the Public Rights of Way (PRoW) although landscaping works are proposed in the area immediately north of the footpath to provide for proposed tree planting, attenuation pond and ecological mitigation. There would be a temporary short diversion required around some drainage works.	Appropriate alternative temporary or permanent access would be provided where practicable throughout construction with people protected from the works activities by temporary fencing.	Negligible adverse
			Operation: No operational impact is anticipated.	None required	No change
FP 234_18 (Springfield) includes part of Centenary Circle (regional trail)	Centenary Circle follows this public footpath along the left bank of the River Chelmer until it meets and follows FP 234_17. FP 234_18 continues eastwards following the left bank of the River Chelmer. It is likely used as a recreational walking route and evidence from Strava Global Heatmap indicates it is well used.	High	Construction: No significant disruption is anticipated to the PRoW although landscaping works are proposed in the area. There would be temporary disruption of the footpath for construction of a drainage outfall. This is expected to be very short-term but would require a temporary diversion.	Appropriate alternative temporary or permanent access would be provided where practicable throughout construction, with arrangements made for continued access during installation of the drainage outfall. Quality of PRoW to be made good on completion of drainage works.	Minor adverse
			Operation: No operational impact is anticipated.	None required	No change

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Chelmsford to Boreham cycleway over Boreham Bridge and existing footways/cycleways at junction 19 (Boreham interchange)	Boreham Bridge carries the Chelmsford to Boreham cycle route over the A12 at junction 19 (Boreham interchange). There are shared use routes on both sides of Boreham Bridge which are relatively narrow (currently only 0.85m wide in places) and walkers and cyclists need to cross via uncontrolled crossings of the A130, A138 and B1137, which would be intimidating and difficult for vulnerable groups such as children and mobility impaired. Strava Global Heatmap data indicate this route is very highly used by both cyclists and pedestrians. It provides the main link for any cyclists wishing to travel between Boreham, Hatfield Peverel and Witham to Chelmsford and would be an important active travel commuting route.	Very high	Construction: Temporary closures of the shared use footways on Boreham Bridge would be required to allow for widening of the bridge and other construction activities. Only one footway would be closed at a time. Therefore, access for pedestrians and cyclists across the interchange area would be maintained, albeit with a need for some diversions. Given the extent of works required at the interchange area it is anticipated that a combination of diversions and closures could extend over a distance between 250m and 500m, which could add a degree of inconvenience which may be frustrating for time-pressured commuters. It is anticipated that works in this area would last for approximately six months.	<p>The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Moderate adverse
			Operation: Realignment of approximately 250m of existing cycleway along Main Road with improved provision and connectivity for walkers and cyclists at junction 19 (Boreham interchange). Additional sections of footway/cycleway would be provided, while other sections would be improved. An addition of five controlled crossing locations would be provided for safer crossing of the A130, A138 and B1137 on and around junction 19. Appropriate dropped kerbs/tactile paving to be provided. The footway/cycle way on Boreham Bridge would be widened with appropriate parapet heights for WCH. The proposed improved crossings and improvements at Boreham Bridge would support access for more users and is therefore judged as moderate beneficial magnitude for a high value route.	None required	Moderate beneficial
FP 213_31 and FP213_29 (Boreham)	These footpaths cross fields in the study area to the east-south-east of junction 19, connecting with the shared use footway along B1137 Main Road, Boreham. They are likely used for recreational purposes such as dog walking.	Medium	Construction: No significant direct impact is anticipated. There would potentially be very short-term temporary disruption to the footpath access points onto Main Road from construction vehicles, particularly for FP 213_31, but this would not affect the overall footpath route and access to the footpath would be maintained.	Appropriate alternative temporary or permanent access would be provided where practicable	Negligible adverse
			Operation: Existing footpaths join realigned footway along Main Road. No change to footpath routes proposed.	None required	No change

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Generals Lane	This is an increasingly important link for commuting cyclists to access Springfield Industrial Estate and Chelmsford generally. It provides access between the new Beaulieu district's Radial Distributor Road (which has a cycle route) and the A130 Colchester Road. Strava Global Heatmap data indicates this is a well-used route by cyclists and pedestrians. There are alternative routes into Chelmsford also used, so this is assessed as high value. It is likely used for both active travel and recreational purposes.	High	Construction: Temporary closures of the shared use footways on Generals Lane Roundabout are expected to allow for construction activities. However, it is expected that access to traffic (including cyclists and pedestrians) would be maintained, albeit with short diversions. This may cause inconvenience for a distance of over 250m.	Mitigation is as reported for the Chelmsford to Boreham cycleway over Boreham Bridge and existing footways/ cycleways at junction 19 (Boreham interchange).	Moderate adverse
			Operation: A signalised crossing would be provided at Generals Lane Roundabout among the improvements to junction 19 (Boreham Interchange) described above, which may improve accessibility for some WCH wishing to use Generals Lane. No impact to Generals Lane itself.	None required	Negligible beneficial
Payne's Lane/BR 213_23 and BR 213_45 (Boreham)	Bridleway north (213_45) and south (213_23) is historically severed by the A12 and Strava Global Heatmap shows no evidence of use along the northern section and use in the southern section is likely restricted to residents of Payne's Lane. There is no break in the central reservation barrier of the A12 and therefore it offers a low baseline value as a route as it is severed.	Low (baseline) Medium (with proposals)	Construction: Bridleway 213_45 would be closed during construction to allow for use as a construction lay down area, while bridleway 213_23 would also be closed during construction and used as a haul route. This would completely remove this WCH resource during construction, although as noted, the bridleway only has a low baseline value and so very few people would be impacted on by this loss.	No mitigation is proposed.	Major adverse
			Operation: Bridleways 213_45 and 213_23 would be restored and operational. The proposed scheme includes a new shared WCH bridge (Payne's Lane Footbridge) which would remove historic severance cause by the A12. This new footbridge would provide a route across the A12 which is approximately 1.2km shorter than the previous route via junction 19 (which was unsuitable for horse riders). The proposed footbridge would increase the value of this PRoW to at least 'Medium' by making it a functional route.	None required	Major beneficial

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
BR 213_48 (Boreham)	Bridleway crosses the study area west-east approximately 275m north of the existing A12, along the southern boundary of Bulls Lodge Quarry before heading northwards along a track through a wooded area east of the quarry. It links to BR 213_23 (Boreham). Data from Strava Global Heatmap suggest this is relatively well used by pedestrians and cyclists. It may also be used by horse riders as it is one of the few bridleways in the study area.	Medium	Construction: Part of the bridleway (approximately 350m) follows a track (the access track to the National Grid Bulls Lodge substation) that would be within the Order Limits. Impacts on WCH are expected to be occasional, intermittent disruption to allow for safe passing of construction vehicles, which may cause temporary inconvenience to WCH, but overall WCH journeys would be maintained. It is anticipated that construction vehicles would be using this route for approximately seven months. (See also Chapter 16: Cumulative effects assessment, of this Environmental Statement [TR010060/APP/6.1] for potential cumulative impacts on this PRoW with the proposed Longfield Solar Farm development).	All WCH routes would be maintained where safe and reasonably practicable to do so. Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7]. This may include temporary fencing to segregate construction vehicles from WCH where required for safety.	Minor adverse
			Operation: No direct impact is anticipated. Improvements to BR213_23 described above would indirectly benefit BR213_48 as WCH would likely use both PRoW as parts of their overall journeys. (This has not been assessed to avoid double-counting with BR 213_23 and BR 213_45 assessed above).	None required	No change
FP 213_24 and FP 213_25 (Boreham)	Footpaths north and south of the existing A12 approximately 170m west of Boreham. There is no break in the central reservation of the existing A12 to allow for crossing of the trunk road. Crossing of the railway is also required. Data from Strava Global Heatmap indicate occasional use of FP 213_24 as far as the railway, and no evidence of use of FP 213_25. On the basis that these footpaths do not currently offer a meaningful route and have virtually fallen into disuse, they are judged to offer low baseline value as a route for walkers.	Low	Construction: FP 213_24 coincides with a track within the Order Limits and impacts are expected to be as described above for BR213_48. The junction 19 Satellite Compound is proposed to be located immediately adjacent to FP 213_25 and part of the public footpath would be temporarily suspended during construction. As these footpaths are scarcely used, very few people would be impacted on, hence it impacts are not judged to be significant.	All WCH routes would be maintained where safe and reasonably practicable to do so. Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7]. This may include temporary fencing to segregate construction vehicles from WCH where required for safety.	Moderate adverse
			Operation: No operational impact is anticipated.	None required	No change
FP 213_28 (Boreham)	200m public footpath through housing in Boreham connecting to B1137 Main Road. Likely used by residents as a short-cut between Church Road and Main Road.	Medium	Construction: No noticeable impact is anticipated.	None required	No change
			Operation: No operational impact is anticipated.	None required	No change
FP 213_21 (Boreham)	Footpath follows a north-south route, crosses under the railway but terminates at the existing A12, north of Boreham. Very scarce evidence of use from Strava Global Heatmap data.	Low	Construction: No noticeable impact is anticipated.	None required	No change
			Operation: No operational impact is anticipated.	None required	No change
		Medium	Construction: No noticeable impact is anticipated.	None required	No change

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
FP 213_39 (Boreham)	Footpath follows a north-south 850m route along the eastern edge of Boreham, linking from Main Road, Boreham to FP 213_40 near Church Road, Boreham. Strava Global Heatmap data indicate this is well used by walkers. It is likely popular with dogwalkers.		Operation: No operational impact is anticipated.	None required	No change
Waltham Road/Porter's Park Bridge	Provides an access across the A12 for walkers and cyclists. However, there are no drop kerbs to reach the footway on the bridge, so access is difficult for mobility impaired. Strava Global Heatmap data indicate this is well used by walkers and cyclists (particularly cyclists).	High	Construction: No noticeable impact is anticipated.	None required	No change
			Operation: No operational impact is anticipated.	None required	No change
Damases Lane	Narrow lane crosses the study area approximately 1km east of Boreham and has a junction with B1137 Main Road. A public footpath (FP 213_41) is accessed from this lane, so the lane may offer part of a meaningful recreational circuit for walkers, as well as being well used by cyclists (as indicated by Strava Global Heatmap data). Also provides access for residents for several properties along the lane.	Medium	Construction: No noticeable impact is anticipated.	None required	No change
			Operation: No operational impact is anticipated.	None required	No change

2 Hatfield Peverel land use and accessibility assessment

2.1 Introduction

- 2.1.1 Tables A.5 to A.8 provide an assessment of impacts on land use and accessibility matters for Hatfield Peverel. This includes all identified assets which coincide with the Order Limits within the village of Hatfield Peverel and that part of the Hatfield Peverel civil parish which also coincides with the Order Limits.
- 2.1.2 An important assumption to note is that although there may be a major impact on a particular land use and accessibility asset, which would be greatly significant to the owners/users of that asset, this does not imply significance at a decision-making level, as there may be sufficient alternative resource to serve overall community needs. Instead, the assessment of significance considers the combined effect of impacts on assets on the overall resource relating to each land use and accessibility matter. The significance assessment is provided in the top row of each table.
- 2.1.3 All measurements in this assessment are approximate, based on GIS datasets, and do not reflect final details of any land acquisition agreements. Reasonable care has been taken to identify assets and landholdings affected for the purposes of environmental assessment. However, the assessment of impacts on individual assets is based on information available at the time of preparation of the Environmental Statement and does not necessarily reflect final outcomes of negotiations between interested parties and their agents. Nevertheless, it is considered that the information provided is sufficient to provide an overall assessment of significance on land use and accessibility for the purposes of EIA.
- 2.1.4 The assessment is focused on impacts on the type of land use, rather than effects on occupants and businesses. In some cases, the assets identified may no longer be occupied by residents. Reference should also be made to the health assessment in Chapter 13 of the Environmental Statement [TR010060/APP/6.1] for potential health and wellbeing impacts associated with impacts on land use.
- 2.1.5 Key impacts are illustrated on Figure 13.2 of the Environmental Statement [TR010060/APP/6.2]. Full details of where PRoW would be permanently stopped up or diverted, together with any chainages referred to in the following tables are shown on the General Arrangement Plans [TR010060/APP/2.9]. Full details of temporary PRoW and footway diversions are shown on the Construction Phase Plans, which are available in Volume 2 of the DCO application [TR010060/APP/2.15]).

Table A.5 Private property and housing (Hatfield Peverel)

Overall significance assessment: There are 1,288 existing residential properties within the part of Hatfield Peverel parish which coincides with the land use and accessibility study area. Direct land-take from ten residential properties would be required during construction. For four of these properties, there would be temporary land-take during the construction stage. Five houses would be permanently acquired, while one house would be temporarily acquired (with the occupier/s temporarily rehoused during the construction period). Furthermore, access would be disrupted for all residents north of the A12 in Hatfield Peverel while Bury Road Bridge and Station Road Bridge replacement works take place, while a further two properties south of the A12 would have their access temporarily disrupted, and a further group of properties on the eastern edge of the parish, near Witham. Although alternative access would be provided, this would cause indirect disruption to over 400 properties during the construction stage, which is assessed as moderate in terms of combined magnitude, taking account of proposals to mitigate severance. It is anticipated that all housing permanently acquired during the construction stage would be returned to the housing stock following construction, and therefore no permanent loss of housing in Hatfield Peverel is anticipated. On this basis the significance of effect on private property and housing in Hatfield Peverel is assessed as large adverse during construction and neutral during operation.					
Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Housing at Bury Lane, north of the A12 Braintree Publication Draft Local Plan (2017) Comprehensive Redevelopment Area. Policy LPP 31 Braintree planning applications (refs 17/00341/OUT; 17/00973/FUL; and 16/02096/OUT; 19/01803/FUL)	12 existing residential properties are present, along with proposed and development under construction at Bury Farm, Bury Lane. Proposed development involves the comprehensive redevelopment of the former Arla Foods dairy site to provide up to 200 residential units. Applications straddle the Order Limits at Bury Lane.	Very high	Construction: Without mitigation there would be loss of access for residential properties on the north side of the A12 during Bury Lane Overbridge Replacement activities. This would last for approximately six months. This would have an impact on 12 existing residential properties off Bury Lane, and two sites (Hatfield Grove and Bury Farm) with planning permission for 50 dwellings each (planning refs: 17/00973/FUL and 19/01803/FUL), one of which is currently under construction. Without mitigation, temporary full prevention of access to residential properties is likely during bridge replacement itself, as well as occasional, intermittent disruption to access due to construction activities at this location, however long-term residential land use would remain viable.	Appropriate alternative temporary or permanent access would be provided where practicable. Package of measures to mitigate severance caused by Bury Lane bridge closure as set out in Section 13.9 of Chapter 13 Population and Human Health, of the Environmental Statement [TR010060/APP/6.1]	Minor adverse
			Operation: No operational impact is anticipated.	None required	No change
Nos 1 and 2 Sorrells Cottages, Bury Lane located immediately north-east of Bury Lane Bridge Ch.16100	Existing housing (these form part of the above 12 properties). No. 1 Sorrell property also considered under business / commercial (Suited & booted DJ's / wedding DJ) see Table A.6.	High	Construction: No 1 Sorrells Cottages (nearest to the bridge) would be permanently acquired to allow for construction of a retaining wall, construction access and other works associated with the Bury Lane Overbridge replacement. No. 2 Sorrells Cottages would be temporarily acquired during construction. This would result in loss to residential use for the duration of construction activities in that location.	No mitigation proposed. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation.	Major adverse (temporary)
			Operation: Post construction, both no. 1 and no. 2 Sorrells Cottages would be available for residential use and therefore no permanent loss of residential land use is anticipated.	None required	No change

Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Peverel Lodge, Bury Lane south-west side of Bury Lane Bridge	Existing house with access onto Bury Lane.	High	Construction: This property would be permanently acquired to allow construction of replacement Bury Road Overbridge and retaining walls. This would result in loss to residential use for the duration of construction activities in that location.	No mitigation proposed. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation.	Major adverse (temporary)
			Operation: Post construction residential use of this property would be restored and therefore no permanent loss of residential land use is anticipated.	None required	No change
No 3 Bury Lane immediately south-east of the Bury Lane Bridge	Existing housing.	High	Construction: Temporary occupation to the front area of the house and side access to enable construction activities associated with widening of the A12 and demolition / reconstruction of Bury Lane Bridge. There would be short to medium term disruption to access the property, but residential use would continue.	Appropriate temporary or permanent access would be provided where practicable.	Minor adverse (temporary)
			Operation: No operational impact is anticipated.	None required	No change
Two properties on the lane Meadow Bank, south-east of Bury Lane Bridge	Existing housing. The two residential properties are located along the shared access track with No 3 Bury Lane.	High	Construction: Temporary occupation of the access off Bury Lane leading to the properties, to enable construction activities associated with widening of the A12 and demolition / reconstruction of Bury Lane Bridge.	Appropriate temporary or permanent access would be provided where practicable.	Negligible adverse (temporary)
			Operation: No operational impact is anticipated.	None required	No change
Station Road North side of A12	Existing housing including Station Road, Bury Lane, The Pines, Rainbow Mead, Rookery Close, Woodland Close and Yew Tree Close.	Very High	Construction: Station Road Bridge (BE07) to be demolished and replaced by Station Road Overbridge (BN03). Works are expected to last approximately six months. Without mitigation there would be a loss of access south across the bridge for existing residential area (158 homes) in Hatfield Peverel north of the A12, during the demolition / reconstruction works. A further 145 new homes, currently under construction at Hatfield Grove (the former Arla Dairy site) (Braintree planning reference: 19/01786/VAR), would also be affected.	Appropriate alternative temporary or permanent access would be provided where practicable. Package of measures to mitigate severance caused by Station Road Bridge closure as set out in Section 13.9 of Chapter 13 Population and Human Health, of the Environmental Statement [TR010060/APP/6.1]	Minor adverse (temporary)
			Operation: No operational impact is anticipated.	None required	No change
Property immediately north-west of Station Road Bridge and strip of land adjacent to the	Existing housing.	High	Construction: Access to the front area of the property would be temporarily lost during construction. The front drive/garden area would be used to provide room for the demolition / replacement of Station Road Bridge and also to allow access to the strip of land adjacent to the road, for widening of the A12 embankment.	Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply. Appropriate alternative temporary or permanent access would be provided where practicable.	Moderate adverse (temporary)

Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
south side of the rear garden.			Operation: There is potential for intermittent disruption should maintenance activities be required as a permanent right of access would be provided across the driveway of this property.	Appropriate permanent access would be maintained where practicable. The principles of the compensation code will apply.	Negligible adverse
Two properties on Station Road immediately north-east of Station Road Bridge	Existing housing.	High	Construction: These two properties would be permanently acquired. Access is required from both properties for the construction of the Station Road Bridge replacement as well as to access earthworks and construct a new retaining wall. The scale of works in this area is such that residential use of these properties during construction would be unviable during the construction stage.	No mitigation proposed. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation.	Major adverse (temporary)
			Operation: Post construction residential use of these properties would be restored and therefore no permanent loss of residential land use is anticipated.	None required	No change
'Kinsey House', located immediately south-west of Station Road Bridge	Existing housing.	High	Construction: The area of the front garden adjacent to Station Road would be temporarily acquired to facilitate the construction of the replacement bridge. Without mitigation this would potentially temporarily prevent or disrupt access to the property. A narrow strip of garden would be lost on the north side of the property. This permanent land take would have a marginal impact on the residential use of this land.	Appropriate alternative temporary or permanent access would be provided where practicable. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation.	Minor adverse (temporary access impact and permanent land-take)
			Operation: During operation access and area under temporary land-take would be reinstated. There would be a very small reduction in overall garden area which is not anticipated to have a noticeable impact on the residential viability of the property.	The principles of the compensation code will apply	Negligible adverse
Residential property immediately south-east of Station Road Bridge	Existing housing.	High	Construction: The property immediately south-east of Station Road bridge. The area of the front garden adjacent to Station Road would be temporarily acquired to facilitate the construction of the replacement bridge. Without mitigation this would potentially temporarily prevent or disrupt access to the property.	Appropriate alternative temporary or permanent access would be provided where practicable	Minor adverse (temporary)
			Operation: No operational impact is anticipated.	None required	No change
'Primrose Lodge' South-east of Station Road Bridge reached by a gravel track	Existing housing.	High	Construction: This property would be permanently acquired to facilitate construction activities in the vicinity of Station Road Bridge. Therefore, residential use would be lost at this location during the construction stage.	No mitigation proposed. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation	Major adverse (temporary)

Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
			Operation: Post construction residential use of this property would be restored and therefore no permanent loss of residential land use is anticipated.	None required	No change
The Vineyards off the B1137 Wellington Road	Existing housing in Hatfield Peverel.	High	Construction: Likely temporary disruption to access for residential properties (Four properties) at The Vineyards off B1137 due to new alignment of B1137 to link with junction 21 Witham South Interchange. Access would generally be maintained, but occasional disruption is likely. This would not compromise viability of residential land use in that location. Access across Wellington Bridge would also be lost short – medium term during its demolition / re building.	Appropriate temporary or permanent access arrangements would be provided where practicable	Minor adverse (temporary)
			Operation: No operational impact is anticipated.	None required	No change
Braintree planning application (ref: 18/01089/FUL)	Salvator, The Street. Conversion of attached Old Forge/Fire station into a single habitable residential accommodation. Application abuts Order Limits between The Street/B1137, Ash Close, and Maldon Road within Hatfield Peverel.	Medium	Construction: Very small degree of temporary land take where the site is accessed by The Street. This application mainly relies on access from The Street which would be subject to minor signage and utilities works. This is not expected to have any likely significant impacts on the development proposal.	None required	No change
			Operation: No operational impacts identified.	None required	No change
Braintree planning application (ref: 16/02156/OUT)	Land Northeast of Gleneagles Way. Outline application for residential development of 120 dwellings. Application abuts Order Limits south of A12 approximately 80m east of Gleneagles Way. Permission has been granted for 100 dwellings (ref: 20/00906/REM)	High	Construction: No land-take is anticipated.	None required	No change
			Operation: No operational impact identified.	None required	No change
Barn on land north-east of Hatfield Peverel	A barn located on land accessed directly from the north-bound A12. Aerial imagery from the past	Low	Construction: The barn would be demolished to allow for construction of the proposed new junction 21 arrangement. This would result in a permanent loss of this building.	Liaison with owners of properties affected by the proposals has been ongoing. The principles of the compensation code will apply.	Negligible adverse

Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
	fifteen years indicates residential property on this area of land has been demolished and the barn is all that remains. The land does not appear to be used for commercial agriculture. On this basis it is assigned low sensitivity for private property and residential land use.		Operation: Permanent loss of barn would have occurred during the construction stage. Since the surrounding residential use has been lost in the recent past baseline, no operational likely significant effect in terms of private property and housing is predicted.	None. Property would be lost during construction.	No change
Woodend Farm and Mayfield Cottages, lane off the B1389 Hatfield Road, western edge of Witham (but within Hatfield Peverel parish)	Existing housing	High	Construction: Roadworks to the junction with the B1389 would cause temporary disruption of access during the works. However, there is an alternative access available onto the B1389, so disruption is expected to be minimal.	Appropriate temporary or permanent access arrangements would be provided where practicable	Minor adverse
			Operation: No operational impact is anticipated.	None required	No change

Table A.6 Community land and assets (Hatfield Peverel)

Overall significance assessment: Impacts on the access to Hatfield Peverel Railway Station during construction are predicted to be of large adverse significance for users of that specific asset where over 400,000 entries/exits to the station per year were recorded between 2016 and 2020 (prior to the influence of the pandemic on train usage). No other community assets are anticipated to be significantly affected by the proposed scheme during construction and any impacts on access for people who need to cross the A12 corridor to access community land and assets is heavily interrelated with the assessment made for WCH in Table A.8. Given the importance of the railway station to the community, and the interaction of impacts on pedestrians and cyclists and their access to wider facilities within Hatfield Peverel, the overall significance of effect on community land and assets in Hatfield Peverel during construction is considered **large adverse**. Effects on community land and assets in Hatfield Peverel during operation are considered to be **neutral**.

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Hatfield Peverel Railway Station Ch. 16400	This station is on the Great Eastern Main Line and serves the villages of Hatfield Peverel and Nounsley, providing public transport access to destinations such as Chelmsford and London. In the year 2019/20 425,000 station passenger entries/exits were recorded (Office of Rail and Road statistics, 2022).	Very high	Construction: There would be disruption to access during construction while Station Road Bridge is demolished and replaced. In the absence of essential mitigation, the magnitude of impact would be major adverse. No direct impact on operational aspects of the railway station are anticipated. A temporary car park serving the railway station, would be made available for the public, for the period of construction of Station Road bridge. The purpose of this carpark is to allow a temporary and alternative access and provide a parking area for the railway station users. It would be located close to the station and close to the main A12 compound. Access would be via Wellington bridge and then through the shared A12 construction compound access road. Access for pedestrians and cyclists is described and assessed in Table A.8. With the proposed mitigation in place the overall viability of access to the train station would be maintained.	<p>The following measures are proposed which are deemed to provide moderate accessibility provision for users of the railway station:</p> <p>Provision of temporary car park to allow temporary and alternative access and provide a parking area for the railway station users during Station Road bridge replacement.</p> <p>Provision of a shuttle service with stops at the temporary car park, Hatfield Peverel train station, Station Road and central Hatfield Peverel, vehicles would be suitable to support persons with accessibility needs.</p> <p>Temporary pedestrian bridge over A12 to provide access during Station Road bridge replacement.</p>	Moderate adverse
			Operation: No operational impacts are identified.	None required	No change
Hatfield Peverel Dental Surgery	Dental surgery located in Arundel House, The Street. The street is within Order Limits. As the only identified dentist surgery in the village, it is likely to serve a significant proportion of residents within Hatfield Peverel.	Very high	Construction: Works on The Street near where the dental surgery is located are anticipated to be very minor, such as signage. While works to Station Road Bridge and Bury Road Bridge may disrupt access for residents, this is not likely to significantly affect the ability of residents to attend the dental surgery. Impacts are likely to relate to minor inconvenience for a small proportion of residents (where they live north of the existing A12) during travel, rather than any notable impact on access and use of the community asset.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Negligible adverse
			Operation: No operational impacts are identified.	None required	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Fishing lakes (used by local angling clubs)	These are approximately 140m south of the existing A12 corridor, east of Hatfield Peverel. Accessed off Wickham Bishop Road, Hatfield Peverel. The northern-most fishing lake abuts the Order Limits. This is a members only facility but plays a role in opportunities for local recreation. There are other fishing lakes in the wider area, including Colemans Cottage in Witham.	Medium	Construction: No direct impacts on this recreational asset and its access route are anticipated during construction. There would be construction activities associated with junction 21 of the A12, the proposed new WCH route between The Street and proposed junction 21, proposed drainage works and landscaping proposals within 20 to 50m of the northern-most fishing lake which may affect recreational amenity during construction. However, this is not anticipated to affect overall viability of the recreational asset.	Standard mitigation practices to reduce dust and construction noise as set out in Chapters 6: Air Quality and 12: Noise and vibration of this Environmental Statement [TR010060/APP/6.1], as well as the first iteration of the EMP [TR010060/APP/6.5].	Minor adverse
			Operation: No operational impacts are identified.	None required	No change

Table A.7 Development land and business (Hatfield Peverel)

Overall Significance Assessment: Within Hatfield Peverel there are several businesses, particularly located along The Street. Most of these are not expected to be directly impacted on by the proposed scheme. However, they may experience a degree of disruption due to traffic management during construction, and particularly while the Bury Lane, Station Road and Wellington Road bridges are replaced. Where businesses are directly impacted on as set out in the table below, impacts are mostly minor impacts on the direct accesses of the businesses, which may cause temporary interruptions, but overall access would be maintained. Businesses directly affected are relatively small and do not employ many people. The combined magnitude of impacts is assessed as minor and therefore the overall significance of effect during construction is assessed to be slight adverse . No direct operational effects have been identified that would have an ongoing impact on function of employment sites. Businesses should benefit from more reliable journey times along the A12 corridor once the proposed scheme is in operation. However, the operational impact on business and employment land is neutral .					
Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
North / West of A12 Suited & Booted DJ / Wedding DJ's 1 / 2 Sorrells Cottages, Bury Lane. House immediately NE of Bury Lane Bridge	Mobile disco and DJ business which is operated from home address.	Low	Construction: The property for this business address would be permanently acquired, meaning the business would need to relocate and find a new location for storage of equipment. This may cause temporary interruption to business continuity, although it is likely it can adapt and schedule commissions accordingly to some extent.	No mitigation proposed. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation.	Minor adverse (on the basis that the type of business is operated from a home address and equipment could be stored elsewhere. The compensation code would aim to place the business in an equivalent position)
			Operation: No operational impact. It is assumed the business would have relocated.	Not required	No change
Southwest of A12 Businesses off Swan Close	Edwards Dunn Investments	Medium	Construction: An area of Swan Close and the access lane off Swan Close, into what appears to be a car parking area for the business units, would be temporarily acquired for the construction works for the widening of the A12. Potential temporary disruption of access.	Appropriate alternative temporary or permanent access would be provided where practicable	Minor adverse
			Operation: No operational impact on function of business land is anticipated.	Not required	No change
North /West of A12 Entrance to Hatfield Peverel train station car park	Entrance to Hatfield Peverel Train station car park.	Low	Construction: The access into Hatfield Peverel Train Station is at the junction of two haul roads with Station Road. Short term disruption is likely.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Negligible adverse
			Operation: Once the scheme is operational there would be no impact.	Not required	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
South of A12 D's Café Diner, The Street	Small café/restaurant. The Order Limits cross part of the car park of this site on the south of the A12, south of the Street/B1137.	Medium	Construction: Potentially up to 20-30% of the baseline parking area would be permanently acquired during construction, potentially causing short to medium-term disruption to access and parking.	Appropriate alternative temporary or permanent access would be provided where practicable. No mitigation proposed. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation.	Moderate adverse
			Operation: Permanent loss of part of car park would reduce parking area available to customers, although it is anticipated that this would not affect business viability.	No mitigation proposed. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation.	Negligible adverse
Balloons and Laughter/The Silk Flower Shop/Friar Tuck Mobile Cafe	Small semi-permanent/ mobile businesses on a lay-by area off of B1389	Low	Construction: None. Part of the land on which these premises fall would be permanently acquired for construction of the proposed scheme. However, no design proposals have been identified which are considered likely to affect access to/from the businesses or their viability in this location as a result.	No mitigation proposed. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation.	Negligible adverse (on the basis that the compensation code would aim to place the businesses in an equivalent position)
			Operation: No operational impact anticipated.	Not required	No change
Commercial premises within King's Wood Gateway area (including Mayfield Nursery, Josephs Barn, Telchristie Cars)	Multiple commercial buildings within King's Wood Gateway area. Main access route to these businesses is within the Order Limits.	Medium	Construction: Roadworks to the junction with the B1389 would cause temporary disruption of access during the works. However, there is an alternative access available onto the B1389, so disruption is expected to be minimal. Furthermore, since the access lane to the Kings Centre is likely to change as part of the Land North of Woodend Farm mixed use development, no significant change to access is likely due to the proposed scheme and there would be no direct impact on the existing business land use.	Appropriate alternative temporary or permanent access would be provided where practicable.	Minor adverse
			Operation: Once the scheme is operational there would be no impact.	No change	Not required
Braintree planning application (ref: 17/02304/FUL) Planning application (ref: 18/01346/FUL)	Hatfield Place, The Street. Application for change of use from single private dwelling to events venue (wedding venue with accommodation suites). Application site abuts Order limits south of The Street/B1137 approximately 1km west of Hatfield Peverel.	Medium	Construction: No land take is anticipated. A utility corridor is proposed along The Street opposite the application site, but this would have no impact on employment use of the Hatfield Place site.	None required	No change
			Operation: No impact on future employment use is anticipated from operation of proposed scheme.	None required	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Braintree planning application (ref: 19/01896/OUT)	Land North of Woodend Farm Hatfield Road. Application for mixed use development (predominantly residential – see also Table A.9 in this appendix), includes a proposed day nursery for up to 30 places.	Medium	Construction: There would be slight encroachment where the proposed scheme is tied into B1024 Hatfield Road and a slight rearrangement of the existing junction to Woodend Farm would be required. However, this would not impact the area identified for the nursery or commercial space as set out in the application's master plan. No impact on employment use of site is anticipated.	None required	No change
			Operation: No impact on future employment use is anticipated from operation of proposed scheme.	None required	No impact
Braintree planning application (ref: 15/00430/OUT)	Land Adjacent to Lodge Farm Hatfield Road. Mixed use application (see also Table A.9 in this appendix), includes a proposed enterprise centre and other mixed uses (approximately 36ha). Site already has planning permission and is currently under construction. Application marginally straddles Order limits at Hatfield Road.	Very high	Construction: No land-take or impacts on access are anticipated.	None required	No change
			Operation: No impact on future employment use is anticipated from operation of proposed scheme.	None required	No impact

Table A.8 Walkers, Cyclists and Horse-riders (Hatfield Peverel)

Overall significance summary: During construction the more notable impacts would be on Bury Lane and Station Road – both of which would require closure for approximately six months each to allow for the demolition and re-build of these bridges. Without mitigation, this would have a major magnitude of impact. At present, relatively few walkers, cyclists, and horse riders use Bury Road, but the numbers are increasing as housing development takes place on Bury Farm estate and former Arla Dairy site (Hatfield Grove). The Station Road Bridge is more significant in terms of effect since it is the route to Hatfield Peverel Station and there is already a sizeable housing estate where many people would need to use the bridge to access facilities within Hatfield Peverel south of the existing A12. Works to each bridge would be phased so that access could be maintained across the A12. Nevertheless, the proposed alternative route, through the site of new housing development at Bury Farm and Hatfield Grove, could add considerable distance to a journey (it is approximately 1.3km around via this route from the north of Station Road Bridge to south of Station Road Bridge), which would be particularly inconvenient for pedestrians and the magnitude of impact would remain as major, based on LA 112 magnitude criteria. The alternative proposed mitigation measures include a temporary footbridge which would limit the magnitude of the Station Road bridge closure to moderate and a shuttle service which would cater for people with accessibility needs. There would also be a temporary closure of Wellington Road Bridge, which would also have a major magnitude impact by requiring walkers and cyclists to divert, this time making use of the proposed new walking, cycling and horse-riding route included in the proposed scheme.

Outside of the main settlement of Hatfield Peverel (but within the parish), there would be a moderate adverse impact on the footway alongside the southbound side of the A12 carriageway between Hatfield Peverel and Witham. This would be due to construction activities along the route causing ongoing disruption. Although access for walkers, cyclists and horse riders would be maintained via a temporary diversion, the diversion and traffic management measures would cause inconvenience, and this would likely affect active travel commuters, some of whom may use the routes daily. In addition, the demolition of Woodend Bridge would prevent access to and /from Witham from public footpath FP 90_29 (Hatfield Peverel), and the Latney’s Boarding Kennels and Cattery, except via a lengthy diversion (approximately 2km) via new provision at the proposed new junction 21 arrangement which would be phased so that it is in place prior to demolition of Woodend Bridge. This large impact is likely to affect relatively few people who would use this route regularly.

Overall, the level of disruption to walkers and cyclists within the Hatfield Peverel parish during the construction phase is judged assessed to have a **very large adverse** significance of effect.

For the vast majority of walkers and cyclists within the Hatfield Peverel, the proposals would be of a minor beneficial impact, with a moderate beneficial impact for commuters travelling east-west along the existing A12 corridor between Hatfield Peverel and Witham. However, access between Witham and public footpath FP 90_29 and the Latney’s Boarding Kennels and Cattery would be considerably lengthened due to the proposed demolition of Woodend Bridge and diversion via the proposed new junction 21. It is expected that more people would benefit from the improvements than be disadvantaged by the additional journey distance for users of one footpath. Therefore overall, the significance is assessed to be **slight beneficial**.

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Terling Hall Road, Crix Bridge and Mowden Hall Lane (National Cycle Network Route 50)	Terling Hall Road crosses the A12 via Crix Bridge approximately 950m west of Hatfield Peverel and links to Main Road (B1137). It forms part of NCN Route 50 which continues along Mowden Hall Lane. Strava Global Heatmap data indicate the route is well used by walkers and cyclists.	Very high	Construction: No noticeable impact is anticipated.	None required	No change
			Operation: No operational impact is anticipated.	None required	No change
FP 90_34 (Hatfield Peverel)	Footpath crosses A12 via an underpass by River Ter approximately 450m west of Hatfield Peverel. Public footpath provides a means for walkers to cross A12. Strava Global Heatmap data indicate some pedestrian use. Likely used mostly recreationally.	Medium	Construction: This footpath would need to be closed for approximately nine months to allow for demolition of parapets of River Ter bridge. Walkers who use this footpath could take an alternative route across Crix Bridge and along A1137 The Street, which would be a similar distance, albeit with a less rural feel.	Signage advising of PRow closures to be provided on access, so people do not walk part way down the PRow and have to turn back at point of closure. (refer to the first iteration of the Environmental Management Plan (EMP) [TR010060/APP/6.5])	Negligible adverse

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
			Operation: Existing footpath joins newly realigned footway after underpass under River Ter Bridge	None required	No change
B1137 between Boreham and Hatfield Peverel	A footway is present along the north side of B1137 between Boreham and Hatfield Peverel. Strava Global Heatmap data indicate this is a well-used by both pedestrians and cyclists. It is considered likely that most cyclists would be on-road as the footway is narrow for shared use. It is likely this is used for active travel as well as recreational journeys.	Very high	Construction: The footway on the northbound verge of The Street (approximately 530m including stretch between River Ter to Terling Hall Road) would be closed to allow for construction works closing the existing junction 20a of the A12 on the south-bound on-slip road. Further temporary disruption to footway over approximately 375m is likely during drainage and embankment works. This would likely cause temporary inconvenience for short sections, with short diversions around the areas of works. No significant impact on journey length is anticipated and on-road cyclists are unlikely to be noticeably affected.	<p>All WCH routes would be maintained where safe and reasonably practicable to do so.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision (refer to the first iteration of the Environmental Management Plan (EMP) [TR010060/APP/6.5])</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Minor adverse
			Operation: The footway would be reinstated and improved over some 350m to shared use cycleway/footway.	None required	Negligible beneficial
FP 90_43 (Hatfield Peverel)	494m long footpath crosses fields between Church Road, Hatfield Peverel and B1137 The Street, Hatfield Peverel, south of the existing A12. Strava Global Heatmap indicates some pedestrian use. It is likely this is used recreationally such as for dog walking.	Medium	Construction: No direct impact anticipated. Construction works would be occurring on opposite side of The Street from where the footpath is accessed, and footpath is routed away from the works area.	None required	No change
			Operation: No operational impact is anticipated.	None required	No change

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Bury Lane	B1137 Bury Lane crosses the A12 via Bury Lane Bridge. It has a footway on both sides of the bridge. Strava Global Heatmap data indicate relatively modest use by pedestrians and cyclists. It is likely mainly used as access for residents living off Bury Road north of the A12. The importance of this route is increasing due to residential development taking place at the Arla Dairy site (Hatfield Grove) and Bury Farm.	Medium	Construction: This road would be closed for approximately six months to allow for the demolition and re-build of Bury Road Bridge. Pedestrians and cyclists would need to be diverted via the new housing development and onto Station Road, which would increase journeys for up to 1.6km for residents on Bury Road immediately north of the bridge seeking to travel immediately south of the bridge.	Phased demolition and bridge replacement to ensure north-south access is maintained for Hatfield Peverel residents. Temporary pedestrian/cycle bridge over the A12 to provide access during the Station Road Bridge replacement Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision. Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].	Major adverse
			Operation: The replacement Bury Lane Bridge would include widened footway on east side of Bury Lane Overbridge to accommodate use by walkers and cyclists.	None required	Minor beneficial

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Station Road	A key route crossing the A12 in Hatfield Peverel and providing access to Hatfield Peverel Train Station. Strava Global Heatmap data indicate this is a highly used route.	Very high	<p>Construction: This road would be closed for approximately six months to allow for the demolition and re-build of Station Road Bridge. Pedestrians and cyclists would need to be diverted via the new housing development and onto Bury Road, which would increase journeys for up to 1.6km. This could potentially affect a lot of people due to it being a key route to Hatfield Peverel Railway Station. There is proposed mitigation to include a temporary pedestrian/cycle bridge over A12 to provide access during bridge replacements. This would reduce the length of diversion to up to approximately 400m.</p>	<p>Phased demolition and bridge replacement to ensure north-south access is maintained for Hatfield Peverel residents, together with the following mitigation measures:</p> <p>Provision of a temporary car park to allow temporary and alternative access and provide a parking area for the railway station users during the Station Road Bridge replacement</p> <p>Provision of a shuttle service with stops at the temporary car park, Hatfield Peverel railway station, Station Road and central Hatfield Peverel. Vehicles would be suitable to support persons with accessibility needs</p> <p>Temporary pedestrian/cycle bridge over the A12 to provide access during the Station Road Bridge replacement</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access.</p> <p>Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p>	Moderate adverse
			<p>Operation: The replacement Station Road Bridge would include widened footway on both sides to accommodate use by walkers and cyclists.</p>	None required	Minor beneficial

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
FP 90_3 (Hatfield Peverel)	50m public footpath along a street (Rainbow Mead) in Hatfield Peverel, north of A12. Likely used for access by residents.	Medium	Construction: No noticeable impact is anticipated.	None required	No change
			Operation: No operational impact is anticipated.	None required	No change
FP 90_4 (Hatfield Peverel)	107m public footpath along Bennet Way within residential area between The Street (B1137) and St Andre's Road in Hatfield Peverel. Footpath likely to be used by residents for local access.	Medium	Construction: No noticeable impact is anticipated.	None required	No change
			Operation: No operational impact is anticipated.	None required	No change
FP 90_2 (Hatfield Peverel)	North side of A12 in Hatfield Peverel. 1,272m long public footpath finishes at B1137 Wellington Road Overbridge. Strava Global Heatmap data indicates it is relatively well used by pedestrians. Footpath is likely used by walkers for local recreation.	Medium	Construction: The existing public footpath would be crossed by the proposed main compound and construction haul routes. Approximately 215m of public footpath would be temporarily diverted west (surfaced with wood chippings and segregated by Heras fencing), adjacent to a farm track to maintain access, although recreational amenity of the route would be reduced.	All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Minor adverse
			Operation: Existing footpath would join newly realigned footway on Wellington Road.	None required	Negligible neutral
B1137 Wellington Road Bridge	There is a footway on the northbound side of Wellington Road Bridge which links with the footway along the northbound carriageway to the existing A12 (see below). The footway is relatively narrow for use as a shared use path. However, data from Strava Global Heatmap shows this is currently well used by pedestrians and relatively well used by cyclists. It is likely used for active travel as well as recreational purposes.	High	Construction: Access on Wellington Road Bridge would be closed to allow for demolition and replacement of Wellington Road Bridge. Closure is anticipated to last around six months. During this time access to Hatfield Peverel would be available via a temporary footway, northwards past a temporary car park and haul road to the south of the railway and then westwards to Station Road. Assuming walkers/cyclists wanted to journey between a point immediately north of Wellington Road Bridge and a point immediately south of Wellington Road Bridge, this would be approximately a 1.8km diversion. However, it is unlikely many walkers/cyclists would require that specific journey and so distances to destinations via the diversion would likely be less. Access to Witham would be available via the proposed new WCH route around the newly constructed junction 21.	Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision. Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].	Major adverse (affecting a small number of walkers/cyclists)
			Operation: Realignment and widening of existing footway to provide improved shared use footway/cycleway following the proposed removal of junction 20B. Distance would remain approximately the same, but widening is judged to be minor beneficial magnitude.	None required	Minor beneficial

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Footway alongside northbound A12 carriageway between Hatfield Peverel and Witham.	Shared use route between Hatfield Peverel and Witham on the northbound side of the existing A12. This route is relatively narrow for a shared use path. However, data from Strava Global Heatmap show this is currently well used by pedestrians and relatively well used by cyclists. It is likely used for active travel as well as recreational purposes.	High	Construction: The footway would be temporarily suspended during the two-and-a-half-year period while works to junction 21 take place. While the northbound footway is closed, walkers/cyclists would be diverted a north of The Vineyards via temporary footway along the proposed temporary access road to junction 21. This is expected to add up to 200m on a journey between Hatfield Peverel and Witham (which is approximately 1.5km overall).	<p>All WCH routes would be maintained where safe and reasonably practicable to do so.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Minor adverse
			Operation: Approximately 1.2km of existing route would be stopped up. However, a new alignment would be provided to bypass the new junction 21 arrangement from the Wellington Road Bridge, tying in with existing provision at Hatfield Road (B1389) at Witham. The new footway/cycleway provision would be widened to modern specification and would link with footway/cycleway provision around the new junction 21 arrangements. The route includes a bypass section for junction 21, offering more traffic free elements and overall, the cycleway/footway would be alongside a less busy road than the baseline arrangement close to the edge of the existing A12 and is judged to be minor beneficial.	None required	Minor beneficial

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Footway alongside southbound A12 carriageway between The Street, Hatfield Peverel and proposed new junction 21	Shared use route between Hatfield Peverel and Witham alongside the southbound side of the existing A12. This route is relatively narrow for a shared use path. However, data from Strava Global Heatmap show this is currently well used by pedestrians and cyclists (appears to be preferred compared to the route alongside the northbound carriageway) and so is judged more sensitive. It is likely used for active travel as well as recreational purposes.	Very high	<p>Construction: The footway would be temporarily suspended during the two-and-a-half-year period while works to junction 21 take place. While the northbound footway is closed, walkers/cyclists would be diverted a north of The Vineyards via temporary footway along the proposed temporary access road to junction 21.</p> <p>This is expected to add up to 500m on a journey between Hatfield Peverel and Witham (which is approximately 1.5km overall). (See also below for effects on section via Woodend Bridge).</p>	<p>All WCH routes would be maintained where safe and reasonably practicable to do so.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Moderate adverse
			<p>Operation: Approximately 1.2km of existing route would be stopped up. However, a new alignment would be provided around the new junction 21 arrangement with parts of it south of the A12, offering more traffic-free elements. The new footway/cycleway provision would be widened to modern specification and would link with footway/cycleway provision around the new junction 21 arrangements which would have uncontrolled crossings.</p>	None required	Minor beneficial
Woodend Bridge near the Latney's Boarding Kennels and Cattery	The footway/cycleway which follows the southbound side of the A12 continues to Witham via a crossing the A12 at Woodend Bridge. As well as providing longer distance access for walkers/cyclists using the footway between Witham and Hatfield Peverel, it is likely to offer more local access between Witham and the Latney's Boarding Kennels and Cattery and PRow FP 90_29.	Very high (part of footway alongside southbound A12 identified above)	<p>Construction: The footway would be permanently closed due to the proposed demolition of Woodend Bridge. Users of this route would be diverted via the new footway/cycleway provision around the proposed new junction 21 arrangement. This would add approximately 2km to northbound journeys, such as from the Latney's Boarding Kennels and Cattery and FP 90_29.</p>	Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Major adverse (for a relatively small number of people)

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
			Operation: Footway would be stopped up for approximately 160m and Woodend Bridge therefore preventing access northbound from FP 90_29 (Hatfield Peverel) and the Latney's Boarding Kennels and Cattery. Embedded mitigation is for walkers/cyclists travelling east-west between Witham and Hatfield Peverel, this would not be too inconvenient as they would divert and use the footway/cycleway on the northbound side of the A12. However, for users of the public footpath and the Latney's Boarding Kennels and Cattery this would add approximately 2km to the route to Witham via the embedded mitigation which is the provision of new northbound footway/cycleway along the A12, and junction 21 arrangement described above to get to B1389 Hatfield Road east of Woodend Bridge.	None identified	Major adverse (for a relatively small number of people)
FP 90_40 (Hatfield Peverel)	Located on the south side of the existing A12 approximately 320m east of Hatfield Peverel. Public footpath follows a route of approximately 830m from Maldon Road in Hatfield Peverel to the point where it meets the shared use path along the southbound side of the A12. It is likely used for recreational walks.	Medium	Construction: 500m of this footpath would be diverted westwards to allow for construction of a proposed culvert. Access along the footpath would be maintained as long as possible until the culvert works require completing, when a temporary closure would be required.	All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Minor adverse
			Operation: Approximately 50m of the footpath would be stopped up so that the footpath links with the proposed new offline footway/ cycleway south of the proposed new junction 21 arrangement. This is not likely to have any discernible impact on overall journey length for walkers.	None required	No change
FP 90_29 (Hatfield Peverel)	South side of A12, terminates at B1389 Hatfield Road. 1,475m public footpath heads southwards across fields from B1389 Hatfield Road near the Latney's Boarding Kennels and Cattery (close to Woodend Bridge, junction 21 (Witham Interchange)) to meet a wider PRoW network south of Wickham Bishops Road. Data from Strava	Medium	Construction: No direct impacts to footpath itself although some loss of amenity at access from B1389 due to construction of new junction 21 layout and associated demolition of Woodend Bridge (which is likely to affect walkers of this footpath as they would be diverted around the new junction arrangement – see assessment above for Woodend Bridge).	All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Negligible adverse

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
	Global Heatmap indicate regular pedestrian use. Likely used recreationally.		Operation: A permanent indirect impact on this footpath is anticipated due to the proposed demolition of Woodend Bridge and stopping up of the footway along the existing B1389 under Woodend Bridge. For users of the public footpath wishing to get to/from Witham (the nearest settlement and most likely origin/destination for walkers of this PRow), the diversion around the new junction 21 would add 2km to the journey, via busy highway infrastructure. This would substantially alter the length and quality of recreational journeys that make use of the public footpath. It is anticipated that this may discourage use of this footpath as it would no longer be conveniently accessible from Witham.	None identified	Major adverse

3 Witham and Rivenhall End land use and accessibility assessment

- 3.1.1 Tables A.9 to A.12 provide an assessment of impacts on land use and accessibility matters for Witham and Rivenhall End. This includes all identified assets within the settlements of Witham and Rivenhall End and those parts of the Witham and Rivenhall civil parishes which coincide with the Order Limits.
- 3.1.2 An important assumption to note is that although there may be a major impact on a particular land use and accessibility asset, which would be greatly significant to the owners/users of that asset, this does not imply significance at a decision-making level, as there may be sufficient alternative resource to serve overall community needs. Instead, the assessment of significance considers the combined effect of impacts on assets on the overall resource relating to each land use and accessibility matter. The significance assessment is provided in the top row of each table.
- 3.1.3 All measurements in this assessment are approximate, based on GIS datasets, and do not reflect final details of any land acquisition agreements. Reasonable care has been taken to identify assets and landholdings affected for the purposes of environmental assessment. However, the assessment of impacts on individual assets is based on information available at the time of preparation of the Environmental Statement and does not necessarily reflect final outcomes of negotiations between interested parties and their agents. Nevertheless, it is considered that the information provided is sufficient to provide an overall assessment of significance on land use and accessibility for the purposes of EIA.
- 3.1.4 The assessment is focused on impacts on the type of land use, rather than effects on occupants and businesses. In some cases, the assets identified may no longer be occupied by residents. Reference should also be made to the health assessment in Chapter 13 of the Environmental Statement [TR010060/APP/6.1] for potential health and wellbeing impacts associated with impacts on land use.
- 3.1.5 Key impacts are illustrated on Figure 13.2 of the Environmental Statement [TR010060/APP/6.2]. Full details of where PRoW would be permanently stopped up or diverted, together with any chainages referred to in the following tables are shown on the General Arrangement Plans in Volume 2 of the DCO application [TR010060/APP/2.9]. Full details of temporary PRoW and footway diversions are shown on the Construction Phase Plans, which are available in Volume 2 of the DCO application [TR010060/APP/2.15]).

Table A.9 Private property and housing (Witham and Rivenhall End)

Overall significance assessment: There are 4,924 existing residential properties within the land use and accessibility study area that falls within Witham parish. Direct land-take is anticipated on 12 of these residential properties in the community, including demolition of two houses. The impacts on the 10 other affected properties relate to land-take from drives or gardens. The land-take would be temporary during the construction stage for three of these properties, while permanent loss of parts of garden area would occur for the remaining eight properties.

While these impacts affect a small minority of residential properties in the area (minor magnitude for the resource as a whole), it is considered to be noticeable, particularly in the neighbourhood south of Olivers Bridge where gardens and access to several properties would also be affected during the construction stage. The significance of effect on private property and housing during construction is assessed as **moderate adverse**.

During operation, while five properties would have a reduced garden area, the remaining areas of garden would still be sizeable and so garden function would not be compromised. There would be a permanent loss of two properties to the housing stock, which is less than 0.05% of the housing stock in the Witham part of the study area. This is considered to be a negligible magnitude of impact on the overall residential land use resource. On the basis that housing is a high value resource, the overall significance for operational effect is assessed as **slight adverse**.

Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Braintree Strategic growth Location. HATF 315 & 316 Policy Ref: LPP 23 Braintree planning application (ref: 19/01896/OUT)* (also assessed under Development land and business Table A.11).	Land North of Woodend Farm Hatfield Road. Application for mixed use development with up to 450 dwellings. Application straddles Order Limits at Hatfield Road.	Very high	Construction: There would be slight encroachment where the proposed scheme is tied into B1024 Hatfield Road and a slight rearrangement of the existing junction to Woodend Farm would be required. However, this would not impact the viability of the development application.	Liaison with developers affected by the proposals has been ongoing. The principles of the compensation code will apply.	Negligible adverse
			Operation: No operational impact is anticipated.	None required	No change
Braintree Draft Local plan 2017-WITC 423 Braintree planning application (ref: 15/00430/OUT) (also assessed under Development land and business Table A.11).	Land Adjacent to Lodge Farm Hatfield Road. Allocation is for 750 dwellings. Site already has planning permission and is currently under construction. Application for mixed use development. Application straddles Order limits at Hatfield Road.	Very high	Construction: No land-take or impacts on access are anticipated.	None required	No change
			Operation: No operational impact is anticipated.	None required	No change
Residential Property Dengie farmhouse (south of existing A12)	Existing housing	Medium	Construction: There would be a large borrow pit on land to the west of Dengie Farm and access to/from areas of works would coincide with the Dengie Farm access track. Some intermittent disruption along the access track due to presence of HGVs and other construction vehicles would be anticipated. Residential land use would not be directly impacted on.	Appropriate temporary or permanent access arrangements would be provided where practicable	Minor adverse
			Operation: No operational impacts on residential land use viability anticipated.	None required	No change

Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Braintree Draft Local Plan 2017. WITC 421 Policy Ref: LPP 32 Braintree planning application (ref: 18/02010/FUL)	Gimsons Kings Chase. Application for the construction of 78 residential dwellings. Main access route to application is within Order Limits on Maldon Road, within Witham itself, adjacent to the Witham Hockey and Cricket Club.	High	Construction: No land-take or impacts on access are anticipated. Any impacts on Maldon Road near the access are anticipated to be very minor and not impact on accessibility or viability of application site.	None required	No change
			Operation: No operational impact is anticipated.	None required	No change
Seven properties at the end of Olivers Drive. North of A12. Ch. 20040 – 20140	Existing housing within wider Witham settlement.	High	Construction: The area of Olivers Drive in front of the last seven properties would either be temporarily or permanently acquired during the works. This would not directly impact on the properties and associated land but may affect access during construction. On the south side of Olivers Drive would be a site compound and lay down area accessed off Gershwin Boulevard.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Minor adverse (temporary)
			Operation: No operational impact is anticipated.	None required	No change
Residential property (The Croft) on Maldon Road on the south-west side of Olivers Bridge, next to Essex Self Storage.	Existing housing south of the A12, which forms part of wider Witham settlement.	High	Construction: Approximately 0.1ha within Order Limits and would be temporarily acquired for installation of gas pipeline diversion works. The area within the Order limits is at a corner of the plot. No impact on viability of residential land use is anticipated.	Appropriate temporary or permanent access arrangements would be provided where practicable. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply	Negligible adverse
			Operation: Land would be returned to landowner but there would be permanent access rights for maintenance of the proposed gas pipeline.	Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply	Negligible adverse
'Rowanbank' first residential property on Maldon Road on the south-west side of Olivers Bridge	Existing housing south of the A12, which forms part of wider Witham settlement.	High	Construction: Approximately 90% of the garden area would be acquired for haul road and the construction of retaining wall associated with the A12 widening. The site works would be immediately behind the house. There would be loss of use of rear and side garden area during construction works and an outbuilding would require demolition. Approximately 50% of the garden area would be permanently acquired. However, the residential use of this property would be viable. Part of Maldon Road would be temporarily acquired to facilitate construction. This may result in occasional, intermittent disruption of access to the property.	Appropriate temporary or permanent access arrangements would be provided where practicable. No mitigation proposed for land-take. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation.	Moderate adverse (temporary)

Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
			Operation: During operation access and area under temporary land-take would be reinstated. There would be a 50% reduction in overall garden area which is not anticipated impact on the residential viability of the property although some functional garden would be lost.	The principles of the compensation code will apply	Moderate adverse
The Conifers, Segenhoe, Talafa, the Gables residential properties on Maldon Road on the south-west side of Olivers Bridge	Existing housing south of the A12, which forms part of wider Witham settlement.	High	<p>Construction: Five properties where up to 50% of the garden areas would be permanently acquired for a haul road and the construction of retaining wall associated with the A12 widening.</p> <p>There would be a partial loss of garden area during construction works. Furthermore, an outbuilding associated with one of the properties would require demolition.</p> <p>Part of Maldon Road would be temporarily acquired to facilitate construction. This may result in occasional, intermittent disruption of access to the property.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable.</p> <p>No mitigation proposed for land-take. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation.</p>	Moderate adverse (temporary)
			<p>Operation: During operation the four properties would be impacted on by the loss of up to 50% of the garden areas which would be permanently acquired.</p> <p>The loss of the garden areas would have a minor impact but there would still be a relatively large garden area remaining to maintain function.</p>	The principles of the compensation code will apply.	Minor adverse
13 and 14 Pantile Close, south-east of Olivers Bridge (BE10)	Existing housing south of the A12, which forms part of wider Witham settlement.	High	<p>Construction: The gardens of the two properties (Nos 13 and 14) at the end of Pantile Close would be permanently acquired to allow room for the construction of retaining wall associated with the A12 widening. The whole of the drive and a large part of the garden of No. 14 would be acquired, compromising the function of these elements during the construction period. Approximately 50% of the front garden area for no. 13 would be acquired.</p> <p>Access to the properties would potentially be disrupted during construction. It is understood these properties would not be occupied by residents during the construction period.</p>	Appropriate temporary or permanent access arrangements would be provided where practicable. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation.	Moderate adverse
			Operation: Residential land use and access would be fully restored post-construction but there would be a permanent loss of garden area for No. 14.	None required	Minor adverse

Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Nos 1 to 14 Pantile Close, south-east of Olivers Bridge	Existing housing south of the A12, which forms part of wider Witham settlement.	High	Construction: The entire road of Pantile Close would be temporarily acquired and used as a site access road during the widening of the A12 / construction of the new retaining wall south-east of Olivers Bridge. Short to medium term intermittent disruption to access during construction works is anticipated.	Appropriate temporary or permanent access arrangements would be provided where practicable	Minor adverse (temporary)
			Operation: During operation access and areas under temporary land-take would be reinstated and so no operational impact is anticipated.	None required	No change
Burghey Brook Cottages. Two residential properties on the south side of the existing A12	Existing housing along stretch of A12 where it is proposed to be de-trunked.	Medium	Construction: Short term disruption to the access onto the de-trunked A12 for two residential properties as new junctions are formed. The rear gardens of the properties would be located within close proximity to the on slip of the new A12 road and west of a proposed new attenuation pond. 50% of the rear gardens would be acquired temporarily during construction works, as a result a number of 'temporary' outbuildings at the rear of the garden of the property on the west side would be demolished.	Appropriate temporary or permanent access arrangements would be provided where practicable. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply.	Moderate adverse (temporary)
			Operation: Although gardens would be returned after construction, a permanent right of access would be in place to approximately 40% of the gardens. Therefore, occasional disruption due to maintenance operations would be anticipated. However, this would not significantly affect residential viability.	Provide notice to residents when access is required.	Negligible adverse
'Fair Rest' residential site and two residential properties to the south Braxted Road	Existing housing, including some mobile homes	Medium	Construction: The new A12 would sever Braxted Road cutting off access along the road, causing inconvenience and disruption to residents living along the road and for other users. Braxted Road would be re-aligned to the west, a new underbridge would re-establish access along Braxted Road. The 'Fair Rest' residential site on Braxted Road would lie in very close proximity to the new A12 alignment. The existing access into the site would also be relocated to the north side of the site. New access arrangements would be via the proposed re-aligned Braxted Road. It is likely that the Fair Rest site would remain viable, albeit the new A12 would be in very close proximity.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Negligible

Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
			Operation: No operational impact is anticipated on residential land use. (See also walkers, cyclists and horse rider assessment (Table A.12 in this appendix) and health assessment in Chapter 13 of the Environmental Statement [TR010060/APP/6.1] for other types of impact).	None required	No change
North of A12 Two residential properties ‘Badger’ and Hare Lodge, London Road	Existing housing to the east of Rivenhall End (north of A12 opposite Essex County Fire and Rescue Service Headquarters).	Medium	Construction: Demolition of two residential properties within footprint of the proposed scheme. This would result in a permanent loss of this residential land use.	Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation	Major adverse
			Operation: Permanent loss of residential use would have occurred during the construction stage and so there would be a loss of housing stock in the operation stage.	None. Property would be lost during construction.	Major adverse
*Although the majority of this planning application/allocation falls within the Hatfield Peverel parish, it has been included within the Witham community assessment as it would form contiguous development with the main settlement of Witham.					

Table A.10 Community land and assets (Witham and Rivenhall End)

Overall significance assessment: Significant effects on community assets within these communities are restricted to the construction phase. In particular, there would be a moderate adverse impact on the community who use the Church of the Latter-Day Saints, should they depend on vehicular access to the venue due to the temporary occupation of the car park during the construction phase. Since most construction activities would not take place on Sunday, it is not anticipated that there would be any significant effect on the use and function of the church during its main worship times. However, it is uncertain how impacts to the car park may affect activities on other days of the week. A major adverse effect is also predicted for people who use the Whetmead Nature Reserve due to marginal loss of green space and the closure of the main footpath to the nature reserve during construction. In addition, there are a number of minor adverse impacts on community assets due to impacts on access via roads affected by the proposed scheme construction. Although standard mitigation would include ensuring access is maintained where safe and practicable and replacement of any lost open space, a degree of inconvenience for the community over the duration of the construction period (medium term) is likely.

Overall, the significance of effect on community land and assets as a whole for the Witham and Rivenhall End community is assessed to be **moderate adverse** during construction due to the widespread scale of potential disruption (minor magnitude on community land resource), but overall **neutral** during operation.

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Chipping Hill Primary School	Primary school located on Owers Road, Witham. It serves the relatively new housing estate in the southern area of Witham.	Very high	Construction: A site compound would be located on unoccupied land south of the school site; next to the school's car park and playing field. The site compound would mainly be used as a traffic management/logistics yard and it is anticipated mostly used outside of school hours, e.g., to collect or return cones and signs required for traffic management. The access into the site compound is south-east of the school, off Hawkes Road. It is likely that parents and children would divert north on Hawkes Road and via Holst Avenue. There are no houses currently from which people would need to access the southern part of Hawkes Road. It is therefore unlikely that there would be a notable impact on land use or accessibility associated with the school.	Avoid movement of construction vehicles to/from site compound during school arrival/departure times.	Negligible adverse
			Operation: No operational impacts are identified.	None required	No change
Kings Centre (Bethel Witham Church) off B1389 Hatfield Road CM8 1EH	Church located on access track off B1389 Hatfield Road CM8 1EH. The church is adjacent to land north of Woodend Farm for which a planning application for mixed use development has been submitted (see Table A.11). A new access is proposed as part of the planning application which would be via a new roundabout on Hatfield Road.	High	Construction: Roadworks to the junction with the B1389 would cause temporary disruption of access during the works. However, there is an alternative access available onto the B1389, so disruption is expected to be minimal. Furthermore, since the access lane to the Kings Centre is likely to change as part of the Land north of Woodend Farm mixed use development, no significant change to access is likely due to the proposed scheme and there would be no direct impact on the existing church land use.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Negligible adverse
			Operation: No operational impacts are identified.	None required	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Church of Jesus Christ Latter-Day Saints, Pantile Close, Witham Ch. 20450	Church is located just south of existing A12. The access and car park are within Order Limits.	High	Construction: Short-term occupation of entire car parking area would be required to facilitate construction of a retaining wall. There is likely to be disruption along Pantile Close, which is the only vehicular access to the church. There is a footpath to the church off Pantile Close, near its junction with Maldon Road. Without mitigation, there is a potential difficulty of access to the church for people dependent on car travel. No direct impact is anticipated on the actual building and grounds, and since construction activities would not take place on a Sunday, not impact on Sunday worship is predicted. However, it is uncertain how much impact loss of parking would have on other community functions which may take place at the church during the week and therefore the impact is assessed as moderate adverse.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Moderate adverse
			Operation: Assumed the parking area and Pantile Close as access would be reinstated and there would be no impact to the amenity.	None required – assumed car parking and access would be reinstated	No change
Area of informal green space between the housing estate on Gershwin Boulevard and Olivers Drive and the existing A12, and wooded area south of Gershwin Drive.	An area of green space is present between the existing A12 corridor and housing along the southern edge of Witham. An electricity substation is present within this area and there is tree planting around the edges. It is likely used for informal recreation by the local community and also provides visual amenity. There are several similar such areas to support informal recreation within Witham as alternative locations.	Low	Construction: Part of this area would be occupied by a proposed laydown and construction area for the proposed Gershwin Boulevard shared cycle/footbridge as well as an area permanently acquired for the shared use path. Further areas would be lost to the A12 widening proposals. This would limit the area of land available for informal recreation, however alternative locations are available, and part of the site would still be accessible, meaning no notable loss of function for the local community.	Land temporarily acquired for construction would be reinstated to its previous use on completion of the footbridge and shared use path. Where permanent loss of open space would occur, the loss will be replaced by equivalent or better provision in terms of quantity and quality in a suitable location. Locations of proposed replacement land are indicated on Figure 13.2 [TR010060/APP/6.2] but reference should be made to the Land Plans [TR010060/APP/2.7] and Replacement Land Statement [TR010060/APP/4.1] for greater detail.	Minor adverse
			Operation: Part of the green space would be permanently lost to the footprint of the new shared use path. The proposed shared use path would not detract from the informal recreational function of the area and would improve connectivity to wider recreational assets south of the A12.		Negligible adverse
Area of informal green space north of Market Lane and Hutley Close, Witham.	An area of green space is present between the River Brain and new housing estate in south-east Witham. The green space includes an area of amenity grassland which transitions to a wooded area closer to the river banks. The grassed area is likely used for informal recreation by the local neighbourhood but there are several other areas of similar green space within the local community,	Low	Construction: During construction, approximately 0.22ha of this green space would be occupied while widening works to the A12 take place. A very small area (circa 11m ²) of this land would be permanently acquired for the Brain Bridge proposals associated with the proposed scheme. The occupation of the green space would include approximately half of the grassed area and the wooded area in the eastern portion of the site. This would temporarily reduce the land available for informal recreation in the medium term, however it is likely that residents would prefer to use the alternative areas of space in the community while works take place which are ≤ 370m away.	Land temporarily acquired for construction would be reinstated to its previous use on completion of the works. Where permanent loss of open space would occur, the loss will be replaced by equivalent or better provision in terms of quantity and quality in a suitable location. Locations of proposed replacement	Minor adverse

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
	for example west of Maldon Road and north of Laurence Avenue.		Operation: During operation the land which was temporarily acquired would have been restored to its past use although some 0.15ha would be under permanent access rights so there is potential for occasional transient disruption of recreational use when access to highway land may be required. The patch of land which would be permanently acquired is immediately adjacent to the A12 corridor and due to the scrub around it is not likely to be accessed by the public in the baseline situation. The small loss of land in this location is not likely to detract from the recreational function of the green space in the long-term.	land are indicated on Figure 13.2 [TR010060/APP/6.2] but reference should be made to the Land Plans [TR010060/APP/2.7] and Replacement Land Statement [TR010060/APP/4.1] for greater detail.	Negligible adverse
Blackwater Rail Trail (see also assessment in Table A.12 below)	Country park, passing under the A12 via under Benton Bridge. This is also a cycle route and therefore also assessed in relation to WCH in Table A.12 below.	Medium	Construction: The part of this country park which is under Benton Road Bridge would be closed in the short term while works to Benton Bridge take place. This would result in a partial loss of available green space. Refer to WCH assessment in Table A.12 below for construction effects on access to this community asset.	A temporary diversion would be provided (see Table A.12) which would allow access to the country park area south of Benton Bridge.	Minor adverse
			Operation: Works to widen Benton Bridge would have resulted with a permanent marginal loss of open space (approximately 171m ²). This is not likely to have a noticeable impact on the function or amenity of this community asset.	Where permanent loss of open space would occur, the loss will be replaced by equivalent or better provision in terms of quantity and quality in a suitable location. Locations of proposed replacement land are indicated on Figure 13.2 [TR010060/APP/6.2] but reference should be made to the Land Plans [TR010060/APP/2.7] and Replacement Land Statement [TR010060/APP/4.1] for greater detail.	Negligible adverse
Whetmead Nature Reserve (see also assessment in Table A.12 below) and part of	Nature reserve which can be reached by residents of Witham via FP 121_101 (Witham) which uses an underpass beneath the A12, alongside the River Brain. This underpass provides for the Witham River Walk which is an area of	High	Construction: The proposed scheme would result in a marginal permanent loss of open space (circa 0.65ha) in this area due to widening proposals. It would be necessary to close the footpath for safety while works to Brain Bridge take place, which would likely prevent access to the nature reserve over the medium term. No diversion route to the nature reserve has been identified.	Land temporarily acquired for construction would be reinstated to its previous use on completion of the works.	Major adverse

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Witham River Walk as it passes under Brain Bridge	open space designated as green corridor which runs through Witham either side of the River Brain and is accessible by foot from central Witham. The nature reserve and river walk are partially within the provisional Order Limits.		Operation: No operational impacts are identified additional to the marginal loss of land at the construction stage.	Where permanent loss of open space would occur, the loss will be replaced by equivalent or better provision in terms of quantity and quality in a suitable location. Locations of proposed replacement land are indicated on Figure 13.2 [TR010060/APP/6.2] but reference should be made to the Land Plans [TR010060/APP/2.7] and Replacement Land Statement [TR010060/APP/4.1] for greater detail. All WCH routes would be maintained where safe and reasonably practicable to do so.	Minor adverse
Land at Freebournes Road, Witham	A strip of amenity grass and trees is present along Freebournes Road which may provide some limited amenity value for employees of the industrial estate and is unlikely to serve the wider community with any recreational value.	Negligible	Construction: A strip of land between Freebournes Road and the existing A12 would be temporarily acquired during construction with the part closest to the existing A12 boundary being permanently acquired to accommodate widening proposals. This would result in a slight impact on amenity; however, this is not likely to be noticeable since in the baseline situation views of this land are frequently obscured by parked vehicles on Freebournes Road.	Land temporarily acquired for construction would be reinstated to its previous use on completion of the works. Where permanent loss of open space would occur, the loss will be replaced by equivalent or better provision in terms of quantity and quality in a suitable location. Locations of proposed replacement land are indicated on Figure 13.2 [TR010060/APP/6.2] but reference should be made to the Land Plans [TR010060/APP/2.7] and Replacement Land Statement [TR010060/APP/4.1] for greater detail.	Negligible adverse
			Operation: The permanent loss of a strip of land close to the existing boundary is not likely to be noticeable in terms of amenity or recreational function.		Negligible adverse
Benton Hall Golf & Country Club, Blue Mills Road, Witham	Golf club with gym and sports facilities. Likely to serve private members from Witham and neighbouring communities of Wickham Bishops, Hatfield Peverel and further afield. Other nearby golf facilities are at Braxted Park and Rivenhall Oaks.	Medium	Construction: The gas main diversion would involve some of the land associated with this golf club, including parts of the golf course itself close to Blue Mills Hill, which may impact on its amenity and recreational use while the gas mains are being installed. Once installed it is anticipated the existing land use as a golf course can be maintained. No other impacts on this recreational asset are anticipated.	Land acquired for the construction would be reinstated on completion of the gas main diversion	Minor adverse
			Operation: Due to the gas main diversion, there may be an easement where occasional maintenance access is required. There would be potential for occasional temporary disruption to the recreational asset for gas main maintenance which may detract from recreational use on an occasional transient basis.	None identified	Minor adverse

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Witham Hockey and Cricket Club	Club house shared between hockey and cricket club. Cricket grounds abut Maldon Road which is within the provisional Order Limits. However, a brick wall separates the grounds from the road. Hockey matches are played elsewhere in Witham on an all-weather pitch. Likely to provide important social facilities for sports members in the community.	High	Construction: No construction impacts are identified.	None required	No change
			Operation: No operational impacts are identified.	None required	No change
Colemans Cottage Fishery	Fishing lakes with tea rooms and pods/caravan pitches. These lakes abut the existing A12 corridor and the provisional Order Limits. This is a private facility but plays a role in opportunities for local recreation. There are other fishing lakes in the wider area, including Lakeland Fishery (see Table A.5 above).	Medium	Construction: No direct impacts are anticipated on this facility although access may be inconvenient due to proposal affecting Little Braxted Lane. However, access to the recreational facility would be maintained and no impacts on its use are anticipated.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Minor adverse
			Operation: No operational impacts are identified.	None required	No change
Allotments, Henry Dixon Road, Rivenhall End	Allotments abut the A12 London Road at Rivenhall End, which is within the provisional Order Limits. There is a waiting list for allotments in this parish, suggesting high local demand for this resource.	High	Construction: No direct impacts are anticipated on this asset although access may be inconvenient due to proposal affecting Braxted Road and Henry Dixon Road. However, access would be maintained and no impacts on its use are anticipated.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Minor adverse
			Operation: No operational impacts are identified.	None required	No change

Table A.11 Development land and business (Witham and Rivenhall End)

Overall Significance Assessment: There are several areas of employment in and around Witham and Rivenhall End, including the Western Industrial and Eastways Industrial Estate in south-east Witham, which would potentially be affected by traffic management during construction. There are also some small areas of encroachment onto business land, but this is relatively limited and unlikely to affect the function of that business, with the exception of the Coleman's Farm Quarry and aggregate business which would be substantially encroached upon by the proposed scheme footprint. Given the minor magnitude of overall impacts but high sensitivity of employment locations in the community, during construction the significance of disruption effect on business is assessed to be moderate adverse . During operation businesses would benefit from more reliable journey times along the A12 corridor affected by the proposed scheme. No significant impacts on business land during operation are anticipated so the effect is assessed to be neutral .					
Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
South of A12 Latneys Boarding Kennels, Cattery and Grooming Parlour	Kennel, Cattery and Grooming Business. Main access route to the business is within the Order Limits.	Medium	Construction: Woodend Bridge would be demolished and access onto the B1389 Hatfield Road would be lost. The new J21 Interchange and slipways to the west would restore access (although it would be considerably longer for anyone travelling to the business on foot – see Table A.12 of this appendix for impacts on WCH). Short to medium-term disruption to access the kennels is expected during construction. Temporary disruption may also be caused by proposed utility diversions. Additionally, construction noise and vibration, and dust from the borrow pit, may be distressing to animals within the facility, which may be discourage some custom.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Moderate adverse
			Operation: Once the scheme is operational it would be considerably longer for anyone travelling to the business on foot from Witham, which may discourage some use. However, it is not likely to affect a large part of the customer base, given that the facility is already slightly remote from Witham.	None identified	Minor adverse
North / East of A12 Western Industrial Estate (part of) Several commercial premises located on Perry Road north-east of the Anglian Water Treatment Plant	Commercial/industrial estate containing multiple businesses including car mechanics, recycling centres, fitness centre and other light industrial uses.	Very high	Construction: Temporary disruption to access is possible while utilities diversions are undertaken. However, it is not expected to affect any functional land use from employment sites, and works are not likely to be extensive.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Negligible adverse
			Operation: No impact anticipated during operation.	None required	No change
North / East of A12 Businesses on Freebournes Road, Western Industrial Estate	Commercial/industrial estate containing multiple businesses and warehouses	Very high	Construction: Permanent strip of land would be acquired along the east and west side of Freebournes Road to allow for access to construct embankments associated with widening of A12. Between Ch 22200 – 22300 approximately 50% of the car parking area coincides with Order Limits and may be used temporarily for construction purposes (e.g., storing materials, parking). Short to medium-term disruption to access to businesses during construction but no notable impact on functional business land is anticipated.	Appropriate alternative temporary or permanent access would be provided where practicable. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply	Minor adverse

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
			Operation: No impact anticipated during operation.	None required	No change
North / East of A12 Access on / off A12 for Freebournes Road / Colchester Road, Western Industrial Estate	Commercial/industrial estate containing multiple businesses and warehouses	Very high	Construction: Construction of a new major junction, J22, north- east of Freebournes Road / east of B1389 Colchester Road (as part of the works Colemans Bridge is being demolished). Direct access to the A12 would be lost. The new junction would provide access onto the A12. Short – medium term access disruption to users during the construction works. It is unlikely there would be an effect on the day to day functioning of businesses located in the industrial estate.	Appropriate alternative temporary or permanent access would be provided where practicable. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply	Minor adverse
			Operation: No impact anticipated during operation.	None required	No change
Rosewood Business Park/Eastways Industrial Estate	Commercial/industrial estate containing multiple businesses and warehouses	Very high	Construction: Small degree of permanent land take would be required on south-east side to accommodate embankments for the reconfiguration of the new J22. Additionally, the main access route into the industrial estate (Eastways) would be temporarily acquired during construction leading to short-medium term disruption to access.	Appropriate alternative temporary or permanent access would be provided where practicable. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply	Minor adverse
			Operation: Small degree of permanent land would be required to accommodate embankments and drainage ditch on the northeast boundary of the business park and would be unlikely to affect the day to day functioning of businesses.	Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply	Negligible adverse
South of A12 Coleman's Cottage Fishery, off Little Braxted Lane east of Witham	Accommodation and business for recreational fishing.	Medium	Construction: Little Braxted Lane northwards would be severed by the new A12. A new slip would be provided onto the new A12. Noise from construction works would likely have an adverse effect on the use due to the nature of the amenity. There would be temporary disruption to access during construction works. Access from Witham would be re-provided through the new J22 via Little Braxted Lane Overbridge.	Appropriate alternative temporary or permanent access would be provided where practicable.	Minor adverse
			Operation: Once the scheme is operational there would be no impact.	Not required	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
South of A12 Coleman's Farm Quarry, Little Braxted Lane, Witham, CM8 3EX	Large quarry and aggregate supplier. Order Limits overlaps footprint of quarry site north of Little Braxted	High	Construction: A significant proportion of the footprint of this site would be permanently acquired to accommodate the new J22, attenuation ponds and access routes, and landscape and ecology mitigation. In addition, there would likely be a level of disruption to access. (Refer to chapter 11 of this Environmental Statement 6.1 for effects on mineral resource [TR010060/APP/6.1])	Appropriate alternative temporary or permanent access would be provided where practicable. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply. (Refer to chapter 11 of the Environmental Statement 6.1 for mitigation measures to limit impacts on mineral resource [TR010060/APP/6.1]).	Moderate adverse
			Operation: Loss of part of quarry site would occur at construction. No further impact anticipated during operation.	Not required	Negligible adverse
Unoccupied public house on the existing A12 (London Road), Rivenhall	Unoccupied public house with parking facilities.	Low	Construction: The business is currently not open for business. Sliver of land-take across front grounds of property for widening of shared use footway. No impact on public house opportunity.	Appropriate temporary or permanent access arrangements would be provided where practicable.	No change
			Operation: No impact anticipated during operation.	None required	No change
Between existing A12 and proposed A12 The Matchyns, Lantana, The Rivenhall Hotel, RCU Solutions Limited Off London Road, Rivenhall End	Several businesses including offices, restaurant, hotel	High	Construction: Small degree of permanent land take, however all land take would be from the verges to the north and east of the business park, and would not affect the operation, amenity or continued viability of the site during construction works, however the works would be audible and possible dust generated.	Measures to control dust and noise as set out by Chapters 6 Air Quality and 12 Noise and Vibration of this Environmental Statement 6.1 [TR010060/APP/6.1].	Negligible adverse
			Operation: No impact anticipated during operation.	None required	No change
'Fair Rest' site Braxted Road	Site is used by travelling show people where circus equipment is stored.	Medium	Construction: The new A12 would sever Braxted Road at Ch.24250 cutting off access along the road, which may disrupt access in the medium term.	Appropriate alternative temporary or permanent access would be provided where practicable	Moderate adverse
			Operation: It is assumed embedded mitigation helps with access (e.g., turning circles) for HGVs, therefore no impact is anticipated during operation.	None required	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
South of A12 Witham Woodchips, Braxted Road, Rivenhall End	Sawmill facility with access within Order Limits on Braxted Road.	Medium	Construction: The new A12 would sever the main access route of Braxted Road at Ch.24250 cutting off access along the road. Braxted Road would be re-aligned to the west with a new underbridge at Ch. 24070 re-establishing access along Braxted Road. Whilst there would be short-term loss of access, this is not likely to affect the viability of the site given the nature of the business.	Appropriate alternative temporary or permanent access would be provided where practicable.	Minor adverse
			Operation: Once the scheme is operational there would be no impact.	None required	No change
Braintree planning application (ref: 19/01980/FUL)	Benton Hall Golf Club Wickham Road. Application for change of use of land to site 18 holiday caravans and extension of carpark, creation of tennis courts, and spa garden. Application straddles Order limits south of Benton Hall Golf Club. Permission has been granted.	Medium	Construction: Potential for a gas corridor to conflict with Benton Hall application site. Given the application is for holiday caravans and other leisure uses, there is potential for pipeline construction activities to disrupt business use. An easement associated with the pipeline may also constrain the proposed layout.	Land acquired for the construction would be reinstated on completion of the gas pipeline diversion. Liaison with third party developers is ongoing to appropriately plan construction (see Chapter 16 of this Environmental Statement [TR010060/APP/6.1]). Ongoing liaison with developers regarding any compensatory measures to accommodate development.	Moderate adverse
			Operation: There may be an easement where occasional maintenance access is required. There would be potential for occasional temporary disruption to the land use.	None identified	Minor adverse
Braintree planning application (ref: 21/03029/FUL)	3 Freebournes Road. Change of Use from Class B2 (General Industry) to a flexible Class B2 (General Industry) and Class B8 (Storage and Distribution) Use. (0.96ha)	Medium	Construction: Utility corridor to be installed along Freebournes Road which may cause transient disruption to access. No impact on employment use of site is anticipated.	Appropriate temporary or permanent access arrangements would be provided where practicable	Negligible adverse
			Operation: No operational impacts identified	None required	No change
Braintree planning application (ref: 20/01754/FUL)	14 Freebournes Road. Application for erection of 2 warehouse buildings to provide multiple industrial units, with ancillary mezzanines, of flexible use (Use	High	Construction: Utility corridor to be installed along Freebournes Road which may cause transient disruption to access. No impact on employment use of site is anticipated.	Appropriate temporary or permanent access arrangements would be provided where practicable	Negligible adverse

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
	Class B2, B8, E(g)). Application abuts order limits west of Freebournes Road off Wheaton Road. Permission has been granted. (1.08ha)		Operation: No operational impacts identified	None required	No change
Braintree planning application (ref: 21/03030/FUL)	16-18 Freebournes Road. Change of Use from Class B2 (General Industry) to a flexible Class B2 (General Industry) and Class B8 (Storage and Distribution) Use. Permission has been granted. (1.5ha)	High	Construction: Utility corridor to be installed along Freebournes Road which may cause transient disruption to access. No impact on employment use of site is anticipated.	Appropriate temporary or permanent access arrangements would be provided where practicable	Negligible adverse
			Operation: No operational impacts identified	None required	No change
Braintree planning application (ref: 16/00082/FUL)	Pickfords Removals Site Eastways. Application for the erection of a distribution warehouse. Application abuts order limits along Eastways in Western Industrial Estate. (1.9 ha) – This is assigned medium for employment on account of low employment density of warehouse use.	Medium	Construction: Utility corridor to be installed along Freebournes Road which may cause transient disruption to access. No impact on employment use of site is anticipated.	Appropriate temporary or permanent access arrangements would be provided where practicable	Negligible adverse
			Operation: No operational impacts identified	None required	No change
Braintree planning application (ref: 18/02200/FUL)	Waterside Business Park Eastways. Application for the erection of 3 employment units. Application abuts order limits along Eastways in Western Industrial Estate. (0.89ha)	Medium	Construction: Utility corridor to be installed along Freebournes Road which may cause transient disruption to access. No impact on employment use of site is anticipated.	Appropriate temporary or permanent access arrangements would be provided where practicable	Negligible adverse
			Operation: No operational impacts identified	None required	No change
Allocation = Site Ref: RIVE 362 and RIVE 363. Policy Ref: Policy LPP 2 Extension to Eastways Industrial Estate Braintree planning application (ref: 20/00128/OUT) Braintree planning application (ref: 21/00031/OUT)	Eastways Industrial Estate. Outline planning permission for industrial, distribution, and storage use. (7.9ha). Permission granted for ref: 20/00128/OUT and ref: 21/00031/OUT.	Very high	Construction: A very small degree of land on the south-eastern boundary of the site would be acquired permanently (~0.2ha) to accommodate the new J22 and drainage. Utility corridor to be installed along Freebournes Road which may cause transient disruption to access. Site compound would be located immediately north-east of site which may also lead to temporary access disruption. No impact on employment use of site is anticipated.	Liaison with third party developers is ongoing to appropriately plan construction (see Chapter 16 of this Environmental Statement [TR010060/APP/6.1]).	Negligible adverse
			Operation: No operational impacts identified	None required	No change

Table A.12 Walkers, cyclists and horse-riders (Witham and Rivenhall End)

Overall significance assessment: Overall, the level of disruption to walkers and cyclists within Witham and Rivenhall End during the construction phase is assessed to have a large adverse significance of effect mainly due to a moderate level of construction related disruption to some very highly used active travel and cycle routes. However, during operation, the recreational value of three footpaths (FP 121_95 (Witham), FP 121_103 (Witham) and FP 105_36 (Rivenhall End)) would be restored – for FP 121_95 by addressing past severance with the proposed new Gershwin Boulevard pedestrian footbridge, for FP 121_103 by providing a footpath diversion which would both address severance by linking to a proposed WCH bridge and creating a circular recreational route, and for FP 105_36 by creating a circular recreational route where the current footpath is truncated by the existing A12. Improvements in the form of widening of shared use walking/cycling routes and provision of toucan crossings would help to improve access. However, there would be a substantial diversion for pedestrians to/from Fair Rest due to proposals to realign Henry Dixon and Braxted Road. For other walkers/cyclists using these roads the proposals would be negligible in the context of their overall journeys. Overall, improvements to provision are judged to be slight beneficial significance in operation, as improvements to accessibility and recreational value of some routes are countered by creation of some more convoluted routes around junction 22 which may frustrate road cyclists.					
WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Howbridge Hall Road	Located south of existing A12, south of Witham. There is public access along this lane to the point where it meets the A12 where public access ceases. The lane then runs parallel to the A12 to Dengie Farm. It is unlikely to be used by the general public as it does not offer a meaningful route other than to access Dengie Farm. This lack of regular use is also evidenced by Strava Global Heatmap data. Therefore, low sensitivity for WCH is assigned.	Low	Construction: (Not assessed for WCH – impacts mainly relate to access to Dengie Farm - see private property and housing assessment in Table A.9)	N/A	N/A
			Operation: (Not assessed for WCH – impacts mainly relate to access to Dengie Farm - see private property and housing assessment in Table A.9)	N/A	N/A
FP 121_95 (Witham)	Footpath crosses the existing A12 at grade via a break in the central reservation barrier at Witham. The speed and volume of traffic effectively severs this footpath. There is no evidence of use from Strava Global Heatmap data nor aerial imagery. It is therefore assumed to have fallen into disuse.	Low (baseline) Medium (with proposed scheme)	Construction: The footpath would be temporarily suspended within the Order Limits to allow for access to, and construction of, proposed new Gershwin Boulevard shared cycle and pedestrian footbridge. However, given the footpath is in disuse, this would be a negligible impact to walkers and cyclists.	All WCH routes would be maintained where safe and reasonably practicable to do so. No temporary diversion is proposed for this PRow.	Negligible adverse
			Operation: Approximately 115m of footpath on the northern side of the A12 corridor would be stopped up and the historically severed footpath rerouted over A12 via proposed new Gershwin Boulevard pedestrian footbridge. This would have the effect of reconnecting the footpath south of the A12 with Gershwin Boulevard in Witham north of the A12, creating a meaningful access to the countryside and lane network for Witham residents, in addition to Maldon Road. This would improve the value of the footpath to 'Medium' as it would become a functional route.	Not required	Moderate beneficial

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
B1018 Maldon Road	Key road connecting residential areas north and south of A12 in Witham as it passes under Oliver's Bridge. Road has footways either side. Strava Global Heatmap data indicate this is well used by cyclists and pedestrians. It is likely used for both active travel and recreationally.	Very high	Construction: One footway would be maintained where safe and practicable while works to widen Oliver's Bridge take place (over approximately seven months) although there is potential that access would be suspended intermittently for safety reasons. Temporary lighting to the new route would be provided. The impact would be transient periods of inconvenience to a well-used route.	All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Moderate adverse
			Operation: No operational impact is anticipated.	None required	No change
Blackwater Rail Trail (see also Table A.10 for assessment in relation to community asset value)	Country park traffic free route which follows former railway line, passing under the A12 via under Benton Bridge. This is a link route for the National Cycle Network. Evidence from Strava Global Heatmap suggests that more cyclists use the parallel Maldon Road (B1018), indicating that the Blackwater Trail may generally be used recreationally.	Medium	Construction: This route would be closed for safety reasons while bridge widening works take place overhead. A temporary diversion would be provided between Blue Mills Hill, Maldon Road and Templar Knights asphalt walkthrough. The impact is likely to be minor inconvenience at the temporary loss of this recreational route but that alternative journeys via Maldon Road would be available.	All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision. The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.	Minor adverse
			Operation: No operational impact on the function and amenity of this WCH route is anticipated. (See Table A.10 for assessment in relation to open space).	See Table A.10 above for mitigation for impacts on open space.	No change
FP 121_101 (Witham) and FP 121_102 (Witham)	Public footpath likely used by walkers for recreation. It passes under the A12 at Brain Bridge and joins FP 121_102 near Benton Hall. Can also be used to access Whetmead Nature Reserve. Strava Global Heatmap data indicates it is well used by pedestrians. It is likely used for recreational access.	Medium	Construction: It would be necessary to close the footpath while works to Brain Bridge take place. This would likely prevent access from Blackwater Lane to Whetmead Nature Reserve over the medium term whilst certain construction activities take place. No diversion has been currently identified. The public footpath would be closed south of the bridge during construction.	None identified	Major adverse
			Operation: Approximately 150m of the route would be stopped up where it coincides with proposed earthworks for the widened A12 corridor, and a realigned route of a similar length provided to maintain connectivity for the public footpath. Approximately 400m of footpath would coincide with an area associated the gas main diversion. Consequently, there may be an easement where occasional maintenance access is required. Potential for occasional temporary disruption to footpath for gas main maintenance.	None identified	Negligible adverse

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
FP 121_103 (Witham)	Crosses A12 at grade via a break in the central reservation barrier at Witham. Public footpath could potentially provide access between Witham and fishing lakes at Little Braxted. However, this requires crossing the A12 at grade which would be extremely hazardous due to dual carriageway conditions. There is no evidence of use from Strava Global Heatmap data nor aerial imagery. It is therefore assumed to have fallen into disuse.	Low (Medium with proposed design in place)	Construction: Approximately 90m of footpath would be stopped up, so that the footpath would terminate at the Order Limits on the east side of the A12. This would allow for the highway widening and associated earthworks in the A12 corridor. Since the footpath is disused at this point it would have minimal impact on walkers.	None identified	Negligible adverse
			Operation: It is proposed to provide a permanent diversion for FP 121_103 so that it links to the proposed new walking/cycling bridge. This would create a meaningful recreational route accessible from the east side of Witham. The result would be to increase the value of this route to 'Medium'. The magnitude of impact is assessed as moderate beneficial on account that past severance has been addressed through an alternative crossing point of the A12 and that meaningful recreational function would be introduced.	None required	Moderate beneficial
FP 268_23 (Wickham Bishops)	Public footpath approximately 500m east of A12 on the edge of the study area which cross fields and can be accessed from Blue Mills Hill.	Medium	Construction: Footpath meets Order Limits in location potentially disrupted by works to gas main diversion. However, it is considered likely that the pipeline diversion could be constructed without disruption to this public right of way.	All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	No change
			Operation: It is assumed that this footpath would not be impacted on by any easement associated with the gas pipeline diversion.	None identified	No change
Little Braxted Lane (NCN Route 16)	South side of A12, terminates at junction 22 (Colemans Interchange). Minor lane that connects hamlet of Little Braxted with Witham. There is a footway along the lane from the point at which an off-road cycleway meets the lane just south of the interchange. This lane also accommodates the Braintree to Colchester cycle route which is also part of National Cycle Network route 16 and so is likely used by a lot of cyclists negotiating the Colemans Interchange.	Very high	Construction: Construction activities associated with junction 22 would disrupt access. WCH would be diverted along newly constructed section around the southern side of junction 22 and over proposed new walking/cycling bridge. This would be a more convoluted route for cyclists and pedestrians and may add up to 500m to some journeys.	All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision. The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.	Moderate adverse

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
	Strava Global Heatmap data indicate high use by pedestrians and cyclists.		Operation: Approximately 285m of the route would be stopped up (including where it currently uses Coleman's Bridge, which is to be demolished) and an alternative alignment is proposed via a new shared walking/cycling footbridge (Little Braxted Footbridge) at chainage 22800 to maintain connectivity over the realigned and widened A12 corridor and onto Little Braxted Road south of the trunk road corridor. The need to negotiate the zig-zag ramp associated with the proposed new walking/cycling footbridge would take longer for cyclists than the baseline route via Coleman's Bridge. Commuting/road cyclists may find this frustrating and less convenient (therefore moderate adverse), whereas the new traffic free connection may be preferable for less confident cyclists, and parents with children (therefore moderate beneficial).	None identified	Moderate adverse (for commuting/road cyclists) Moderate beneficial (for walkers/cyclists who prefer traffic free routes)
B1389/Eastways junction and existing A12 from chainage 22800 to 23600.	This forms part of west-east route used between B1389 Colchester Road and Rivenhall End (shared use path along existing A12 to Colchester). Strava Global Heatmap indicates this is well used by pedestrians and cyclists. It is likely to be part of an important route for active travel.	Very high	Construction: Proposed highway works to B1389 and junction 22 would disrupt access along the footways and road, which would impact on walkers and cyclists. Short diversions would be required to maintain access.	All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision. The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.	Moderate adverse
			Operation: Toucan crossings would be provided on north-west and north-east arms of new reconfigured signalised junction to provide links for NCR 16 users and footway/cycleway on north-west side of B1389. The shared footway/cycleway on southern side of B1389 Colchester Road would be widened and extended to meet the realigned route of NCN 16, as well as linked to shared footway/cycleway along northern length of B1389 via the above-mentioned toucan crossing. This route then continues past the proposed new Junction 22 Northern Roundabout via a shared use route which bypasses the junction and ties in with the existing A12 shared use route at approximately chainage 23650. In combination these proposals would improve the safety for pedestrians and cyclists crossing the junction, and also improve the quality of cycling provision east-west along existing A12 route.	None required	Minor beneficial

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
BR 105_29 (Rivenhall)	Crosses study area east of A12 between Little Braxted Road and Braxted Road. Likely used by WCH for recreation. Strava Global Heatmap data indicate this is relatively well used.	Medium	Construction: Slight impacts at the Little Braxted Road access point for the bridleway may occur as a consequence of construction of the new walking/cycling route to the new footbridge. However, impacts are expected to be relatively minimal with no impact on use of the bridleway once away from Little Braxted Road.	All WCH routes would be maintained where safe and reasonably practicable to do so.	Negligible
			Operation: No operational impact is anticipated.	None required	N/A
Oak Road and shared use footway/cycleway along northbound side of A12 at Rivenhall End between Whitelands and Memorial Road Bridge	This forms part of west-east route along existing A12 to Colchester. Strava Global Heatmap indicates this is well used by pedestrians and cyclists. It is likely to be part of an important route for active travel.	Very high	Construction: Proposed highway works to B1389 and junction 22 would disrupt access along the footways and road, which would impact on walkers and cyclists. Short diversions would be required to maintain access.	<p>All WCH routes would be maintained where safe and reasonably practicable to do so.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Moderate adverse
			Operation: Direct access from the north side of Oak Road for vehicles to/from existing A12 would be closed. However, walkers and cyclists would still be able to access the shared walking/cycling footway on the north-west side of existing A12. A new (staggered) toucan crossing would be provided across the existing A12 (which would be de-trunked) to link with walking/cycling provision along the new access road which would connect the proposed realigned Little Braxted Road with the proposed Rivenhall End West Roundabout, as well as link with walking/cycling route along the proposed realigned section of Henry Dixon Road. The proposals would reconnect walkers and cyclists to destinations (businesses premises and residential properties) within Rivenhall End north and south of the existing A12 alignment, where currently the only route is >500m via Henry Dixon Road. Approximately 420m of existing footway/cycleway on north-west side of A12 would be widened where practicable, and opportunity is created on the de-trunked A12 for potential new bus stops. East-west journeys for active travellers would be improved due to de-trunking and increased segregation from heavily trafficked A12 trunk road.	None required	Moderate beneficial

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Henry Dixon and Braxted Road	Located through Rivenhall End, this road connects the north and south of Rivenhall End by passing under the A12 via Memorial Bridge. The road has a footway along one side and also has steps up to the footway on the southbound side of the A12 where there is a bus stop. Strava Global Heatmap data indicate this is highly used by cyclists in particular, and also used by walkers.	High	Construction: Approximately 100m of the existing footway along Henry Dixon Road immediately north of Fair Rest would be closed to allow construction of the proposed new A12 alignment. Walkers and cyclists would be diverted around the Braxted Road realignment. This could add 500m to the journey for Fair Rest residents, but for most it would be a relatively minor inconvenience throughout the works period.	<p>The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	<p>Moderate adverse (to/from Fair Rest)</p> <p>Minor adverse (other cyclists/walkers)</p>
			Operation: Approximately 100m of the existing footway along Henry Dixon Road immediately north of Fair Rest (approximate chainage 24200) is to be stopped up as is crossed by proposed new A12 alignment. An alternative route is proposed along the realigned Henry Dixon Road to the proposed junction with the realigned Braxted Road, where it would tie into a walking/cycling route along Braxted Road and over Braxted Road Overbridge. This would add approximately 500m between Fair Rest and the realigned Henry Dixon Road. However, it does provide enhanced walking/cycling route which wasn't previously available along Braxted Road. A controlled crossing location is proposed at the junction between Henry Dixon Road and Braxted Road, allowing for safe crossing. The magnitude of effect would be moderate adverse for pedestrians travelling to/from Fair Rest but is judged to be negligible adverse for the context of cycling and other pedestrian journeys.	None identified	<p>Moderate adverse (to/from Fair Rest)</p> <p>Negligible adverse (other cycling/pedestrian journeys)</p>

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
FP 105_47 (Rivenhall)	Footpath follows parallel to southern side of railway approximately 360m west of existing A12. It connects Oak Road, Rivenhall End with a wider PRow network. Strava Global Heatmap data indicate it is well used by pedestrians. It is likely used for recreation such as dog walking.	Medium	Construction: The footpath follows the edge of the Order Limits and is close (<12m) to a proposed borrow pit location (borrow pit I). No direct impact on the PRow is anticipated, although there would likely be an impact on amenity, such as potential dust and noise, which may dissuade some use of the footpath for recreation.	Measures to control fugitive dust would be employed (refer to Chapter 6: Air Quality of this Environmental Statement [TR010060/APP/6.1]). All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Minor adverse
			Operation: No operational impact is anticipated.	None required	No change
FP 105_45 (Rivenhall)	377m public footpath accessed from existing A12. The footpath crosses fields in a north-westerly direction meeting FP 105_47 and also FP 105_43 across the railway (via a level crossing). Strava Global Heatmap data indicates relatively little use, so it is likely occasionally used for recreation, though other PRow in the area are more popular.	Medium	Construction: The entire footpath would be realigned to the southwest of the proposed borrow pit I, as its current route is through the middle of the proposed borrow pit area. Access would therefore be maintained, although amenity may be impacted on by operations at the borrow pit, such as from dust and noise. Since the route appears to be rarely used, few walkers would be impacted on and the difference in journey length is not judged likely to be of consequence to most journeys.	Measures to control fugitive dust would be employed (refer to Chapter 6: Air Quality of this Environmental Statement [TR010060/APP/6.1]). All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Minor adverse
			Operation: Once operational, no impact on FP 105_45 is likely although there is potential for slight encroachment on the public footpath in a worst-case scenario should the full limits of deviation at the proposed Rivenhall East Roundabout be required. In this instance, it is expected that the footpath would be realigned, with negligible adverse impact on its recreational use.	None identified	Negligible adverse

WCH asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
FP 105_46 (Rivenhall)	612m public footpath accessed from existing A12. The footpath crosses fields in a north-westerly direction meeting FP 105_47 and also FP 105_43 across the railway (via a level crossing). Strava Global Heatmap data indicates very little use, so it is likely very occasionally used for recreation. Furthermore, access to the footpath in the baseline situation is completely overgrown, indicating it is not currently used. It is therefore valued as low.	Low (baseline)	Construction: This footpath would be closed, and walkers would divert via the temporarily realigned route identified for FP_45 above. Access would therefore be maintained, although amenity may be impacted on by operations at the borrow pit, such as from dust and noise. Since the route appears to be rarely used, few walkers would be impacted and the difference in journey length is not judged likely to be of consequence to most journeys.	Measures to control fugitive dust would be employed (refer to Chapter 6: Air Quality of this Environmental Statement [TR010060/APP/6.1]). All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Minor adverse
		Medium (with proposed scheme)	Operation: Approximately 120m of FP 105_46 would be stopped up at its connection to the A12 and the footpath would be realigned to tie in with the realigned shared use footway/cycleway along the proposed B1024 extension at the proposed Rivenhall End East Roundabout. For walkers seeking to access the footpath from the east, this would add an additional 360m to the journey. However, it is expected that most walkers would be coming from Rivenhall End to the west so would not be noticeably affected by the realignment. The proposals would facilitate an accessible circular route in combination with FP 105_45, improving the value of the footpath to 'medium' on the basis that it would most likely be used for recreational walks.	None required	Minor beneficial
FP 105_36 (Rivenhall)	565m footpath links with south side of A12 and south of Fire and Rescue Headquarters where it continues across fields towards Great Braxted Mill. To access the footpath, walkers need to negotiate the very narrow footway alongside the southbound carriageway of A12 and there is no clear access point to the footpath and a steep embankment would need to be negotiated. It is therefore fairly inaccessible and Strava Global Heatmap shows very little evidence of use of public footpath. It is therefore judged low value.	Low (baseline)	Construction: Footpath would be closed for the entire construction period to allow for construction of new A12 alignment, and attenuation pond. However, since it scarcely used, this is not expected to be of any consequence for walkers.	None proposed	Major adverse (affecting very few walkers)
		Medium (with proposals)	Operation: Approximately 150m of FP 105_36 would be stopped up to allow for the development of the proposed new A12 alignment and attenuation pond. The footpath would be realigned around the west side of the proposed attenuation pond and then follow the proposed pond access route. The proposals would allow for an improved circular recreational route in combination with footpath FP 105_35, with more diverse green space than the baseline route through the arable field and down the steep embankment onto the existing narrow footway along the southern side of the existing A12.	None required	Moderate beneficial

4 Kelvedon, Feering and Inworth land use and accessibility assessment

4.1 Introduction

- 4.1.1 Tables A.13 to A.16 provide an assessment of impacts on land use and accessibility matters for Kelvedon, Feering and Inworth. This includes all identified assets which coincide with the Order Limits within the civil parishes of Kelvedon, Feering and Messing-cum-Inworth.
- 4.1.2 An important assumption to note is that although there may be a major impact on a particular land use and accessibility asset, which would be greatly significant to the owners/users of that asset, this does not imply significance at a decision-making level, as there may be sufficient alternative resource to serve overall community needs. Instead, the assessment of significance considers the combined effect of impacts on assets on the overall resource relating to each land use and accessibility matter. The significance assessment is provided in the top row of each table.
- 4.1.3 Reference should also be made to the health assessment in Chapter 13 of the Environmental Statement [TR010060/APP/6.1] for potential health and wellbeing impacts associated with impacts on land use.
- 4.1.4 Key impacts are illustrated on Figure 13.2 of the Environmental Statement [TR010060/APP/6.2]. Full details of where PRoW would be permanently stopped up or diverted, together with any chainages referred to in the following tables are shown on the General Arrangement Plans [TR010060/APP/2.9]. Full details of temporary PRoW and footway diversions are shown on the Construction Phase Plans, which are available in Volume 2 of the DCO application [TR010060/APP/2.15]).

Table A.13 Private property and housing (Kelvedon, Feering and Inworth)

Overall significance assessment: There are approximately 2,282 existing residential properties which fall within the part of land use and accessibility study area that coincides with the parishes of Kelvedon, Feering and Messing-cum-Inworth. The vast majority of this land use would not be affected by the proposed scheme. No direct impacts on residential land use are anticipated from construction and operation of the proposed scheme. Impacts on residential land use would be indirect due to impacts on access arrangements affecting a small number of properties. However, overall residential viability of all properties in this area is expected to be maintained during construction and operation and so no change is anticipated and overall, the effect is assessed to be of neutral significance of effect on residential land use during construction and operation.					
Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
6+ residential properties on Cranes Lane also named Crabb's Lane	Existing housing.	Medium	Construction: Disruption at the junction of Cranes Lane with B1024 London Road during re-alignment works on London Road at the A12 underbridge during bridge widening works. This would be short to medium term disruption for residents using Cranes Lane and those using London Road to Kelvedon. This is not expected to compromise residential land use.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Negligible adverse
			Operation: No operational impact is anticipated.	None required	No change
Braintree planning application (ref: 17/01979/OUT) (also assessed under Development land and business in Table A.15).	Land at Cranes Lane. Outline planning permission for a mixed development with up to 125 residential dwellings. Application straddles Order Limits along Crabb's Lane and London Road.	High	Construction: There would be slight encroachment where the proposed scheme is tied into B1024 London Road and a slight rearrangement of the existing junction with Crabb's Lane would be required. However, this would not impact the viability of the development application.	Ongoing liaison with developer regarding any compensatory measures to accommodate development. The compensation code will apply.	Negligible
			Operation: No operational impact is anticipated.	None required	No change
Braintree planning application (ref: 15/01498/FUL)	Grangewood, Centre 10 - 12 High Street, Kelvedon. Application for the erection of 25 dwellings. Application abuts Order Limits along High Street.	High	Construction: Minimal impacts from the proposed scheme are expected on High Street which borders the application site. This road would be temporarily acquired due to installation of cabling. This is not expected to have any likely significant impacts on neighbouring development proposals.	None required	No change
			Operation: No operational impacts identified.	None required	No change
Braintree planning application (ref: 18/01591/FUL)	Kelvedon House 86 High Street. Application for the erection of 4 flats and 4 dwellings. Application abuts Order Limits along High Street/B1024 opposite Rolley Lane.	High	Construction: Minimal impacts from the proposed scheme are expected on High Street which borders the application site. This road would be temporarily acquired due to installation of cabling. This is not expected to have any likely significant impacts on neighbouring development proposals.	None required	No change
			Operation: No operational impacts identified.	None required	No change

Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Properties along Maldon Road / Highfields Lane	Small number of houses along these lanes south of the River Blackwater	Medium	Construction: Highfields Bridge would be demolished, and the road cutting would be widened to accommodate the widening of the A12. As a result of the widening a section of Highfields Lane would be lost. The lost section would be re-aligned, and the bridge replaced. There would be short to medium term disruption for residents on Maldon Road / Highfields Lane during the demolition / construction works. Upon completion of works no effect long term.	Appropriate alternative temporary or permanent access would be provided where practicable.	Minor – there is alternative vehicular access via the lane network, albeit considerably longer
			Operation: No operational impact is anticipated.	None required	No change
No. 19 New Lane, Feering	End house on New Lane, by East Feering Roundabout	Medium	Construction: Potential permanent direct impact on boundary features of residential property due to tie between proposed new roundabout with New Lane and the B1024 London Road. Impact is likely to involve marginal encroachment to the edge of front garden/drive. This permanent impact would have no impact on the residential use of this land although temporary inconvenience of access is possible.	Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply	Minor adverse
			Operation: No operational impacts on residential land use viability anticipated beyond those which would occur during construction.	None required	No change
Braintree Draft Local Plan 2017 - FEER233 Braintree planning application (ref: 16/00569/OUT) Braintree planning application (ref: 19/01222/REM)	The allocation FEER233 covers land south of Feering either side of Inworth Road for up to 750 dwellings. Applications for Land Northeast Of Inworth Road 16/00569/OUT cover a site of 5.5ha, east of Inworth Road for up to 165 residential dwellings. The application site abuts the Order Limits at London Road, Feering. This is covered by FEER233A in the Section 2 Revised Maps for the Emerging Plan Examination.	Very high	Construction: No land-take is anticipated for the site covered by planning applications (ref 16/00569/OUT and 19/01222/REM) (FEER233A). Works to London Road in this location would be very minor in the form of cabling installation. The proposed scheme cuts a strip through the area of land under allocation FEER233B between Inworth Road and the existing A12 where temporary position would be required for works access to Threshelford Bridge and proposals for the proposed new A12 alignment and Prested Hall/Threshelfords Overbridge, which would all be to the east of the allocated site. This is not expected to change the viability of the land use allocation. Approximately 12ha of the allocation along the eastern edge and around the existing Threshelford Bridge would be permanently acquired to accommodate the proposed new WCH route, drainage and landscaping proposals. Since any residential arrangement developed would need to accommodate PROW 78_18 (Feering) anyway, and include an element of landscaping, this land-take is not anticipated to affect the viability of the land allocation.	Ongoing liaison with developers and Braintree District Council regarding any compensatory measures to accommodate development. The principles of the compensation code will apply for land-take affecting third parties.	Negligible adverse
			Operation: No operational impact identified.	None required	No change

Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Braintree Draft Local Plan 2017 - FEER232	Feering, near A12 J24. Provision of approximately 30 dwellings. Application abuts Order Limits at London Road and New Lane	High	Construction: Small degree of permanent land take where allocation site borders London Road and existing A12 to accommodate proposed drainage ditch and flood compensation area and other works associated with the proposed realignment of Feering East Roundabout (~1.1ha). This is not anticipated to affect the viability of the land allocation.	Ongoing liaison with developers and Braintree District Council regarding any compensatory measures to accommodate development.	Negligible adverse
			Operation: No operational impact identified.	None required	No change
Properties on B1023 Inworth Road, south of existing A12 at Park Bridge	Existing housing between Feering and Inworth, south of Park Bridge.	Medium	Construction: Park Bridge over the B1023, near Barconn would be widened. Also, there would be a new junction, junction 24, constructed west of Inworth Road incorporating a new underbridge beneath the A12. There would be short to medium term disruption for residents using the B1023 road during construction works. An alternative route is available over the A12; albeit a much longer route.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Minor – there is alternative access via the lane network, albeit considerably longer
			Operation: No operational impact identified	Not required	No change
3+ Residential properties along lane leading to Prested Hall off the B1024	Existing housing. The three residential properties are located at the end of the access road to Prested Hall, which is off the B1024.	Medium	Construction: The new A12 would sever this access road, near the B1024, and without mitigation access would be lost. A new access road would be provided as part of the proposed scheme which would take the road to the west of the existing access. There would be short to medium term disruption for the residents during the construction works but no impact on viability of residential use of properties is anticipated.	Maintain access for residents throughout construction period where practicable by completing alternative access route prior to severance of Prested Hall access road.	Minor adverse
			Operation: No operational impact identified.	None required	No change

Table A.14 Community land and assets (Kelvedon, Feering and Inworth)

<p>Overall significance assessment: The main impacts on community land and assets identified for Kelvedon, Feering and Inworth relate to the Essex County Fire and Rescue Service Headquarters just outside of Kelvedon, and the All-Saints Church in Inworth. A minor adverse magnitude of impact is anticipated on the Essex County Fire and Rescue Service Headquarters due to proposed changes in access to the premises from the proposed scheme. Although this is a very high sensitivity asset, these changes are not anticipated to have a significant effect on the function of that asset and the ability to serve the communities across Essex. The impact on All Saints Church in Inworth relates to marginal encroachment onto the church grounds from localised widening works on Inworth Road. Impacts on this community asset would include some inconvenience of access during construction activities, as well as the permanent marginal loss of land at the boundary.</p> <p>The impacts on community land use and assets relate to quite different types of community assets, in different locations and relate to the construction stage. Most other community land and assets would be unaffected. On this basis, the overall impact on community land and assets in the Kelvedon, Feering and Inworth communities is assessed as slight adverse during construction and neutral during operation.</p>					
Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Essex County Fire and Rescue Service Headquarters, Kelvedon Park Ch. 25000-25260	The Headquarters is where a large percentage of Essex County Fire and Rescue Service staff are based as well as the emergency control centre. The facility also provides learning and development for staff. It is therefore an important asset for the community and provides a service for the population of Essex.	Very high	<p>Construction: Existing access to the Fire Station is off the A12. The new A12 would cut across the existing A12 within close proximity to the west of the Fire Station. Consequently, direct access onto the new A12 would be severed. The new permanent access would be from the east along the de-trunked A12.</p> <p>A small degree of short to medium-term land take to facilitate construction is required which would not interfere with the functioning of this community service. Access to the facility would be maintained throughout construction, however small-scale diversions may be required. Land occupied on a temporary basis would be fully reinstated on completion of works.</p>	Appropriate alternative temporary or permanent access would be provided where practicable.	Minor adverse
			<p>Operation: The access to/from Headquarters would be from the east towards Kelvedon and there would be no direct access onto the trunk road. However, since this facility does not house fire engines, this is not anticipated to affect the effectiveness of emergency responses and so no change is predicted.</p>	None required	No change
Kelvedon recreation ground	This asset includes a playing field and tennis courts. Accessed via The Chase which is off B1024 High Street within the provisional Order Limits. Recreation ground itself is 85m away from provisional Order Limits. This is the principal recreational space serving the Kelvedon community.	High	<p>Construction: No construction impacts are identified which would affect the asset. Works on High Street, Kelvedon would be minor and associated with utilities installation, which would not significantly differ from the baseline in terms of access on local roads, where maintenance of services and utilities is routine.</p>	None required	No change
			<p>Operation: No operational impacts are identified.</p>	None required	No change
Allotments, High Street, Kelvedon	Allotments accessed via B1024 High Street, Kelvedon. There is a waiting list for allotments in this parish, suggesting high local demand for this resource.	High	<p>Construction: No construction impacts are identified which would affect the asset. Works on High Street, Kelvedon would be minor and associated with utilities installation, which would not significantly differ from the baseline in terms of access on local roads, where maintenance of services and utilities is routine.</p>	None required	No change
			<p>Operation: No operational impacts are identified.</p>	None required	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
St Dominic's Nursing Home, Church Street, Kelvedon	Accessed from B1024 London Road, which is within the Order Limits.	Very high	Construction: No construction impacts are identified which would affect the asset. Works on London Road, Kelvedon would be minor and associated with utilities installation, which would not significantly differ from the baseline in terms of access on local roads, where maintenance of services and utilities is routine.	None required	No change
			Operation: No operational impacts are identified.	None required	No change
Kelvedon & Feering Health Centre	GP practice serving approximately 7800 patients from Kelvedon and surrounding area. The nearby Brimpton House GP practice has now merged with the Kelvedon & Feering Health Centre. Located on High Street which is within the Order Limits.	Very high	Construction: No construction impacts are identified which would affect the asset. Works on London Road, Kelvedon would be minor and associated with utilities installation, which would not significantly differ from the baseline in terms of access on local roads, where maintenance of services and utilities is routine.	None required	No change
			Operation: No operational impacts are identified.	None required	No change
Mid Essex Dental Care, 215-217 High Street, Kelvedon	Dentist located along B1024 which is within Order Limits	Very high	Construction: No construction impacts are identified which would affect the asset. Works on London Road, Kelvedon would be minor and associated with utilities installation, which would not significantly differ from the baseline in terms of access on local roads, where maintenance of services and utilities is routine.	None required	No change
			Operation: No operational impacts are identified.	None required	No change
Zero Three Care Homes LLP, B1024 London Road, Feering	Care Home which abuts Order Limits near existing junction with A12.	Very high	Construction: There is potential for minor disruption to access for residents and visitors due to works to tie in the Prested Hall-Threshelfords Joint Access Bridge and works to the approach to the proposed Feering East Roundabout. However, impacts are likely to be of minor inconvenience rather than any notable effect on physical access and the operation of the care home.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Negligible adverse
			Operation: No operational impacts are identified.	None required	No change
St Mary Immaculate & The Holy Archangels Catholic Church	Church and grounds abut Order Limits close to B1024, St Mary's Square in Kelvedon	High	Construction: No construction impacts are identified which would affect the asset. Works on London Road, Kelvedon would be minor and associated with utilities installation, which would not significantly differ from the baseline in terms of access on local roads, where maintenance of services and utilities is routine.	None required	No change
			Operation: No operational impacts are identified.	None required	No change
Kelvedon United Reformed Church, High Street, Kelvedon	Accessed via B1024 which is within Order Limits. Car park access via New Road.	High	Construction: No construction impacts are identified which would affect the asset. Works on London Road, Kelvedon would be minor and associated with utilities installation, which would not significantly differ from the baseline in terms of access on local roads, where maintenance of services and utilities is routine.	None required	No change
			Operation: No operational impacts are identified.	None required	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
The Institute, Kelvedon	Hall used by local clubs and activities. Accessed via B1024 which is within Order Limits.	High	Construction: No construction impacts are identified which would affect the asset. Works on London Road, Kelvedon would be minor and associated with utilities installation, which would not significantly differ from the baseline in terms of access on local roads, where maintenance of services and utilities is routine.	None required	No change
			Operation: No operational impacts are identified.	None required	No change
Former Quakers burial ground	B1024 High Street, Kelvedon. Not in use since 1963.	Low	Construction: No construction impacts are identified which would affect the asset. Works on London Road, Kelvedon would be minor and associated with utilities installation, which would not significantly differ from the baseline in terms of access on local roads, where maintenance of services and utilities is routine.	None required	No change
			Operation: No operational impacts are identified.	None required	No change
Bridge Meadow	Public park abuts B1024 Feering Hill which is within Order Limits.	Medium	Construction: No construction impacts are identified which would affect the asset. Works on Feering Hill, Kelvedon would be minor and associated with utilities installation, which would not significantly differ from the baseline in terms of access on local roads, where maintenance of services and utilities is routine.	None required	No change
			Operation: No operational impacts are identified.	None required	No change
All Saints Church, B1023 Inworth Road, Inworth	Grounds of church coincide with Order Limits on Inworth Road	High	Construction: Marginal encroachment onto the grounds of this church would be likely from localised widening works on Inworth Road. The proposals include some tree planting at the edge of the grounds. Impacts on this community asset would include some inconvenience of access during construction activities, as well as the permanent marginal loss of land at the boundary (approximately 0.66m ²). This is not anticipated to affect the overall function and physical ability to access the asset.	Appropriate temporary or permanent access arrangements would be provided where practicable. Liaison with landowners affected by the proposals has been ongoing. The principles of the compensation code will apply.	Minor adverse
			Operation: No operational impacts are identified.	None required	No change

Table A.15 Development land and business (Kelvedon, Feering and Inworth)

<p>Overall Significance Assessment: Significant adverse effects on two businesses in this community area have been identified. In particular, one business premises (Barconn Limited) on Inworth Road would be compulsory purchased to allow for widening work of the A12 at Park Bridge. The access and grounds and setting of Prested Hall, which is used as a wedding venue as well as hotel and health club, would also be affected. This would be disruptive to the business, particularly for events such as weddings. Relatively few other business have been identified which would be directly impacted on and so an overall moderate magnitude of impact on development land and business in this community is anticipated. Installation of cabling and utility diversions through Kelvedon High Street may cause some disruption but this is not likely to be notably different from general baseline maintenance activities in urban areas.</p> <p>Owing to the scale of impact on two particular businesses, but noting most other businesses would be unaffected, the significance of effect during construction is assessed to be overall moderate adverse for development land and business during construction, and negligible adverse during operation.</p>					
Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
North of A12, between B1024 and A12 Knight Group and other businesses in small business park off B1024 London Road, Kelvedon	Civil engineering, construction, and groundworks offices and warehouse unit and some other business units.	Medium	Construction: The access to the business site is off the B1024 between the A12 and Kelvedon. Access from the west would potentially experience transient disruption during the construction of the new road layout.	Appropriate alternative temporary or permanent access would be provided where practicable.	Negligible adverse
			Operation: No impact anticipated during operation.	None required	No change
South of A12 Barconn Limited, off the B1023 Inworth Road at Feering	Specialist groundworks and civil engineering contractor. This is a medium sized employer.	Medium	Construction: This site falls within the footprint of the highway widening proposals at this location and would be permanently acquired. Opportunities are being sought to retain some of the buildings. However, at the time of assessment it is uncertain whether it would be feasible to retain the buildings, and therefore it has been assessed as a loss of property as a worst case.	No mitigation proposed. Liaison with business owners affected by the proposals has been ongoing. The principles of the compensation code will apply.	Major adverse
			Operation: N/A (business would have relocated).	N/A	N/A
South of A12 Premises located on Inworth Road south of the A12, including Anglia Tours, Divine Care Provider Ltd, Astley Components, Peta Ltd Haley Peter, and Stonefields Farm Shop	Several businesses including tour organiser, elderly care agency, fastener supplier, manufacturing site, accountant, and farm shop.	High	Construction: Park Bridge over the B1023, near Barconn Ltd would be widened. Also, there would be a new junction, J24, constructed west of Inworth Road incorporating a new underbridge beneath the A12. There would therefore be short to medium term disruption of access for those using the B1023 road during construction works. An alternative route is available over the A12, albeit a much longer route.	Appropriate alternative temporary or permanent access would be provided where practicable.	Minor adverse
			Operation: No impact anticipated during operation.	None required	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Threshelfords Business Park	Business park incorporating a number of different businesses including construction, vehicle repair, office supplies, and travel agent.	High	Construction: Park Bridge over the B1023, near Barconn Ltd would be widened. Also, there would be a new junction, J24, constructed west of Inworth Road incorporating a new underbridge beneath the A12. There would therefore be short to medium term disruption for those using the B1023 road to access the business park during construction works. An alternative route is available over the A12, albeit a much longer route.	Appropriate alternative temporary or permanent access would be provided where practicable	Minor adverse
			Operation: Once the scheme is operational there would be no impact.	None required	No change
South of A12 Prested Hall, Feering	Hotel and wedding venue. Main/only access route is within Order Limits. Sensitivity is assigned high as dependent on setting.	High	Construction: Prested Hall is accessed via a road off the B1024. The new A12 would sever this access road, near the B1024 and access would be lost; there is no alternative access available. A new access road would be provided which would take the road to the west of the existing. Temporary disruption to access would be likely during construction, and temporary land take required to facilitate construction of a new cut-off ditch. Construction works to the new trunk road and access would be visible and audible from Prested Hall and may produce dust, which given the nature of the business (wedding venue, amongst other uses), would be sensitive to construction noise and dust.	Appropriate alternative temporary or permanent access would be provided where practicable. Provide advance notice to operator of any proposed works to limit disruptions to events. Measures to control dust and noise as set out by Chapters 6 Air Quality and 12 Noise and Vibration of this Environmental Statement 6.1 [TR010060/APP/6.1].	Minor adverse
			Operation: The change of setting (e.g., loss of the chase) may affect some function of the premises as a wedding venue although it is expected that overtime it would adapt.	Landscaping proposals to mitigate impacts on setting are set out in Chapter 8 of this Environmental Statement 6.1 [TR010060/APP/6.1].	Minor adverse
Allocation = Site Ref: RIVE 364. Policy Ref: LPP 4	Kelvedon Park. Emerging Braintree District Local Plan 2033 Land at the Essex Fire & Rescue Service Headquarters, Kelvedon Park is allocated as a Special Employment Area specifically to meet the requirements of the emergency services. An additional 3.3ha extension is allocated on the Proposals Map.	High	Construction: A very small degree of land (~0.4ha) on the north-western boundary of the site would be acquired to accommodate a utility corridor and tie in with access. This is not anticipated to encroach on any employment area of the site, nor compromise any expansion of the site for employment.	Liaison with Essex Fire and Rescue is ongoing to appropriately plan construction (see Chapter 16, Cumulative Effects of this Environmental Statement [TR010060/APP/6.1]).	Negligible adverse
			Operation: No operational impacts identified	None required	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Braintree planning application (ref: 17/01979/OUT)	Land at Cranes Lane. Outline planning permission for a mixed development (see also Table A.13 of this appendix). This includes up to 2000m ² of floor space. Application straddles order limits along Crabbs Lane and London Road. (Total site is 6.3ha).	Very high	Construction: There would be slight encroachment where the proposed scheme is tied into B1024 London Road and a slight rearrangement of the existing junction with Crabb's Lane would be required. However, this would not impact the viability of the development application.	Liaison with third party developers is ongoing to appropriately plan construction (see Chapter 16 of this Environmental Statement [TR010060/APP/6.1]).	Negligible
			Operation: No operational impact is anticipated.	None required	No change

Table A.16 Walkers, cyclists and horse-riders (Kelvedon, Feering and Inworth)

Overall significance assessment: Notable disruption to walkers who use public footpath FP 78_18 (Feering), which would require closure for a period of approximately 39 months while the proposed demolition of Threshelford Bridge and construction of the replacement structure takes place. There are some other impacts of moderate magnitude particularly affecting recreational walkers, due to PRoW diversions and closures during construction. Overall, the level of disruption to walkers and cyclists within the parishes of Kelvedon, Feering and Inworth during the construction phase is assessed to have a **moderate adverse** significance of effect mainly due to construction related disruption to PRoW and recreational access.

During operation there are several slight beneficial effects on routes due to minor improvements to accessibility, such as widening or upgrades to bridleway. The proposed new walking/cycling provision over the proposed combined Threshelford/Prested Hall accommodation bridge would replace access lost by the stopping up of part of FP 78_18 (Feering). The new route would be of a different character (metalled) and 200m longer. However, it would be able to accommodate cyclists, and this may also be beneficial for wheelchair access. It is therefore beneficial to some people but would be adverse in terms of recreational amenity for walkers seeking a more 'rural' experience. The greatest area of impact for walkers and cyclists would be for routes meeting the existing A12 in the vicinity of the Essex County Fire and Rescue Service Headquarters. The provision of the proposed Sniveller's Lane footbridge would address existing severance where currently people cannot cross north to south over the A12. This provision would also facilitate recreational access to the Blackwater Valley south of the A12 via FP 92_27, FP 92_32, FP 92_28 and FP 105_36, as well as the PRoW network north of the existing A12. East-west connectivity would be served by an enhanced shared use walking/cycling route along northbound side of the B1024, which would be an improvement over the current route alongside the existing A12 trunk road.

Overall, the improved provision is likely to be of significance to east-west commuters (although it is uncertain whether it would be sufficient to attract new users) and also facilitate more recreational use of the PRoW and lane network. Therefore, an overall **moderate beneficial** significance of effect is predicted for operation.

WCH asset/s	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
FP 92_32 (Kelvedon), FP 92_27 (Kelvedon) and Snivellers Lane. Essex Fire and Rescue Headquarters and footway alongside northbound side of A12 between Cranes Lane (Kelvedon) and Sniveller's Lane (approximately chainage 24800 – 26200) and footway on southbound side (approximately	Each of these footpaths and the lane (unmetalled) terminates at the A12. The ones which meet the northbound carriageway have access onto the shared use path that runs parallel to the A12, while the ones which meet the southbound carriageway have access to the footway. However, there are no crossing points across the A12 for any of these PRoW meaning pedestrians would have to cross at Rivenhall End or at junction 23 (Kelvedon South Interchange) where at grade crossings are required for the roads which pass under the A12 at the interchange. Strava Global Heatmap data indicates limited use of the public footpaths, moderate use of Sniveller's Lane and regular use of Crane's Lane. The footway along the northbound side of A12 is very well used and so overall 'Very high' value has been applied.	Medium (PRoW and Sniveller's Lane) Very high (A12 footways and Crane's Lane)	Construction: Access along footpaths FP 92_32 and FP 92_27 would be maintained. One footpath along Crane's Bridge would also be kept open under Crane's Bridge where possible. It is expected that access for walkers and cyclists would be maintained along the A12 footways, with minor diversions provided to avoid works to highway.	The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Negligible adverse

WCH asset/s	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
chainage 24800 – 25900).			<p>Operation: A shared use footway/cycleway would be provided along the proposed local access road (the existing A12 route) to the Essex Fire and Rescue Headquarters. Access across the proposed new A12 alignment would be provided via the Sniveller's Lane footbridge (suitable for walkers, cyclists, and horse riders), which would link to the enhanced shared footway/cycleway along the proposed B1024 extension, to Sniveller's Lane, and to the proposed new bus stop provision on the B1024.</p> <p>This provision would address existing severance across the existing A12 for walkers and cyclists and mitigate the potential for new severance from the proposed realigned A12. It would also facilitate recreational access to the Blackwater Valley south of the A12 via FP 92_27, FP 92_32, FP 92_28 and FP 105_36, as well as the PRow network north of the existing A12.</p> <p>Approximately 50m of FP 92_32 would be realigned at the connection with the footway on the A12.</p> <p>No direct impact anticipated to FP 92_27.</p> <p>Snivellers Lane would be tied into the above-mentioned enhanced shared footway/cycleway along the proposed B1024 extension.</p> <p>It is judged that the overall provision in this area would increase the accessibility and connectivity value of the routes.</p>	None required	Major beneficial
FP 92_30 (Kelvedon), FP 246_19 (Great Braxted)	These linked footpaths are linked together with FP 92_30 meeting the on-slip at junction 23 (Kelvedon South Interchange) where an at grade crossing is required to get to the footway that follows the road under the A12 (Crane's Bridge). Further at grade crossings are then required to the shared use path along the B1024 London Road.	Medium	<p>Construction: The footpaths would be realigned along proposed new bridleway adjacent to Order Limits boundary. Plant crossing points may be required near the proposed compound so occasional disruption to users of the PRow is anticipated. The existing Ashman's Farm footbridge over watercourse would be relocated further south. No noticeable impact on overall distance for journeys is anticipated, but amenity of route may be reduced during construction (approximately 10 months).</p>	<p>The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p>	Minor adverse
			<p>Operation: FP 92_30 and the northern 100m stretch of FP 246_19 would be stopped up and an alternative route of equal length provided approximately 70m south of the existing FP 92_30 footpath alignment. The new provision would be upgraded to bridleway status. On the basis that the new route would serve more types of journey (i.e., horse riding and cycling) and would be more distant than the heavily trafficked A12 corridor, the impact is judged to be beneficial.</p>	None required	Minor beneficial

WCH asset/s	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Maldon Road and Highfields Lane and FP 246_2, 246_19 and 92_26.	Maldon Road crosses A12 via Highfields Bridge near Kelvedon. It connects Kelvedon to a network of lanes and Tiptree south of A12. Maldon Road shows very high use by walkers and cyclists on Strava Global Heatmap while Highfields Lane shows high use. Likely to be popular with recreational cyclists but would also be used by walkers to access PRow network south of the A12.	High	Construction: While Highfields Bridge is demolished, WCH would be diverted via the proposed new Highfields Bridge. The footway on Highfields Bridge would be temporarily closed 2-4 weeks while tie in works of the road are undertaken.	<p>The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Moderate adverse
			Operation: A shared footway/cycleway would be provided on the south-east side of the realigned Highfields Lane and the existing footway on Maldon Road (south of Blackwater River crossing) would be realigned/widened to provide shared use route over the replacement Highfields Overbridge. This provision would be linked, and link footpaths 246_19, 246_2 and 92_26, via uncontrolled crossings. <p>Approximately 50m of FP 246_2 would be stopped up where it previously crossed A12 via Highfields Lane bridge (to be demolished). The footpath would instead tie into the new shared use route on the realigned Highfields Road and over the replacement Highfields Road overbridge described above.</p>	None required	Negligible beneficial

WCH asset/s	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
FP 246_20 (Great Braxted) and FP 92_26 (Kelvedon)	These two linked together footpaths are accessed via Highfields Lane and cross fields south. They are moderately well used by walkers.	Medium	Construction: The footpaths would be impacted on by earthworks and drainage works associated with the proposed scheme. The public footpaths would be diverted around the works with access maintained.	All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Minor adverse
			Operation: No impact is anticipated during operation. The footpath would be permanently diverted.	None required	No change
Ewell Hall Chase (FP 92_15) and Ewell Hall Chase overbridge (FP 92_25).	Public footpath follows Ewell Chase. Likely to be a popular route for recreational walkers. Strava Global Heatmap data also indicate use of Ewell Chase by cyclists. It is likely these are off-road cyclists since Ewell Chase is unmetalled.	Medium	Construction: FP 92_25 would be maintained to allow agricultural vehicle access throughout construction. During demolition of bridge for Ewell Bridge replacement, WCH would be temporarily diverted via Highfields Bridge. FP 92_15 would be temporarily diverted.	All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision	Minor adverse
			Operation: No impact on Ewell Hall Chase is anticipated in operation. The proposed replacement Ewell Hall Chase accommodation bridge would include provision for walkers, cyclists, and horse riders to support continued equestrian use by Essex Farm Trails.	None required	Negligible beneficial
FP 92_41 (Kelvedon), FP 92_20 (Kelvedon), FP 145_18, FP and FP 145_7 (Messing Cum Inworth)	PRoW network south of Kelvedon. Likely used by walkers for recreation.	Medium	Construction: FP 92_20 would be closed due to construction of proposed new junction 24 and diverted along FP 92_25 and FP 145_17. FP 92_41 would be inaccessible during construction. This would add 300m to a walking route. Amenity is likely to be impacted on by proposed borrow pit J.	Measures to control fugitive dust would be employed (refer to Chapter 6: Air Quality of this Environmental Statement [TR010060/APP/6.1]). All WCH routes would be maintained where safe and reasonably practicable to do so. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Moderate adverse

WCH asset/s	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
			Operation: FP 92_41 would be stopped up for approximately 40m, FP 145_18 would be stopped up for approximately 200m, and FP 145_7 would be stopped up for approximately 130m. These rights of way would be realigned along the edge of the cutting for the south-west arm of the southern roundabout at the proposed new junction 24 and would again link with FP 92_20 (Kelvedon). Since the route was alongside the existing A12 alignment in the baseline, the scale of impact is judged as negligible.	None identified	Negligible adverse
FP 78_14 (Feering)	810m footpath follows right bank of River Blackwater to the east of Kelvedon, north of the existing A12. Likely used by recreational walkers.	Medium	Construction: Southern part of footpath may be interrupted by works to a proposed attenuation pond. However, this is unlikely to affect most walkers as they would likely continue along FP 92_15 (Kelvedon).	Measures to control fugitive dust would be employed (refer to Chapter 6: Air Quality of this Environmental Statement [TR010060/APP/6.1]). All WCH routes would be maintained where safe and reasonably practicable to do so.	Negligible adverse
			Operation: No operational impact anticipated other than presence of new attenuation pond.	None required	No change
FP 92_15 (Kelvedon)	1150m public footpath follows right bank of River Blackwater to the south of Kelvedon, north of the existing A12 and links with Ewell Chase. Likely used by recreational walkers.	Medium	Construction: Part of footpath may be interrupted by works to a proposed attenuation pond and replacement of Ewell Chase overbridge although access is expected to be maintained with potential minor diversions around works.	Measures to control fugitive dust would be employed (refer to Chapter 6: Air Quality of this Environmental Statement [TR010060/APP/6.1]). All WCH routes would be maintained where safe and reasonably practicable to do so.	Negligible adverse
			Operation: No operational impact anticipated other than presence of new attenuation pond.	None required	No change
FP 145_5 (Messing Cum, Inworth)	Footpath accessed off B1023 Inworth Road, Inworth. Likely used recreationally.	Medium	Construction: Access to footpath may be slightly impacted on by proposed widening of parts of Inworth Road, however access onto footpath would be maintained.	All WCH routes would be maintained where safe and reasonably practicable to do so.	Negligible adverse
			Operation: No operational impact anticipated.	None required	No change

WCH asset/s	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
FP 145_15 (Messing Cum, Inworth)	1,036m public footpath across fields between B1023 Inworth Road and New Road. Strava Heatmap data indicate this is relatively well used by pedestrians. It is assumed this is used recreationally by walkers.	Medium	Construction: Drainage proposals, including drainage ditch and attenuation pond would be constructed in the vicinity of the public footpath which may result in disruption of access. Minor diversions, fenced off from areas of works, would be provided to maintain access.	All WCH routes would be maintained where safe and reasonably practicable to do so.	Minor adverse
			Operation: No direct impact on this footpath is anticipated, however it would tie into a proposed new footway/cycleway southward along the east side of B1023 Inworth Road, which would better link the footpath to Inworth village, where currently the pedestrian footway stops approximately 75m short of the access for FP 145_15.	None required	Minor beneficial
B1023 Inworth Road	The B1023 between Kelvedon and Tiptree is a relatively narrow lane without footway provision for most of its length. There is a footway on the southbound side of the road through part of Inworth village. Strava Heatmap data indicate regular use by cyclists and pedestrians. It is likely used by WCH for recreation, as well as an active travel route for some village residents.	High	Construction: Proposals for pinch-point widening affecting a length of approximately 830m of the overall road may occasionally disrupt cyclists and other road users as well as pedestrians using the footway in Inworth.	<p>The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Minor adverse

WCH asset/s	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
			Operation: Approximately 470m of Inworth Road would be subject to localised widening just before All Saints Church with a proposed extended and improved footway/cycleway in Inworth linking to above-mentioned FP 145_15. This would improve accessibility for walkers and cyclists along part of the route, within the immediate Inworth community.	None required	Negligible beneficial
FP 78_18 (Feering)	Public footpath links Feering with PRoW network east of A12, crossing the A12 via a farm access bridge (Threshelfords Bridge). Evidence from Strava Heatmap indicate this is relatively well used, particularly by pedestrians. It is likely that this is primarily used by walkers for recreational.	Medium	Construction: This public footpath would be closed for a period of approximately 39 months (medium term) while the proposed demolition of Threshelford Bridge and construction of the replacement structure takes place. The footpath would then be diverted onto its new permanent alignment. There are limited alternative PRoW which cross the A12 for residents from Feering, so alternative access to the PRoW network east of the A12 is likely to add over 1km to journeys.	The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Major adverse
			Operation: Approximately 625m would be stopped up due to the demolition of the existing Threshelfords Bridge and the proposed realignment of the A12 near Prested Hall. However, an alternative shared footway/cycleway is proposed which would be approximately 200m longer, yet suitable for both walkers and cyclists (see below). Given the additional length to be negotiated by walkers to Prested Hall and the PRoW network to the east, together with the change in character of the route from rural recreational to a longer section within new highway infrastructure context, the impact is judged to be adverse.	Proposed landscaping would help to soften the appearance of new highway infrastructure but would not mitigate the additional journey length. Chapter 8 of this Environmental Statement [TR010060/APP/6.1] sets out tree planting proposals to mitigate visual impacts of proposed new highway infrastructure.	Minor adverse
New footway/cycleway on Prested Hall/Threshelfords Overbridge	Baseline access is via FP 78_18 which is unmetalled and crosses fields (see above).	N/A (not in baseline)	Construction: N/A route is not in baseline.	-	-
			Operation: A new shared footway/cycleway is proposed on the new Prested Hall/Threshelfords Overbridge connecting Prested Hall to London Road and FP 78_18. This route would improve accessibility for cyclists and wheelchair users, since the current Threshelfords Bridge and route (along FP 78_18) is unmetalled. Uncontrolled crossings are provided on the proposed new Prested Hall/Threshelfords access road.	None required	Minor beneficial

WCH asset/s	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
FP 78_15 (Feering)	Meets the A12 on the south side approximately 80m east of junction 24 (Kelvedon North Interchange). Data from Strava Heatmap indicates it is occasionally used by pedestrians. It is assumed it is used by walkers for recreation.	Medium	Construction: The footpath would be closed for approximately 30 months to allow for the construction of the proposed new A12 alignment. Alternative access would be via Prested Hall access.	Signage advising of PRow closures to be provided on access, so people do not walk part way down the PRow and have to turn back at point of closure.	Moderate adverse
			Operation: Approximately 100m of this footpath would be stopped up where it would be crossed by the proposed new A12 alignment, resulting in severance of this public footpath. Approximately 1.5km would be added to walking journeys from this public footpath to get from south to north of the proposed A12 via the new Prested Hall/Threshelfords Overbridge. While the magnitude of change is major, it should be noted that the existing footpath does not cross the existing A12, and walkers of this route would currently continue their journeys via the existing footway on the southern side of the A12 and onto the B1024. As such, it is considered likely that walkers would adapt to the new arrangement via the Prested Hall/Threshelfords access road and overall journeys would not be compromised.	None identified	Major adverse
FP 78_12 (Feering)	Footpath links with FP 78_15 and FP 78_18 near Prested Hall and follows the eastern boundary of Prested Hall. It is assumed it is used by walkers for recreation.	Medium	Construction: Likely to be some disruption due to nearby works to create attenuation pond.	The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Minor adverse
			Operation: No operational impact anticipated.	None required	No change

WCH asset/s	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
New Lane, Feering	Meets A12 on north side at junction 24 (Kelvedon North Interchange). There is a line of residential properties along New Lane. New Lane has a footway and connects to the shared use path that follows the northbound carriageway of the A12. There is no means for pedestrians, cyclists, or horse riders to cross the A12 at this location. Strava Heatmap data indicate this is a very well used route, particularly for pedestrians, suggesting it may be a popular route for joggers.	High	Construction: Minor disruption to the exit of New Lane as works to proposed Feering East Roundabout take place.	<p>The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Minor adverse
			Operation: New Lane would connect with the proposed new Feering East Roundabout. Any difference in arrangement for walkers and cyclists on New Road would be marginal. New Lane would indirectly benefit from improved connectivity to walking/cycling routes south of the A12.	None required	Negligible beneficial

WCH asset/s	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Prested Hall access	Meets A12 on south side at junction 24. This road gives access to Prested Hall along with its Tennis and Health Club. Strava Heatmap data indicate this is a relatively well used route.	Medium	Construction: This route would be crossed by the proposed new A12 alignment. Users would need to divert via temporary access roads, which may cause inconvenience.	<p>The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Moderate adverse
			Operation: Access would be realigned over the proposed new Prested Hall/Threshelfords overbridge. Route between Feering and Prested Hall would be a similar distance to the baseline.	None required	Negligible neutral

WCH asset/s	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Existing footway/cycleway London Road, Feering	Footway along northbound side of London Road in Feering. It is relatively narrow in Feering, which widens out slightly into a shared use path near the New Road junction, where it continues eastwards to Colchester. Strava Heatmap data indicate this route is very well used, particularly to New Road (from which Little Tey Road to the A120, Colchester, appears to be a preferred east-west route, presumably due to lighter traffic conditions than the existing A12).	Very high	Construction: Proposed highway works to junction 24 would disrupt access along the footways and road, which would impact on walkers and cyclists. Short diversions would be required to maintain access.	<p>All WCH routes would be maintained where safe and reasonably practicable to do so.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Moderate adverse
			Operation: The existing footway/cycleway would be realigned, and new footway/cycleway provided on all sides of the new roundabout arrangement. Uncontrolled crossing points would be provided on the north, east and south arms of roundabout, while a toucan crossing would be provided on the western arm to link with the walking/cycling provision along the proposed new Prested Hall/Threshelfords access road. <p>The existing footway/cycleway provision along the B1024 would be stopped up as the section of B1024 between Nursery Bridge and Prested Hall Cottages would be demolished.</p> <p>There would be little difference in overall length and connectivity for walking and cycling routes with the new highway arrangement, but the provision would be wider.</p>	None required	Minor beneficial

WCH asset/s	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Domsey Chase (lane)	Meets the A12 northbound carriageway between Hanover Bridge, Feering and Dobbies Lane, Marks Tey. Strava Heatmap data indicates it is well used.	Medium	Construction: Minor disruption to the exit of Domsey Chase as works to proposed Easthorpe Roundabout take place.	<p>The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Minor adverse
			Operation: At connection from Domsey Chase to existing A12, an uncontrolled crossing is proposed at the proposed Easthorpe Roundabout. (See Easthorpe Road below for impacts on wider connectivity for walkers and cyclists using Domsey Chase).	None required	Negligible beneficial
FP 78_3 (Feering)	Meets the A12 northbound carriageway between Hanover Bridge, Feering and Dobbies Lane, Marks Tey. Strava Heatmap data indicate occasional use.	Medium	Construction: No likely significant impacts during construction are likely.	None required	No change
			Operation: No operational impact is anticipated. It may indirectly benefit from reduced traffic on London Road.	None required	No change

5 Marks Tey, Copford and Easthorpe land use and accessibility assessment

5.1 Introduction

- 5.1.1 Tables A.17 to A.20 provide an assessment of impacts on land use and accessibility matters for Marks Tey, Copford and Easthorpe. This includes all identified assets which coincide with the Order Limits within the civil parishes of Marks Tey, Copford, Eight Ash Green and Stanway.
- 5.1.2 An important assumption to note is that although there may be a major impact on a particular land use and accessibility asset, which would be greatly significant to the owners/users of that asset, this does not imply significance at a decision-making level, as there may be sufficient alternative resource to serve overall community needs. Instead, the assessment of significance considers the combined effect of impacts on assets on the overall resource relating to each land use and accessibility matter. The significance assessment is provided in the top row of each table.
- 5.1.3 All measurements in this assessment are approximate, based on GIS datasets, and do not reflect final details of any land acquisition agreements. Reasonable care has been taken to identify assets and landholdings affected for the purposes of environmental assessment. However, the assessment of impacts on individual assets is based on information available at the time of preparation of the Environmental Statement and does not necessarily reflect final outcomes of negotiations between interested parties and their agents. Nevertheless, it is considered that the information provided is sufficient to provide an overall assessment of significance on land use and accessibility for the purposes of EIA.
- 5.1.4 The assessment is focused on impacts on the type of land use, rather than effects on occupants and businesses. In some cases, the assets identified may no longer be occupied by residents. Reference should also be made to the health assessment in Chapter 13 of the Environmental Statement [TR010060/APP/6.1] for potential health and wellbeing impacts associated with impacts on land use.
- 5.1.5 Key impacts are illustrated on Figure 13.2 of the Environmental Statement [TR010060/APP/6.2]. Full details of where PRow would be permanently stopped up or diverted, together with any chainages referred to in the following tables are shown on the General Arrangement Plans [TR010060/APP/2.9]. Full details of temporary PRow and footway diversions are shown on the Construction Phase Plans, which are available in Volume 2 of the DCO application [TR010060/APP/2.15]).

Table A.17 Private property and housing (Marks Tey, Copford and Easthorpe)

<p>Overall significance assessment: There are a total of 1,341 residential properties within the study area that coincides with these communities. Of these, only one residential property would be directly impacted on during construction of the proposed scheme, as part of the garden would be permanently acquired. Other impacts on residential land use would be indirect due to impacts on access arrangements. However, overall residential viability of all properties in this area is expected to be maintained during construction and operation, which is assessed as a minor magnitude impact and so overall the significance of effect during construction is assessed as slight adverse.</p> <p>During operation, since there would only be one property impacted on by permanent land-take, the overall significance on private property and housing is assessed as neutral.</p>					
Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Residential Properties on Easthorpe Green	Existing housing	Medium	<p>Construction: Lane leads to a small group of residential properties. The proposed new A12 would cut across this road. A proposed new access road would be constructed which would cross over the proposed new A12 alignment on the new Wishing Well Overbridge.</p> <p>There would be short to medium term intermittent disruption to access for the residents during the construction works.</p>	Appropriate alternative temporary or permanent access would be provided where practicable.	Minor adverse
			Operation: No operational impact identified.	None required	No change
Single large property on Hall Chase (road) Chase Hall, off London Road	Large, isolated property off London Road.	Medium	<p>Construction: Permanent land take from a portion of the garden (<50% garden area) to accommodate the tie in from the new offline A12 alignment with junction 25. This would result in permanent loss of garden elements, compromising the quality of the residential land use for this individual property.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable. Liaison with occupiers of properties affected by the proposals has been ongoing. The principles of the compensation code will apply, and support provided for occupiers who may need to find alternative accommodation.</p>	Moderate adverse
			<p>Operation: No operational impacts on land use viability anticipated beyond those which would occur during construction. The garden area of this property would be substantially reduced in area.</p>		Moderate adverse
Hall Chase, London Road	Existing housing	Medium	<p>Construction: The new A12 would cut across Hall Chase Road and access to two residential properties would be lost. A proposed new access road would be provided which would tie into the Existing London Road. There would be short to medium term disruption for the residents during the construction works.</p> <p>Upon completion of works there would be no long-term impact on residential land use.</p>	Appropriate alternative temporary or permanent access would be provided where practicable	Minor adverse
			Operation No operational impacts on residential land use viability anticipated. (See also noise assessment, health assessment and development land and business for other types of impacts).	None required	No change

Asset	Baseline	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Planning application (ref: 200730)	Adcock Refrigeration & Air Con, 152 London Road. Development of 5 residential properties. Application abuts Order Limits at London Road opposite School Road.	Medium	Construction: Land immediately west and north of the application site would be permanently acquired to allow for construction and maintenance of an access route to a proposed attenuation pond south of London Road. However, there would be no land-take from the application site and no likely impact on access to the application site.	Contractor to liaise with developer regarding construction management arrangements for any potential for construction works to take place concurrently.	No change
			Operation: No operational impact identified.	None required	No change
Colchester Draft Local Plan 2017-2033. Policy WC2: Stanway Colchester planning application ref: 181859 Colchester planning application ref: 212507	Land to the North of London Road. Provision of up to 630 dwellings and an additional 26 affordable dwellings. Application abuts Order Limits along existing A12 approximately 180m east of Turkey Cock Lane. Two planning applications have come forward for this allocation. <u>Planning application ref: 181859</u> Detailed planning application submitted in 2018 and now approved for residential development to provide 102 no. residential dwellings. The majority of these dwellings have now been constructed. <u>Planning application ref: 212507</u> Outline Planning Application submitted in September 2021 (with all matters reserved except access) for the erection of up to 600 dwellings. Vehicular access from London Road (B1408) and Red Panda Road.	Very high	Construction: No construction impacts identified.	None required	No change
			Operation: No operational impacts identified.	None required	No change

Table A.18 Community land and assets (Marks Tey, Copford and Easthorpe)

Overall significance assessment: Impacts on community land and assets in Marks Tey mainly relate to the potential disruption and inconvenience of access to facilities due to the scale and duration of proposed works for the new arrangement for junction 25. Given that minor adverse magnitude impacts are anticipated on four of the five community assets identified within or in close proximity to the Order Limits, the overall significance of effect on community land and assets is assessed to be moderate adverse during construction, as it is not certain whether the level of disruption may dissuade some use and access of facilities in the community. Effects are considered to be neutral during operation.					
Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Marks Tey recreation ground Old London Road, Marks Tey	Playing fields, skatepark, children's playground and basketball court. Access to the ground's car park is partially within Order Limits and the grounds abut the boundary of the Order Limits. This is the principal recreational space serving the Marks Tey community.	High	Construction: The access road into these amenities would be realigned and disruption of access is anticipated. This is likely to be a source of inconvenience for users during the construction phase, although physical access would still be generally possible.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Minor adverse
			Operation: No operational impacts are identified.	None required	No change
Marks Tey Parish Hall, Old London Road, Marks Tey	Hall used by local clubs and activities, as well as Parish Council. Accessed via Old London Road which is within Order Limits.	High	Construction: The access road into the hall would be realigned and disruption of access is anticipated. This is likely to be a source of inconvenience for users during the construction phase, although physical access would still be generally possible.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Minor adverse
			Operation: No operational impacts are identified.	None required	No change
Marks Tey Railway Station	This station is on the Great Eastern Main Line and serves Marks Tey, providing public transport access to destinations such as Chelmsford and London. The station had 606,914 passenger entries/exits in 2019/20 (Office of Rail and Road, 2022).	Very high	Construction: Temporary disruption to access onto A12 northbound and southbound during construction of the new junction 25 arrangement. The impact is likely to be of potential slight delays to vehicular travellers accessing the station, rather than any prevention of access to the facility.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Minor adverse
			Operation: No operational impacts are identified.	None required	No change
Copford Recreation Ground and Queensbury Avenue Playground	Location abuts Order Limits which cover part of Marks Tey car boot sale site. The sites are separated from each other by a hedgerow.	Medium	Construction: No impacts identified on the formal recreation ground and playground itself. However, approximately 2,343m ² of less formal recreational land in the north of the existing Copford Recreation Ground/Queensbury Avenue Playground open space would be required for the diversion of the Roman River, which runs parallel to and to the south of the A12 at this location. This is not anticipated to affect the recreational function of the wider site.	Land temporarily acquired for construction would be reinstated to its previous use on completion of the works.	Minor adverse

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
			Operation: A small area of open space would be lost.	Where permanent loss of open space would occur, the loss will be replaced by equivalent or better provision in terms of quantity and quality in a suitable location. Locations of proposed replacement land are indicated on Figure 13.2 [TR010060/APP/6.2] but reference should be made to the Land Plans [TR010060/APP/2.7] and Replacement Land Statement [TR010060/APP/4.1] for greater detail.	Negligible adverse
The Laurels Nursing Home, Marks Tey	Accessed via Station Road, which is within Order Limits	Very high	Construction: Temporary disruption to access onto A12 northbound and southbound during construction of the new junction 25 arrangement. The impact is likely to be of potential slight delays to vehicular travellers accessing the station, rather than any prevention of access to the facility.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Minor adverse
			Operation: No operational impacts are identified.	None required	No change
Area of informal open space, Station Road, Marks Tey	An island of amenity grass with trees (approximately 0.54ha) sandwiched between the A120 and Station Road on the north-east side of Marks Tey roundabout. It is crossed by two pedestrian routes which offer access between the bus stop on the A120 and Marks Tey Railway Station. It offers visual amenity and limited recreational value.	Low	Construction: Approximately 1,850m ² would be encroached upon during construction of the new junction 25 arrangement. The impact is not likely to affect the overall function of the space	Where permanent loss of open space would occur, the loss will be replaced by equivalent or better provision in terms of quantity and quality in a suitable location. Locations of proposed replacement land are indicated on Figure 13.2 [TR010060/APP/6.2] but reference should be made to the Land Plans [TR010060/APP/2.7] and Replacement Land Statement [TR010060/APP/4.1] for greater detail.	Minor adverse
			Operation: The area of open space in the existing location would be smaller in area compared to the baseline. The impact is not likely to noticeably affect the overall function of the space in terms of visual amenity and recreational value.		Neutral

Table A.19 Development land and business (Marks Tey, Copford and Easthorpe)

Overall Significance Assessment: There are major construction works proposed at junction 25 (Marks Tey interchange) and associated traffic management and loss of amenity would likely cause disruption to businesses around the interchange over the short to medium term. Furthermore, the new alignment of the proposed scheme would be very close to a sound recording studio, which would be a considerable change from its baseline situation in a relatively isolated rural location. Given the sensitivity of this type of business, the nearby construction activities are likely to affect its function. Overall, the disruption to local businesses in the Marks Tey area is assessed as moderate adverse significance. During operation it is anticipated that most businesses would benefit from improved journey reliability brought by the proposed scheme. However, the recording studio may not be viable in that location. On the basis that most businesses would not be directly affected, the overall operational effect on development land and business in operation is assessed as neutral .					
Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
South of A12 J M W Motorsport and other business units at Hall Farm Hall Chase Road, Marks Tey	Former agricultural buildings converted to light industrial use. Appears to be a sports car workshop.	Medium	Construction: The existing access route (Hall Chase Road) for the premises would be severed by the new A12 road. Access on and off the A12 would be re provided via new slip roads. It is likely there would be a degree of disruption to access during construction.	Appropriate alternative temporary or permanent access would be provided where practicable.	Minor adverse
			Operation: No impact anticipated during operation.	None required	No change
Businesses in the vicinity of Marks Tey Roundabout	Several businesses including gun shop, tyre shop, florist, coffees store, camping store, and garden building supplier	High	Construction: Widening and other site related works around Marks Tey Bridge and the roundabout could result in temporary disruption to access issues for local businesses.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Moderate adverse
			Operation: No impact anticipated during operation.	None required	No change
South of A12 Car boot sale site off London Road (B1408), Marks Tey	Site of the weekly Marks Tey Car-Boot Sale. This is valued low sensitivity in terms of business and employment land as it likely provides supplementary income for people, and due to the nature of the trade, there would be other alternative locations in the wider area	Low	Construction: Approximately 30% of the site would be lost permanently for a new attenuation pond and an access road to the pond. It is assumed the remaining area could continue to operate as a car boot site as the access is not affected.	Ensure remaining site can still be utilised during and post construction and appropriate temporary or permanent access arrangements would be provided where practicable.	Minor adverse
			Operation: Despite being a smaller site, given the nature of the business, the car-boot sale could continue albeit on a smaller site.	Liaison with business owners affected by the proposals has been ongoing. The principles of the compensation code will apply.	Negligible adverse
South of A12 Terlingfair Kennels and Cattery, London Road, Marks Tey	Kennel and Cattery Business which abuts the Order Limits along London Road.	Medium	Construction: There would be relatively limited works associated with de-trunking of the existing A12 London Road. There may be temporary disruption, but this is not anticipated to be notable or affect the function of the business.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Negligible adverse
			Operation: No impact anticipated during operation.	None required	No change

Asset	Baseline summary	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
South of A12 Property at the end of the lane past Terlingfair Kennels and Cattery – Wishingwell Farm	Recording Studio. This business is assigned medium sensitivity on account of its sensitivity to sound (but noting it would not employ many people).	Medium	Construction: This property is at the end of the lane which passes on the western side of Terlingfair Kennels and Cattery. The new A12 Trunk road would sever the access lane within extremely close proximity to the property. A new link road would provide alternative access across the new A12 to the de trunked A12. This new link road would be within close proximity to the property and due to the nature of the business the noise could be detrimental.	Liaison with business owners affected by the proposals has been ongoing. The principles of the compensation code will apply	Major adverse
			Operation: Access would be reinstated however due to the noise sensitivity of the business; the business may become unviable.	Liaison with business owners affected by the proposals has been ongoing. The principles of the compensation code will apply	Major adverse
Northwest of existing A12 and new A12 ARC Raceway	Racetrack facility for remote-controlled vehicles which abuts Order Limits on London Road.	Low	Construction: The access to the site is along Old London Road and the track beyond. It is assumed the de-trunking works would not interfere with access to the racetrack and therefore no impact is expected.	Appropriate temporary or permanent access arrangements would be provided where practicable.	Negligible adverse
			Operation: Once the scheme is operational there would be no impact.	None required	No change
Colchester planning application (ref: 90398)	Proposed demolition of existing building, construction of 1no. 2-bedroom dwelling, adjacent to North Lane. New headquarter office building (B1 A use) and a new nursery crescent building providing B1c use light industrial use (7 units) and 1 unit retaining the existing B8 storage and/or distribution. Main access route to application site is within Order Limits on London Road	Medium	Construction: No construction impacts identified	None required	No change
			Operation: No operational impacts identified	None required	No change
Marks Tey Hotel, London Road and Colchester planning application (ref: 181137)	Marks Tey Hotel, London Road. Proposed extension and alterations to hotel to provide 20 additional rooms. Main access route application is within order limits on London Road	Medium	Construction: Minimal impacts from the Proposed Scheme are expected on London Road which borders the application site. This is not expected to have any likely significant impacts on neighbouring development proposals. There is a risk to the hotel business in the event of night-time working as hotel residents may be disturbed.	Provide advance notice to hotel operator of any proposed night works via Community Relations Manager. Measures to control dust and noise as set out by Chapters 6 Air Quality and 12 Noise and Vibration in the Environmental Statement 6.1 [TR010060/APP/6.1].	Negligible adverse
			Operation: No operational impacts identified	None required	No change

Table A.20 Walkers, cyclists and horse-riders (Marks Tey, Copford and Easthorpe)

<p>Overall significance assessment: Notable impacts on WCH routes in these parishes include where public footpath FP 144_19 would both be closed for a period of approximately 20 months, and the last 200m of FP 144_18 stopped up, to allow for the construction of the proposed new A12 alignment. This would temporarily reduce access to outdoor recreation for residents in Marks Tey as alternative access to the PRoW network south of the A12 is limited or requires lengthy alternative routes via Copford Green. Disruption to the east-west route alongside the northbound carriageway of the A12 while the proposed Wishing Well Farm Roundabout, Easthorpe Road Roundabout, and Feering East Roundabout are constructed, could cause minor disruption to active travel commuters (most likely cyclists). Works to junction 25 (Marks Tey interchange) would likely cause disruption to residents of Marks Tey for a period of at least two years. This would affect Old London Road Station Road, North Lane, A120, B1408 and the footways around the Marks Tey roundabout. Given the duration and scale of disruption, although access would be maintained via diversions, the overall significance of effect on Marks Tey is anticipated to be moderate adverse during construction.</p> <p>During operation, the proposed new shared use walking/cycling route proposed on the northeast side of realigned northern section of Easthorpe Road would connect to footpath 128_23 and also to the proposed Easthorpe Road Overbridge providing access across the proposed new A12 alignment and to an uncontrolled crossing on the existing A12 (London Road) route (to be de-trunked). This would remove historical severance for walkers and cyclists north-south of the A12. It would provide connectivity from Easthorpe Road and the lane and PRoW network on the southern side of the A12 corridor for walkers and cyclists to Domsey Chase and the shared use cycleway/footway along the northbound side of the existing A12. The closure of the direct access onto the A12 for vehicular traffic on Easthorpe Road would also reduce traffic, making for safer use by walkers and cyclists. On the basis that these proposals would remove existing severance north-south of the A12 for walkers and cyclists, this is assessed to be a major beneficial impact. A new WCH route is proposed parallel along the south side of the proposed new A12 alignment between Easthorpe Green Farm (chainage 36000) and Marks Tey (chainage 38100). Access across the proposed A12 would be provided via the Wishing Well Overbridge, which would link with Wishing Well Farm roundabout and an existing walking/cycling route along the existing A12 London Road (to be de-trunked). The route parallel to the A12 would link PRoW FP 128_88; FP 144_18; and FP 144_17 and would also link Hall Chase and the east side of the A12 at Marks Tey with Wishing Well Farm and the accommodation road down to Easthorpe Green Farm. It is expected that this route would help facilitate east-west active travel journeys between Kelvedon and Marks Tey (by linking with existing provision alongside the existing A12 (to be de-trunked)), as well as access to the PRoW network. It would therefore be expected to become a high value route. A number of minor beneficial impacts are also anticipated in Marks Tey such as where current controlled crossings would be replaced with toucan crossings to help cyclists as well as pedestrians. Overall, the significance of effect in operation is assessed to be moderate beneficial mainly due to overall improved connectivity.</p>					
WCH asset	Baseline scenario	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
FP 144_11 (Marks Tey)	Meets the A12 northbound carriageway between Hanover Bridge, Feering and Dobbies Lane, Marks Tey. Terminates at the A12 northbound where access can continue via shared use path.	Medium	Construction: No likely significant impacts during construction are likely.	None required	No change
			Operation: No operational impact is anticipated. It may indirectly benefit from reduced traffic on London Road.	None required	No change

WCH asset	Baseline scenario	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Easthorpe Road, PRoW FP 128_23	<p>Easthorpe Road has a junction with the southbound carriageway of the existing A12 but there are no pedestrian or cyclist crossing facilities and there is no footway on the southbound section of existing A12 at this point. Therefore, any WCH travelling to/from Easthorpe Road via the A12 would need to use the highway or grassed verge and would be exposed to dual carriageway traffic conditions. Nevertheless, evidence from Strava Global Heatmap does indicate cyclist use of the Easthorpe Road/A12 junction and also use of the southbound A12 itself. It may be used for active travel and recreation.</p> <p>The Strava Global Heatmap shows pedestrian use of Easthorpe Road to/from FP 128_23, FP 128_22 and Little Domsey Cottages. From Little Domsey Cottages there is a break in the central reservation barrier of the A12 allowing people to cross (at-grade) to the footway on the northbound side of the A12. Strava Global Heatmap shows that this is very occasionally negotiated by pedestrians. It is likely these routes are used mostly by recreational walkers.</p>	High	<p>Construction: Access from FP 128_23 onto Easthorpe Road would be maintained where reasonably practicable. Easthorpe Road would be closed to through-traffic. This is unlikely to add significantly to most journeys as alternative routes are available.</p>	<p>The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Minor adverse
			<p>Operation: New walking/cycling footway proposed on northeast side of realigned northern section of Easthorpe Road which would connect to footpath 128_23 and also to the proposed Easthorpe Road Overbridge providing access across the proposed new A12 alignment and to an uncontrolled crossing on the existing A12 (London Road) route (to be de-trunked). This would remove historical severance for walkers and cyclists north-south of the A12. It would provide connectivity from Easthorpe Road and the lane and PRoW network on the southern side of the A12 corridor for walkers and cyclists to Domsey Chase and the shared use cycleway/footway along the northbound side of the existing A12. The closure of the direct access onto the A12 for vehicular traffic on Easthorpe Road would also reduce traffic, making for safer use by walkers and cyclists. On the basis that these proposals would remove existing severance north-south of the A12 for walkers and cyclists, this is judged to be a major beneficial impact.</p>	None required	Major beneficial

WCH asset	Baseline scenario	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Dodding's Lane and FP 128_22 (Copford)	Dodding's Lane has a junction with the southbound carriageway of the A12. It provides access to a small number of residential properties. FP 128_22 is accessed off Dodding's Lane. From Dodding's Lane to footpath cuts through Easthorpe Green Farm and then across fields until it reaches Easthorpe Road. Strava Global Heatmap indicates moderate pedestrian use, and that people do follow the A12 from Dodding's Lane junction, meaning they likely walk along the grass verge to/from Marks Tey. It is likely the footpath is used recreationally by walkers.	Medium	Construction: Access would be maintained where reasonably practicable during the tie in with new highway infrastructure associated with the proposed realigned Easthorpe Green Farm access track.	None identified	Negligible adverse
			Operation: No direct impact on the public footpath, but it would be tied into the proposed new walking/cycling route along the realigned Easthorpe Green Farm access track which continues over Wishing Well Overbridge to the existing A12 (London Road) or onwards along the proposed new east-west walking/cycling route between Easthorpe Green Farm (chainage 36000) and Marks Tey (chainage 38100).	None required	Negligible beneficial
FP 128_19 (Copford) FP 144_19, FP 144_18 (Marks Tey) and Doggett's Lane	FP 128_19 (Copford) and FP 144_19 join to form a continuous route. These routes meet the A12 near Marks Tey. At this point there is a footway along the southbound side of the A12 meaning these can be reached by residents at Marks Tey on the south side of the A12. There are no means of crossing the A12 at these locations, however. Strava Global Heatmap indicates relatively regular use of these routes. It is likely they are used by recreational walkers.	Medium	Construction: FP 144_19 would be closed for a period of approximately 20 months (medium term) to allow for the construction of the proposed new A12 alignment. The northernmost part of FP 144_18 (approximately 200m) would be permanently stopped up. This would limit access to outdoor recreation for residents in Marks Tey as alternative access to the PRoW network south of the A12 is limited or requires lengthy alternative routes via Copford Green.	None identified	Major adverse
			Operation: No impact is anticipated on 128_19 (Copford). Approximately 200m of the connected footpath FP 144_19 would be stopped up where the proposed new A12 route alignment crosses it, and the footpath would be realigned via new walking/cycling route over the proposed Potts Green footbridge and linking with the east-west walking/cycling route along the southbound side of the new A12 alignment.	None required	Negligible beneficial

WCH asset	Baseline scenario	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Footway alongside existing A12 London Road (southbound carriageway) from Wishing Well Farm access to Marks Tey	Footway follows southbound carriageway of A12 to Marks Tey. Strava Global Heatmap indicates some use by pedestrians and cyclists, however Old London Road which is parallel to the northbound carriageway of the existing A12 appears to be a much more favoured route for east-west travel in this area. There is no means to cross from the footway along the southbound carriageway to the footway along the northbound carriageway of the A12 until Marks Tey footbridge with is over 1.5km east of the Wishing Well Farm access junction with the A12.	Medium	Construction: There would be disruption for some months as the Wishing Well Farm Roundabout is constructed. This would cause inconvenience for WCH diverted around the areas of works.	<p>The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Moderate adverse
			Operation: Two new means of crossing the de-trunked London Road would be provided. One would be an uncontrolled crossing at Wishing Well Farm Roundabout (chainage 36300), the other a staged uncontrolled crossing near the fuelling station and approximately 100m north-east of Dobbies Lane. Together with reduced traffic volumes of this road in operation, there would be improved connectivity for WCH, and historic severance reduced.	None required	Moderate beneficial
	(Not in baseline – proposed new provision)		Construction: N/A (not in baseline).	N/A	N/A

WCH asset	Baseline scenario	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Proposed WCH route parallel to proposed new A12 alignment and Wishing Well Overbridge		N/A (not in baseline)	Operation: New WCH route would be provided parallel along the south side of the proposed new A12 alignment between Easthorpe Green Farm (chainage 36000) and Marks Tey (chainage 38100). Access across the proposed A12 would be provided via the Wishing Well Overbridge, which would link with Wishing Well Farm roundabout and existing walking/cycling route along the existing A12 London Road (to be de-trunked). The route parallel to the A12 would link PRow FP 128_88; FP 144_18; and FP 144_17 and would also link Hall Chase and the east side of the A12 at Marks Tey with Wishing Well Farm and the accommodation road down to Easthorpe Green Farm. It is expected that this route would help facilitate east-west active travel journeys between Kelvedon and Marks Tey (by linking with existing provision alongside the existing A12 (to be de-trunked), as well access to the PRow network. It would therefore be expected to become a high value route.	None required	Major beneficial
Existing footway along northbound side of existing A12 (Kelvedon to Marks Tey)	Existing footway supports both walking and cycling journeys. Strava Heatmap shows regular use.	High	Construction: Some disruption is anticipated for some months as the Wishing Well Farm Roundabout, Easthorpe Road Roundabout and Feering East Roundabout are constructed. Depending on phasing, this may be inconvenient for active travel commuters (mainly cyclists) due to cumulative impact of areas of works to negotiate over a single journey. Short diversions around works would be provided.	<p>The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Minor adverse
			Operation: New roundabout (Wishing Well Farm Roundabout) is proposed with approximately 260m of existing footway being realigned to accommodate this. The small change is deemed neutral for WCH, so no change is predicted.	None required	No change

WCH asset	Baseline scenario	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Dobbies Lane, Marks Tey	This lane provides an access between a large residential estate at Long Green, Marks Tey and Old London Road parallel to the A12 and the shared use path. There are several residential properties along Old London Road so there is potential that this lane is regularly used, potentially by schoolchildren heading to the school in Long Green, Marks Tey. Strava Global Heatmap indicates high use, particularly by pedestrians.	Very high	Construction: Disruption to this route is anticipated to be minimal and related to de-trunking activities.	N/A	Negligible adverse
			Operation: No operational impact is anticipated.	None required	No change
FP 144_15 (Marks Tey) and FP 144_16 (Marks Tey)	Meet the A12 approximately 430m and immediately west of junction 25 (Marks Tey Interchange). These public footpaths follow the edge of Marks Tey Recreation Ground and link with Old London Road and the shared use path. Footpath 15 also connects to the large residential estate at Long Green, Marks Tey.	Medium	Construction: Some disruption to the access to each of these footpaths is anticipated due to construction activities associated with the proposed new junction 25 arrangement. This is likely to cause some inconvenience, but access would be maintained.	The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Minor adverse
			Operation: No operational impact is anticipated.	None required	No change
FP 144_17 (Marks Tey) and FP 144_20 (Marks Tey)	These two footpaths are accessed from London Road in the vicinity of junction 25 (Marks Tey Interchange) and connect with each other in fields south of residential properties in Marks Tey. They are therefore likely regularly used for local recreational walks by residents as a circular route can be made.	Medium	Construction: FP 144_17 follows the boundary of a site of a proposed compound which would affect amenity, and disruption is also anticipated due to the proposed tie in of new highway arrangements at Marks Tey Interchange. However, it is expected that access would be maintained where reasonably practicable, although some minor diversions may be required around areas of works. Minimal impact is anticipated on FP 144_20.	The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions. Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.	Minor adverse
			Operation: Once in operation, FP 144_17 would pass a proposed attenuation pond and an area of grassland, woodland planting and shrubs. It is anticipated that this would improve the recreational amenity for walkers in the long term once the planting becomes established. Minimal impact is anticipated on FP 144_20.	None required	Minor beneficial

WCH asset	Baseline scenario	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
Old London Road /Station Road / North Lane / A120 / B1408 and junction Tey Marks Tey Interchange	There are several residential properties along these streets. Evidence from Strava Global Heatmap indicates this road and Marks Tey Interchange are regularly used by runners and cyclists. There is a footbridge that crosses the A12 at Marks Tey and a staggered light-controlled crossing over the A120. However, the A12 and interchange effectively sever Marks Tey as access from the south side to the north side for pedestrians and cyclists is convoluted and difficult. The junction is likely regularly negotiated by cycle commuters heading to and from Colchester.	Very high	Construction: Disruption is anticipated in this area over at least two years while construction works associated with proposals for the new junction 25 arrangement take place. During this time there would likely be multiple diversions to provide continued, safe access for pedestrians and cyclists through the area. However, this may lengthen journeys and cause regular inconvenience.	<p>The construction activities would be planned to limit requirements for temporary footway and cycleway closures or diversions.</p> <p>Temporary diversion routes would be well-signed and would be suitable for all potential users of the existing provision.</p> <p>Traffic management measures would be implemented to ensure safe access. Refer to Outline Construction Traffic Management Plan [TR010060/APP/7.7].</p> <p>The construction works would be phased such that disruption to access is minimised, with full road closures restricted to nights and weekends.</p>	Major adverse

WCH asset	Baseline scenario	Sensitivity	Description of impact	Essential mitigation proposed	Magnitude of impact (with essential mitigation)
			<p>Operation: The existing A120/A12/Station Road roundabout at Marks Tey interchange would be removed and replaced with a signalised junction with a new footway giving access to Station Road. The current controlled crossing would be converted into a toucan crossing for the use of both cyclists and pedestrians which would then be connected to another proposed shared cycle/pedestrian route which would link to Station Road and an uncontrolled crossing to link Marks Tey railway station access.</p> <p>The provision of toucan crossings for the south and west arms of the junction would link with further new walking/cycling routes around the new arrangements for the junction with Station Road and the north-west arm of the proposed new Prince of Wales Roundabout.</p> <p>The current 1.8m wide Marks Tey footbridge over the A12 would be demolished and replaced with footway/cycleway bridge. An uncontrolled crossing across London Road is proposed on the southeast side of new bridge.</p> <p>The existing footway on Marks Tey Bridge would be unaffected.</p> <p>No impact is predicted to existing footways on Prince of Wales roundabout.</p>	None required	Minor beneficial
FP 128_1 (Copford) and FP 149_29 (Stanway)	Footpaths cross the A12 via an underpass, connecting Copford to north of the A12. However, after further inspection, no bridge appears to be present so unsure how crossing of A12 occurs.	Medium	Construction: No impact is anticipated.	None required	No change
			Operation: No operational impact identified.	None required	No change
Turkey Cock Lane	Road connecting Copford to Daisy Green under A12. Likely to be popular with recreational road cyclists but may also be used by walkers seeking to access PRow network to both the north and south of the A12.	Very high	Construction: No impact is anticipated.	None required	No change
			Operation: No operational impact identified.	None required	No change

6 Agricultural landholdings assessment

- 6.1.1 Table A.21 presents the assessment of impacts on agricultural landholdings. Information from agricultural questionnaires have informed the baseline and assessment. In cases where questionnaires were not returned, the baseline agricultural use has been informed by aerial photography.
- 6.1.2 The scope of this environmental assessment is of likely effects on agricultural land use and does not include farm business viability which would require an economic analysis of additional factors such as farm margins, market value for products and costs.
- 6.1.3 All measurements in this assessment are approximate, based on GIS datasets, and do not reflect final details of any land acquisition agreements. Reasonable care has been taken to identify assets and landholdings affected for the purposes of environmental assessment. However, the assessment of impacts on individual assets is based on information available at the time of preparation of the Environmental Statement and does not necessarily reflect final outcomes of negotiations between interested parties and their agents. Nevertheless, it is considered that the information provided is sufficient to provide an overall assessment of significance on land use and accessibility for the purposes of EIA.
- 6.1.4 The assessed agricultural landholdings are illustrated on Figure 13.2 of the Environmental Statement [TR010060/APP/6.2]. The chainages referred to in Table A.21 are shown on the General Arrangement Plans [TR010060/APP/2.9].

Table A.21 Agricultural landholdings assessment

Overall significance assessment: The majority of agricultural landholdings include arable production. Approximately 504ha of arable farmland would be lost to the proposed scheme during the construction stage, of which 395ha would be permanently lost. There would be remaining viable agricultural land at most landholdings affected, but the scale of loss and high value of agricultural assets means the overall effect is significant for the study area. On a county wide basis, there were 552 cereal farms in Essex in 2019/20 (Defra, 2020¹) so this impact affects approximately 3% of the cereal farm businesses in Essex, and approximately 0.5% of arable land use (assuming an average farm size 140.2ha (Defra, 2020¹)). Two instances have been identified where access between land parcels for farmers would be notably longer via the proposed scheme, which may affect productivity during the operational stage. Figure 13.2 of the Environmental Statement [TR010060/APP/6.2] indicates the location of each agricultural landholding identified in this assessment.

Given the importance of agricultural production as a resource, and the pressure on agricultural land in the region, this is assessed to be a **large adverse** significant effect for construction and operation.

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 1	<p>Approximately 356 ha total land.</p> <p>Approximately 15.4ha in land title which coincides with Order Limits.</p> <p>Arable use for land within Order Limits.</p> <p>B1137 Main Road divides land under title.</p>	High	<p><u>Construction</u></p> <p>Approximately 29ha would be occupied for construction purposes including for a J19 East Satellite Compound, for haul routes and soil storage areas.</p> <p>Parts of remaining fields could be farmed.</p> <p><u>Operation</u></p> <p>Approximately 8.5ha returned to landowner post construction.</p> <p>Approximately 20.8ha permanently acquired and used for environmental mitigation (e.g., biodiversity)</p>	<p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)

¹ Department for Environment, Food and Rural Affairs (2020). Farm Business Survey. Available at: <http://www.farmbusinesssurvey.co.uk/DataBuilder/>. Accessed February 2022.

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 2	Total area of affected title in landholding is approximately 100ha. Location approximately Ch. 11200 – Ch. 11800 Land is covered by planning applications and permissions associated with Beaulieu Park development so land use is changing in the baseline over to mixed use development. (Some under construction). On this basis it is rated low for agricultural landholding value.	Low	<u>Construction</u> An access route would be acquired during construction, following an existing track for the most part, but with an area of temporary land-take to allow for soil storage, laydown area and construction of Payne's Lane footbridge. Land would be restored to former use on completion of works. <u>Operation</u> Land would operate as per the baseline, although it is likely there would be more public use of the bridleway across one field due to installation of Payne's Lane footbridge.	Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply. Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents. Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land. Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.	Minor adverse (construction and operation)
Agricultural landholding 3	Land title coinciding with study area covers 166.9 ha and is within Bulls Lodge Quarry. Approximately location Ch. 11000 – 13600 Majority of land not currently quarried is in arable production. Circa 1ha is woodland.	High	<u>Construction</u> No direct impact is anticipated during construction. <u>Operation</u> No impact is anticipated during operation.	None required	No change
Agricultural landholding 4	Total area of landholding is approximately 4.1ha and is entirely within Order Limits. Location approximately Ch.15500 The land looks to be used mostly as a hay meadow but with occasional arable use evident in historic aerial photographs.	Medium	<u>Construction</u> The entirety of this landholding is within the Order Limits and would be permanently acquired for use of soil storage areas and the construction of an attenuation pond and the associated access route. <u>Operation</u> Land acquired permanently outside of highway works would be used for attenuation ponds and ecological mitigation.	Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply. Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents. Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.	Major adverse (construction and operation)

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 5	<p>A very large landowner with 5 land titles amounting to approximately 117.4ha which overlap Order Limits.</p> <p>Approximately location Ch. 15650 - 18100</p> <p>Majority of this land is arable, with approximately 2.5ha woodland. 6.7ha is tenanted (arable)</p>	High	<p><u>Construction</u></p> <p>Approximately 65.1ha in Order Limits would be occupied during construction. Borrow Pit E would be located in this area. Unaffected land in titles would still be able to be farmed.</p> <p><u>Operation</u></p> <p>35.2ha would be permanently acquired. Approximately 3.5ha would be restored to former agricultural use (including 2.5ha of tenanted land). A thin strip of land (circa 1.6ha) would be under permanent access rights.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)
Agricultural landholding 6	<p>Approximately 53.7ha of land under title which overlaps Order Limits</p> <p>Approximately location Ch. 17000 - 18000</p> <p>Aerial imagery indicates this is in arable use (with some fishing lakes)</p> <p>It is understood the land is tenanted.</p>	High	<p><u>Construction</u></p> <p>Approximately 17.3ha of arable land in northern portion of land title is within Order Limits. This land would be used during construction for soil storage, construction access and construction of junction 21. Access would be possible to unaffected land south of the Order Limits for continued agricultural use.</p> <p><u>Operation</u></p> <p>On completion approximately 2.6ha of land would be reinstated south of the junction area. Of this 1ha would be subject to permanent access rights for access to ecological mitigation areas and attenuation pond.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 7	<p>Aerial imagery indicates arable use for land within Order Limits.</p> <p>Landholding is split with some land parcels west of Witham at approximate Ch. 17950 and 18350 and further land south of the existing A12 either side of Howbridge Hall Road between approximate Ch. 19100 – 20200.</p> <p>The landholding includes a field of approx. 5ha north of the railway line (accessed via an accommodation bridge). A field of approx. 15.6ha north of B1389 Hatfield Road, which is subject to an outline application for residential development (19/01896/OUT) (application pending at the time of assessment), two fields south of the A12 and Woodend Bridge, covering approx. 19ha and four fields either side of Howbridge Road covering approximately 31ha.</p> <p>Approximately location of potentially affected land: Ch. 17950 and 18350.</p>	High	<p><u>Construction</u></p> <p>Approximately 21.4 ha acquired during construction for haul routes, utility diversions, soil storage area and compound.</p> <p>Approximately 9.1ha of this would be temporarily acquired.</p> <p>Approximately 12.3ha would be permanently acquired.</p> <p>Potential loss of access to fields south of Order Limits without mitigation.</p> <p><u>Operation</u></p> <p>Remaining land would remain functional post construction. Approximately 3.3ha of land (a field between Howbridge Road and Maldon Road) would be subject to permanent access rights relating to the gas main corridor. However, this is not likely to impact on routine use of agricultural land.</p> <p>Due to the demolition of the Woodend Road Bridge, access between land south of the A12 and land north of the A12 would be increased via the new junction 21 from approximately 689m in the baseline, to approximately 1.5km with the proposed scheme. On the basis that planning permission for the landholding north of the B1389 has not yet been granted, this is assessed as a moderate adverse in terms of agricultural land use on the basis that the additional distance between farmland introduced may compromise viability.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits. Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 8	<p>Total area of affected land title is approximately 52.6ha.</p> <p>Location between Ch. 18300 – 18900.</p> <p>Arable use for land within Order Limits.</p> <p>Land is understood to be tenanted.</p>	High	<p><u>Construction</u></p> <p>Approximately 24.6ha permanently acquired for borrow pit.</p> <p>Remaining land unaffected. Access to remaining land is via B1018 Maldon Road, therefore no access severance anticipated.</p> <p><u>Operation</u></p> <p>Above identified permanent land-take equates to a loss of almost half of arable land use for this landholding.</p>	<p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)
Agricultural landholding 9	<p>Approximately 14.6ha in total landholding.</p> <p>Currently used as permanent pasture (hay crop), forestry and has some access roads, yards, and buildings.</p> <p>Operations run by tenants. Hay crop taken by another farmer.</p> <p>Some farm buildings are used by a fruit and vegetable wholesale business. Access is required 24/7.</p> <p>There is only one access to the farmyard, land, and buildings.</p> <p>Location approximately ch.18950 and ch.19150.</p>	Medium	<p>Three fields (adjacent to each other) would be affected, located between ch.18950 and ch.19150, south of the farm buildings.</p> <p><u>Construction</u></p> <p>A proposed haul route would potentially temporarily sever access between two plots of land used for permanent pasture, as well as from the pastureland to the farm buildings. Further temporary severance could potentially be caused by a proposed utility corridor.</p> <p>In total approximately 1ha of land would be temporarily acquired for construction. This would be returned to landowner on completion of construction.</p> <p>Area required for construction of A12 widening could potentially conflict with access to farm buildings, with potential impacts on diversification business (wholesaler).</p> <p><u>Operation</u></p> <p>A strip of land approximately 0.36ha would be under permanent right of access.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access farmland and land south of construction haul routes.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	<p>Minor adverse (construction)</p> <p>Negligible adverse (operation)</p>

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 10	<p>Approximately 53ha total land owned by landowner.</p> <p>Approximately 20ha total land in titles which coincide with Order Limits.</p> <p>Approximately location Ch. 20500 - 21100</p> <p>Aerial imagery suggests land is used as combination of arable (13.5ha), pasture and plantation woodland (broadleaf).</p>	High	<p><u>Construction</u></p> <p>Approximately 12.6ha of land under arable production would be acquired during construction. Of this, 2.5ha would be permanently acquired for highway widening, while approximately 10.1ha would be temporarily impacted on by gas pipeline diversion.</p> <p><u>Operation</u></p> <p>The 2.5ha land permanently lost is confined to field margins so should not compromise tenability of fields. Temporarily acquired land would be returned to landowner but there would be permanent access rights for pipeline maintenance. Arable production could continue.</p>	<p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	<p>Minor adverse (construction)</p> <p>Negligible adverse (operation)</p>
Agricultural landholding 11	<p>Land title is approximately 9.1ha</p> <p>Location approximately Ch. 20900 – 21200</p> <p>Landholding comprises one arable field (approximately 3.3 ha) and part of a wooded area.</p>	High	<p><u>Construction</u></p> <p>Entire area of arable field (3.3ha) would be permanently acquired. Remaining woodland area would be temporarily acquired but with permanent rights of access due to the gas main diversion route.</p> <p><u>Operation</u></p> <p>Entire area of arable production would be lost.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	<p>Major adverse (construction and operation)</p>

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 12	<p>Total area of landholding is approximately 2.6ha</p> <p>Location approximately Ch. 30900 – 31450. Site is bounded to east and north by River Blackwater and Domsey Brook respectively.</p> <p>Land is currently used as willow plantation.</p>	Low	<p><u>Construction</u></p> <p>Part of site (circa 0.15ha) is within Order Limits to allow for attenuation pond outfall to Domsey Brook. This would sever the willow plantation.</p> <p><u>Operation</u></p> <p>The land surrounding the outfall would be permanently acquired, potentially severing access to the east part of the willow plantation (the larger portion of the site).</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 13	<p>Total area of landholding is approximately 24.7ha and is made up of two fields (23ha) under one land title, and an area of house and garden (with a small narrow plot of land behind the garden (1.7ha)) under a second land title. One of the fields and part of the plot of land, coincide partially within Order Limits.</p> <p>Access to the land is from Ishams Chase.</p> <p>Location approximately Ch. 21100-23300, and Ch.20950.</p> <p>From aerial imagery the fields appear to be in recent use for hay pasture and occasional arable use (historic aerial imagery from 2012). The plot of land beyond the garden does not appear to be in use for productive agriculture (potentially backyard poultry or other small-scale livestock) and so the impact on the plot has not been assessed in this agricultural assessment.</p>	Medium	<p><u>Construction</u></p> <p>Approximately 2.1ha of one agricultural field would be temporarily acquired for a gas pipeline diversion. The land to be acquired involves the western side of the field, so theoretically the remaining 19ha of those agricultural fields could continue to be farmed.</p> <p>The area of land acquisition does include the main access from Ishams Chase. Therefore, there is a potential risk that the land would not be accessible to be farmed while gas pipeline diversion is underway.</p> <p><u>Operation</u></p> <p>Land would be returned to landowner but there would be permanent access rights for pipeline maintenance.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	<p>Minor adverse (construction)</p> <p>Negligible adverse (operation)</p>

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 14	<p>Approximately 51.3ha east of Witham, south of Braxted Hall.</p> <p>Land comprises 6 fields, mostly arable but with areas that appear to be set-aside, and another area of pasture interspersed with woodland.</p>	High	<p><u>Construction</u></p> <p>Up to approximately 6.8ha would potentially be temporarily acquired for gas pipeline diversion. This would be a wide strip through the western portions of two fields. A further 0.1ha between proposed pipeline corridor and River Blackwater is likely to be inaccessible and untenable during pipeline works. Remaining approximately 44 ha east of pipeline corridor would remain accessible and tenable.</p> <p><u>Operation</u></p> <p>Land would be returned to agricultural use although there would be a permanent right of access for pipeline maintenance.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	<p>Minor adverse (construction)</p> <p>Negligible adverse (operation)</p>
Agricultural landholding 15	<p>Approximately 278.4ha total land owned by landowner.</p> <p>Approximately 164.5ha land in titles which overlap Order Limits.</p> <p>Approximately location Ch. 22600 - 26500</p> <p>Land is predominantly in arable use, with some areas being quarried for sand/aggregates and small areas of pasture/trees.</p>	High	<p><u>Construction</u></p> <p>Approximately 64ha land under arable production/gravel extraction would be occupied during construction, of which 52ha of land would be permanently acquired during construction for construction of new A12 alignment and utility corridor.</p> <p>Existing land uses could continue in land outside Order Limits as access would not be compromised.</p> <p>On completion of construction, some of this land would be used for environmental mitigation (e.g., biodiversity)</p> <p><u>Operation</u></p> <p>Approximately 12ha land would be reinstated, of which 4.5ha would have permanent access rights. A substantial proportion of land would be permanently lost from agricultural production.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	<p>Moderate adverse (construction and operation)</p>

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 16	<p>Approximately 3.2ha land owned by landowner.</p> <p>Land has historically been used as rough grazing although the landowner has advised there is no livestock on site at present.</p> <p>Access is via a gate off existing A12.</p> <p>Approximately location Ch. 23320 - 23400</p> <p>(Note land is subject to planning application 20/00128/OUT for light industrial use (permission granted December 2021). Therefore, use will change in future baseline.</p> <p>On the above basis (no livestock and future land use change) the landholding has been valued low for sensitivity.</p>	Low	<p><u>Construction</u></p> <p>Approximately 0.3ha 'L' shaped portion of field along south-west/south-east boundary temporarily acquired for construction access. Construction access would also use route through Eastways Industrial Estate. Access to landholding may be temporarily disrupted.</p> <p><u>Operation</u></p> <p>Land would be returned to existing use on completion of construction, but with permanent right of access.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	<p>Minor adverse (construction)</p> <p>Negligible adverse (operation)</p>
Agricultural landholding 17	<p>Approximately 3.6ha land.</p> <p>Approximately location Ch. 23380 – 23550</p> <p>Land, residential property, and several outbuildings. Site was previously a poultry farm. It is now used for rough grazing and livestock (sheep/goats/poultry)</p> <p>(Note land is subject to planning application 20/00128/OUT for light industrial use (permission granted December 2021). Therefore, use will change in future baseline.</p>	Medium	<p><u>Construction</u></p> <p>Approximately 0.22ha of southern extent of land would be occupied during construction for haul route and construction of new A12 alignment south-east of Eastways Industrial Estate.</p> <p>Grazing could continue on remaining land assuming access can be maintained throughout construction.</p> <p><u>Operation</u></p> <p>Land would be returned to landholder but with permanent right of access. Access to poultry farm from de-trunked A12 would be maintained.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	<p>Minor adverse (construction)</p> <p>Negligible adverse (operation)</p>

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 18	<p>Approximately 76.1 ha land owned by landowner.</p> <p>Landholding is near Rivenhall End and is currently severed by existing A12.</p> <p>Approximately location Ch. 24200 - 26100</p> <p>Land predominantly in arable use for winter wheat (60.8ha).</p> <p>There are some areas of woodland (non-commercial native broadleaf) and land between A12, and railway line is used as a commercial shoot.</p>	High	<p><u>Construction</u></p> <p>Approximately 46ha (mostly arable) would be occupied during construction for borrow pit, haul route and construction of new A12 alignment south of Rivenhall End.</p> <p>Access to unaffected fields north of A12 appears to be possible via Cranes Lane, so it is assumed this land use can continue.</p> <p><u>Operation</u></p> <p>On completion of construction approximately 2.6ha would be returned to existing (arable) use. Land acquired permanently outside of highway works and borrow pit would be used for attenuation ponds and ecological mitigation.</p> <p>Majority of land used for arable production would be lost.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)
Agricultural landholding 19	<p>Total area of landholding is approximately 6.4ha and a very tiny sliver is within Order Limits.</p> <p>Location approximately Ch.26100-26300.</p> <p>From aerial imagery the land currently looks to be used for arable farming.</p> <p>(Note land is subject to planning application 17/01979/OUT the development of a mixed residential and employment space (permission not yet granted). Therefore, use may change in future baseline).</p>	High	<p><u>Construction</u></p> <p>Approximately 0.1ha within Order Limits which would be permanently acquired during construction in order to connect the newly realigned A12 to the existing B1204.</p> <p><u>Operation</u></p> <p>No impact is anticipated during operation. Arable farming practices would still be viable on the remaining land during operation.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	<p>Minor adverse (construction)</p> <p>No change (operation)</p>

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 20	<p>Total area of landholding is approximately 1.8ha with one unregistered land title and another parcel outside the Order Limits. Approximately location Ch. 26400-26500.</p> <p>Predominantly arable but there are also areas of woodland, an area for rough grazing (on unregistered land), as well as various farm buildings and poultry.</p> <p>The landholder has advised access is currently poor on/off B1024 London Road to both areas due to fast and frequent traffic.</p>	High	<p><u>Construction</u></p> <p>B1023 London Road west of Kelvedon would be temporarily acquired during construction to allow for some minor works to utilities. This is the main route to/from the landholding so there would be a risk of intermittent minor disruption should utilities works be taking place. There would be no direct land-take during construction.</p> <p><u>Operation</u></p> <p>Traffic flow along B1024 London Road is expected to reduce from between 8000-16,000 Annual average daily traffic (AADT) in the Do Minimum scenario to 4,000 – 8,000 AADT in the Do Something scenario. This would be a beneficial indirect effect on access based on the landholder's current reported experience.</p>	Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.	<p>Minor adverse (construction)</p> <p>Minor beneficial (operation)</p>
Agricultural landholding 21	<p>Landholding is approximately 2.9ha.</p> <p>Location approximately Ch. 26400 - 26800</p> <p>Land is currently used as willow plantation.</p> <p>Land currently severed by existing A12.</p>	Low	<p><u>Construction</u></p> <p>Approximately 0.6ha occupied during construction (including area with storage barn)</p> <p><u>Operation</u></p> <p>Approximately 0.04ha would be returned to former use (including 0.03ha area with storage barn).</p> <p>A permanent area of acquisition land is required for an attenuation pond outfall pipe. However, it is assumed that access for the willow plantation owner will be permitted, so access is not severed.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land both inside and outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 22	<p>Landholding comprises two titles totaling 6.6ha in size. One small title coincides with Order Limits (0.47ha).</p> <p>Located on east side of Braxted Road, approximately Ch 26520 - 26680.</p> <p>Land appears to be used for grazing livestock.</p>	Medium	<p><u>Construction</u></p> <p>Approx. 0.4ha would be acquired, of which 0.13ha would be temporary acquisition. The acquired land is at the edge of the land parcel and therefore not likely to impact on function of remaining land.</p> <p><u>Operation</u></p> <p>Landholding would be slightly reduced in size, but existing land use is expected to remain viable.</p>	<p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Negligible adverse (construction and operation)
Agricultural landholding 23	<p>Approximately 310ha total land of which 3 land titles overlap Order Limits comprising 267ha. This land is predominantly arable, but there is also a solar farm, an area of pasture and woodland and a livery, as well as various farm buildings.</p> <p>Approx. location Ch. 26600-32120</p> <p>Land is already severed by A12, with access north and south via Ewell Bridge</p>	High	<p><u>Construction</u></p> <p>Approximately 77.5ha of land (arable) would be acquired for construction, of which approximately 71ha would be permanently acquired.</p> <p><u>Operation</u></p> <p>Post construction remaining land would be viable with exception of one small, severed plot of circa 0.16ha between proposed new A12 alignment and River Blackwater, which appears too small to be tenable.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)
Agricultural landholding 24	<p>Landholding is approximately 4.4ha.</p> <p>Location approximately Ch. 26530 - 26740</p> <p>It is assumed from aerial photography land is used for rough pasture/hay.</p>	Low	<p><u>Construction</u></p> <p>Entire landholding would be permanently acquired for construction, including areas for soil storage, compound, and haul routes.</p> <p><u>Operation</u></p> <p>Permanent loss of agricultural land. .</p>	<p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Major adverse (construction and operation)

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 25	<p>Total area of affected title in landholding is approximately 57.7ha.</p> <p>Location approximately. Ch.32050 to Ch.32650</p> <p>Aerial imagery indicates land is under arable production.</p> <p>Landholding is currently severed by A12, with access between fields east and west of A12 provided by Threshelfords accommodation bridge.</p>	High	<p><u>Construction</u></p> <p>Approximately 1.2ha acquired for access to demolish existing accommodation bridge and construct access to proposed new Prested Hall/Threshelfords Overbridge.</p> <p>Approximately 8.87 ha permanently lost for proposed new A12 alignment and access to proposed new overbridge.</p> <p>Of total approximately 10.07ha occupied during construction, approximately 1.1ha would be returned to former use.</p> <p><u>Operation</u></p> <p>Remaining land (approximately 48.7ha) could continue to be farmed. However, it would take longer for the farmer to cross A12 due to less direct Prested Hall/Threshelfords Overbridge.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)
Agricultural landholding 26	<p>Total area of landholding is approximately 60.6ha with a tiny sliver within the Order Limits</p> <p>Location approximately Ch32250-32310.</p> <p>Land includes grounds to the rear of Prested Hall and appears from aerial imagery not to be in agricultural production (potentially occasional grazing)</p>	Low	<p><u>Construction</u></p> <p>As the site is an irregular shape, only a small sliver (approximately 0.03ha) intersects with the Order Limits and would be temporarily acquired during construction with permanent rights for access purposes. Additionally, potential loss of access to fields south of Order Limits without mitigation.</p> <p><u>Operation</u></p> <p>No impact is anticipated during operation.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Negligible adverse (construction) Neutral (operation)

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 27	<p>Total area of landholding is approximately 11.7ha. The land title covers two fields, the northernmost being within the Order Limits.</p> <p>Location approximately Ch.32600-33050.</p> <p>From aerial imagery the northern field land currently looks to be used for hay. The southern field (outside of the Order Limits) appears to be parkland, not in commercial agricultural use.</p>	Low	<p><u>Construction</u></p> <p>Approximately 9.2ha within Order Limits would be permanently acquired during construction to accommodate the newly realigned A12, and three attenuation ponds with their associated access routes.</p> <p><u>Operation</u></p> <p>Approximately 2.5ha would not be affected and could continue to be used. Access would be via unnamed lane leading to Prested Hall and Spa.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)
Agricultural landholding 28	<p>Majority of land linked to this landholding is same landowner for landholding 29 which is. This assessment relates to untenanted land parcel not included under landholding 29.</p> <p>Land title is approximately 7.2ha.</p> <p>Land use appears to be pasture (aerial imagery indicates possible horse paddocks on some).</p>	Medium	<p><u>Construction</u></p> <p>Entire northern most field (approximately 3.1ha) covered by land title would be occupied during construction to allow for construction of roundabout, attenuation pond and site of J25 satellite compound.</p> <p>Land further south (with possible horse paddocks) would be unaffected.</p> <p>Potential for temporary disruption to access on Hall Chase during construction.</p> <p><u>Operation</u></p> <p>Approximately 1.4ha would be returned to landowner and could be used for continued grazing pasture.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)

Agricultural asset	Baseline (size & land use)	Sensitivity	Description of impact (land take and severance)	Essential mitigation	Magnitude of impact (with essential mitigation)
Agricultural landholding 29	<p>A large landholding with five titles which coincide with Order Limits. These land titles are used by two tenants.</p> <p>Approx. location Ch. 33000-35250</p> <p>Tenant 1 works approximately 197ha land – predominantly arable, with small areas of woodland and one field used by Colchester Model Car Club</p> <p>Tenant 2 works approximately 99ha land – predominantly arable</p>	High	<p><u>Construction</u></p> <p>Tenant 1 land: Approximately 58.69ha land would be permanently acquired (including field used by model car club), and 9.58 temporarily acquired.</p> <p>Unaffected land south of Order Limits could still be farmed.</p> <p>Tenant 2 land: Approximately 44.8ha land would be permanently acquired and 7.1 ha temporarily acquired. Unaffected plots could be farmed during construction, though access may be disrupted by construction works.</p> <p><u>Operation</u></p> <p>Tenant 1 land: Remaining 138.6ha would still be viable for agricultural use.</p> <p>Tenant 2 land: Proposed scheme would sever tenanted land north and south. Access across A12 would be via de-trunked London Road and Wishing Well Overbridge. 54 ha land would be viable but access between some fields would take longer.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable to access land outside of Order Limits.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Moderate adverse (construction and operation)
Agricultural landholding 30	<p>Land title covers approximately 76.9ha between Ch. 34720 – 34950. The land is on the north-west side of A12 London Road and is bisected by the Great Eastern Main Line railway.</p> <p>The land is in arable production.</p> <p>Access to land south of railway is via Domsey Chase.</p>	High	<p><u>Construction</u></p> <p>Small area of permanent acquisition required from corners of fields on each side of Domsey Chase to construction Easthorpe Road Roundabout arrangement (approximately 0.5ha). Access potentially disrupted during construction works.</p> <p><u>Operation</u></p> <p>Approx. 0.03ha would have permanent access rights. Since permanent land-take is in corners of fields, no significant impact on land use viability is anticipated.</p>	<p>Appropriate temporary or permanent access arrangements would be provided where practicable.</p> <p>Liaison with landowners, tenants, and their agents which are affected by the proposals has been ongoing. The principles of the compensation code will apply.</p> <p>Contractor to appoint an Agricultural Liaison Officer for ongoing engagement with landholders, tenants and their agents.</p> <p>Undertake record condition of farm assets at pre-construction against which to measure quality of reinstatement of temporarily acquired land.</p> <p>Requirements for protection of biosecurity, water supplies, soils, and other farm assets placed on Principal Contractor.</p>	Minor adverse (construction and operation)

References

Office of Rail and Road (2022). Estimates of Station Usage. Available at:
<https://dataportal.orr.gov.uk/statistics/usage/estimates-of-station-usage>. Accessed June 2022.