national highways

Lower Thames Crossing

6.3 Environmental Statement Appendices
Appendix 7.10 – Schedule of Visual Effects (Clean version)

APFP Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Volume 6

DATE: December 2023
DEADLINE: 9

Planning Inspectorate Scheme Ref: TR010032
Application Document Ref: TR010032/APP/6.3

VERSION: 2.0

Revision history

Version	Date	Submitted at
1.0	31 October 2022	DCO Application
2.0	11 December 2023	Deadline 9

Lower Thames Crossing

6.3 Environmental Statement Appendices Appendix 7.10 – Schedule of Visual Effects (Clean version)

List of contents

Page number

1 Introduction 1
1.1 Overview 1
1.2 Sensitivity and magnitude and nature of effect 1
1.3 Significance of effect 1
1.4 Terminology 2
2 Construction 3
2.1 Effects on visual amenity during construction phase 3
3 Operation 85
3.1 Effects on visual amenity during operational phase 85
References 189

List of tables

Page number

Table 2.1 Schedule of visual effects on Representative Viewpoints south of the River Thames during construction 3
Table 2.2 Schedule of visual effects for visual receptors south of the River Thames during construction 27
Table 2.3 Schedule of visual effects on Representative Viewpoints north of the River Thames during construction 34
Table 2.4 Schedule of visual effects for visual receptors north of the River Thames during construction 73
Table 3.1 Schedule of visual effects on Representative Viewpoints south of the River Thames during operation 85
Table 3.2 Schedule of visual effects for visual receptors south of the River Thames during operation 125
Table 3.3 Schedule of visual effects on Representative Viewpoints north of the River Thames during operation 133
Table 3.4 Schedule of visual effects for visual receptors north of the River Thames during operation 174

1 Introduction

1.1 Overview

1.1.1 The assessment of effects on visual amenity considers the A122 Lower Thames Crossing (the Project) as detailed in Chapter 2: Project Description (Application Document 6.1). It considers residual effects following implementation of mitigation measures during the construction and operational phases of the Project. This appendix provides a detailed assessment of the effects on Representative Viewpoints and visual receptors identified within the study area.

1.1.2 A range of visual receptors has been identified for residential receptors, users of Public Rights Of Way (PRoWs) and recreational areas, users of transport routes and 'other' receptors such as industrial areas, schools and churches. For residential receptors, the assessment of receptor groups is based on worst-case views and not all properties within a group would necessarily experience the same level of effect.

1.2 Sensitivity and magnitude and nature of effect

1.2.1 The criteria for visual sensitivity, and for magnitude and nature of effect are set out in Table 7.4 and Table 7.6 of Chapter 7: Landscape and Visual (Application Document 6.1).

1.3 Significance of effect

1.3.1 Table 3.8.1 of Design Manual for Roads and Bridges (DMRB) LA 104 Environmental Assessment and Monitoring (Highways England, 2020) provides guidance on how to determine the level of significance from the assessment of visual sensitivity and magnitude of effect. Where Table 3.8.1 provides two significance categories, justification for the reporting of a single significance category is provided in the assessment commentary in this appendix.

1.3.2 Typical descriptors for visual significance of effect and the extent to which the level of significance is likely to be material to the decision-making process are set out in Table 4.1 of Appendix 7.2 (Application Document 6.3).

1.3.3 Effects on the visual receptors listed in Table 2.2, Table 2.4, Table 3.2 and Table 3.4 are illustrated on Figure 7.16 (Application Document 6.2) as a series of segmented circles, with each segment of the circle representing the significance of effects during construction, the opening year and the design year. The assessment of effects on visual receptors has been based on the location of these segmented circles.

1.3.4 The reporting of the design year operational effects, 15 years after opening of the Project, has been based on a summer view. A winter day 15 years after opening has also been reported to identify any seasonal variation, where applicable.

1.4 Terminology

1.4.1 The terminology used to describe the distance of features in the view from the visual receptor is as follows:

a. Close range/foreground: up to approximately 100m from the viewer

b. Mid-range/midground: over 100m and up to just below 1km from the viewer

c. Long range/distant: 1km and above from the viewer

1.4.2 The terminology used to describe the duration of effects is as follows:

a. Short term: less than five years

b. Medium term: between five to 10 years

c. Long term: more than 10 years

1.4.3 Temporary effects are considered to be those arising during construction and that would stop when construction is completed.

1.4.4 The Highway Section numbers referred to in Table 3.1 to Table 3.4 of this appendix refer to parts of the Project route. The locations of Highway Sections are shown in Figure 2.4: Environmental Masterplan (Application Document 6.2). (Receptor locations are shown on Figure 7.16 (Application Document 6.2).)

2 Construction

2.1 Effects on visual amenity during construction phase

South of the River Thames

2.1.1 Refer to Figure 7.16 (Application Document 6.2) for the location of the Representative Viewpoints and visual receptors. For Representative Viewpoint photography, refer to Figure 7.17: Representative Viewpoints – Winter and Summer Views and Figure 7.18: Representative Viewpoints – Night-time (inc. Winter) Views (Application Document 6.2).

Table 2.1 Schedule of visual effects on Representative Viewpoints south of the River Thames during construction

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
S-01	View from footpath NS150, at Gadshill on the outskirts of Higham settlement (Local Landscape Character Area (LLCA) Higham Arable Farmland (sub area Gadshill)). View centred south-south-west for recreational receptors.	Moderate	No change	Neutral effect	The existing vegetation present along the A226 and A289, in combination with the rolling landform and distance between the viewpoint and the Project (approximately 1.7km) would result in no utility works or Main Project construction activity being discernible from this location. There would also be no discernible change to the view from construction traffic using the A226 Gravesend Road.
S-02	View from footpath NS160 located on the south-western edge of Great Crabbles Wood (LLCA Shorne Wooded Slopes). View centred south-west for recreational receptors.	Moderate	Negligible	Slight adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds, and walkers, cyclists and horse riders (WCHs)) – nature of effects</u> There would be limited glimpsed views, of construction activity in the midground (approximately 0.5km) for an access track to an attenuation basin and potential views towards the A2 widening works/M2 tie-in works, densely filtered by the intervening tree belt. These works would be located beyond the intervening equestrian fields, which would be planted with new woodland during the construction phase as ancient woodland compensation planting. Construction works along the A2 corridor would include replacement of street lighting, the dismantling of a gantry, installation of a new gantry and road signage and construction of a retaining structure along the edge of a new WCH route parallel to the eastbound local distributor road. Construction works for the new attenuation basin would be largely screened due to intervening vegetation. Woodland loss adjacent to the A2 would not be apparent in this view due to intervening vegetation. There would not be a perceivable change in the view at night due to the existing lit condition of the A2/M2 corridor. Overall, construction works for the A2 widening would be barely noticeable in views. <u>Project utility works – nature of effects</u> There would be no discernible view of the utility works from this viewpoint due to a combination of intervening landform and existing vegetation along and south of Bowesden Lane. <u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as slight rather than neutral due to construction works being perceivable in part of the view.
S-03	View from the Kent Downs Area of Outstanding Natural Beauty (AONB) on footpath NS161, located north of Park Pale, east of Shorne Woods Country Park (LLCA West Kent Downs (sub area	Very high	Moderate	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be close- to mid-range, broad views south towards construction activity (approximately 0km to 0.5km) from this elevated position on the PRoW. This location represents the worst-case location where visibility of the Project would be at its maximum. Visibility closer to the Project along the PRoW to the south would reduce due to the lower elevation. Construction activity would be partially screened by retained vegetation and the landform, although the loss of some screening vegetation along the existing A2 corridor would increase visibility of construction works along the highway.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
	Shorne)). View centred south-south-east for recreational receptors.				There would be views towards construction works for the new WCH route in the foreground, and beyond for the new access to the haulage yard and an access track to a new attenuation basin. Construction works for the attenuation basin would be partially visible to the south-east. Widening of the A2 corridor with gantry dismantling, replacement street lighting, installation of a new gantry and road signage, and construction of a retaining structure along a new WCH route parallel to the eastbound local distributor road, would be visible across most of the view. During construction, much of the foreground fields would be planted with new woodland as ancient woodland compensation planting. There would not be a perceivable change in the view at night due to the existing lit condition of the A2/M2 corridor. Overall, construction activity associated with the widened A2 corridor and associated structures, and the loss of mature vegetation would be noticeable in views.
					<u>Project utility works – nature of effects</u> The vegetation loss associated with the proposed diversion of a high-pressure gas line and three multi-utility corridors, would increase visibility of the A2 corridor and associated traffic. There would be a readily apparent change in front of the existing wooded ridgeline, which would be visible against the skyline due to the removal of the High Speed 1 (HS1) mitigation planting. In addition, operation of Park Pale Utility Hub would be clearly visible in the midground. Overall, the utility works would result in a noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than very large due to construction works being viewed in the context of the existing road corridor.
S-04	View from the Kent Downs AONB on Park Pale, part of the National Cycle Network (NCN) Route 177* and Darnley Trail recreational route adjacent to Park Pale overbridge. Also represents views from the end of footpath NS161 (LLCA West Kent Downs (sub area Shorne)). View centred south-east for recreational receptors. **NCN Route 177 to be diverted and not considered as part of visual receptors in the assessment at this location.* *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	High	Moderate	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be close-range views of construction activity from this elevated location. As part of the Project, NCN Route 177 would be diverted away from the existing Park Pale overbridge, however, recreational access for the Darnley Trail would continue over this structure. Viewpoints S-05 and S-05a represent other views from this bridge. There would be views towards widening and realignment works along the A2/M2 corridor and construction works for the new access to the haulage yard and a WCH route and retaining wall parallel to the new eastbound local distributor road. These works would be seen alongside vegetation loss adjacent to the A2/M2 carriageway, in particular to accommodate the eastbound local distributor road. Construction activity associated with replacement street lighting, dismantling of the existing gantry and installation of a new gantry and road signage would also be clearly visible along the A2. Construction works associated with the NCN Route 177 diversion would be visible between the A2 corridor and HS1 to the south-east. There would not be a perceivable change in the view at night due to the existing lit condition of the A2/M2 corridor. Overall, construction activity associated with the widened A2/M2 corridor and associated structures, and the loss of mature vegetation, would be noticeable in views.
					<u>Project utility works – nature of effects</u> The removal of existing vegetation within the A2 corridor would increase the visibility of activity along the highway, particularly to the east where the view of the A289 slip road off the A2 eastbound carriageway would be opened up. There would be close- to mid-range views of multi-utility works, including works on Park Pale bridge. Overall, the utility works would result in a noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than moderate due to construction works being close to the viewpoint.
S-05	View from the Kent Downs AONB on Park Pale overbridge, part of the NCN Route 177* and Darnley	High	Major	Very large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> Close-range and extensive north-west view of construction activity from this elevated location above the A2 corridor. As part of the Project, NCN Route 177 would be diverted away from the existing Park Pale overbridge, however, recreational access

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
	Trail recreational route (LLCA West Kent Downs (sub area Shorne)). View centred north-north-west for recreational receptors. **NCN Route 177 to be diverted and not considered as part of visual receptors in the assessment at this location.* *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*				for the Darnley Trail would continue over this structure. Viewpoints S-04 and S-05a represent other available views from this bridge. Substantial mature vegetation loss within the central reservation and adjacent to the westbound carriageway associated with the widening and realignment works along the A2 corridor, as well as some vegetation removal along the eastbound carriageway, would be apparent across the full view. Construction works for the widened A2 and a retaining wall between the carriageways would also be prominent in the view, as would construction activity associated with the modification of the earthworks and new retaining structure on the southern side of the A2. There would also be views towards dismantling of existing gantries, installation of four new gantries and road signs and replacement street lighting on the A2. There would not be a perceivable change in the view at night due to the existing lit condition of the A2 corridor. Overall, construction activity associated with the widened A2 corridor and associated structures, and the loss of mature vegetation, would be dominant in views.
					<u>Project utility works – nature of effects</u> The removal of existing vegetation within the A2 corridor would increase the visibility of activity along the highway. There would be close- to mid-range views of multi-utility works to the north and west, including works on Park Pale bridge, and a mid-range view of installation of a medium-pressure gas pipeline on the northern side of the A2, to the north-west. There would also be a mid-range view of the Park Pale Utility Hub to the north-east. Overall, the utility works would result in a noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as very large rather than large due to construction works being close to the viewpoint.
S-05a	View from the Kent Downs AONB on Park Pale overbridge, part of the NCN Route 177* and Darnley Trail recreational route (LLCA West Kent Downs (sub area Shorne)). View centred west for recreational receptors. **NCN Route 177 to be diverted and not considered as part of visual receptors in the assessment at this location.*	High	Major	Very large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> As part of the Project, NCN Route 177 would be diverted away from the existing Park Pale overbridge, however, recreational access for the Darnley Trail would continue over this structure. Viewpoints S-04 and S-05 represent other views from this bridge. The visual effects would be very similar to those reported for S-05, except that views along the existing A2 corridor from this location extend further due to the viewpoint being positioned above the central reservation. Loss of mature vegetation and removal of the existing gantry above the eastbound carriageway would result in long-range views being more open, with greater construction activity being visible from this location. These views would extend as far as construction works for Brewers Road overbridge. There would be views towards construction activity associated with the A2 carriageway widening including the dismantling of existing gantries, installation of five new gantries, replacement street lighting and new signage, and construction of new retaining structures. In the distance, construction works for Brewers Road overbridge would be evident. There would not be a perceivable change in the view at night due to the existing lit condition of the A2 corridor. Overall, construction activity associated with the widened A2 corridor and associated structures, and the substantial loss of mature vegetation, would be dominant in views.
					<u>Project utility works – nature of effects</u> There would be close- to mid-range views of multi-utility works to the north and west, including works on Park Pale bridge, with mid-range views of the installation of a medium-pressure gas pipeline on the north side of the A2 to the west, in combination with multi-utility works on both sides of the A2. There would also be a close-range view of the Park Pale Utility Hub to the north-east. Overall, the utility works would result in a noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as very large rather than large due to construction works being close to the viewpoint.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
S-06	View from the Kent Downs AONB and the Grade I listed Darnley Mausoleum and Darnley Trail, within Cobham Hall Grade II* Registered Park and Garden (LLCA West Kent Downs (sub area Cobham)). View centred north-west for recreational receptors.	Very high	Negligible	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects The intervening dense mature vegetation within Cobham Hall Grade II* Registered Park and Garden would largely screen the construction activity associated with the A2 corridor (approximately 1.3km) from this elevated location, apart from occasional glimpses through gaps in vegetation. There would not be a perceivable change in the view at night due to the existing lit condition of the A2 corridor, and the screening provided by intervening vegetation. Overall, construction works would be barely noticeable in views. Project utility works – nature of effects There would be no discernible view of the utility works from this location due to a combination of intervening landform and existing vegetation within Cobham Hall Grade II* Registered Park and Garden.
S-07 & S-(CH)02	View from the Kent Downs AONB on footpath NS182 within Rochester and Cobham Park Golf Club and Cobham Hall Grade II* Registered Park and Garden. Also represents views from footpath NS180 (LLCA West Kent Downs (sub area Cobham)). View centred north-north-west for recreational receptors.	Very high	Negligible	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects Intervening mature vegetation and the undulating landform within Cobham Hall Grade II* Registered Park and Garden would largely screen the majority of construction activity occurring along the A2 corridor (approximately 0.8km). Vegetation loss along the A2 corridor could be just evident from this location, as existing roadside trees are partially visible against the skyline. Very limited glimpses of construction activities associated with the removal of existing gantries (one gantry is just visible in the existing view), installation of new gantries and replacement of street lighting could be just visible against the backdrop of woodland, although these views would be very limited due to the intervening landform and tree planting. There would not be a perceivable change in the view at night due to the existing lit condition of the A2 corridor, and the screening provided by intervening vegetation. Overall, construction works would be barely noticeable in views. Project utility works – nature of effects There would be no discernible view of the utility works from this viewpoint due to a combination of intervening landform and tree planting within Rochester and Cobham Park Golf Club. However, some vegetation loss required to facilitate multi-utility works along the A2 corridor would be evident from this location, as existing roadside trees are partially visible against the skyline. Overall, there would be a perceptible change in the view.
S-08	View from the Kent Downs AONB on footpath NS179, within Cobham Hall Grade II* Registered Park and Garden (LLCA West Kent Downs (sub area Cobham)). View centred west-north-west for recreational receptors. **Proposed diverted NCN Route 177 considered as part of visual receptors in the assessment at this location.*	High	Moderate	Large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects Due to the gap in the vegetation at this viewpoint and its location adjacent to HS1, this view represents a worst-case scenario for the PRoW, with views along other sections of the PRoW more restricted by vegetation south of HS1. There would be views of construction works for the WCH route in the foreground, as well as close- to mid-range views of prominent construction activity along the existing A2 road corridor associated with the A2 widening works, opened up by vegetation clearance on the south side of the A2 and in the central reserve. The currently visible gantry (approximately 0.1km) would be dismantled and two new gantries installed. There would also be construction works visible for the replacement of street lighting, new signage, a new retaining wall between the east and westbound carriageways and a new retaining wall along the south of the A2. During night-time working, construction activity could result in a perceivable change in view at night due to increased light sources, which would be more apparent due to vegetation loss. However, this lighting would be viewed in the context of existing lighting along the A2, including vehicle lights. Overall, construction works for the modified A2 corridor and associated structures and the substantial loss of mature vegetation would be noticeable in the context of the existing transport corridor comprising HS1 and the existing A2.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
					Project utility works – nature of effects There are likely to be close-range views of multi-utility works between the HS1 embankment and the A2 corridor and the associated tree removal would reduce the effectiveness of the existing tree belt in screening views of A2 and traffic using it. Overall, there would be a perceptible change in view, with the A2 and associated traffic becoming more evident in the view.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as large rather than moderate due to the open nature of views towards construction works and the existing A2 corridor following vegetation removal.
S-09	View from the Kent Downs AONB on Park Pale/Darnley Trail/NCN Route 177*, adjacent to Brewers Wood, part of Shorne Woods Country Park (LLCA West Kent Downs (sub area Shorne)). View centred south for recreational receptors. **NCN Route 177 diverted and not considered as part of visual receptors in the assessment at this location.*	High	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be close-range, densely filtered views through retained foreground vegetation along Park Pale towards construction works for the A2 widening and realignment, and mature vegetation loss in the central reservation and along the westbound carriageway. Vegetation loss within the central reservation would reduce the filtering of views towards construction activity. Filtered views would also include construction works for replacement street lighting, dismantling of the existing visible gantry on the eastbound carriageway, and installation of new gantries and signage. There would also be filtered views towards construction works for a retaining wall located between the east and westbound carriageways. Views south-east along Park Pale of the upper parts of highway infrastructure such as new gantries and replacement street lighting would be seen above retained vegetation. There would not be a perceivable change in the view at night due to the existing lit condition of the A2 corridor. Overall, construction activity associated with the widening of the A2 corridor and the loss of mature vegetation, would be noticeable in views.
					Project utility works – nature of effects There would be close-range views of works associated with the medium-pressure gas pipeline installation along Park Pale. Overall, the utility works would result in a perceptible change to the view but would not alter the overall balance of features and elements.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as moderate rather than large due to the retention of existing screening vegetation along Park Pale reducing the extent of construction works visible.
S-10	View from the Kent Downs AONB on a path within the Pleasure Grounds at Cobham Hall part of the Cobham Hall Grade II* Registered Park and Garden (LLCA West Kent Downs (sub area Cobham)). View centred north-north-west for recreational receptors.	Very high	Negligible	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects Existing dense vegetation within Cobham Hall Grade II* Registered Park and Garden would largely screen the construction activity from this location (approximately 0.2km). This would result in only very limited glimpsed views of construction activity for the A2 widening works and utility diversions. Construction activity at night would not result in a perceivable change in view. Overall, construction activity associated with widening of the A2 corridor would be barely noticeable in views.
					Project utility works – nature of effects Existing dense vegetation within Cobham Hall Grade II* Registered Park and Garden would result in no utility works being discernible in views.
S-11	View from the Kent Downs AONB on footpath NS179 within Cobham Hall Grade II* Registered Park and	Very high	Moderate	Large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects This viewpoint is located on a PRoW within Cobham Hall Grade II* Registered Park and Garden and represents a worst-case location where visibility is at its maximum due to the break in the intervening vegetation.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
	Garden (LLCA West Kent Downs (sub area Cobham)). View centred north-north-west for recreational receptors.				There would be close- to mid-range, filtered views towards limited vegetation removal on the northern edge of the parkland adjoining the existing Brewers Road overbridge, which would slightly increase views towards demolition of the existing overbridge and construction of the new Brewers Road green bridge, as well as construction works for the new WCH access route (connecting footpath NS179 and the diverted NCN Route 177 to Brewers Road). The removal of the existing false cutting earthwork located between HS1 and the A2 corridor would result in slightly greater visibility of the A2 corridor, including construction works for the widening of the A2 corridor, replacement of street lighting and dismantling of the existing gantry. Mature vegetation clearance within the central reserve would open up some views towards Shorne Woods Country Park, where further mature trees would be removed. Views towards the A2 corridor would be filtered by retained vegetation at the edge of the parkland, with construction works viewed through gaps in vegetation. There would not be a perceivable change in the view at night due to the existing lit condition of the A2 corridor. Overall, construction activity associated with the widening of the A2 corridor and Brewers Road green bridge, and the loss of mature vegetation, would be noticeable in views.
					<u>Project utility works – nature of effects</u> The close-range existing view is characterised by the mature trees on the edge of the parkland. There would be densely filtered, close-range views of multi-utility works along Brewers Road. Overall, the utility works would result in a perceptible change to the view but would not alter the overall balance of features and elements.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than very large due to the retention of existing trees along the boundary of Cobham Hall Grade II* Registered Park and Garden reducing the extent of construction works visible.
S-12	View from the Kent Downs AONB on Brewers Road/Luddesdown Trek/NCN Route 177*, adjacent to Brewers Wood/Shorne Wood (part of Shorne Woods Country Park) (LLCA West Kent Downs (sub area Shorne)). View centred south-south-west for recreational receptors. **NCN Route 177 to be diverted and not considered as part of visual receptors in the assessment at this location.*	High	Moderate	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> The existing Brewers Road overbridge would be demolished and replaced with a new green bridge, with no public access for approximately 18 months during construction. Visual effects from Brewers Road overbridge or immediate approaches would therefore be seen in the context of the new green bridge. (It has been assumed that due to the lack of public access, there would be no views of demolition of the existing bridge or construction activity for installation of the replacement green bridge from this location.) As part of the Project, NCN Route 177 would be permanently diverted away from Brewers Road overbridge, however, recreational access for the Luddesdown Trek would resume over the new Brewers Road green bridge, once in place. Effects on views from this recreational route are described for once the new bridge has been constructed. There would be close-range views of construction activity for replacement lighting columns and the dismantling of a gantry along the A2 corridor. Views of these construction works would be more open due to mature vegetation removal, including within the central reservation. Retained vegetation flanking Brewers Road would screen most views of construction works further east along the carriageway. Construction activity associated with the A2 widening and a retaining wall between the east and westbound carriageways would be largely screened within the existing cutting and by Brewers Road green bridge, apart from glimpses of construction works for the upper part of the retaining wall. During night-time working, construction activity could result in a perceivable change in the view at night due to increased light sources and the opening up of views by vegetation removal, but in the context of existing lighting along the A2 corridor. Overall, construction activity associated with widening of the A2 corridor and loss of mature vegetation, would be noticeable in views.
					<u>Project utility works – nature of effects</u> There would be close-range views of multi-utility works along Brewers Road in combination with installation of the medium-pressure gas pipeline along Brewers Road. Overall, the utility works would result in a noticeable change in the view.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as large rather than moderate due to the open nature of views towards construction works and the existing A2 corridor following vegetation removal.
S-13	View from the Kent Downs AONB on Brewers Road overbridge and the Luddesdown Trek above the A2 eastbound carriageway (LLCA West Kent Downs (sub area Shorne)). View centred south for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	High	Major	Very large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects The existing Brewers Road overbridge would be demolished and replaced with a new green bridge, with no public access for approximately 18 months during construction. Visual effects from Brewers Road overbridge or immediate approaches would therefore be seen in the context of the new green bridge. (It has been assumed that due to the lack of public access, there would be no views of demolition of the existing bridge or construction activity for installation of the replacement green bridge from this location.) There would be close-range views of construction activity in the immediate foreground, as well as in mid-range views to the west and east from this elevated location. Recreational access for the Luddesdown Trek would resume over the new Brewers Road green bridge, once in place. Effects on views from this recreational route are described for once the new bridge has been constructed. Given the elevated nature of the viewpoint, this location represents a worst-case scenario where visibility of the Project is at its maximum. Representative Viewpoint S-14 represents another view from this overbridge. Substantial loss of woodland would be apparent in the central reservation, which would open up views to construction activity associated with the widening and realignment works along the A2 corridor. This vegetation loss would also open up views of the westbound carriageway, with views towards HS1 and Cobham Hall Grade II* Registered Park and Garden to the south. In addition, further loss of mature vegetation adjacent to the eastbound carriageway would be apparent to the west. Construction activity to the west would include dismantling the existing visible gantry, installation of two new gantries in the midground (approximately 0.3km to 0.6km), earthwork modifications along the edge of the A2 corridor and construction of a retaining wall along the realigned Thong Lane. To the east, there would be views towards construction activity associated with the dismantling of the two existing visible gantries and installation of five new gantries in the midground (approximately 0.2km to 1km). Modifications to earthworks and existing retaining walls along the A2 corridor, and construction of a new retaining structure between the east and westbound carriageways, would be evident. Construction works for new road signs and the replacement street lighting would also be apparent. There would not be a perceivable change in the view at night due to the existing lit condition of the A2 corridor. Overall, construction activity associated with widening of the A2 corridor and associated gantries, and loss of substantial areas of mature vegetation, would be dominant in views. Project utility works – nature of effects There would be close-range views of multi-utility works and installation of a medium-pressure gas pipeline along the eastbound A2 carriageway, west of Brewers Road green bridge, with associated vegetation removal. There would also be close-range views of multi-utility works along Brewers Road and on the south side of the A2. Overall, the utility works would be seen as a noticeable change in the view. Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as very large rather than large due to construction works being close to the viewpoint.
S-14	View from the Kent Downs AONB on Brewers Road overbridge and the Luddesdown Trek above A2 westbound carriageway/HS1 (LLCA West Kent Downs (sub area Shorne)). View	High	Major	Very large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects The existing Brewers Road overbridge would be demolished and replaced with a new green bridge, with no public access for approximately 18 months during construction. Visual effects from Brewers Road overbridge or immediate approaches would therefore be seen in the context of the new green bridge. (It has been assumed that due to the lack of public access, there would be no views of demolition of the existing bridge or construction activity for installation of the replacement green bridge from this location.)

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
	centred north-east for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2))*				There would be close-range and wide views of extensive, prominent construction activity along the A2, in the immediate foreground and within mid- to long-range views east and west from this elevated location. Recreational access for the Luddesdown Trek would resume over the new Brewers Road green bridge, once in place. Effects on views from this recreational route are described for once the new bridge has been constructed. Given the elevated nature of the viewpoint, this location represents a worst-case scenario where visibility of the Project is at its maximum. Viewpoint S-13 represents an alternative view from the overbridge. Substantial loss of woodland would be apparent in the central reservation, which would open up views to the eastbound carriageway and construction activity for the widening and realignment works along the A2 corridor. Further vegetation loss (including some ancient woodland) would also be apparent within Shorne Woods Country Park adjacent to the eastbound carriageway and along the southern side of the A2 corridor, including some HS1 mitigation planting. The focus of views would be on construction works for the A2 widening, including modifications to earthworks and existing retaining walls along the A2 corridor, and construction of new retaining structures along the realigned Thong Lane and between the east and westbound carriageways. Three existing visible gantries to the north-east and east would be dismantled and five new gantries installed in the midground up to Park Pale overbridge (approximately 1.2km), with gantry dismantling and installation also visible along the A2 corridor beyond. Gantry dismantling and installation works for two new gantries would also be visible above the carriageways in the midground to the west (approximately 0.25km to 0.55km). Increased visibility along the A2 corridor would be possible to the west due to vegetation removal and the widened carriageway. Construction works for replacement street lighting and road signage on the A2 would also be evident, however, this would be partially obscured in the midground to the west by the landform and the curving of the A2 corridor. There would not be a perceivable change in the view at night due to the existing lit condition of the A2 corridor. Overall, construction activity associated with widening of the A2 corridor and associated gantries, and the loss of large-scale areas of mature vegetation, would dominate the view.
					<u>Project utility works – nature of effects</u> There would be close-range views of multi-utility works along the westbound A2 corridor to the east and west and along Brewers Road. On the northern side of the A2, multi-utility works and installation of a medium-pressure gas pipeline would also be visible. Vegetation removal to facilitate utility works would be concentrated on the north side of the A2, to the west of Brewers Road overbridge. Overall, the utility works would be seen as a noticeable change in the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as very large rather than large due to construction works being close to the viewpoint.
S-15	View from the Kent Downs AONB on footpath NS178 located adjacent to the Halfpence Lane roundabout (LLCA West Kent Downs (sub area Cobham)). View centred north for recreational receptors.	High	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be close-range views of construction work for a WCH route in the foreground, as well as construction activities beyond the roundabout junction. This would include removal of the A2 slip roads and existing Thong Lane and construction of the realigned Thong Lane and associated earthworks and retaining wall, which together with the widening of the A2 corridor, would result in mature vegetation clearance within and adjacent to the A2 corridor. Vegetation loss would open up views to a larger proportion of construction activity in the area and there would be some loss of mature woodland (including some ancient woodland) on the southern edge of Shorne Woods Country Park. This view would also include construction works for the replacement street lighting on the A2 corridor and new road signs. The gantry partially visible in the existing view would be dismantled and a new gantry installed closer to the view. The demolition of Brewers Road overbridge and construction of Brewers Road green bridge would also be just apparent due to vegetation removal, although views would be filtered by retained vegetation to the south-west of Brewers Road overbridge. There would not be a perceivable change in the view at night due to the existing lit condition of the A2 corridor. Overall, construction activity associated with widening of the A2 corridor and associated highway infrastructure, realignment of Thong Lane and the loss of mature vegetation, would be noticeable in views seen in the context of the existing roundabout junction.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
					Project utility works – nature of effects There would be close-range views of multi-utility works at the roundabout junction and extending along Brewers Road. Overall, the utility works would be seen as a noticeable change in the view. Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as moderate rather than large due to construction works being viewed in the context of the existing road corridor and roundabout.
S-16	View from the Kent Downs AONB and Randall Heath Woods, on a permissive path within Shorne Woods Country Park (LLCA West Kent Downs (sub area Shorne)). View centred south-south-west for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	Very high	Minor	Moderate adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be heavily filtered, mid- to long-range views of construction activity (approximately 0.4km to 1.2km). This viewpoint is considered to be a worst-case scenario, as it is positioned at a slightly elevated location where there are gaps in the woodland, allowing filtered views towards the Project. Views along the permissive path to the east are more enclosed and contained, as are other views from the permissive paths within Shorne Woods Country Park, therefore there would be limited visibility of the Project and construction activity. Operation of the A2 compound adjacent to Thong Lane (approximately 0.4km) would be just visible, including a concrete batching plant up to 25m in height. There would also be views towards construction works for the substantial earthworks along the Project route and two large new viaducts associated with the proposed M2/A2/Lower Thames Crossing junction. There would also be partial visibility of construction activity associated with several supporting structures and retaining walls for the various slip roads at the junction. However, views of these elements would be obscured due to a combination of the intervening vegetation within Shorne Woods Country Park and the proposed vertical alignment of the Project and earthworks. Glimpses of construction works for the installation of new street lighting, gantries and road signage are likely to be visible, as well as the widening and remodelling/repositioning of the existing A2 corridor beyond. During night-time working, construction activity could result in a perceivable change in the view at night due to increased light sources, however, this lighting would be seen in the context of the prominently lit existing condition on the A2. Overall, construction activity associated with the new slip roads and viaducts, earthworks and A2 widening would be perceptible in views through intervening vegetation but would not alter the overall balance of features and elements that constitute the existing view. Project utility works – nature of effects Existing trees within Randall Wood (part of Shorne Woods Country Park) would limit views of utility works to partial glimpses of overhead line (OHL) modifications to the west. Overall, the utility works would result in a barely noticeable change to the view. Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as moderate rather than large due to the retention of existing trees in Shorne Woods Country Park reducing the extent of construction works visible.
S-17	View from the Kent Downs AONB on the NCN Route 177*/Timeball and Telegraph Trail Long Distance Path, on Thong Lane adjacent to the Inn on the Lake Hotel (LLCA West Kent Downs (sub area Shorne)). View centred south for recreational receptors.	High	Major	Very large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be very close-range, wide views of construction activity in the immediate foreground, including demolition of the existing Thong Lane overbridge and construction of new slip roads between the M2/A2/Lower Thames Crossing junction and the eastbound local distributor road and the A2, including the associated retaining structures and earthworks. The removal of the existing Gravelhill Wood on the western side of Thong Lane, as well as the landform associated with Thong Lane overbridge, which collectively restrict current visibility of the A2 corridor, would open up views towards construction works. There would also be views towards construction activity associated with the new Thong Lane green bridge south and widening of the A2 corridor, and the extensive clearance of mature vegetation between the A2 corridor and HS1. This clearance would open up a view of construction works for the realigned Thong Lane, elevated above the A2 corridor by a large retaining wall.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
	**NCN Route 177 to be diverted and not considered as part of visual receptors in the assessment at this location*				To the west, the clearance of Gravelhill Wood would allow visibility towards construction works for the M2/A2/Lower Thames Crossing junction, although once the Thong Lane green bridge south and the realigned Thong Lane have been constructed in the immediate foreground, these elements would obscure views west and north-west due to their elevated nature. Construction activity associated with the replacement of street lighting on the A2 would also be readily apparent, together with the dismantling of a gantry and installation of two new gantries and road signage. During night-time working, construction activity could result in a perceivable change in the view at night due to vegetation removal and the presence of increased light sources, however, lighting would be seen in the context of the existing prominently lit condition on the A2. Overall, construction activity associated with widening of the A2 corridor, new slip roads and associated structures, and the loss of large-scale areas of mature vegetation, would be dominant in views.
					<u>Project utility works – nature of effects</u> Thong Lane overbridge is a dominant visual focus of the existing view, with views of the A2 filtered by existing vegetation bordering the Inn on the Lake. Substantial vegetation removal would be readily apparent, resulting in close-range views of multi-utility works and installation of a medium-pressure gas pipeline. Overall, the utility works would be seen as a dominant change in the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as very large rather than large due to construction works being close to the viewpoint.
S-18	View from the Kent Downs AONB on the HS1 green bridge and Timeball and Telegraph Trail Long Distance Path (LLCA West Kent Downs (sub area Cobham)). View centred north-west for recreational receptors.	Very high	Major	Very large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be very close-range views of construction activities in the immediate foreground from this elevated location. There would be views towards construction works for the realigned Thong Lane in the foreground, including new earthworks, a retaining wall and WCH route. Beyond the realigned Thong Lane, demolition of the existing Thong Lane overbridge would be visible, together with construction works for the new Thong Lane green bridge south. Construction activity associated with the A2 widening works and the new slip roads between the M2/A2/Lower Thames Crossing junction and the westbound local distributor road and the A2 would be apparent, although partially screened due to the lower elevation of the works below the retaining wall along the realigned Thong Lane. Construction works would also include the dismantling of a gantry behind the existing Thong Lane overbridge, and the installation of new and replacement street lighting, new signage and two new gantries. Glimpses of construction works for retaining walls along the new slip road carriageways and the installation of a gantry beyond the Thong Lane green bridge south would be apparent. Removal of woodland between the A2 and HS1 (including remnant woodland within the Shorne and Ashenbank Woods Site of Special Scientific Interest (SSSI) between the A2 and HS1) would open up views of the A2 corridor and construction works. Beyond the A2 corridor, loss of mature woodland within Gravelhill Wood and on the edge of Shorne Woods Country Park would result in increased visibility to the north. There would be views towards taller operations and elements in the A2 compound, such as the concrete batching plant up to 25m high, and construction works for the new M2/A2/Lower Thames Crossing junction slip roads, with substantial earthwork operations likely to be partially visible. During night-time working, construction activity could result in a perceivable change in the view at night due to vegetation removal and increased light sources being present, however, this lighting would be seen in the context of the existing lighting on the A2. Overall, construction activity associated with widening of the A2 corridor, new slip roads and associated structures, and the loss of large-scale areas of mature vegetation, would be dominant in views.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
					Project utility works – nature of effects Vegetation removal for widening works would open up close-range views of multi-utility works on the south side of the A2. There could also be glimpsed views of utility works on the north side of the A2 adjoining the Inn on The Lake, following vegetation removal, including installation of a medium-pressure gas pipeline and multi-utility works. Overall, the utility works would be seen as a dominant change in the view.
S-19	View from footpath NS177, located within Jeskyns Community Woodland. Also represents views from footpath NS177A (LLCA Istead Arable Farmlands). View centred north-west for recreational receptors.	High	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be mid-range views of construction activities (approximately 0.35km to WCH construction and 0.9km to M2/A2/Lower Thames Crossing junction construction), with filtering of views provided by intervening young trees in Jeskyns Community Woodland. It is anticipated that young woodland within Jeskyns Community Woodland would continue to grow during the construction phase limiting views further, however, the worst case has been assessed at current growth height. Construction works for a WCH route along an existing footpath through Jeskyns Community Woodland would be visible in the midground. There would also be some views above intervening vegetation towards construction of the M2/A2/Lower Thames Crossing junction including two large viaducts. The dismantling of existing gantries and installation of several new gantries would also be apparent along the A2 corridor. The concrete batching plant, up to 25m high, could be just visible at the A2 compound to the north-east. Mature vegetation loss associated with the A2 widening would be apparent, including woodland within Claylane Wood and along the existing A2 corridor. However, construction activity associated with the A2 widening and M2/A2/Lower Thames Crossing junction would be partially screened or filtered by intervening vegetation. During night-time working, construction activity could result in a perceivable change in the mid-range view at night due to increased light sources, however, this lighting would be seen in the context of the existing prominently lit condition on the A2 and at Gravesend, an area with notable skyglow. Overall, construction activity associated with the widening of the A2 corridor, and introduction of new viaducts and supporting road infrastructure at the M2/A2/Lower Thames Crossing junction, and the loss of mature vegetation, would be noticeable in this mid-range view.
					Project utility works – nature of effects There would be mid- to long-range views of OHL modifications to the north, however, views of ground level utility works at the proposed M2/A2/Lower Thames Crossing junction and other locations would be screened by existing vegetation. There would be some loss of vegetation with the Jeskyns Community Woodland, Claylane Wood and along the A2 corridor. Overall, the utility works would result in a perceptible change to the view but would not alter the overall balance of features and elements.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as moderate rather than large due to retained existing vegetation limiting the extent of low-level construction works visible.
S-20	View from a recreational permissive route within Jeskyns Community Woodland (LLCA Istead Arable Farmlands). View centred north-east for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	High	Moderate	Large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be close- to long-range views of construction activities from this location, which would be limited by intervening woodland within Jeskyns Community Woodland. It is anticipated that young woodland within Jeskyns Community Woodland would continue to grow during the construction phase limiting views further, however, the worst case has been assessed at current growth height. Construction works for a WCH route along an existing footpath through Jeskyns Community Woodland would be visible in the foreground. Taller features in the A2 compound (approximately 1km), including a concrete batching plant up to 25m in height, would also be apparent in views above intervening vegetation to the north-east, along with construction works for the M2/A2/Lower Thames Crossing junction structures (approximately 0.5km) and glimpses of construction activity associated with the Thong Lane green bridge south, largely visible against a backdrop of retained woodland and seen in front of the existing Telecom tower at Inn on the Lake. Dismantling of existing gantries and installation of the upper parts of new gantries,

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
					road signs and replacement street lighting along the A2 corridor would be glimpsed above vegetation. Glimpses of construction works for the realigned Thong Lane and a new junction with the A2 (approximately 0.35km) would also be apparent in proximity to the HS1 Springwell Feeder Station (electricity substation). The removal of vegetation associated with the A2 widening would be apparent including remnant woodland within the Shorne and Ashenbank Woods SSSI between the A2 and HS1, Gravelhill Wood, woodland within Claylane Wood and tree belts along the A2 corridor, opening up views towards construction works and highway infrastructure along the A2. However, lower-level construction operations would be obscured by retained vegetation in Jeskyns Community Woodland. During night-time working, construction activity could result in a perceivable change in the view at night due to additional light sources, some of which would be observable against the dark backdrop of the Kent Downs AONB, although in the context of existing lighting along the A2 corridor and skyglow from the urban area of Gravesend. Overall, construction activity associated with the widening of the A2 corridor and M2/A2/Lower Thames Crossing junction and the loss of woodland, would be noticeable in views. <u>Project utility works – nature of effects</u> The removal of existing vegetation required for the proposed utility works, including that within the immediate foreground, would slightly open up views in the direction of the M2/A2/Lower Thames Crossing junction. There would be close-range views of OHL modifications to the north-east. Utility works near the M2/A2/Lower Thames Crossing junction would be largely screened by intervening buildings and retained vegetation within the Jeskyns Community Woodland. Overall, the utility works would result in a noticeable change to the view. <u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than moderate due to vegetation removal increasing the extent of construction works visible and the proximity of utility works.
S-20a	View from Jeskyns Community Woodland. Also represents views from northern end of footpath NS177 (LLCA Istead Arable Farmlands). View centred north-east for recreational receptors.	High	Major	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> Construction activity would be more visible from this viewpoint compared to S-20 due to its elevated nature, therefore it represents a worst-case scenario for views from Jeskyns Community Woodland. Construction works for a WCH route along an existing footpath through Jeskyns Community Woodland would be visible in the foreground. There would also be mid-range, wide views of vegetation removal between the A2 and HS1. This would open views into the adjacent landscape south of Thong, where the A2 compound would be visible including a concrete batching plant up to 25m in height. However, there would only be glimpsed views of ground-level operations within the A2 compound. There would be mid-range views of construction works for the new M2/A2/Lower Thames Crossing junction structures. These works would be visible above the intervening and retained vegetation within Jeskyns Community Woodland but seen against the backdrop of the surrounding landform and wooded ridge within the Kent Downs AONB, in part restricting and limiting visibility of construction works. The demolition of the existing A2 service area would be partially evident following the removal of adjoining woodland, together with construction works for the realigned Thong Lane and new junction with the A2 (approximately 0.4km) in proximity to the HS1 Springwell Feeder Station (electricity substation). There would be glimpsed views towards the dismantling of existing gantries and installation works for the upper parts of replacement street lighting, road signs and gantries along the A2 corridor. The removal of large areas of woodland would be apparent including remnant woodland within the Shorne and Ashenbank Woods SSSI between the A2 and HS1 (approximately 0.9km), Gravelhill Wood (approximately 1km), on the western edge of Shorne Woods Country Park (approximately 1.1km) and between HS1 and the A2. In the background, there would be views of construction works for the Thong Lane green bridge south on the wooded ridgeline, seen in front of the existing Telecom tower at Inn on the Lake. During night-time working, construction activity could result in a perceivable change in the view at night due to additional light sources, some of which would be observable against the dark backdrop of the Kent Downs AONB, although in the context of existing lighting along the A2 corridor and skyglow from the urban area of Gravesend.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
					Overall, construction activity associated with the widening of the A2 corridor, new M2/A2/Lower Thames Crossing junction and the substantial loss of woodland, would dominate the view. Project utility works – nature of effects The removal of existing vegetation required for the proposed utility works, including that within the immediate foreground, would slightly open up views in the direction of the M2/A2/Lower Thames Crossing junction. There would be close-range views of OHL modifications to the north-east. Utility works near the M2/A2/Lower Thames Crossing junction would be largely screened by intervening buildings and retained vegetation within the Jeskyns Community Woodland. Overall, the utility works would result in a noticeable change to the view. Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as large rather than very large due to construction works being viewed in the context of the existing road corridor and OHL.
S-21	View from footpath NU29/ Wealdway recreational route to the north of Ifield Court. Also represents views from footpath NU18 (LLCA Istead Arable Farmlands). View centred east-north-east for recreational receptors.	High	Minor	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be mid- to long-range, partial views of construction activities over a wide extent of the view. Vegetation loss along the A2 corridor and within Claylane Wood ancient woodland would be evident. There would be limited views of construction activities associated with the widening of the A2 corridor, largely confined to taller elements comprising replacement street lighting, dismantling of some existing gantries and installation of new gantries and road signage. Intervening hedgerows along field boundaries and retained roadside planting would screen most views of construction activity from this location, however, a small section of vegetation on the west edge of Shorne Woods Country Park at Gravelhill Wood would be removed and this would be evident in the distance. There would not be a perceivable change in the view at night due to the existing lit condition of the A2 corridor. Overall, construction activity associated with the widening of the A2 corridor, and the loss of vegetation, would be perceptible in views but would not alter the overall balance of features and elements that constitute the existing view. Project utility works – nature of effects From this location, the existing view is focused on the flat arable farmland in the foreground, largely remote from the proposed utility works, which would be concentrated around the M2/A2/Lower Thames Crossing junction. Views of utility works from this location would be limited to long-range views of OHL modifications to the north-east. Overall, the utility works would result in a barely noticeable change to the view. Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as slight rather than moderate due to construction works being viewed in the context of the existing road corridor.
S-22	View from Watling Street on the A2 overbridge (LLCA Gravesend Southern Fringe). View centred east-south-east for users of the main road.	Low	Moderate	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects The existing Marling Cross overbridge would be partially demolished and widened, with no public access during these works. Visual effects from Marling Cross overbridge would therefore be seen from the replacement bridge. (It has been assumed that due to the lack of public access, there would be no views of works to the existing bridge from this location.) In oblique views to the direction of travel, there would be close- to mid-range extensive views of construction activities in the immediate foreground from this elevated location. Vegetation clearance along the A2 corridor would be apparent, with loss in the immediate foreground resulting in increased visibility of Valley Drive and the operation of the Marling Cross compound. In the midground, further vegetation removal including the southern edge of Claylane Wood ancient woodland (approximately 0.5km) and Gravelhill Wood (approximately 1.3km) would be visible. In the foreground, construction activity would include realignment of the A2 with construction of earthworks and a retaining wall visible, together with the construction of a new slip road between the M2/A2/Lower Thames Crossing junction and the A2 and a link road to the Henhurst Road junction. There would also be views towards the dismantling of existing gantries along

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
					the A2, including the gantry in the foreground that currently obscures more distant views. With this removal, construction works for the new M2/A2/Lower Thames Crossing junction and new large-scale viaducts would be prominent in views. Construction works for the junction and viaducts would restrict further visibility towards the A2 corridor within the Kent Downs AONB. The installation of new and replacement street lighting, new gantries and road signs would also be clearly visible features across the view. The view would also include the demolition of some properties between the westbound A2 and Henhurst Road, as well as construction works for a new roundabout along Henhurst Road and an attenuation basin. There would not be a perceivable change in the view at night due to the existing lit condition of the A2 corridor. Overall, construction activity associated with the modification of the A2 corridor, new viaducts with substantial earthworks and associated structures, and loss of mature vegetation, would be noticeable in views seen in the context of the existing road corridor.
					<u>Project utility works – nature of effects</u> The existing view is dominated by the A2 and associated highway infrastructure, and the existing 400kV OHL are prominent features in the view set against the skyline. The utility works would necessitate vegetation removal north and south of the A2 and there would be views of multi-utility works along both sides the A2 corridor. This would include close-range views of multi-utility works along Hever Court Road to the east and beyond to installation of a medium-pressure gas pipeline along Watling Street. To the south-east there would also be mid-range views of OHL modifications. Overall, the utility works would result in a noticeable change to the view.
S-23	View from NCN Route 177 adjacent to Claylane Wood, and the A2/Watling Street (LLCA Gravesend Southern Fringe). View centred south-east for recreational receptors.	N/A	Not assessed	Not assessed	This route would be permanently stopped up and become part of the M2/A2/Lower Thames Crossing junction, with the existing PRoW/WCH links diverted away from this location, therefore this receptor has not been considered as part of the visual assessment during construction or operation.
S-24	View from footpath NS167 adjacent to Claylane Wood. Also represents views from bridleway NS174 (LLCA Higham Arable Farmland (sub area Thong)) looking towards the Kent Downs AONB. View centred east for recreational receptors.	Moderate	Not assessed	Not assessed	As part of the Project, this recreational route would be stopped up during construction and diverted along a new route on completion. No views from this PRoW would therefore be experienced during construction and this receptor has not been considered as part of the visual assessment during construction.
S-25	View from footpath NS167* at the western edge of Thong village and Thong Conservation Area (LLCA Higham Arable Farmland (sub area Thong)). View centred south-west for recreational receptors. ** Footpath NS167 to be closed during construction and not considered as part of visual receptors in the assessment at this location.*	Moderate	Not assessed	Not assessed	Project construction activity would occur over a medium-term period <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> As part of the Project, this recreational route would be temporarily stopped up during construction and, following completion of construction activities would be diverted along a new route. However, the viewpoint represents a worst case from residential properties along the edge of Thong village, noting that garden features and vegetation would restrict views in most cases. For sensitivity and assessment scores associated with the residential receptors, refer to Table 2.2. There would be close- to mid-range, wide views of construction activity from this location, with the closest elements being for the construction of earthworks along the eastern edge of the M2/A2/Lower Thames Crossing junction incorporating an associated WCH route. Once the earthworks are constructed in the foreground, the view would largely become restricted by the new road embankment and false cutting (approximately 0.1km), limiting visibility of wider construction activity. Prior to the earthwork construction and within the wider view, loss of mature vegetation would be apparent on the east edge of Claylane Wood ancient woodland, between the A2 corridor and HS1 and along the northern edge of the A2. There would also be views towards construction works for the new Project carriageway and associated slip roads, retaining wall structures and two large new viaducts, one of which would appear prominent against the skyline. Construction activity associated with

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
	Commentary has been provided here to support the visual assessment of nearby residential properties. For sensitivity and assessment scores associated with the residential receptors, refer to Table 2.2. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*				replacement street lighting, dismantling of the existing gantries and installation of new gantries and road signage along the A2 would be visible, although following the construction of viaducts and earthworks, these features would be obscured. The A2 compound would be largely screened by retained vegetation, however, there could be filtered glimpses of material storage areas, fencing around the compound and the concrete batching plant (up to 25m high). During night-time working, construction activity could result in a perceivable change in the view at night due to additional light sources seen at close range, however, the changes would be seen in the context of the prominently lit existing condition on the A2 corridor. Overall, construction activity associated with the new carriageways, viaducts and associated structures, with substantial earthworks, and the loss of mature vegetation, would dominate the view. <u>Project utility works – nature of effects</u> The removal of existing vegetation required for the proposed utility works would include a broad swathe of trees within Claylane Wood ancient woodland. There would be close-range views of installation of a medium-pressure gas pipeline in the foreground view to the west. Immediately beyond this to the south-west, there would be views of the A2 East Utility Hub, sited in the existing arable field. OHL modifications would also be visible, in mid-range views to the west. Overall, the utility works would be seen as a dominant change in the view.
S-26	View from Thong village and Thong Conservation Area (residential properties along the east of Thong Lane) (LLCA Higham Arable Farmland (sub area Thong)). View centred south-south-east for residential receptors.	High	No change	Neutral effect	The built form and settlement context, together with established and mature peripheral vegetation within Thong village along Thong Lane, would screen utility works and Main Project construction activity, which would not be discernible from this location.
S-27	View from footpath NS169, looking towards Shorne Woods and the Kent Downs AONB (LLCA Higham Arable Farmland (sub area Thong)). View centred east-south-east for recreational receptors.	Moderate	Not assessed	Not assessed	As part of the Project, this recreational route would be permanently stopped up and a new route for the PRoW created towards the end of the construction phase. No views from this PRoW would therefore be experienced during construction and this receptor has not been considered as part of the visual assessment during construction.
S-28 & S-(CH)01	View from footpath NS169* adjacent to Gravesend urban edge, looking towards Shorne Woods within the Kent Downs AONB, and St Mary Magdalene Church, Cobham (LLCA Higham Arable Farmland (sub area Thong)). View centred east-south-east for recreational receptors. ** Footpath NS169 to be closed during construction*	Moderate	Not assessed	Not assessed	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> As part of the Project, this recreational route would be temporarily stopped up during construction. However, the viewpoint represents a worst case from residential properties along the edge of Gravesend, noting that garden features and vegetation would restrict views in some cases. For sensitivity and assessment scores associated with the residential receptors, refer to Table 2.2. This location would have close- to long-range extensive views of construction activity. There would be views towards construction works for a WCH route in the foreground. In the midground view, there would be visibility of earthworks linked to the construction of the new Project carriageway and associated slip roads on embankment and within cutting and two new viaducts forming part of the M2/A2/Lower Thames Crossing junction. Installation of new gantries would be visible, as well as street lighting and signage. The A2 compound (approximately 1km) would also be visible from this location, until obscured by road construction, set against the backdrop of woodland in Shorne Woods Country Park. The compound would include a concrete batching plant up to 25m in height. Within the wider view there would be extensive vegetation clearance and loss of mature vegetation along

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
	and not considered as part of visual receptors in the assessment at this location. Commentary has been provided here to support the visual assessment of nearby residential properties. For sensitivity and assessment scores associated with the residential receptors, refer to Table 2.2. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*				the northern edge of the A2 corridor, between the A2 and HS1, at Gravelhill Wood adjacent to Thong Lane and along the eastern edge of Claylane Wood ancient woodland. Until obscured by construction of the new junction, the repositioning and widening of the existing A2 corridor would be apparent, as well as the dismantling of existing gantries, installation of new gantries, new street lighting and road signs, and demolition of the service area on the A2 westbound carriageway. During night-time working, construction activity could result in a perceivable change in the view at night due to the presence of additional light sources, including lighting of the construction compound and activity associated with construction of the new viaducts at the M2/A2/Lower Thames Crossing junction. However, this lighting would be seen in the context of prominent existing lighting along the A2 corridor and lighting from housing on the edge of Gravesend. Overall, construction activity associated with the new carriageways, viaducts and highway infrastructure, with substantial earthworks, and the loss of mature vegetation, would dominate the view.
					<u>Project utility works – nature of effects</u> There would be a series of utility works around the M2/A2/Lower Thames Crossing junction. The A2 West Utility Hub would feature prominently in foreground views to the south. Views would include works to at first temporarily and then permanently divert the existing 400kV OHL between the A2 and Thong Lane, east of Claylane Wood. Diversion would require installation of new pylon towers, including a tower within Claylane Wood, up to 75m high. In addition, there would be works associated with installation of two high-pressure gas pipelines, one medium-pressure gas pipeline and a power supply for the South Portal, with installation of other underground utilities along the A2 corridor potentially visible in more distant views. The A2 East Utility Hub may also be partially visible beyond the A2 West Utility Hub. Vegetation clearance required for the proposed utility works would result in some loss of Claylane Wood, and along the A2 corridor would be apparent in a small part of the view. Utility works would span a large proportion of the existing panoramic view to the south and east. Overall, the utility works would dominate the view.
S-29	View from the Kent Downs AONB on Shorne Ifield Road located to the north of Shorne Woods Country Park (LLCA Higham Arable Farmland (sub area Chalk)). View centred north-west for users of the local road.	High	Major	Very large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be close- to long-range extensive views of construction activity from this location. This view is considered a worst-case view from Shorne Ifield Road given its elevated nature and position next to a break in the roadside vegetation. There would be views towards construction activity at the southern tunnel entrance compound (approximately 0.3km), including excavation works for the South Portal cutting slopes, extensive material storage along the edge of the South Portal cutting slopes, and construction works for several attenuation basins. The tallest elements in the compound (up to 25m high) would be prominent in views, with the compound visible across the full extent of the view on the site of the existing golf course. A tall tower crane would be required in the short term. Views of construction works for the new carriageway would be restricted due to its location in cutting. There would also be some distant views of construction activity associated with the northern tunnel entrance compound and the North Portal and surrounding sculptural landscape mounding up to 17m above existing ground level on the north side of the River Thames. However, these features would not be the focus of this view due to their distance (approximately 4.7km to 5km). During construction, much of the foreground field would be planted with new woodland as ancient woodland compensation planting. During night-time working, construction activity could result in a perceivable and prominent change in the view from this receptor at night due to additional light sources seen in the midground. However, this lighting would be observable in the context of existing lighting within Gravesend and Tilbury, which is visible in the distance. Overall, construction activity across the full extent of the midground associated with the southern tunnel entrance compound and substantial earthworks, would be dominant in views.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
					Project utility works – nature of effects The elevation of the location affords long-range views across the River Thames to the north. There would be mid-range views to the north of installation of a high-pressure gas pipeline and the OHL modifications beyond. There are also likely to be views of the western edge of the Shorne Ifield Road Utility Hub to the north-east, as a result of vegetation removal. Overall, the utility works would result in a noticeable change to the view.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as very large rather than large due to the elevated nature of views and the extent of construction and utility works visible.
S-30	View from Thong Lane on the eastern urban edge of Gravesend (Riverview Park) adjacent to the entrance of Southern Valley Golf Club (LLCA Gravesend Urban Area). View centred south-south-east for users of the local road.	Moderate	Major	Large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be close- to mid-range views of construction activity. This view represents vehicle users along Thong Lane, although as part of the Project, the existing highway would require diversion over the new Thong Lane green bridge north and would be temporarily closed during a period of the construction phase. (Views to the north are represented by viewpoint S-31.) This is a narrowly focused view along Thong Lane which, as a result of vegetation clearance along the roadside and beyond to the east within the Southern Valley Golf Club and to the south-east around the former Hartshill Nursery, would become a wider view and include the southern edge of the southern tunnel entrance compound. Construction works for a WCH route and Thong Lane green bridge north would be prominent in the immediate foreground. Substantial earthworks associated with the cutting for the new Project carriageway would also be visible. The partially retained vegetation west of Thong Lane and the adjacent residential properties would restrict views of construction works further south. During night-time working, construction activity could result in a perceivable change in the view at night as a result of increased light sources adjacent to Thong Lane. However, this view is currently influenced by light sources within Riverview Park and along Thong Lane. Overall, construction activity within the immediate foreground associated with Thong Lane green bridge north, substantial earthworks for the cutting slopes and the southern edge of the southern tunnel entrance compound, and loss of vegetation, would dominate the view.
					Project utility works – nature of effects The removal of existing vegetation within the Southern Valley Golf Club, required as part of the utility works, would be visible from this location in close- to mid-range views. There would also be close-range views of multi-utility works along Thong Lane and beyond to OHL modifications, and works to install two high-pressure gas pipelines in the midground. Overall, the utility works would dominate the view.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as large rather than moderate due to construction works being close to the viewpoint.
S-31	View from footpath NG8* located within Southern Valley Golf Club at the urban edge of Gravesend (Riverview Park) (LLCA Higham Arable Farmland (sub area Chalk)). View centred east-north-east for recreational receptors.	Moderate	Not assessed	Not assessed	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects As part of the Project, this recreational route would be permanently stopped up and a new route for the PRoW created towards the end of the construction phase. Views from this PRoW during construction would therefore not be possible, however, effects described below are representative of views from the adjacent residential properties on Thong Lane within Riverview Park. For sensitivity and assessment scores associated with the residential receptors, refer to Table 2.2. This is a close- to mid-range view, with more distant visibility towards Shorne (approximately 1.7km). There would be views towards construction activity in the southern part of the southern tunnel entrance compound. Construction works for the cutting slopes of the South Portal would be visible in the immediate foreground. While these would be at a lower elevation, the activity and movements associated with material removal would be readily apparent. There could also be views of works

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
	** Footpath NG8 to be closed during construction and not considered as part of visual receptors in the assessment at this location. Commentary has been provided here to support the visual assessment of nearby residential properties. For sensitivity and assessment scores associated with the residential receptors, refer to Table 2.2.* *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*				associated with the new carriageway, including installation of gantries, signage and street lighting, although largely obscured within the cutting. Vegetation loss within the Southern Valley Golf Club would open up views to the wider compound area. This wider view of construction activity is likely to include site welfare offices, car parking, workshops, and a concrete batching plant up to 25m in height. A prominent tower crane required in the short term would be visible. Vegetation loss around the former Hartshill Nursery would also be apparent, with more open views to the fields beyond. During night-time working, construction activity could result in a perceivable change in the view at night as a result of increased light sources within this typically unlit landscape. However, this view is currently influenced by light sources in the distance to the north of the River Thames, including London Gateway Port and Canvey Island. Overall, construction activity within the immediate foreground for the substantial earthworks along the carriageway cutting slopes, operation of the southern tunnel entrance compound, and loss of vegetation, would be dominant in views.
					<u>Project utility works – nature of effects</u> The removal of existing vegetation within the Southern Valley Golf Club, required as part of the utility works, would be visible from this location in mid-range views. There would be mid-range views of the OHL modifications to the south-east in combination with installation of a high-pressure gas pipeline beyond. Overall, the utility works would be seen as a noticeable change in the view.
S-32	View from elevated location along footpath NS316 located immediately west of Shorne Hill, with views to the Kent Downs AONB. Also represents views from footpath NS163 (LLCA Higham Arable Farmland (sub area Chalk)). View centred west for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2))*	Moderate	Major	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be long-range, extensive views of construction activity associated with the South Portal (approximately 1.25km) and excavation for the South Portal cutting slopes. Much of the southern tunnel entrance compound would be visible across arable fields, including material storage, vehicle movements along haul routes, welfare offices, car parking, workshops, and a concrete batching plant up to 25m high, together with a prominent tower crane required in the short term. The view would also include vegetation loss within the Southern Valley Golf Club and around the former Hartshill Nursery, and construction of a hilltop landform between the South Portal and the urban edge of Gravesend, at up to 17m above existing ground level. The construction activities associated with Thong Lane green bridge north could also be apparent in the wider view. There would also be long-range views towards the operation of the A226 Gravesend Road and Milton compounds, including cranes in the short term, and construction activities associated with the advanced grout works (approximately 1.7km), as well as the northern tunnel entrance compound and North Portal (approximately 4.5km to 4.8km) north of the River Thames, but due to the distance and closer-range construction activity, these features would not be a visual focus. During night-time working, construction activity could result in a perceivable change in the view at night as a result of increased light sources, however, these would be seen in conjunction with extensive existing lighting including at Gravesend, Tilbury, Chadwell St Mary and Grays. Overall, construction works for the South Portal and substantial earthworks along the cutting slopes, and operation of the southern tunnel entrance compound, would be dominant in views.
					<u>Project utility works – nature of effects</u> There would be mid-range views to the west of the installation of a high-pressure gas pipeline and OHL modifications. More distant multi-utility works, including those along the A226 Gravesend Road, are unlikely to be discernible. To the south-west there would be mid-range views of the Shorne Ifield Road Utility Hub, seen on rising ground in front of Brummelhill Wood. Utility works would include the removal of approximately 2.8km of existing wood pole-mounted 33kV OHL from west of Thong Lane heading north to the A226. Overall, the utility works would result in a perceptible change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than moderate due to the elevated nature of views and the wide extent of construction and utility works visible.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
S-33	View taken at intersection of footpaths NG7, NG8, NG9, on northern edge of Southern Valley Golf Club (LLCA Higham Arable Farmland (sub area Chalk)). View centred north-west for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	Moderate	Not assessed	Not assessed	As part of the Project, this recreational route would be temporarily stopped up and a new route for the PRoW to the west created towards the end of the construction phase. No views from this PRoW would therefore be experienced during construction and this receptor has not been considered as part of the visual assessment during construction.
S-34	View from footpath NS163A* located adjacent to residential properties fronting the A226 Gravesend Road (LLCA Higham Arable Farmland (sub area Chalk)). View centred south-west for recreational receptors. ** Footpath NS163A to be closed during construction and not considered as part of visual receptors in the assessment at this location. Commentary has been provided here to support the visual assessment of nearby residential properties. For sensitivity and assessment scores associated with the residential receptors, refer to Table 2.2.*	Moderate	Not assessed	Not assessed	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> As part of the Project, this recreational route would be temporarily stopped up during construction, and therefore views from this PRoW would not be possible during construction. However, effects described below are broadly representative of views from the adjacent residential properties, albeit worst case given the reduced visibility due to intervening roadside vegetation. For sensitivity and assessment scores associated with the residential receptors, refer to Table 2.2. Within the immediate foreground, the adjoining southern tunnel entrance compound would be visible within the dry valley and across the adjacent slope, as well as construction works for a WCH route. In the midground, activity and taller elements within the southern tunnel entrance compound would be visible, behind the intervening ridgeline. It is unlikely that the concrete batching plant or tower crane (present in the short term) would be visible. Construction works for a series of attenuation basins would also be apparent within the dry valley. In the distance, construction activity associated with the South Portal cutting slopes and the Thong Lane green bridge north would be visible. The removal of vegetation within Southern Valley Golf Club and around the former Hartshill Nursery would also be apparent. During night-time working, construction activity could result in a perceivable change in the view at night as a result of increased light sources within this typically unlit landscape. While this view is currently influenced by light sources within Riverview Park (and for the adjoining residential receptors by street lighting and vehicle lights along the A226 Gravesend Road), night-time activity would be seen within the backdrop of a dark landscape to the south. Overall, construction activity in the foreground and operation of the southern tunnel entrance compound would be noticeable in views. <u>Project utility works – nature of effects</u> The existing view to the south-west comprises a rolling arable landscape crossed by prominent OHL. There would be close-range views of OHL modifications in combination with mid-range views of installation of a high-pressure gas pipeline. More distant utility works are unlikely to be discernible from this location. Overall, the utility works would result in a noticeable change to the view.
S-35 & S-(CH)03a	View from A226 Gravesend Road near Chalk (LLCA Higham Arable Farmland (sub area Chalk)). View centred south-south-east for users of the main road.	Low	Major	Moderate adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be close-range views south, of construction activity in the immediate foreground for the access road to the South Portal and the new substation (slightly to the west of the viewpoint photograph), as well as operation of the southern tunnel entrance compound. There could be views towards taller elements in the compound including a concrete batching plant (up to 25m in height), together with the upper extent of a tower crane present in the short term. Construction activity associated with the hilltop landform on the rising slopes near the South Portal would be apparent, although construction works at the South Portal would be concealed in cutting.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
	Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).				Hedgerow removal would be apparent along the A226 Gravesend Road and a nearby field boundary, which would open up views towards some existing farm buildings (slightly to the west of the viewpoint photograph). During night-time working, construction activity could result in a perceivable change in the view at night as a result of increased light sources within this typically unlit landscape. While this view is currently influenced by light sources along the A226, night-time activity within the compound would be extensive and seen within a dark landscape to the south, which would be adversely affected by additional light sources during construction. Overall, construction activity in the foreground and within the wider southern tunnel entrance compound would dominate the view. <u>Project utility works – nature of effects</u> There would be close-range views of multi-utility works along the A226 Gravesend Road and to the south. There would also be mid- to long-range views of OHL modifications to the south-east. Overall, the utility works would result in a noticeable change to the view. <u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as moderate rather than slight due to construction works being close to the viewpoint.
S-36	View from footpath NS172 off Queen's Farm Road. Also represents views from footpath NG5 (LLCA Higham Arable Farmland (sub area Chalk)). View centred west for recreational receptors.	Moderate	Minor	Slight adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be long-range, limited, glimpsed views of construction activity (approximately 1.75km), including the South Portal earthworks on rising landform. Construction works at the South Portal would be concealed in cutting. The upper parts of welfare offices, workshops and a concrete batching plant (up to 25m in height) in the construction compound would be visible from this location, together with the tower crane present in the short term. Vegetation removal would be apparent on the horizon at Gravesend Golf Centre. In addition, there would be glimpsed views towards the operation of the A226 Gravesend Road compound and Milton compound in the westerly view across agricultural fields, including the use of cranes in the short term, present in order to facilitate the advanced grout tunnel. During night-time working, construction activity could result in a perceivable change in the view at night as a result of increased light sources within this typically unlit area of landscape. However, this view is influenced by existing light sources in the urban area of Gravesend and by more distant light sources along the River Thames to the north-west. Overall, construction activity associated with the operation of the southern tunnel entrance compound would be perceptible in views but would not alter the overall balance of features and elements that constitute the existing view. <u>Project utility works – nature of effects</u> The existing view is characterised by a prominent OHL crossing the landscape. There would be long-range views of multi-utility works along the A226 Gravesend Road, as well as OHL modifications to the south-west. To the north-west, OHL modifications across the River Thames are unlikely to be discernible in long-range views. Overall, the utility works would result in a perceptible change to the view but would not alter the overall balance of features and elements.
S-37 & S-(CH) 03b	View from NCN Route 1 /footpath NG2/NG4 adjacent to former Thames and Medway Canal (LLCA Shorne and Higham Marshes). View centred south for recreational receptors.	High	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be long-range, extensive southerly views, of construction works (approximately 1.75km) from this location. This view represents a worst-case scenario, given the elevated position which is only available on the Thames and Medway Canal footbridge. There would be long-range views towards construction activity within the southern tunnel entrance compound (approximately 1.2km), which would facilitate the construction of the South Portal, as well as mid-range views of the operation of the A226 Gravesend Road compound (approximately 0.6km), which would facilitate the advanced grout tunnel. Elements likely to be visible within the southern tunnel entrance compound include welfare offices, car parking, workshops and a concrete batching

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
					plant (up to 25m in height). Prominent cranes would also be apparent in both the southern tunnel entrance compound and the A226 Gravesend Road compound in the short term. Construction activity associated with the earthworks around the South Portal and the access road and Rendezvous Point on the rising slopes near the South Portal would also be visible, although construction works for the South Portal itself would be largely concealed in cutting. Construction activity on the lower rising slopes would be partially softened by intervening vegetation along A226 Gravesend/Rochester Road. Construction of a hilltop landform between the South Portal and the urban edge of Gravesend (up to 17m above existing ground level) would also be visible. Vegetation removal would be apparent on the horizon at Gravesend Golf Centre. During night-time working, construction activity could result in a perceivable change in the view at night as a result of increased light sources, however, this view is currently influenced by extensive lighting within the urban area of Gravesend and by light sources along the A226. Overall, construction activity within the extensive southern tunnel entrance compound would be noticeable in views.
					<u>Project utility works – nature of effects</u> The existing view is characterised by the large-scale, flat arable landscape in the foreground and the A226 Gravesend Road can be seen spanning across the view. Mid-range views of the short stretch of proposed multi-utility works along Lower Higham Road and long-range views of multi-utility works along the A226 Gravesend Road would be barely noticeable. Overall, the utility works would result in a barely noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as moderate rather than large due to the limited overall effect on the wide panoramic view.
S-38a	View from Saxon Shore Way Long Distance Path/footpath NS138 at intersection with bridleway NS318 adjacent to Shornemead Fort. Also represents views from footpath NG1 (LLCA Shorne and Higham Marshes). View centred north-west for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	High	Minor	Slight adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> This viewpoint is part of a 360° panoramic view from the southern bank of the River Thames. For the purposes of the assessment, this northerly view has been considered separately from the southerly view due to the different impacts. Viewpoint 38b represents the southerly view. There would be long-range views north, of construction activity within the northern tunnel entrance compound and towards construction works for the North Portal (approximately 1.8km to 2.1km), although sculptural landscape mounding (up to 17m above existing ground level) around the North Portal would partially obscure views. During night-time working, construction activity could result in a perceivable change in the view at night as a result of increased light sources within the Tilbury Marshes, associated with tunnelling operations and increased night-time movement and activity. However, construction lighting would be viewed in the context of areas of existing prominent lighting such as at Tilbury Docks and London Gateway Port. Overall, construction activity associated with operation of the northern tunnel entrance compound and the North Portal would be perceptible in long-range views, but would not alter the overall balance of features and elements that constitute the existing view.
					<u>Project utility works – nature of effects</u> Distant views of utility works, including OHL modifications, across the River Thames are unlikely to be discernible at this distance (approximately 2.2km). Overall, the utility works would result in a barely noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as slight rather than moderate due to the limited overall effect on the wide panoramic view.
S-38b	View from Saxon Shore Way Long Distance Path/footpath	High	Minor		Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u>

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
	NS138 at intersection with bridleway NS318 adjacent to Shornemead Fort. Also represents views from footpath NG1 (LLCA Shorne and Higham Marshes). View centred south-west for recreational receptors.			Slight adverse effect	This viewpoint is part of a 360° panoramic view from the southern bank of the River Thames. For the purposes of the assessment, this southerly view has been considered separately from the northerly view due to the different impacts. Viewpoint 38a represents the northerly view. There would be long-range views, of construction activity to the south-west from this location, with impacts similar in nature to S-37, albeit views would be slightly more distant (approximately 1.4km to 2.5km). There would be views towards construction activity within the southern tunnel entrance compound (approximately 2.5km), which would facilitate construction works for the South Portal, as well as within the A226 Gravesend Road compound (approximately 1.9km) and Milton compound (approximately 1.4km), which would facilitate the advanced grout tunnel. Elements likely to be visible within the southern tunnel entrance compound include welfare offices, car parking, workshops and a concrete batching plant (up to 25m in height). Prominent cranes would also be visible within the southern tunnel entrance compound, A226 Gravesend Road compound and Milton compound in the short term. Construction activity associated with the earthworks around the South Portal and the access road and Rendezvous Point on the rising slopes near the South Portal would be apparent, although construction works for the South Portal itself would be partially concealed in cutting. Construction activity on the lower rising slopes would be partially softened by intervening vegetation along A226 Gravesend/Rochester Road. Construction of a hilltop landform between the South Portal and the urban edge of Gravesend (up to 17m above existing ground level) would also be visible. Vegetation removal would be apparent on the horizon at Gravesend Golf Centre. During night-time working, construction activity could result in a perceivable change in the view at night as a result of increased light sources, however, this view is currently influenced by extensive lighting within the urban area of Gravesend and by light sources along the A226. Overall, construction activity associated with the southern tunnel entrance compound and the South Portal would be perceptible in views but would not alter the overall balance of features and elements that constitute the existing view.
					<u>Project utility works – nature of effects</u> The existing view comprises extensive views across the flat and large-scale landscape of Shorne Marshes. To the south, there would be long-range views of OHL modifications. Multi-utility works along Lower Higham Road and along the A226 Gravesend Road to the south-west are unlikely to be discernible. Overall, the utility works would result in a barely noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as slight rather than moderate due to the limited overall effect on the wide panoramic view.
S-39 & S-(CH)04	View from local recreational ground on area of elevated ground at Windmill Hill, within residential area of Gravesend (LLCA Gravesend Urban Area). View centred north-north-east for residential receptors.	High	Minor	Slight adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be long-range views north-east, of construction activity on the north side of the River Thames from this elevated location, with views focused by existing vegetation. This represents a worst-case scenario due to the elevated position where construction works would be visible through a gap in the vegetation. There would be views towards construction works for the North Portal and the operation of the northern tunnel entrance compound (approximately 2.4km to 3.7km), although sculptural landscape mounding (up to 17m above existing ground level) around the North Portal would partially obscure views. Glimpsed views of construction works for Tilbury Viaduct could also be just evident. There would not be a perceivable change in the view at night due to the existing lit condition of the landscape, with extensive existing lighting apparent, including in Gravesend and at London Gateway Port. Overall, construction activity associated with the compound area, earthworks and road building would be perceptible in views.
					<u>Project utility works – nature of effects</u> Distant views of utility works, including OHL modifications, across the River Thames, are unlikely to be discernible at this distance (approximately 3km). Overall, the utility works would result in a barely noticeable change to the view.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as slight rather than moderate due to construction works being viewed in the context of existing industrial buildings along the River Thames.
N-Dep-RV-01	View from footpath KT/NS/176. Also represents views from footpath KT/NS/175 (LLCA Istead Arable Farmlands). View centred west-north-west for recreational receptors.	Moderate	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects Construction works for a new WCH route would be visible to the south of Church Lane in the field adjacent to the road. There would also be glimpses of construction works for a new roundabout junction along Henhurst Lane, including a new attenuation basin, and widening works for the A2 corridor to the north-east. These works would be partially screened by the grass mound north of Church Lane. Vegetation removal near the residential properties on Henhurst Lane and along the A2 corridor, partially removed to facilitate utility works, would also be apparent and open up views of construction works as a result. Further west, there would be glimpses of construction works at the Gravesend East junction, including the widening of the existing bridge structure across the A2 and replacement lighting columns. There would also be glimpses of construction works along the verge of the westbound A2 carriageway and the replacement of gantries. However, tree belts between HS1 and Church Lane and buildings along the HS1 corridor would provide some screening. There would not be a perceivable change in the view at night due to the existing lit condition of the A2 corridor. Overall, construction activity associated with the widening of the A2 corridor, improvements at the Gravesend East junction, and the loss of mature vegetation would be noticeable in views.
					Project utility works – nature of effects Vegetation removal would be apparent along Henhurst Road to the north-east, including some evergreen trees at the residential properties along Henhurst Road. Glimpses of construction works associated with the installation of several multi-utility corridors would also be visible along Henhurst Road near its junction with the A2, although the grass mound north of Church Lane would provide some screening. Further west, vegetation removal and construction works for multi-utility corridors at the Gravesend East junction and between HS1 and the A2 would largely be screened by tree belts between HS1 and Church Lane, and by buildings along the HS1 corridor. Overall, the utility works would result in a perceptible change to the view.
N-Dep-RV-02	View from footpath KT/NS/168, north-west of Woodlands Lane in Shorne Ridgeway (LLCA West Kent Downs (sub area Shorne)). View centred north-west for recreational receptors.	Very high	No change	Neutral effect	Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects No Main Project construction works would be visible from the footpath.
					Project utility works – nature of effects No utility works would be visible from the footpath.
N-Dep-RV-03	View from Swiller's Lane and residential properties along Barndale Court and Warren View, east of Shorne village (LLCA Shorne Wooded Slopes). View centred south-east for recreational and residential receptors.	Moderate for users of Swiller's Lane High for residents	No change No change	Neutral effect Neutral effect	Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects No Main Project construction works would be visible from Swiller's Lane or the residential properties
					Project utility works – nature of effects No utility works would be visible from Swiller's Lane or the residential properties.

Visual receptor		Sensitivity	Magnitude and nature of effect	Significance of effect	Commentary
N-Dep-RV-04	View from footpath KT/NS/159. Also represents views from footpath KT/NS/156 (LLCA Shorne Wooded Slopes). View centred south-south-west for recreational receptors.	Moderate	No change	Neutral effect	Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects No Main Project construction works would be visible from the footpath. Project utility works – nature of effects No utility works would be visible from the footpath.
N-Dep-RV-05	View from the junction of footpath MR26 and bridleway MR24, including the Augustine Camino Long Distance Path and Medway Valley Rail Trails – Aylesford (LLCA Medway Valley (sub area The Eastern Scarp). View centred north for recreational receptors.	Omitted due to design changes at the Burham nitrogen deposition compensation site.			
N-Dep-RV-06	View from footpath MR601, the North Downs Way and the panoramic Ordnance Survey (OS) map viewpoint at the Blue Bell Hill picnic site (LLCA Medway Valley (sub area The Eastern Scarp). View centred south-west for recreational receptors.	Omitted due to design changes at the Burham nitrogen deposition compensation site.			
N-Dep-RV-07	View from footpath KH31 and adjacent residential properties along a farm access track off Bell Lane (LLCA Mid Kent Downs (sub area Bredhurst)). View centred south-south-west for recreational and residential receptors.	Very high for users of footpath KH31 Moderate for residents	No change No change	Neutral effect Neutral effect	Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects No Main Project construction works would be visible from the footpath or residential properties. Project utility works – nature of effects No utility works would be visible from the footpath or residential properties.
N-Dep-RV-08	View from footpath KH31, KH30 and the North Downs Way (LLCA Mid Kent Downs (sub area Bredhurst)). View centred east-north-east for recreational receptors.	Very high	No change	Neutral effect	Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects No Main Project construction works would be visible from the footpath. Project utility works – nature of effects No utility works would be visible from the footpath.
N-Dep-RV-09	View from footpath KH646 (LLCA Mid Kent Downs (sub area Bredhurst)). View centred north-west for recreational receptors.	Very high	No change	Neutral effect	Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects No Main Project construction works would be visible from the footpath. Project utility works – nature of effects No utility works would be visible from the footpath.

Table 2.2 Schedule of visual effects for visual receptors south of the River Thames during construction

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
Residential properties 'R'				
VR-S01-R-001	Residential properties along Lodge Lane, east of Cobham	Moderate	Negligible	Neutral effect
VR-S01-R-002	Oak Tree Cottage, Knights Place Farm and adjacent residential properties	Moderate	Negligible	Neutral effect
VR-S01-R-003	Residential properties on Bowesden Lane, Shorne	Moderate	Negligible	Slight adverse effect
VR-S01-R-004	Park Farm House, Bowesden Lane, Shorne	Moderate	Minor	Slight adverse effect
VR-S01-R-005	Residential properties on Squires Close and Sharfleet Drive, Strood	High	Moderate	Moderate adverse effect
VR-S01-R-006	Residential properties on Old Watling Street, Strood	High	Moderate	Moderate adverse effect
VR-S02-R-001	Residential properties along Thong Lane, Riverview Park	High	Major	Large adverse effect
VR-S02-R-002	Residential properties at the junction of Halfpence Lane and The Street in Cobham village	High	Negligible	Slight adverse effect
VR-S02-R-003	The Mount, north of Cobham	Moderate	Negligible	Slight adverse effect
VR-S02-R-004	Scalers Hill and The Nook, north of Cobham	Moderate	Minor	Slight adverse effect
VR-S02-R-005	Residential properties on Jeskyns Road near Owletts	Moderate	Negligible	Neutral effect
VR-S02-R-006	Residential properties near the junction of Henhurst Road and Jeskyns Road, north-west of Cobham	Moderate	Negligible	Neutral effect
VR-S02-R-007	Residential properties along Henhurst Road	Moderate	Minor	Slight adverse effect
VR-S02-R-008	Ifield Rectory, Church Road	Moderate	Negligible	Slight adverse effect
VR-S02-R-009	Hever Court Farm, Church Road	Moderate	Negligible	Slight adverse effect
VR-S02-R-010	Residential properties on Church Road and near Ifield Court Farm	Moderate	Negligible	Slight adverse effect
VR-S02-R-011	Landway Cottage, north-west of Ifield Court Farm	Moderate	Minor	Slight adverse effect
VR-S02-R-012	New Cottages, Church Road	Moderate	Minor	Slight adverse effect
VR-S02-R-013	Residential properties along Hever Court Road, Watling Street, Old Watling Street, Chalky Bank and Wrotham Road, southern edge of Gravesend	High	Minor	Slight adverse effect
VR-S02-R-014	Marlborough House, Little Birches, Stamford House, Still Meadow and Castle Shaw, A227 Wrotham Road near Istead Rise	Moderate	No change	Neutral effect
VR-S02-R-015	Residential properties along The Glades, southern edge of Gravesend	High	Minor	Moderate adverse effect
VR-S02-R-016	Residential properties along Mackenzie Way and Valley Drive (west), southern edge of Gravesend	High	Moderate	Moderate adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S02-R-017	Residential properties along Valley Drive (east) and northern part of Sheldon Heights, southern edge of Gravesend	High	Moderate	Moderate adverse effect
VR-S02-R-018	Residential properties along southern part of Sheldon Heights, southern edge of Gravesend	High	Major	Large adverse effect
VR-S02-R-019	Residential properties within Istead Rise	High	No change	Neutral effect
VR-S02-R-020	Residential properties along Davy's Place, eastern edge of Gravesend	High	Major	Very large adverse effect
VR-S02-R-021	Residential properties along eastern side of Fairfields, eastern edge of Gravesend	High	Moderate	Large adverse effect
VR-S02-R-022	Residential properties along the northern side of Astra Drive, eastern edge of Gravesend	High	Minor	Slight adverse effect
VR-S02-R-023	Residential properties along Astra Drive, Gazelle Glade, Glenrosa Gardens and Genesta Glade, eastern edge of Gravesend	High	Major	Very large adverse effect
VR-S02-R-024	Thong Mead, south of Thong village	Moderate	Major	Large adverse effect
VR-S02-R-025	Thong Lodge, south of Thong village	Moderate	Moderate	Moderate adverse effect
VR-S02-R-026	Residential properties on Thong Lane in Thong village (western side)	High	Major	Large adverse effect
S-26	Residential properties along the east of Thong Lane in Thong village	High	See S-26	See S-26
VR-S02-R-027	Residential properties on Thong Lane in Thong village (north-western side)	High	Major	Very large adverse effect
VR-S02-R-028	Hartshill Bungalow, Thong Lane	High	Major	Very large adverse effect
VR-S02-R-029	Residential properties along western side of Fairfields and Michael Gardens, eastern edge of Gravesend	High	Minor	Slight adverse effect
VR-S02-R-030	Residential properties along Wykeham Close and Calderwood, eastern edge of Gravesend	High	Moderate	Moderate adverse effect
VR-S02-R-031	Residential properties along Calderwood and Marling Way, eastern edge of Gravesend	High	Minor	Slight adverse effect
VR-S02-R-032	Residential properties along the west side of Davy's Place, eastern edge of Gravesend	High	Moderate	Moderate adverse effect
VR-S02-R-033	Residential properties along Epsom Close and Hever Court Road, southern edge of Gravesend	High	Minor	Slight adverse effect
VR-S02-R-034	Residential properties along Kemsley Close, Dogwood Close, Durndale Lane, Henley Deane, The Clovers, Brightlands, Nash Croft, Peach Croft, Rowmarsh Close, Ashmore Gardens and Landseer Avenue, southern edge of Gravesend	High	Minor	Slight adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S02-R-035	Residential properties along Roman Road and Pepper Hill, southern edge of Gravesend	High	Minor	Slight adverse effect
VR-S02-R-036	Residential properties along Dabbs Place, north-west of Cobham	Moderate	Negligible	Neutral effect
VR-S03-R-001	Residential properties along Thong Lane opposite Cascades Leisure Centre, eastern edge of Gravesend	High	Negligible	Slight adverse effect
VR-S03-R-002	Residential properties along Thong Lane to the north and north-west of Cascades Leisure Centre, eastern edge of Gravesend	High	Moderate	Moderate adverse effect
VR-S03-R-003	222 to 232 Thong Lane	High	Major	Large adverse effect
VR-S03-R-004	Residential properties along eastern side of Thong Lane south of the A226, eastern edge of Gravesend	High	Major	Large adverse effect
VR-S03-R-005	Residential properties on Vicarage Lane (southern side), Chalk	High	Moderate	Moderate adverse effect
VR-S03-R-006	Residential properties on Priest's Walk, Vicarage Lane, Rochester Road and Chalk Road (western end), Chalk	High	Minor	Slight adverse effect
VR-S03-R-007	Residential properties along Chalk Road (eastern end), Rochester Road, Lisle Close, Beckley Close and Filborough Way, Chalk	High	Moderate	Moderate adverse effect
VR-S03-R-008	Residential property along Mill Hill Lane, Shorne	High	Negligible	Slight adverse effect
VR-S03-R-009	Residential properties along the west side of Crown Green, Shorne	High	Moderate	Moderate adverse effect
VR-S03-R-010	Residential properties along the west side of Thong Lane and along Rochester Road	High	Moderate	Moderate adverse effect
VR-S03-R-011	Residential properties along the north and south of Crown Green, Malthouse Lane and Forge Lane, Shorne	High	Negligible	Slight adverse effect
VR-S03-R-012	Residential properties along Shorne Ifield Road, south-west of Shorne, including Baynards Cottage	Moderate	Major	Moderate adverse effect
VR-S03-R-013	Residential properties along Shorne Ifield Road, south-west of Shorne, including Ifield Place, 1-5 Ifield Farm and Ifield Farm	Moderate	Major	Large adverse effect
VR-S03-R-014	Orchard Lea Farm along Shorne Ifield Road, south-west of Shorne	Moderate	Negligible	Slight adverse effect
VR-S03-R-015	Crown Cottage, A226 Gravesend Road	Moderate	Minor	Slight adverse effect
VR-S03-R-016	Midfields, A226 Gravesend Road	Moderate	Moderate	Moderate adverse effect
VR-S03-R-017	Residential properties along the north-east of A226 Gravesend Road	Moderate	Minor	Slight adverse effect
VR-S03-R-018	Barretts Folly off the A226 Gravesend Road	Moderate	Minor	Slight adverse effect
VR-S03-R-019	Residential properties along the north-east of A226 Gravesend Road (near footpath NS163A)	Moderate	Moderate	Moderate adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S03-R-020	17 and 18 Church Lane, east of Chalk	Moderate	Moderate	Moderate adverse effect
VR-S03-R-021	13, 14, 15, 16, 24 and 25 Church Lane, east of Chalk	Moderate	Moderate	Moderate adverse effect
VR-S03-R-022	19 and 20 Church Lane, East Court Manor and East Court Farm, east of Chalk	Moderate	Moderate	Moderate adverse effect
VR-S03-R-023	East Court Cottages and Little Filborough, Lower Higham Road (including property opposite East Court Cottages on Lower Higham Road), east of Chalk	Moderate	Moderate	Moderate adverse effect
VR-S03-R-024	Filborough Farm and Filborough Farm Barn, Lower Higham Road, east of Chalk	Moderate	Moderate	Moderate adverse effect
VR-S03-R-025	Homelea Farm, Meadow Cottage, Chalk Pit Cottages and Longtens Cottages along Green Farm Lane	Moderate	Minor	Slight adverse effect
VR-S03-R-026	Farm View Cottage and 2, 3 and 4 New Cottages along Green Farm Lane	Moderate	No change	Neutral effect
VR-S03-R-027	Green Farm and adjacent residential properties, Green Farm Lane	Moderate	Negligible	Slight adverse effect
VR-S03-R-028	Residential properties along Lower Road	Moderate	Negligible	Slight adverse effect
VR-S03-R-029	Queen's Farm and Queen's Farm Cottages, Queen's Farm Road	Moderate	Minor	Slight adverse effect
VR-S03-R-030	Residential properties at the junction of Castle Lane and A226 Gravesend Road	High	Moderate	Moderate adverse effect
VR-S03-R-031	Residential properties along west and east of Castle Lane, eastern edge of Chalk	High	Moderate	Moderate adverse effect
VR-S03-R-032	Residential properties along Malthouse Field and Cricket Marsh Walk, eastern edge of Gravesend	High	Negligible	Slight adverse effect
VR-S03-R-033	Residential properties along Lower Higham Road, northern edge of Chalk	High	Negligible	Slight adverse effect
VR-S03-R-034	Residential properties along Brooke Drive, Shirley Close and Sutherland Close, eastern edge of Chalk	High	Minor	Slight adverse effect
VR-S03-R-035	Polperro, A226 Rochester Road	High	Major	Very large adverse effect
VR-S03-R-036	View Point Place traveller site, A226 Rochester Road, south-east of Chalk	High	Major	Very large adverse effect
VR-S03-R-037	Horseshoe Meadow traveller site, A226 Rochester Road, south-east of Chalk	High	Major	Large adverse effect
Recreational receptors (route) 'RL'				
VR-S01-RL-001	Byway open to all traffic (BOAT) NS196 and footpath NS183 (part of Luddesdown Trek)	Very high	Negligible	Slight adverse effect
VR-S01-RL-002	Footpath NS161 (part of Luddesdown Trek)	Very high	Negligible	Slight adverse effect
VR-S01-RL-003	Footpath NS182	Very high	Minor	Moderate adverse effect
VR-S01-RL-004	Footpath NS179	Very high	Minor	Moderate adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S02-RL-001	Footpath NG22 and footpath NU29 (Wealdway)	High	Minor	Slight adverse effect
VR-S02-RL-002	Footpath NS359	Moderate	Minor	Slight adverse effect
VR-S02-RL-003	Southern end of footpath NS175A	Moderate	Minor	Slight adverse effect
VR-S02-RL-004	Central section of footpath NS175A	Moderate	Moderate	Moderate adverse effect
VR-S02-RL-005	Footpath NU31 (Wealdway)	High	Negligible	Slight adverse effect
VR-S02-RL-006	Northern end of footpath NS175A and footpath NS365	Moderate	Moderate	Moderate adverse effect
VR-S02-RL-007	Footpath NU32	Moderate	Negligible	Slight adverse effect
VR-S02-RL-008	Footpath NS175 and footpath NS176	Moderate	Moderate	Moderate adverse effect
VR-S02-RL-009	Footpath NU41/NS194	Moderate	Minor	Slight adverse effect
VR-S02-RL-010	Southern end of footpath NS177	High	Minor	Slight adverse effect
VR-S02-RL-011	Southern end of BOAT NS311	High	Negligible	Slight adverse effect
VR-S02-RL-012	BOAT NS311	High	No change	Neutral effect
VR-S02-RL-013	Northern end of BOAT NS195	Very high	Minor	Moderate adverse effect
VR-S02-RL-014	Southern end of BOAT NS195	Very high	No change	Neutral effect
VR-S02-RL-015	Footpath NS178 (part of Luddesdown Trek)	Very high	No change	Neutral effect
VR-S02-RL-016	Northern end of footpath NS169	Moderate	Minor	Slight adverse effect
VR-S02-RL-017	Footpath NS167 east of Thong village	Moderate	Moderate	Moderate adverse effect
VR-S02-RL-018	Footpath NS167	Very high	Minor	Moderate adverse effect
VR-S02-RL-019	Footpath NS170	Very high	Minor	Moderate adverse effect
VR-S03-RL-001	Footpath NS355	Very high	Minor	Moderate adverse effect
VR-S03-RL-002	Bridleway NS318	Moderate	Minor	Slight adverse effect
VR-S03-RL-003	Footpath NG3	Moderate	Negligible	Slight adverse effect
VR-S03-RL-004	Footpath NG7	Moderate	Not assessed: As part of the Project, this recreational route would be stopped up during construction	
VR-S03-RL-005	Footpath NS164 and footpath NS163A	Moderate	Major	Large adverse effect
VR-S03-RL-006	Footpath NS163 and footpath NS165	Moderate	Major	Large adverse effect
VR-S03-RL-007	Southern end of footpath NS316	Moderate	Major	Large adverse effect
VR-S03-RL-008	Footpath NS157	Moderate	Minor	Slight adverse effect
VR-S03-RL-009	Footpath NS171	Moderate	Negligible	Slight adverse effect
VR-S03-RL-010	Crown Lane Route	Moderate	Minor	Slight adverse effect
Recreational receptors (area) 'RA'				
VR-S01-RA-001	Rochester and Cobham Golf Club, Park Pale	Moderate	Negligible	Slight adverse effect
VR-S01-RA-002	Shorne Woods Country Park, Brewers Road, Shorne	Very high	Minor	Moderate adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S02-RA-001	Jeskyns Community Woodland, Henhurst Road, Gravesend	High	Moderate	Large adverse effect
VR-S02-RA-002	Owletts, The Street, Cobham	High	Negligible	Slight adverse effect
VR-S02-RA-003	Green space on MacKenzie Way, southern edge of Gravesend	Moderate	Moderate	Moderate adverse effect
VR-S02-RA-004	Shorne Woods Country Park, Brewers Road, Shorne	Very high	Negligible	Slight adverse effect
VR-S02-RA-005	Shorne Woods Country Park, Brewers Road, Shorne	Very high	Minor	Moderate adverse effect
VR-S02-RA-006	Cyclopark, The Tollgate, Watling Street, southern edge of Gravesend	Low	Minor	Slight adverse effect
VR-S03-RA-001	Cascades Leisure Centre and sports fields, Thong Lane, eastern edge of Gravesend	Low	Major	Slight adverse effect
VR-S03-RA-002	Sports fields on Thong Lane, eastern edge of Gravesend	Low	Major	Slight adverse effect
VR-S03-RA-003	Green space on Mill Hill Lane, Shorne	Moderate	No change	Neutral effect
Transport receptors (route) 'T'				
VR-S01-T-001	Bowesden Lane	Moderate	Minor	Slight adverse effect
VR-S01-T-002	Park Pale	Moderate	Moderate	Moderate adverse effect
VR-S01-T-003	Brewers Road	Moderate	Major	Large adverse effect
VR-S01-T-004	Halfpence Lane	Moderate	Minor	Slight adverse effect
VR-S01-T-005	Lodge Lane	Moderate	Negligible	Neutral effect
VR-S02-T-001	HS1 green bridge	Moderate	Major	Large adverse effect
VR-S02-T-002	The northern end of Henhurst Road	Moderate	Moderate	Moderate adverse effect
VR-S02-T-003	The southern end of Henhurst Road	Moderate	Minor	Slight adverse effect
VR-S02-T-004	Church Road	Moderate	Minor	Slight adverse effect
VR-S02-T-005	Thong Lane near the A2	Moderate	Major	Large adverse effect
VR-S02-T-006	Thong Lane within Thong village	Moderate	No change	Neutral effect
VR-S02-T-007	Shorne Ifield Road (western end)	Moderate	Moderate	Moderate adverse effect
VR-S02-T-008	The Street and Jeskyns Road	Moderate	Negligible	Slight adverse effect
VR-S02-T-009	A227 Wrotham Road (northern end)	Low	Negligible	Slight adverse effect
VR-S02-T-010	Dabbs Place	Moderate	Negligible	Neutral effect
VR-S02-T-011	HS1 railway line	Negligible	Moderate	Slight adverse effect
VR-S02-T-012	A227 Wrotham Road (southern end)	Low	Negligible	Neutral effect
VR-S03-T-001	Thong Lane between Cascades Leisure Centre and Rochester Road	Moderate	Moderate	Moderate adverse effect
VR-S03-T-002	A226 Gravesend Road	Low	Minor	Slight adverse effect
VR-S03-T-003	Church Lane, Chalk	Moderate	Moderate	Moderate adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S03-T-004	Lower Higham Road	Moderate	Moderate	Moderate adverse effect
VR-S03-T-005	Lower Road	Moderate	Minor	Slight adverse effect
VR-S03-T-006	Green Farm Lane	Moderate	Minor	Slight adverse effect
VR-S03-T-007	Queen's Farm Road	Moderate	Minor	Slight adverse effect
VR-S03-T-008	North Kent railway line, South-eastern	Low	Minor	Slight adverse effect
Other receptors (area) 'O'				
VR-S01-O-001	Park Pale Industrial Estate – Harlex Haulage, Park Pale	Negligible	Moderate	Slight adverse effect
VR-S01-O-002	The Nook - Pet Hotel, Brewers Road	Low	Moderate	Slight adverse effect
VR-S01-O-003	Cobham Hall School, off Brewers Road, Cobham	Moderate	Minor	Slight adverse effect
VR-S02-O-001	The Inn on the Lake, Watling Street	Moderate	Major	Large adverse effect
VR-S02-O-002	Painters Ash Primary School, Masefield Road, Gravesend	Moderate	Minor	Slight adverse effect
VR-S02-O-003	Singlewell Primary School, MacKenzie Way, Gravesend	Moderate	Minor	Slight adverse effect
VR-S02-O-004	St Margaret's Church, Church Road	Moderate	Minor	Slight adverse effect
VR-S02-O-005	Premier Inn, Best Western and The George public house, Hever Court Road, Gravesend	Moderate	Moderate	Moderate adverse effect
VR-S02-O-006	Sparks and Co Builders Merchant and Singlewell Car Sales and Service Centre, Hever Court Road, Gravesend	Low	Moderate	Slight adverse effect
VR-S02-O-007	Tollgate Services, Wrotham Road, Gravesend	Low	Minor	Slight adverse effect
VR-S03-O-001	Thames View Crematorium, Gravesend Road, Chalk	Moderate	Moderate	Moderate adverse effect
VR-S03-O-002	Chalk Church, Church Lane, Chalk	Moderate	Minor	Slight adverse effect
VR-S03-O-003	Apex Business Park, Queen's Farm Road, Chalk	Negligible	No change	Neutral effect
VR-S03-O-004	Metropolitan Police Service Specialist Training Centre, Gravesend	Low	Moderate	Slight adverse effect
VR-S03-O-005	Hye Oak Ltd and various businesses at Denton Wharf and along Wharf Road	Negligible	Negligible	Neutral effect
VR-S03-O-006	Nuralite Industrial Estate, Canal Road, Higham	Negligible	Negligible	Neutral effect
VR-S03-O-007	Thamesview School, Thong Lane, Gravesend	Moderate	Minor	Slight adverse effect

North of the River Thames

2.1.2 Refer to Figure 7.16 (Application Document 6.2) for the location of the Representative Viewpoints and visual receptors. For Representative Viewpoint photography, refer to Figure 7.17: Representative Viewpoints – Winter and Summer Views and Figure 7.18: Representative Viewpoints – Night-time (inc. Winter) Views (Application Document 6.2).

Table 2.3 Schedule of visual effects on Representative Viewpoints north of the River Thames during construction

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
N-01	View from Grade I listed Tilbury Fort adjacent to NCN Route 13 and footpath 146/Thames Estuary Path/Two Forts Way (LLCA Tilbury Marshes). View centred north-north-east for recreational receptors.	Very high	Minor	Moderate adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be mid- to long-range, glimpsed views through gaps in built form and vegetation at Tilbury Sewage Treatment Works, towards the northern tunnel entrance compound. The concrete batching plant (up to 25m high), segment factory and associated cranes and laydown area would be visible within the former Tilbury Power Station site (approximately 0.8km). There would also be glimpsed views towards construction activity associated with tunnelling works at the North Portal (approximately 2.3km) and nearby compound areas including site welfare facilities, slurry tanks and laydown areas, as well as other tall elements such as cranes. Earthworks around the North Portal for the proposed Tilbury Fields sculptural landscape mounding up to 17m above existing ground level would gradually occur as material is excavated from the tunnel, with glimpses of this activity apparent in the view. Glimpses of vehicles using the construction access along existing roads across West Tilbury Marshes would also be visible to the north-east (approximately 0.8km), as well as vehicles moving along an access road (approximately 1.4km) between the segment factory and the North Portal and construction works for the Tilbury Viaduct (approximately 2.8km). Construction activity would not result in a perceivable change to the view at night from this location due to the existing light sources including those at Tilbury Sewage Treatment Works, and within the urban area of Tilbury to the north. Overall, construction works for the Project and the operation of the northern tunnel entrance compound, in particular the segment factory, would be perceptible in views through intervening built form and vegetation. Project utility works – nature of effects Visibility of utility works would be limited from N-01 as a result of distance and intervening built form and existing vegetation. There would potentially be distant, filtered views of construction activity associated with the temporary connection to the OHL network and the large temporary electricity substation to the north-east. In views to the north-east, there would also be distant views of the OHL modifications and distant, filtered views of the construction activity associated with the multi-utility works to the east of the Fort Road overbridge, in front of Tilbury Loop railway line. Overall, the utility works would result in a barely noticeable change to the view. Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as moderate rather than large due to construction works being viewed in the context of existing industrial buildings north of the River Thames.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
N-02	View from Fort Road, adjacent to residential properties at Tilbury urban edge (LLCA Tilbury and Docks Urban Area). View centred east-north-east for residential receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	High	Minor	Slight adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be mid- to long-range, wide views across arable fields in West Tilbury Marshes through and above intervening vegetation along the Tilbury Loop railway line. This would include earthwork operations along the Project route and around the North Portal operational access bridge to the east (approximately 1.7km) and construction works for the Tilbury Viaduct to the north-east (approximately 1.9km). The clearance of mature vegetation would also be apparent in front of the viaduct. Tunnelling-related works at the North Portal (approximately 2km), earthworks around the North Portal for the proposed Tilbury Fields sculptural landscape mounding up to 17m above existing ground level (approximately 1.8km) and construction activity within the northern tunnel entrance compound (approximately 1.2km) and Station Road compound (approximately 1.6km) would be apparent in views, although in the context of numerous pylons and OHL and construction activity associated with Tilbury Docks. The tallest elements would be most visible, including cranes, and the upper parts of the sculptural landscape mounding around the North Portal, with potential glimpses to the conveyor used to transport materials between the Tilbury2 Construction Materials and Aggregate Terminal and the North Portal. The concrete batching plant (up to 25m high), segment factory and associated cranes and laydown area would be visible on the former Tilbury Power Station site (approximately 0.8km) to the south-east, although filtered by vegetation along the Tilbury Loop railway line. Glimpses of vehicles using the construction access along existing roads across West Tilbury Marshes would also be visible beyond the Tilbury Loop railway line to the south (approximately 0.35km). While wider views, especially to the south-east, are influenced by existing light sources at Tilbury Sewage Treatment Works, construction activity at night to the east and north-east could result in a prominent change in night-time views from this receptor during night-time working, due to additional light sources seen against the skyline. Overall, construction works for the Project and operation of the construction compounds would be perceptible in views through intervening vegetation. As the receptor travels along Fort Road, the view would change and the focus would be shifted away from the construction activities to the wider landscape.
					<u>Project utility works – nature of effects</u> The existing view overlooks West Tilbury Marshes and is dominated by high voltage OHL to the east, leading to the site of the former Tilbury Power Station. Vegetation along the Tilbury Loop railway line and south of Church Road in the mid to long distance partially screens the pylons in the distance and would filter views of construction activities and OHL modifications. The vegetation along Tilbury Loop railway line would also screen views of the multi-utility works to the east of the Tilbury Loop railway line. There would be partial views of construction activities associated with the multi-utility corridor north of Coopers Shaw Road which extends to Gunhill Farm, with the extent of the works that would be visible filtered by intervening vegetation. Overall, the utility works would result in a barely noticeable change to the view.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as slight rather than moderate due to due to construction works being viewed in the context of existing industrial buildings and OHL north of the River Thames.
N-03	View from Two Forts Way Coastal Path/footpath 146 and NCN Route 13 (LLCA Tilbury Marshes). View centred north-north-east for recreational receptors.	High	Major	Large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be mid- to long-range, wide, extensive views across West Tilbury Marshes towards construction activity to the west, north and east associated with the northern tunnel entrance compound and North Portal. There would also be distant views of construction activity south of the River Thames. The concrete batching plant (up to 25m high), segment factory and associated cranes and laydown area would be visible on the former Tilbury Power Station site to the west (approximately 0.5km), as well as the conveyor used to transport materials between the Tilbury2 Construction Materials and Aggregate Terminal and the North Portal and vehicles using an access road between the segment factory and North Portal to the north (approximately 0.9km and 0.7km respectively). There would also be views north-east towards construction activity associated with tunnelling works at the North Portal (approximately 0.8km) and nearby compound areas including site welfare facilities, slurry tanks and laydown areas, as well as other tall elements such as cranes. The earthworks around the North Portal for the proposed Tilbury Fields sculptural landscape mounding up to 17m above existing ground level, would be clearly visible in the open landscape as material is excavated from the tunnel. These earthworks would progressively screen the North Portal construction and parts of the northern tunnel entrance compound. Earthwork operations along the Project route and around the North Portal operational access bridge to the north-east (approximately 1.3km) and construction works for the Tilbury Viaduct (approximately 2km) are unlikely to be visible, encompassed by and beyond the northern tunnel entrance compound. There would be distant views south towards construction works for the South Portal and advanced grout tunnel and construction activity within the southern tunnel entrance compound. However, the prominence of this work would be limited due to distance (approximately 3km). During night-time working, construction activity could result in a prominent change to views north at night, given the additional light sources for the northern tunnel entrance compound, although viewed in the context of existing lighting at Tilbury Docks and London Gateway Port. To the south, lighting associated with the extensive operation of the southern tunnel entrance compound is likely to be evident, viewed in the context of existing lighting in the urban area of Gravesend. Overall, construction works associated with the tunnelling works, construction activity within the northern tunnel entrance compound and the proposed Tilbury Fields sculptural landscape mounding would be dominant in this view.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					Project utility works – nature of effects There would be mid-range views of utility construction activity to the north, including construction of the temporary electricity connection and the large temporary electricity substation. To the east of the substation, there would also be mid-range views of construction activities for the multi-utility works associated with the North Portal. To the north of the temporary electricity connection, OHL modifications would be visible. However, the utility works at ground level are likely to be partially filtered by a combination of landform and vegetation. Overall, the utility works would result in a perceptible change to the view but would not alter the overall balance of features and elements.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as large rather than very large due to construction works being viewed in the context of the existing OHL.
N-04	View from Two Forts Way Coastal Path/footpath 146 and NCN Route 13 (LLCA Tilbury Marshes). View centred west-north-west for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	High	Major	Large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects Close- to long-range, open, extensive panoramic views over construction activity to the north-west. There would also be distant views of construction activity south of the River Thames. Visibility of construction activity would be readily apparent from this location. Earthworks around the North Portal for the proposed Tilbury Fields sculptural landscape mounding would progressively occur in the immediate foreground as material is excavated from the tunnel and would be dominant in views due to the construction of new landforms up to 17m above existing ground level. As the sculptural landscape mounding progresses, views of the tunnelling operations at the North Portal (approximately 0.4km), construction works for the Project route and Tilbury Viaduct, and operation of the northern tunnel entrance compound would be obscured by the new landforms. There could be distant glimpses towards the easternmost earthwork operations around the North Portal operational access bridge to the north (approximately 1.1km) and the concrete batching plant (up to 25m high) and workers' accommodation near Readmans Industrial Estate. The concrete batching plant (up to 25m high), segment factory and associated cranes and laydown area would be visible within the former Tilbury Power Station site to the west (approximately 1.5km), as well as the conveyor used to transport materials between the Tilbury2 Construction Materials and Aggregate Terminal and the North Portal and vehicles using an access road between the segment factory and North Portal (approximately 1km), although sculptural landscape mounding in the foreground would progressively obscure most views in this direction. There would also be distant views south towards construction works for the South Portal and advanced grout tunnel and construction activity within the southern tunnel entrance compound, but views of these elements would be limited due to their distance (approximately 3km). During night-time working, construction activity could result in a prominent change to northerly views at night due to additional light sources for the northern tunnel entrance compound. However, some lighting would be obscured by new earthworks and

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					lighting would be viewed in the context of existing lighting at Tilbury Docks and London Gateway Port. To the south, lighting associated with the operation of the southern tunnel entrance compound would be evident, viewed in the context of extensive existing lighting in the urban area of Gravesend. Overall, the proposed Tilbury Fields sculptural landscape mounding in the foreground, construction works for the North Portal and operation of the northern tunnel entrance compound would be dominant in the view.
					<u>Project utility works – nature of effects</u> In mid- to long-range views, the skyline is dominated by the existing high voltage OHL. The proposed Tilbury Fields sculptural landscape mounding would screen inland views of utility construction activity at ground level. However, there could be limited views to the north-west of OHL modifications, until the proposed earthworks reach sufficient height to screen all views of utility works. Overall, the utility works would result in a barely noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than very large due to construction works being viewed in the context of the existing OHL.
N-05 & N-(CH)09	View from Coalhouse Fort Scheduled Monument, adjacent to Two Forts Way Coastal Path/bridleway 187 and NCN Route 13, looking towards the Kent Downs AONB (LLCA Mucking Marshes). View centred south-south-west for visitors. *Note: at the time of writing (20 May 2022) Coalhouse Fort is only open to visitors every last Sunday between March and September and most bank holiday Mondays.*	Very high	Moderate	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> Close- to long-range, panoramic views over East Tilbury Marshes, with the visibility of construction activity limited to the west by intervening vegetation in the immediate foreground around Coalhouse Fort. Foreground construction activity would be more apparent. In views west, there would be foreground construction activity associated with the water vole mitigation area, including the construction of new scrapes and ditches. To the south-west, construction works for the inlet structure associated with the water vole mitigation area would be visible in the midground. There would also be glimpsed, long-range views across the East Tilbury Marshes through gaps in existing vegetation around Coalhouse Fort towards tunnelling operations at the North Portal (approximately 1.7km), as well as operation of the northern tunnel entrance compound (approximately 1.4km). Taller elements would be visible in the compound, including cranes, site welfare facilities and slurry tanks. There would also be glimpses towards the concrete batching plant (up to 25m high), segment factory and associated cranes in the distance to the west (approximately 3.3km) and construction works for Tilbury Viaduct to the north-west (approximately 2km), including the removal of

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					mature vegetation, and the concrete batching plant (up to 25m high) and workers' accommodation near Readmans Industrial Estate. Views of construction works would generally be limited due to distance and intervening vegetation. In addition, earthworks around the North Portal for the proposed Tilbury Fields sculptural landscape mounding up to 17m above existing ground level would gradually be constructed as material is excavated from the tunnel, which would progressively reduce the visibility of the northern tunnel entrance compound and construction activity for the North Portal. To the south, there would be distant views towards construction works for the South Portal and advanced grout tunnel, and operation of the southern tunnel entrance compound, the A226 Gravesend Road compound and the Milton compound, including cranes. These elements would not be the main focus of the view due to distance (approximately 3km to 4km). During night-time working, construction activity could result in a perceivable change to western views at night due to additional light sources for the operation of the northern tunnel entrance compound. However, lighting would be viewed against the bright light sources of Tilbury, which create a degree of skyglow in the night-time sky. Overall, construction works for the ecology habitat and North Portal, the proposed Tilbury Fields sculptural landscape mounding, tunnelling works and operation of the northern tunnel entrance compound would be noticeable in views.
					<u>Project utility works – nature of effects</u> There would potentially be views of utility works to the west of the viewpoint, including OHL modifications. However, visibility of the works is likely to be heavily restricted by existing intervening vegetation. Overall, the utility works would result in a barely noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than very large due to the retention of existing vegetation at the fort reducing the extent of construction works visible.
N-06	View from footpath 200 adjacent to Bowaters Farm (LLCA Tilbury Marshes). View centred south-south-east for recreational receptors.	Moderate	Major	Moderate adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> Views towards construction activity would be partially filtered by vegetation in the foreground adjacent to the PRoW, with views towards the Kent Downs wooded ridgeline in the distance. There would also be views through gaps in the foreground vegetation towards a watercourse diversion, construction works for the North Portal operational access bridge and associated attenuation basins (approximately 0.1km), and settlement lagoons for contaminated water treatment within the northern tunnel entrance compound. Construction works for a new WCH route would also be partially visible. There would also be views towards tunnelling works at the North Portal (approximately 1km) and nearby compound areas including site welfare facilities, slurry tanks and laydown areas, as well as other tall elements such as cranes. Earthworks around the North Portal for the proposed Tilbury Fields sculptural landscape mounding would also be apparent, resulting in the gradual construction of

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					mounds up to 17m above existing ground level as material is excavated from the tunnel. Where visible through vegetation, construction works would be a key focus at this location. During night-time working, construction activity could result in a prominent change to southerly, close-range views at night due to additional light sources for the operation of the northern tunnel entrance compound, however, lighting would be viewed against a backdrop of existing light sources within the urban area of Gravesend. Overall, construction works for the North Portal and North Portal operational access bridge, the proposed Tilbury Fields sculptural landscape mounding and the operation of the northern tunnel entrance compound would be dominant in views.
					Project utility works – nature of effects Utility works are likely to be screened by existing vegetation and are therefore unlikely to be discernible in the view.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as moderate rather than large due to the retention of existing vegetation near the PRoW reducing the extent of construction works visible.
N-07	View from bridleway 58 (off Love Lane) (LLCA West Tilbury Urban Fringe). View centred west-south-west for recreational receptors.	Moderate	Major	Large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects Mid- to long-range, panoramic views across arable fields with existing industrial buildings, OHL pylons, occasional rural residential buildings and dense field boundary vegetation visible. Construction activity in the immediate foreground would be prominent. There would be close-range views towards part of the northern tunnel entrance compound, including a concrete batching plant (up to 25m high), workers' accommodation, site welfare facilities, offices, storage and laydown areas, and car parks. These elements would partially restrict views towards other construction works beyond, including Tilbury Viaduct (adjacent to Readmans Industrial Estate). However, between breaks in the foreground construction activity, there would be views towards construction of the south and north abutments, embankments and piers associated with the viaduct. Beneath the viaduct structure, earthwork operations associated with the flood compensation areas and modifications to the existing waterbody would be visible. Extensive loss of mature vegetation surrounding Readmans Industrial Estate to accommodate Tilbury Viaduct, would also be apparent. There would be glimpses north-west towards the construction of the earthworks and false cuttings along the Project route, together with Muckingford Road green bridge (approximately 1km). During night-time working, construction activity could result in a prominent change to south-westerly, close-range views at night due to additional light sources for the operation of the northern tunnel entrance compound. However, this lighting would be viewed in the context of existing lighting at Readmans Industrial Estate. Overall, construction works for Tilbury Viaduct, the operation of the northern tunnel entrance compound and the extensive loss of mature vegetation would be dominant in views.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					Project utility works – nature of effects The existing view to the south-west and west at mid and long range is dominated by OHL, which are seen above the skyline. Readmans Industrial Estate is a prominent element within the view at a short distance. Temporary multi-utility works to install a water pipeline would be visible at a short distance. To the north and south of the Readmans Industrial Estate, there would potentially be views of further multi-utility works. However, visibility is likely to be partially screened by intervening vegetation and buildings. In views to the west, there would be views of OHL modifications, including removal of the OHL closest to the viewer. Overall, the utility works would result in a noticeable change to the view.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as large rather than moderate due to construction works being apparent across a large proportion of the view.
N-08	View from Low Street Lane adjacent to cluster of rural residential properties (LLCA West Tilbury Urban Fringe). View centred east for residential receptors.	Moderate	Major	Large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects A contained view of the immediate arable landscape focused on mature vegetation in the foreground, but with wider, more distant visibility of the surrounding arable landscape beyond. Vegetation loss to accommodate Tilbury Viaduct would open up views east and north-east towards earthworks for the remodelled flood compensation area and modified field pond in the foreground and beyond to construction works for the viaduct (approximately 0.25km to 0.4km). There would also be views north-east towards construction of a WCH route beneath Tilbury Viaduct and the earthworks and false cuttings along the Project route, together with the installation of two new gantries. Glimpses of construction activity and buildings in part of the northern tunnel entrance compound would be apparent to the east, including the concrete batching plant (up to 25m high) and workers' accommodation, although features would be partially obscured by buildings in Readmans Industrial Estate. Views north and south-east would be more filtered by existing vegetation, although there would be glimpses along Low Street Lane towards construction activity to the north for Muckingford Road green bridge, and glimpses of taller elements such as cranes in the northern tunnel entrance compound to the south-east. During night-time working, construction activity could result in a perceivable change to views from this receptor at night due to additional light sources in mid-range views, in the context of prominent lighting in the wider view including along the urban edge of East Tilbury. To the south, the operation of the northern tunnel entrance compound would result in some lighting being evident. Overall, the loss of mature vegetation and construction activity associated with Tilbury Viaduct, gantries and earthworks, and operation of the northern tunnel entrance compound would be dominant in views.
					Project utility works – nature of effects Low and high voltage OHL feature prominently in the existing view. There would be mid-range views to the east towards multi-utility works. Immediately beyond, there would be views of activities associated with the OHL modifications. With the exception

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					of the OHL modifications, views of utility works to the east and south of the Tilbury Loop railway line are likely to be filtered or screened by existing vegetation. Overall, utility works would be seen as a dominant change in the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than moderate due to construction works being close to the viewpoint.
N-09	View from footpath 67 (off Blue Anchor Lane) adjacent to Holford Farm (LLCA West Tilbury Urban Fringe). View centred east-north-east for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	Moderate	Major	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be mid-range views south-east towards earth-moving activities for the flood compensation area and construction works for Tilbury Viaduct and its associated abutments (approximately 0.7km to 1km). Vegetation loss around the Tilbury Viaduct would be apparent in the view. There would also be views towards the construction of the earthworks and false cuttings along the Project route and the installation of two new gantries (approximately 0.7km). To the south-east, the northern tunnel entrance compound (approximately 1km) would be largely screened by intervening retained vegetation and buildings at Readmans Industrial Estate and along Station Road, with only glimpsed views of lower-level construction activity. However, taller elements such as cranes, workers' accommodation and the concrete batching plant (up to 25m high) near Readmans Industrial Estate are likely to be apparent. In addition, there would be long-range glimpses (approximately 2.3km) towards earthworks around the North Portal for the proposed Tilbury Fields sculptural landscape mounding up to 17m above existing ground level, which would gradually be constructed as material is excavated from the tunnel. To the north-east, construction works for Muckingford Road green bridge (approximately 0.6km) would be clearly visible in the open landscape, together with associated hedgerow removal. During night-time working, construction activity could result in a perceivable change to the view at night, with increased light sources introduced into the midground. However, this lighting would be viewed in the context of occasional car lights and lights at scattered properties, and prominent lighting in the wider view including along the urban edge of East Tilbury and at London Gateway Port. Overall, construction works for Tilbury Viaduct and Muckingford Road green bridge, earthwork operations and the loss of mature vegetation would dominate the view.
					<u>Project utility works – nature of effects</u> The existing view is dominated by the OHL and pylons scattered across fields. In mid-range views to the east, north-east and north, modifications to the OHL would be visible. Views of ground level multi-utility works would be restricted by existing vegetation, particularly in views to the north-east and south-east. The Muckingford Road Utility Hub and the Low Street Lane Utility Hub would be perceptible in mid-range views east beyond the OHL works. Overall, the utility works would result in a perceptible change to the view but not alter the overall balance of features and elements.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as large rather than moderate due to construction works being apparent across a large proportion of the view.
N-10	View from Sandy Lane adjacent to residential properties located in Chadwell St Mary urban fringe (LLCA Grays/Chadwell St Mary Urban Area). View centred south-east for residential receptors.	High	No change	Neutral effect	The dense vegetation present along the south-eastern urban fringe of Chadwell St Mary together with the rolling landform, and distance between the viewpoint and the Project, would result in no utility works or Main Project construction activity being discernible from this location.
N-11	View from junction of bridleway 63 and footpath 66 (off Muckingford Road) (LLCA West Tilbury Urban Fringe). View centred south-east for recreational receptors.	Moderate	Major	Large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects As a result of the Project, part of this PRoW would be temporarily stopped up during the construction phase and later diverted during the operational phase. However, while the route to the east of this location would not be accessible, this view would remain available. There would be mid-range views east and south-east towards the construction of the earthworks and false cuttings along the Project route and the installation of two new gantries. Earthwork operations associated with the flood compensation area beneath Tilbury Viaduct would also be apparent (approximately 0.8km). There would be long-range views south-east towards construction works for Tilbury Viaduct (approximately 0.9km to 1.4km). The loss of mature vegetation to accommodate the viaduct, as well as wider vegetation loss beyond the Tilbury Loop railway line, would be readily apparent and allow distant views of earthworks around the North Portal for the proposed Tilbury Fields sculptural landscape mounding up to 17m above existing ground level and elements in the northern tunnel entrance compound (approximately 1.7km), including cranes, workers' accommodation, the concrete batching plant (up to 25m high) near Readmans Industrial Estate, site welfare facilities and slurry tanks. During night-time working, construction activity could result in a perceivable change to the view at night, with increased light sources introduced into the midground, which is typically unlit apart from occasional car lights and lights at scattered properties. To the south, the operation of the northern tunnel entrance compound would result in some lighting being evident. However, construction lighting would be viewed in the context of prominent lighting in the wider view along the urban edge of East Tilbury. Overall, earthwork operations, construction activity associated with gantries and Tilbury Viaduct, and loss of mature vegetation would be dominant in views.
					Project utility works – nature of effects There are existing wide, long-distance views across the relatively flat landscape, with large, predominantly arable fields sometimes bounded by mature hedgerows and trees. There would be close-range views of multi-utility works, with mid-range views towards modifications to existing OHL and the Muckingford Road Utility Hub and the Low Street Lane Utility Hub, and potentially distant views of the installation of a

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					temporary water pipeline to the west of Thames Industrial Park. Existing views towards the Readmans Industrial Estate are heavily filtered by existing vegetation, and vegetation removal for the main Project works would open up distant views of multi-utility works beyond. Overall, the utility works would result in a perceptible change to the view but would not alter the overall balance of features and elements that constitute the existing view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than moderate due to construction works being apparent across a large proportion of the view.
N-12	View from residential properties in East Tilbury (off Beechcroft Avenue) (LLCA West Tilbury Urban Fringe). View centred south-west for residential receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	High	Major	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be open views west and south-west of construction of a WCH route in the foreground, and beyond to construction works for Muckingford Road green bridge and the associated landscape earthworks (approximately 0.4km), earthworks and false cuttings along the Project route (approximately 0.5km) and Tilbury Viaduct (approximately 0.7km), as well as the installation of four gantries. Construction traffic movements along haul routes would also be visible. Loss of mature vegetation at Tilbury Viaduct and beyond the Tilbury Loop railway line would be apparent above the skyline and would allow distant views of taller elements in the northern tunnel entrance compound, such as cranes, workers' accommodation and the concrete batching plant (up to 25m high) near Readmans Industrial Estate. Earthwork operations would also be apparent beneath Tilbury Viaduct for the flood compensation area. During night-time working, construction activity could result in a perceivable change to the view at night due to increased light sources introduced into the midground. However, lighting would be viewed against a backdrop of skyglow from the urban areas of Grays and Chadwell St Mary, with notable but distant light sources along the A13 corridor visible above the skyline. To the south, the operation of northern tunnel entrance compound is likely to result in some lighting being evident. Overall, earthworks, construction works for Muckingford Road green bridge and Tilbury Viaduct, and the loss of mature vegetation would be dominant in views.
					<u>Project utility works – nature of effects</u> The skyline is dominated by existing OHL and pylons, which are scattered across the landscape. In the immediate foreground, there would be close-range views of activities associated with the installation of a temporary water pipeline. Beyond this to the south-west, there would be mid-range views of the Muckingford Road Utility Hub and Low Street Lane Utility Hub (beyond construction works along the Project route). There would also be mid-range views of multi-utility works broadly parallel to and south of Muckingford Road, multi-utility works extending southwards from Muckingford Road to the Tilbury Loop railway line and works to divert the two OHL spanning the existing view. Overall, utility works would be seen as a dominant change in the view.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as large rather than very large due to construction works being viewed in the context of the existing OHL.
N-13	View from edge of public open space between Linford and East Tilbury (off Muckingford Road) (LLCA Linford/Buckingham Hill Urban Fringe). View centred south-west for users of the public open space.	Moderate	Major	Moderate adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects Views from this recreational open space are typically contained in nature due to the field boundary vegetation along its western boundary. The assessment considers the worst-case location from a break in the boundary vegetation. There would be views west towards the creation of ponds within new open mosaic habitat in the foreground, as well as mid-range views towards construction works for an attenuation basin, the new carriageway, earthworks and false cuttings along the Project route, the installation of two new gantries and construction of Muckingford Road green bridge (approximately 0.6km). Vegetation clearance associated with the construction of Muckingford Road green bridge would be apparent to the south-west, with further vegetation removal along the watercourse south of Lower Crescent to the north-west. There would also be long-range, glimpsed views south-west towards the construction of Tilbury Viaduct (approximately 1.1km), and the associated loss of mature vegetation. During night-time working, construction activity could result in a perceivable change to the view at night due to increased light sources introduced into the midground. However, lighting would be viewed against a backdrop of light sources within the urban areas of Grays and Chadwell St Mary. Overall, construction works for the new carriageway, Muckingford Road green bridge and new earthworks, as well as the loss of mature vegetation, would be dominant in views.
					Project utility works – nature of effects The skyline is dominated by existing OHL and pylons, which are scattered across the landscape. There would be mid-range views of installation works for the temporary water pipeline to the west. Beyond the pipeline, there would be mid-range views of OHL diversions, multi-utility works to the west within the adjacent field and multi-utility works to the south-west along Muckingford Road. Overall, the utility works would result in a noticeable change to the view from the edge of the recreation area. Within the recreation area, views of utility works would be typically filtered by existing boundary vegetation.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as moderate rather than large due to construction works being viewed in the context of the existing OHL.
N-14	View from Hoford Road Protected Lane (LLCA West Tilbury Urban Fringe). View centred east for recreational receptors.	Moderate	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be mid-range views looking north-east to south-east towards construction works for the new carriageway, earthworks and false cuttings along the Project route, a

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					new retaining structure adjacent to an existing waterbody and a new culvert, as well as the installation of four new gantries. There would also be filtered views north-east towards the construction of Hoford Road green bridge (approximately 0.9km), as well as views south-east towards the construction of Muckingford Road green bridge (approximately 0.95km). Loss of mature vegetation would also be apparent at Rainbow Wood, adjoining Hoford Road and along the existing watercourse to the north-east, as well as the loss of hedgerows and trees along Muckingford Road to the south-east. However, due to the undulating landform and construction works taking place at a lower elevation, it is likely that some views towards construction elements would be restricted. During night-time working, construction activity could result in a perceivable change to the view at night, with increased light sources introduced into the midground. However, this lighting would be viewed in the context of prominent lighting in the wider view including along the urban edge of East Tilbury and at London Gateway Port. Overall, construction activity associated with the Muckingford Road and Hoford Road green bridges, the new carriageway, associated earthworks and gantries, and the loss of mature vegetation in the wider landscape, would be noticeable in views.
					<u>Project utility works – nature of effects</u> Multi-utility works would be visible along Muckingford Road in the midground to the south-east, together with some associated vegetation removal. There would also be views of OHL diversions in the midground to the east. Overall, the utility works would result in a perceptible change to the view but would not alter the overall balance of features and elements that constitute the existing view.
N-15	View from Hoford Road Protected Lane. Also represents views from footpath FP64 (LLCA West Tilbury Urban Fringe). View centred north-north-east for recreational receptors.	Moderate	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be mid-range views towards the excavation of a cutting along the upper slopes of the valley to the north-east, as well as the construction of Hoford Road green bridge (approximately 0.5km) and earthworks and false cuttings along the Project route to the north-east and east. The installation of approximately four gantries would also be visible. Glimpses of construction works for retaining structures and a new culvert where the Project crosses the existing watercourse would be apparent, although some lower-level work would be obscured by the undulating landform. Vegetation loss to the north-east at Rainbow Wood and along Hoford Road would be apparent and would potentially open up views into the adjacent quarry and area of material storage. Mature vegetation loss would also be readily apparent along the existing watercourse. Construction vehicle movements along haul routes would be evident. In addition, to the north-west, there would be long-range glimpses of construction activities at Brentwood Road overbridge (approximately 1km) and the FP79 WCH bridge (approximately 1.3km). However, these elements would be slightly obscured by rising landform. During night-time working, construction activity could result in a perceivable change to the view at night, with increased light sources introduced into the midground. However, this lighting would be viewed in the context of prominent lighting in the wider view including along the urban edge of Linford and at Linford Tarmac Building Products.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					Overall, construction works for the new carriageway, structures, earthworks and Hoford Road green bridge, and loss of mature vegetation, would be noticeable in views.
					<u>Project utility works – nature of effects</u> Existing OHL and pylons are prominent features in the existing view. From this location, there would be mid-range views of OHL modifications to the north-west, north-east, east and south-east. Views to the east of the OHL modifications at the west of Linford would be partially filtered by intervening vegetation. Multi-utility works would also be visible in an arable field to the north-west. Overall, the utility works would result in a perceptible change to the view but would not alter the overall balance of features and elements that constitute the existing view.
N-16	View from footpath 41/access track near Butts Lane (LLCA Linford/Buckingham Hill Urban Fringe). View centred south-south-west for recreational receptors.	Moderate	Negligible	Slight adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be very minimal views towards construction activity, due to rising landform in the immediate foreground and the distance between the visible part of the Project (approximately 3.1km) and this location. Construction works would be barely noticeable in views.
					<u>Project utility works – nature of effects</u> There would be mid- to long-range views of OHL modifications to the south-west, however, visibility of other utility works from this location would be screened by landform and vegetation. Overall, the utility works would result in a barely noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as slight rather than neutral due to construction works being perceivable in part of the view.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
N-17	View from footpath 45 located within Orsett Golf Club (LLCA Linford/Buckingham Hill Urban Fringe). View centred south-south-east for recreational receptors.	Moderate	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> A long-range view across arable farmland with mature vegetation belts towards Chadwell St Mary, contained by surrounding landform and vegetation. There would be mid-range views south-west towards construction activity within the valley, associated with the diversion and culverting of an existing watercourse and the construction of the new Project carriageway and associated earthworks (partly shallow cutting, partly slight embankment). Views of construction works for the Project further south-east, including for Hoford Road green bridge, and west towards Brentwood Road would be screened by intervening landform and vegetation such as at Rainbow Wood. Construction works would also be viewed in the context of existing mineral extraction activity to the south-east. Visibility of the surrounding arable landscape and Chadwell St Mary would be retained to the south-west above construction works. During night-time working, construction activity could result in a perceivable change to the view at night, with increased light sources introduced into the midground. However, lighting would be viewed against a backdrop of skyglow and light sources within the urban edge of Grays and Chadwell St Mary beyond. Overall, construction works for the new carriageway and earthworks would be noticeable in views. <u>Project utility works – nature of effects</u> The mid-range view features the existing OHL across the skyline. Modifications to these OHL would be visible from this location. Overall, the utility works would result in a barely noticeable change to the view.
N-18	View from footpath 78 on the north-east edge of Chadwell St Mary (LLCA White Croft/Orsett Heath Urban Fringe). View centred north-north-east for recreational receptors.	Moderate	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> Close to mid-range, north and north-eastern views of construction activity from this slightly elevated location at the urban edge of Chadwell St Mary. There would also be views north towards realignment works for High House Lane and an associated WCH route in the foreground, and beyond towards vegetation removal along Brentwood Road and construction works for Brentwood Road overbridge, which would be seen above the intervening rolling landform. Construction works for the new Project carriageway (in shallow cutting) on the southern valley slope side and associated earthworks, false cuttings, and a retaining wall and acoustic barrier adjacent to Brook Farm would also be visible to the north-east and east, although views would be slightly obscured by the rolling landform. There would also be views towards the installation of new gantries. Loss of vegetation along Brentwood Road would result in more open views of construction works, vehicle movements along haul routes and Brentwood Road compound, with plant storage, site offices, material storage and a prominent concrete batching plant (up to 25m in height). Vegetation loss and construction works along the A13 would also be apparent on the horizon in long-range views north-west. To the east, vegetation loss and construction works would be apparent at Hoford Road green bridge (approximately 1.1km).

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					During night-time working, construction activity could result in a perceivable change to the view at night, with increased light sources within the foreground. However, lighting would be seen in the context of the prominently lit A13 (a night-time focus) and car lights along the A13 and Brentwood Road. Overall, construction works for Brentwood Road overbridge, along the A13, at Hoford Road green bridge, and for the new Project carriageway and earthworks, and the loss of mature vegetation, would be noticeable in views.
					<u>Project utility works – nature of effects</u> The double line of existing OHL are prominent across the skyline and modifications to these OHL would be clearly visible in the midground. Installation of a high-pressure gas main following the east side of Brentwood Road and other multi-utility works along and west of Brentwood Road, together with associated vegetation removal, would also be visible in close- to mid-range views. Overall, the utility works would result in a noticeable change to the view.
N-19	View from residential properties at Orsett Heath/Chadwell St Mary (LLCA White Croft/Orsett Heath Urban Fringe). Viewpoint centred north-north-east for residential receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2))*	High	Major	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be mid- to long-range views looking north-west to north-east towards construction activity for the new Project carriageway (approximately 0.4km to 1km), earthworks and false cuttings, and the installation of gantries, street lighting and signage. Construction vehicle movements along haul routes would also be readily apparent, as would construction works for the FP79 WCH bridge (approximately 0.6km) and the northern end of Brentwood Road overbridge (approximately 0.9km). Brentwood Road compound would be visible to the north-east, with plant storage, site offices, material storage and a concrete batching plant (up to 25m in height). Plant and material storage and site offices in the Stanford Road compound are also likely to be visible to the north. Views north-west and north would be partially obscured by intervening buildings along Hornsby Lane, and views north-east by woodland on the northern edge of Chadwell St Mary. Vegetation loss along a field boundary and Hornsby Lane would be apparent and would increase visibility towards the A13 corridor in long-range views, as well as towards vegetation loss on the horizon and the construction of new structures and slip roads at the A13/A1089/A122 Lower Thames Crossing junction adjacent to the A13 corridor. The embankment and reinforced earth structure along the slip road between the Orsett Cock roundabout and the A1089 Dock Approach Road would provide some screening of construction activity along the A13 corridor once constructed. The construction of landscape mounds up to 11m above the existing ground and one landscape mound up to 9m above the existing A13 would also be glimpsed above buildings on Hornsby Lane and would provide some screening of construction activity at the A13/A1089/A122 Lower Thames Crossing junction once created. During night-time working, construction activity could result in a perceivable change to the view at night, with increased light sources introduced into the midground. However, lighting would be seen in the context of the prominently lit A13 (a night-time focus), lighting from tower blocks in Grays and Chadwell St Mary and car lights on the A13 and Brentwood Road.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					Overall, construction works for the new Project carriageway, earthworks and two new overbridges, operation of the Brentwood Road compound, and the loss of mature vegetation, would be dominant in views.
					<u>Project utility works – nature of effects</u> The double line of existing OHL are prominent across the skyline and works to divert these OHL would be clearly visible in the midground. The Hornsby Lane Utility Hub and multi-utility works along Hornsby Lane would also be visible. Overall, the utility works would result in a noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than very large due to construction works being viewed in the context of the existing OHL.
N-20	View from Hornsby Lane adjacent to Heath Place (Grade II listed building) (LLCA White Croft/Orsett Heath Urban Fringe). View centred west-south-west for users of the local road.	Moderate	Major	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be close- to mid-range views south and south-west towards construction works for the new Project carriageway (in cutting and false cutting), the A13 westbound to Project southbound slip road in cutting, the installation of four gantries, street lighting and signage (approximately 0.15km to 0.25km), and plant and material storage and site offices in the Stanford Road compound (approximately 70m). Vegetation loss would be apparent along Hornsby Lane to the south resulting in more open views towards construction activity. In mid-range views west, construction works for the new A1013 Stanford Road overbridges over the A1089 Dock Approach Road and the Project carriageway (approximately 0.5km to 0.7km) would be apparent above an intervening belt of vegetation, as well as the construction of new bridges, viaducts and highway infrastructure associated with the A13/A1089/A122 Lower Thames Crossing junction. The construction of a landscape mound up to 9m above the existing ground would also be glimpsed to the west above vegetation and would provide some screening of construction activity at the A13/A1089/A122 Lower Thames Crossing junction once created. Construction activity may also be glimpsed in mid-range views south-east in association with the FP79 WCH bridge and Brentwood Road overbridge and the Brentwood Road compound, including a prominent concrete batching plant (up to 25m in height), plant and material storage and site offices. However, views would be largely screened by existing vegetation in the grounds of Heath Place. Vegetation removal would be apparent along the A13 and A1013 Stanford Road to the north-west, which would open up views towards the construction of new structures and slip roads at the A13/A1089/A122 Lower Thames Crossing junction adjacent to the A13 corridor, as well as the installation of new and replacement highway infrastructure along the A13, which is elevated on embankment. The embankment and reinforced earth structure along the slip road between the Orsett Cock

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					roundabout and the A1089 Dock Approach Road would provide some screening of construction activity along the A13 corridor once constructed. During night-time working, construction activity could result in a perceivable change to the view at night, with increased light sources introduced into the foreground and midground. However, lighting would be seen in the context of the prominently lit A13 (a night-time focus) and the urban edge of Chadwell St Mary. Overall, construction works for the new Project carriageway, earthworks, overbridges, and new infrastructure including street lighting, and loss of mature vegetation, would be dominant in views.
					<u>Project utility works – nature of effects</u> Vegetation clearance in the immediate foreground of the viewpoint would result in largely open and unrestricted close-range views of multi-utility works. There would also be views of works to divert the two existing OHL in the midground. Overall, the concentration of utility works in this location would be a dominant change within the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than moderate due to construction works being apparent across a large proportion of the view.
N-21	View from the junction of Hornsby Lane/A1013 Stanford Road (LLCA White Croft/Orsett Heath Urban Fringe). View centred south-south-west for users of the local road.	Moderate	Major	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> Long-range, wide views looking from east to north-east over an area affected by extensive construction activity. There would be close-range views towards construction works for the widening of the A1013 Stanford Road to accommodate a new WCH route in the foreground, which would result in the loss of existing roadside vegetation. There would also be close-range views towards construction traffic along Hornsby Lane. There would be mid- to long-range views south and south-east towards the construction of earthworks and false cuttings along the Project route and the FP79 WCH bridge and Brentwood Road overbridge (approximately 0.5km to 1.1km). A prominent concrete batching plant (up to 25m in height), plant and material storage and site offices would also be apparent in the Brentwood Road compound. Views south-east would be partially screened by vegetation and buildings at Heath Place. In mid-range views to the south-west, construction activity for the new Project carriageway and A13 westbound to Project road southbound slip road in cutting (approximately 0.5km) and the installation of gantries, signage and street lighting would be apparent. However, vegetation near The Whitecroft care home would provide some filtering of views and the construction of a landscape mound near The Whitecroft would provide some screening of construction works beyond once created. Plant and material storage and site offices in the Stanford Road compound would also be visible (approximately 0.4km). Views west and north would include construction activity associated with the A13/A1089/A122 Lower Thames Crossing junction, including new slip road overbridges, some of which would be seen above the skyline. Construction of the new link road between the Orsett Cock roundabout and the A1089 Dock Approach Road

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					and the associated embankment and reinforced earth structure would take place just north of the existing A1013 Stanford Road corridor. There would also be views towards the installation of gantries, signage, replacement and new street lighting, and construction of retaining structures. The modification to the A13 would result in vegetation loss, which would be visible above the skyline and open up views to the existing carriageway. The construction of landscape mounds up to 11m above the existing ground and one landscape mound up to 9m above the existing A13 at the new junction would also be apparent and would provide some screening of construction works once created. Similarly, the embankment and reinforced earth structure along the slip road between the Orsett Cock roundabout and the A1089 Dock Approach Road would provide some screening of views beyond once constructed. Construction activity would not result in a perceivable change in night-time views north-west, as existing light sources are readily apparent within the existing view. To the south, there could be a perceivable change in night-time views, due to the presence of additional light sources during night-time working. However, lighting would be viewed in the context of existing lighting at Chadwell St Mary. Overall, construction works for new carriageways, earthworks, overbridges and structures, including at the A13/A1089/A122 Lower Thames Crossing junction, and the loss of mature vegetation, would be dominant in views.
					<u>Project utility works – nature of effects</u> There would be close-range views of the multi-utility works along the A1013 Stanford Road to the north-east and south-west and extending north towards the A13. There would also be filtered, close- to mid-range views of the multi-utility works extending south along Hornsby Lane. To the south, there would also be mid-range views of works to divert the existing OHL north of Orsett Heath. Overall, the utility works would be a noticeable change within the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than moderate due to construction works being apparent across a large proportion of the view.
N-22	View from A1013 Stanford Road on the A1089 overbridge (northern side) (LLCA White Croft/Orsett Heath Urban Fringe). View centred north-east for users of the main road.	Low	Major	Moderate adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> The A1013 Stanford Road would be diverted onto a new structure immediately north of the current position. Prior to diversion, Stanford Road would remain open and this viewpoint is representative of user views, both prior to and after diversion. This long-range, wide view is over an area experiencing extensive construction activity within the typically flat, predominantly arable landscape interspersed with main road corridors and settlement. There would be close-range views north towards construction works for the A1013 Stanford Road overbridge in the foreground, with vegetation loss apparent along Stanford Road, which would open up views to construction works. There would be mid- to long-range views towards construction compounds, including plant and material storage and site offices in Long Lane compound A and earthwork stockpiles in Long Lane compound B to the north-west (approximately 0.3km), plant

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					and material storage and site offices in the Stanford Road compound to the east (approximately 0.55km) and a prominent concrete batching plant (up to 25m in height), plant and material storage and site offices in the Brentwood Road compound to the east (approximately 1.1km). Construction works for the A13/A1089/A122 Lower Thames Crossing junction would also be visible to the north-west, north-east and south-east, including new carriageway construction with substantial bulk earthwork activity and engineering works, resulting in the new junction being seen at a variety of heights with several new flyovers, underpasses and new retaining structures. The construction of landscape mounds would also be apparent in several locations at the junction, some of which would partially screen views towards construction works once created. The view would also include removal of Gammonfields Way travellers' site along Gammonfields Way to the north-west. There would be long-range views south-east towards construction works for the FP79 WCH bridge and Brentwood Road overbridge and the Project carriageway in shallow cutting, at grade and within false cutting earthworks, as well as construction vehicle movements within the arable landscape. Vegetation loss along the existing A13 corridor, the A1089 Dock Approach Road and adjacent field boundaries would be readily apparent, resulting in increased visibility of construction works, traffic and highway infrastructure. Construction activity would not result in a perceivable change in night-time views where existing lighting is present along the A1089 Dock Approach Road, A13 and A1013 Stanford Road. Within the wider landscape to the north-west and south-east, construction activity could result in a perceivable change in the night-time environment where construction lighting is introduced into existing fields. However, this would be viewed in the context of existing lighting, including at Little Thurrock to the north-west and Chadwell St Mary to the south-east. Overall, construction activity associated with the new carriageway, earthworks, A13/A1089/A122 Lower Thames Crossing junction, overbridges, gantries, signage and street lighting, and loss of mature vegetation, would be dominant in views.
					<u>Project utility works – nature of effects</u> The existing view is characterised by major road corridors and highway infrastructure. The most noticeable multi-utility works from this location would be those taking place along the A1013 Stanford Road. To the south-east, there would be close-range views of the removal of two OHL, facilitated by the proposed southerly diversion in the midground. Overall, the utility works would result in a noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as moderate rather than slight due to construction works being apparent across a large proportion of the view.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
N-23	View from Grays urban edge (off Long Lane) (LLCA White Croft/Orsett Heath Urban Fringe). View centred east-north-east for residential receptors.	High	Moderate	Large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be close- to mid-range views across arable fields in the foreground towards earthwork stockpiles in Long Lane compound A and plant and material storage and site offices in Long Lane compound B to the north and north-east (approximately 0.1km to 0.25km), with a retained hedgerow providing some filtering of northerly views. These compound elements would partially obscure views towards construction works beyond. There would be mid-range, glimpsed views between elements within the compounds towards construction works for the A13/A1089/A122 Lower Thames Crossing junction, including a new viaduct and slip road in front of the existing highway, new earthworks, a false cutting and a retaining wall, and the installation of signage, gantries and replacement street lighting. Views towards the demolition of the existing A1013 Stanford Road overbridge and construction works for the new structure would also be apparent to the east (approximately 0.7km). The construction of landscape mounds along the outer edge of the new A1089 Dock Approach Road to Project road northbound slip road and between this slip road and the existing highway would also be apparent and would screen some views towards construction works once created. Vegetation loss along the A1089 Dock Approach Road and A1013 Stanford Road would be apparent and would result in more open views towards construction works, traffic and highway infrastructure. During night-time working, construction activity could result in a perceivable change to the view at night, with increased light sources within the Long Lane compounds A and B introduced into close-range views. However, lighting would be seen in the context of existing light sources along the A1089 Dock Approach Road, A13 and A1013 Stanford Road and at a tower block in Chadwell St Mary. Overall, construction activity associated with the Long Lane compounds A and B and the new earthworks, structures and highway infrastructure at the A13/A1089/A122 Lower Thames Crossing junction, and the loss of mature vegetation, would be noticeable in views filtered by existing hedgerows. Project utility works – nature of effects The existing view is characterised by agricultural fields and prominent OHL. There would be mid-range views of OHL modifications and multi-utility works to the east. Views of Long Lane Utility Hub to the north-west of the viewpoint, are likely to be screened by the hedgerow lining footpath 97. Overall, the utility works would result in a noticeable change to the view. Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as large rather than moderate due to operations in the construction compounds being close to the viewpoint.
N-24	View from residential properties on B188 Baker Street (LLCA Orsett Lowland Farmland). View looking south-south-east for residential receptors.	High	Major	Large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					There would be close-range views, framed by retained vegetation along Baker Street, towards construction works for the new Project road southbound to A13 slip road overbridge at the A13/A1089/A122 Lower Thames Crossing junction (approximately 0.17km), including earthworks, retaining walls and street lighting. Loss of mature vegetation for utility works (described below) on the west side of Baker Street would open up views towards adjacent construction works. During night-time working, construction activity at night would be visible to the south. However, lighting would not result in a perceivable change to the night-time environment due to existing light sources being readily apparent along Baker Street and the A13. Overall, construction works for the new slip road overbridge at the A13/A1089/A122 Lower Thames Crossing junction, and extensive vegetation loss along Baker Street, would dominate the view.
					<u>Project utility works – nature of effects</u> This framed view has been taken from footpath 96 where it intersects with the footway on the B188 Baker Street. There would be close-range views of multi-utility works in the road. Slightly further to the south, vegetation removal to facilitate multi-utility works is also likely to be visible in front of the existing A13 overbridge. Overall, the utility works would result in a noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than very large due to construction works being viewed in the context of the existing highway corridor.
N-25	View from the intersection of footpath 93, footpath 96 and bridleway 206, off Mill Lane, on southern urban edge of Orsett. Also represents views from footpaths 82 and 94 (LLCA Orsett Lowland Farmland). View centred south-west for recreational receptors.	Moderate	Major	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> This is a mid-range view over the equestrian fields in the foreground towards construction works for the new Project road southbound to A13 slip road (approximately 0.4km) and associated overbridge (approximately 0.8km) at the A13/A1089/A122 Lower Thames Crossing junction. Extensive loss of vegetation along the A13 corridor would be readily apparent and result in more open views of moving traffic and highway infrastructure, as well as the construction of earthworks and several retaining structures along the A13 and new Project road southbound to A13 slip road, and the installation of gantries, and new and replacement street lighting. The existing embankments along the A13 are likely to screen views of construction activity further south, except for taller elements such as gantries and the construction of landscape mounds at the A13/A1089/A122 Lower Thames Crossing junction. Demolition of residential properties along Baker Street and Woolings Close would be apparent to the south-west, as well as construction works for a new WCH route linking Baker Street to Rectory Road along the toe of the embankment to the south. During night-time working, construction activity at night would be visible to the south. However, it would not result in a perceivable change in the night-time environment due to existing light sources being readily apparent along the A13. Overall, construction works along the A13 corridor, and extensive loss of mature vegetation, would be dominant in views.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					Project utility works – nature of effects There would be mid-range views south-west of the installation of a high-pressure gas pipeline. There would also be distant, southerly views of OHL modifications beyond the A13. Overall, the utility works would result in a noticeable change to the existing view.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as large rather than moderate due to construction works being apparent across a large proportion of the view.
N-26	View from Stifford Clays Road (LLCA Orsett Lowland Farmland). View centred north-west for users of the local road.	Moderate	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be close-range views towards construction activity associated with the realignment of Stifford Clays Road to the west and associated new overbridge across the Project route. Loss of mature vegetation along Stifford Clays Road and adjacent to the north, would result in glimpsed views towards the excavation of a cutting for the Project route, the construction of a landscape mound and the installation of a gantry, street lighting and signage. There would also be glimpsed views north-west towards the site welfare offices, plant and material storage and a prominent concrete batching plant (up to 25m high) in the Stifford Clays Road compound East. As a result of vegetation loss, construction activity at night would be visible at the Stifford Clays Road compound East. This could therefore result in a perceivable change in the night-time environment, as the existing landscape is largely dark in character. Overall, construction works for the Stifford Clays Road realignment and new carriageway, earthworks and highway infrastructure, and loss of mature vegetation, would be noticeable in views.
					Project utility works – nature of effects There would be close-range views of multi-utility works along Stifford Clays Road and associated removal of trees and roadside hedgerow. Close-range views of multi-utility works to the north-west and west of the viewpoint could also occur as a result of the removal of existing vegetation. Overall, the utility works would result in a noticeable change to the view.
N-27	View from bridleway 161 adjacent to junction of Green Lane/Stifford Clays Road (LLCA Orsett Lowland Farmland). View centred north-north-east for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	Moderate	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be mid-range views north-east towards construction works for the new Project carriageway, earthworks, false cuttings and signage, the Green Lane green bridge with its slackened slope earthworks, and a new WCH route between Stifford Clays Road and Orsett Fen. There would also be views towards a concrete batching plant up to 25m high in the Stifford Clays Road compound East. Other elements in the compound (site offices and welfare buildings, plant and material storage) would be likely obscured by the undulating, arable landform. The construction of a landscape mound along the Project route would also be just apparent and would screen some

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					views towards construction works and the Stifford Clays Road compound East once created. Construction traffic would be visible within the fen landscape and along Green Lane to the north-east, as would earthwork operations for the attenuation basin north of Green Lane green bridge. Vegetation loss adjacent to Green Lane would be apparent. There would also be long-range views towards construction works for Orsett Fen Viaduct (approximately 1.5km). During night-time working, construction activity could result in a perceivable change to the view from this receptor at night due to increased light sources being present within this typically unlit landscape. The lighting would extend into the dark, rural landscape in the distance. Overall, construction works for the new carriageway, earthworks, bridge structure and viaduct, and the loss of mature vegetation, would be noticeable in views.
					<u>Project utility works – nature of effects</u> To the east, there would be close-range views of multi-utility works along Stifford Clays Road. To the south, there would be close-range views of the works associated with the temporary foul water connection extending south towards the A13. To the north-west, the Green Lane Utility Hub would be visible in the midground, with mid-range views of the installation of a high-pressure gas pipeline to the north, extending north-eastwards towards Green Lane. Overall, the utility works would result in a noticeable change to the view.
N-28	View from footpath 90 at the junction of Green Lane/Fen Lane (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred south-west for recreational receptors.	Moderate	Major	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be mid-range views over the arable landscape towards construction works in the midground, which would span most of the view. This would include the operation of Stifford Clays Road compound East with a prominent concrete batching plant up to 25m in height, together with site offices, welfare buildings, and plant and material storage. There would also be views towards construction works for the Project route (in a transition from deep cutting at Stifford Clays Road to shallow cutting at Green Lane) and Green Lane green bridge (approximately 0.4km), which would require some mature vegetation clearance along the road, evident above the skyline. The construction of a landscape mound along the Project route would be apparent behind the Stifford Clays Road compound East. Construction works would also be partially obscured by existing vegetation adjacent to Fen Lane to the south and south-west. During night-time working, construction activity could result in a perceivable change to the view from this receptor at night due to increased light sources being present within this typically unlit landscape. Overall, construction activity associated with the operation of the Stifford Clays Road compound East, construction works for the Project route and Green Lane green bridge and associated mature vegetation loss, would be noticeable in the view.
					<u>Project utility works – nature of effects</u> There would be close-range views of the installation of a high-pressure pipeline crossing the view from east to west, and temporary multi-utility works along Fen Lane

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					to the south. In the midground to the south-west, there would be views of multi-utility works on the north side of Stifford Clays Road and views of OHL modifications. Overall, the utility works would result in a noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than moderate due to construction works being apparent across a large proportion of the view.
N-29	View from bridleway 219 located on the Mardyke Way, east of Grangewaters Outdoor Education Centre (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred east-north-east for recreational receptors.	High	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> This Representative Viewpoint is part of a sequence of views along the Mardyke Way and considers effects at this location only. For details of effects along other sections of the PRoW, please refer to viewpoints N-29a and N-32. This is a long-range, wide easterly view. There would be long-range views north-east towards bulk earthwork operations associated with the creation of the flood compensation area, and construction vehicles using haul routes along the Project route within the relatively remote Orsett Fen landscape. Construction works for the new carriageway embankment (approximately 1.4km) and the Orsett Fen Viaduct (approximately 1.7km) would also be apparent. Typically, however, views towards construction works would be partially filtered by existing vegetation, and viewed in the distance. In addition, views of construction works to the east would be largely screened by intervening vegetation. Beyond the Project route, there would be views north-east to the Mardyke compound (approximately 1.8km), within which the most noticeable element at this distance would be the concrete batching plant up to 25m in height (due to intervening construction works and vegetation). There would also be glimpsed views east above vegetation towards the concrete batching plant up to 25m in height within the Stifford Clays Road compound East (approximately 1.5km). There could also be potential long-range, glimpsed views south-east towards construction works along the A13 corridor (approximately 1.5km). However, views would be filtered by intervening vegetation and partially obscured by the gently rising landform. During night-time working, construction activity could result in a perceivable change to the view at night due to increased light sources being present within this typically unlit landscape. The lighting would extend into the dark, rural landscape in the distance. However, construction lighting to the south-east would be viewed in the context of existing lighting along the A13. Overall, construction works for Orsett Fen Viaduct, the new carriageway and earthworks, and construction activity associated with the operation of the construction compounds, would be noticeable in views.
					<u>Project utility works – nature of effects</u> To the north-east, the view opens up towards the wider landscape with distant views to a wooded horizon where the prominent landform within the Langdon Hills Country Park is apparent. In distant views, the skyline is dominated by the existing OHL and pylons and there would be views to the east and south-east of the OHL modifications. However, views of ground level multi-utility works in the midground would be mainly screened by existing vegetation and landform. The western edge of Green Lane

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					Utility Hub may be just visible at the southern end of the existing tree belt to the south-east. Overall, the utility works would result in a barely noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as moderate rather than large due to existing vegetation limiting the overall effect on the view.
N-29a	View from bridleway 219 located on the Mardyke Way on Orsett Fen, open access land (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred east-north-east for recreational receptors.	High	Major	Very large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> This Representative Viewpoint is part of a sequence of views along the Mardyke Way and considers effects at this location only. For details of effects along other sections of the PRoW, please refer to N-29 and N-32. This viewpoint is located further north along bridleway 219 than viewpoint N-29, where the Project is closer. There would be wide, open views of extensive construction works, including for a new WCH route and new level control structure and earth-moving operations for the flood compensation and ecological mitigation area in the foreground, and beyond for the new Project earthworks, Orsett Fen Viaduct and Mardyke Viaduct (the latter only just visible), and a concrete batching plant (up to 25m in height), offices, welfare buildings, and plant and material storage in the Mardyke compound. There would also be some southerly, distant views towards the operation of the Stifford Clays Road compound East (mainly limited to the concrete batching plant up to 25m in height), along with the construction of Green Lane green bridge and Stifford Clays Road overbridge, although the latter would be heavily filtered by intervening vegetation. Construction traffic would also be apparent along the Project route on temporary haul routes. Construction works for the new carriageway on embankment and the two viaducts to the north-east and east of the view would appear above the skyline. During night-time working, construction activity could result in a perceivable change to the view from this receptor at night due to increased light sources being introduced into the dark, rural landscape. Overall, construction works for Orsett Fen Viaduct, Mardyke Viaduct, the new carriageway and earthworks, and the operation of construction compounds, would be dominant in views.
					<u>Project utility works – nature of effects</u> OHL and pylons dominate the existing view south-east. There would be close-range views of the OHL modifications, taking place overhead. Multi-utility works may just be visible in distant views to the south-east. Overall, the utility works would result in a perceptible change to the view but would not alter the overall balance of features and elements that constitute the existing view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as very large rather than large due to construction works being apparent across a large proportion of the view.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
N-30	View from footpath 132 near South Ockendon urban fringe (off Mollands Lane) (LLCA Belhus Lowland Quarry Farmland). View centred north-north-east for recreational receptors.	Moderate	Negligible	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects Only very limited construction activity would be apparent from this location, due to the distance of construction works from the Project route (approximately 1.5km), falling landform, field-bounding vegetation within the arable landscape, and structural woodland blocks adjacent to the landfill site to the north, which would obscure views. Construction works would be barely noticeable in views. Project utility works – nature of effects From this location, visible utility works would be limited to partial, long-range views to the east of OHL modifications, just visible above existing tree belts. Overall, the utility works would result in a barely noticeable change to the view. Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as slight rather than neutral due to construction works being perceivable in part of the view.
N-31	View from footpath 90 on Orsett Fen (east of Hobletts residential property) (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred west for recreational receptors.	Moderate	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be mid- to long-range, wide views of extensive construction activity, including earth-moving operations for the flood compensation area, the new Project carriageway and earthworks, Orsett Fen Viaduct (approximately 0.6km), Mardyke Viaduct (approximately 0.8km) and a new maintenance access track parallel to the Project route. Construction vehicle movements along the Project route on temporary haul routes would also be visible. Construction works for the new carriageway on embankment and viaduct from the south-west to north-west would be viewed in front of tree belts along Mardyke Way and beyond. Some limited vegetation loss would be evident along the Mardyke, at Mardyke Viaduct. During night-time working, construction activity could result in a perceivable change to the view from this receptor at night due to increased light sources being present within the dark, rural landscape. Overall, construction works for Orsett Fen Viaduct, Mardyke Viaduct, the new carriageway and earthworks, would be noticeable in views. Project utility works – nature of effects From this location, visible utility works would be limited to partial, long-range views to the north-west of the OHL modifications. Overall, the utility works would result in only a barely noticeable change to the view.
N-32	View from bridleway 219 located on the Mardyke Way on Orsett Fen (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred north-east for recreational receptors.	High	Major	Very large adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					This Representative Viewpoint is part of a sequence of views taken along the Mardyke Way and considers effects at this location only. For details of effects along other sections of the PRoW, please refer to N-29 and N-29a. During construction, the Mardyke Way at the viewpoint location would be temporarily closed, however, the assessment considers the worst case where the bridleway remains accessible to the south. There would be close-range views towards earth-moving operations for the flood compensation and ecological mitigation area and construction works for a new WCH route and the piers and abutments of the Mardyke Viaduct in the foreground. Construction activity associated with the embankments along the Project route would also be prominent in the wider view, as well as the loss of mature vegetation along the Mardyke. There would also be mid-range views towards construction works for the FP136 bridge (approximately 0.9km). Construction works for a new level control structure for the flood compensation and ecological mitigation area could be visible in the midground to the south. During night-time working, construction activity could result in a perceivable change to the view from this receptor at night due to increased light sources being present within this dark, rural landscape. Overall, construction works for Mardyke Viaduct, the FP136 bridge, the new carriageway and earthworks, and the loss of mature vegetation, would be dominant in views.
					<u>Project utility works – nature of effects</u> As a result of the removal of existing vegetation to the north-west, close-range views of the multi-utility works around the Mardyke Viaduct abutment would be likely. There are also likely to be mid-range views of OHL modifications to the west. Overall, the utility works would result in a noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as very large rather than large due to construction works being close to the viewpoint.
N-33	View from intersection of footpaths 89 and 90 at Bulphan Fen (off Harrow Lane). Also represents views from footpath 159 (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred south-west for recreational receptors.	Moderate	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be long-range, wide, heavily filtered views of construction works for Mardyke Viaduct (approximately 1.15km), Orsett Fen Viaduct (approximately 1.7km), the Project route on embankment, and earthworks. Earth-moving operations for the flood compensation area beneath the Mardyke Viaduct and around the embankments could be just discernible through intervening field boundary vegetation. There could also potentially be filtered glimpses of the concrete batching plants (up to 25m high) in the Mardyke compound to the south and the Medebridge compound to the west. Views of construction works would be largely obscured by intervening hedgerows and mature trees along field boundaries, although breaks in the vegetation would allow glimpsed visibility of the works. During night-time working, construction activity could result in a just perceivable change to the view from this receptor at night due to increased light sources being present within the dark, rural landscape.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					Overall, construction works for the elevated viaduct structures, new carriageway and earthworks, and the loss of mature vegetation, would be noticeable in views. Project utility works – nature of effects The existing OHL and pylons are noticeable vertical features of the landscape. There would be distant views to the west of the OHL modifications. Views of ground level utility works including the Medebridge Utility Hub would also be distant and likely to be screened or filtered by existing vegetation. Overall, the utility works would result in a barely noticeable change to the view.
N-34	View from footpath 160 on the western edge of Bulphan (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred south-west for recreational receptors.	Moderate	Negligible	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be long-range, south-westerly views towards construction works for Mardyke Viaduct and the new carriageway on embankment. However, the Project would be set within the flat, typically arable landscape in the distance (approximately 2.5km), and intervening vegetation including tree belts, would largely obscure views of construction activity from this location. Construction works would be barely noticeable in views. Project utility works – nature of effects At this distance (approximately 2.5km), utility works would not be discernible, including OHL modifications to the south-west. Overall, the utility works would not result in any discernible change to the view. Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as slight rather than neutral due to construction works being perceivable in part of the view.
N-35	View from footpath 136 located on Hall Lane, west of South Ockendon Hall (LLCA Belhus Lowland Quarry Farmland). View centred north-north-east for recreational receptors.	Moderate	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects This is a wide panoramic view from Hall Lane approximately halfway between South Ockendon Hall and the urban edge of South Ockendon. There are mid- to long-range views north across the gently undulating arable fields, where not interrupted by existing woodland and vegetation belts. Construction works are likely to be most visible to the north, in the midground (approximately 0.67km). There would be mid-range views from north-west to north-east towards construction activity associated with earthworks and the excavation of the deep cutting along the Project route. Construction works for a watercourse diversion, the North Road green bridge and retaining structures in front of the woodland block The Wilderness (approximately 0.75km) would also be prominent in views, together with the installation of the top of a new gantry above the cutting slopes. The southern section of The Wilderness, which is a defining feature of the existing view, would be felled to facilitate construction. Construction works would be seen in conjunction with roadside

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					and field-bounding vegetation clearance. Construction vehicle movements would also be visible. During night-time working, construction activity could result in a perceivable change to the view at night due to additional light sources in the midground during construction, although viewed in the context of existing lighting at South Ockendon and street lights along North Lane. Overall, construction activity associated with the new cutting, North Road green bridge, retaining structures and a gantry and loss of mature vegetation at The Wilderness would be noticeable in views.
					<u>Project utility works – nature of effects</u> There would be mid-range, filtered views to the north-west of multi-utility works along North Road associated with the proposed North Road green bridge. To the north, there would be mid-range views to multi-utility works, including some removal of existing woodland within The Wilderness. To the east, distant views of OHL modifications, partially screened by existing vegetation, would be barely discernible. Overall, the utility works would result in a perceptible change to the view.
N-36	View from footpath 135 off B186 North Road (LLCA Belhus Lowland Quarry Farmland). View centred south-south-east for recreational receptors.	Moderate	Major	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There would be close-range views towards construction works within the foreground arable fields, spanning most of the view. Construction activity associated with the excavation of the deep cutting along the Project route would be visible in the foreground. Construction works for North Road green bridge (approximately 0.13km), including the embanked side road approach, would be prominent in the foreground and installation of the top of a new gantry would be visible above the cutting slopes. Construction works would be seen in conjunction with roadside and field-bounding vegetation clearance and construction vehicle movements. In the south-easterly view, construction activity associated with the retaining structures to the south of The Wilderness (approximately 0.3km) would also be prominent, together with tree removal on the southern section of The Wilderness. During night-time working, construction activity could result in a perceivable change to the view at night due to additional light sources in the foreground to midground, although viewed in the context of existing lighting at South Ockendon and street lights along North Lane. Overall, construction activity associated with the new cutting, North Road green bridge, retaining structures and a gantry, and loss of mature vegetation at The Wilderness, would dominate the view.
					<u>Project utility works – nature of effects</u> To the south, there would be close-range views of installation of a short section of gas pipeline and mid-range views of multi-utility works. To the south-west, there would

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					also be close- to mid-range views of multi-utility works associated with the proposed North Road green bridge. Overall, the utility works would result in a noticeable change to the view.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as large rather than moderate due to construction works being close to the viewpoint.
N-37	View from South Ockendon (West Road) (LLCA Belhus Lowland Quarry Farmland). View centred north for users of main road.	Low	Negligible	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be close-range, filtered views through hedgerow vegetation towards the eastern end of construction works for a WCH route. There would also be mid-range, heavily filtered views through gaps in intervening vegetation along field boundaries and the Upminster to Grays railway line towards construction works for the FP252 WCH bridges east and west (approximately 1.3km), seen in the context of traffic on the M25. The M25 compound would be located approximately 1.35km to the north, although only the concrete batching plant (up to 25m high) is likely to be visible due to distance and existing vegetation. During night-time working, construction activity could result in a just perceivable change to the view from this receptor at night due to increased light sources, however, this would be viewed in the context of existing lighting along West Road and the M25. Overall, construction works would be barely noticeable in views due to distance and intervening vegetation.
					Project utility works – nature of effects From this location, existing vegetation along the Upminster to Grays railway line would screen views towards distant utility works and there would be no discernible change in the view.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as slight rather than neutral due to construction works being perceivable in part of the view.
N-38	View from intersection of footpaths 253 and 254 in North Ockendon Conservation Area. Also represents views from footpath 252 (LLCA Belhus Lowland Quarry Farmland). View centred south-south-west for recreational receptors.	Moderate	Major	Moderate adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects As part of the Project, the southern end of footpath 254 and western end of footpath 253 would be temporarily closed. The assessment considers the worst case where the routes remain accessible to the north, as well as views from the southern edge of North Ockendon Conservation Area. Construction works would be seen in a large proportion of the view in the foreground to midground. There would be close-range views south and south-west of construction works for a WCH route and activity within the M25 compound (approximately 10m), including plant, material and equipment storage, movement of

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					construction vehicles, site offices and the concrete batching plant up to 25m in height, which would be visible above the skyline. There would also be the partial loss of the hedgerow along the northern edge of the arable field adjacent to footpath 253 to the west. Elements in the M25 compound are likely to screen most construction works beyond to the south and south-west, apart from glimpses of earthwork operations and construction for the new Project carriageway and the FP252 WCH bridges east and west (approximately 0.4km). In a narrow view west between the M25 compound and vegetation along the edge of South Ockendon, the construction of a watercourse diversion and earthworks associated with the false cutting along the side of the proposed M25 to Project road southbound slip road would be apparent. The false cutting earthworks would screen construction works for the underpass beneath the M25. Construction activity associated with the replacement of street lighting and the installation of road signage and a gantry along the M25 corridor is likely to be glimpsed above earthworks associated with the false cutting. During night-time working, construction activity could result in a perceivable change to the view at night due to the installation of additional light sources in the foreground to midground, although this lighting would be viewed in the context of prominent light sources on the skyline along the existing M25 corridor. Overall, construction works for new earthworks and structures, operation of the M25 compound and loss of mature vegetation would be dominant in views. <u>Project utility works – nature of effects</u> There would be mid-range views to the south of multi-utility works. Overall, the utility works would result in a barely noticeable change to the view. <u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as moderate rather than large due to construction works being viewed in the context of the existing M25 corridor.
N-39	View from footpath 231 near St Mary Magdalene Church, in North Ockendon Conservation Area (LLCA Belhus Lowland Quarry Farmland). View centred west for recreational receptors.	Moderate	Moderate	Moderate adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> Mid-range views of construction activity within the foreground arable fields adjoining the existing M25 (approximately 0.3km). There would be notable loss of the roadside vegetation on the skyline, increasing visibility of the M25 and associated widening works, including replacement street lighting. There would also be views of construction works for the new M25 to Project road southbound slip road, with earthworks, a retaining wall, new street lighting and a single new gantry. Demolition of existing retaining wall structures would also be apparent in this section. In addition, construction vehicle movements on a haul road alongside the works and the slight realignment of a WCH route would be visible within the arable field. Construction works for the new Ockendon Road overbridge (approximately 0.5km) would be apparent due to vegetation loss to the west of the M25, and visibility of the existing structure and traffic using it would also increase due to vegetation loss.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					The construction of a landscape mound to the west of the M25 would be evident and would progressively screen some views towards construction works for the new Ockendon Road overbridge once created. Construction activity would not result in a perceivable change to the view at night due to the prominence of the existing lit M25 corridor. Overall, construction works along the M25 corridor including new earthworks, structures and highway infrastructure, and the loss of mature vegetation along the M25, would be noticeable in views.
					<u>Project utility works – nature of effects</u> There would be mid-range views to the north-west across open arable land to multi-utility works east of the M25. Overall, the utility works would result in a perceptible change to the view but would not alter the overall balance of features and elements that constitute the existing view.
N-40	View from intersection of B186 Ockendon Road and B1421 Ockendon Road, east of North Ockendon (LLCA Belhus Lowland Quarry Farmland). View centred south-west for users of local road. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2))*	Moderate	Negligible	Slight adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> Residential properties and roadside vegetation on Church Lane and the slightly rising landform in the foreground would restrict visibility of construction activity. The M25 compound would be located approximately 0.75km to the south-west of this location and the concrete batching plant up to 25m in height may be just evident above the skyline. It is unlikely that construction works for the Project carriageway (approximately 1.25km), associated infrastructure (gantries, signage and lighting), earthworks and false cuttings would be evident due to the intervening vegetation and undulating landform. In addition, construction activity along the M25 corridor would be largely screened by buildings and vegetation, apart from glimpses of replacement street lighting. Vegetation removal to the west of the M25 is also likely to be apparent, opening up glimpsed views towards the construction of a landscape mound to the west of the M25. Construction activity would not result in a perceivable change to the view at night due to the prominence of the existing lit M25 corridor. Construction works would be barely noticeable in views.
					<u>Project utility works – nature of effects</u> There would be close-range views of temporary multi-utility works in the B186 Clay Tye Road/Ockendon Road. No other utility works would be visible from this location. Overall, the utility works would result in a barely noticeable change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as slight rather than neutral due to construction works being perceivable in part of the view.
N-41	View from adjacent to residential properties, including Cranham Place on B1421, Ockendon Road (LLCA Belhus Lowland Quarry Farmland). View centred south for residential receptors.	Moderate	Major	Moderate adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> This is a close- to mid-range view of the western edge of the arable field adjoining the existing M25 corridor. There would be notable loss of roadside vegetation on the

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					skyline, which would increase visibility of the M25. This vegetation loss would also allow views of construction works for the widening of the M25 corridor to accommodate the new M25 to Project road southbound slip road, including earthworks and a retaining wall, and the installation of replacement street lighting along the M25, new street lighting on the slip road, and two new gantries. Demolition of existing retaining wall structures and the dismantling of a gantry would also be apparent. In addition, a haul road with vehicle movements and the realignment of a WCH route would be visible alongside the works. There would also be views of construction traffic along the B4121 Ockendon Road, for access to the Ockendon Road compound. Vegetation removal to the west of the M25 would open up views of construction works for the new Project road northbound to M25 slip road and associated earthworks. The construction of a landscape mound to the west of the M25 would also be evident and would progressively screen some views towards construction works for the Project road northbound to M25 slip road once created. Construction activity would not result in a perceivable change to the view at night due to the prominence of the existing lit M25 corridor. Overall, construction works for new earthworks, structures and highway infrastructure along the M25 corridor, and the associated loss of mature vegetation, would be dominant in views.
					<u>Project utility works – nature of effects</u> There would be close-range views of multi-utility works along Ockendon Road, in addition to views to the south-west of multi-utility works bordering the M25. Overall, the utility works would result in a noticeable and readily apparent change to the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as moderate rather than large due to construction works being viewed in the context of existing highway infrastructure along the M25 corridor.
N-42	View from permissive path within Thames Chase Forest Centre (LLCA Thurrock Reclaimed Fen (sub area Thames Chase)). View centred south-east for recreational receptors.	High	Major	Large adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> There are close- to mid-range views beyond the immediate open space within Thames Chase Forest Centre towards highway infrastructure on the existing M25 (approximately 0.2km). There would be close- to mid-range views towards construction works for the M25 widening and the new Lower Thames Crossing J29 link road on embankment, in conjunction with loss of established woodland along the M25 on the eastern edge of the Thames Chase Forest Centre. There would also be views towards the dismantling of an existing gantry and construction activity associated with the new Thames Chase WCH bridge structure and realigned WCH routes, the replacement of street lighting along the M25, new street lighting along the link road, a new gantry and new signage. The tops of moving vehicles along the existing M25 would become more apparent due to the removal of existing roadside vegetation.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					During night-time working, construction activity could result in a perceivable change to the view at night due to vegetation removal and increased light sources, although viewed against the prominently lit M25 corridor. Overall, construction activity for new earthworks, structures and highway infrastructure along the M25 corridor, and the loss of mature vegetation, would be dominant across a large proportion of the view.
					<u>Project utility works – nature of effects</u> There would be close-range views to the south-east of multi-utility works and mid-range views of OHL modifications beyond. The works would also result in the removal of two swathes of woodland. Overall, the utility works would be seen as a dominant change in the view.
					<u>Justification for significance level where two significance categories are given in LA 104</u> The significance of effect has been assessed as large rather than very large due to construction works being viewed in the context of existing highway infrastructure along the M25 corridor.
N-43	View from Cranham Brickfields public open space and footpath 193 on the eastern edge of Upminster (LLCA Thurrock Reclaimed Fen (sub area Thames Chase)). View centred east for recreational receptors.	Moderate	Minor	Slight adverse effect	Project construction activity would occur over a medium-term period. <u>Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects</u> Narrow, mid-range, densely filtered view from public open space through bounding vegetation to the tops of high-sided vehicles and highway infrastructure on the existing M25. Views of construction works for the widening of the existing M25 to accommodate the Lower Thames Crossing J29 link road and an emergency/maintenance access road (approximately 0.7km) would be apparent above intervening vegetation, although construction activity associated with modified earthworks further south and a new bridge structure over the Shoeburyness railway line would be largely screened by existing vegetation on the boundary of the public open space. The upper elements of the Warley Street compound would be evident beyond the M25 corridor, including the site office and welfare units, with views filtered by the canopy of the intervening vegetation, and ground-level activity obscured by the M25 embankment. Other construction activity visible above intervening vegetation could include partial, filtered views of the replacement of street lighting on the M25 corridor, new street lighting along the link road, the dismantling of an existing gantry and the installation of a new gantry. There would not be a perceivable change in the view at night due to the existing lit condition of the M25 corridor. Overall, construction works along the M25 corridor, including new highway infrastructure, would be perceptible in views but would not alter the overall balance of

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					features in the existing view, given the presence of the M25 and retained intervening vegetation. Project utility works – nature of effects From this location, existing vegetation would screen views of utility works and there would be no discernible change in the view.
N-44	View from PRoW 272_110 within Thames Chase (Brentwood) (LLCA Brentwood Wooded Hills). View centred south-east for recreational receptors.	Moderate	Minor	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects Close- to mid-range views between intervening vegetation towards activity associated with the ancient woodland compensation area in the foreground, and construction works for the widening of the existing M25 in the midground (approximately 0.4km), including the extended J29 slip roads, new hard shoulders, modified earthworks and new retaining structures. Some limited vegetation removal along the M25 corridor could slightly increase visibility of the motorway in close-range views. Other construction activity visible in this section would include replacement of the street lighting, the dismantling of several existing gantries, and the installation of new gantries and signage. There would also be long-range glimpses towards construction of the attenuation basin (approximately 1.1km). There would not be a perceivable change in the view at night due to the existing lit condition of the M25 corridor. Construction activity associated with earthworks, structures and gantries along the M25 corridor would be perceptible in views but would not alter the overall balance of features and elements that constitute the existing view. Project utility works – nature of effects The elevation of the location affords panoramic, long-range views to the south. From this location, there would be mid-range views to the south-east of the Beredens Lane Utility Hub and installation of a high-pressure gas pipeline. Overall, the utility works would result in a perceptible change to the view.
N-45	View from Bird Lane to the west of Little Warley (LLCA Brentwood Wooded Hills). View centred south-west for users of the local road.	Moderate	Negligible	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be long-range, glimpsed views through gaps in vegetation across the foreground equestrian fields towards construction activity along the existing M25 (approximately 1.75km). Construction activity associated with the replacement of street lighting on the M25 corridor and the slight loss of roadside vegetation would not be discernible at this distance. There would not be a perceivable change in the view at night due to the existing lit condition of the M25 corridor. Overall, construction works along the M25 corridor would be barely noticeable in the view.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					Project utility works – nature of effects From this location, as a result of a combination of distance and existing vegetation, the utility works would not be visible and there would be no discernible change in the view.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as slight rather than neutral due to construction works being perceivable in part of the view.
N-46	View from southern edge of Thorndon Country Park (LLCA Brentwood Wooded Hills) and PRoW 272_130. View looking south-west for recreational receptors.	High	Minor	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects Long-range and wide, elevated southerly view towards construction activity. The Project would be set within the flat landscape, evident in the distance (approximately 5.3km), with visibility of the works along the existing M25 at a distance of approximately 3.5km to the west. This view represents a worst-case scenario on the southern edge of the elevated Thorndon Country Park, which is typically enclosed by dense bounding vegetation. There would be filtered views through intervening vegetation towards construction activities for the Orsett Fen Viaduct, Mardyke Viaduct, FP136 bridge and North Road green bridge, together with bulk earthworks, these being slightly elevated from the surrounding landscape. Highway construction in cutting or at grade, however, would be partially obscured by intervening vegetation. The concrete batching plants up to 25m in height may be just evident in the Medebridge compound (approximately 5.2km) and the M25 compound (approximately 6km). It is unlikely that vegetation removal would be perceptible at this distance. Construction activity at night would introduce additional lighting into the dark Orsett Fen landscape, that has few light sources. This influence would, however, be reduced as a result of the distance between the receptor and construction activity and existing light sources visible in the broader view. Construction activity is unlikely to result in a perceivable change in night-time views. Overall, construction activity along the Project route, operation of the Medebridge and M25 compounds and the loss of mature vegetation would be perceptible in views but would not alter the overall balance of features and elements that constitute the existing view.
					Project utility works – nature of effects From this location, as a result of a combination of distance and existing vegetation, the utility works would not be visible and there would be no discernible change in the view.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as slight rather than moderate due to the limited overall effect on the wide panoramic view.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
N-47	View from South Hill, within the Langdon Hills Country Park (LLCA Langdon Hills and Farmland). View looking south-west for recreational receptors.	High	Minor	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects A long-range and wide, elevated south-western view towards construction works, set within the flat landscape in the distance (approximately 6.5km to 9.5km). This view represents a worst-case scenario on the south-western edge of the elevated Langdon Hills Country Park, with a gap in dense roadside mature vegetation allowing views over the surrounding landscape. There would be views towards construction activities associated with the Orsett Fen Viaduct, Mardyke Viaduct, FP136 bridge and North Road green bridge, together with bulk earthworks, these being slightly elevated from the surrounding landscape. Highway construction in cutting or at grade would be partially obscured by intervening vegetation. The concrete batching plants up to 25m in height in the Medebridge compound (approximately 7km) and the M25 compound (approximately 9km), could be just evident. It is unlikely that vegetation removal would be perceptible at this distance. Construction activity at night would introduce additional lighting into the dark Orsett Fen landscape, that has few light sources. This influence would, however, be reduced as a result of the distance between the receptor and construction activity and existing light sources in the broader view. Construction activity is unlikely to result in a perceivable change in night-time views. Overall, construction activity along the Project route, the operation of the Medebridge and M25 compounds and the loss of mature vegetation would be perceptible in views but would not alter the overall balance of features and elements that constitute the existing view. Project utility works – nature of effects From this location, as a result of a combination of distance and existing vegetation, the utility works would not be visible and there would be no discernible change in the view. Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as slight rather than moderate due to the limited overall effect on the wide panoramic view.
N-Dep-RV-10	View from footpath PRoW 272_110 west of Great Warley Street (LLCA Brentwood Wooded Hills). View centred west-south-west for recreational receptors.	Moderate	Minor	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be mid-range views (approximately 0.85km) towards construction activity associated with the widening of the M25 carriageway, the replacement of lighting columns and the dismantling and installation of new gantries. There would not be a perceivable change in the view at night due to the existing lit condition of the M25 corridor. Overall, construction activity associated with the widening of the M25 corridor and changes in highway infrastructure would be perceptible in views.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
					Project utility works – nature of effects There would be mid-range views to the west and south-west towards the Beredens Lane Utility Hub and the installation of a high-pressure gas pipeline, although a woodland block at Parker's Shaw would screen some of the pipeline works. Overall, the utility works would result in a perceptible change to the view.
N-Dep-RV-11	View from Codham Hall Lane, west of Great Warley Street (LLCA Brentwood Wooded Hills). View centred north-west for recreational receptors.	Moderate	Negligible	Slight adverse effect	Project construction activity would occur over a medium-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects There would be glimpsed, long-range views towards construction activity associated with the widening of the M25 carriageway, principally comprising the replacement of lighting columns and the dismantling and installation of new gantries. There would not be a perceivable change in the view at night due to the existing lit condition of the M25 corridor. Overall, construction activity associated with the widening of the M25 corridor and changes in highway infrastructure would be barely noticeable in views.
					Project utility works – nature of effects There would be glimpsed, long-range views to the north-west towards the Beredens Lane Utility Hub and installation of a high-pressure gas pipeline, although woodland at Parker's Shaw and tree belts and hedgerows in adjacent fields would screen much of the works. Overall, the utility works would result in a barely noticeable change to the view.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as slight rather than neutral due to the combination of construction works along the M25 corridor and glimpsed utility works taking place in front of the existing wooded backdrop to this viewpoint.
N-Dep-RV-12	View from footpath FP42 (LLCA Linford/Buckingham Hill Urban Fringe). View centred east-north-east for recreational receptors.	Moderate	Negligible	Neutral effect	Project construction activity would occur over a short-term period. Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects No Main Project construction works would be visible from the footpath.
					Project utility works – nature of effects There are likely to be long-range glimpses towards changes in OHL at the pylon in the distance to the south-east. However, these works would be barely noticeable.
					Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as neutral rather than slight due to the pylon works having a limited overall effect on the view.

Visual receptor		Sensitivity	Magnitude of visual effect	Significance of effect	Commentary
N-Dep-RV-13	View from informal footpath within open space associated with the Maple Park housing development in Stanford-le-Hope. Also represents views from footpath FP41 (LLCA Linford/Buckingham Hill Urban Fringe). View centred west-south-west for recreational receptors.	Moderate	No change	Neutral effect	Main Project (highway and associated infrastructure, earthworks, construction compounds and WCHs) – nature of effects No Main Project construction works would be visible from the footpath. Project utility works – nature of effects No utility works would be visible from the footpath.

Table 2.4 Schedule of visual effects for visual receptors north of the River Thames during construction

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2).				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
Residential properties 'R'				
N-02	Residential properties along Sandhurst Road, Fort Road, Galsworthy Road, and Pepys Close, eastern edge of Tilbury	High	See N-02	See N-02
VR-S09-R-001	Residential properties along the east side of Princess Margaret Road, south-east of East Tilbury	High	Negligible	Slight adverse effect
VR-S09-R-002	Residential properties along the west side of Princess Margaret Road, south-east of East Tilbury	High	Minor	Slight adverse effect
VR-S09-R-003	Residential properties near the junction of Station Road and Princess Margaret Road, including Barvills Farm, south-east of East Tilbury	Moderate	Negligible	Slight adverse effect
VR-S09-R-004	Orchard House and residential property at Orchard Stables, Love Lane, south of East Tilbury	Moderate	Moderate	Moderate adverse effect
VR-S09-R-005	Goshems Farm, Pleasant View and Willows, Station Road, south of East Tilbury	Moderate	Major	Large adverse effect
VR-S09-R-006	Buckland and Bowaters Farm, off Station Road, south-west of East Tilbury	Moderate	Moderate	Moderate adverse effect
VR-S09-R-007	1 and 2 Gravelpit Farm, Station Road, south-west of East Tilbury	Moderate	Major	Large adverse effect
VR-S09-R-008	Buxton, Princess Margaret Road, south-east of East Tilbury	Moderate	Minor	Slight adverse effect
VR-S09-R-009	Gun Hill Farm, Gun Hill, south-east of Chadwell St Mary	Moderate	Minor	Slight adverse effect
VR-S09-R-010	Biggin Farm, off Biggin Lane, south-east of Chadwell St Mary	Moderate	Negligible	Slight adverse effect
VR-S09-R-011	Residential properties along the south of Rectory Road, west of Church Road, West Tilbury	Moderate	Negligible	Neutral effect
VR-S09-R-012	Residential properties along Church Road and within the former St James's Church, West Tilbury	Moderate	Minor	Slight adverse effect
VR-S09-R-013	Properties opposite the end of Low Street Lane including Walnut Tree Farm	Moderate	Major	Large adverse effect
N-08	Residential properties at the southern end of Low Street Lane, south-east of West Tilbury	Moderate	See N-08	See N-08

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2).				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S09-R-014	Residential properties along Dock Road and Hume Avenue, southern edge of Tilbury	High	Negligible	Slight adverse effect
VR-S09-R-015	Residential properties along Feenan Highway, north-eastern edge of Tilbury	High	Negligible	Slight adverse effect
VR-S10-R-001	Residential properties along Bata Avenue, Shearwater Avenue, Pipit Close, Pintail Close, Lapwing Close, Turnstone Close, Sanderling Close and Sandpiper Close, western edge of East Tilbury	High	Major	Large adverse effect
N-12	Residential properties along Beechcroft Avenue, western edge of East Tilbury	High	See N-12	See N-12
VR-S10-R-002	Residential properties along Muckingford Road in East Tilbury	High	Major	Moderate adverse effect
VR-S10-R-003	Residential properties along Muckingford Road including Ash Lea Farm, west of East Tilbury	Moderate	Major	Large adverse effect
VR-S10-R-004	Residential properties along east side of Blue Anchor Lane including Holford House, Holford Farm Cottage and Blue Anchor Cottage	Moderate	Moderate	Moderate adverse effect
VR-S10-R-005	Residential properties along west side of Blue Anchor Lane including Marshalls Cottage and Holford Cottages	Moderate	Negligible	Slight adverse effect
VR-S10-R-006	Residential properties at the junction of Muckingford Road and Blue Anchor Lane	Moderate	Moderate	Moderate adverse effect
VR-S10-R-007	Residential properties at the southern end of Hoford Road	Moderate	Moderate	Moderate adverse effect
VR-S10-R-008	Mill Cottage and Mill House, Muckingford Road	Moderate	Minor	Slight adverse effect
VR-S10-R-009	Juorei, Muckingford Road	Moderate	Major	Large adverse effect
VR-S10-R-010	Becksland, Muckingford Road	Moderate	Major	Large adverse effect
VR-S10-R-011	Residential properties along the northern side of Lower Crescent, western edge of Linford	High	Minor	Slight adverse effect
VR-S10-R-012	Residential properties along the southern side of Lower Crescent, southern edge of Linford	High	Moderate	Moderate adverse effect
VR-S10-R-013	Residential properties along the southern end of Somerset Road, western edge of Linford	High	Minor	Slight adverse effect
VR-S10-R-014	Residential properties along Northumberland Road, East Tilbury Road, Essex Gardens, Dorset Gardens and the northern end of Somerset Road, northern edge of Linford	High	Negligible	Slight adverse effect
VR-S10-R-015	Cranes House, Gun Hill, south-east of Chadwell St Mary	Moderate	Negligible	Slight adverse effect
VR-S10-R-016	The White House, Manor Farm and nearby residential properties along Blue Anchor Lane, eastern edge of West Tilbury	Moderate	Moderate	Moderate adverse effect
VR-S10-R-017	Residential properties along the northern side of Rectory Road, northern edge of West Tilbury	Moderate	Minor	Slight adverse effect
VR-S10-R-018	High House, High House Lane	Moderate	Moderate	Moderate adverse effect
VR-S10-R-019	Turnpike Cottages, Turnpike House, Turnpike Lane	Moderate	Negligible	Slight adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2).				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S10-R-020	Residential properties along Atherton Gardens and the east side of Cole Avenue and The Cherubs along Linford Road, eastern edge of Chadwell St Mary	High	Minor	Slight adverse effect
VR-S10-R-021	Residential properties along the west side of Cole Avenue and east side of St Francis Way, eastern margin of Chadwell St Mary	High	Minor	Slight adverse effect
VR-S10-R-022	Residential properties along the northern end of Cole Avenue and St Francis Way, north-eastern edge of Chadwell St Mary	High	Moderate	Moderate adverse effect
VR-S10-R-023	Residential properties along Ingleby Road	High	Minor	Slight adverse effect
VR-S10-R-024	Residential properties along Halton Road, north-eastern edge of Chadwell St Mary	High	Negligible	Slight adverse effect
VR-S10-R-025	Residential properties along south side of Wickham Road and southern end of Courtney Road, north-eastern edge of Chadwell St Mary	High	Negligible	Slight adverse effect
VR-S10-R-026	Residential properties along Haywood Place and Courtney Road, north-eastern edge of Chadwell St Mary	High	Major	Large adverse effect
VR-S10-R-027	High rise flats on Godman Road, northern edge of Chadwell St Mary	High	Major	Large adverse effect
VR-S10-R-028	Residential properties along Alexandra Close, north-eastern edge of Chadwell St Mary	High	Major	Large adverse effect
VR-S10-R-029	Brook Farm Cottages, High House Lane	Moderate	Major	Large adverse effect
VR-S10-R-030	Residential properties along the north side of Godman Road, northern edge of Chadwell St Mary	High	Negligible	Slight adverse effect
VR-S10-R-031	131 to 157 Godman Road, northern edge of Chadwell St Mary	High	Negligible	Slight adverse effect
VR-S10-R-032	95 to 129 Godman Road, northern edge of Chadwell St Mary	High	Moderate	Moderate adverse effect
VR-S10-R-033	Residential properties along Turnstone Close, Sanderling Close, Stenning Avenue and Sandpiper Close, western edge of East Tilbury	High	Minor	Slight adverse effect
VR-S10-R-034	Residential properties along Godman Road, Northwood, Alexandra Close, Sleepers Farm Road, Wickham Road, Courtney Road and Semper Road, within Chadwell St Mary	High	Minor	Slight adverse effect
VR-S10-R-035	64 to 104 Godman Road, 12 to 64 Morant Road and 2, 2A and 4 Nevell Road, within Chadwell St Mary	High	Minor	Slight adverse effect
VR-S10-R-036	13 to 21 Morant Road, St Joseph's Court, Heathlyn Close, 1 and 3 Nevell Road, 40 to 62 Godman Road and Kendale, within Chadwell St Mary	High	Negligible	Slight adverse effect
VR-S10-R-037	Residential properties along Rigby Gardens, Felicia Way, Brentwood Road, Marisco Close, St Stephens Crescent, Chadwell Hill and Furness Close, within Chadwell St Mary	High	Negligible	Slight adverse effect
VR-S11-R-001	Orsett House, High Road, north-west of Orsett	Moderate	Minor	Slight adverse effect
VR-S11-R-002	Residential properties along Shelford Close, Cassell Close and Daltons Shaw, western edge of Orsett	High	Minor	Slight adverse effect
VR-S11-R-003	Baker Street Windmill, western edge of Baker Street	High	Major	Large adverse effect
VR-S11-R-004	Residential properties at Rectory Fields	High	Minor	Moderate adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2).				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S11-R-005	Residential properties along School Lane, southern edge of Orsett	High	Negligible	Slight adverse effect
VR-S11-R-006	Old Rectory, Fen Lane, north of Baker Street	Moderate	Major	Large adverse effect
VR-S11-R-007	Residential properties along Godman Road, northern side of Cedar Road and eastern side of Barry Close, northern edge of Chadwell St Mary	High	Major	Large adverse effect
N-19	Residential properties along the north side of Greyhound Lane, northern edge of Chadwell St Mary	High	See N-19	See N-19
VR-S11-R-008	Residential properties along the south side of Greyhound Lane, northern edge of Chadwell St Mary	High	Moderate	Moderate adverse effect
VR-S11-R-009	Residential properties along the eastern end and southern side of Harding Road and 43 to 45 Heath Road, northern edge of Chadwell St Mary	High	Negligible	Slight adverse effect
VR-S11-R-010	Residential properties along the western end of Harding Road (northern side), northern edge of Chadwell St Mary	High	Minor	Slight adverse effect
VR-S11-R-011	130 to 168 Heath Road and residential properties along Foxes Green, the southern end of Squirrel's Chase and Hornsby Lane, Orsett Heath	High	Minor	Slight adverse effect
VR-S11-R-012	Rose Cottage, Hornsby Lane	Moderate	Major	Large adverse effect
VR-S11-R-013	Residential properties along Gowers Lane, along the northern end of Squirrel's Chase and at the junction of Gowers Lane and Hornsby Lane, Orsett Heath	High	Major	Large adverse effect
VR-S11-R-014	170 to 174 Heath Road, Orsett Heath	High	Minor	Slight adverse effect
VR-S11-R-015	202 to 224 Heath Road, north of Orsett Heath	Moderate	Major	Large adverse effect
VR-S11-R-016	242, 246 and 246a Heath Road, north of Orsett Heath	Moderate	Major	Large adverse effect
VR-S11-R-017	1 to 4 Badgers Mount, Orsett Heath	High	Negligible	Slight adverse effect
VR-S11-R-018	Residential properties along 5, 6, 8 and 9 Badgers Mount and adjoining 167, 175 and 179 Heath Road, Orsett Heath	High	Minor	Slight adverse effect
VR-S11-R-019	Heath Place, Hornsby Lane	Moderate	Major	Large adverse effect
VR-S11-R-020	The Whitecroft (also White Crofts on OS mapping), Stanford Road	Moderate	Major	Large adverse effect
VR-S11-R-021	Bloomfields Farm, Blackshots Lane	Moderate	Negligible	Slight adverse effect
VR-S11-R-022	Grey Goose Farm, Grey Goose Farm Cottage and Little Wellhouse Farm, Blackshots Lane	Moderate	Moderate	Moderate adverse effect
N-23	Residential properties along Kerry Road and Milford Road (including high rise flats), eastern edge of Grays	High	See N-23	See N-23
VR-S11-R-023	Residential properties along Kerry Road, Long Lane, Foxhills Road, Rushley Close, Brookman's Avenue, south side of Fairfield Avenue and Ashley Gardens, eastern edge of Grays	High	Moderate	Moderate adverse effect
VR-S11-R-024	Residential properties along Milford Road, eastern edge of Grays	High	Moderate	Moderate adverse effect
VR-S11-R-025	Residential properties along Stifford Clays Road (south of the A13), northern edge of Grays	High	Negligible	Slight adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2).				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S11-R-026	24 to 44 Stanford Road and residential properties along Masefield Road and Buxton Road, eastern edge of Grays	High	Moderate	Moderate adverse effect
VR-S11-R-027	66 to 84 Heath Road and residential properties along southern side of Cedar Road and western side of Barry Close, northern edge of Chadwell St Mary	High	Minor	Slight adverse effect
VR-S11-R-028	Residential properties along north side of Fairfield Avenue, north-eastern edge of Grays	High	Minor	Slight adverse effect
VR-S11-R-029	Residential properties along Blackshots Lane, north-eastern edge of Grays	High	Minor	Slight adverse effect
VR-S11-R-030	Residential properties along the south of Stifford Clays Road and western side of Baker Street	High	Moderate	Large adverse effect
VR-S11-R-031	Residential properties along the eastern side of Baker Street	High	Moderate	Moderate adverse effect
N-24	Southern end of Baker Street	High	See N-24	See N-24
VR-S11-R-032	Residential properties along the north of Stifford Clays Road and west of Fen Lane, northern edge of Baker Street	High	Major	Large adverse effect
VR-S11-R-033	110 to 158 High Road (north side), northern edge of Baker Street	High	Minor	Slight adverse effect
VR-S11-R-034	91 to 163 High Road (south side), northern edge of Baker Street	High	Minor	Slight adverse effect
VR-S11-R-035	Hollycrest House and Mill House, Mill Lane, western edge of Orsett	Moderate	Moderate	Moderate adverse effect
VR-S11-R-036	Hill House, High Road, west of Orsett	Moderate	Negligible	Slight adverse effect
VR-S11-R-037	Residential properties along High Road, Pound Lane and Malting Lane, north-western edge of Orsett	High	Negligible	Slight adverse effect
VR-S11-R-038	Residential properties along Brentwood Road, Orsett, including Loft Hall Farm and Loft Hall Cottage	Moderate	Minor	Slight adverse effect
VR-S11-R-039	Springfield Farm, Stifford Clays Road, west of Baker Street	Moderate	Major	Large adverse effect
VR-S11-R-040	Cherry Orchard Farm, northern edge of Orsett	Moderate	Negligible	Neutral effect
VR-S11-R-041	Barrington's Farm and adjacent residential properties, south-east of Orsett	Moderate	Negligible	Slight adverse effect
VR-S11-R-042	1 and 2 Potash Cottages	Moderate	Major	Large adverse effect
VR-S11-R-043	Five Chimney Cottages, A1013 Stanford Road	Moderate	Major	Large adverse effect
VR-S12-R-001	Home Farm Cottage on Ockendon Road and Redcrofts North Road, south-east of North Ockendon	Moderate	Moderate	Moderate adverse effect
VR-S12-R-002	Residential properties along the northern side of Cheelson Road, northern edge of South Ockendon	High	Major	Large adverse effect
VR-S12-R-003	Residential properties along the southern side of Cheelson Road, northern edge of South Ockendon	High	Moderate	Moderate adverse effect
VR-S12-R-004	Home Farm, Corner Farm and Bolyngtons off Fen Lane	Moderate	Minor	Slight adverse effect
VR-S12-R-005	Fen Farm and Fen Farm Cottages, Fen Lane	Moderate	Moderate	Moderate adverse effect
VR-S12-R-006	Residential properties along Dunning's Lane	Moderate	Negligible	Slight adverse effect
VR-S12-R-007	Castle Cottage, Judds Farm and Judds House, Harrow Road	Moderate	Moderate	Moderate adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2).				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S12-R-008	The Downes, Elms Lane	Moderate	Moderate	Moderate adverse effect
VR-S12-R-009	Residential properties along Rosewood Close, Magnolia Close, Medlar Drive, Juniper Drive and Birch Crescent, eastern edge of South Ockendon	High	Minor	Slight adverse effect
VR-S12-R-010	Hobletts	Moderate	Major	Large adverse effect
VR-S12-R-011	Parkers Farm and Parkers Farm Cottages along Parkers Farm Road	Moderate	Minor	Slight adverse effect
VR-S12-R-012	Fen Cottage, Fen Lane	Moderate	Moderate	Moderate adverse effect
VR-S12-R-013	Residential properties along the east side of North Road, northern edge of South Ockendon	High	Moderate	Moderate adverse effect
VR-S12-R-014	The Evergreens and nearby properties along North Road	Moderate	Major	Large adverse effect
VR-S12-R-015	South Ockendon Hall, Hall Lane	Moderate	Moderate	Moderate adverse effect
VR-S12-R-016	Residential properties along the northern side of West Rd, northern edge of South Ockendon	High	Minor	Slight adverse effect
VR-S13-R-001	Sab-Anthony, Brookside and Clay Lodge along Clay Tye Road	Moderate	Minor	Slight adverse effect
VR-S13-R-002	Eastview and Southside along Clay Tye Road	Moderate	Minor	Slight adverse effect
VR-S13-R-003	Residential properties along Clay Tye Road	Moderate	Minor	Slight adverse effect
VR-S13-R-004	Lowlands and Upminster Nursing Home, Clay Tye Road	Moderate	Negligible	Slight adverse effect
VR-S13-R-005	White Post Farm and 1 to 8 Ockendon Road	Moderate	Minor	Slight adverse effect
VR-S13-R-006	Residential properties near the junction of Fen Lane and Ockendon Road	Moderate	Minor	Slight adverse effect
VR-S13-R-007	1 to 4 Dennises Cottages and Medina along Dennises Lane	Moderate	Minor	Slight adverse effect
VR-S13-R-008	Manor Farm, Ockendon Road	Moderate	Negligible	Slight adverse effect
N-41	Residential properties along Ockendon Road, including Grafton and The Old Coach House	Moderate	See N-41	See N-41
VR-S13-R-009	Residential properties at the northern end of Church Lane, North Ockendon	Moderate	Minor	Slight adverse effect
VR-S13-R-010	Residential properties along southern end of Church Lane in North Ockendon	Moderate	Moderate	Moderate adverse effect
VR-S13-R-011	Kemps Farm, Kemps Farm Mews, Kemps Cottages and Field House, Dennis Road	Moderate	Minor	Slight adverse effect
VR-S13-R-012	Railway Sidings, Ockendon Road	Moderate	Major	Moderate adverse effect
VR-S14-R-001	Residential properties along Beredens Lane	Moderate	Negligible	Slight adverse effect
VR-S14-R-002	Residential properties along Folkes Lane	Moderate	Negligible	Slight adverse effect
VR-S14-R-003	Residential properties at Laburnham Stables, off Laburnham Gardens	High	Moderate	Moderate adverse effect
VR-S14-R-004	56 to 74 Laburnham Gardens (south side) and residential properties on Laburnham Close	High	Minor	Slight adverse effect
VR-S14-R-005	Frank’s Farm off St Marys Lane	Moderate	Major	Large adverse effect
VR-S14-R-006	Youngs Farm, Cranham Court Nursing Home, residential property at Westbury Farm and residential property at entrance to Westbury Farm, St Marys Lane	Moderate	Negligible	Neutral effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2).				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S14-R-007	Franks Cottages, St Marys Lane	Moderate	Minor	Slight adverse effect
VR-S14-R-008	1 to 10 St Marys Lane, Clovelly, Lamorna, Monks Farm Cottages, Fallowfield Farm, Bodiam Farm and adjacent residential properties along St Marys Lane	Moderate	Negligible	Slight adverse effect
VR-S14-R-009	Residential property near Puddledock Farm Fishery, St Marys Lane	Moderate	Minor	Slight adverse effect
VR-S14-R-010	Gladstone Cottages, Warley Street	Moderate	Minor	Slight adverse effect
VR-S14-R-011	Residential properties at the junction of Warley Street and Church Lane	Moderate	Negligible	Slight adverse effect
VR-S14-R-012	Residential properties (Netherstone and Hulmers) along Warley Street, north of A127	Moderate	Negligible	Slight adverse effect
VR-S14-R-013	Tabrums Farm, Little Tabrums and adjacent residential properties, Folkes Lane	Moderate	Minor	Slight adverse effect
VR-S14-R-014	Small Acres Farm, Folkes Lane	Moderate	Minor	Slight adverse effect
VR-S14-R-015	Hole Farm	Moderate	Minor	Slight adverse effect
VR-S14-R-016	Tyas Stud Farm (including static caravans) and Latchford Farm, St. Mary's Lane	Moderate	Moderate	Moderate adverse effect
VR-S14-R-017	Residential property at Wyngray Farm and static caravans at Fairoak, St Marys Lane, Upminster	Moderate	Moderate	Moderate adverse effect
Recreational receptors (route) 'RL'				
VR-S09-RL-001	Bridleway 187 (Two Forts Way Coastal Path/NCN Route 13)	High	Minor	Slight adverse effect
VR-S09-RL-002	Footpath 146 (Two Forts Way Coastal Path/NCN Route 13)	High	Moderate	Moderate adverse effect
VR-S09-RL-003	Footpath 146 (Two Forts Way Coastal Path/NCN Route 13)	High	Minor	Slight adverse effect
VR-S09-RL-004	Footpath 200	Moderate	Moderate	Moderate adverse effect
VR-S09-RL-005	Footpath 200	Moderate	Major	Large adverse effect
VR-S09-RL-006	Footpath 200	Moderate	Major	Large adverse effect
VR-S09-RL-007	Footpath 68	Moderate	Minor	Slight adverse effect
VR-S09-RL-008	Footpath 51 and footpath 147	Moderate	Negligible	Slight adverse effect
VR-S09-RL-009	Low Street Lane Route	Moderate	Major	Large adverse effect
VR-S10-RL-001	Coal Road/Bridleway 58	Moderate	Major	Large adverse effect
VR-S10-RL-002	Footpath 61 and footpath 60	Moderate	Major	Large adverse effect
VR-S10-RL-003	Footpath 72	Moderate	Negligible	Slight adverse effect
VR-S10-RL-004	Footpath 69, footpath 70 and footpath 71	Moderate	Minor	Slight adverse effect
VR-S10-RL-005	Footpath 74	Moderate	Minor	Slight adverse effect
VR-S10-RL-006	Footpath 75	Moderate	Minor	Slight adverse effect
VR-S10-RL-007	Footpath 65	Moderate	Minor	Slight adverse effect
VR-S10-RL-008	Footpath 106 and footpath 105	Moderate	Major	Large adverse effect
VR-S10-RL-009	Footpath 95	Moderate	Major	Large adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2).				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S10-RL-010	Footpath 79	Moderate	Major	Large adverse effect
VR-S10-RL-011	Footpath 95 and footpath 107	Moderate	Major	Large adverse effect
VR-S10-RL-012	Footpath 103	Moderate	Minor	Slight adverse effect
VR-S10-RL-013	Footpath 104	Moderate	Major	Large adverse effect
VR-S10-RL-014	Hoford Road Route (near Tarmac Linford Blocks Plant)	Moderate	Moderate	Moderate adverse effect
VR-S11-RL-001	Footpath 108	Moderate	Minor	Slight adverse effect
VR-S11-RL-002	Footpath 109 and footpath 114	Moderate	Minor	Slight adverse effect
VR-S11-RL-003	Footpath 82, footpath 93 and footpath 94	Moderate	Major	Large adverse effect
VR-S11-RL-004	Footpath 97	Moderate	Not assessed: as part of the Project, this recreational route would be stopped up during construction	
VR-S12-RL-001	Footpath 134	Moderate	Moderate	Moderate adverse effect
VR-S12-RL-002	Footpath 136	Moderate	Major	Large adverse effect
VR-S12-RL-003	Footpath 15	Moderate	Moderate	Moderate adverse effect
VR-S12-RL-004	Footpath 136	Moderate	Major	Large adverse effect
VR-S12-RL-005	Footpath 135	Moderate	Major	Large adverse effect
VR-S12-RL-006	Footpath 233	Moderate	Minor	Slight adverse effect
VR-S12-RL-007	Bridleway 178 and footpath 101	Moderate	Minor	Slight adverse effect
VR-S12-RL-008	Footpath 100	Moderate	Moderate	Moderate adverse effect
VR-S12-RL-009	Footpath 90	Moderate	Major	Large adverse effect
VR-S12-RL-010	Footpath 135	Moderate	Major	Large adverse effect
VR-S12-RL-011	Bridleway 219 (Mardyke Way)	High	Major	Large adverse effect
VR-S12-RL-012	Footpath 160 and footpath 4	Moderate	Negligible	Slight adverse effect
VR-S13-RL-001	Footpath 232	Moderate	Negligible	Slight adverse effect
VR-S13-RL-002	Bridleway 272	Moderate	Moderate	Moderate adverse effect
VR-S13-RL-003	Footpath 231	Moderate	Minor	Slight adverse effect
VR-S13-RL-004	Footpath 139 and footpath 153	Moderate	Minor	Slight adverse effect
VR-S13-RL-005	Footpath 230 (within Thames Chase Forest Centre)	High	Major	Large adverse effect
VR-S13-RL-006	Footpath 229	Moderate	Minor	Slight adverse effect
VR-S13-RL-007	Footpath 210	Moderate	Negligible	Slight adverse effect
VR-S13-RL-008	Footpath 1	Moderate	Minor	Slight adverse effect
VR-S14-RL-001	Bridleway 119	Moderate	Minor	Slight adverse effect
VR-S14-RL-002	Footpath PRoW 272_179	Moderate	Major	Moderate adverse effect
VR-S14-RL-003	Bridleway PRoW 272_183 (south of the A127)	Moderate	Not assessed: as part of the Project, this recreational route would be stopped up during construction	

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2).				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S14-RL-004	Bridleway PRoW 272_183 (north of the A127)	Moderate	Minor	Slight adverse effect
VR-S14-RL-005	Footpath 176	Moderate	Major	Moderate adverse effect
VR-S14-RL-006	Footpath PRoW 272_180 and footpath 177	Moderate	Major	Moderate adverse effect
VR-S14-RL-007	Footpath PRoW 272_178 and footpath 179	Moderate	Minor	Slight adverse effect
Recreational receptors (areas) 'RA'				
VR-S10-RA-001	Green space, Stenning Avenue, East Tilbury	Moderate	Major	Large adverse effect
VR-S10-RA-002	Green space (also known as Wickham Park), St Francis Way, Chadwell St Mary	Moderate	Moderate	Moderate adverse effect
VR-S10-RA-003	Orsett Golf Club, Brentwood Road, Orsett	Moderate	Moderate	Moderate adverse effect
VR-S11-RA-001	Orsett and Thurrock Cricket Club, School Lane, Orsett	Moderate	Negligible	Slight adverse effect
VR-S11-RA-002	Green space, Heath Road, Grays	Moderate	Minor	Slight adverse effect
VR-S11-RA-003	Orsett Bowls Club, School Lane, Orsett	Moderate	Negligible	Slight adverse effect
VR-S11-RA-004	Thurrock Rugby Club, Long Lane, Grays	Low	Moderate	Slight adverse effect
VR-S12-RA-001	Top Meadow Golf Club, North Ockendon, Upminster	Moderate	Minor	Slight adverse effect
VR-S13-RA-001	Cranham Golf Club, St Marys Lane, Upminster	Moderate	Moderate	Moderate adverse effect
Transport receptors (route) 'T'				
VR-S09-T-001	Tilbury Loop railway line, c2c	Low	Moderate	Slight adverse effect
VR-S09-T-002	Fort Road near edge of Tilbury	Moderate	Minor	Slight adverse effect
VR-S09-T-003	Fort Road north of Tilbury and Coopers Shaw Road	Moderate	Moderate	Moderate adverse effect
VR-S09-T-004	Church Road	Moderate	Moderate	Moderate adverse effect
VR-S09-T-005	Station Road, between Low Street Lane and Readmans Industrial Estate	Moderate	Major	Large adverse effect
VR-S09-T-006	Station Road, Readmans Industrial Estate to Goshems Farm	Moderate	Major	Large adverse effect
VR-S09-T-007	Station Road, east of Goshems Farm	Moderate	Negligible	Slight adverse effect
VR-S09-T-008	Love Lane	Moderate	Minor	Slight adverse effect
VR-S09-T-009	Princess Margaret Road	Moderate	Negligible	Slight adverse effect
VR-S09-T-010	New road to Tilbury2	Low	Negligible	Neutral effect
VR-S09-T-011	Gun Hill, West Tilbury	Moderate	Negligible	Slight adverse effect
VR-S09-T-012	Fort Road, west and north of Tilbury Fort	Moderate	Negligible	Neutral effect
VR-S09-T-013	A1089, Dock Approach Road	Low	Negligible	Neutral effect
VR-S09-T-014	Rectory Road, West Tilbury	Moderate	Minor	Slight adverse effect
VR-S10-T-001	Blue Anchor Lane	Moderate	Minor	Slight adverse effect
VR-S10-T-002	Muckingford Road and Linford Road	Moderate	Major	Moderate adverse effect
VR-S10-T-003	East Tilbury Road	Moderate	Negligible	Slight adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2).				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S10-T-004	Hoford Road	Moderate	Moderate	Moderate adverse effect
VR-S10-T-005	Turnpike Lane	Moderate	Negligible	Slight adverse effect
VR-S10-T-006	High House Lane (southern end)	Moderate	Moderate	Moderate adverse effect
VR-S10-T-007	High House Lane (northern end)	Moderate	Major	Large adverse effect
VR-S10-T-008	Brentwood Road, north of Chadwell St Mary	Moderate	Moderate	Moderate adverse effect
VR-S10-T-009	Buckingham Hill Road and Walton's Hall Road	Moderate	Negligible	Slight adverse effect
VR-S10-T-010	A128, Brentwood Road (north of the A13)	Low	Moderate	Slight adverse effect
VR-S10-T-011	Brentwood Road within Chadwell St Mary	Moderate	Minor	Slight adverse effect
VR-S10-T-012	Chadwell Hill	Moderate	Minor	Slight adverse effect
VR-S11-T-001	Fen Lane	Moderate	Major	Large adverse effect
VR-S11-T-002	B188 High Road/Stifford Clays Road, between Baker Street and Orsett	Moderate	Minor	Slight adverse effect
VR-S11-T-003	School Lane	Moderate	Minor	Slight adverse effect
VR-S11-T-004	Mill Lane	Moderate	Major	Moderate adverse effect
VR-S11-T-005	Stifford Clays Road (west)	Moderate	Major	Moderate adverse effect
VR-S11-T-006	Green Lane	Moderate	Major	Large adverse effect
VR-S11-T-007	A1089, Dock Approach Road (near the A13 junction)	Low	Moderate	Slight adverse effect
VR-S11-T-008	Hornsby Lane, east of Orsett Heath	Moderate	Major	Large adverse effect
VR-S11-T-009	Baker Street	Moderate	Major	Large adverse effect
VR-S11-T-010	Rectory Road	Moderate	Major	Large adverse effect
VR-S11-T-011	Blackshots Lane	Moderate	Negligible	Slight adverse effect
VR-S11-T-012	Long Lane	Moderate	Major	Large adverse effect
VR-S11-T-013	Heath Road	Moderate	Minor	Slight adverse effect
VR-S11-T-014	Stanford Road	Low	Moderate	Slight adverse effect
VR-S11-T-015	A13 (east of Orsett Cock roundabout)	Negligible	Major	Slight adverse effect
VR-S11-T-016	A13 (west of A1089 Dock Approach Road junction)	Negligible	Major	Slight adverse effect
VR-S12-T-001	Upminster to Grays railway line, c2c	Low	Moderate	Slight adverse effect
VR-S12-T-002	Parkers Farm Road	Moderate	Minor	Slight adverse effect
VR-S12-T-003	Conway's Road	Moderate	Minor	Slight adverse effect
VR-S12-T-004	Dunning's Lane and Harrow Road	Moderate	Minor	Slight adverse effect
VR-S12-T-005	Fen Lane, near Top Meadow Golf Club	Moderate	Minor	Slight adverse effect
VR-S13-T-001	Pea Lane	Moderate	Minor	Slight adverse effect
VR-S13-T-002	Dennises Lane	Moderate	Minor	Slight adverse effect
VR-S13-T-003	Clay Tye Road	Moderate	Minor	Slight adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2).				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S13-T-004	Church Lane	Moderate	Minor	Slight adverse effect
VR-S13-T-005	B1421, Ockendon Road	Moderate	Major	Moderate adverse effect
VR-S13-T-006	B1421, Ockendon Road (west of M25)	Moderate	Minor	Slight adverse effect
VR-S13-T-007	Pike Lane	Moderate	Moderate	Moderate adverse effect
VR-S13-T-008	Dennis Road	Moderate	Minor	Slight adverse effect
VR-S14-T-001	Upminster to Basildon railway line, c2c	Low	Minor	Slight adverse effect
VR-S14-T-002	Folkes Lane	Moderate	Minor	Slight adverse effect
VR-S14-T-003	B186, Warley Street	Moderate	Minor	Slight adverse effect
VR-S14-T-004	B187, St Marys Lane	Moderate	Moderate	Moderate adverse effect
VR-S14-T-005	Warley Road	Moderate	Negligible	Slight adverse effect
VR-S14-T-006	Beredens Lane	Moderate	Minor	Slight adverse effect
VR-S14-T-007	A127	Negligible	Moderate	Slight adverse effect
VR-S14-T-008	St Marys Lane	Moderate	Negligible	Slight adverse effect
Other receptors (area) 'O'				
VR-S09-O-001	Readmans Industrial Estate	Negligible	Major	Slight adverse effect
VR-S09-O-002	Thames Industrial Park	Low	Major	Moderate adverse effect
VR-S09-O-003	Allotments, Station Road, East Tilbury	Moderate	Negligible	Slight adverse effect
VR-S09-O-004	Tilbury Sewage Treatment Works, Tilbury	Negligible	Negligible	Neutral effect
VR-S09-O-005	Riverside Business Park, Fort Road, Tilbury	Low	Negligible	Neutral effect
VR-S09-O-006	Salvage yard, tyre shop and garage, Dock Road, Tilbury	Negligible	Negligible	Neutral effect
VR-S09-O-007	Condovers Scout Activity Centre, Church Road, West Tilbury	Moderate	Moderate	Moderate adverse effect
VR-S10-O-001	Allotments, Lower Crescent, Linford	Moderate	Minor	Slight adverse effect
VR-S10-O-002	Tarmac Linford Blocks Plant, Linford	Negligible	Minor	Neutral effect
VR-S11-O-001	Orsett Allotments, Rectory Road, Orsett	Moderate	Major	Large adverse effect
VR-S11-O-002	Orsett Village Hall, High Road, Orsett	Moderate	Minor	Slight adverse effect
VR-S11-O-003	Treetops School, Buxton Road, Grays	Moderate	Moderate	Moderate adverse effect
VR-S11-O-004	Allotments, Heath Road, Orsett Heath	Moderate	Moderate	Moderate adverse effect
VR-S11-O-005	Pyramid Resource Centre, Heath Road, Grays	Moderate	Minor	Slight adverse effect
VR-S11-O-006	William Edwards School, Stifford Clays Road, Grays	Moderate	Negligible	Slight adverse effect
VR-S11-O-007	Bombers Café, Brentwood Road, north of A13	Low	Minor	Slight adverse effect
VR-S11-O-008	Orsett Church of England Primary School, School Lane, Orsett	Moderate	Minor	Slight adverse effect
VR-S11-O-009	The Fox	Moderate	Moderate	Moderate adverse effect
VR-S11-O-010	Willow Garden Day Nursery	Moderate	Major	Large adverse effect

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2).				
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**	**Significance of effect**
VR-S11-O-011	Orsett Heath Academy, Grays, adjacent to Thurrock Rugby Football Club	Moderate	Moderate	Moderate adverse effect
VR-S12-O-001	Benyon Primary School, West Road, South Ockendon	Moderate	Moderate	Moderate adverse effect
VR-S12-O-002	Next Distribution Warehouse, West Rd, South Ockendon	Low	Negligible	Slight adverse effect
VR-S13-O-001	Equipment rental agency, Ashley Farm, North Ockendon	Low	Negligible	Slight adverse effect
VR-S13-O-002	Nurture Landscapes, Church Lane, North Ockendon	Low	Major	Moderate adverse effect
VR-S13-O-003	Industrial units at Baldwins Farm, Baldwins Farm Lane, Upminster	Negligible	Negligible	Neutral effect
VR-S14-O-001	Industrial units at Westbury Farm, St Marys Lane, Upminster	Negligible	Negligible	Neutral effect
VR-S14-O-002	Upminster Trading Park, Warley Street, Upminster	Negligible	Minor	Slight adverse effect
VR-S14-O-003	Industrial units at Woodcroft Farm, Folkes Lane, Upminster	Negligible	Minor	Slight adverse effect
VR-S14-O-004	Industrial units at Folkes Farm, Folkes Lane, Upminster	Negligible	Minor	Slight adverse effect
VR-S14-O-005	In Fitness In Health gym, Franks Farm off St Marys Lane, Upminster	Low	Major	Moderate adverse effect
VR-S14-O-006	Puddledock Farm Fishery, St Marys Lane, Upminster	Low	Moderate	Slight adverse effect
VR-S14-O-007	Industrial units at Codham Hall Farm, Codham Hall Lane, Upminster (south of A127)	Negligible	Moderate	Slight adverse effect
VR-S14-O-008	Industrial units at Beredens Farm, Beredens Farm Lane, Upminster	Negligible	Negligible	Neutral effect
VR-S14-O-009	Industrial units at Codham Hall Farm, Codham Hall Lane, Upminster (north of A127)	Negligible	Minor	Slight adverse effect
VR-S14-O-020	Industrial units at Wyngray Farm, Aquarend and adjacent Latchfield Farm Aquatics, St Marys Lane, Upminster	Negligible	Minor	Slight adverse effect

3 Operation

3.1 Effects on visual amenity during operational phase

South of the River Thames

3.1.1 Refer to Figure 7.16 (Application Document 6.2) for the location of the Representative Viewpoints and visual receptors. For Representative Viewpoint photography, refer to Figure 7.17: Representative Viewpoints – Winter and Summer Views and Figure 7.18: Representative Viewpoints – Night-time (inc. Winter) Views (Application Document 6.2).

3.1.2 Photomontages have been prepared to provide a visual representation of the operational phases (Year 1 opening year and Year 15 design year) for a selection of the Representative Viewpoint locations. Where available, these are identified in the tables below. For photomontages, refer to Figure 7.19 (Application Document 6.2).

Table 3.1 Schedule of visual effects on Representative Viewpoints south of the River Thames during operation

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
S-01	View from footpath NS150, at Gadshill on the outskirts of Higham settlement (LLCA Higham Arable Farmland (sub area Gadshill)). View centred south-south-west for recreational receptors.	Moderate	No change	No change	Neutral effect	Neutral effect	The existing vegetation present along the A226 and A289, together with rolling landform and the distance between the viewpoint and the Project (approximately 1.7km), would result in no elements of the Project being discernible from this location.	Highway Section 1
S-02	View from footpath NS160 located on the south-western edge of Great Crabbles Wood (LLCA View Shorne Wooded Slopes). View centred south-west for recreational receptors.	Moderate	Negligible	Negligible	Slight adverse effect	Slight adverse effect	<u>Opening year (winter)</u> There would be limited glimpsed views of vehicle movements (approximately 0.5km) along the modified A2 corridor through the intervening vegetation, and above the newly planted areas of woodland in the ancient woodland compensation area in the foreground to midground. A new gantry would be visible, along with replacement street lighting columns, set against the existing wooded backdrop to the south of the A2 corridor. There would also be very occasional glimpses of vehicles along the access track to the attenuation basin. New planting on the modified A2 corridor earthworks would not be visible from this location. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than neutral due to the Project being perceivable in part of the view. <u>Design year (summer)</u> Establishment of the ancient woodland compensation planting in close-range and mid-range views would screen views of the modified A2 corridor. However, this woodland would also result in a foreshortening of existing views. A vista would be incorporated within the planting design to the south-west to maintain a framed long-range view towards woodland within Cobham Hall Grade II* Registered Park and Garden. In addition, planting would be set back from the PRoW edge to maintain a sense of openness.	Highway Section 1

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Overall, the Project would remain perceptible in views. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the substantial nature of proposed woodland planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than neutral due to the Project being perceivable in part of the view. Night-time environment Overall, the change in street lighting (light-emitting diode (LED) luminaires) would result in a positive impact, with reduced height of columns and a reduction in light spill and skyglow apparent in the night-time view. There would be no discernible change in night-time views at design year due to screening by intervening vegetation.	
S-03	View from the Kent Downs AONB on footpath NS161, located north of Park Pale, east of Shorne Woods Country Park (LLCA West Kent Downs (sub area Shorne)). View centred south-south-east for recreational receptors.	Very high	Moderate	Minor	Large adverse effect	Moderate beneficial effect	Opening year (winter) There would continue to be wide views of the modified A2 corridor and vehicle movements, with slightly more open views due to vegetation loss between Park Pale overbridge and the haulage yard and a reduction in the width of the existing tree belt east of the haulage yard. In the wider view, a new large-scale attenuation basin would be partially visible to the south-east, as well as very occasional vehicles along the access track to the attenuation basin. These views would be available above the newly planted areas of woodland in the foreground view. Views of the modified A2 corridor would include replacement street lighting at a reduced height, and the upper extent of new gantries. Vehicle movements (approximately 0.3km) along the highway would be a visual focus. Overall, it is considered that the modified A2 corridor would be noticeably more visible in the view at opening year, compared with the existing view. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than very large due to the Project being viewed in the context of the existing A2 corridor. Design year (summer) As a result of establishment of the proposed woodland planting between the viewer and A2 corridor, views of the modified A2 corridor at design year would be largely screened. Taller features including gantries, street lighting and high-sided vehicle movements would also be largely screened. The new woodland would form part of the ancient woodland compensation planting and would help screen the existing haulage yard, which detracts from the existing view. However, it would also restrict visibility of the wooded ridgeline beyond the modified A2 corridor, although management of the woodland would ensure retention of a vista towards the Grade I Darnley Mausoleum within the Cobham Hall Grade II* Registered Park and Garden. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the substantial nature of proposed woodland planting.	Highway Section 1

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as moderate rather than large due to the beneficial effects of the Project being slightly limited by a foreshortening of views across the wooded backdrop. <u>Night-time environment</u> At night, the change in street lighting (LED luminaires) would result in a positive impact, due to the reduced height of columns and reduction of light spill and skyglow. Following establishment of mitigation planting there would be a degree of filtering reducing the influence of light sources by the design year.	
S-04	View from the Kent Downs AONB on Park Pale, part of the NCN Route 177* and Darnley Trail recreational route adjacent to Park Pale overbridge. Also represents views from the end of footpath NS161 (LLCA West Kent Downs (sub area Shorne)). View centred south-east for recreational receptors. **NCN Route 177 to be diverted and not considered as part of visual receptors in the assessment at this location.* *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	High	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> There would be close-range views of the modified A2 corridor and local distributor road together with associated vehicle movements, with increased visibility of the eastbound carriageway due to vegetation loss between the haulage yard and A2. On the modified A2 corridor, one new gantry would be prominent in views and replacement street lighting at a reduced height would be clearly visible. The carriageway of Park Pale would be stopped up and replaced with a WCH route under the existing overbridge structure. A new retaining wall would also be visible adjacent to the WCH route. The modified A2 corridor and local distributor roads would occupy approximately the same extent as the existing A2 corridor and Park Pale in the existing view. However, there would be up to 12 lanes of traffic visible, with new highway infrastructure apparent. Overall, the Project would be noticeable in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of the existing A2 corridor. <u>Design year (summer)</u> Direct, close-range views of the Project and associated vehicle movements would remain in summer of the design year. However, within the broader view to the east, established mitigation planting would reinstate some vegetation lost during construction. Overall, the modified A2 corridor would remain noticeable in the view. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the close-range view of the Project and limited scope for proposed screening planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of the existing A2 corridor. <u>Night-time environment</u> At night, the change in street lighting (LED luminaires) would result in a positive impact due to the reduced height of columns and reduction of light spill and skyglow. Night-time visual effects would be similar in opening year and design year.	Highway Section 1

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
S-05	View from the Kent Downs AONB on Park Pale overbridge, part of the NCN Route 177* and Darnley Trail recreational route (LLCA West Kent Downs (sub area Shorne)). View centred north-north-west for recreational receptors. **NCN Route 177 to be diverted and not considered as part of visual receptors in the assessment at this location.* *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	High	Major	Moderate	Large adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> There would be close-range views of the modified A2 corridor and associated vehicle movements. Extensive vegetation loss along the south of the A2 corridor would open up views to HS1 and loss of the wooded former central reserve would increase visibility of the eastbound carriageway. The modified A2 corridor would be visible together with the local distributor roads, resulting in up to 12 lanes of traffic being visible adjacent to HS1, within a wider, open corridor. In the centre of the carriageways and along the south of the A2 corridor, new retaining wall structures would be prominent. On the modified A2 corridor, a number of gantries would be prominent in views (up to approximately 1km), partially screening views of Brewers Road green bridge. Replacement street lighting at a reduced height would also be visible, together with new signage. Overall, vehicle movements and highway infrastructure would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than very large due to the Project being viewed in the context of the existing A2 corridor. <u>Design year (summer)</u> Direct, close-range views of the widened highway corridor and associated highway infrastructure and vehicle movements would remain in summer of the design year. Over time, established mitigation planting adjacent to HS1 would reduce visibility of the railway. However, passing trains are likely to remain visible. Established mitigation planting on the edge of Shorne Woods Country Park near Brewers Road, south of Park Pale and along Brewers Road green bridge, would integrate with surrounding woodland and increase visual containment of the highway corridor. However, given the scale of permanent vegetation loss and the width of the highway corridor and associated infrastructure visible, the Project would remain noticeable in the view, although these features would not be dissimilar to those seen in the existing view. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the close-range view of the Project. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of the existing A2 corridor. <u>Night-time environment</u> At night, the change in street lighting (LED luminaires) would result in a positive impact due to the reduced height of columns and a reduction of light spill and skyglow, although due to loss of vegetation in the former central reservation, lighting would be slightly more visible along the eastbound carriageway than in the	Highway Section 1

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							existing view. Night-time visual effects would be similar in opening year and design year.	
S-05a	View from the Kent Downs AONB on Park Pale overbridge, part of the NCN Route 177* and Darnley Trail recreational route (LLCA West Kent Downs (sub area Shorne)). View centred west for recreational receptors. **NCN Route 177 to be diverted and not considered as part of visual receptors in the assessment at this location.* *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2))*	High	Major	Moderate	Large adverse effect	Moderate adverse effect	This location is considered to represent a worst-case scenario given its elevated and unobstructed views over the bridge parapet. (Viewpoints S-04 and S-05 represent other views from this bridge.) Opening year (winter) There would be close-range views of the modified A2 corridor and associated vehicle movements, with increased visibility of the A2 carriageways and HS1 as a result of vegetation loss along the south of the A2 and within the former central reserve, and removal of the nearest gantry above the eastbound carriageway. The modified A2 corridor would be clearly visible together with the local distributor roads, resulting in up to 12 lanes of traffic being visible adjacent to HS1, within a wider, open corridor. A new retaining wall structure would be visible in the centre of the modified A2 corridor, as well as another new retaining wall structure visible adjacent to HS1. Along the modified A2 corridor, a number of gantries would be prominent in views, partially screening views of Brewers Road green bridge, with some gantries potentially partially visible in the distance (up to approximately 1.4km) due to vegetation loss. Replacement street lighting at a reduced height would also be visible, along with new signage. Overall, vehicle movements, structures and highway infrastructure would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than very large due to the Project being viewed in the context of the existing A2 corridor. Design year (summer) Direct, close-range views of the widened highway corridor and associated highway infrastructure and vehicle movements would remain in summer of the design year. Over time, established mitigation planting adjacent to HS1 would reduce visibility of the railway. However, passing trains are likely to remain visible. Established mitigation planting on the edge of Shorne Woods Country Park near Brewers Road, south of Park Pale and along Brewers Road green bridge would integrate with surrounding woodland and increase visual containment of the highway corridor. However, the gantry in the foreground would remain prominent. Given the scale of permanent vegetation loss and the width of the highway corridor and associated structures and infrastructure, the Project would remain noticeable in the view, although these features would not be dissimilar to those seen in the existing view. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the close-range view of the Project. *Justification for significance level where two significance categories are given in LA 104*	Highway Section 1

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of the existing A2 corridor. Night-time environment At night, the change in street lighting (LED luminaires) would result in a positive impact due to the reduced height of columns and a reduction of light spill and skyglow. Night-time visual effects would be similar in opening year and design year.	
S-06	View from the Kent Downs AONB and the Grade I listed Darnley Mausoleum and Darnley Trail, within Cobham Hall Grade II* Registered Park and Garden (LLCA West Kent Downs (sub area Cobham)). View centred north-west for recreational receptors.	Very high	No change	No change	Neutral effect	Neutral effect	The intervening dense mature vegetation within Cobham Hall Grade II* Registered Park and Garden would screen the Project from this elevated location. The Project would not be discernible in either the opening year or design year.	Highway Section 1
S-07 & S-(CH)02	View from the Kent Downs AONB on footpath NS182 within Rochester and Cobham Park Golf Club and Cobham Hall Grade II* Registered Park and Garden. Also represents views from footpath NS180 (LLCA West Kent Downs (sub area Cobham)). View centred north-north-west for recreational receptors.	Very high	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Opening year (winter) Due to a combination of intervening woodland between Peggy Taylor's Hill (a local elevated landform) and the Pleasure Grounds within Cobham Hall Grade II* Registered Park and Garden, the undulating landform with scattered trees at Rochester and Cobham Park Golf Club, and the slightly lower elevation of the A2 corridor, the Project would be barely noticeable in views. Vegetation loss along the A2 corridor could be perceptible through gaps in intervening vegetation, as well as part of a new gantry. Replacement street lighting is unlikely to be visible due to intervening vegetation and the reduced height of the columns. Where visible, changes would only be apparent within a very small part of the wider view. Design year (summer) Visual effects would be similar to those reported for the opening year, however, summer tree foliage would further limit any visual effects of the Project. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the intervening vegetation and topography. Night-time environment At night, the change in street lighting (LED luminaires) would result in a positive impact due to a reduction in skyglow in this view. Night-time visual effects would be the same in the opening year and design year.	Highway Section 1

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
S-08	View from the Kent Downs AONB on footpath NS 179, within Cobham Hall Grade II* Registered Park and Garden (LLCA West Kent Downs (sub area Cobham)). View centred west-north-west for recreational receptors. **Proposed diverted NCN Route 177 considered as part of visual receptors in the assessment at this location.*	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	<u>Opening year (winter)</u> Due to the gap in the vegetation alongside footpath NS179 and location adjacent to HS1, this view represents a worst-case scenario with views along other sections of the PRoW more restricted by vegetation south of HS1. There would be close-range views, seen in conjunction with HS1 in the foreground, towards the widened eight-lane A2 corridor and adjacent local distributor roads where vehicle movements would be prominent. This would be as a result of extensive vegetation loss along the south of the A2. Views would extend northwards, backdropped by retained vegetation within Shorne Woods Country Park (approximately 0.15km) on the northern side of the A2. On the A2 corridor, several gantries would be prominent in views. The tops of two retaining structures would also be apparent, with one between the A2 carriageways and the other in the foreground along the south of the A2 corridor. Replacement street lighting at a reduced height would be visible, along with new signage. Overall, there would be noticeable additions to vehicle movements, structures and highway infrastructure in the view, however, this would be seen in the context of existing highway infrastructure and traffic. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of the existing A2 and HS1 corridors. <u>Design year (summer)</u> Established mitigation planting would partially screen summer views at design year towards traffic, highway infrastructure and structures along the widened A2 corridor. However, the upper parts of gantries, signage and high-sided vehicles would remain perceptible in views above mitigation planting. <u>Design year (winter)</u> Leaf fall would increase visibility of traffic and highway infrastructure along the widened A2 corridor in winter, however, views would be filtered by proposed planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the Project being viewed in the context of the existing A2 and HS1 corridors. <u>Night-time environment</u> At night, there would be a perceivable change in night-time views due to increased visibility of street lighting (LED luminaires) and vehicle lights as a result of vegetation loss. Following the establishment of mitigation vegetation, there would be a degree of screening provided by trees and shrubs, which would reduce the influence of light sources on night-time views by the design year.	Highway Section 1
S-09	View from the Kent Downs AONB on Park Pale/Darnley Trail/NCN Route	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	<u>Opening year (winter)</u> There would be densely filtered, close-range views towards the upper parts of high-sided vehicles along the eight-lane A2 corridor and adjacent local distributor roads.	Highway Section 1

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	177*, adjacent to Brewers Wood, part of Shorne Woods Country Park (LLCA West Kent Downs (sub area Shorne)). View centred south for recreational receptors. **NCN Route 177 diverted and not considered as part of visual receptors in the assessment at this location.*						This would be similar to the existing view, except vegetation loss within the central reservation would result in filtered views of traffic along both carriageways. On the modified A2 corridor, the upper parts of new gantries, replacement street lighting (at a reduced height) and new signage would also be apparent in views. Overall, vehicle movements and highway infrastructure would be noticeable in views, although these features would not be dissimilar to those seen in the existing view. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the retention of existing screening vegetation along Park Pale reducing the extent of the Project visible. Design year (summer) Established mitigation planting south of Park Pale would increase the amount of screening along the north side of the local distributor road. Glimpses of the tops of high-sided vehicles and highway infrastructure on the local distributor road and the A2 corridor would remain apparent in views. Overall, the Project would remain perceptible in views. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the close-range view of the Project and substantial swathe of retained trees and proposed planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to retention of the existing screening vegetation along Park Pale reducing the extent of the Project visible. Night-time environment At night, the change in street lighting (LED luminaires) would result in a positive impact due to the reduced height of columns and a reduction of light spill and skyglow. Establishment of mitigation planting would provide some additional filtering, which would reduce the influence of light sources on night-time views by the design year.	
S-10	View from the Kent Downs AONB on a path within the Pleasure Grounds at Cobham Hall part of the Cobham Hall Grade II* Registered Park and Garden (LLCA West Kent Downs (sub area Cobham)). View centred north-north-	Very high	Negligible	No change	Slight adverse effect	Neutral effect	Opening year (winter) Existing dense, mature vegetation within Cobham Hall Grade II* Registered Park and Garden would largely screen the Project (approximately 0.2km) from this location. The widened A2 corridor would therefore appear similar to existing, apart from the perception of some increased traffic movements as a result of vegetation removal along the central reservation. Overall, the Project would be barely noticeable in views. Design year (summer) In the summer view at design year, existing dense foreground woodland in conjunction with proposed roadside planting would fully screen views of the Project. Design year (winter)	Highway Section 1

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	west for recreational receptors.						In winter, there could be a very limited glimpsed and densely filtered view of moving traffic through existing woodland and proposed planting along the A2 road corridor. Night-time environment At night, the change in street lighting (LED luminaires) would result in a positive impact due to a reduction in skyglow. There would be no discernible change in night-time views at design year due to screening by intervening vegetation.	
S-11	View from the Kent Downs AONB on footpath NS179 within Cobham Hall Grade II* Registered Park and Garden (LLCA West Kent Downs (sub area Cobham)). View centred north-north-west for recreational receptors.	Very high	Moderate	Minor	Large adverse effect	Moderate adverse effect	Opening year (winter) As a result of vegetation loss adjacent to Brewers Road, the embanked approach road to the bridge would become slightly more evident at close range. Removal of the HS1 false cutting earthwork would result in an increase in mid-range views beyond the HS1 railway line towards the A2 corridor and the westbound local distributor road, with associated vehicle movements filtered by vegetation on the edge of Cobham Hall Grade II* Registered Park and Garden. There would also be views towards the new Brewers Road green bridge, replacing the existing bridge over the A2, and the new WCH ramp connecting with Brewers Road. Vegetation loss within Shorne Woods Country Park could be just evident in the background beyond the new Brewers Road green bridge. On the A2 corridor, there could be filtered views of replacement street lighting at a reduced height and new signage. New gantries are unlikely to be visible. Overall, the Project would be noticeable in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than moderate due to the retention of existing trees along the boundary of Cobham Hall Grade II* Registered Park and Garden reducing the extent of the Project visible. Design year (summer) Established planting along Brewers Road green bridge and scattered tree planting south of the WCH ramp would help to provide visual integration of the green bridge and partially screen views of passing vehicles. A narrow belt of established planting between the A2 and HS1 and retained existing vegetation on the edge of Cobham Hall Grade II* Registered Park and Garden would partially screen vehicle movements and highway infrastructure along the widened A2 corridor and western local distributor road. Overall, the Project would remain perceptible in views. Design year (winter) In winter, there would be filtered views of moving traffic along the widened A2 corridor through existing and proposed vegetation. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the retention of existing trees along the boundary of Cobham Hall Grade II* Registered Park and Garden reducing the extent of the Project visible. Night-time environment At night, there would be a slight perceivable change to views due to increased visibility of street lighting (LED luminaires) and vehicle lights along the A2 corridor	Highway Section 1

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							at opening year, due to the loss of the HS1 false cutting earthwork and vegetation adjacent to Brewers Road. However, this lighting would be viewed in the context of the existing lit condition of the A2 corridor. Visibility of lighting would reduce in night-time views at design year due to screening by existing and proposed vegetation.	
S-12	View from the Kent Downs AONB on Brewers Road/Luddesdown Trek/NCN Route 177*, adjacent to Brewers Wood/Shorne Wood (part of Shorne Woods Country Park) (LLCA West Kent Downs (sub area Shorne)). View centred south-south-west for recreational receptors. **NCN Route 177 to be diverted and not considered as part of visual receptors in the assessment at this location.* *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2))*	High	Moderate	Minor	Moderate adverse effect	Slight beneficial effect	<u>Opening year (winter)</u> The new Brewers Road green bridge would be seen in place of the existing bridge, softened by planting on both sides. As a result of vegetation loss along the north-west side of Brewers Road, there would be more open views in the direction of the widened A2 corridor and eastbound local distributor road, although only the tops of replacement street lighting columns (at a reduced height) are likely to be apparent. Replacement street lighting columns along Brewers Road green bridge would also be evident. Overall, the Project would be noticeable in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of highway infrastructure along the A2 corridor. <u>Design year (summer)</u> Established mitigation planting on Brewers Road green bridge and at the edge of Shorne Woods Country Park would help to provide visual integration of the new bridge and largely screen views towards the A2 corridor, except for glimpses of street lighting columns. However, permanent mature vegetation loss along the north of the A2 corridor to the south-west would be perceivable. Overall, the Project would result in a perceptible benefit to views. <u>Design year (winter)</u> In winter, there could be densely filtered views of a greater number of street lighting columns through the proposed native hedge along Brewers Road green bridge due to the loss of the woodland belt in the former central reservation. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the beneficial effects of the Project being slightly limited by the presence of highway infrastructure along the A2 corridor and Brewers Road green bridge. <u>Night-time environment</u> At night, there would be a slight perceivable change due to increased visibility of street lighting (LED luminaires) along the A2 corridor at opening year, as a result of vegetation loss. However, this lighting would be viewed in the context of the existing lit condition of the A2 corridor. Established mitigation planting would provide some filtering of lighting in night-time views at design year.	Highway Section 1
S-13	View from the Kent Downs AONB on Brewers Road	High	Major	Minor	Large adverse effect	Slight beneficial effect	This location is considered to represent a worst-case scenario given its elevated and unobstructed view along the A2 corridor to the east and west. Representative	Highway Section 1

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	overbridge and the Luddesdown Trek above the A2 eastbound carriageway (LLCA West Kent Downs (sub area Shorne)). View centred south for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).* *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*						Viewpoint S-14 provides an alternative worst-case view from the southern end of the bridge. <u>Opening year (winter)</u> The new Brewers Road green bridge would be seen in place of the existing bridge, softened by planting on both sides. Extensive loss of mature vegetation in the former A2 central reserve and along the edge of Shorne Woods Country Park would result in more open views along the widened A2 corridor, particularly of the westbound carriageway which was largely screened in the existing view. There would be views west and east towards the eight-lane A2 corridor and parallel local distributor roads, where vehicle movements would be visible along 12 lanes. To the south-west, views would be backdropped by the retained vegetation within the Shorne and Ashenbank Woods SSSI. On the A2 corridor, gantries would be prominent features, along with replacement street lighting (at a reduced height) and signage. Overall, the Project would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than very large due to the Project being viewed in the context of highway infrastructure along the A2 corridor. <u>Design year (summer)</u> Established mitigation planting along Brewers Road green bridge would largely screen views towards vehicle movements and highway infrastructure along the widened A2 corridor and local distributor roads, except for the tops of a few street lighting columns. Woodland planting along the edge of Shorne Woods Country Park would help to replace some of the existing vegetation removed. However, permanent mature vegetation loss along the north of the A2 corridor to the north-west would be perceivable. Overall, the Project would result in a perceptible benefit to views. <u>Design year (winter)</u> In winter, there could be densely filtered views of moving traffic and highway infrastructure through the proposed native hedge along Brewers Road green bridge. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the beneficial effects of the Project being slightly limited by the presence of highway infrastructure along the A2 corridor and Brewers Road green bridge. <u>Night-time environment</u> At night, the change in street lighting (LED luminaires) would result in a positive impact, with reduced height columns and a reduction of light spill and skyglow, although lighting would be more visible along the westbound carriageway than the existing situation as a result of vegetation loss in the central reservation. Establishment of mitigation planting along Brewers Road green bridge would provide additional filtering of lighting on the A2 corridor by the design year.	

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
S-14	View from the Kent Downs AONB on Brewers Road overbridge and the Luddesdown Trek above the A2 westbound carriageway/HS1 (LLCA West Kent Downs (sub area Shorne)). View centred north-east for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).* *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	High	Major	Minor	Large adverse effect	Slight beneficial effect	This location is considered to represent a worst-case scenario given its elevated and unobstructed view. Representative Viewpoint S-13 provides an alternative worst-case view from the northern end of the bridge. Opening year (winter) The new Brewers Road green bridge would be seen in place of the existing bridge, softened by planting on both sides. Views towards the A2 corridor would be more open due to extensive loss of mature vegetation within the former A2 central reservation and along the A2 north of HS1, particularly towards the eastbound carriageway which was previously largely screened. Vegetation loss at the edge of Shorne Woods Country Park would also be apparent. There would be views towards the repositioned eight-lane A2 corridor along with the parallel local distributor roads in westerly and easterly views. There would be 12 lanes visible with associated vehicle movements. In views of the A2 corridor, there would be a series of prominent features including retaining wall structures, replacement street lighting (at a reduced height), new signage and several gantries. In easterly views, these features would be visible up to approximately 1.2km, as far as Park Pale overbridge. Overall, the Project would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than very large due to the Project being viewed in the context of highway infrastructure along the A2 corridor. Design year (summer) Established mitigation planting on Brewers Road green bridge would largely screen views of vehicle movements and highway infrastructure along the widened A2 corridor and local distributor roads, apart from glimpses of street lighting columns. Woodland planting along the edge of Shorne Woods Country Park would help to replace some of the existing vegetation removed. However, permanent mature vegetation loss along the north of the A2 corridor to the north-west would be perceivable. Overall, the Project would result in a perceptible benefit to views. Design year (winter) In winter, there could be densely filtered views of moving traffic and highway infrastructure through the proposed native hedge along Brewers Road green bridge. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the beneficial effects of the Project being slightly limited by the presence of highway infrastructure along the A2 corridor and Brewers Road green bridge. Night-time environment At night, the change in street lighting (LED luminaires) would result in a positive impact due to the reduced height of columns and a reduction of light spill and skyglow, although lighting would be more visible along the eastbound carriageway than the existing situation as a result of vegetation loss. Establishment of mitigation	Highway Sections 1 and 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							planting along Brewers Road green bridge would provide additional filtering of lighting on the A2 corridor by the design year.	
S-15	View from the Kent Downs AONB on footpath NS178 located adjacent to the Halfpence Lane roundabout (LLCA West Kent Downs (sub area Cobham)). View centred north for recreational receptors.	High	Minor	No change	Slight adverse effect	Neutral effect	Opening year (winter) There would be close- to mid-range, direct views towards the modified A2 junction with Brewers Road, Halfpence Lane and Thong Lane, where the A2 slip roads would have been removed, as well as towards the realigned Thong Lane, the widened A2 corridor and new westbound local distributor road. Vehicle movements and highway infrastructure would be slightly more apparent due to the increased number of lanes along the A2 corridor and loss of vegetation from the central reserve. Thong Lane would appear slightly elevated to the north-west, although the retaining wall and embankment would largely be screened by retained vegetation. Vegetation loss would also be apparent on the Brewers Road/Halfpence Lane/Thong Lane roundabout island, along the south of the A2 and along the edge of Shorne Woods Country Park. The Project would be perceptible in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the Project being viewed in the context of the existing road corridor and roundabout. Design year (summer) Established mitigation planting around the Brewers Road/Halfpence Lane/Thong Lane roundabout and to the south of the A2 would restore the screening in views towards vehicle movements and highway infrastructure along the widened A2 and the local distributor road, with slightly less of the highway corridor apparent compared to the existing view. Established woodland along the edge of Shorne Woods Country Park would help reinstate some vegetation lost in the background. Overall, elements of the Project would be visible but features would not appear dissimilar to those seen in the existing view, therefore there would be no discernible change. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the substantial nature of proposed planting. Night-time environment At night, the change in street lighting (LED luminaires) would result in a positive impact due to the reduced height of columns and a reduction of light spill and skyglow, compared with existing street lighting. There would be a degree of filtering provided by established mitigation planting around the Brewers Road/Halfpence Lane/Thong Lane roundabout and to the south of the A2 by design year, reducing the influence of light sources visible in the night-time view.	Highway Sections 1 and 2
S-16	View from the Kent Downs AONB and Randall Heath Woods, on a permissive path within Shorne Woods Country	Very high	Minor	Negligible	Moderate adverse effect	Slight adverse effect	This location represents a worst-case, elevated view, where gaps in woodland allow glimpses towards the Project, with other views screened or densely filtered. Opening year (winter) There would be long-range, densely filtered views towards the new M2/A2/Lower Thames Crossing junction, including the false cutting along the Project road southbound to A2 eastbound slip road. Due to the elevation of the view, the false cutting would provide limited screening of the junction. There would be views of the	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Park (LLCA West Kent Downs (sub area Shorne)). View centred south-south-west for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2))*						Project road southbound to A2 westbound viaduct beyond the false cutting, which would partly reduce visibility of the wider junction, although glimpses of other elevated structures, retaining walls and earthworks would be apparent. Vehicle movements would be visible at the junction along with new street lighting. A number of new gantries are also likely to be visible, along with new signage. These features would be most prominent along the elevated Project road southbound to A2 westbound viaduct. Overall, the M2/A2/Lower Thames Crossing junction would be perceptible, but would only affect a small part of the view, with other parts of the junction heavily filtered by woodland within Shorne Woods Country Park. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the retention of existing trees in Shorne Woods Country Park reducing the extent of the Project visible. <u>Design year (summer)</u> In the summer view at design year, with the existing foreground mature trees and established mitigation planting in leaf, views towards the M2/A2/Lower Thames Crossing junction would be more glimpsed in nature. The Project would be barely noticeable in views. <u>Design year (winter)</u> In winter, the visual effect would not be notably different from that in summer, given the substantial nature of existing foreground woodland. <u>Night-time environment</u> At night, there would be a perceivable change to views due to increased visibility of street lighting (LED luminaires) and vehicle lights along elevated structures and viaducts at the M2/A2/Lower Thames Crossing junction. There would be a degree of filtering provided by established mitigation planting and foreground vegetation by design year, reducing the influence of light sources visible in the night-time view.	
S-17	View from the Kent Downs AONB on the NCN Route 177*/Timeball and Telegraph Trail Long Distance Path, on Thong Lane adjacent to The Inn on the Lake Hotel (LLCA West Kent Downs (sub area Shorne)). View centred south for recreational receptors.	High	Major	Moderate	Large adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> Following opening of the realigned Thong Lane and the Thong Lane green bridge south, views west would be dominated by the new bridge and embanked approach, replacing existing views towards Gravelhill Wood. New street lighting would also be visible along the new bridge, as well as glimpses of street lighting beyond the bridge along the new slip roads between the M2/A2/Lower Thames Crossing junction and the eastbound local distributor road and the A2. In south-easterly views, up to 14 carriageways would be partially visible including the widened A2 corridor, the local distributor roads and the new slip roads (the nearest carriageway being approximately 40m). Similar to the existing view, moving vehicles would be visible where the A2 is at grade, with a series of prominent features visible along the A2 corridor, including two gantries, replacement street lighting and signage. The new street lighting would replace existing taller features, although a greater number of columns would be visible. A substantial new retaining wall between the southern edge of the A2 corridor and the elevated Thong Lane	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	**NCN Route 177 to be diverted and not considered as part of visual receptors in the assessment at this location.* *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2))*						diversion would also be apparent. Extensive vegetation loss south of the A2 would alter the wooded backdrop to views. Overall, the Thong Lane green bridge south, the modified A2 corridor and extensive vegetation loss would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than very large due to the Project being viewed in the context of the existing A2 corridor. Design year (summer) Established mitigation planting along the embanked approach to the Thong Lane green bridge south, planting along the green bridge, and planting along the modified A2 corridor would soften the appearance of the bridge structure and associated earthworks, street lighting and moving vehicles. However, increased vehicle movements, gantries, street lighting and signage would remain apparent to the south-east, as would the substantial retaining wall between the A2 and the realigned Thong Lane. Views would also remain more open in character due to vegetation loss, although mitigation planting south of the realigned Thong Lane would provide some reinstatement. Overall, the Project would be noticeable in views, largely due to the green bridge structure. Design year (winter) In winter, the visual effect would not be notably different to that in summer, given the close-range view of the Project. However, there would be a slight reduction in the softening of the bridge structure provided by the proposed planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of the existing A2 corridor. Night-time environment At night, there would be a perceivable change to views due to increased visibility of street lighting (LED luminaires) along Thong Lane and the Thong Lane green bridge south compared to the existing bridge, which did not incorporate street lighting. A greater number of lighting columns would also be visible along the A2 corridor, slip roads and local distributor roads. However, new lighting would be at a reduced height compared to existing lighting, and there would be a reduction in light spill and skyglow. In addition, lighting would be viewed in the context of the existing lit condition of the A2 corridor. Night-time visual effects would be the same in the opening year and design year.	
S-18	View from the Kent Downs AONB on the HS1 green bridge and Timeball and Telegraph Trail Long Distance Path (LLCA West Kent	Very high	Major	Moderate	Very large adverse effect	Large adverse effect	Opening year (winter) As a result of vegetation loss between the A2 corridor and HS1, there would be close- to mid-range views north-west towards the realigned Thong Lane and the Thong Lane green bridge south, which would be located slightly further away than the existing bridge but would still form a prominent feature spanning the widened A2 corridor. The bridge structure is likely to restrict more distant visibility north-west towards the M2/A2/Lower Thames Crossing junction. The elevated Thong Lane	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Downs (sub area Cobham)). View centred north-west for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*						would largely screen views of vehicle movements along the widened A2 corridor. New gantries and lighting columns (at a reduced height) would be visible along the A2 corridor, with new street lighting visible along Thong Lane and the Thong Lane green bridge south. Overall, extensive vegetation loss across the wider view, and the prominent Thong Lane green bridge south and the elevated Thong Lane, would dominate views. <u>Design year (summer)</u> An established hedgerow along the Thong Lane green bridge south would filter views of vehicle movements, although the bridge structure would remain clearly visible. Established mitigation planting to the north and south of the realigned Thong Lane would soften the appearance of the bridge structure, although lighting columns and gantries would remain apparent along the A2 corridor. Overall, the Project would be noticeable in views. <u>Design year (winter)</u> In winter, the visual effect would not be notably different to that in summer, given the close-range view of the Project. However, there would be a slight reduction in the softening of the bridge structure provided by the proposed planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than very large due to the Project being viewed in the context of highway infrastructure along the A2 corridor. <u>Night-time environment</u> At night, there would be a perceivable change to views due to increased visibility of street lighting (LED luminaires) along Thong Lane and the Thong Lane green bridge south. A greater number of lighting columns would also be visible along the A2 corridor, slip roads and local distributor roads. However, new lighting would be at a reduced height compared to existing lighting, and there would be a reduction in light spill and skyglow. In addition, lighting would be viewed in the context of the existing lit condition of the A2 corridor. Established mitigation planting would provide some filtering of lighting in night-time views north-west at design year.	
S-19	View from footpath NS177, located within Jeskyns Community Woodland. Also represents views from footpath NS177A (LLCA Istead Arable Farmlands). View centred north-west for recreational receptors.	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Views from footpath NS177 are heavily filtered by intervening woodland within Jeskyns Community Woodland. It is anticipated that establishing existing woodland would further restrict visibility towards the Project by opening year. A worst case has been assessed for the opening year based on current planting heights. However, a realistic assumption for growth and the resulting increased screening has been assessed at design year. <u>Opening year (winter)</u> There would be mid-range views towards the Project, limited to taller elements of the new M2/A2/Lower Thames Crossing junction, including the prominent Project road southbound to A2 westbound viaduct, supporting structures and retaining walls. The new junction and associated highway infrastructure and vehicle traffic would be partially visible above the intervening vegetation within Jeskyns Community Woodland, but at a distance of approximately 1km and seen against the backdrop of the surrounding landform and woodland in the wider view.	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Vegetation loss at Claylane Wood, along the northern edge of the modified A2 corridor and between the A2 and HS1 would be apparent across the wider view. The replacement OHL pylon within Claylane Wood would appear larger than the existing pylons visible in the midground, although would not notably change the existing view given the distance (approximately 1.1km) and the presence of the existing OHL pylon to be replaced. Overall, vegetation loss and new road elements at the M2/A2/Lower Thames Crossing junction would be noticeable in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to retained existing vegetation limiting the extent of the Project visible. Design year (summer) With the anticipated growth of the existing foreground woodland providing additional screening, views of the Project would be reduced in the design year. In addition, established mitigation planting at the M2/A2/Lower Thames Crossing junction would help to provide integration and screening of the junction elements. However, the Project road southbound to A2 westbound viaduct and associated street lighting and vehicle movements are likely to remain apparent. Overall, the Project would be perceptible in views. Design year (winter) In winter, the visual effect would not be notably different from that in summer, given the extent of existing foreground woodland in conjunction with proposed woodland planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to retained existing vegetation limiting the extent of the Project visible. Night-time environment At night, there would be a perceivable change to views due to increased visibility of street lighting (LED luminaires) and vehicle lights along elevated structures and viaducts at the M2/A2/Lower Thames Crossing junction, although this would be viewed in the context of existing lighting along the A2 corridor and skyglow from Gravesend. Established mitigation planting would provide some additional filtering of lighting in night-time views at design year.	
S-20	View from a recreational permissive route within Jeskyns Community Woodland (LLCA Istead Arable Farmlands). View centred north-east	High	Minor	Negligible	Moderate adverse effect	Slight adverse effect	Opening year (winter) There would be mid- to long-range views of taller elements of the M2/A2/Lower Thames Crossing junction, in particular the prominent Project road southbound to A2 westbound viaduct, its supporting structures and retaining walls and the Project road southbound to A2 eastbound slip road on embankment. These elements would be viewed against a backdrop of landform and woodland and seen in the context of the existing OHL pylons, which form a focal point in the existing view, and HS1 infrastructure.	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*						Vehicle movements on the new viaduct structures and elevated sections of road would be visible, as well as new street lighting. New gantries and replacement street lighting would also be apparent along the A2. Through breaks in intervening vegetation along the edge of HS1, there could be long-range views towards the Thong Lane green bridge south. The replacement OHL pylon within Claylane Wood, although notably taller than the existing pylon, would not notably change the existing view given the presence of existing pylons in the foreground. Overall, new road elements at the M2/A2/Lower Thames Crossing junction would be perceptible in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than slight due to vegetation loss increasing the extent of the Project visible. <u>Design year (summer)</u> Established mitigation planting within Jeskyns Community Woodland, at the M2/A2/Lower Thames Crossing junction and along Thong Lane and the A2 would help to provide integration and screening of the junction and associated highway infrastructure, as well as restoring vegetation removed during construction. However, parts of the Project road southbound to A2 westbound viaduct and associated street lighting and vehicle movements are likely to remain apparent. Overall, the Project would be barely noticeable in the view. <u>Design year (winter)</u> In winter, the visual effect would not be notably different from that in summer, given the extent of proposed planting. <u>Night-time environment</u> At night, there would be a perceivable change to views due to increased visibility of street lighting (LED luminaires) and vehicle lights along the Project road southbound to A2 eastbound slip road, the Project road southbound to A2 westbound viaduct and along Thong Lane green bridge south, although this would be viewed in the context of existing lighting along the A2 corridor and skyglow from Gravesend. Established mitigation planting would largely screen lighting in night-time views at design year, apart from glimpses of lighting along the Project road southbound to A2 westbound viaduct.	
S-20a	View from Jeskyns Community Woodland. Also represents views from northern end of footpath NS177 (LLCA Istead Arable Farmlands). View centred north-east for recreational receptors.	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	There would be slightly greater visibility than the S-20 Representative Viewpoint, due to it being slightly more elevated. <u>Opening year (winter)</u> There would be mid- to long-range visibility of taller elements at the new M2/A2/Lower Thames Crossing junction, including the Project road southbound to A2 eastbound slip road on embankment and the prominent Project road southbound to A2 westbound viaduct, its supporting structures and retaining walls. New road elements, street lighting and vehicle movements would be visible above the intervening vegetation within Jeskyns Community Woodland, but seen against the backdrop of the surrounding landform and wooded ridge within the Kent Downs AONB.	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).						New gantries and replacement street lighting would be apparent along the A2. There would also be views of the new Thong Lane green bridge south. Due to the elevation of the view, gantries could potentially be visible beyond the Thong Lane green bridge south. Modifications to the OHL would appear similar to the existing OHL. Overall, a notable proportion of the view would be affected by the new M2/A2/Lower Thames Crossing junction and associated structures and highway infrastructure, which would comprise noticeable features in the view. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of the existing road corridor and OHL. <u>Design year (summer)</u> Following the establishment of mitigation planting within Jeskyns Community Woodland, at the M2/A2/Lower Thames Crossing junction and along Thong Lane and the A2, the Lower Thames Crossing southbound to A2 westbound viaduct would remain visible above vegetation, including street lighting and vehicle movements. Other elements at the junction and along the A2 corridor would largely be screened, although the tops of some gantries could potentially remain visible along the A2, as well as the Thong Lane green bridge south. Overall, the Project would remain perceptible in views. <u>Design year (winter)</u> In winter, the visual effect would not be notably different from that in summer, given the extent of proposed planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the Project being viewed in the context of the existing road corridor and OHL. <u>Night-time environment</u> At night, there would be a perceivable change to views due to increased visibility of street lighting (LED luminaires) and vehicles along the Project road southbound to A2 eastbound slip road, the Project road southbound to A2 westbound viaduct and along Thong Lane green bridge south. However, new lighting would be seen in the context of existing lighting along the A2 corridor and skyglow from Gravesend. Established mitigation planting would provide some additional filtering of lighting in night-time views at design year and less lighting would be visible compared to the existing view.	
S-21	View from footpath NU29/Wealdway recreational route to the north of Ifield Court. Also represents views from footpath NU18 (LLCA Istead Arable	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	<u>Opening year (winter)</u> There would be mid-range views towards several new and replacement gantries along the A2, replacement street lighting (at a reduced height) and new signage. Vehicle movements on the A2 corridor would appear similar to the existing view. Changes would be perceptible but would be seen in the context of the existing A2 corridor, therefore the overall balance of features would not be affected.	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Farmlands). View centred east-north-east for recreational receptors.						*Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the Project being viewed in the context of the existing road corridor. <u>Design year (summer)</u> In the summer at design year, dense hedgerows along field boundaries and established mitigation planting to the south of the A2 corridor would help to filter views towards the Project and partially screen highway infrastructure along the A2 corridor. Overall, the Project would be barely noticeable in views. <u>Design year (winter)</u> In winter, the A2 corridor would be slightly more apparent than in summer views, however, the visual effect of the Project would not be notably different to the influence of the A2 corridor in existing summer views. <u>Night-time environment</u> At night, the change in street lighting (LED luminaires) would result in a positive impact due to the reduced height of columns and a reduction of light spill and skyglow, as street lighting is present in the existing view along the A2 corridor. There would be a degree of filtering provided by established mitigation planting by design year, further reducing the influence of light sources visible in the night-time view.	
S-22	View from Watling Street on the A2 overbridge (LLCA Gravesend Southern Fringe). View centred east-south-east for users of the main road. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*	Low	Minor	Negligible	Slight adverse effect	Neutral effect	<u>Opening year (winter)</u> There would be close-range, oblique views towards the full width of the repositioned eight-lane A2 corridor, a slip road between the M2/A2/Lower Thames Crossing junction and the A2, and associated vehicle movements. There would be increased visibility of road elements and highway infrastructure as a result of vegetation loss in the immediate foreground, along the A2 corridor and within Claylane Wood, as well as the loss of a gantry in the midground. On the modified A2 corridor, this would include two gantries, new retaining structures, new street lighting (at a reduced height) and new signage. In the midground (approximately 0.75km), there would also be views towards the new Project road southbound to A2 westbound viaduct, although this would be partially obscured by a new gantry. Glimpses of the other carriageways, structures and highway infrastructure would be apparent at the junction beyond the viaduct and the gantry. The replacement OHL pylon visible in the midground within Claylane Wood, although notably taller than the existing pylon, would not notably change the existing view given the presence of existing pylons. Overall, the Project would be perceptible in views, although would not alter the overall balance of features and elements that constitute the existing view. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than neutral due to a reduction in roadside planting and the widened A2 corridor and M2/A2/Lower	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Thames Crossing junction appearing in a greater proportion of the view than the existing A2 corridor. Design year (summer) Following establishment of mitigation planting, views of the Project road southbound to A2 westbound viaduct and other slip roads, highway infrastructure and structures at the M2/A2/Lower Thames Crossing junction would be filtered and the modified A2 corridor would be more enclosed, reducing the apparent scale of the overall highway corridor. Gantries, street lighting and vehicle movements along the wider A2 corridor would appear as in existing views, although a greater number of lighting columns would be visible. Overall, the Project would be barely noticeable in views. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the angle of view and proximity of the Project. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as neutral rather than slight due to the Project appearing similar to the existing A2 corridor in views. Night-time environment At night, the change in street lighting (LED luminaires) would result in a positive impact due to the reduced height of columns and a reduction of light spill and skyglow, as existing street lighting is present in the view along the A2 corridor. However, there would be a greater number of lighting columns present, with slightly increased visibility of lighting as a result. Night-time visual effects would be similar in opening year and design year.	
S-23	View from NCN Route 177 adjacent to Claylane Wood, and the A2/Watling Street (LLCA Gravesend Southern Fringe). View centred south-east for recreational receptors.	N/A	Not assessed	Not assessed	Not assessed	Not assessed	This route would be permanently stopped up and become part of the M2/A2/Lower Thames Crossing junction, with the existing PRoW/WCH links diverted away from this location, therefore this receptor has not been considered as part of the visual assessment during construction or operation.	N/A
S-24	View from footpath NS167 adjacent to Claylane Wood. Also represents views from bridleway NS174 (LLCA Higham Arable Farmland (sub area Thong)) looking towards the	Moderate	Major	Major	Large adverse effect	Large adverse effect	The existing PRoW would be diverted to a new alignment skirting proposed woodland edge planting east of Claylane Wood. The assessment of visual effects from S-24 has therefore been made from a slightly different location to the existing viewpoint location (slightly closer to the Project), however, the viewpoint is considered comparable to the existing viewpoint location for assessment purposes. Opening year (winter) There would be close-range views of the new M2/A2/Lower Thames Crossing junction, in particular the embankment of the local distributor road to Project slip road and an attenuation basin. The embankment would form a dominating feature in the foreground. There would also be views towards the prominent Project road southbound to A2 westbound viaduct and the A2 eastbound local distributor road	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Kent Downs AONB. View centred east for recreational receptors.						viaduct, with associated vehicle movements, highway infrastructure and street lighting visible. The new junction would obscure views of the wooded skyline in the current backdrop to the view. In southerly views, the loss of the eastern edge of Claylane Wood would increase visibility towards the widened A2 corridor, although this would be partially obscured by the embankment of the local distributor road to Project slip road. Two new gantries, new and replacement street lighting and new signage would be apparent along the A2 and the slip road. The replacement OHL pylon within Claylane Wood would be visible to the south-west. An additional OHL pylon would also be visible to the north-east, and one pylon would appear closer. However, the new and replacement pylons would not notably change the existing view given the presence of existing OHL. New elements would be visible across the full extent of this broad view. Overall, the Project would dominate views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than moderate due to the Project appearing across a large proportion of the view. <u>Design year (summer)</u> Established mitigation planting along the embankment of the local distributor road to Project slip road and within the wider M2/A2/Lower Thames Crossing junction would soften the appearance of earthworks and structures and partially screen views of vehicle movements. However, it is likely that vehicle movements, highway infrastructure and street lighting would remain visible above vegetation due to their elevated position on viaducts and embankments. In addition, views would be foreshortened. To the south, the modified A2 corridor would be largely screened by established mitigation planting along the embankment of the local distributor road to Project slip road and reinstatement planting east of Claylane Wood. Overall, the Project would remain dominant in views. <u>Design year (winter)</u> In winter, the visual effect would not be notably different from that in summer given the proximity of the viewer and dominance of the Project in the view. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than moderate due to the Project appearing across a large proportion of the view. <u>Night-time environment</u> At night, there would be a prominent change in views due to increased visibility of street lighting (LED luminaires) and vehicle lights, in particular along the elevated Project road southbound to A2 westbound viaduct. However, new lighting would be viewed in the context of existing lighting in Gravesend. Overall, light sources would span a broader extent of the available view than existing views of lighting along the A2 corridor, however, by design year established mitigation planting would partially screen new lighting.	
S-25	View from footpath NS167 at the western edge of Thong village and	Moderate	Major	Minor	Large adverse effect	Slight adverse effect	<u>Opening year (winter)</u> Following opening of footpath NS174, there would be close-range views of the prominent new embankment and false cutting slopes associated with the Project road southbound to A2 eastbound slip road at the M2/A2/Lower Thames Crossing	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Thong Conservation Area (LLCA Higham Arable Farmland (sub area Thong)). View centred south-west for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).* *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*						junction and a new WCH route (approximately 80m) in the foreground. The false cutting would curtail views of the wider landscape and the A2 corridor beyond. While the carriageway would not be visible, street lighting, signage and the upper sections of high-sided vehicles would be apparent across the full extent of this view. The replacement OHL pylon within Claylane Wood, notably taller than the existing pylon, would be visible above the new junction and skyline, but alone would not notably change the existing view given the presence of existing pylons. Overall, the false cutting slope would be dominant and would foreshorten views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than moderate due to the Project appearing across a large proportion of the view. Design year (summer) Following the establishment of mitigation planting at the M2/A2/Lower Thames Crossing junction and along the false cutting slopes, vehicle movements and highway infrastructure would be screened. There would be a foreshortening of views as a result of the established mitigation planting, although these planting areas would be in keeping with the wooded backdrop of existing views, and would provide screening of the A2 corridor. Overall, the Project would result in a perceptible foreshortening of views but would maintain the nature of the existing wooded backdrop. Design year (winter) In winter, the visual effect would not be notably different from that in summer, given the substantial nature of the woodland mitigation planting. Night-time environment At night, there would be a perceivable change in the opening year due to increased visibility of street lighting (LED luminaires) at the M2/A2/Lower Thames Crossing junction, with some lighting visible above the skyline. However, views of new lighting would replace existing views of lighting along the A2 corridor, which currently spans much of the existing view. By design year, established mitigation planting on the false cutting slopes would screen lighting in night-time views.	
S-26	View from Thong village and Thong Conservation Area (residential properties along the east of Thong Lane) (LLCA Higham Arable Farmland (sub area Thong)). View centred south-south-east for residential receptors.	High	No change	No change	Neutral effect	Neutral effect	The built form and settlement context, together with established and mature peripheral vegetation within Thong village along Thong Lane, would result in no elements of the Project being discernible from this location.	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
S-27	View from footpath NS169, looking towards Shorne Woods and the Kent Downs AONB (LLCA Higham Arable Farmland (sub area Thong)). View centred east-south-east for recreational receptors.	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> The new M2/A2/Lower Thames Crossing junction would be visible in the midground across the full extent of this broad view. In south-easterly views, the new local distributor road to Project slip road would be a notable elevated feature on embankment, and the Project road southbound to A2 westbound viaduct would appear as a dominant skyline feature (approximately 0.4km). There would also be visibility of the A2 eastbound local distributor viaduct. Collectively, these new elevated features would partially screen views of the wooded ridgeline in the backdrop. New highway infrastructure and moving vehicles would be prominent across the view, including several gantries, street lighting and signage, some of which would be visible above the skyline. To the east and north-east, the Project route would be in cutting and largely screened due to intervening rising landform, although street lighting, two gantries and signage would be apparent. In southerly views, the loss of the eastern edge of Claylane Wood would increase visibility towards the modified A2 corridor. Vegetation loss along the modified A2 corridor would also be readily apparent, allowing visibility towards the realigned Thong Lane, which is slightly elevated. There would also be views of an attenuation basin. The replacement OHL within Claylane Wood, including one notably taller pylon, would not notably change the existing view given the presence of existing pylons. An additional OHL pylon would also be visible to the north-east, and one pylon would appear closer. However, the diverted OHL would appear similar to the existing OHL. Overall, the Project would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than moderate due to the Project appearing across a large proportion of the view. <u>Design year (summer)</u> Established mitigation planting along the embankment of the local distributor road to Project slip road and within the wider M2/A2/Lower Thames Crossing junction would soften the appearance of earthworks and structures and partially screen views of vehicle movements. However, it is likely that vehicle movements, highway infrastructure and street lighting would remain visible above vegetation due to their elevated position on viaducts and embankments. In addition, filtered views of the cutting slopes, signage, gantries and street lighting along the Project route would remain to the east and north-east, with filtered views of the attenuation basin to the south-east. To the south, the modified A2 corridor would be largely screened by established mitigation planting along the embankment of the local distributor road to Project slip road and reinstatement planting east of Claylane Wood. Overall, the Project would be noticeable in views.	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							<u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the proximity of the Project, although proposed screen planting in the foreground may be slightly less effective in winter. <u>Night-time environment</u> At night, there would be a prominent change in views due to increased visibility of street lighting (LED luminaires) and vehicle lights, including along the elevated Project road southbound to A2 westbound viaduct. However, new lighting would be viewed in the context of existing lighting in Gravesend. Overall, light sources would span a much broader extent of the available view than existing lighting on the A2 corridor. There would be a degree of filtering of lighting not raised on viaduct/embankment provided by established mitigation planting by design year.	
S-28 & S-(CH)01	View from footpath NS169 adjacent to Gravesend urban edge, looking towards Shorne Woods within the Kent Downs AONB, and St Mary Magdalene Church, Cobham (LLCA Higham Arable Farmland (sub area Thong)). View centred east-south-east for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).* *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> There would be mid- to long-range, wide views of the new M2/A2/Lower Thames Crossing junction, located beyond the newly created open space in the foreground, which would predominantly comprise species-rich chalk grassland. In the south-easterly view, the new local distributor road to Project slip road would be a notable elevated feature on embankment, and the Project road southbound to A2 westbound viaduct would appear as a dominant skyline feature (approximately 0.7km). The A2 eastbound local distributor viaduct and the false cutting along the edge of the Project road southbound to A2 eastbound slip road would also be visible behind. Vehicle movements and new highway infrastructure such as street lighting and signage would be visible across the various carriageways, some of which would be visible above the skyline. In southerly views, the loss of the eastern edge of Claylane Wood would increase visibility towards the southern part of the new junction. The replacement OHL within Claylane Wood, including one notably taller pylon, would not notably change the existing view given the presence of existing pylons. An additional OHL pylon would also be visible to the east, and one pylon would appear closer. However, the diverted OHL would appear similar to the existing OHL. The earthwork slopes of the false cutting associated with the Project road southbound to A2 eastbound slip road (approximately 0.55km) would partially restrict visibility of the wooded ridge beyond to the south-east, although the wooded ridge would remain visible to the east over the Project route in cutting. To the east and north-east, the Project route would be largely screened within the cutting apart from street lighting, two gantries and signage. New elements would be visible across the full extent of this broad view. Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Established woodland within the ancient woodland compensation area along the urban edge of Gravesend would result in a slight narrowing of views from this location. However, views would remain towards the northern part of the M2/A2/Lower Thames Crossing junction, and the southern part of the cutting along the Project route. Established mitigation planting along the embankment of the local distributor road to Project slip road and within the wider M2/A2/Lower Thames Crossing junction	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							would soften the appearance of earthworks and structures and partially screen views of vehicle movements. The Project road southbound to A2 westbound viaduct would remain apparent above vegetation, along with vehicles and highway infrastructure elevated on the viaduct. Signage, two gantries and street lighting would also be visible above the cutting along the Project route to the east. Overall, the Project would remain noticeable in views. Design year (winter) In winter, the lower parts of the Project viaducts and traffic on junction embankments would be slightly more visible, filtered by proposed woodland planting. However, the overall visual effect would not be notably different from that in summer, given the substantial nature of proposed planting. Night-time environment At night, there would be a prominent change in views due to increased visibility of street lighting (LED luminaires) and vehicle lights, in particular along the elevated Project road southbound to A2 westbound viaduct, replacing existing views of lighting along the A2 corridor. Overall, light sources would span a broader extent of the available view and appear more prominent than existing lighting along the A2 corridor. There would be a degree of filtering provided by established mitigation planting by design year, although viaduct lighting would remain prominent.	
S-29	View from the Kent Downs AONB on Shorne Ifield Road located to the north of Shorne Woods Country Park (LLCA Higham Arable Farmland (sub area Chalk)). View centred north-west for users of the local road.	High	Minor	Minor	Slight adverse effect	Slight adverse effect	Opening year (winter) The pole mounted OHL would have been removed from the foreground view. In the midground, the cutting for the South Portal would be visible, together with the new attenuation basins. While the carriageway and associated vehicle movements and highway infrastructure would largely be obscured by the cutting slopes, the upper sections of the chalk slopes would be apparent, with the cutting appearing as a new linear feature in the landscape. Above the South Portal cutting slopes, a new species-rich grassed open space would be visible. Modifications to the OHL to the north would appear similar to the existing OHL. Overall, the Project would be perceptible in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the limited overall effect on the elevated, distant view. Design year (summer) Following establishment of woodland in the proposed ancient woodland compensation area, views north-west towards the Project would be screened. A vista would be incorporated within the planting to maintain a partial long-range view north over the River Thames towards the distant hills. The vista would exclude existing detracting features such as pylons, where practicable. Overall, the proposed woodland planting would result in a perceptible adverse change in views. The foreshortening of views due to woodland planting would be reduced through the provision of a vista.	Highway Sections 2 and 3

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							<u>Design year (winter)</u> In winter the visual effects would not be notably different from that in summer, given the substantial nature of the ancient woodland compensation planting in the foreground. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate, as the foreshortening of views due to woodland planting would be reduced through the provision of a vista. <u>Night-time environment</u> At night, there would be a perceivable increase in light sources along the Project route due to new street lighting (LED luminaires), although the cutting slopes would largely contain the new lighting, which would be seen in the context of existing lighting within Tilbury and Thurrock. By design year, established ancient woodland compensation planting would screen lighting in night-time views.	
S-30	View from Thong Lane in the eastern urban edge of Gravesend (Riverview Park) adjacent to the entrance of Southern Valley Golf Club (LLCA Gravesend Urban Area). View centred south-south-east for users of the local road. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	<u>Opening year (winter)</u> As a result of vegetation loss at close range, there would be an open view of the new WCH route and Thong Lane green bridge north (approximately 0.1km). A new species-rich grass open space would be visible around the upper slopes of the South Portal cutting, as well as a highway boundary fence. Moving vehicles and highway infrastructure would be concealed within the cutting, apart from the tops of street lights. The upper part of the cutting slope would also be apparent, with the colour of the exposed chalk substrate initially appearing prominent. Due to the loss of vegetation in the midground, there would be increased visibility beyond the Project towards the wooded ridgeline within the Kent Downs AONB (approximately 0.7km). In addition, a replacement OHL pylon would be visible, although it would not be dissimilar in appearance to the existing pylon it replaces, with the exception that the base would initially be less screened by vegetation. Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Established mitigation planting adjacent to and above the Thong Lane green bridge north would restore a similar level of screening to the existing view, and soften the appearance of the bridge structure, the South Portal cutting and the OHL pylon. In addition, the colour of the chalk rock and scree slope along the South Portal cutting would soften with weathering over time and appear less prominent. Overall, the Project would be perceptible in views but would not be intrusive. <u>Design year (winter)</u> In winter, the visual effects would not be notably different from that in summer, given the proximity of the view, the sunken nature of the Project road and the substantial nature of proposed mitigation planting. <u>Night-time environment</u> At night, there would not be a perceivable change to the view, as new street lighting would not be visible.	Highway Sections 2 and 3

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
S-31	View from footpath NG8 located within Southern Valley Golf Club at the urban edge of Gravesend (Riverview Park) (LLCA Higham Arable Farmland (sub area Chalk)). View centred east-north-east for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).* *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Footpath NG8 would be diverted slightly further north from this viewpoint location, however, this view is still considered to be representative of the PRoW. Opening year (winter) There would be close-range views across a new species-rich grass open space in the foreground towards the South Portal cutting (approximately 60m). The upper sections of the chalk slopes would be apparent, with the colour of the exposed chalk substrate initially appearing prominent. The Project carriageway and moving vehicles would be obscured by the cutting slopes, however, the highway boundary fence and the upper sections of two new gantries and street lighting would be visible above the cutting. There would also be glimpses of the attenuation basins in the dry valley to the east. The line of modified OHL pylons beyond the Project cutting would appear more prominent in the landscape due to vegetation loss within the Southern Valley Golf Club and around the former Hartshill Nursery. Overall, the Project would be noticeable in views. Design year (summer) Established mitigation planting along the edge of the South Portal cutting slopes would largely screen the cutting and street lighting to the south-east and east. However, mid-range views towards the gantries and the upper sections of the chalk slopes would remain to the north-east. The colour of the chalk rock and scree slope along the South Portal cutting would soften over time and appear less prominent. Established woodland planting mitigation would also result in the loss of attractive distant views east towards the wooded ridge at Shorne Woods Country Park within the Kent Downs AONB. Overall, the Project would be perceptible in views. Views east would be foreshortened by woodland planting. However, this planting would soften views of OHL. In addition, long-range views north-east would be maintained towards the River Thames. Design year (winter) In winter, the visual effects would not be notably different from that in summer, given the vertical alignment of the Project road in cutting. Night-time environment At night, there would be a perceivable increase in light sources along the Project route due to new street lighting (LED luminaires) within the typically unlit landscape to the east of Riverview Park, Gravesend. However, this view is currently influenced by distant light sources north of the River Thames, including London Gateway Port and Canvey Island. By design year, established mitigation planting would provide some filtering of lighting in night-time views.	Highway Sections 2 and 3
S-32	View from elevated location along footpath NS316 located immediately west of Shorne Hill, with views to the Kent Downs AONB.	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Opening year (winter) The South Portal cutting slopes would be just apparent in long-range views as a new linear feature in the landscape, seen in the context of the existing urban backdrop of Gravesend and of Grays and Tilbury beyond the River Thames, with the upper sections of the chalk slopes just visible. The hilltop landform associated with Chalk Park would also be visible beyond, in front of some buildings in Gravesend. The new attenuation basins within the dry valley would also be just	Highway Sections 2 and 3

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Also represents views from footpath NS163 (LLCA Higham Arable Farmland (sub area Chalk)). View centred west for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*						apparent. The basins would be set within a landscape reinstated to agriculture, with newly planted hedgerows forming the boundaries to restored agricultural fields. Modifications to the OHL crossing the mid-range view would appear similar to the existing OHL. A line of pole mounted OHL would have been removed from the midground. Loss of mature vegetation would be apparent across the wider view. Overall, the Project would be perceptible in views but would not be intrusive. <u>Design year (summer)</u> The South Portal cutting slopes and attenuation basins would remain just apparent. Established mitigation planting to the north-east of Thong Lane, at the hilltop landform associated with Chalk Park, along parts of the cutting and along field boundaries would soften the appearance of the cutting slope edges and hilltop landform. Established mitigation planting would also help to reinstate lost vegetation. Overall, the Project would be perceptible in views but would not be intrusive. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the expansive panoramic view and the distance from the Project. <u>Night-time environment</u> At night, there would be a perceivable increase in light sources along the Project route due to new street lighting (LED luminaires), although the cutting slopes are likely to provide some containment of lighting. New lighting would be viewed in the context of existing lighting within Gravesend, Tilbury, Chadwell St Mary and Grays. Night-time visual effects would be similar in opening year and design year.	
S-33	View taken at intersection of footpaths NG7, NG8, NG9, on northern edge of Southern Valley Golf Club (LLCA Higham Arable Farmland (sub area Chalk)). View centred north-west for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	The PRoW would be slightly diverted to follow a new hedgerow field boundary slightly north of its current position. This view is still considered to be representative of the PRoW. <u>Opening year (winter)</u> There would be mid-range views of the upper sections of the chalk slopes and the top of the large South Portal. The colour of the exposed chalk substrate would initially appear as a prominent feature. The Project carriageway, Tunnel Service Building, street lighting, signage and gantries would be concealed within the cutting. There would, however, be views beyond the cutting to the new hilltop landform within Chalk Park, which would be a notable feature, obscuring views of Riverview Park and Windmill Hill, Gravesend but with remaining views towards Tilbury Docks. Loss of mature vegetation would be apparent at Gravesend Golf Centre, opening up views further to the hilltop landform at the new Chalk Park open space. In the broader view, a new substation would be just apparent on the lower arable slopes adjacent to the A226, as well as an access road between the South Portal and the A226, and the Rendezvous Point. A new species-rich grass open space would be visible around the South Portal, set within a wider landscape reinstated to agriculture. Overall, the prominent cutting and hilltop landform would be noticeable in views.	Highway Section 3

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2))						<u>Design year (summer)</u> Established mitigation planting at the hilltop landform associated with Chalk Park, adjoining the South Portal cutting and along field boundaries would soften the appearance of the cutting slope edges and hilltop landform. Established mitigation planting would also help to reinstate lost vegetation. The colour of the chalk rock and scree slope along the South Portal cutting would soften over time and appear less prominent. However, the South Portal and approach cutting would remain apparent in part of the view. Overall, the Project would remain perceptible in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the limited planting proposed in front of the South Portal cutting, in order to maintain some distant views across the Thames Estuary. <u>Night-time environment</u> At night, there would be a perceivable increase in light sources along the Project route due to new street lighting (LED luminaires), although the cutting would provide some containment of lighting. New lighting would be viewed in the context of existing lighting within Tilbury, Chadwell St Mary and Grays. Night-time visual effects would be similar in opening year and design year.	
S-34	View from footpath NS163A located adjacent to residential properties fronting the A226 Gravesend Road (LLCA Higham Arable Farmland (sub area Chalk)). View centred south-west for recreational receptors.	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	<u>Opening year (winter)</u> New attenuation basins would be visible within the dry valley in the midground to the south-west (approximately 0.65km). The attenuation basins would be seen in the context of a new species-rich grass open space to the north-west and reinstated agricultural fields bounded by newly planted hedgerows to the east and south-east. In long-range views south-west (approximately 1.7km), vegetation loss along Thong Lane, within Southern Valley Golf Club and around the former Hartshill Nursery would allow visibility towards the Thong Lane green bridge north. Modifications to the OHL would appear similar to the existing OHL, although an additional pylon would be visible in the distance. A line of broadly parallel pole mounted OHL would have been removed from the view. Due to the intervening landform, the hilltop landform associated with Chalk Park and the South Portal cutting would not be visible. Overall, the Project would be perceptible in views. <u>Design year (summer)</u> Established hedgerow planting would restore lost features and soften views towards the attenuation basins. Established individual tree planting would also filter views towards the more distant attenuation basins. Mitigation planting on and adjacent to Thong Lane green bridge north would screen views of the bridge and reinstate lost vegetation in the distance. Overall, the Project would be barely noticeable in the view. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the distance to the Project and established hedgerow field boundaries.	Highway Section 3

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as slight rather than neutral due to the Project being perceivable in part of the view. <u>Night-time environment</u> At night, from this location there would be no perceivable change caused by the Project.	
S-35 & S-(CH)03a	View from A226 Gravesend Road near Chalk (LLCA Higham Arable Farmland (sub area Chalk)). View centred south-south-east for users of the main road. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	Low	Moderate	Negligible	Slight adverse effect	Neutral effect	<u>Opening year (winter)</u> The land in the foreground would have been reinstated to agriculture and a new 5m-wide access road would be visible, extending into the field, bounded by a drainage ditch and newly planted hedgerows. The access road would be set at a similar elevation to the existing landform, linking the A226 to the South Portal emergency access. The north-eastern tip of the hilltop landform associated with Chalk Park would also be just visible, as well as the new substation (slightly to the west of the viewpoint photograph), with views slightly more open due to vegetation removed during construction. The South Portal and associated cutting slopes would be screened by intervening landform. Overall, new Project features would be noticeable in the view. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than neutral due to the Project being perceivable in part of the view. <u>Design year (summer)</u> Established hedgerows and mitigation planting would soften the appearance of the access road off the A226 and the substation (slightly to the west of the viewpoint photograph), as well as restoring screening of the existing farm buildings. Mitigation planting would restrict views south-west, resulting in the agricultural land to the south-east being the visual focus. Overall, the Project would be barely noticeable in the view. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given that the close-range view of the access road off the A226 would also be well integrated into the view by new hedgerows in winter. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as neutral rather than slight as the access road off the A226 would be integrated into the landscape by hedgerow planting and the main focus of the view would be the restored agricultural field to the south-east. <u>Night-time environment</u> At night, from this location there would be no perceivable change resulting from the Project.	Highway Section 3

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
S-36	View from footpath NS172 off Queen's Farm Road. Also represents views from footpath NG5 (LLCA Higham Arable Farmland (sub area Chalk)). View centred west for recreational receptors.	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Opening year (winter) The South Portal cutting slopes would be screened by intervening vegetation at St Mary's Church in Chalk. The new access road linking the A226 Gravesend Road to the South Portal emergency access would be just apparent crossing the field, and a new substation could be just evident on the lower arable slopes adjacent to the A226, although vegetation along the A226 would heavily filter views. The hilltop landform within Chalk Park would be visible on the skyline but would not be prominent at this distance. Loss of mature vegetation would also be apparent at Gravesend Golf Centre. Restored areas of agricultural land would, where visible, appear similar to the existing view. Modifications to the existing OHL south of the A226 would not result in any discernible change in views at this distance. Overall, the Project would be barely noticeable in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than neutral due to the Project being perceivable in part of the view. Design year (summer) An established wooded copse on the hilltop landform within the Chalk Park open space would create a distinctive new landscape feature, in keeping with the characteristics of the existing view, as well as replacing vegetation removed during construction at Gravesend Golf Centre. Established hedgerow planting would integrate the access road off the A226 into the adjoining landscape. Overall, the Project would remain barely noticeable in views. Design year (winter) The visual effect in winter would not be notably different from that in summer, given that the Project is predominantly below ground at this location and due to the distance between the viewpoint and the visible elements. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as neutral rather than slight, as the key characteristics of the existing view would remain essentially unchanged at this distance. Night-time environment At night, from this location there would be no perceivable change caused by the Project.	Highway Section 3
S-37 & S-(CH)03b	View from NCN Route 1/footpath NG2/NG4 adjacent to former Thames and Medway Canal (LLCA Shorne and Higham Marshes). View centred south	High	Minor	Minor	Slight adverse effect	Slight adverse effect	This view represents the worst case, given the unobstructed nature and slightly elevated position on a footbridge. It is noted that typical transient views along footpath NG2 and NCN Route 1 would be more restricted due to a combination of reduced viewing height and intervening vegetation along the canal and railway line. Opening year (winter) A very small part of the South Portal cutting would be visible on the skyline in the field above the farm buildings along the A226. The new access road linking the A226 to the South Portal emergency access would also be apparent ascending the	Highway Sections 3 and 4

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	for recreational receptors.						field to the side of the farm buildings. The new substation would be screened behind the farm buildings. The hilltop landform within Chalk Park would be visible on the skyline but would not be prominent at this distance. Loss of mature vegetation would also be apparent at Gravesend Golf Centre. Restored areas of agricultural land would, where visible, appear similar to the existing view. Modifications to the existing OHL south of the A226 would not result in any discernible change in views at this distance. Overall, new elements would be perceptible in views, including the South Portal cutting on the skyline. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the limited overall effect on the wide panoramic view. <u>Design year (summer)</u> An established wooded copse on the hilltop landform within the Chalk Park open space would create a distinctive new landscape feature, in keeping with the characteristics of the existing view, as well as replacing vegetation removed during construction at Gravesend Golf Centre. Established hedgerow planting would integrate the access road off the A226 into the adjoining landscape. However, the hilltop landform would still be apparent, as would the chalk cutting on the skyline at the South Portal. Overall, new elements would remain perceptible in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given that the Project is predominantly below ground at this location and due to the distance between the viewpoint and the visible elements. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the limited overall effect on the wide panoramic view. <u>Night-time environment</u> At night, from this location there would be no perceivable change caused by the Project.	
S-38a	View from Saxon Shore Way Long Distance Path/footpath NS138 at intersection with bridleway NS318 adjacent to Shornemead Fort. Also represents views from footpath NG1 (LLCA Shorne	High	Minor	Minor	Slight adverse effect	Slight adverse effect	This is part of a 360° panoramic view from the banks of the River Thames. For the purposes of the assessment, this northerly view has been considered separately to the southerly view due to the different impacts. Viewpoint 38b represents the southerly view. <u>Opening year (winter)</u> There would be long-range, broad views north towards the sculptural landscape mounding (up to 17m above existing ground level) around the North Portal (approximately 1.8km), covered with open mosaic habitat. The sculptural landscape mounding would restrict visibility of the North Portal beyond. Overall, the Project would be perceptible in views, but would not alter the balance of features that constitute the existing view.	Highway Section 9

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	and Higham Marshes). View centred north-west for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*						*Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the limited overall effect on the wide panoramic view. <u>Design year (summer and winter)</u> Effects would be as described for opening year. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the limited overall effect on the wide panoramic view. <u>Night-time environment</u> At night, from this location there would be no perceivable change caused by the Project, due to the intervening sculptural landscape mounding, which would restrict visibility towards the North Portal.	
S-38b	View from Saxon Shore Way Long Distance Path/footpath NS138 at intersection with bridleway NS318 immediately adjacent to Shornemead Fort. Also represents views from footpath NG1 (LLCA Shorne and Higham Marshes). View centred south-west for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	This is part of a 360° panoramic view from the banks of the River Thames. For the purposes of the assessment this southerly view has been considered separately from the northerly view due to the different impacts. Viewpoint 38a represents the northerly view. <u>Opening year (winter)</u> A very small part of the South Portal cutting would be visible on the skyline in the field south of the A226. The new access road linking the A226 to the South Portal emergency access would also be apparent in the field below the South Portal cutting. The new substation would be screened behind the farm buildings along the A226. There would also be a long-range view towards the new Chalk Park open space, including the hilltop landform visible above the skyline but reflective of existing landform. Loss of mature vegetation would also be apparent at Gravesend Golf Centre. Restored agricultural land would appear similar to the existing view. Modifications to the existing OHL south of the A226 would not result in any discernible change in views at this distance. Overall, the Project would be barely noticeable in views. <u>Design year (summer)</u> An established wooded copse on the hilltop landform within the Chalk Park open space would create a distinctive new landscape feature, in keeping with the characteristics of the existing view, as well as replacing vegetation removed during construction at Gravesend Golf Centre. Established hedgerow planting would integrate the access road off the A226 into the adjoining landscape. However, the South Portal cutting would still be apparent on the skyline. Overall, the Project would be barely noticeable in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given that the Project is predominantly below ground at this location and due to the distance between the viewpoint and the visible elements.	Highway Section 3

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Night-time environment At night, from this location there would be no perceivable change caused by the Project.	
S-39 & S-(CH)04	View from local recreational ground on area of elevated ground at Windmill Hill, within residential area of Gravesend (LLCA Gravesend Urban Area). View centred north-north-east for residential receptors.	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Opening year (winter) There would be long-range views towards the sculptural landscape mounding (up to 17m above existing ground level) around the North Portal (approximately 3.5km). The sculptural landscape mounding would restrict visibility of the North Portal beyond. Overall, the Project would be barely noticeable in views. Design year (summer and winter) Effects would be as described for opening year. Night-time environment At night, from this location there would be no perceivable change caused by the Project, due to the intervening sculptural landscape mounding, which would restrict visibility towards the North Portal.	Highway Section 9
N-Dep-RV-01	View from footpath KT/NS/176. Also represents views from footpath KT/NS/175 (LLCA Istead Arable Farmlands). View centred west-north-west for recreational receptors.	Moderate	Minor	Moderate	Slight adverse effect	Moderate beneficial effect	Opening year (winter) Due to a reduction in the amount of vegetation in the view north of HS1, an increase in the overall width of the A2 corridor and adjoining parallel roads, and the introduction of an additional roundabout junction along Henhurst Road to the north-east, there is likely to be greater visibility of moving traffic and highway infrastructure. Additional gantries are also likely to be visible. However, the A2 corridor would remain partially screened by the existing grass mound north of Church Road, a tree belt between Church Road and HS1 and railway buildings along the HS1 corridor. Overall, the Project would be perceptible in views, although this would not alter the balance of features and elements that comprise the existing view. Design year (summer) Following establishment of trees and shrubs within the nitrogen deposition compensation site and ancient woodland compensation area adjoining Church Road to the south, the A2/HS1 corridor would be completely screened in views from the footpath. Some pylons and OHL to the south-west are also likely to be screened in views. A long-range vista west across the landscape towards St Margaret's Church would be retained from the footpaths. The orientation and angle of the vista would be designed to screen existing detracting features such as pylons and OHL, where practicable. Overall, compensation planting would result in a noticeable benefit to views from the footpath. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the proximity and depth of compensation planting.	Highway Section 2

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Night-time environment At night, the change in street lighting (LED luminaires) would result in a positive impact due to the reduced height of columns and a reduction of light spill and skyglow, as street lighting is present in the existing view along the A2 corridor. By design year, lighting along the A2 corridor would be completely screened by established planting within the nitrogen deposition compensation site and ancient woodland compensation area.	
N-Dep-RV-02	View from footpath KT/NS/168, north-west of Woodlands Lane in Shorne Ridgeway (LLCA West Kent Downs (sub area Shorne)). View centred north-west for recreational receptors.	Very high	Negligible	Minor	Neutral effect	Moderate beneficial effect	Opening year (winter) Establishing small trees and shrubs would not appear out of character in the wooded landscape. The existing fence between the pasture fields would have been removed. The potential use of protective guards to establish woodland planting would result in a barely noticeable adverse change in views. *Justification for alternative significance level to matrix in LA 104* The significance of effect for users of the footpath has been assessed as neutral rather than slight, as the establishing small trees and shrubs would not be notably intrusive in views. Design year (summer) Established trees and shrubs within the nitrogen deposition compensation site would effectively extend the existing woodland within Shorne Woods Country Park at the edge of Shorne Ridgeway village. Open glades and occasional vistas would be incorporated within the planting along the footpath route to maintain variety and interest. Overall, compensation planting would result in a perceptible benefit to views from the footpath. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the proximity of the compensation planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect for users of the footpath has been assessed as moderate rather than large given that the proposed compensation planting would not fundamentally change the character of the existing view. Night-time environment There would be no change in the night-time environment.	Highway Section 1
N-Dep-RV-03	View from Swiller's Lane and residential properties along Barndale Court and Warren View, east of Shorne village (LLCA Shorne	Moderate for users of Swiller's Lane High for residents	Negligible Negligible	Minor Minor	Neutral effect Neutral effect	Slight adverse effect Slight adverse effect	Opening year (winter) Establishing small trees and shrubs would not appear out of character in the wooded, arable landscape. The potential use of protective guards to establish woodland planting would result in a barely noticeable adverse change in views.	Highway Section 1

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Wooded Slopes). View centred south-east for recreational and residential receptors.						*Justification for significance level where two significance categories are given in LA 104/alternative significance level to matrix in LA 104* The significance of effect for users of Swiller's Lane and residents has been assessed as neutral rather than slight, as the establishing small trees and shrubs would not be notably intrusive in views. <u>Design year (summer)</u> Established trees and shrubs within the nitrogen deposition compensation site would effectively extend the existing woodland within Court Wood, Cole Wood and Starmore Wood. Vistas would be incorporated within the planting to the south-east from Swiller's Lane and east from the adjacent residential properties to maintain a partial view of the existing undulating landscape framed by skyline woodland. In addition, planting would be set back from the residential edge to maintain a sense of openness and avoid any potential overshadowing. Overall, compensation planting would result in a perceptible adverse change in views from Swiller's Lane and the residential properties. The foreshortening of views due to woodland planting would be reduced through the provision of vistas. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the proximity and depth of compensation planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect for residents has been assessed as slight rather than moderate, as the foreshortening of views due to woodland planting would be reduced through the provision of vistas. <u>Night-time environment</u> There would be no change in the night-time environment.	
N-Dep-RV-04	View from footpath KT/NS/159. Also represents views from footpath KT/NS/156 (LLCA Shorne Wooded Slopes). View centred south-south-west for recreational receptors.	Moderate	Negligible	Minor	Neutral effect	Slight adverse effect	<u>Opening year (winter)</u> Establishing small trees and shrubs would not appear out of character in the wooded, arable landscape. The potential use of protective guards to establish woodland planting would result in a barely noticeable adverse change in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as neutral rather than slight, as the establishing small trees and shrubs would not be notably intrusive in views. <u>Design year (summer)</u> Established trees and shrubs within the nitrogen deposition compensation site would effectively extend the existing woodland within Court Wood, Cole Wood and Starmore Wood. Open glades and glimpses towards the existing backdrop woodland would be incorporated within the planting in views south to maintain variety and interest.	Highway Section 1

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Overall, compensation planting would result in a perceptible adverse change in views from the footpath. The foreshortening of views due to woodland planting would be reduced through the provision of glimpses towards the existing backdrop woodland. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the depth of compensation planting. Night-time environment There would be no change in the night-time environment.	
N-Dep-RV-05	View from the junction of footpath MR26 and bridleway MR24, including the Augustine Camino Long Distance Path and Medway Valley Rail Trails – Aylesford (LLCA Medway Valley (sub area The Eastern Scarp). View centred north for recreational receptors.	Omitted due to design changes at the Burham nitrogen deposition compensation site.						
N-Dep-RV-06	View from footpath MR601, the North Downs Way and the panoramic OS map viewpoint at the Blue Bell Hill picnic site (LLCA Medway Valley (sub area The Eastern Scarp). View centred south-west for recreational receptors.	Omitted due to design changes at the Burham nitrogen deposition compensation site.						
N-Dep-RV-07	View from footpath KH31 and adjacent residential properties along a farm access track off Bell Lane (LLCA Mid Kent Downs (sub area Bredhurst)). View	Very high for users of footpath KH31 Moderate for residents	Negligible Negligible	Moderate Moderate	Neutral effect Neutral effect	Moderate beneficial effect Moderate beneficial effect	Opening year (winter) Establishing small trees and shrubs would not appear out of character in the wooded, arable landscape. The potential use of protective guards to establish woodland planting would result in a barely noticeable adverse change in views.	Highway Section 1a

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	centred south-south-west for recreational and residential receptors.						*Justification for significance level where two significance categories are given in LA 104/alternative significance level to matrix in LA 104* The significance of effect for residents and users of the footpath has been assessed as neutral rather than slight, as the establishing small trees and shrubs would not be notably intrusive in views. <u>Design year (summer)</u> Established trees and shrubs within the nitrogen deposition compensation site would effectively extend the existing woodland within Malling Wood, Westfield Wood and Frith Wood, as well as softening views of pylons and communications masts. A vista and open glades would be incorporated along the footpath route, including glimpsed views to the south-west to maintain variety and interest. The vista would exclude existing detracting features such as pylons and communications masts, where practicable. In addition, planting would be set back from the residential edge to maintain a sense of openness and avoid any potential overshadowing. Overall, compensation planting would result in a noticeable benefit to views from the footpath and the residential properties. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the proximity and depth of compensation planting. *Justification for alternative significance level to matrix in LA 104* The significance of effect for users of the footpath has been assessed as moderate rather than large or very large, as the effectiveness of screening of pylons and communications masts would be limited. <u>Night-time environment</u> There would be no change in the night-time environment.	
N-Dep-RV-08	View from footpath KH31, KH30 and the North Downs Way (LLCA Mid Kent Downs (sub area Bredhurst)). View centred east-north-east for recreational receptors.	Very high	Negligible	Minor	Neutral effect	Slight beneficial effect	<u>Opening year (winter)</u> Establishing small trees and shrubs would not appear out of character in the wooded, arable landscape. The potential use of protective guards to establish woodland planting would result in a barely noticeable adverse change in views. *Justification for alternative significance level to matrix in LA 104* The significance of effect for users of the footpaths has been assessed as neutral rather than slight, as the establishing small trees and shrubs would not be notably intrusive in views. <u>Design year (summer)</u> Established trees and shrubs within the nitrogen deposition compensation site would effectively extend the existing woodland within Malling Wood and Frith Wood and the adjoining tree belt along the M2 corridor west of footpath KH31. The woodland would also soften views towards communications masts to the north-west.	Highway Section 1a

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Overall, compensation planting would result in a perceptible benefit to views from the footpaths. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the proximity and depth of compensation planting. *Justification for alternative significance level to matrix in LA 104* The significance of effect has been assessed as slight rather than moderate or large, as the effectiveness of screening of communications masts would be limited. <u>Night-time environment</u> There would be no change in the night-time environment.	
N-Dep-RV-09	View from footpath KH646 (LLCA Mid Kent Downs (sub area Bredhurst)). View centred north-west for recreational receptors.	Very high	Negligible	Minor	Neutral effect	Slight beneficial effect	<u>Opening year (winter)</u> Establishing small trees and shrubs would not appear out of character in the wooded, arable landscape. The potential use of protective guards to establish woodland planting would result in a barely noticeable adverse change in views. *Justification for alternative significance level to matrix in LA 104* The significance of effect for users of the footpath has been assessed as neutral rather than slight, as the establishing small trees and shrubs would not be notably intrusive in views. <u>Design year (summer)</u> Established trees and shrubs within the nitrogen deposition compensation site would effectively extend the existing woodland within Malling Wood, Westfield Wood and Frith Wood and the tree belt along the M2 corridor west of footpath KH31. The woodland would also soften views of the communications masts to the north-west and slightly reduce the prominence of pylons, viewed against a new wooded backdrop. Overall, compensation planting would result in a perceptible benefit to views from the footpath. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer due to the depth of proposed compensation planting. *Justification for alternative significance level to matrix in LA 104* The significance of effect has been assessed as slight rather than moderate or large, as the effectiveness of screening of communications masts would be limited. <u>Night-time environment</u> There would be no change in the night-time environment.	Highway Section 1a

Table 3.2 Schedule of visual effects for visual receptors south of the River Thames during operation

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
Residential properties 'R'							
VR-S01-R-001	Residential properties along Lodge Lane, east of Cobham	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 1
VR-S01-R-002	Oak Tree Cottage, Knights Place Farm and adjacent residential properties	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 1
VR-S01-R-003	Residential properties on Bowesden Lane, Shorne	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 1
VR-S01-R-004	Park Farm House, Bowesden Lane, Shorne	Moderate	Minor	Minor	Slight adverse effect	Slight beneficial effect	Highway Section 1
VR-S01-R-005	Residential properties on Squires Close and Sharfleet Drive, Strood	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 1
VR-S01-R-006	Residential properties on Old Watling Street, Strood	High	Moderate	No change	Moderate adverse effect	Neutral effect	Highway Section 1
VR-S02-R-001	Residential properties along Thong Lane, Riverview Park	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Sections 2 and 3
VR-S02-R-002	Residential properties at the junction of Halfpence Lane and The Street in Cobham village	High	No change	No change	Neutral effect	Neutral effect	Highway Sections 1 and 2
VR-S02-R-003	The Mount, north of Cobham	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-R-004	Scalers Hill and The Nook, north of Cobham	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 2
VR-S02-R-005	Residential properties on Jeskyns Road near Owletts	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-R-006	Residential properties near the junction of Henhurst Road and Jeskyns Road, north-west of Cobham	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-R-007	Residential properties along Henhurst Road	Moderate	Negligible	Minor	Slight adverse effect	Slight beneficial effect	Highway Section 2
VR-S02-R-008	Ifield Rectory, Church Road	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-R-009	Hever Court Farm, Church Road	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-R-010	Residential properties on Church Road and near Ifield Court Farm	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-R-011	Landway Cottage, north-west of Ifield Court Farm	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 2
VR-S02-R-012	New Cottages, Church Road	Moderate	Minor	Minor	Slight adverse effect	Slight beneficial effect	Highway Section 2
VR-S02-R-013	Residential properties along Hever Court Road, Watling Street, Old Watling Street, Chalky Bank and Wrotham Road, southern edge of Gravesend	High	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-R-014	Marlborough House, Little Birches, Stamford House, Still Meadow and Castle Shaw, A227 Wrotham Road near Istead Rise	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S02-R-015	Residential properties along The Glades, southern edge of Gravesend	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-R-016	Residential properties along Mackenzie Way and Valley Drive (west), southern edge of Gravesend	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-R-017	Residential properties along Valley Drive (east) and northern part of Sheldon Heights, southern edge of Gravesend	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-R-018	Residential properties along southern part of Sheldon Heights, southern edge of Gravesend	High	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 2
VR-S02-R-019	Residential properties within Istead Rise	High	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-R-020	Residential properties along Davy's Place, eastern edge of Gravesend	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 2
VR-S02-R-021	Residential properties along eastern side of Fairfields, eastern edge of Gravesend	High	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-R-022	Residential properties along the northern side of Astra Drive, eastern edge of Gravesend	High	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-R-023	Residential properties along Astra Drive, Gazelle Glade, Glenrosa Gardens and Genesta Glade, eastern edge of Gravesend	High	Major	Minor	Large adverse effect	Slight adverse effect	Highway Section 2
VR-S02-R-024	Thong Mead, south of Thong village	Moderate	Moderate	Minor	Moderate adverse effect	Slight beneficial effect	Highway Section 2
VR-S02-R-02	Thong Lodge, south of Thong village	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 2
VR-S02-R-026	Residential properties on Thong Lane in Thong village (western side)	High	Major	Minor	Large adverse effect	Slight adverse effect	Highway Section 2
S-26	Residential properties along the east of Thong Lane in Thong village	High	See S-26	See S-26	See S-26	See S-26	See S-26
VR-S02-R-027	Residential properties on Thong Lane in Thong village (north-western side)	High	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 2
VR-S02-R-028	Hartshill Bungalow, Thong Lane	High	Moderate	Negligible	Moderate adverse	Slight adverse effect	Highway Section 2
VR-S02-R-029	Residential properties along western side of Fairfields and Michael Gardens, eastern edge of Gravesend	High	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-R-030	Residential properties along Wykeham Close and Calderwood, eastern edge of Gravesend	High	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-R-031	Residential properties along Calderwood and Marling Way, eastern edge of Gravesend	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-R-032	Residential properties along the west side of Davy's Place, eastern edge of Gravesend	High	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-R-033	Residential properties along Epsom Close and Hever Court Road, southern edge of Gravesend	High	No change	No change	Neutral effect	Neutral effect	Highway Section 2

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S02-R-034	Residential properties along Kemsley Close, Dogwood Close, Durndale Lane, Henley Deane, The Clovers, Brightlands, Nash Croft, Peach Croft, Rowmarsh Close, Ashmore Gardens and Landseer Avenue, southern edge of Gravesend	High	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-R-035	Residential properties along Roman Road and Pepper Hill, southern edge of Gravesend	High	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-R-036	Residential properties along Dabbs Place, north-west of Cobham	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S03-R-001	Residential properties along Thong Lane opposite Cascades Leisure Centre, eastern edge of Gravesend	High	No change	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-R-002	Residential properties along Thong Lane to the north and north-west of Cascades Leisure Centre, eastern edge of Gravesend	High	Minor	Minor	Slight beneficial effect	Slight adverse effect	Highway Section 3
VR-S03-R-003	222 to 232 Thong Lane	High	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 3
VR-S03-R-004	Residential properties along eastern side of Thong Lane south of the A226, eastern edge of Gravesend	High	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 3
VR-S03-R-005	Residential properties on Vicarage Lane (southern side), Chalk	High	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-R-006	Residential properties on Priest's Walk, Vicarage Lane, Rochester Road and Chalk Road (western end), Chalk	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-R-007	Residential properties along Chalk Road (eastern end), Rochester Road, Lisle Close, Beckley Close and Filborough Way, Chalk	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-R-008	Residential property along Mill Hill Lane, Shorne	High	No change	No change	Neutral effect	Neutral effect	Highway Sections 2 and 3
VR-S03-R-009	Residential properties along the west side of Crown Green, Shorne	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Sections 2 and 3
VR-S03-R-010	Residential properties along the west side of Thong Lane and along Rochester Road	High	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-R-011	Residential properties along the north and south of Crown Green, Malthouse Lane and Forge Lane, Shorne	High	No change	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-R-012	Residential properties along Shorne Ifield Road, south-west of Shorne, including Baynards Cottage	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Sections 2 and 3
VR-S03-R-013	Residential properties along Shorne Ifield Road, south-west of Shorne, including Ifield Place, 1-5 Ifield Farm and Ifield Farm	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Sections 2 and 3

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S03-R-014	Orchard Lea Farm along Shorne Ifield Road, south-west of Shorne	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Sections 2 and 3
VR-S03-R-015	Crown Cottage, A226 Gravesend Road	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-R-016	Midfields, A226 Gravesend Road	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-R-017	Residential properties along the north-east of A226 Gravesend Road	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-R-018	Barretts Folly off the A226 Gravesend Road	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-R-019	Residential properties along the north-east of A226 Gravesend Road (near footpath NS163A)	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-R-020	17 and 18 Church Lane, east of Chalk	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-R-021	13, 14, 15, 16, 24 and 25 Church Lane, east of Chalk	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-R-022	19 and 20 Church Lane, East Court Manor and East Court Farm, east of Chalk	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-R-023	East Court Cottages and Little Filborough, Lower Higham Road (including property opposite East Court Cottages on Lower Higham Road), east of Chalk	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-R-024	Filborough Farm and Filborough Farm Barn, Lower Higham Road, east of Chalk	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-R-025	Homelea Farm, Meadow Cottage, Chalk Pit Cottages and Longtens Cottages along Green Farm Lane	Moderate	Minor	No change	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-R-026	Farm View Cottage and 2, 3 and 4 New Cottages along Green Farm Lane	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-R-027	Green Farm and adjacent residential properties, Green Farm Lane	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-R-028	Residential properties along Lower Road	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-R-029	Queen’s Farm and Queen’s Farm Cottages, Queen’s Farm Road	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-R-030	Residential properties at the junction of Castle Lane and A226 Gravesend Road	High	Minor	No change	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-R-031	Residential properties along west and east of Castle Lane, eastern edge of Chalk	High	Minor	No change	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-R-032	Residential properties along Malthouse Field and Cricket Marsh Walk, eastern edge of Gravesend	High	No change	No change	Neutral effect	Neutral effect	Highway Section 4
VR-S03-R-033	Residential properties along Lower Higham Road, northern edge of Chalk	High	No change	No change	Neutral effect	Neutral effect	Highway Section 4

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S03-R-034	Residential properties along Brooke Drive, Shirley Close and Sutherland Close, eastern edge of Chalk	High	No change	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-R-035	Polperro, A226 Rochester Road	High	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-R-036	View Point Place traveller site, A226 Rochester Road, south-east of Chalk	High	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-R-037	Horseshoe Meadow traveller site, A226 Rochester Road, south-east of Chalk	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 3
Recreational (route) 'RL'							
VR-S01-RL-001	BOAT NS196 and footpath NS183 (part of Luddesdown Trek)	Very high	No change	No change	Neutral effect	Neutral effect	Highway Section 1
VR-S01-RL-002	Footpath NS161 (part of Luddesdown Trek)	Very high	No change	No change	Neutral effect	Neutral effect	Highway Section 1
VR-S01-RL-003	Footpath NS182	Very high	Negligible	No change	Slight adverse effect	Neutral effect	Highway Section 1
VR-S01-RL-004	Footpath NS179	Very high	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 1
VR-S02-RL-001	Footpath NG22 and footpath NU29 (Wealdway)	High	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-RL-002	Footpath NS359	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 2
VR-S02-RL-003	Southern end of footpath NS175A	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 2
VR-S02-RL-004	Central section of footpath NS175A	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 2
VR-S02-RL-005	Footpath NU31 (Wealdway)	High	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-RL-006	Northern end of footpath NS175A and footpath NS365	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 2
VR-S02-RL-007	Footpath NU32	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-RL-008	Footpath NS175 and footpath NS176	Moderate	Minor	Moderate	Slight adverse effect	Moderate beneficial effect	Highway Section 2
VR-S02-RL-009	Footpath NU41/NS194	Moderate	Minor	Minor	Slight adverse effect	Slight beneficial effect	Highway Section 2
VR-S02-RL-010	Southern end of footpath NS177	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-RL-011	Southern end of BOAT NS311	High	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-RL-012	BOAT NS311	High	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-RL-013	Northern end of BOAT NS195	Very high	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-RL-014	Southern end of BOAT NS195	Very high	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-RL-015	Footpath NS178 (part of Luddesdown Trek)	Very high	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-RL-016	Northern end of footpath NS169	Moderate	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-RL-017	Footpath NS167 east of Thong village	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 2
VR-S02-RL-018	Footpath NS167	Very high	Minor	Negligible	Moderate adverse effect	Slight adverse effect	Highway Section 2
VR-S02-RL-019	Footpath NS170	Very high	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 2

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S03-RL-001	Footpath NS355	Very high	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Sections 2 and 3
VR-S03-RL-002	Bridleway NS318	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-RL-003	Footpath NG3	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 4
VR-S03-RL-004	Footpath NG7	Moderate	Minor	Minor	Slight beneficial effect	Slight beneficial effect	Highway Section 3
VR-S03-RL-005	Footpath NS164 and footpath NS163A	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-RL-006	Footpath NS163 and footpath NS165	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-RL-007	Southern end of footpath NS316	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-RL-008	Footpath NS157	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-RL-009	Footpath NS171	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-RL-010	Crown Lane Route	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 3
Recreational (area) 'RA'							
VR-S01-RA-001	Rochester and Cobham Golf Club, Park Pale	Moderate	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 1
VR-S01-RA-002	Shorne Woods Country Park, Brewers Road, Shorne	Very high	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 1
VR-S02-RA-001	Jeskyns Community Woodland, Henhurst Road, Gravesend	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 2
VR-S02-RA-002	Owletts, The Street, Cobham	High	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-RA-003	Green space on MacKenzie Way, southern edge of Gravesend	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-RA-004	Shorne Woods Country Park, Brewers Road, Shorne	Very high	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-RA-005	Shorne Woods Country Park, Brewers Road, Shorne	Very high	Minor	Negligible	Moderate adverse effect	Slight adverse effect	Highway Section 2
VR-S02-RA-006	Cyclopark, The Tollgate, Watling Street, southern edge of Gravesend	Low	Negligible	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S03-RA-001	Cascades Leisure Centre and sports fields, Thong Lane, eastern edge of Gravesend	Low	Moderate	Negligible	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-RA-002	Sports fields on Thong Lane, eastern edge of Gravesend	Low	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 3
VR-S03-RA-003	Green space on Mill Hill Lane, Shorne	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Sections 2 and 3
Transport (route) 'T'							
VR-S01-T-001	Bowesden Lane	Moderate	Minor	Minor	Slight adverse effect	Slight beneficial effect	Highway Section 1
VR-S01-T-002	Park Pale	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 1
VR-S01-T-003	Brewers Road	Moderate	Major	Minor	Large adverse effect	Slight beneficial effect	Highway Section 1
VR-S01-T-004	Halfpence Lane	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 1

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S01-T-005	Lodge Lane	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 1
VR-S02-T-001	HS1 green bridge	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 2
VR-S02-T-002	The northern end of Henhurst Road	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-T-003	The southern end of Henhurst Road	Moderate	Negligible	Minor	Slight adverse effect	Slight beneficial effect	Highway Section 2
VR-S02-T-004	Church Road	Moderate	Minor	Minor	Slight adverse effect	Slight beneficial effect	Highway Section 2
VR-S02-T-005	Thong Lane near the A2	Moderate	Major	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 2
VR-S02-T-006	Thong Lane within Thong village	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-T-007	Shorne Ifield Road (western end)	Moderate	Moderate	Negligible	Moderate adverse effect	Neutral effect	Highway Sections 2 and 3
VR-S02-T-008	The Street and Jeskyns Road	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-T-009	A227 Wrotham Road (northern end)	Low	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-T-010	Dabbs Place	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-T-011	HS1 railway line	Negligible	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Sections 1 and 2
VR-S02-T-012	A227 Wrotham Road (southern end)	Low	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S03-T-001	Thong Lane between Cascades Leisure Centre and Rochester Road	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 3
VR-S03-T-002	A226 Gravesend Road	Low	Negligible	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-T-003	Church Lane, Chalk	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	S03-02, S03-03
VR-S03-T-004	Lower Higham Road	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	S03-02, S03-03
VR-S03-T-005	Lower Road	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-T-006	Green Farm Lane	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-T-007	Queen's Farm Road	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-T-008	North Kent railway line, South-eastern	Low	Negligible	Negligible	Neutral effect	Neutral effect	Highway Sections 3 and 4
Other receptors (area) 'O'							
VR-S01-O-001	Park Pale Industrial Estate – Harlex Haulage, Park Pale	Negligible	Moderate	Minor	Slight adverse effect	Neutral effect	Highway Section 1
VR-S01-O-002	The Nook – Pet Hotel, Brewers Road	Low	Minor	Negligible	Neutral effect	Neutral effect	Highway Section 1
VR-S01-O-003	Cobham Hall School, off Brewers Road, Cobham	Moderate	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 1
VR-S02-O-001	The Inn on the Lake, Watling Street	Moderate	Major	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 2
VR-S02-O-002	Painters Ash Primary School, Masefield Road, Gravesend	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S02-O-003	Singlewell Primary School, MacKenzie Way, Gravesend	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-O-004	St Margaret's Church, Church Road	Moderate	Minor	Minor	Slight adverse effect	Slight beneficial effect	Highway Section 2

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S02-O-005	Premier Inn, Best Western and The George public house, Hever Court Road, Gravesend	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 2
VR-S02-O-006	Sparks and Co Builders Merchant and Singlewell Car Sales and Service Centre, Hever Court Road, Gravesend	Low	Minor	Negligible	Neutral effect	Neutral effect	Highway Section 2
VR-S02-O-007	Tollgate Services, Wrotham Road, Gravesend	Low	No change	No change	Neutral effect	Neutral effect	Highway Section 2
VR-S03-O-001	Thames View Crematorium, Gravesend Road, Chalk	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 3
VR-S03-O-002	Chalk Church, Church Lane, Chalk	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 3
VR-S03-O-003	Apex Business Park, Queen's Farm Road, Chalk	Negligible	No change	No change	Neutral effect	Neutral effect	Highway Section 3
VR-S03-O-004	Metropolitan Police Service Specialist Training Centre, Gravesend	Low	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 9
VR-S03-O-005	Hye Oak Ltd and various businesses at Denton Wharf and along Wharf Road	Negligible	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 9
VR-S03-O-006	Nuralite Industrial Estate, Canal Road, Higham	Negligible	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 9
VR-S03-O-007	Thamesview School, Thong Lane, Gravesend	Moderate	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 3

North of the River Thames

3.1.3 Refer to Figure 7.16 (Application Document 6.2) for the location of the Representative Viewpoints and visual receptors. For Representative Viewpoint photography, refer to Figure 7.17: Representative Viewpoints – Winter and Summer Views and Figure 7.18: Representative Viewpoints – Night-time (inc. Winter) Views (Application Document 6.2).

3.1.4 Photomontages have been prepared to provide a visual representation of the operational phases (Year 1 opening year and Year 15 design year) for a selection of Representative Viewpoint locations. Where available, this is identified in the tables below. For photomontages, refer to Figure 7.19 (Application Document 6.2).

Table 3.3 Schedule of visual effects on Representative Viewpoints north of the River Thames during operation

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
N-01	View from Grade I listed Tilbury Fort adjacent to NCN Route 13 and footpath 146/Thames Estuary Path/Two Forts Way (LLCA Tilbury Marshes). View centred north-north-east for recreational receptors.	Very high	Negligible	Negligible	Slight adverse effect	Slight adverse effect	<u>Opening year (winter)</u> There would be long-range views across West Tilbury Marshes and through gaps in intervening vegetation and built form at Tilbury Sewage Treatment Works towards sculptural landscape mounding at Tilbury Fields (up to 17m above existing ground level) around the North Portal (approximately 2.2km). Tilbury Viaduct (approximately 2.8km) and the Project route on embankment (approximately 2.6km) are unlikely to be visible above intervening vegetation to the north-east, although there could be glimpses of moving vehicles and highway infrastructure. Views of the Project would be seen in conjunction with the existing OHL extending north-eastwards from the former Tilbury Power Station (now demolished). Overall, due to a combination of distance and intervening features, the Project would be barely noticeable. <u>Design year (summer)</u> Established mitigation planting at Tilbury Viaduct and along the embankments to the south would filter glimpsed views of moving traffic and highway infrastructure. However, there would be little difference in the view by the design year and, overall, the Project would remain barely noticeable in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the distance to the main Project features. <u>Night-time environment</u> At night, from this location there would be no perceivable change caused by the Project, due to the existing light sources in the view, including those at Tilbury Sewage Treatment Works.	Highway Section 9
N-02	View from Fort Road, adjacent to residential properties at Tilbury urban edge (LLCA Tilbury and Docks Urban Area). View centred east-north-east for residential receptors. *Photomontage available from this*	High	Minor	Minor	Slight adverse effect	Slight adverse effect	<u>Opening year (winter)</u> There would be long-range, filtered views across West Tilbury Marshes towards the Tilbury Viaduct (approximately 1.9km), with a reduction in escarpment woodland apparent on the skyline, as well as the Project route on embankment (approximately 1.9km) and the North Portal operational access bridge (approximately 1.8km). There could also be glimpses of the sculptural landscape mounding at Tilbury Fields (up to 17m above existing ground level). Views of the Project would be limited by intervening vegetation along the Tilbury Loop railway line and seen in the context of existing and modified OHL pylons. The viaduct structure would appear above the skyline in some parts of the view, in particular where it crosses the Tilbury Loop railway line. Highway infrastructure including signage, gantries and street lighting, are unlikely to be perceivable at this distance. However, the removal of a section of OHL parallel with the	Highway Section 9

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	location (refer to Figure 7.19 (Application Document 6.2)). *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*						Tilbury Loop railway line would result in a slight reduction of visual clutter in distant views within the relatively open landscape. Overall, the Project would be perceptible in views, but would not alter the overall balance of features that constitute the existing view, given the distance to the Project and presence of existing infrastructure and OHL. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the Project being viewed in the context of existing industrial buildings and OHL north of the River Thames. Design year (summer) Views towards the Project would be as described above for the opening year, except existing vegetation in leaf in the foreground would provide some filtering of views towards the Tilbury Viaduct structure in the distance. Overall, the Project would remain perceptible in views. Design year (winter) In winter, the existing vegetation in the foreground would provide less filtering of views and the Tilbury Viaduct would be slightly more exposed in the view. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the Project being viewed in the context of existing industrial buildings and OHL north of the River Thames. Night-time environment At night, there would be a potential perceivable increase in light levels along Station Road/Church Road within the West Tilbury Marshes. However, this lighting would be viewed in the context of existing lighting nearby and at London Gateway Port. New street lighting (LED luminaires) along the approach to the North Portal is unlikely to be perceivable, as this would be viewed in conjunction with intervening lighting near Tilbury Sewage Treatment Works. Night-time visual effects would be similar in opening year and design year.	
N-03	View from Two Forts Way Coastal Path/footpath 146 and NCN Route 13 (LLCA Tilbury Marshes). View centred north-north-east for recreational receptors.	High	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	A wide panoramic view from north-west to east, with distant visibility south (approximately 5km). Opening year (winter) There would be mid-range views towards the sculptural landscape mounding at Tilbury Fields (up to 17m above existing ground level) around the North Portal (approximately 0.6km), which would contrast with the existing flat open landscape and screen views of the North Portal. Embankments along the Project route and around the North Portal operational access bridge would be visible in the distance to the north-east, along with the Tilbury Viaduct structure and glimpses of moving vehicles and highway infrastructure. The removal of a section of OHL to the south of and parallel with the Tilbury Loop railway line would result in a slight reduction of visual clutter in distant views within the open landscape. To the south, there would be long-range views of the hilltop landform within Chalk Park. This new landform would be seen in the context of the wooded ridgeline at Shorne Woods Country Park, which forms part of the Kent Downs AONB. The upper chalk slopes of the South Portal cutting would also be just apparent (approximately 3.4km).	Highway Section 9

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Overall, due to the prominence of the new areas of sculptural landscape mounding at Tilbury Fields, the Project would be noticeable in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the nearest parts of the Project route being screened by the sculptural landscape mounding around the North Portal. Design year (summer) Established mitigation planting at Tilbury Viaduct and along the embankments to the south would help to soften the appearance of the new structures and earthworks. However, there would be little difference in views towards the sculptural landscape mounding at Tilbury Fields. In southerly views, the establishment of the woodland copse on the hilltop landform associated with Chalk Park would help to integrate the landform into the surrounding landscape, including the existing wooded ridgeline in the background. However, in the context of the wider view, the new woodland would not be readily apparent. Overall, the Project would remain noticeable in views. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the nature of the open mosaic habitat landscape treatment across the sculptural landscape mounding at Tilbury Fields. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the nearest parts of the Project route being screened by the sculptural landscape mounding around the North Portal. Night-time environment At night, there would be a potential perceivable increase in light levels along Station Road/Church Road within the West Tilbury Marshes. However, this lighting would be viewed in the context of existing lighting at Tilbury Docks, Tilbury Sewage Treatment Works and London Gateway Port. New street lighting (LED luminaires) along the approach to the North Portal is unlikely to be perceivable, as this would be screened by the sculptural landscape mounding at Tilbury Fields. Night-time visual effects would be similar in opening year and design year.	
N-04	View from Two Forts Way Coastal Path/footpath 146 and NCN Route 13 (LLCA Tilbury Marshes). View centred west-north-west for recreational receptors. *Night-time photograph available from this location (refer to*	High	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	A wide panoramic view from north-west to east, with distant visibility south (approximately 5km). Opening year (winter) There would be close-range views of the retained Two Forts Way footpath in the foreground and the sculptural landscape mounding at Tilbury Fields (up to 17m above existing ground level) around the North Portal, with open mosaic habitat land cover and new WCH routes, including one leading to an elevated viewing platform to the north-west. The new sculptural landscape mounding, which would contrast with the existing flat open landscape, would dominate this view and screen the North Portal and the Project route and reduce views of existing OHL. There would also be long-range views south towards the hilltop landform within Chalk Park. This new landform would be apparent in the context of the wooded ridgeline of Shorne	Highway Section 9

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Figure 7.18 (Application Document 6.2))						Woods Country Park, which forms part of the Kent Downs AONB. The upper chalk slopes of the South Portal cutting would also be just apparent (approximately 3.5km). Overall, due to the foreshortening of views north and the prominence of the new sculptural landscape mounding at Tilbury Fields, the Project would be the dominant feature in northerly views but only a perceptible feature in southerly views, where it would be seen in the context of the wide panoramic view to the south of the River Thames. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the majority of the Project being screened by the sculptural landscape mounding at Tilbury Fields. Although the sculptural landscape mounding would dominate views north, the Project would only be perceptible in views south. <u>Design year (summer)</u> There would be no change to the northerly views described at the opening year. In southerly views, establishment of the woodland copse on the hilltop landform within Chalk Park would help to integrate the landform into the surrounding landscape. However, in the context of the wider view, the new woodland would not be readily apparent. Overall, the Project would remain noticeable in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the proximity of proposed sculptural landscape mounding and the nature of the open mosaic habitat landscape treatment. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the majority of the Project being screened by the sculptural landscape mounding around the North Portal. Although the sculptural landscape mounding would dominate views north, it would only be perceptible in views south. <u>Night-time environment</u> At night, from this location there would be no perceivable change caused by the Project, due to the screening provided by the intervening landform and the presence of existing light sources in views, including those at Tilbury Docks and Tilbury Sewage Treatment Works.	
N-05 & N-(CH)09	View from Coalhouse Fort Scheduled Monument, adjacent to Two Forts Way Coastal Path/bridleway 187 and NCN Route 13, looking towards the Kent Downs AONB (LLCA Mucking Marshes). View centred south-south-west for visitors.	Very high	Negligible	Negligible	Slight adverse effect	Slight adverse effect	A wide panoramic view from south-east to north, including distant visibility south (approximately 6km) across the River Thames. <u>Opening year (winter)</u> There would be close-range, filtered views of the water vole mitigation area to the west, including new scrapes, ditches and wet grassland. Beyond this, there would be partially filtered and glimpsed long-range views of the sculptural landscape mounding at Tilbury Fields around the North Portal (up to 17m above existing ground level), which would contrast with the existing flat landform of the Tilbury Marshes and largely screen views towards the North Portal and the Project route. Glimpses of Tilbury Viaduct and movement of high-sided vehicles would be visible to the north-west and the associated loss of mature vegetation would be apparent, although highway infrastructure is unlikely to be perceivable at this distance (approximately 2km).	Highway Section 9

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Note: at the time of writing (20 May 2022) Coalhouse Fort is only open to visitors every last Sunday between March and September and most bank holiday Mondays.						There would also be long-range views of the hilltop landform within Chalk Park to the south-west. The new landform would be just apparent, seen in the context of the wooded ridgeline backdrop in Shorne Woods Country Park, which forms part of the Kent Downs AONB. The upper chalk slopes of the South Portal cutting (approximately 4.6km) would also be just apparent. Overall, the Project would be barely noticeable in views. <u>Design year (summer)</u> Views towards the Project would be as described above for the opening year, except existing trees in leaf in the foreground would provide some additional filtering of views. In southerly views, the establishment of the woodland copse on the hilltop landform within Chalk Park would help to integrate the new landform into the surrounding landscape. However, in the context of the wider view, this new woodland feature would not be readily apparent. Overall, the Project would remain barely noticeable in views. <u>Design year (winter)</u> The existing vegetation in the foreground would provide less filtering of views, and the sculptural landscape mounding at Tilbury Fields would be slightly more apparent. <u>Night-time environment</u> At night, there would be a potential perceivable increase in light levels along Station Road/Church Road within the Tilbury Marshes. However, this lighting would be viewed in the context of existing lighting at Tilbury Docks and Tilbury Sewage Treatment Works. New street lighting (LED luminaires) along the approach to the North Portal is unlikely to be perceivable, as this would be screened by the sculptural landscape mounding at Tilbury Fields. Night-time visual effects would be similar in opening year and design year.	
N-06	View from footpath 200 adjacent to Bowaters Farm (LLCA Tilbury Marshes). View centred south-south-east for recreational receptors.	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	<u>Opening year (winter)</u> Generally, visibility along the PRoW is restricted due to intervening vegetation, which limits views beyond the immediate foreground. At this location, there would be close- to mid-range, partially filtered, elevated views of the eastern embankments of the new North Portal operational access bridge, a new roundabout and moving vehicles. There would also be views south-west towards the sculptural landscape mounding at Tilbury Fields (up to 17m above existing ground level) around the North Portal. The Project route and North Portal would largely be screened by a combination of the sculptural landscape mounding and the embankments associated with the North Portal operational access bridge. Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Due to the presence of existing foreground vegetation in leaf, and established mitigation planting along the embankments of the North Portal operational access bridge, the visibility of the Project would be reduced. Overall, the North Portal operational access bridge and sculptural landscape mounding at Tilbury Fields would be perceptible in views.	Highway Section 9

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Design year (winter) The existing vegetation in the foreground would provide less filtering of views, and the sculptural landscape mounding at Tilbury Fields would be more apparent to the south-west. Night-time environment At night, there would only be a slight perceivable change to views, due to limited lighting associated with vehicle lights at the North Portal operational access bridge, although new lighting would be viewed in the context of existing lighting within Gravesend in the distant view. New street lighting (LED luminaires) along the approach to the North Portal is unlikely to be perceivable, as this would be screened by the sculptural landscape mounding at Tilbury Fields. By design year, established mitigation planting would provide some filtering of lighting in night-time views.	
N-07	View from bridleway 58 (off Love Lane) (LLCA West Tilbury Urban Fringe). View centred west-south-west for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Opening year (winter) A wide view along a broad extent of the Project. Beyond the foreground arable fields, reinstated to agriculture, the Tilbury Viaduct and associated traffic would be visible to the west as it spans the Tilbury Loop railway line, partially screened by existing vegetation and buildings in Readmans Industrial Estate. A reduction in mature vegetation at the viaduct would also be apparent. North of Tilbury Viaduct, the false cutting earthwork would obscure the Project carriageway from view. The grassed slopes of the false cutting would be visible, along with the upper parts of high-sided vehicles and gantries. In distant views north-west, the new Muckingford Road green bridge would also be apparent (approximately 1.1km) across the flat, open arable landscape. The diverted OHL and changes in pylon locations would appear similar to the existing OHL, however, the line of pylons closest to the viewpoint would have been removed, resulting in some reduction in visual clutter. Distant views southwards towards the North Portal and its approach would be restricted by intervening landform, vegetation and buildings. However, there would be mid-range views of the embanked approach to Tilbury Viaduct and associated highway infrastructure and vehicles to the south-west. Overall, the Project would be noticeable in views. Design year (summer) Establishment of mitigation planting adjoining Station Road and along the new road embankment, the Tilbury Loop railway line and field boundaries, and groups of established shrubs and trees east of Tilbury Viaduct, would reduce visibility of the embanked approach to Tilbury Viaduct and soften views of the viaduct structure. However, glimpsed views of Tilbury Viaduct and associated traffic would remain. In the northerly view, established mitigation planting at the southern end of the false cutting slopes would help to soften their appearance, although gantries and high-sided vehicle movements would remain apparent, as would Muckingford Road green bridge. Overall, the Project would be perceptible in views but would not be intrusive. Design year (winter) In winter, Tilbury Viaduct and associated traffic would be slightly more apparent through deciduous tree cover.	Highway Sections 9 and 10

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Night-time environment At night, there would be a perceivable change in light levels in south-westerly views from this location as a result of new street lighting (LED luminaires) along Station Road, although this would be viewed in the context of existing lighting at Readmans Industrial Estate. Night-time visual effects would be similar in opening year and design year.	
N-08	View from Low Street Lane adjacent to cluster of rural residential properties (LLCA West Tilbury Urban Fringe). View centred east for residential receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*	Moderate	Major	Major	Large adverse effect	Large adverse effect	Opening year (winter) There would be mid-range visibility of the Project across a broad extent of this wide view. Beyond the foreground arable fields, reinstated to agriculture, the loss of existing trees would allow open views of Tilbury Viaduct, which would be seen as a prominent feature crossing the landscape above the skyline, together with associated traffic. A modified field pond would also be apparent in front of and beneath the viaduct. The existing view towards Readmans Industrial Estate would be mostly screened by the viaduct. Further north, there would be filtered views of the false cutting earthwork along the Project route in the midground (approximately 0.4km), with the upper parts of high-sided vehicles and gantries visible above the false cutting. In the wider view north, the new Muckingford Road green bridge would be apparent, although partially screened by the woodland copse on Low Street Lane. The diverted OHL and new pylons would appear similar to the existing OHL. Overall, the Project would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than moderate due to the proximity of the Project to the viewpoint. Design year (summer) Established mitigation planting along the nearby field boundary, around the modified field pond and along the Tilbury Loop railway line beyond Tilbury Viaduct would soften the appearance of the viaduct. However, the viaduct and associated vehicle movements would remain a prominent feature above the skyline, visible across a large proportion of the view. In the northerly view, established mitigation planting at the southern end of the false cutting slopes and hedgerows along adjacent field edges would help to soften the appearance of earthworks, although gantries and high-sided vehicles would remain apparent, as would Muckingford Road green bridge. Overall, the Project would remain dominant in views. Design year (winter) In winter, the base of Tilbury Viaduct would be slightly more visible through existing deciduous vegetation and proposed mitigation planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than moderate due to the proximity of the Project to the viewpoint. Night-time environment At night, there would be a perceivable change in light levels in the midground due to vehicle lights along Tilbury Viaduct, which would in part be restricted by the structure's solid parapet/acoustic barrier. The vehicle lights would be viewed in the context of	Highway Sections 9 and 10

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							existing lighting in the wider view, including along the urban edge of East Tilbury and at Readmans Industrial Estate. Night-time visual effects would be similar in opening year and design year.	
N-09	View from footpath 67 (off Blue Anchor Lane) adjacent to Holford Farm (LLCA West Tilbury Urban Fringe). View centred east-north-east for recreational receptors. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> There would be mid-range views of the Project across a broad extent of this wide view. Beyond arable fields reinstated to agriculture, there would be views of the false cutting earthwork along the Project route, where the carriageway would be obscured from view. The slopes would appear out of character in the midground (approximately 0.7km) of this relatively flat landscape. The upper parts of high-sided vehicles and a number of gantries would be visible above the false cutting. The new Muckingford Road green bridge would also be apparent (approximately 0.8km), although the slackened south-western slope, reinstated to agriculture, would aid integration of the bridge into the wider landscape. The diverted OHL and new pylons would appear similar to the existing OHL. Due to vegetation loss, the new Tilbury Viaduct would be clearly visible crossing the Tilbury Loop railway line. Visibility of the Project beyond this viaduct structure towards the North Portal (approximately 2km) would be restricted by intervening landform, vegetation and buildings, although there could be glimpses of the sculptural landscape mounding at Tilbury Fields (up to 17m above existing ground level) around the North Portal. Overall, the Project would be a noticeable feature crossing the flat landscape. <u>Design year (summer)</u> Established mitigation planting in front of Tilbury Viaduct to the south-east and at the southern end of the false cutting to the east, in combination with hedgerow field boundary planting, would soften the appearance of earthworks and the viaduct structure. However, vehicle movements and gantries would remain apparent, as would Muckingford Road green bridge. Overall, the Project would remain noticeable in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the year-round visual screening provided by the false cutting and the relatively limited nature of proposed mitigation planting around Tilbury Viaduct due to the constraints of the surrounding flood compensation area. <u>Night-time environment</u> At night, there would be a perceivable change in light levels in the midground due to lighting associated with gantries along the Project route and vehicle lights along Tilbury Viaduct, which would in part be restricted by the structure's solid parapet/acoustic barrier. This lighting would be viewed in the context of existing lighting at Readmans Industrial Estate and more distant lighting at London Gateway Port. Night-time visual effects would be similar in opening year and design year.	Highway Sections 9 and 10
N-10	View from Sandy Lane adjacent to residential properties located in Chadwell St	High	No change	No change	Neutral effect	Neutral effect	The dense vegetation present along the south-eastern urban fringe of Chadwell St Mary, together with the rolling landform and the distance between the viewpoint and the Project (approximately 3km), would result in the Project not being discernible from this location.	Highway Section 9

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Mary urban fringe (LLCA Grays/Chadwell St Mary Urban Area). View centred south-east for residential receptors.							
N-11	View from junction of bridleway 63 and footpath 66 (off Muckingford Road) (LLCA West Tilbury Urban Fringe). View centred south-east for recreational receptors.	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> There would be mid- to long-range views of the Project across this view. Muckingford Road green bridge would be screened by the dense hedgerow along the PRoW. Beyond the arable fields, reinstated to agriculture, there would be views of the false cutting earthwork along the Project route, where the carriageway would be obscured from view. The slopes would appear out of character in the midground (approximately 0.65m) of this relatively flat landscape. The upper parts of high-sided vehicles and gantries would also be visible above the false cutting. The diverted OHL and new pylons would appear similar to the existing OHL. Due to vegetation loss, the new Tilbury Viaduct would be visible crossing the Tilbury Loop railway line. Visibility of the Project beyond the viaduct towards the North Portal (approximately 2.5km) would be restricted by intervening vegetation and landform, and buildings along Station Road, although there could be glimpses of the sculptural landscape mounding at Tilbury Fields (up to 17m above existing ground level) around the North Portal. Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Established mitigation planting in front of Tilbury Viaduct and along the southern end of the false cutting, in combination with hedgerow field boundary planting, would soften the appearance of earthworks and the viaduct structure. However, much of the false cutting earthworks, gantries, vehicle movements and Tilbury Viaduct structure would remain apparent in views. Overall, the Project would remain noticeable in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the year-round visual screening provided by the false cutting and the relatively limited nature of proposed mitigation planting around Tilbury Viaduct due to the constraints of the surrounding flood compensation area. <u>Night-time environment</u> At night, there would be a perceivable change in light levels in mid- to long-range views due to lighting associated with gantries along the Project route and vehicle lights along Tilbury Viaduct, which would in part be restricted by the structure's solid parapet/acoustic barrier. This lighting would be viewed in the context of existing lighting at Thames Industrial Park and Readmans Industrial Estate. Night-time visual effects would be similar in opening year and design year.	Highway Sections 9 and 10

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
N-12	View from residential properties in East Tilbury (off Beechcroft Avenue) (LLCA West Tilbury Urban Fringe). View centred south-west for residential receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).* *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	High	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> There would be mid-range visibility of the Project across a broad extent of this wide view. Beyond the foreground arable fields, reinstated to agriculture, there would be views of the false cutting earthwork along the Project route, where the carriageway would be obscured from view. The slopes would appear out of character in the midground (approximately 0.5km), with the upper parts of high-sided vehicles and gantries visible above the false cutting. In the wider view, the new Muckingford Road green bridge would also be prominent above the skyline (approximately 0.5km), although the slackened south-eastern slope, reinstated to agriculture, would aid integration of the bridge into the wider landscape. Modifications to the OHL would appear similar to the existing OHL, however, the line of pylons closest to the viewpoint would have been removed, resulting in the reduction of some visual clutter. Vegetation loss would allow a clear view of the northern part of Tilbury Viaduct. Visibility further south towards the North Portal would be restricted by intervening vegetation and buildings. Overall, the Project would be seen as a noticeable feature crossing the flat, relatively open landscape. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of the OHL. <u>Design year (summer)</u> Established mitigation planting along the southern end of the false cutting, and established hedgerows along field edges adjacent to the false cutting and along Muckingford Road, would help to soften the appearance of earthworks and structures. However, much of the false cutting and upper parts of high-sided vehicles would remain visible, as would Muckingford Road green bridge, seen above the skyline. Tilbury Viaduct and associated vehicle movements would also remain visible to the south-west. Overall, the Project would remain noticeable in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the year-round visual screening provided by the false cutting and the relatively limited nature of proposed mitigation planting around Tilbury Viaduct due to the constraints of the surrounding flood compensation area. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of the OHL. <u>Night-time environment</u> At night, there would not be a perceivable change to views, as lighting associated with gantries along the Project route and vehicle lights along Muckingford Road green bridge and Tilbury Viaduct would be viewed in the context of several existing light sources, including skyglow from the urban areas of Grays and Chadwell St Mary. Hedgerow planting along Muckingford Road green bridge would screen views of vehicle lights by the design year.	Highway Sections 9 and 10

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
N-13	View from edge of public open space between Linford and East Tilbury (off Muckingford Road) (LLCA Linford/Buckingham Hill Urban Fringe). View centred south-west for users of the public open space.	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> There would be mid-range visibility of the Project across a broad extent of this wide view. Beyond the open mosaic habitat in the foreground and arable fields reinstated to agriculture beyond, there would be south-westerly views of the realigned Muckingford Road and the prominent Muckingford Road green bridge (approximately 0.65km), which would be visible above the skyline. The slackened earthwork slopes would help to integrate the new bridge into the surrounding landscape. The bridge earthworks would also partially screen further visibility of the Project to the south-west from this location. In westerly views, the new false cutting earthwork along the Project route would obstruct existing views beyond the midground (approximately 0.5km), with the upper parts of high-sided vehicles and gantries visible above the false cutting. However, some views towards vehicles and a gantry would be partially restricted by buildings at Ashlea Farm. A new large-scale attenuation basin would also be apparent in views west. Modifications to the OHL would appear similar to the existing OHL, however, the OHL closest to the viewpoint would have been partially removed, resulting in the reduction of some visual clutter. Overall, the Project would be a noticeable feature crossing the landscape. <u>Design year (summer)</u> Established hedgerows along the edge of the attenuation basin and along Muckingford Road green bridge would soften the appearance of earthworks and filter views of vehicle movements on the green bridge. However, earthworks and the green bridge structure would remain apparent above intervening vegetation, and the upper parts of gantries and high-sided vehicles would be visible along the Project route. Overall, the Project would remain noticeable in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the year-round visual screening provided by the false cutting and the open nature of the landscape treatment along the Project route (intentionally limited to integrate with the existing landscape character). <u>Night-time environment</u> At night, there would not be a perceivable change to views, as lighting associated with gantries along the Project route and vehicle lights along Muckingford Road green bridge would be viewed in the context of several existing light sources, including skyglow from the urban areas of Grays and Chadwell St Mary. Hedgerow planting along Muckingford Road green bridge would screen views of vehicle lights by the design year.	Highway Section 10
N-14	View from Hoford Road Protected Lane (LLCA West Tilbury Urban Fringe). View centred east for recreational receptors.	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	<u>Opening year (winter)</u> There would be mid-range visibility of the Project across this wide view, including the upper sections of new false cutting earthworks along the Project route to the east (approximately 0.8km). The upper parts of high-sided vehicles and gantries would be visible above the false cutting. The base of the false cutting would be softened by intervening landform and field-bounding vegetation. Modifications to OHL and new pylons would appear similar to the existing OHL.	Highway Section 10

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							To the north-east, intervening field boundary vegetation would provide a degree of visual screening to the new Hoford Road green bridge (approximately 0.9km). The upper part of the cutting slopes along the Project route would be visible, as well as the tops of high-sided vehicles, signage and gantries to the north-west and south-east of the green bridge. To the south-east, the realigned Muckingford Road and new Muckingford Road green bridge would be apparent (approximately 0.9km). The gentle slopes along the green bridge approaches would help to integrate the new structure into the surrounding landscape. Existing buildings and vegetation along Muckingford Road and the green bridge earthworks would largely screen views of the Project further to the south. Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Established hedgerows along the base of the false cutting to the east and along Muckingford Road green bridge to the south-east would soften the appearance of earthworks and partially screen views of vehicles on the green bridge. However, gantries and high-sided vehicles would remain visible above the false cutting along the Project route. Established mitigation planting along the existing watercourse to the north-east and established hedgerows along Hoford Road green bridge would help to replace lost vegetation along Hoford Road and largely screen views of Hoford Road green bridge and the Project route. Overall, the Project would be perceptible in views, but would not alter the overall balance of features and elements that constitute the existing view. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the presence of the proposed false cutting to the east and the substantial nature of planting along the existing watercourse to the north-east, both of which would continue to provide effective mitigation in winter. <u>Night-time environment</u> At night, there would not be a perceivable change to views, due to the limited nature of new lighting associated with gantries along the Project route and vehicle lights along the Muckingford Road and Hoford Road green bridges. In addition, new lighting would be viewed in the context of existing lighting at Linford Tarmac Building Products and London Gateway Port. By design year, established mitigation planting would provide some filtering of lighting in night-time views.	
N-15	View from Hoford Road Protected Lane. Also represents views from footpath FP64 (LLCA West Tilbury Urban Fringe). View centred north-north-east for recreational receptors.	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	<u>Opening year (winter)</u> There would be mid-range visibility of the Project across this wide view, from a break in the vegetation flanking Hoford Road. The upper part of the cutting slopes along the Project route would be visible to the north-east, along with the tops of high-sided vehicles, signage and gantries. The new Hoford Road green bridge would also be apparent above the Project route. Retained vegetation along Hoford Road in the foreground would screen some views to the north-east. To the east, the tops of high-sided vehicles and gantries would be visible above the new false cutting earthwork, although the false cutting slopes would be partially	Highway Section 10

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							obscured within the valley landform. Modifications to the OHL and new pylons would appear similar to the existing OHL. To the north-west, due to the intervening undulating landform and location of the Project at a relatively low elevation, there would be only limited visibility of the new false cutting in the midground to the west of Hoford Road. This would include glimpses of the upper parts of high-sided vehicles and gantries. There would also be views towards the Brentwood Road overbridge (approximately 1km) and the FP79 WCH bridge (approximately 1.3km) in the distance. Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Established mitigation planting along the existing watercourse to the north-east would help to replace lost vegetation along Hoford Road and filter views of Hoford Road green bridge and the cutting along the Project route. Glimpses of the tops of high-sided vehicles, signage and gantries are likely to remain visible, as well as parts of Hoford Road green bridge. Established hedgerows along the edge of the false cutting slopes to the north, east and south-east would soften the appearance of earthworks, although the tops of high-sided vehicles and gantries would be visible. Established planting around the Brentwood Road overbridge and FP79 WCH bridge would soften the appearance of these structures to the north-west. Overall, the Project would be perceptible in views, but would not alter the overall balance of features and elements that constitute the existing view. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the depth of proposed planting along the existing watercourse and the year-round screening provided by the false cuttings. <u>Night-time environment</u> At night, there would not be a perceivable change to views, due to the limited nature of new lighting associated with gantries along the Project route and vehicle lights, where not screened within cutting or false cutting. In addition, new lighting would be viewed in the context of existing lighting at Linford Tarmac Building Products and Chadwell St Mary. By design year, established mitigation planting would provide some filtering of lighting in night-time views.	
N-16	View from footpath 41/access track near Butts Lane (LLCA Linford/Buckingham Hill Urban Fringe). View centred south-south-west for recreational receptors.	Moderate	No change	No change	Neutral effect	Neutral effect	Due to distance, landform and intervening features between the Project and the viewpoint (approximately 3.1km), the Project would not be discernible in views.	Highway Section 10
N-17	View from footpath 45 located within Orsett Golf Club (LLCA	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate beneficial effect	<u>Opening year (winter)</u> There would be mid-range visibility of the Project across a localised part of this wide view. Beyond the newly planted nitrogen deposition compensation site in the	Highway Section 10

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Linford/Buckingham Hill Urban Fringe). View centred south-south-east for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*						foreground, there would be views of the new Project road on low embankment and associated vehicle movements. The new Hoford Road green bridge (approximately 0.6km) would not be visible, as a result of intervening retained vegetation and the landform associated with the quarry. Modifications to the OHL would appear similar to the existing OHL. Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Established trees and shrubs within the nitrogen deposition compensation site adjacent to the PRoW would effectively extend the existing woodland at Rainbow Wood north-eastwards and screen views towards the Project, nearby mineral workings and existing OHL. A vista would be incorporated within the planting to the south-west to maintain a framed long-range view of the existing undulating landscape. The vista would exclude existing detracting features such as pylons, where practicable. In addition, planting would be set back from the PRoW edge to maintain a sense of openness. Overall, mitigation planting would result in a noticeable benefit to views from the PRoW by removing views of existing visual detractors, such as OHL and the nearby mineral workings. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the proximity of mitigation planting. <u>Night-time environment</u> At night, there would be a perceivable change in mid-range views due to vehicle lights along the Project route. However, this would be viewed in the context of existing lighting in the background at Grays and Chadwell St Mary. By design year, lighting would be fully screened by established mitigation planting.	
N-18	View from footpath 78 on the north-east edge of Chadwell St Mary (LLCA White Croft/Orsett Heath Urban Fringe). View centred north-north-east for recreational receptors.	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> Footpath 78 would be slightly realigned to form a WCH route along the realigned High House Lane. Beyond the foreground arable fields, reinstated to agriculture, and the realigned High House Lane, there would be mid-range views north-east towards the top of the new false cutting earthwork along the Project route. The carriageway (approximately 0.3km) would be screened by a combination of existing landform and false cutting, although the tops of high-sided vehicles and gantries are likely to be visible above the false cutting. There could also be glimpses of the acoustic barrier adjacent to Brook Farm. The lower parts of the false cutting would be screened within the shallow valley landform. There would also be close- to mid-range views towards the new Brentwood Road overbridge, which would form a prominent visual focus due to its raised position in the landscape. In long-range easterly views, the new Hoford Road green bridge would not be visible due to a combination of distance, intervening landform and retained vegetation. Views north-west towards the Project would be limited by earthworks at Brentwood Road overbridge, although there would be narrow, glimpsed views towards features such as the upper parts of high-sided vehicles.	Highway Section 10

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							In the long-range view to the north, there could also be views of highway infrastructure associated with improvements to the A13 and A1013 Stanford Road along the skyline, due to vegetation loss. Modifications to the OHL would appear similar to the existing OHL. Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Established hedgerows along the base of false cuttings and the Brentwood Road overbridge embankment would soften the appearance of earthworks, although the tops of high-sided vehicles and gantries would remain visible along the Project route, with vehicle movements apparent on the overbridge. Brentwood Road overbridge would remain a prominent feature due to its height within the landscape. Established mitigation planting would also help to soften views towards the A13 and A1013 Stanford Road corridors. Overall, the Project, in particular Brentwood Road overbridge, would remain noticeable in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the year-round screening provided by the false cuttings. <u>Night-time environment</u> At night, there would only be a slight perceivable change to views, due to the limited nature of new lighting associated with gantries along the Project route and vehicle lights on Brentwood Road overbridge. However, new lighting would be viewed in the context of existing lighting at Chadwell St Mary and along the A13. Night-time visual effects would be similar in opening year and design year.	
N-19	View from residential properties at Orsett Heath/Chadwell St Mary (LLCA White Croft/Orsett Heath Urban Fringe). Viewpoint centred north-north-east for residential receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).* *Night-time photograph available from this location (refer to*	High	Major	Moderate	Large adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> There would be mid-range visibility of the Project across this wide view, beyond the reinstated agricultural fields to the east and west of Hornsby Lane. The carriageway along the Project route (approximately 0.5km) would be largely screened in cutting or by the false cuttings, although the tops of high-sided vehicles and gantries would be visible. The FP79 WCH bridge (approximately 0.75km) and the northern end of Brentwood Road overbridge (approximately 1km) and the false cuttings along the Project route would appear visually prominent in the flat landscape to the north and north-east. The new link road between the Orsett Cock roundabout and the A1089 Dock Approach Road and the associated embankment and reinforced earth structure (approximately 1km) would be visible in front of the existing A13 embankment to the north, in conjunction with new street lighting (LED luminaires), vehicle movements and highway infrastructure. The embankment and reinforced earth structure with grass surfacing would largely screen views of the A13 corridor and new A13/A1089/A122 Lower Thames Crossing junction beyond, apart from new and replacement lighting columns. Landscape mounds up to 11m above the existing ground and one landscape mound up to 9m above the existing A13 within the junction area would also be visible and provide some screening of the new junction. The new Rectory Road overbridge over the A13 corridor would be apparent beyond Heath Place to the north-east.	Highway Sections 10 and 11

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Figure 7.18 (Application Document 6.2)).						The diverted OHL and new pylons would appear similar to the existing OHL. Overall, the Project would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than very large due to the Project being viewed in the context of the OHL. Design year (summer) Established hedgerows along the base of the false cutting slopes would soften the appearance of earthworks, although the tops of high-sided vehicles and gantries would be visible. Established mitigation planting at the FP79 WCH bridge and Brentwood Road overbridge would soften views of the associated embankments and vehicle movements. Established mitigation planting would substantially screen views of the A13/A1089/A122 Lower Thames Crossing junction except for part of the new link road between the Orsett Cock roundabout and the A1089 Dock Approach Road and associated reinforced earth structure, vehicle movements and highway infrastructure. The tops of some lighting columns would also remain visible within the wider junction. Overall, the Project would be noticeable in views. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the substantial nature of mitigation planting at the A13/A1089/A122 Lower Thames Crossing junction and the year-round screening provided by the false cutting along the Project route, to the east and west of the FP79 WCH bridge. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of the OHL. Night-time environment At night, there would be a perceivable increase in light levels in the midground as a result of lighting associated with gantries and vehicle lights along the Project route, where not screened by the cutting or false cutting, and new street lighting (LED luminaires) along the A13 and at the A13/A1089/A122 Lower Thames Crossing junction. However, new lighting would be viewed in the context of existing lighting along the A13, housing including tower blocks in Grays and Chadwell St Mary, and vehicle lights on the A13. By design year, established mitigation planting would provide some filtering of lighting in night-time views, however, street lighting along the A13 and at the A13/A1089/A122 Lower Thames Crossing junction would remain evident.	
N-20	View from Hornsby Lane adjacent to Heath Place (Grade II listed building) (LLCA White Croft/Orsett Heath Urban Fringe). View centred west-south-west for users of the local road.	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Opening year (winter) Views south-east would be largely screened by existing vegetation in the grounds of Heath Place. To the south and south-west, there would be views towards the Project route where it transitions from cutting to false cutting, as well as the A13 westbound to Project southbound slip road in cutting, with mid-range (approximately 0.15km) views of vehicle movements, gantries, signage and street lighting columns across a broad extent of the view.	Highway Sections 10 and 11

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							To the south-west, the diverted OHL and new pylons (approximately 0.3km) would appear similar to the existing OHL and would be seen beyond the Project route. In westerly, mid-range views, a series of elevated bridge and viaduct structures within the A13/A1089/A122 Lower Thames Crossing junction would be visible above an intervening belt of vegetation, including two new A1013 Stanford Road overbridges (approximately 0.5km and 0.7km). Highway infrastructure and moving vehicles would also be apparent. A landscape mound near The Whitecroft (care home on A1013 Stanford Road) up to 9m above existing ground would screen some elements of the junction to the west. To the north, vegetation loss along the A13 and A1013 Stanford Road would be apparent, with largely open views of the new link road between the Orsett Cock roundabout and the A1089 Dock Approach Road and the associated embankment and reinforced earth structure in front of the existing A13 embankment, in conjunction with new street lighting (LED luminaires), vehicle movements and highway infrastructure. The embankment and reinforced earth structure with grass surfacing would largely screen views of the A13 corridor and new A13/A1089/A122 Lower Thames Crossing junction beyond, apart from new and replacement lighting columns. Overall, the Project would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than moderate due to the Project appearing across a large proportion of the view. Design year (summer) Established hedgerows along the edge of the false cutting and cutting slopes to the south and south-west would soften the appearance of earthworks, although the tops of high-sided vehicles, signage and gantries would be visible along the Project route. Established mitigation planting at the A13/A1089/A122 Lower Thames Crossing junction would filter views of earthworks, structures, vehicle movements and highway infrastructure. However, part of the new link road between the Orsett Cock roundabout and the A1089 Dock Approach Road and associated reinforced earth structure, vehicle movements and highway infrastructure would remain apparent to the north. The tops of some lighting columns would also remain visible within the wider junction. Overall, the Project would be noticeable in views. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the proximity of the Project, the year-round screening provided by the landscape mound and the substantial nature of mitigation planting at the A13/A1089/A122 Lower Thames Crossing junction. Night-time environment At night, there would be a perceivable increase in light levels in the foreground and midground, as a result of lighting associated with gantries and vehicle lights along the Project route where not screened within cutting or false cutting. Vegetation loss along the A13 and A1013 Stanford Road would also result in new street lighting (LED luminaires) and vehicle lights being more apparent. However, new lighting would be viewed in the context of existing lighting along the A13 and within Chadwell St Mary and Grays. By design year, established mitigation planting would provide some filtering	

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							of lighting in night-time views, however, street lighting along the A13 and at the A13/A1089/A122 Lower Thames Crossing junction would remain evident.	
N-21	View from the junction of Hornsby Lane/A1013 Stanford Road (LLCA White Croft/Orsett Heath Urban Fringe). View centred south-south-west for users of the local road. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> To the north and west, there would be open, close-range to mid-range views, due to vegetation loss along the A1013 Stanford Road, towards the new link road between the Orsett Cock roundabout and the A1089 Dock Approach Road and the associated embankment and reinforced earth structure (approximately 30m) in front of the existing A13 embankment, in conjunction with new street lighting (LED luminaires), vehicle movements and highway infrastructure. The embankment and reinforced earth structure with grass surfacing would largely screen views of the A13 corridor and new A13/A1089/A122 Lower Thames Crossing junction beyond, apart from new and replacement lighting columns. To the south-west, replacement street lighting would be visible in close-range views along the A1013 Stanford Road. The new carriageway and earthworks along the Project route and A13 westbound to Project road southbound slip road would not be visible south of the A1013 Stanford Road due to screening provided by retained vegetation at The Whitecroft and a landscape mound of up to 9m above existing ground, and due to the roads being in cutting. However, there would be glimpsed, filtered views of high-sided vehicles, gantries and street lighting in the midground (approximately 0.5km). Views to the south and south-east would be partially restricted by buildings and vegetation at Heath Place, although there would be views towards the false cutting along the Project route and the FP79 WCH bridge and Brentwood Road overbridge. The Project carriageway would be obscured by the false cutting, although the upper parts of high-sided vehicles, signage and gantries could potentially be apparent above the earthworks. In south and south-westerly views, the diverted OHL with new pylons would appear similar to existing, given the distance (approximately 0.6km) and intervening features. Overall, the Project would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than moderate due to the Project appearing across a large proportion of the view. <u>Design year (summer)</u> Following establishment of mitigation planting, views of the Project would be reduced. Established mitigation planting to the north and west at the A13/A1089/A122 Lower Thames Crossing junction would soften the appearance of new earthworks and filter views of vehicle movements and highway infrastructure. However, part of the reinforced earth structure along the new link road between the Orsett Cock roundabout and the A1089 Dock Approach Road and associated vehicle movements and highway infrastructure would remain apparent to the north. Established hedgerow planting along the base of the false cutting to the south-east would soften the appearance of earthworks, although the tops of high-sided vehicles, signage and gantries could potentially remain visible along the Project route. Established mitigation planting at the FP79 WCH bridge and Brentwood Road	Highway Sections 10 and 11

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							overbridge would soften views of the associated embankments and vehicle movements. Overall, the Project would be noticeable in views. <u>Design year (winter)</u> The visual effects in winter would not be notably different from that in summer, given the substantial nature of proposed woodland planting along the A13 corridor and at the A13/A1089/A122 Lower Thames Crossing junction to the north and west, and the year-round mitigation provided by the landscape mounds to the west and south-west, and false cutting to the south and south-east. <u>Night-time environment</u> At night, there would be a perceivable increase in light levels as a result of additional street lighting and vehicle lights along new slip roads, and lighting associated with new gantries. However, additional lighting would be viewed in the context of existing lighting along the prominently lit A13 corridor. By design year, established mitigation planting would provide some filtering of lighting in night-time views.	
N-22	View from A1013 Stanford Road on the A1089 overbridge (northern side) (LLCA White Croft/Orsett Heath Urban Fringe). View centred north-east for users of the main road.	Low	Major	Moderate	Moderate adverse effect	Slight adverse effect	The existing A1013 Stanford Road bridge over the A1089 Dock Approach Road would be replaced with a new overbridge approximately 30m north of the existing location. This viewpoint is therefore considered to be representative of views from the new overbridge location. However, the commentary below has been based on a slightly adjusted viewpoint location from the new bridge since the existing location would no longer exist. From this new structure, there would be close- to mid-range views of the Project, including a series of structures associated with the A13/A1089/A122 Lower Thames Crossing junction in views north-west to south-east. There would also be distant views in an east-south-east direction. <u>Opening year (winter)</u> To the north, the elevated link road between Orsett Cock roundabout and the A1089 Dock Approach Road and the associated overbridge above the Project (approximately 0.25km) would be prominent, including vehicle movements and street lighting. The A13 westbound to Project road northbound slip road would also be visible on a viaduct crossing the Project and the A1089 Dock Approach Road (approximately 0.35km). To the north-west, the A13 westbound to Project road northbound slip road viaduct would also cross the A1089 Dock Approach Road northbound to Project road northbound slip road. The viaduct structure would be readily apparent and the additional slip road along the A1089 Dock Approach Road would widen the existing highway corridor in close- to mid-range views, with additional street lighting, signage and a new gantry visible. Vegetation loss around the existing highway network would result in more open views of earthworks, structures, vehicle movements and highway infrastructure. A landscape mound of up to 10m above existing ground would provide some screening of the existing A13 to the north-west. To the north-east, vegetation loss and the repositioning of the A1013 Stanford Road overbridge would result in increased visibility of the A1013 carriageways, vehicle movements and highway infrastructure in close- to mid-range views compared to existing views. In the midground, the new A1013 Stanford Road overbridge across the Project would be apparent, with the A1013 Stanford Road elevated in the view. Beyond this, there would be a backdrop of bridges, earthworks, street lighting, gantries, vehicle	Highway Section 11

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							movements and signage associated with the A13 westbound slip roads, the link road between Orsett Cock roundabout and the A1089 Dock Approach Road and the A13. Landscape mounds of up to 11m above the existing ground and one landscape mound up to 9m above the existing A13 would provide screening of some elements within this part of the A13/A1089/A122 Lower Thames Crossing junction. In south-easterly views, there would be mid- to long-range visibility along the Project route as it transitions from within cutting to false cutting, and associated vehicle movements, gantries and signage. The FP79 WCH bridge structure would also be visible in the distance (approximately 1.2km). In views south, vegetation loss along the A1089 Dock Approach Road would be apparent, allowing for increased visibility into the urban area. A new gantry would be a prominent foreground feature spanning the A1089. The diverted OHL and new pylons would be located approximately 0.2km further away from this viewpoint, but would remain prominent features in the view. Overall, the Project would be dominant in views. Several additional slip roads and structures would be visible at the large-scale A13/A1089/A122 Lower Thames Crossing junction across a large proportion of views from the new overbridge. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than slight due to the Project appearing across a large proportion of the view. <u>Design year (summer)</u> Following establishment of mitigation planting, in particular within and surrounding the A13/A1089/A122 Lower Thames Crossing junction, the visual impact of the Project would be reduced. Established mitigation planting to the north would soften the appearance of earthworks and reduce the extent of bridge and viaduct structures visible. However, the widened highway corridor along the A1089 Dock Approach Road, with vehicle movements and highway infrastructure, would remain apparent in close- to mid-range views. The increased intensity of slip roads and structures would also remain apparent to the north-east, with taller elements such as the tops of high-sided vehicles, gantries and lighting columns remaining visible above and through gaps in woodland. These elements would be more prominent across open bridge and viaduct structures. To the east and south-east, established mitigation planting along the A1013 Stanford Road and the realigned Heath Road would restrict views of the Project route beyond, as well as restoring a similar level of containment to views compared to the existing situation. Similarly, established mitigation planting along the A1089 Dock Approach Road to the south would reinstate some loss of vegetation, although the gantry would remain apparent. Overall, the Project would be noticeable in views, with prominent elements such as gantries, street lighting and bridge and viaduct structures remaining visible. <u>Design year (winter)</u> The visual effects in winter would not be notably different from that in summer, given the substantial nature of proposed woodland planting at the A13/A1089/A122 Lower Thames Crossing junction.	

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Night-time environment At night, there would be a notable increase in light levels as a result of additional street lighting and vehicle lights along new slip roads, and lighting associated with new gantries. In addition, vegetation loss around the existing highway network would result in increased visibility of lighting, including vehicle lights in the opening year. However, additional lighting would be viewed in the context of existing lighting along the prominently lit A13 corridor, the A1013 Stanford Road and the A1089 Dock Approach Road. By design year, established mitigation planting would provide some filtering of lighting in night-time views.	
N-23	View from Grays urban edge (off Long Lane) (LLCA White Croft/Orsett Heath Urban Fringe). View centred east-north-east for residential receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Opening year (winter) There would be mid-range views of the Project at its intersection with the A13 and A1089 Dock Approach Road. There would be views towards the A13 westbound to Project road northbound slip road viaduct to the north-east and the new A1013 Stanford Road overbridge above the A1089 Dock Approach Road to the east, with visibility of vehicle movements, street lighting and highway infrastructure. The A13 westbound to Project road northbound slip road would be screened by a false cutting once it transitions off the viaduct, although the tops of high-sided vehicles, a gantry and street lighting could potentially be visible above the false cutting slopes. The A1089 Dock Approach Road to Project road northbound slip road would be screened by both the false cutting and a landscape mound south of the viaduct of up to 11m above existing ground. A second landscape mound beyond the slip roads of up to 10m above existing ground would provide some screening of the existing A13 to the north-east. The diverted OHL and new pylons would appear similar to the existing OHL. Overall, the Project would be noticeable in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of the OHL. Design year (summer) Following establishment of mitigation planting at the south-western edge of the A13/A1089/A122 Lower Thames Crossing junction, visibility of the Project would be substantially reduced. There would remain some filtered glimpses of the viaduct and bridge structures and vehicles using structures, with street lighting visible above vegetation. Overall, the Project would be perceptible in views, although this would not alter the overall balance of features that constitute the existing view. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the substantial nature of proposed planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to the Project being viewed in the context of the OHL. Night-time environment At night, there would be a perceivable increase in light levels as a result of additional street lighting and vehicle lights along new slip roads. In addition, vegetation loss	Highway Section 11

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							around the existing highway network would result in increased visibility of lighting, including vehicle lights. However, additional lighting would be viewed in the context of existing lighting along the prominently lit A13 corridor, the A1013 Stanford Road and the A1089 Dock Approach Road. By design year, established mitigation planting would provide some filtering of lighting in night-time views.	
N-24	View from residential properties on B188 Baker Street (LLCA Orsett Lowland Farmland). View looking south-south-east for residential receptors.	High	Major	Moderate	Large adverse effect	Moderate adverse effect	Opening year (winter) There would be a close- to mid-range framed view of the new overbridge carrying the elevated Project road southbound to A13 eastbound slip road (approximately 0.16km), part of the road embankment approach (approximately 70m) and supporting retaining walls (approximately 0.14km). Elevated street lighting and vehicle movements on the bridge would also be readily apparent. Vegetation loss along Baker Street would allow increased visibility of the highway corridor. Views further south to the A13 and wider A13/A1089/A122 Lower Thames Crossing junction would be largely obscured by the new slip road overbridge. Overall, the Project would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than very large due to the Project being viewed in the context of the existing highway corridor. Design year (summer) Established mitigation planting along the embankment of the Project road southbound to A13 eastbound slip road, and in front of the retaining walls flanking both ends of the overbridge, would restore a similar level of vegetation cover along Baker Street, as well as softening the appearance of earthworks and structures and filtering views of vehicle movements and highway infrastructure. However, the overbridge structure and elevated vehicles on the overbridge would remain a focal point in front of the existing A13 structure. Overall, the Project would be noticeable in views. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the substantial nature of proposed planting and the open, framed view of the proposed bridge structure crossing Baker Street. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of the existing highway corridor. Night-time environment At night, there would be a perceivable increase in light levels as a result of vegetation loss along Baker Street and the A13, which would broaden the extent of visible light sources. There would also be new street lighting introduced along the Project road southbound to A13 eastbound slip road, which would be closer to the viewpoint. However, new lighting would be viewed in the context of existing lighting along Baker Street and the A13. By design year, established mitigation planting would provide some filtering of lighting in night-time views.	Highway Section 11
N-25	View from the intersection of footpath 93, footpath 96 and bridleway 206, off Mill Lane, on southern urban edge	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Opening year (winter) There would be mid-range views of the new Project road southbound to A13 eastbound slip road in front of the existing A13 (approximately 0.4km), including the new overbridge structure where the slip road crosses Baker Street and the associated retaining walls and embankment. Extensive vegetation loss would be readily apparent	Highway Section 11

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	of Orsett. Also represents views from footpaths 82 and 94 (LLCA Orsett Lowland Farmland). View centred south-west for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*						along the A13, resulting in more open views of vehicle movements and highway infrastructure on the A13. Replacement street lighting along the A13 and additional street lighting along the slip road would be visible above the skyline, together with new signage and vehicle movements across a broad extent of the view. New street lighting and gantries would also be apparent in views towards the A13/A1089/A122 Lower Thames Crossing junction, as well as the tops of landscape mounds of up to 11m above the existing ground and one landscape mound up to 9m above the existing A13 to the south-west. The diverted OHL and new pylons would appear similar to the existing OHL at this distance (approximately 1.2km). Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Following establishment of mitigation planting on the embankment slopes along the Project road southbound to A13 eastbound slip road, visibility of the Project would be substantially reduced. Established mitigation planting would soften the appearance of the embankments and largely screen views of vehicle movements and highway infrastructure along both the A13 and the slip road. However, the tops of taller features such as street lighting and gantries are likely to remain apparent. Further mitigation planting within the A13/A1089/A122 Lower Thames Crossing junction would provide a backdrop to glimpses of moving vehicles and help to reduce their prominence in views. Overall, the Project would be perceptible in views, but would not alter the overall balance of features that constitute the existing view. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the substantial nature of proposed planting at the A13/A1089/A122 Lower Thames Crossing junction. <u>Night-time environment</u> At night, there would be a perceivable increase in light levels due to new street lighting introduced along the Project road southbound to A13 eastbound slip road, which would be closer to the viewpoint, and within the wider A13/A1089/A122 Lower Thames Crossing junction beyond. However, new lighting would be viewed in the context of existing lighting along the prominently lit A13. By design year, established mitigation planting would provide some filtering of vehicle lights in night-time views, although street lights are likely to remain visible above vegetation. This is similar to the existing situation, although a greater number of street lights would be visible.	
N-26	View from Stifford Clays Road (LLCA Orsett Lowland Farmland). View centred north-west for users of the local road.	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	<u>Opening year (winter)</u> There would be close-range views of the slightly realigned Stifford Clays Road and the cycle route on the southern side of the road. Vegetation loss on both sides of Stifford Clays Road would open up views of the Project. There would be close- to mid-range views west towards the Stifford Clays Road overbridge and associated embankments, which would largely obscure views of the Project further west. There would also be mid-range views north-west over fields reinstated to agriculture towards glimpses of high-sided vehicles, signage and gantries above the cutting slopes of the Project route. In addition, the elevated Green Lane green bridge and associated embankments are likely to be visible. Views would be	Highway Section 11

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							glimpsed through gaps between existing houses along Stifford Clays Road. A landscape mound along the Project route of up to approximately 15m above the Project road (2m above Stifford Clays Road) would provide some screening of the Project road northbound slip roads and associated traffic and highway infrastructure. Overall, the Project would be noticeable in views. Design year (summer) Established mitigation planting along the embankment of the Stifford Clays Road overbridge and north of Stifford Clays Road would soften the appearance of the earthworks and overbridge structure and largely screen views of the Project route to the north-west. Overall, the Stifford Clays Road overbridge would be perceptible in views. Design year (winter) The visual effects in winter would not be notably different from that in summer, given the proximity of, and open nature of the view towards, Stifford Clays Road overbridge. Night-time environment At night, there would be a limited perceivable change in views north-west as a result of lighting associated with gantries, which would be within an area that is largely dark in character. No street lighting is proposed, and vehicle lights would be screened within the cutting. By design year, established mitigation planting would largely screen views of gantry lighting.	
N-27	View from bridleway 161 adjacent to junction of Green Lane/Stifford Clays Road (LLCA Orsett Lowland Farmland). View centred north-north-east for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).* *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Opening year (winter) There would be mid- to long-range views of the Project route between Green Lane green bridge and Mardyke Viaduct across a broad extent of this wide view. There would be views north-east across arable fields, some of which would have been reinstated to agriculture, towards two gantries along the Project route just south of Green Lane green bridge. The carriageways and associated moving vehicles to the south of Green Lane bridge would be partially screened by a combination of false cutting and cutting. Views of the Project route further south would be restricted by intervening landform, although the top of a landscape mound of up to approximately 15m above the Project road is likely to be visible. The new Green Lane green bridge would be prominent in views due to its elevation above the surrounding landscape. North of Green Lane green bridge, the carriageway level would rise on embankment, screened by a false cutting seen below the skyline, although high-sided vehicles would be visible. North of the false cutting, there would be open views of vehicle movements and two gantries, seen above the road embankment. There would also be views towards the Orsett Fen Viaduct and the southern end of the Mardyke Viaduct. The false cutting and embanked approaches to the Orsett Fen and Mardyke Viaducts would slightly obstruct north-easterly views of the wider landscape, however, more distant views towards rising ground would be maintained above these features. Modifications to the OHL would appear similar to the existing OHL. Overall, the Project would be noticeable in this wide view. Design year (summer)	Highway Sections 11 and 12

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Established hedgerows across Green Lane green bridge and at the base of the associated embankments, as well as established mitigation planting on the embankments, would soften the appearance of earthworks and the bridge structure. Blocks of woodland planting around the embankments of the Orsett Fen Viaduct would screen some views towards the earthworks and the viaduct. Existing hedgerows in leaf and some established hedgerow planting along field boundaries would filter views towards false cutting slopes along the Project route. However, vehicle movements, gantries and parts of the bridge and viaduct structures would remain visible due to their elevated nature. Overall, the Project would be perceptible in views. Design year (winter) The visual effects in winter would not be notably different from that in summer, given the relatively limited proposed screen planting (intentionally limited to integrate with the existing landscape character) and the open, elevated aspect of the bridge and viaduct structures. Night-time environment At night, there would be a limited perceivable change in views as a result of lighting associated with gantries and vehicle lights, where not screened by the false cutting. Vehicle lights would be most prominent on the Orsett Fen and Mardyke Viaducts and the embanked approaches. New lighting would be viewed in a landscape that is largely dark in character. By design year, established mitigation planting would provide some filtering of lighting in night-time views.	
N-28	View from footpath 90 at the junction of Green Lane/Fen Lane (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred south-west for recreational receptors.	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Opening year (winter) The field in the foreground would have been reinstated to agriculture. There would be mid-range views west across the arable landscape towards the new Green Lane green bridge and associated embankments, which would be prominent and clearly visible above the skyline. The Project route to the south-west would be in cutting, with the carriageway and car traffic largely obscured from view as a result. However, high-sided vehicles, signage and gantries would be visible above the cutting. There would also be filtered views south-west towards one of the Stifford Clays Road overbridges, although intervening vegetation would limit visibility and the bridge would not be much taller than the existing road. The second Stifford Clays Road bridge and the Project road northbound slip roads would be largely screened by a landscape mound of up to approximately 15m above the Project road (2m above Stifford Clays Road). A reduction in mature vegetation would also be apparent along Green Lane and Stifford Clays Road. Modifications to the OHL would appear similar to the existing OHL. Overall, the Project, in particular Green Lane green bridge, would be noticeable in views. Design year (summer) Established hedgerows across Green Lane green bridge and established mitigation planting on the embankments would soften the appearance of earthworks and the bridge structure. An established hedgerow at the edge of the cutting along the Project route would filter views of vehicle movements and highway infrastructure. However, high-sided vehicles, signage and gantries would remain visible above the cutting slope	Highway Section 11

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							and the Green Lane green bridge would remain prominent due to its elevated nature in the relatively open landscape. Overall, the Project would remain noticeable in views. Design year (winter) The visual effects in winter would not be notably different from that in summer, given the proximity and prominence of the Green Lane green bridge and the limited extent of proposed planting along the Project route (intentionally limited to integrate with the existing landscape character). Night-time environment At night, there would be a limited perceivable change in views as a result of lighting associated with gantries along the Project route and vehicle lights along the Stifford Clays Road overbridge, which would be more visible due to vegetation loss. However, this lighting would be very localised in night-time views. By design year, established mitigation planting would provide some filtering of lighting in night-time views.	
N-29	View from bridleway 219 located on the Mardyke Way, east of Grangewaters Outdoor Education Centre (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred east-north-east for recreational receptors.	High	Minor	Minor	Slight adverse effect	Slight adverse effect	Opening year (winter) There would be long-range views north-east across arable fields towards the Project (approximately 1.6km). The new carriageway would be elevated on embankment and on the Orsett Fen Viaduct structure. Due to the elevated nature of the carriageway, there would be views of vehicle movements, signage and two gantries. Views would be partially filtered by intervening vegetation along field boundaries. Further south, the Project route would be largely obscured from view due to an intervening tree belt and rising landform. Glimpses of false cutting slopes, two gantries, signage and high-sided vehicles could be just apparent, as well as the upper parts of the new Green Lane green bridge and associated earthworks. Modifications to the existing OHL would not result in any discernible change in views at this distance. Overall, the Project would be perceptible in views, given the distance from the viewer and existing vegetation limiting visibility. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than moderate due to existing vegetation limiting the overall effect on the view. Design year (summer) Blocks of woodland planting around the embankments of the Orsett Fen Viaduct would screen views of the earthworks adjoining the viaduct. Existing hedgerows in leaf and some established hedgerow planting along field boundaries would filter views towards false cutting slopes along the Project route. Established hedgerows across Green Lane green bridge and established mitigation planting on the embankments would soften the appearance of earthworks and the bridge structure. However, vehicle movements, gantries and parts of the bridge and viaduct structures would remain visible in distant views. Overall, the Project would remain perceptible in views. Design year (winter) The visual effects in winter would not be notably different from that in summer, given the elevated nature of the Project route and Orsett Fen Viaduct and the relatively limited extent of proposed planting (intentionally limited to integrate with the existing landscape character).	Highway Sections 11 and 12

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Justification for significance level where two significance categories are given in LA 104 The significance of effect has been assessed as slight rather than moderate due to existing vegetation limiting the overall effect on the view. <u>Night-time environment</u> At night, there would be a limited perceivable change in views as a result of lighting associated with gantries and vehicle lights, where not screened by the false cutting. Vehicle lights would be most prominent on Orsett Fen Viaduct and on the embanked approaches. New lighting would be viewed in a landscape that is largely dark in character. By design year, established mitigation planting would provide some filtering of lighting in night-time views.	
N-29a	View from bridleway 219 located on the Mardyke Way on Orsett Fen, open access land (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred east-north-east for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*	High	Major	Major	Very large adverse effect	Very large adverse effect	<u>Opening year (winter)</u> Wet grassland, ditches and ponds within the flood compensation and ecological mitigation area would comprise the main features visible in the foreground. Beyond, the Project route would be visible across a broad extent of this wide view in the midground (approximately 0.3km). The carriageway would be elevated on embankment and the Orsett Fen Viaduct, which would result in a prominent change in view within the flat fen landscape. The view across the wider landscape would be foreshortened, although some visibility beyond the Project would be retained beneath the viaduct. An acoustic barrier/solid parapet would also be apparent along Orsett Fen Viaduct and the adjacent embankment, as well as vehicle movements and gantries along the Project route. To the south-east, there would be views towards the false cutting north of Green Lane, which would screen views of the carriageway and most cars. However, high-sided vehicles would be visible. The Green Lane green bridge would also be visible in the distance (approximately 1.2km) due to its raised elevation in the landscape, although views would be filtered by intervening vegetation. Views further south would be largely obscured by this structure, except for potentially distant glimpses of one of the Stifford Clays Road overbridges (approximately 1.6km) due to vegetation loss along Stifford Clays Road. To the north, the southern end of the large-scale Mardyke Viaduct would be apparent. However, it would be largely obscured by existing vegetation along the Mardyke. Modifications to the OHL would appear similar to the existing OHL. Overall, the Project would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as very large rather than large due to the Project being apparent across a large proportion of the view. <u>Design year (summer)</u> Blocks of woodland planting on the approach embankments of the Orsett Fen Viaduct would screen views of the earthworks and help soften views of the viaduct. The woodland would also screen some views of traffic on the Project route to the south. Existing hedgerows in leaf and some established hedgerow planting along field boundaries would filter views towards false cutting slopes along the Project route to the north of Green Lane. Established hedgerows across Green Lane green bridge would soften the appearance of the bridge structure slightly. However, Orsett Fen Viaduct and much of the Project road embankment would remain clearly visible, along with vehicle	Highway Section 12

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							movements and gantries, and there would be a permanent foreshortening of eastward views. Overall, due to the proximity of the embankments and the Orsett Fen Viaduct structure, and due to the contrast with the flat, open landscape, the Project would remain dominant in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the elevated nature of the Project route on embankment and on Orsett Fen Viaduct, and the relatively limited extent of proposed planting (intentionally limited to integrate with the existing landscape character). *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as very large rather than large due to the Project being apparent across a large proportion of the view. <u>Night-time environment</u> At night, there would be a perceivable change in views due to the lighting associated with gantries and vehicle lights on the embankments and Orsett Fen Viaduct, within an area that is largely dark in character, although the acoustic barrier/solid parapet along Orsett Fen Viaduct and the adjacent embankment would screen some views of vehicle lights. Night-time effects are likely to be similar in both the opening year and design year, with some filtering of views to the south-east provided by established mitigation planting.	
N-30	View from footpath 132 near South Ockendon urban fringe (off Mollands Lane) (LLCA Belhus Lowland Quarry Farmland). View centred north-north-east for recreational receptors.	Moderate	No change	No change	Neutral effect	Neutral effect	Due to intervening field-bounding vegetation and buildings and vegetation along Hall Lane to the north, the intervening woodland belt to the east (approximately 0.2km) and the distance between the Project and the viewpoint (approximately 1.5km), no element of the Project would be discernible in views in either the opening year or design year.	Highway Section 12
N-31	View from footpath 90 from Orsett Fen (north-east of Hobletts residential property) (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred west for recreational receptors.	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> The Project would be visible in the midground of this wide view (approximately 0.6km), in front of the woodland belt along the Mardyke. The Project route would be elevated on embankment and viaduct structures, crossing the flat, open fen landscape. Orsett Fen Viaduct, Mardyke Viaduct and the embankment between the two viaducts would be prominent, although the Mardyke Viaduct would be viewed at an oblique angle. The piers and abutments of the viaducts would also be evident at this distance, together with vehicle movements and an acoustic barrier/solid parapet along the viaducts and intermediate embankment. The new embankment would form a continuous linear feature across the flat, open landscape, which would limit visibility of the woodland belt along the Mardyke. Beyond the Mardyke along the Project route, there would be visibility of an elevated gantry in	Highway Section 12

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							the distance, through gaps in the woodland. A reduction in mature vegetation would also be apparent where the Project route crosses the Mardyke. At ground level, a new flood compensation area would be visible. Occasional vehicles using a new maintenance access track could also be just apparent parallel to the Project route at the base of the embankment and viaducts. Modifications to the OHL would appear similar to the existing OHL. Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Established woodland along parts of the embankments adjacent to Orsett Fen Viaduct would help to soften the appearance of earthworks, filter views of vehicles and visually break up the line of the Project route. However, much of the embankments would remain visible, and vehicle movements would remain evident. There would also be remaining views of the Orsett Fen and Mardyke Viaducts. Overall, due to the foreshortening of views by the embankment and the visibility of vehicle movements, the Project would remain noticeable in views. <u>Design year (winter)</u> The visual effects in winter would not be notably different from that in summer, given the elevated nature of the Project route on embankment and viaduct and the relatively limited extent of proposed planting (intentionally limited to integrate with the existing landscape character). <u>Night-time environment</u> At night, there would be a perceivable change in views due to lighting associated with a gantry and vehicle lights along the Project route, which would be within an area that is largely dark in character, although the acoustic barrier/solid parapet along the Orsett Fen and Mardyke Viaducts and the intermediate embankment would screen some views of vehicle lights. Night-time visual effects are likely to be similar in both the opening year and design year.	
N-32	View from bridleway 219 located on the Mardyke Way on Orsett Fen (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred north-east for recreational receptors.	High	Major	Major	Very large adverse effect	Very large adverse effect	<u>Opening year (winter)</u> The Project would be the prominent focus of views due to the proximity of the Mardyke Viaduct structure adjacent to the Mardyke Way, which would encompass the full vertical and horizontal field of view. This would result in a substantial change, but would be localised to this section of the Mardyke Way and its approach from the south. (More distant views of the Project from Mardyke Way are considered in the assessment from Representative Viewpoints N-29 and N-29a.) In views north when travelling from the south, the new substructure, structural deck and piers beneath Mardyke Viaduct would be prominent features. Due to the proximity of these elements, the carriageway and vehicle movements above would tend to be obscured, unless viewed from further south along the Mardyke Way. Some visibility towards the wider landscape would be partially retained beneath the viaduct. In views south when travelling from the north, there would be visibility of the embankment slopes along the Project route, which would appear out of character in the flat fen landscape and would foreshorten views. Vehicle movements, an acoustic barrier/solid parapet and signage would be apparent along the embankment. Wet	Highway Section 12

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							grassland, ponds and ditches within the flood compensation and ecological mitigation area would also be visible in the foreground to the south-east. Although mature vegetation would have been removed along the Mardyke, views north-west would be restricted by the new Mardyke Viaduct structure. However, there would be views towards the embankment slopes and associated acoustic barrier beyond Mardyke Viaduct. Overall, the Mardyke Viaduct would dominate the view. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as very large rather than large due to the Project being apparent across a large proportion of the view and in close proximity. <u>Design year (summer)</u> Due to the proximity of Mardyke Viaduct and the embankments along the Project route to the north and south, and due to there being limited scope for screen planting within the flood compensation and ecological mitigation area, effects on views in the design year would be as described for the opening year. In the wider view to the south-east, established woodland would soften the appearance of earthworks in the midground, although this would not reduce the overall effect on views. The Project would remain dominant in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, due to the proximity of Mardyke Viaduct and the embankments along the Project route, and the limited scope for screen planting within the flood compensation and ecological mitigation area. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as very large rather than large due to the Project being apparent across a large proportion of the view and in close proximity. <u>Night-time environment</u> At night, there would be a limited perceivable change in views from vehicle lights along the embankment to the south-east in a landscape that is largely dark in character, although the acoustic barrier/solid parapet along the embankment would screen some views of vehicle lights. Night-time visual effects are likely to be similar in both the opening year and design year.	
N-33	View from intersection of footpaths 89 and 90 in Bulphan Fen (off Harrow Lane). Also represents views from footpath 159 (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred south-west for recreational receptors.	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	<u>Opening year (winter)</u> There would be partial long-range views (approximately 1.1km) of parts of the Project from this location, filtered by existing field boundary trees. The Project road would be elevated on embankment, and on the Orsett Fen Viaduct and the Mardyke Viaduct, which would be seen intermittently through intervening vegetation. Glimpses of vehicle movements and two gantries would also be apparent, as well as filtered views of the upper parts of the FP136 bridge. Modifications to the existing OHL would not result in any discernible change in views at this distance (approximately 1.2km). Overall, the Project would be perceptible in views.	Highway Section 12

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).						Design year (summer) In the summer view, existing vegetation in leaf would filter views towards the Project. Furthermore, establishment of mitigation planting on some of the embankments along the Project route, and on the FP136 bridge embankments and adjoining land, would further restrict views of earthworks and structures. However, some glimpsed views of vehicle movements and gantries would remain. Overall, the Project would be barely noticeable in views. Design year (winter) In winter, views towards Orsett Fen Viaduct, Mardyke Viaduct and associated moving traffic would be slightly less filtered by existing field boundary vegetation and proposed planting along the Project route. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than neutral due to the Project being perceivable in part of the view. Night-time environment At night, there would be a limited perceivable change in views due to lighting associated with gantries and vehicle lights along the Project route, within an area that is largely dark in character. By design year, existing vegetation in leaf and established mitigation planting would provide some filtering of lighting in night-time views.	
N-34	View from footpath 160 on the western edge of Bulphan (LLCA Thurrock Reclaimed Fen (sub area Mardyke)). View centred south-west for recreational receptors.	Moderate	No change	No change	Neutral effect	Neutral effect	No element of the Project would be discernible from this location in south-westerly views, due to the intervening field boundary vegetation including linear tree belts within the Orsett Fen landscape, and the distance between the Project and the viewpoint (approximately 2.5km).	Highway Section 12
N-35	View from footpath 136 located on Hall Lane, west of South Ockendon Hall (LLCA Belhus Lowland Quarry Farmland). View centred north-north-east for recreational receptors.	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Opening year (winter) The Project would be visible in the midground to the north, where the North Road green bridge and associated vehicle movements and street lighting would be elevated slightly above the adjacent landscape. Occasional vehicles using a new maintenance access track could also be just apparent at the base of the North Road green bridge embankment. The carriageway of the Project route, together with most associated highway infrastructure and vehicle movements, would be obscured in deep cutting, although there could be glimpses of the top of a gantry along the Project route. The loss of the southern edge of The Wilderness woodland block (approximately 0.75km) would be apparent in the view. There would be no visibility of the Project to the east from this PRoW, due to intervening vegetation at South Ockendon Hall and surrounding the landfill site. Overall, the Project would be perceptible in views, with much of the view remaining largely similar in nature to the existing situation.	Highway Section 12

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Design year (summer) Established mitigation planting along the embankments of North Road green bridge, as well as established hedgerows along North Road and the green bridge, would filter views of vehicles and soften the appearance of earthworks and the bridge structure. Established woodland along the edge of the southern cutting slope, and woodland edge adjacent to The Wilderness, would screen views of the gantry and restore a similar level of woodland backdrop in views north. Overall, the Project would be barely noticeable in views. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the deep cutting enclosing the Project route. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than neutral due to the Project being perceivable in part of the view. Night-time environment At night, there would be a limited perceivable change in views due to vehicle lights and street lighting on the North Lane green bridge, and potential glimpses of lighting associated with the gantry along the Project route. Vehicle lights along the Project route would be screened within the cutting. Lighting would be viewed in the context of existing street lighting along North Road and within South Ockendon. By design year, the gantry lighting is likely to be screened by established mitigation planting, and most vehicle headlights would be screened by the established hedgerow along North Road green bridge.	
N-36	View from footpath 135 off B186 North Road (LLCA Belhus Lowland Quarry Farmland). View centred south-south-east for recreational receptors.	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Opening year (winter) The North Road green bridge and associated vehicle movements and street lighting would be prominent in close- to mid-range views, slightly elevated above the adjacent landscape. The Project route would be obscured in deep cutting, with associated highway infrastructure and high-sided vehicles also largely screened, apart from potential glimpses of a gantry. In addition, the loss of the southern edge of The Wilderness woodland block (approximately 0.3km) would be perceivable, with the upper extent of a retaining wall on the south side of the new road also potentially visible. The remaining woodland in The Wilderness would obscure other views of the Project to the east. Overall, the North Road green bridge would be a noticeable feature in the view. Design year (summer) Following establishment of the hedgerow at the top of the northern cutting slope along the Project route, any views of vehicle movements would be screened, with potential filtered glimpses remaining towards the gantry. Established mitigation planting along the embankments of North Road green bridge, as well as established hedgerows along North Road and the green bridge, would soften the appearance of earthworks and the bridge structure and filter views of vehicles. In addition, established woodland edge adjacent to The Wilderness would restore a similar level of woodland cover in views south-east, and screen views of the retaining wall. Overall, the Project would be perceptible in views.	Highway Section 12

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
							Design year (winter) The visual effect in winter would not be notably different from that in summer, given the deep cutting enclosing the Project route. Night-time environment At night, there would be a limited perceivable change in views due to vehicle lights and street lighting along North Lane green bridge, and potential glimpses of lighting associated with the gantry along the Project route. Vehicle lights along the Project route would be screened within the cutting. Lighting would be viewed in the context of existing street lighting along North Road and within South Ockendon. By design year, established hedgerow planting would provide some filtering of gantry lighting, and most vehicle headlights would be screened by the established hedgerow along North Road green bridge.	
N-37	View from South Ockendon (West Road) (LLCA Belhus Lowland Quarry Farmland). View centred north for users of main road.	Low	Negligible	No change	Slight adverse effect	Neutral effect	Opening year (winter) There could be partial views of a new gantry and replacement street lighting along the M25 corridor and the FP252 WCH bridge west crossing the Upminster to Grays railway line (approximately 1.3km). However, these elements would be viewed in the context of existing vehicle movements and highway infrastructure along the M25. Views of the Project road would not be evident from this location, apart from potential filtered glimpses of the upper parts of high-sided vehicles, signage and gantries through gaps in vegetation. Overall, due to distance and intervening vegetation, the Project would be barely noticeable in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than neutral due to the Project being perceivable in part of the view. Design year (summer) Existing vegetation in leaf, in conjunction with established mitigation planting along the embankments of the FP252 WCH bridge west and the edge of the Project route, would effectively screen views of the Project, with no discernible change in views. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the effectiveness of winter screening provided by vegetation along existing field boundaries and established mitigation planting. Night-time environment At night, there would not be a perceivable change in views due to the presence of existing lighting along the M25 to the north. In addition, gantry lighting and vehicle lights associated with the Project route to the north-east would be largely obscured by intervening vegetation. At design year, existing vegetation in leaf and established mitigation planting along the embankments of the FP252 WCH bridge west would provide some filtering of lighting in night-time views.	Highway Section 13
N-38	View from intersection of footpaths 253 and 254 in North Ockendon	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Opening year (winter) There would be mid-range views of the Project across a broad extent of this wide view. Beyond the arable fields in the foreground, reinstated to agriculture, there would be partial views south-west and west towards the false cuttings along the Project route	Highway Section 13

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Conservation Area. Also represents views from footpath 252 (LLCA Belhus Lowland Quarry Farmland). View centred south-south-west for recreational receptors.						(approximately 0.45km) and the M25 to Project road southbound slip road (approximately 0.4km), which would obscure views of the carriageways and car traffic. However, there would be views towards the upper parts of high-sided vehicles and gantries above the false cutting slopes. To the south-west, the lower parts of the false cutting would be largely screened by intervening landform. The new FP252 WCH bridges east and west would be visible in this direction. To the west, the false cutting would largely screen views beyond of the new underpass beneath the M25, the Project road northbound to M25 slip road passing through the underpass, and associated vehicle movements. Glimpses of the tops of gantries and street lighting along the Project road northbound to M25 slip road could potentially be visible above the false cutting slopes. Replacement street lighting and new gantries along the M25 would also be evident, although filtered by retained vegetation along the Upminster to Grays railway line. Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Established mitigation planting on the earthworks of the FP252 WCH bridges east and west, between the Project road/M25 slip roads, and on part of the false cutting along the M25 to Project road southbound slip road, as well as established hedgerows at the base of the false cuttings, would reduce visibility of the Project and the existing M25 corridor. The FP252 WCH bridge east is likely to remain apparent, as well as the tops of high-sided vehicles, a gantry and lighting columns above the false cutting slopes along the M25 to Project road southbound slip road. Overall, the Project would be perceptible in views, but would not alter the overall balance of features that constitute the existing view. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, given the year-round mitigation provided by the proposed false cuttings, supplemented by wide belts of woodland planting. <u>Night-time environment</u> At night, the change in street lighting (LED luminaires) along the M25 would result in a positive impact due to a reduction of light spill and skyglow. There would not be a perceivable change in views arising from new lighting along the Project road/M25 slip roads due to the presence of existing lighting along the M25. In views south-south-west, which are less influenced by existing lighting along the M25, vehicle lights would be screened by the false cutting slopes and intervening landform, although there could be glimpses of gantry lighting. By design year, established mitigation planting would provide some filtering of night-time views, particularly to the west where views of lighting along the M25 would be more limited, resulting in a slight improvement in the existing situation.	
N-39	View from footpath 231 near St Mary Magdalene Church, in North Ockendon Conservation Area	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	<u>Opening year (winter)</u> There would be mid-range views towards the Project beyond the foreground arable field, which would have been reinstated to agriculture. Extensive vegetation loss along the M25 corridor would be apparent, including existing screen planting along the boundary of the M25 corridor, resulting in open views towards the top of a new gantry,	Highway Section 13

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	(LLCA Belhus Lowland Quarry Farmland). View centred west for recreational receptors. *Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).*						replacement street lighting and the existing Ockendon Road overbridge. Vehicle movements along the M25 and M25 to Project road southbound slip road are likely to be obscured from view due to the deep cutting, except to the south-west where the M25 and slip road transition out of cutting. In addition, new street lighting would be evident along the M25 to Project road southbound slip road. Views beyond the M25 corridor would be screened by a landscape mound of up to approximately 10m above the level of the existing M25 carriageway. Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Following the establishment of mitigation planting adjacent to the glasshouses within Hall Farm and south-east of Ockendon Road overbridge, and hedgerow planting along the eastern boundary of the M25 to Project road southbound slip road, views of street lighting and the gantry would be softened, and visibility of the Ockendon Road overbridge would reduce. Filtered views would remain towards moving vehicles along the M25 to Project road southbound slip road to the south-west. Street lighting along the slip road and the M25 would also remain apparent above vegetation, although this would be similar to the existing view. Established woodland on the landscape mound beyond the M25 would restore the vegetated backdrop to views. Overall, the Project would be perceptible in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, although moving traffic along the M25 to Project road southbound slip road would be slightly less filtered by hedgerow planting. <u>Night-time environment</u> At night, the change in street lighting (LED luminaires) would result in a positive impact due to a reduction of light spill and skyglow. Night-time visual effects would be similar in opening year and design year.	
N-40	View from intersection of B186 Ockendon Road and B1421 Ockendon Road, east of North Ockendon (LLCA Belhus Lowland Quarry Farmland). View centred south-west for users of local road. *Night-time photograph available from this location (refer to Figure 7.18 (Application Document 6.2)).*	Moderate	No change	No change	Neutral effect	Neutral effect	As a result of the intervening field-bounding vegetation and the distance between the viewpoint and the Project (approximately 0.85km), no element of the Project would be discernible from this location.	Highway Section 13

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
N-41	View from adjacent to residential properties, including Cranham Place on B1421, Ockendon Road (LLCA Belhus Lowland Quarry Farmland). View centred south for residential receptors.	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	<u>Opening year (winter)</u> There would be close- to mid-range views towards the Project to the south-west, across arable fields reinstated to agriculture. Extensive vegetation loss along the M25 would be apparent, resulting in open views of replacement street lighting and the top of a new gantry. The widened M25 and M25 to Project road southbound slip road would be largely obscured in deep cutting to the west and south-west of this location. However, as the M25 and slip road transition out of cutting further to the south, there would be greater visibility of the carriageways and vehicle movements due to vegetation loss adjacent to Hall Farm (approximately 0.35km). In addition, new street lighting would be evident along the M25 to Project road southbound slip road. Views beyond the M25 corridor would be screened by a landscape mound of up to approximately 10m above the level of the existing M25 carriageway. In westerly views, the loss of vegetation along Ockendon Road would result in slightly increased visibility of the Ockendon Road overbridge. Overall, the Project would be noticeable in views. <u>Design year (summer)</u> Established mitigation planting adjacent to the glasshouses within Hall Farm, on the landscape mound beyond the M25 and south-east of Ockendon Road bridge, and hedgerow planting on the eastern boundary of the M25 to Project road southbound slip road and along Ockendon Lane, would restore a similar level of vegetation cover and screening of the M25 corridor to that of existing views. This planting would help to reduce the prominence of the gantry and street lighting along the road corridor. However, filtered views would remain towards moving vehicles along the M25 to Project road southbound slip road to the south. Overall, the Project would be perceptible in views. <u>Design year (winter)</u> The visual effect in winter would not be notably different from that in summer, although moving traffic along the M25 to Project road southbound slip road would be slightly less filtered by hedgerow planting. <u>Night-time environment</u> At night, the change in street lighting (LED luminaires) would result in a positive impact due to a reduction of light spill and skyglow. Night-time visual effects would be similar in opening year and design year.	Highway Section 13
N-42	View from permissive path within Thames Chase Forest Centre (LLCA Thurrock Reclaimed Fen (sub area Thames Chase)). View centred south-east for recreational receptors.	High	Major	Moderate	Large adverse effect	Moderate adverse effect	<u>Opening year (winter)</u> There would be close- to mid-range views south-east towards the Project (approximately 0.1km). Extensive vegetation loss would be apparent on the western side of the M25 across a broad extent of the view. This would open up views towards the widened road corridor and the embankment supporting the Lower Thames Crossing J29 link road, with associated vehicle movements and new street lighting. The widened M25 carriageway and two further slip roads would be largely obscured by the new embankment along the Lower Thames Crossing J29 link road.	Highway Section 13

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	Photomontage available from this location (refer to Figure 7.19 (Application Document 6.2)).						The new Thames Chase WCH bridge would be prominent to the south-east, partially visible above the skyline, and there would be views towards a realigned WCH route linking the open space to the bridge. The diverted OHL to the south-east would appear similar to the existing OHL. Overall, the Project would be dominant in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as large rather than very large due to the Project being viewed in the context of highway infrastructure along the existing M25 corridor. <u>Design year (summer)</u> Following the establishment of mitigation planting within the Thames Chase Forest Centre open space near the Thames Chase WCH bridge, and along the new embankment of the Lower Thames Crossing J29 link road, views of the Project would be substantially reduced. However, the tops of lighting columns and vehicle movements would remain visible to the south-east along the embankment of the Lower Thames Crossing J29 link road. In addition, the Thames Chase WCH bridge would remain partially visible in the background. Overall, the Project would be noticeable in views. <u>Design year (winter)</u> In winter, the Thames Chase WCH bridge and vehicle movements on the Lower Thames Crossing J29 link road would be slightly more visible, filtered by established mitigation planting. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as moderate rather than large due to the Project being viewed in the context of highway infrastructure along the existing M25 corridor. <u>Night-time environment</u> At night, there would be a perceivable change in views due to the introduction of new lighting closer to the viewer, and the loss of existing vegetation that filters views of existing lighting along the M25. Vehicle lights would also be apparent along the Lower Thames Crossing J29 link road. However, the new LED luminaires would limit light spill and skyglow to a level required for safe operation of the new road layout. In addition, lighting would be viewed in the context of existing street lighting along the M25. By design year, established mitigation planting would provide some filtering of night-time views towards street lighting and vehicle lights.	
N-43	View from Cranham Brickfields public open space and footpath 193 on the eastern edge of Upminster (LLCA Thurrock Reclaimed Fen (sub area Thames Chase)). View centred east for recreational receptors.	Moderate	No change	No change	Neutral effect	Neutral effect	Due to the intervening vegetation, and the distance between the viewpoint and the Project (approximately 0.7km), the changes introduced by the Project would not be discernible when considered in conjunction with elements along the existing M25 corridor, which are partially visible from this location.	Highway Section 14

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
N-44	View from PRoW 272_110 within Thames Chase (Brentwood) (LLCA Brentwood Wooded Hills). View centred south-east for recreational receptors.	Moderate	Negligible	Minor	Slight adverse effect	Slight adverse effect	<u>Opening year (winter)</u> There would be mid-range views across the newly planted ancient woodland compensation area in the foreground towards replacement street lighting, new gantries and vehicle movements along the M25 corridor. Views would be slightly more open due to vegetation loss along the carriageway edge, although the intervening landform would continue to screen close-range views of the motorway. New and replacement highway infrastructure along the M25 is unlikely to appear notably different to the existing view. The attenuation basin would be just apparent in long-range views, seen in front of Codham Hall Wood (approximately 1km). Overall, the Project would be barely noticeable in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than neutral due to the Project being perceivable in part of the view. <u>Design year (summer)</u> Following establishment of woodland in the ancient woodland compensation area, views south towards the M25 corridor would be screened, although existing views across the surrounding landscape would also be foreshortened. A vista would be incorporated within the planting to maintain a partial view across the attractive landscape, in the direction of Langdon Hills Country Park to the south-east. The vista would exclude existing detracting features such as pylons, where practicable. In addition, planting would be set back from the PRoW edge to maintain a sense of openness. Overall, the proposed woodland planting would result in a perceptible adverse change in views. The foreshortening of views due to woodland planting would be reduced through the provision of a vista. <u>Design year (winter)</u> The visual effects in winter would not be notably different from that in summer, due to the substantial nature of proposed woodland planting. <u>Night-time environment</u> At night, the change in street lighting (LED luminaires) would result in a positive impact due to a reduction of light spill and skyglow. Vegetation loss would not notably open up views towards existing lighting. By design year, established mitigation planting would largely screen lighting, resulting in an improvement in night-time views.	Highway Section 14
N-45	View from Bird Lane to the west of Little Warley (LLCA Brentwood Wooded Hills). View centred south-west for users of the local road.	Moderate	No change	No change	Neutral effect	Neutral effect	Due to intervening vegetation, and the distance between the viewpoint and the Project (approximately 1.6km), no element of the Project would be discernible from this location.	Highway Section 14
N-46	View from southern edge of Thorndon Country Park (LLCA Brentwood Wooded Hills) and PRoW	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	This view represents a worst-case scenario on the southern edge of the elevated Thorndon Country Park, which is typically contained by dense boundary vegetation. The Project would be located within the flat, typically arable landscape in the distance (approximately 5.3km), in this very long-range and wide-angled southerly view, with visibility of the modified M25 at a distance of approximately 3.5km to the west.	Highway Sections 12 to 14

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	272_130. View looking south-west for recreational receptors.						Opening year (winter) Vehicle movements along the Project route, most notably through Orsett Fen on the Orsett Fen and Mardyke Viaducts and along the elevated embankment approaches, would be just apparent in views (approximately 5.6km to 6.6km). Given the distance of the Project and wide-angled nature of the view, these elements would only appear as minor additions and would not change the overall composition of the existing view. Overall, the Project would be barely noticeable in views. Design year (summer and winter) The visual effects in winter would not be notably different from that in summer, given the distance from the Project and the relatively limited nature of proposed mitigation planting along the Project route crossing Orsett Fen (intentionally limited to integrate with the existing landscape character). Night-time environment There is unlikely to be a perceivable change in night-time views at this distance. At night, vehicle lights and lighting associated with gantries would introduce additional lighting into the dark Orsett Fen landscape, that has few light sources. However, this would be perceived in the context of existing light sources visible in the broader view.	
N-47	View from South Hill, within the Langdon Hills Country Park (LLCA Langdon Hills and Farmland). View looking south-west for recreational receptors.	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	This view represents a worst-case scenario on the south-western edge of the elevated Langdon Hills Country Park, with a gap in dense roadside mature vegetation allowing views over the surrounding landscape. The Project would be just apparent in the distance (approximately 6.5km to 9.5km), in this very long-range and extensive south-western view. Opening year (winter) Vehicle movements along the Project route, most notably through Orsett Fen on the Orsett Fen and Mardyke Viaducts and along the elevated embankment approaches, could be just apparent, viewed in front of the elevated landform at the landfill site immediately to the south-west of the Project route. Given the distance of the Project and the wide-angled nature of the view, these elements would only appear as minor additions and would not change the overall composition of the existing view. Overall, the Project would be barely noticeable in views. Design year (summer and winter) The visual effects in winter would not be notably different from that in summer, given the distance from the Project and the relatively limited nature of proposed mitigation planting along the Project route crossing Orsett Fen (intentionally limited to integrate with the existing landscape character). Night-time environment There is unlikely to be a perceivable change in night-time views at this distance. At night, vehicle lights and lighting associated with gantries would introduce additional lighting into the dark Orsett Fen landscape, that has few light sources. However, this would be perceived in the context of existing light sources visible in the broader view.	Highway Sections 12 to 14
N-Dep-RV-10	View from footpath PRoW 272_110 west of Great Warley Street (LLCA Brentwood Wooded Hills). View centred west-south-	Moderate	Negligible	Moderate	Neutral effect	Moderate beneficial effect	Opening year (winter) Changes along the M25 corridor would not be perceptible. Establishing small trees and shrubs would not appear out of character in the adjacent arable fields. The potential use of protective guards to establish woodland planting would result in a barely noticeable adverse change in views. *Justification for significance level where two significance categories are given in LA 104*	Highway Section 14

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
	west for recreational receptors.						The significance of effect has been assessed as neutral rather than slight, as the establishing small trees and shrubs would not be notably intrusive in views. Design year (summer) Established trees and shrubs within the nitrogen deposition compensation site would enhance the appearance of the existing arable fields, as well as softening some views towards the M25 and industrial units at Codham Hall Farm. A vista and/or grassland glades would be maintained in views south-east and south-west to reduce the foreshortening effect introduced by the planting. Where practicable, the vista would exclude existing detracting features such as telegraph poles, the M25 and the industrial units at Codham Hall Farm. In addition, planting would be set back from the edges of the footpath to maintain variety and views south-west. Overall, compensation planting would result in a noticeable benefit to views from the footpath. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the proximity and depth of compensation planting. Night-time environment At night, the change in street lighting (LED luminaires) along the M25 corridor would result in a positive impact due to a reduction of light spill and skyglow. By design year, established compensation planting would largely screen lighting, resulting in an improvement in night-time views.	
N-Dep-RV-11	View from Codham Hall Lane, west of Great Warley Street (LLCA Brentwood Wooded Hills). View centred north-west for recreational receptors.	Moderate	Negligible	Minor	Neutral effect	Slight adverse effect	Opening year (winter) Changes along the M25 corridor would not be perceptible. Establishing small trees and shrubs would not appear out of character in the adjacent arable fields. The potential use of protective guards to establish woodland planting would result in a barely noticeable adverse change in views. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as neutral rather than slight, as the establishing small trees and shrubs would not be notably intrusive in views. Design year (summer) Established trees and shrubs within the nitrogen deposition compensation site would enhance the appearance of the existing arable fields, as well as softening views towards lighting columns and the tops of vehicles and gantries along the M25. A vista would be incorporated in a north-west direction to maintain attractive views towards a patchwork of arable fields and woodland on rising ground. The vista would exclude existing detracting features such as telegraph poles, where practicable. Overall, compensation planting would result in a perceptible adverse change in views from the lane. The foreshortening of views due to woodland planting would be reduced through the provision of a vista. Design year (winter) The visual effect in winter would not be notably different from that in summer, given the proximity and depth of compensation planting. Night-time environment At night, the change in street lighting (LED luminaires) would result in a positive impact due to a reduction of light spill and skyglow. By design year, established compensation planting would largely screen lighting, resulting in an improvement in night-time views.	Highway Section 14

Visual receptor		Sensitivity	Magnitude of visual effect		Significance of effect		Commentary	Environmental Masterplan references: Figure 2.4 (Application Document 6.2)
			Opening year (winter)	Design year (summer)	Opening year (winter)	Design year (summer and winter)		
N-Dep-RV-12	View from footpath FP42 (LLCA Linford/Buckingham Hill Urban Fringe). View centred east-north-east for recreational receptors.	Moderate	No change	Negligible	Neutral effect	Slight beneficial effect	Opening year (winter) Isolated groups of establishing small trees and shrubs on the plateau of the raised landfill area would not be visible at this distance, including any protective guards that could potentially be used to establish planting. Design year (summer) Isolated groups of established trees and shrubs within the nitrogen deposition compensation site on the plateau of the raised landfill area would add interest to the skyline. Overall, compensation planting would result in a barely noticeable benefit to views from the footpath. Design year (winter) The visual effect in winter would not be notably different from that in summer, as the isolated groups of trees and shrubs would be visible above the skyline in winter. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as slight rather than neutral due to the benefit provided by compensation planting compared to the existing skyline along the raised landfill area. Night-time environment There would be no change in the night-time environment.	Highway Section 10
N-Dep-RV-13	View from informal footpath within open space associated with the Maple Park housing development in Stanford-le-Hope. Also represents views from footpath FP41 (LLCA Linford/Buckingham Hill Urban Fringe). View centred west-south-west for recreational receptors.	Moderate	No change	Negligible	Neutral effect	Neutral effect	Opening year (winter) Isolated groups of establishing small trees and shrubs would not be visible at this distance, including any protective guards that could potentially be used to establish planting. Design year (summer) Groups of established trees and shrubs within the nitrogen deposition compensation site would strengthen the tree and scrub backdrop to the open space and further soften views towards existing OHL. Overall, compensation planting would result in a barely noticeable beneficial change in views. Design year (winter) Existing vegetation in the foreground would allow more open views in the direction of the raised landfill area and associated planting blocks in winter. *Justification for significance level where two significance categories are given in LA 104* The significance of effect has been assessed as neutral rather than slight, as the established compensation planting would not notably alter the overall composition of the view, particularly as the raised landfill area would be viewed through existing vegetation in the foreground. Night-time environment There would be no change in the night-time environment.	Highway Section 10

Table 3.4 Schedule of visual effects for visual receptors north of the River Thames during operation

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
Residential properties 'R'							
N-02	Sandhurst Road	High	See N-02	See N-02	See N-02	See N-02	See N-02
VR-S09-R-001	Residential properties along the east side of Princess Margaret Road, south-east of East Tilbury	High	No change	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-R-002	Residential properties along the west side of Princess Margaret Road, south-east of East Tilbury	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 9
VR-S09-R-003	Residential properties near the junction of Station Road and Princess Margaret Road, including Barvills Farm, south-east of East Tilbury	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-R-004	Orchard House and residential property at Orchard Stables, Love Lane, south of East Tilbury	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 9
VR-S09-R-005	Goshems Farm, Pleasant View and Willows, Station Road, south of East Tilbury	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 9
VR-S09-R-006	Buckland and Bowaters Farm, off Station Road, south-west of East Tilbury	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 9
VR-S09-R-007	1 and 2 Gravelpit Farm, Station Road, south-west of East Tilbury	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 9
VR-S09-R-008	Buxton, Princess Margaret Road, south-east of East Tilbury	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 9
VR-S09-R-009	Gun Hill Farm, Gun Hill, south-east of Chadwell St Mary	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-R-010	Biggin Farm, off Biggin Lane, south-east of Chadwell St Mary	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-R-011	Residential properties along the south of Rectory Road, west of Church Road, West Tilbury	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-R-012	Residential properties along Church Road and within the former St James's Church, West Tilbury	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 9
VR-S09-R-013	Properties opposite the end of Low Street Lane including Walnut Tree Farm	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 9
N-08	Residential properties at the southern end of Low Street Lane, south-east of West Tilbury	Moderate	See N-08	See N-08	See N-08	See N-08	See N-08
VR-S09-R-014	Residential properties along Dock Road and Hume Avenue, southern edge of Tilbury	High	No change	No change	Neutral effect	Neutral effect	Highway Section 9

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S09-R-015	Residential properties along Feenan Highway, north-eastern edge of Tilbury	High	No change	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S10-R-001	Residential properties along Bata Avenue, Shearwater Avenue, Pipit Close, Pintail Close, Lapwing Close, Turnstone Close, Sanderling Close and Sandpiper Close, western edge of East Tilbury	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Sections 9 and 10
N-12	Residential properties along Beechcroft Avenue, western edge of East Tilbury	High	See N-12	See N-12	See N-12	See N-12	See N-12
VR-S10-R-002	Residential properties along Muckingford Road in East Tilbury	High	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 10
VR-S10-R-003	Residential properties along Muckingford Road including Ash Lea Farm, west of East Tilbury	Moderate	Major	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 10
VR-S10-R-004	Residential properties along east side of Blue Anchor Lane including Holford House, Holford Farm Cottage and Blue Anchor Cottage	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Sections 9 and 10
VR-S10-R-005	Residential properties along west side of Blue Anchor Lane including Marshalls Cottage and Holford Cottages	Moderate	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Sections 9 and 10
VR-S10-R-006	Residential properties at the junction of Muckingford Road and Blue Anchor Lane	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Sections 9 and 10
VR-S10-R-007	Residential properties at the southern end of Hoford Road	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 10
VR-S10-R-008	Mill Cottage and Mill House, Muckingford Road	Moderate	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 10
VR-S10-R-009	Juorei, Muckingford Road	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 10
VR-S10-R-010	Becksland, Muckingford Road	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 10
VR-S10-R-011	Residential properties along the northern side of Lower Crescent, western edge of Linford	High	Negligible	No change	Slight adverse effect	Neutral effect	Highway Section 10
VR-S10-R-012	Residential properties along the southern side of Lower Crescent, southern edge of Linford	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 10
VR-S10-R-013	Residential properties along the southern end of Somerset Road, western edge of Linford	High	Negligible	No change	Slight adverse effect	Neutral effect	Highway Section 10
VR-S10-R-014	Residential properties along Northumberland Road, East Tilbury Road, Essex Gardens, Dorset Gardens and the northern end of Somerset Road, northern edge of Linford	High	No change	No change	Neutral effect	Neutral effect	Highway Section 10

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S10-R-015	Cranes House, Gun Hill, south-east of Chadwell St Mary	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Sections 9 and 10
VR-S10-R-016	The White House, Manor Farm and nearby residential properties along Blue Anchor Lane, eastern edge of West Tilbury	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Sections 9 and 10
VR-S10-R-017	Residential properties along the northern side of Rectory Road, northern edge of West Tilbury	Moderate	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 10
VR-S10-R-018	High House, High House Lane	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 10
VR-S10-R-019	Turnpike Cottages, Turnpike House, Turnpike Lane	Moderate	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Sections 9 and 10
VR-S10-R-020	Residential properties along Atherton Gardens and the east side of Cole Avenue and The Cherubs along Linford Road, eastern edge of Chadwell St Mary	High	No change	No change	Neutral effect	Neutral effect	Highway Section 10
VR-S10-R-021	Residential properties along the west side of Cole Avenue and east side of St Francis Way, eastern margin of Chadwell St Mary	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 10
VR-S10-R-022	Residential properties along the northern end of Cole Avenue and St Francis Way, north-eastern edge of Chadwell St Mary	High	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 10
VR-S10-R-023	Residential properties along Ingleby Road	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 10
VR-S10-R-024	Residential properties along Halton Road, north-eastern edge of Chadwell St Mary	High	No change	No change	Neutral effect	Neutral effect	Highway Section 10
VR-S10-R-025	Residential properties along south side of Wickham Road and southern end of Courtney Road, north-eastern edge of Chadwell St Mary	High	Negligible	No change	Slight adverse effect	Neutral effect	Highway Section 10
VR-S10-R-026	Residential properties along Haywood Place and Courtney Road, north-eastern edge of Chadwell St Mary	High	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 10
VR-S10-R-027	High rise flats on Godman Road, northern edge of Chadwell St Mary	High	Major	Major	Large adverse effect	Large adverse effect	Highway Sections 10 and 11
VR-S10-R-028	Residential properties along Alexandra Close, north-eastern edge of Chadwell St Mary	High	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 10
VR-S10-R-029	Brook Farm Cottages, High House Lane	Moderate	Major	Major	Large adverse effect	Moderate adverse effect	Highway Section 10
VR-S10-R-030	Residential properties along the north side of Godman Road, northern edge of Chadwell St Mary	High	No change	No change	Neutral effect	Neutral effect	Highway Sections 10 and 11

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S10-R-031	131 to 157 Godman Road, northern edge of Chadwell St Mary	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Sections 10 and 11
VR-S10-R-032	95 to 129 Godman Road, northern edge of Chadwell St Mary	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Sections 10 and 11
VR-S10-R-033	Residential properties along Turnstone Close, Sanderling Close, Stenning Avenue and Sandpiper Close, western edge of East Tilbury	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Sections 9 and 10
VR-S10-R-034	Residential properties along Godman Road, Northwood, Alexandra Close, Sleepers Farm Road, Wickham Road, Courtney Road and Semper Road, within Chadwell St Mary	High	Negligible	No change	Slight adverse effect	Neutral effect	Highway Sections 10 and 11
VR-S10-R-035	64 to 104 Godman Road, 12 to 64 Morant Road and 2, 2A and 4 Nevell Road, within Chadwell St Mary	High	No change	No change	Neutral effect	Neutral effect	Highway Section 10
VR-S10-R-036	13 to 21 Morant Road, St Joseph's Court, Heathlyn Close, 1 and 3 Nevell Road, 40 to 62 Godman Road and Kendale, within Chadwell St Mary	High	No change	No change	Neutral effect	Neutral effect	Highway Section 10
VR-S10-R-037	Residential properties along Rigby Gardens, Felicia Way, Brentwood Road, Marisco Close, St Stephens Crescent, Chadwell Hill and Furness Close, within Chadwell St Mary	High	No change	No change	Neutral effect	Neutral effect	Highway Section 10
VR-S11-R-001	Orsett House, High Road, north-west of Orsett	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 11
VR-S11-R-002	Residential properties along Shelford Close, Cassell Close and Daltons Shaw, western edge of Orsett	High	Negligible	No change	Slight adverse effect	Neutral effect	Highway Section 11
VR-S11-R-003	Baker Street Windmill, western edge of Baker Street	High	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 11
VR-S11-R-004	Residential properties at Rectory Fields	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-005	Residential properties along School Lane, southern edge of Orsett	High	No change	No change	Neutral effect	Neutral effect	Highway Section 11
VR-S11-R-006	Old Rectory, Fen Lane, north of Baker Street	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-007	Residential properties along Godman Road, northern side of Cedar Road and eastern side of Barry Close, northern edge of Chadwell St Mary	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Sections 10 and 11
N-19	Residential properties along the north side of Greyhound Lane, northern edge of Chadwell St Mary	High	See N-19	See N-19	See N-19	See N-19	See N-19

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S11-R-008	Residential properties along the south side of Greyhound Lane, northern edge of Chadwell St Mary	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-009	Residential properties along the eastern end and southern side of Harding Road and 43 to 45 Heath Road, northern edge of Chadwell St Mary	High	No change	No change	Neutral effect	Neutral effect	Highway Section 11
VR-S11-R-010	Residential properties along the western end of Harding Road (northern side), northern edge of Chadwell St Mary	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-011	130 to 168 Heath Road and residential properties along Foxes Green, the southern end of Squirrel's Chase and Hornsby Lane, Orsett Heath	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-012	Rose Cottage, Hornsby Lane	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 11
VR-S11-R-013	Residential properties along Gowers Lane, along the northern end of Squirrel's Chase and at the junction of Gowers Lane and Hornsby Lane, Orsett Heath	High	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 11
VR-S11-R-014	170 to 174 Heath Road, Orsett Heath	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-015	202 to 224 Heath Road, north of Orsett Heath	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 11
VR-S11-R-016	242, 246 and 246a Heath Road, north of Orsett Heath	Moderate	Major	Minor	Large adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-017	1 to 4 Badgers Mount, Orsett Heath	High	Negligible	No change	Slight adverse effect	Neutral effect	Highway Section 11
VR-S11-R-018	Residential properties along 5, 6, 8 and 9 Badgers Mount and adjoining 167, 175 and 179 Heath Road, Orsett Heath	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-019	Heath Place, Hornsby Lane	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Sections 10 and 11
VR-S11-R-020	The Whitecroft (also White Crofts on OS mapping), Stanford Road	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 11
VR-S11-R-021	Bloomfields Farm, Blackshots Lane	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 11
VR-S11-R-022	Grey Goose Farm, Grey Goose Farm Cottage and Little Wellhouse Farm, Blackshots Lane	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
N-23	Residential properties along Kerry Road and Milford Road (including high rise flats), eastern edge of Grays	High	See N-23	See N-23	See N-23	See N-23	See N-23
VR-S11-R-023	Residential properties along Kerry Road, Long Lane, Foxhills Road, Rushley Close, Brookman's Avenue, south side of Fairfield	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 11

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
	Avenue and Ashley Gardens, eastern edge of Grays						
VR-S11-R-024	Residential properties along Milford Road, eastern edge of Grays	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-025	Residential properties along Stifford Clays Road (south of the A13), northern edge of Grays	High	No change	No change	Neutral effect	Neutral effect	Highway Section 11
VR-S11-R-026	24 to 44 Stanford Road and residential properties along Masefield Road and Buxton Road, eastern edge of Grays	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-027	66 to 84 Heath Road and residential properties along southern side of Cedar Road and western side of Barry Close, northern edge of Chadwell St Mary	High	No change	No change	Neutral effect	Neutral effect	Highway Sections 10 and 11
VR-S11-R-028	Residential properties along north side of Fairfield Avenue, north-eastern edge of Grays	High	No change	No change	Neutral effect	Neutral effect	Highway Section 11
VR-S11-R-029	Residential properties along Blackshots Lane, north-eastern edge of Grays	High	No change	No change	Neutral effect	Neutral effect	Highway Section 11
VR-S11-R-030	Residential properties along the south of Stifford Clays Road and western side of Baker Street	High	Moderate	Minor	Large adverse effect	Moderate adverse effect	Highway Section 11
VR-S11-R-031	Residential properties along the eastern side of Baker Street	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
N-24	Southern end of Baker Street	High	See N-24	See N-24	See N-24	See N-24	See N-24
VR-S11-R-032	Residential properties along the north of Stifford Clays Road and west of Fen Lane, northern edge of Baker Street	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-033	110 to 158 High Road (north side), northern edge of Baker Street	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-034	91 to 163 High Road (south side), northern edge of Baker Street	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-035	Hollycrest House and Mill House, Mill Lane, western edge of Orsett	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
VR-S11-R-036	Hill House, High Road, west of Orsett	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 11
VR-S11-R-037	Residential properties along High Road, Pound Lane and Malting Lane, north-western edge of Orsett	High	No change	No change	Neutral effect	Neutral effect	Highway Section 11

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S11-R-038	Residential properties along Brentwood Road, Orsett, including Loft Hall Farm and Loft Hall Cottage	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 11
VR-S11-R-039	Springfield Farm, Stifford Clays Road, west of Baker Street	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 11
VR-S11-R-040	Cherry Orchard Farm, northern edge of Orsett	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Sections 11 and 12
VR-S11-R-041	Barrington's Farm and adjacent residential properties, south-east of Orsett	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 11
VR-S11-R-042	1 and 2 Potash Cottages	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 11
VR-S11-R-043	Five Chimney Cottages, A1013 Stanford Road	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 11
VR-S12-R-001	Home Farm Cottage on Ockendon Road and Redcrofts North Road, south-east of North Ockendon	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Sections 12 and 13
VR-S12-R-002	Residential properties along the northern side of Cheelson Road, northern edge of South Ockendon	High	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Sections 12 and 13
VR-S12-R-003	Residential properties along the southern side of Cheelson Road, northern edge of South Ockendon	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Sections 12 and 13
VR-S12-R-004	Home Farm, Corner Farm and Bolyngtons off Fen Lane	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 12
VR-S12-R-005	Fen Farm and Fen Farm Cottages, Fen Lane	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 12
VR-S12-R-006	Residential properties along Dunning's Lane	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 12
VR-S12-R-007	Castle Cottage, Judds Farm and Judds House, Harrow Road	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 12
VR-S12-R-008	The Downes, Elms Lane	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 12
VR-S12-R-009	Residential properties along Rosewood Close, Magnolia Close, Medlar Drive, Juniper Drive and Birch Crescent, eastern edge of South Ockendon	High	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 12
VR-S12-R-010	Hobletts	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 12
VR-S12-R-011	Parkers Farm and Parkers Farm Cottages along Parkers Farm Road	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 12
VR-S12-R-012	Fen Cottage, Fen Lane	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 12
VR-S12-R-013	Residential properties along the east side of North Road, northern edge of South Ockendon	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 12

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S12-R-014	The Evergreens and nearby properties along North Road	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 12
VR-S12-R-015	South Ockendon Hall, Hall Lane	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 12
VR-S12-R-016	Residential properties along the northern side of West Rd, northern edge of South Ockendon	High	No change	No change	Neutral effect	Neutral effect	Highway Sections 12 and 13
VR-S13-R-001	Sab-Anthony and Clay Lodge along Clay Tye Road	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Sections 13 and 14
VR-S13-R-002	Eastview, Brookside and Southside along Clay Tye Road	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Sections 13 and 14
VR-S13-R-003	Residential properties along Clay Tye Road	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Sections 13 and 14
VR-S13-R-004	Lowlands and Upminster Nursing Home, Clay Tye Road	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 13
VR-S13-R-005	White Post Farm and 1 to 8 Ockendon Road	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 13
VR-S13-R-006	Residential properties near the junction of Fen Lane and Ockendon Road	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 13
VR-S13-R-007	1 to 4 Dennises Cottages and Medina along Dennises Lane	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 13
VR-S13-R-008	Manor Farm, Ockendon Road	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 13
N-41	Residential properties along Ockendon Road, including Grafton and The Old Coach House	Moderate	See N-41	See N-41	See N-41	See N-41	See N-41
VR-S13-R-009	Residential properties at the northern end of Church Lane, North Ockendon	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 13
VR-S13-R-010	Residential properties along southern end of Church Lane in North Ockendon	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 13
VR-S13-R-011	Kemps Farm, Kemps Farm Mews, Kemps Cottages and Field House, Dennis Road	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 13
VR-S13-R-012	Railway Sidings, Ockendon Road	Moderate	Moderate	Minor	Moderate adverse effect	Slight beneficial effect	Highway Section 13
VR-S14-R-001	Residential properties along Beredens Lane	Moderate	Negligible	Minor	Slight adverse effect	Slight adverse effect	Highway Section 14
VR-S14-R-002	Residential properties along Folkes Lane	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 14
VR-S14-R-003	Residential properties at Laburnham Stables, off Laburnham Gardens	High	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 14
VR-S14-R-004	56 to 74 Laburnham Gardens (south side) and residential properties on Laburnham Close	High	No change	No change	Neutral effect	Neutral effect	Highway Section 14
VR-S14-R-005	Frank's Farm off St Marys Lane	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 14
VR-S14-R-006	Youngs Farm, Cranham Court Nursing Home, residential property at Westbury Farm	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 14

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
	and residential property at entrance to Westbury Farm, St Marys Lane						
VR-S14-R-007	Franks Cottages, St Marys Lane	Moderate	Negligible	No change	Slight adverse effect	Neutral effect	Highway Section 14
VR-S14-R-008	1 to 10 St Marys Lane, Clovelly, Lamorna, Monks Farm Cottages, Fallowfield Farm, Bodiam Farm and adjacent residential properties along St Marys Lane	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 14
VR-S14-R-009	Residential property near Puddledock Farm Fishery, St Marys Lane	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 14
VR-S14-R-010	Gladstone Cottages, Warley Street	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 14
VR-S14-R-011	Residential properties at the junction of Warley Street and Church Lane	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 14
VR-S14-R-012	Residential properties (Netherstone and Hulmers) along Warley Street, north of A127	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 14
VR-S14-R-013	Tabrums Farm, Little Tabrums and adjacent residential properties, Folkes Lane	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 14
VR-S14-R-014	Small Acres Farm, Folkes Lane	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 14
VR-S14-R-015	Hole Farm	Moderate	No change	Negligible	Neutral effect	Neutral effect	Highway Section 14
VR-S14-R-016	Tyas Stud Farm (including static caravans) and Latchford Farm, St. Marys Lane	Moderate	Moderate	Minor	Moderate adverse effect	Slight beneficial effect	Highway Section 14
VR-S14-R-017	Residential property at Wyngray Farm and static caravans at Fairoak, St Marys Lane, Upminster	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 14
Recreational (route) 'RL'							
VR-S09-RL-001	Bridleway 187 (Two Forts Way Coastal Path/NCN Route 13)	High	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 9
VR-S09-RL-002	Footpath 146 (Two Forts Way Coastal Path/NCN Route 13)	High	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 9
VR-S09-RL-003	Footpath 146 (Two Forts Way Coastal Path/NCN Route 13)	High	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 9
VR-S09-RL-004	Footpath 200	Moderate	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 9
VR-S09-RL-005	Footpath 200	Moderate	Major	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 9
VR-S09-RL-006	Footpath 200	Moderate	Major	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 9
VR-S09-RL-007	Footpath 68	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 9
VR-S09-RL-008	Footpath 51 and footpath 147	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-RL-009	Low Street Lane Route	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Sections 9 and 10
VR-S10-RL-001	Coal Road/Bridleway 58	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Sections 9 and 10

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S10-RL-002	Footpath 61 and footpath 60	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Sections 9 and 10
VR-S10-RL-003	Footpath 72	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Sections 9 and 10
VR-S10-RL-004	Footpath 69, footpath 70 and footpath 71	Moderate	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 10
VR-S10-RL-005	Footpath 74	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 10
VR-S10-RL-006	Footpath 75	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 10
VR-S10-RL-007	Footpath 65	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 10
VR-S10-RL-008	Footpath 106 and footpath 105	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Sections 10 and 11
VR-S10-RL-009	Footpath 95	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Sections 10 and 11
VR-S10-RL-010	Footpath 79	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Sections 10 and 11
VR-S10-RL-011	Footpath 95 and footpath 107	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Sections 10 and 11
VR-S10-RL-012	Footpath 103	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 11
VR-S10-RL-013	Footpath 104	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
VR-S10-RL-014	Hoford Road route (near Tarmac Linford Blocks Plant)	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 10
VR-S11-RL-001	Footpath 108	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 11
VR-S11-RL-002	Footpath 109 and footpath 114	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 11
VR-S11-RL-003	Footpath 82, footpath 93 and footpath 94	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
VR-S11-RL-004	Footpath 97	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
VR-S12-RL-001	Footpath 134	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 12
VR-S12-RL-002	Footpath 136	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 12
VR-S12-RL-003	Footpath 15	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 12
VR-S12-RL-004	Footpath 136	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 12
VR-S12-RL-005	Footpath 135	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 12
VR-S12-RL-006	Footpath 233	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 12
VR-S12-RL-007	Bridleway 178 and footpath 101	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 12
VR-S12-RL-008	Footpath 100	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 12
VR-S12-RL-009	Footpath 90	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 12
VR-S12-RL-010	Footpath 135	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 12
VR-S12-RL-011	Bridleway 219 (Mardyke Way)	High	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 12
VR-S12-RL-012	Footpath 160 and footpath 4	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 12
VR-S13-RL-001	Footpath 232	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 13
VR-S13-RL-002	Bridleway 272	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 13

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S13-RL-003	Footpath 231	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 13
VR-S13-RL-004	Footpath 139 and footpath 153	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 13
VR-S13-RL-005	Footpath 230 (within Thames Chase Forest Centre)	High	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 13
VR-S13-RL-006	Footpath 229	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 13
VR-S13-RL-007	Footpath 210	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 13
VR-S13-RL-008	Footpath 1	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 13
VR-S14-RL-001	Bridleway 119	Moderate	Minor	No change	Slight adverse effect	Neutral effect	Highway Section 14
VR-S14-RL-002	Footpath PRoW 272_179	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 14
VR-S14-RL-003	Bridleway PRoW 272_183 (south of the A127)	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 14
VR-S14-RL-004	Bridleway PRoW 272_183 (north of the A127)	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 14
VR-S14-RL-005	Footpath 176	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 14
VR-S14-RL-006	Footpath PRoW 272_180 and footpath 177	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 14
VR-S14-RL-007	Footpath PRoW 272_178 and footpath 179	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 14
Recreational (area) 'RA'							
VR-S10-RA-001	Green space, Stenning Avenue, East Tilbury	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Sections 9 and 10
VR-S10-RA-002	Green space (also known as Wickham Park), St Francis Way, Chadwell St Mary	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 10
VR-S10-RA-003	Orsett Golf Club, Brentwood Road, Orsett	Moderate	Moderate	Minor	Moderate adverse effect	Slight beneficial effect	Highway Section 10
VR-S11-RA-001	Orsett and Thurrock Cricket Club, School Lane, Orsett	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 11
VR-S11-RA-002	Green space, Heath Road, Grays	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 11
VR-S11-RA-003	Orsett Bowls Club, School Lane, Orsett	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 11
VR-S11-RA-004	Thurrock Rugby Club, Long Lane, Grays	Low	Moderate	Minor	Slight adverse effect	Neutral effect	Highway Section 11
VR-S12-RA-001	Top Meadow Golf Club, North Ockendon, Upminster	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Sections 12 and 13
VR-S13-RA-001	Cranham Golf Club, St Marys Lane, Upminster	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Sections 13 and 14
Transport (route) 'T'							
VR-S09-T-001	Tilbury Loop railway line, c2c	Low	Minor	Minor	Slight adverse effect	Neutral effect	Highway Sections 9 and 10
VR-S09-T-002	Fort Road near edge of Tilbury	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 9
VR-S09-T-003	Fort Road north of Tilbury and Coopers Shaw Road	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 9

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S09-T-004	Church Road	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Sections 9 and 10
VR-S09-T-005	Station Road, between Low Street Lane and Readmans Industrial Estate	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Sections 9 and 10
VR-S09-T-006	Station Road, Readmans Industrial Estate to Goshems Farm	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Sections 9 and 10
VR-S09-T-007	Station Road, east of Goshems Farm	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-T-008	Love Lane	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-T-009	Princess Margaret Road	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-T-010	New road to Tilbury2	Low	No change	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-T-011	Gun Hill, West Tilbury	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-T-012	Fort Road, west and north of Tilbury Fort	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-T-013	A1089 , Dock Approach Road	Low	No change	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-T-014	Rectory Road, West Tilbury	Moderate	Negligible	Negligible	Slight adverse effect	Slight adverse effect	Highway Section 9
VR-S10-T-001	Blue Anchor Lane	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Sections 9 and 10
VR-S10-T-002	Muckingford Road and Linford Road	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Sections 9 and 10
VR-S10-T-003	East Tilbury Road	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 10
VR-S10-T-004	Hoford Road	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Sections 9 and 10
VR-S10-T-005	Turnpike Lane	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Sections 9 and 10
VR-S10-T-006	High House Lane (southern end)	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 10
VR-S10-T-007	High House Lane (northern end)	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 10
VR-S10-T-008	Brentwood Road, north of Chadwell St Mary	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Sections 10 and 11
VR-S10-T-009	Buckingham Hill Road and Walton's Hall Road	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 10
VR-S10-T-010	A128, Brentwood Road (north of the A13)	Low	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 11
VR-S10-T-011	Brentwood Road within Chadwell St Mary	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 10
VR-S10-T-012	Chadwell Hill	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 10
VR-S11-T-001	Fen Lane	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Sections 11 and 12
VR-S11-T-002	B188 High Road/Stifford Clays Road, between Baker Street and Orsett	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 11
VR-S11-T-003	School Lane	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 11
VR-S11-T-004	Mill Lane	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
VR-S11-T-005	Stifford Clays Road (west)	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Sections 11 and 12
VR-S11-T-006	Green Lane	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Sections 11 and 12

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S11-T-007	A1089, Dock Approach Road (near the A13 junction)	Low	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 11
VR-S11-T-008	Hornsby Lane, east of Orsett Heath	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Sections 10 and 11
VR-S11-T-009	Baker Street	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 11
VR-S11-T-010	Rectory Road	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
VR-S11-T-011	Blackshots Lane	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 11
VR-S11-T-012	Long Lane	Moderate	Major	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
VR-S11-T-013	Heath Road	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 11
VR-S11-T-014	Stanford Road	Low	Moderate	Negligible	Slight adverse effect	Neutral effect	Highway Section 11
VR-S11-T-015	A13 (east of Orsett Cock roundabout)	Negligible	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 11
VR-S11-T-016	A13 (west of A1089 Dock Approach Road junction)	Negligible	Moderate	Minor	Slight adverse effect	Neutral effect	Highway Section 11
VR-S12-T-001	Upminster to Grays railway line, c2c	Low	Minor	Minor	Slight adverse effect	Neutral effect	Highway Sections 12 and 13
VR-S12-T-002	Parkers Farm Road	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 12
VR-S12-T-003	Conway's Road	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 12
VR-S12-T-004	Dunning’s Lane and Harrow Road	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 1217
VR-S12-T-005	Fen Lane, near Top Meadow Golf Club	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 12
VR-S13-T-001	Pea Lane	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 13
VR-S13-T-002	Dennises Lane	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 13
VR-S13-T-003	Clay Tye Road	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Sections 13 and 14
VR-S13-T-004	Church Lane	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 13
VR-S13-T-005	B1421, Ockendon Road	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 13
VR-S13-T-006	B1421, Ockendon Road (west of M25)	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 13
VR-S13-T-007	Pike Lane	Moderate	Minor	Minor	Slight adverse effect	Slight beneficial effect	Highway Section 13
VR-S13-T-008	Dennis Road	Moderate	Negligible	Negligible	Slight adverse effect	Neutral effect	Highway Section 13
VR-S14-T-001	Upminster to Basildon railway line, c2c	Low	Negligible	No change	Slight adverse effect	Neutral effect	Highway Section 14
VR-S14-T-002	Folkes Lane	Moderate	Minor	Minor	Slight adverse effect	Slight beneficial effect	Highway Section 14
VR-S14-T-003	B186, Warley Street	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 14
VR-S14-T-004	B187, St Marys Lane	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 14
VR-S14-T-005	Warley Road	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 14
VR-S14-T-006	Beredens Lane	Moderate	Negligible	Minor	Slight adverse effect	Slight adverse effect	Highway Section 14
VR-S14-T-007	A127	Negligible	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 14
VR-S14-T-008	St Marys Lane	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 14

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
Other receptors 'O'							
VR-S09-O-001	Readmans Industrial Estate	Negligible	Major	Major	Slight adverse effect	Slight adverse effect	Highway Sections 9 and 10
VR-S09-O-002	Thames Industrial Park	Low	Moderate	Minor	Slight adverse effect	Slight adverse effect	Highway Sections 9 and 10
VR-S09-O-003	Allotments, Station Road, East Tilbury	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-O-004	Tilbury Sewage Treatment Works, Tilbury	Negligible	No change	No change	Neutral effect	Neutral effect	Highway Section 9
VR-S09-O-005	Riverside Business Park, Fort Road, Tilbury	Low	Minor	Minor	Neutral effect	Neutral effect	Highway Section 9
VR-S09-O-006	Salvage yard, tyre shop and garage, Dock Road, Tilbury	Negligible	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 9
VR-S09-O-007	Condovers Scout Activity Centre, Church Road, West Tilbury	Moderate	Minor	Minor	Slight adverse effect	Slight adverse effect	Highway Section 9
VR-S10-O-001	Allotments, Lower Crescent, Linford	Moderate	Negligible	No change	Slight adverse effect	Neutral effect	Highway Section 10
VR-S10-O-002	Tarmac Linford Blocks Plant, Linford	Negligible	Negligible	No change	Neutral effect	Neutral effect	Highway Section 10
VR-S11-O-001	Orsett Allotments, Rectory Road, Orsett	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
VR-S11-O-002	Orsett Village Hall, High Road, Orsett	Moderate	Negligible	No change	Neutral effect	Neutral effect	Highway Section 11
VR-S11-O-003	Treetops School, Buxton Road, Grays	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 11
VR-S11-O-004	Allotments, Heath Road, Orsett Heath	Moderate	Moderate	Moderate	Moderate adverse effect	Moderate adverse effect	Highway Section 11
VR-S11-O-005	Pyramid Resource Centre, Heath Road, Grays	Moderate	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 11
VR-S11-O-006	William Edwards School, Stifford Clays Road, Grays	Moderate	No change	No change	Neutral effect	Neutral effect	Highway Section 11
VR-S11-O-007	Bombers Café, Brentwood Road, north of A13	Low	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 11
VR-S11-O-008	Orsett Church of England Primary School, School Lane, Orsett	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 11
VR-S11-O-009	The Fox	Moderate	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Section 11
VR-S11-O-010	Willow Garden Day Nursery	Moderate	Major	Moderate	Large adverse effect	Moderate adverse effect	Highway Section 11
VR-S11-O-011	Orsett Heath Academy, Grays, adjacent to Thurrock Rugby Football Club	Moderate	Moderate	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 11
VR-S12-O-001	Benyon Primary School, West Road, South Ockendon	Moderate	Minor	Negligible	Slight adverse effect	Slight adverse effect	Highway Sections 12 and 13
VR-S12-O-002	Next Distribution Warehouse, West Rd, South Ockendon	Low	Negligible	No change	Neutral effect	Neutral effect	Highway Sections 12 and 13
VR-S13-O-001	Equipment rental agency, Ashley Farm, North Ockendon	Low	No change	No change	Neutral effect	Neutral effect	Highway Section 13
VR-S13-O-002	Nurture Landscapes, Church Lane, North Ockendon	Low	Moderate	Minor	Slight adverse effect	Slight adverse effect	Highway Section 13

The locations of visual receptors are shown on Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations (Application Document 6.2)							
Visual receptor reference	**Address (residential property)/PRoW/road/type of receptor**	**Sensitivity**	**Magnitude of visual effect**		**Significance of effect**		**Environmental Masterplan references: Figure 2.4 (Application Document 6.2)**
			Opening year (winter)	**Design year (summer)**	**Opening year (winter)**	**Design year (summer)**	
VR-S13-O-003	Industrial units at Baldwins Farm, Baldwins Farm Lane, Upminster	Negligible	Negligible	No change	Neutral effect	Neutral effect	Highway Section 13
VR-S14-O-001	Industrial units at Westbury Farm, St Marys Lane, Upminster	Negligible	No change	No change	Neutral effect	Neutral effect	Highway Sections 13 and 14
VR-S14-O-002	Upminster Trading Park, Warley Street, Upminster	Negligible	Negligible	No change	Neutral effect	Neutral effect	Highway Section 14
VR-S14-O-003	Industrial units at Woodcroft Farm, Folkes Lane, Upminster	Negligible	Negligible	No change	Neutral effect	Neutral effect	Highway Section 14
VR-S14-O-004	Industrial units at Folkes Farm, Folkes Lane, Upminster	Negligible	Negligible	Minor	Neutral effect	Slight beneficial effect	Highway Section 14
VR-S14-O-005	In Fitness In Health gym, Franks Farm off St Marys Lane, Upminster	Low	Major	Minor	Moderate adverse effect	Slight adverse effect	Highway Section 14
VR-S14-O-006	Puddledock Farm Fishery, St Marys Lane, Upminster	Low	Minor	Negligible	Slight adverse effect	Neutral effect	Highway Sections 13 and 14
VR-S14-O-007	Industrial units at Codham Hall Farm, Codham Hall Lane, Upminster (south of A127)	Negligible	Minor	Negligible	Neutral effect	Neutral effect	Highway Section 14
VR-S14-O-008	Industrial units at Beredens Farm, Beredens Farm Lane, Upminster	Negligible	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 14
VR-S14-O-009	Industrial units at Codham Hall Farm, Codham Hall Lane, Upminster (north of A127)	Negligible	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 14
VR-S14-O-010	Industrial units at Wyngray Farm, Aquarend and adjacent Latchfield Farm Aquatics, St Marys Lane, Upminster	Negligible	Negligible	Negligible	Neutral effect	Neutral effect	Highway Section 14

References

Highways England (2020). Design Manual for Roads and Bridges, LA 104 Environmental Assessment and Monitoring. Revision 1. Accessed August 2020. https://www.standardsforhighways.co.uk/dmrb/.

If you need help accessing this or any other National Highways information, please call **0300 123 5000** and we will help you.

If you have any enquiries about this publication email **info@nationalhighways.co.uk** or call **0300 123 5000***.

*Calls to 03 numbers cost no more than a national rate call to an 01 or 02 number and must count towards any inclusive minutes in the same way as 01 and 02 calls.

These rules apply to calls from any type of line including mobile, BT, other fixed line or payphone. Calls may be recorded or monitored.

Printed on paper from well-managed forests and other controlled sources when issued directly by National Highways.

Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ

National Highways Limited registered in England and Wales number 09346363