12 Townscape and Visual Effects

12.1 Scope of the Assessments

12.1.1 The assessments reported in this chapter have been focused on predicted changes in the form, quality and value of the townscape within Watford and in views of the urban area as experienced by residents and visitors to the town should the proposed scheme be implemented.

12.1.2 The assessment for both aspects has been limited to the sections of the proposed scheme between the western diverge from the existing Metropolitan Line to the merge with the existing Euston to Watford Line. The proposed works east of the merge are limited to small-scale extension of platforms at Watford High Street Station and Watford Junction and associated localised works at Watford Junction. These are works which will be contained within the existing operational corridor and which will not have an impact on the composition or quality of the existing townscape. Nor will they result in a significant change in views for residents and visitors to the town.

Townscape

12.1.3 The assessment of impacts on townscape has involved investigation of how the composition of physical, natural and human features and activities that frame the existing character of the townscape would change as a result of the introduction of the proposed scheme into the existing urban fabric. The assessment has considered the scale and form of the proposed scheme and its associated earthworks and structures and the impact on the existing composition of urban development and open space that makes up the existing townscape. It considers the extent to which this would be likely to be beneficial or adverse relative to existing character.

12.1.4 The assessment has included consideration of the impact on trees as an important element of the landscape and the significance of landscape / townscape impacts in the context of the Watford Borough Green Infrastructure Plan as indicated in the scoping opinion for the proposed scheme.

12.1.5 The study area for the townscape assessment comprises the area contained within the townscape character areas defined in Figure 12.1. The assessments have considered predicted impacts immediately following completion of construction and some fifteen years following completion of construction. This has enabled consideration to be given to the extent to which character will be likely to change as the proposed landscape measures and planting in particular, establish and begin to mature.
Visual impacts

12.1.6 The assessment of visual impacts has involved the identification of areas of the town from which it is anticipated the proposed tracks, associated structures and buildings and trains would appear in existing views and the extent to which this would be detrimental to receptors within the areas.

12.1.7 The affected areas, collectively known as the Zone of Visual Influence (ZVI), constitute the study area for the visual impact assessment as shown in Figure 12.2.

12.1.8 Receptors within the affected areas comprise occupiers of residential and other properties and users of communal and recreational areas and facilities where the visual context to these areas is an essential contributor to the enjoyment and experience of users. Examples of such areas and facilities relevant to the proposed scheme include parks and public open space and public footpaths.

12.1.9 Assessments have been undertaken at three points in the anticipated life of the project; during construction, immediately following construction (2016) and fifteen years following completion of construction (2031). Comparison of the impacts relative to specific receptors in the latter two instances provides a good indication of the anticipated effectiveness of the landscape proposals and mitigation measures which form an integral part of the proposed scheme and which have been described in Chapter 6.

12.2 Methods of assessment

12.2.1 The assessments have been undertaken in accordance with the Guidelines for Landscape and Visual Impact Assessment (Second Edition), published by the Landscape Institute and IEMA (2002) (GLVIA).

12.2.2 Reference has also been made to the Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 5 - Landscape Effects and the Landscape Character Assessment: Guidance for England and Scotland published by Scottish Natural Heritage and the Countryside Agency (2002).

12.2.3 Both townscape and visual impact assessments have involved five key stages:

- recording and evaluation of the existing character and visual context of the receiving environment (the baseline environment);
- an appreciation of the nature, forms and features of the proposed development;
- identification of predicted significant impacts on townscape character and views experienced by sensitive receptors;
- identification of appropriate landscape design and mitigation measures in respect of any significant adverse impacts; and
a description of the anticipated residual significant impacts after mitigation on townscape and the visual context of the proposed scheme corridor and surrounding areas.

Townscape

Baseline environment and sensitivity

12.2.4 The identification and evaluation of the existing townscape has involved:

- reference to Landscape East’s East of England Framework relative to landscape typology;
- reference to the South Hertfordshire Landscape Character Assessment;
- reference to the historic character areas (HCAs) detailed in SPG28 Watford: Historic Environment Character Statement and Guidance Note;
- reference to the Civic Core, High Street / King Street, St Mary’s and Croxley Green Conservation Area Character Appraisals;
- reference to the Watford Borough Green Infrastructure Plan (2011)
- desk based analysis of OS mapping relating to landform, vegetation, settlement patterns and the drainage regime in the wider area;
- desk based analysis of aerial photography for the area;
- preliminary identification of local townscape character zones;
- site surveys and appropriate modification of preliminary zones. Site recording involved annotation of 1:1250 and 1:25000 scale OS plans defining the zones and the key elements determining character;
- site photography to illustrate character zones, notable views / viewpoints and key landscape elements; and
- drafting and description of local townscape character zones including an appraisal of their quality and value to inform the evaluation of their sensitivity to change in the context of the proposed form of development.

12.2.5 The review of the East of England typology established that the whole of the proposed scheme corridor is located within an area classified as being of urban typology. The principal data sources referred to for the purposes of defining and differentiating townscape character zones were, therefore, the South Hertfordshire Landscape Appraisal, SPG28 and the Conservation Area Character Appraisals.

Townscape quality

12.2.6 Townscape quality relates to the intrinsic aesthetic appeal of an urban character zone or feature / composition within the urban fabric. Five ratings for quality have been adopted as detailed in Table 12-1:
Table 12-1: Townscape quality ratings

<table>
<thead>
<tr>
<th>Quality rating</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest quality</td>
<td>Areas comprising a strong, clear composition of valued townscape components in robust form and health, free of disruptive visual detractors and with a strong sense of place.</td>
</tr>
<tr>
<td>Very attractive</td>
<td>Areas primarily of valued townscape components combined in an aesthetically pleasing composition, expressing sense of place and lacking prominent disruptive visual detractors.</td>
</tr>
<tr>
<td>Good</td>
<td>Areas primarily of valued townscape components combined in an aesthetically pleasing composition with low levels of disruptive visual detractors.</td>
</tr>
<tr>
<td>Ordinary</td>
<td>Areas containing some features of townscape value or a distinguishable townscape structure, but lacking a coherent and aesthetically pleasing composition.</td>
</tr>
<tr>
<td>Poor</td>
<td>Areas lacking valued townscape components or comprising degraded features or exhibiting evidence of mixed land use and detracting features, and lacking any aesthetically pleasing composition.</td>
</tr>
</tbody>
</table>

Townscape value

12.2.7 Townscape value relates to areas of particular scenic quality or those displaying important historic and cultural associations. Value is frequently addressed by reference to international, national, regional and local designations. An absence of a formal designation does not, however, determine that a townscape is necessarily of low value; factors such as accessibility and local scarcity can render areas of unremarkable quality highly valuable as a local resource.

Sensitivity to change

12.2.8 Sensitivity to change relates to the quality and value of the townscape and the extent to which it is considered capable of accepting the type of development proposed. Three orders of sensitivity have been adopted for the assessment as detailed in Table 12-2.

Table 12-2: Ratings for townscape sensitivity to change

<table>
<thead>
<tr>
<th>Sensitivity to change</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Townscape or townscape elements of particularly distinctive character, highly valued and considered susceptible to relatively small changes.</td>
</tr>
<tr>
<td>Medium</td>
<td>A townscape of moderately valued characteristics considered reasonably tolerant of moderate levels of change.</td>
</tr>
<tr>
<td>Low</td>
<td>A townscape of generally low valued characteristics considered tolerant of substantial levels of change.</td>
</tr>
</tbody>
</table>
**Impact assessment**

12.2.9 The evaluation of impacts has involved consideration of the sensitivity to change, derived during the baseline appraisal, and the predicted magnitude of the change that will occur in light of the construction and future use of the proposed scheme.

**Magnitude of change**

12.2.10 The magnitude of change has been determined through a process of quantification of impacts, such as loss of and severance or modification to key components (woodland, hedgerows, buildings walls and landform) and evaluation of the extent to which the proposed development will emerge as a new component in the townscape or change the balance between components that currently constitute baseline character. Four ratings for magnitude have been adopted as detailed in Table 12-3.

**Table 12-3: Ratings for townscape magnitude of change**

<table>
<thead>
<tr>
<th>Magnitude of change</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td>Beneficial: Large scale or major improvement of resource quality; extensive restoration or enhancement; major improvement of attribute quality and/or the removal of uncharacteristic features and elements, or by the addition of new distinctive features. Adverse: Total loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements and/or the addition of new but uncharacteristic conspicuous features and elements.</td>
</tr>
<tr>
<td><strong>Medium</strong></td>
<td>Beneficial: Partial or noticeable improvement of character by the restoration of existing features and elements, and/or the removal of uncharacteristic noticeable features and elements, or by the addition of new characteristic features. Adverse: Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements.</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>Beneficial: Slight improvement of character by the restoration of existing features and elements, and/or the removal of uncharacteristic features and elements, or by the addition of new characteristic elements. Adverse: Slight loss or damage to existing character or features and elements, and/or the addition of new but uncharacteristic features and elements.</td>
</tr>
<tr>
<td><strong>Negligible</strong></td>
<td>Beneficial: Barely noticeable improvement of character by the restoration of existing features and elements, and/or the removal of uncharacteristic features and elements, or by the addition of new characteristic elements. Adverse: Barely noticeable loss or damage of to the existing character or features ad elements, and/or the addition of new but uncharacteristic features and elements.</td>
</tr>
<tr>
<td><strong>No change</strong></td>
<td>No change</td>
</tr>
</tbody>
</table>
Impact ratings

12.2.11 Seven impact ratings have been adopted based on consideration of sensitivity and magnitude and taking into account the landscape and mitigation proposals included as part of the proposed scheme. The ratings are detailed in Table 12-4.

Table 12-4: Townscape impact ratings

<table>
<thead>
<tr>
<th>Magnitude</th>
<th>Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>High</td>
<td>Slight/Moderate</td>
</tr>
<tr>
<td>Medium</td>
<td>Slight</td>
</tr>
<tr>
<td>Low</td>
<td>Neutral/Slight</td>
</tr>
<tr>
<td>Negligible</td>
<td>Neutral/Slight</td>
</tr>
<tr>
<td>No change</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

Visual impact assessment

Baseline environment

12.2.12 Establishment of the existing visual context for the proposed scheme involved consideration of the findings of the townscape baseline studies and surveys related to key townscape components and their composite form, the definition of a zone of visual influence (ZVI) for the proposed scheme and the identification of key visual receptors within the ZVI.

ZVI

12.2.13 The ZVI represents the extent of the area within which there would be potential for views of the proposed scheme. A preliminary plotting of the ZVI was undertaken by reviewing current OS mapping for the area to establish where landform, large scale established planting and areas of built development would be likely to define the availability of views. The initial plotting was then checked on site and modified.

12.2.14 Inclusion of an area within the ZVI is not an indicator that all potential receptors within the defined area will experience views of the proposed scheme. There are many localised features such as individual buildings, hedgerows, small copses or localised variations in landform which may obstruct views from a receptor. The prime objective is to establish an area within which key receptors whose views may be influenced by the proposed scheme can be identified.
Key receptors

12.2.15 The identification of key receptors involved a review and initial plotting of buildings, areas open to public use, rights of way, informal routes and local roads located within the ZVI. Site surveys were then undertaken to establish the nature, location and availability of view. The identified receptors were grouped and mapped and a schedule was prepared and completed to record their location, existing views from the receptors which could potentially be affected by the proposed scheme and the sensitivity of each receptor group to changes in the relevant views. The schedule, which has been subsequently extended to record the assessment of visual impacts, is available in the form of the Visual Impact Tables in Volume 3, Appendix 12C.

Impact assessment

12.2.16 The assessment of predicted visual impacts for the identified receptors involved a detailed site survey on 25th May 2011. The weather was bright and clear and visibility was good. Individual records were made for each receptor or receptor group. Information recorded included:

- receptor type and number (houses, footpaths, open space etc);
- form and quality of the existing view;
- distance between receptor and the proposed scheme;
- angle of view towards the proposed scheme;
- elevation of receptor in relation to the proposed scheme (view up / view down / level view);
- extent of the existing view predicted to be influenced by the proposed scheme;
- location of the proposed scheme in the view (foreground / mid ground / background); and
- preliminary prediction of orders of impact during construction, in the year of opening, and ten years following opening.

Impact criteria

12.2.17 In common with the townscape assessment, the key criteria used to evaluate visual impacts have been the sensitivity of the receptor and the magnitude of change.

12.2.18 Assessment of predicted impacts has been undertaken for the anticipated construction period, during the winter in the year of commencing operation and in the winter and summer ten years following commencement of operation. The latter assessment provides an indication of the predicted effectiveness of the planting included as part of the landscape strategy for the proposed scheme.
Sensitivity to change

12.2.19 Three ratings for sensitivity to change have been adopted as detailed in Table 12-5:

**Table 12-5: Ratings for visual receptor sensitivity to change**

<table>
<thead>
<tr>
<th>Sensitivity to change</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Receptors where the changed view is of high value and importance and/or where the receptor will notice any change to visual amenity by reason of the nature of use and their expectations. Typically residential properties, users of Public Rights of Way or users of recreational facilities where the purpose is the enjoyment of the countryside.</td>
</tr>
<tr>
<td>Medium</td>
<td>Receptors where the changed view is incidental but not critical to amenity and/or the nature of the view is not a primary consideration of the uses. Typically outdoor workers, users of scenic roads, railways or waterways, schools and other institutional buildings and their outdoor areas.</td>
</tr>
<tr>
<td>Low</td>
<td>Receptors where the changed view is unimportant/ irrelevant and/or users are not sensitive to change. Typically indoor workers, uses of main roads or passengers on in public transport on main arterial routes, users of recreational facilities where the purpose of that recreation is not related to the view (e.g. sports facilities).</td>
</tr>
</tbody>
</table>
Magnitude of change

12.2.20 Magnitude of change has involved the quantification and description of the extent of the proposed scheme that would be visible; the percentage of the existing view newly occupied by the proposals; and the viewing distance / angle from the receptor to the road and its associated traffic. Five ratings have been adopted as detailed in Table 12-6.

Table 12-6: Ratings for visual impact magnitude of change

<table>
<thead>
<tr>
<th>Magnitude of change</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Beneficial: The project, or part of it, would become the dominant positive feature or focal point of the view. Adverse: The project, or part of it, would become the dominant negative feature or focal point of the view.</td>
</tr>
<tr>
<td>Medium</td>
<td>Beneficial: The project, or part of it, would form a noticeable positive feature or element of the view which is readily apparent to the receptor. Adverse: The project, or part of it, would form a noticeable negative feature or element of the view which is readily apparent to the receptor.</td>
</tr>
<tr>
<td>Low</td>
<td>Beneficial: The project, or part of it, would be perceptible but not alter the overall balance of features that comprise the exiting view. Adverse: The project, or part of it, would be perceptible but not alter the overall balance of features that comprise the exiting view.</td>
</tr>
<tr>
<td>Negligible</td>
<td>Beneficial: Only a very small part of the project would be discernable, or it is at such a distance that it would form a barely noticeable feature or element of the view. Adverse: Only a very small part of the project would be discernable, or it is at such a distance that it would form a barely noticeable feature or element of the view.</td>
</tr>
<tr>
<td>No change</td>
<td>No change</td>
</tr>
</tbody>
</table>

Impact ratings

12.2.21 Seven impact ratings have been adopted based on consideration of sensitivity and magnitude and taking into account the landscape and mitigation proposals described in Chapter 6 and outlined in Figures 6.7A and 6.7B. The ratings are detailed in Table 12-7.
12.3 Baseline environment

Townscape

12.3.1 The proposed scheme corridor traces a route from the Metropolitan Line and the extensive suburban housing of Croxley Green south of the historic landscape of Cassiobury Park before crossing the Grand Union Canal and the narrow, woodland-lined channel of the River Gade.

12.3.2 It then threads its way between dense areas of housing that marked the Victorian expansion of the town following the advent of the railways and areas of mid 20th century houses and flats which are surrounded and punctuated by grassed open spaces.

12.3.3 It briefly skirts the north eastern margin of the Colne Valley before merging with the operational Network Rail corridor of the Euston to Watford Junction line which is enclosed by dense areas of terraced housing, and commercial and retail development on the fringe of Watford town centre.

Regional character areas

12.3.4 There are two county landscape character areas located along the southern and western margins of the study area which are defined and described in the South Hertfordshire Landscape Character Assessment. The extent of both is shown in Figure 12.1. The two areas comprise Character Area 005 - Croxley Moor and Character Area 011 - Lower Gade Valley. Information relating to both areas as detailed in the South Hertfordshire LCA is provided in Volume 3, Appendix 12A.

12.3.5 Character Area 005 - Croxley Moor is defined as ‘a varied though coherent landscape created by a mix of mineral extraction, agriculture, education and transport corridors. A jumbled but peaceful area on the edge of extensive urbanisation. Scattered pasture and semi-natural habitats survive throughout the area, giving an indication of the original landscape character, but there is a strong 20th century influence’.

Table 12-7: Visual impact ratings

<table>
<thead>
<tr>
<th>Magnitude</th>
<th>Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>High</td>
<td>Slight/Moderate</td>
</tr>
<tr>
<td>Medium</td>
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<tr>
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<td>Neutral/Slight</td>
</tr>
<tr>
<td>No change</td>
<td>Neutral</td>
</tr>
</tbody>
</table>
Character Area 011 - Lower Gade Valley is defined as 'a narrow but marked river valley with the predominant influence from a combination of historic parkland and ancient woodland. Moderate slopes rise to either side with occasional dramatic open views across the valley. The eastern slopes of the area are mainly built-up and form part of Watford. The Grand Union Canal flows majestically through the area from whence there are views up to the parkland landscapes.

Local townscape character zones

The large part of the townscape associated with the proposed scheme corridor is not included in the national or regional landscape classifications other than being recognised as being urban in form and character.

The appraisal specific to the townscape associated with the proposed scheme corridor has identified nine local townscape character zones. The extent of the zones and relationship to each other is shown in Figure 12.1.

Where relevant, reference is made to Historic Character Areas (HCA) as defined in SPG28 Watford: Historic Environment Character Statement and Guidance Note. Detailed abstracts from SPG28 for the HCAs referred to are available in Volume 3, Appendix 12A. Reference is also made to those areas which are identified as strategic green infrastructure assets in the Watford Borough Green Infrastructure Plan.

Local Character Zone 1: Croxley Green

Croxley Green is a substantial area of 20th century housing on the western fringe of Watford. The large part of the housing, located to the west of the Metropolitan Line, was developed in the 1930’s. Spacious properties with long gardens and enclosed frontages are arranged in a generally rectilinear pattern of relatively wide streets punctuated by areas of open space.

East of the Metropolitan Line there is a mix of housing styles. They date from semi-detached mid 20th century properties with enclosed gardens in simply arranged linear streets, to more contemporary development of the late 1900s and current decade with more sinuous streets and closes with open plan frontages.

It is a zone of ordinary quality and high sensitivity to change relative to the introduction of a scheme of the type proposed.

Local Character Zone 2: Cassiobury Park

This zone corresponds to WBC’s Historic Character Area 19 (HCA19). It is an historic area of parkland extending over some 78 hectares. Much of the zone is designated as a Grade II Registered Park and Garden. The River Gade and Grand Union Canal run north to south through the parkland.
12.3.14 It is an important recreational resource for residents and visitors to the town. There are golf courses, play and recreational facilities and walks. Habitats include extensive areas of ancient and semi-natural woodland, aquatic and marginal vegetation and semi natural grassland as well as expansive parkland.

12.3.15 The southern-most part of the parkland was severed from the park as a whole with the construction of the Metropolitan Line through Croxley to Watford in the 1920s, a development which effectively redefined the southern boundary of the park and the current character zone.

12.3.16 The Park and Grand Union Canal are identified in the Green Infrastructure Plan as strategic green infrastructure assets.

12.3.17 It is a zone of highest quality and high sensitivity to change relative to the introduction of a scheme of the type proposed.

Local Character Zone 3: Watford Gateway West

12.3.18 Formerly part of the Cassiobury estate, this is an area which has evolved in an apparently ad hoc manner. The principal influences in the townscape are:

- the A412 and Ascot Road dual carriageways and associated roundabouts;
- an attractive corridor along the Grand Union Canal, the towpath of which is part of a National Trail;
- strong linear belts of woodland planting which define and screen the Metropolitan Line along the north-west boundary of the zone and which have established on embankments associated with the western end of the disused branch line along the southern boundary of the zone;
- established woodland planting on the eastern margins of the River Gade; and
- mixed residential, retail and commercial development which defines the eastern part of the zone.

12.3.19 There is a marked contrast between the eastern and western parts of the zone. In the western part tree planting serves to enclose and define infrastructure and relatively dispersed development and activity including a marina. The eastern part is densely developed with little landscape structure.

12.3.20 This is an area which is strongly influenced by existing infrastructure but where established planting does serve to contain and soften the influence. It is a zone of ordinary quality and medium sensitivity to change relative to the introduction of a scheme of the type proposed.
Local Character Zone 4: Croxley Business Park

12.3.21 Croxley Business Park is an area of mixed commercial, retail and light industrial development with individual development areas of highly variable quality. The zone corresponds to the south-western part of HCA20 and the western part of HCA 21, both of which are noted as comprising industrial estates.

12.3.22 The western part of the zone comprises three relatively recent, landscaped business park developments. The eastern part comprises industrial estate-styled development with small and large warehouses and generally utilitarian commercial units. There is no coherent urban design form and very little internal planting structure.

12.3.23 The part of the zone most closely associated with the proposed scheme corridor comprises an area of low, relatively modern commercial units and light industrial and warehousing units located to the west and east of the tree-lined Ascot Road.

12.3.24 This mixed area of older and more contemporary, industrial commercial and business development constitutes a zone of ordinary townscape quality with a low sensitivity to change relative to the introduction of a scheme of the type proposed.

Local Character Zone 5: Holywell

12.3.25 Holywell is a triangular shaped zone which shares common boundaries with the Croxley Business Park and the disused branch line to the west and north respectively. The third boundary is defined by the Colne Valley which appears as a broad swathe of open land as it runs north-east to south-west.

12.3.26 The zone occupies a very subtle and broad local hill crest, with a high point of AOD 70m at the centre of the zone. Beyond this, landform subtly slopes down to the south, west and more steeply to the east to the Colne Valley.

12.3.27 The part of the zone directly to the south of the proposed scheme corridor corresponds to the southern parts of HCAs 20 and 36. It is a part of the zone which comprises housing dating from the mid 20th century to the current decade. House styles include semi-detached properties, terraces and three and four-storey flats and maisonettes. There are wide grassed verges and central reservations, and green open spaces within and between the developed areas. Significant areas of open space include sports fields associated with the Holywell Sports Centre and Community Technology College and allotments to the west of Vicarage Road. Both of these are immediate neighbours to the proposed scheme corridor.
12.3.28 The proposed scheme corridor defines the northern boundary to the zone. It is set in cutting for the substantial length of its common boundary with the zone. Well established tree planting on the cutting slopes between Ascot Road and Vicarage Road defines and encloses the zone. This part of the corridor is identified in the Watford Borough Green Infrastructure Plan as a woodland enhancement zone.

12.3.29 Tree planting within the zone is relatively sparse and takes the form of individual specimens, small groups and occasional avenues along estate roads.

12.3.30 It is a zone of ordinary quality and low sensitivity to change relative to the introduction of a scheme of the type proposed.

Local Character Zone 6: West Watford

12.3.31 This zone, located west of the town centre, comprises a combination of the central section of HCA 20, the northern part of HCA 20, the southern half of HCA 3t and the northern part of HCA 45. There are areas of high and medium density Victorian, Edwardian and inter-war housing laid out in a generally rectilinear pattern. There is little open space other than for the mid-19th century Vicarage Road Cemetery. In common with Holywell there is generally little tree planting within the zone.

12.3.32 The disused branch line corridor, located in cutting and defined by well established tree planting on the cutting slopes, marks the boundary to the southern part of the zone. In contrast to the formally arranged core of the zone, the southern areas extending west to east along the line above the cutting slopes lack any clear form or plan. There is an ad-hoc arrangement of short terraces and cul-de-sacs of mid 20th century housing, light industrial units and small businesses, one of the few open spaces in the zone at Vicarage Road and the Laurance Haines Primary School.

12.3.33 The quality of the townscape within the zone is generally good. However, that of the southern part of the zone with its direct relationship to the proposed scheme corridor is ordinary. Taking this into account and the established relationship between this part of the zone and the disused branch line, the sensitivity to change relative to the introduction of a scheme of the type proposed is low.

Local Character Zone 7: Watford Metropolitan Station

12.3.34 Character Zone 7 corresponds to the northern parts of HCA 20 and HCA 37. It is an area of mixed early 20th century medium to low density residential development. It is a point of transition between the markedly inner urban residential areas associated with the Watford West zone and the expansive and highly attractive Cassiobury Park. Tree planting and
open space is noticeably more evident than within the inner urban areas. Watford Metropolitan station appears as an understated but important focus in the area and is a Grade II listed building.

12.3.35 Change and contrast in form and character is occurring as a result of recent development of an area of four-storey apartment blocks south of the station.

12.3.36 The established relationship between the existing Metropolitan Line and station and the zone result in this zone of good quality being of low sensitivity to change relative to the introduction of a scheme of the type proposed.

Local Character Zone 8: The River Colne

12.3.37 The Colne Valley appears as an increasingly broad swathe of open land and floodplain as the river flows north east to south west from the south of the town centre to its confluence with the River Gade. It separates the residential areas of Holywell and West Watford from those at The Rookery and Oxhey.

12.3.38 As the valley separates the residential areas to the north and south. It reflects the composite extent of HCAs 22, 23, 24 and 25 in which the natural open valley form and semi-natural habitats associated with the floodplain have been significantly modified by development. This includes two disused railway lines (one of which is the disused branch line) which sever and fragment the natural valley form. Overhead transmission lines have been routed through the valley. There is a substantial electricity sub-station. Building suppliers operate on former areas of hard standing and roughly graded land. The northern valley side comprising the southern extent of Historic Character Area 45 is occupied by a mix of large-scale unplanned land uses including an unsightly industrial estate, allotments, Vicarage Road Football Stadium and the General Hospital.

12.3.39 It is a form typical of many urban river valley and fringe landscapes / townscapes. There are conflicts between remnant natural forms and habitats which have an inherent appeal, such as the Lairage Lands Local Nature Reserve, the incongruent presence of infrastructure, and unplanned, generally poor quality and unsightly development.

12.3.40 The value of the valley to the town and local communities has been recognised by the District Council. Saved policy S18 of the Watford District Local Plan 2000 makes clear commitment to the promotion of access and nature conservation and the control of conflicting development within The Colne Valley Linear Park. The boundaries of the Linear Park are shown in Figure 12.1. The river valley is also identified in the Watford Borough Green Infrastructure Plan as strategic link and an area of woodland enhancement.
12.3.41 The parts of the zone associated with Cardiff Road are of poor townscape quality. The substantial part of the zone is of good quality. Taking into account the established relationship between the zone and the disused branch line, the sensitivity to change relative to the introduction of a scheme of the type proposed within the linear park is low.

Local Character Zone 9: Oxhey

12.3.42 This zone corresponds to the northern part of HCA 39. Oxhey is a residential suburb of Watford comprising a mix of 19th and 20th century housing. The western part of the area located between Eastbury Road and Riverside Road frames the south eastern margin of the Colne Valley. It is an area of low to medium density two-storey houses dating from the mid 20th to late century. Houses are arranged in avenues of semi-detached properties, short terraces, cul-de-sacs and courts with a central green. Whilst there are no substantial areas or belts of trees, there are groups of specimen trees dispersed throughout the zone.

12.3.43 The relationship between the zone and the Colne Valley to the north-west is contained and defined by established planting along the main eastern channel of the river, such that the gently sloping open grassed valley side east of the river appears as a green corridor.

12.3.44 This north western part of the wider zone is of ordinary / moderate townscape quality, local value and low sensitivity to change relative to the introduction of a scheme of the type proposed.

Visual context

Zone of visual influence (ZVI)

12.3.45 The ZVI for the proposed scheme is shown in Figure 12.2.

12.3.46 In the west of the study area, where the viaduct is proposed, the ZVI is relatively expansive due to the low lying topography surrounded by more elevated areas east and west of the Grand Union Canal. The existing LU Metropolitan Line is on high embankment and densely vegetated, which limits the visual connections to the north-west (Croxley Green). To the south-west, the topography rises and affords views across the canal and on to the urban development in the north-east which is also on a rise. Views in these elevated areas are largely residential and are mostly screened by the intervening built structures, leaving open views to larger buildings (such as the new high rise apartments near Watford Metropolitan station) and properties in prominent locations (such as the two storey terraced properties along Watford Road).

12.3.47 The existing disused Croxley Green branch line running east / west through the majority of the study area is mostly overgrown with mature tree and shrub cover, particularly in the deep sections of cutting and on
the embankment crossing the River Colne. Generally, the disused track is visually discreet and mostly only identified as a strong green corridor running through the town. To the north of the track, urban development abuts the corridor and acts as an effective visual barrier preventing further views to the north. However to the south, the urban development is less dense and consists of open spaces (playing fields and allotment gardens) abutting the corridor which allows the ZVI to extend further but is again limited by the dense urban development.

12.3.48 In the section passing over the more open River Colne valley the ZVI widens due to the rise in topography to the north where Watford Hospital and the surrounding area looks to the south over the allotments and small industrial areas to the dense vegetation along the disused rail corridor. To the south, the wooded river banks and additional overgrown railway embankments prevent views to the south at Oxhey.

12.3.49 In the east of the study area the proposals will join the existing Network Rail line leading to Watford High Street station. In this area the ZVI is contained within cutting and the terraced housing lining the corridor to the south.

12.4 Predicted impacts

Townscape

Local Character Zone 1: Croxley Green

12.4.1 The proposed viaduct will be located immediately east of the existing Baldwins Lane railway bridge at a level close to the existing structure. Awareness of its presence at this gateway to the character zone will be limited to this highly localised part of the zone. The magnitude of change in relation to a zone of ordinary quality and high sensitivity to change will be negligible and the impact on the townscape of the zone will be neutral.

Local Character Zone 2: Cassiobury Park

12.4.2 There will be no direct impact on this zone. The proposed viaduct providing the link between the Metropolitan Line and Ascot Road will be located in the neighbouring Character Zone 1 to the south east. Zone 1 is visually separated from Cassiobury Park by the woodland enclosed underground line as it approaches Watford Metropolitan Station. The viaduct will be at a level close to the existing rail bridge on Baldwins Lane which sits below the canopy line of the woodland. There will accordingly be no visual relationship between the parkland zone and the viaduct and no consequential impact on the character of the parkland zone.
The proposed scheme will involve the introduction of substantial new components within the townscape of the zone in the form of the new viaduct, the bridge over Ascot Road and the proposed Ascot Road Station and car park.

The alignment and elevation of the 400m long viaduct will conflict with the existing pattern of linear infrastructure as it crosses the existing network of roads and the attractive corridor associated with the Grand Union Canal and River Gade. There will be localised loss of trees and scrub at the site of the proposed station and to accommodate the crossing of the river, the canal and the A412.

The principal structure of mature woodland and scrub extending north along the river valley, associated with the embankments at the western end of the disused branch line and along the south east facing embankments of the existing Metropolitan Line and along the margins of the A412 will, however, remain.

The result will be that the presence of the viaduct will be most evident west of the canal and at the crossing of the A412, though it will be below the general canopy line of the mature tree planting within the zone.

Fragmentation of the townscape will be increased, particularly in the western part of the zone where the viaduct and trains using the link will become the most influential component in the townscape.

The introduction of the proposed Ascot Road Station, associated bridges and car park will result in the rationalisation of a localised part of the zone which appears as an area of rough ground which is unused and detracts from the townscape of the area. It will complement recent modern development which has seen the regeneration of former industrial land immediately north of the proposed scheme corridor and establish a positive link between that development and development within the Croxley Business Park to the south.

The magnitude of change will be high in a townscape of ordinary quality and moderate sensitivity to change. Taking into account the combination of adverse and beneficial impacts, the impact on the townscape of the zone will be moderate and adverse following completion of construction. It will reduce to slight and adverse some 10 to 15 years following opening as existing woodland planting in the zone continues to mature and the proposed planting associated with the station and car park establishes and begins to mature.
Local Character Zone 4: Business Park

12.4.10 The introduction of the proposed Ascot Road Station, associated bridges and car park immediately adjacent to and north of this character zone as described in relation to LCZ 3 will serve to establish an improved quality of urban form at the gateway to the zone. There will be a localised loss of trees and scrub on the area to be cleared to accommodate the station and loss of some of the line of poplars that frame the west side of Old Ascot Road to accommodate the car park. New planting will, however, be introduced to frame the station car park.

12.4.11 The magnitude of change in the context of an extensive zone of ordinary quality will be negligible such that the impact on the zone will be neutral upon completion of construction and thereafter. There will, however, be a highly localised benefit at the point of entry to the zone along Ascot Road.

Local Character Zone 5: Holywell

12.4.12 The installation of sheet piling toe walls and attendant re-profiling of cutting slopes will involve the removal of existing planting along some 30% of the common boundary between the character zone and proposed scheme corridor.

12.4.13 This partial loss of definition will not have a material impact on the perception or quality of the zone as a whole. It will however be detrimental to the extent that it weakens a locally valuable component within the townscape which provides definition to the zone and adds to the quality of the setting within the northern part of the zone.

12.4.14 The landscape proposals provide for the reintroduction of planting onto the upper sections of the re-profiled slopes. This will take some time to establish and begin to mature such that it would be some 10 to 15 years before the continuity of the linear planting re-establishes a relationship similar to that which currently exists.

12.4.15 Existing planting which will be retained and the new planting which will be introduced to re-establish the integrity of the corridor as a green resource (as described in the Watford Borough Green Infrastructure Plan) will be managed to encourage diversity in the composition and structure of the woodland within the corridor whilst ensuring safety criteria relative to proximity to the operational tracks are fully met.

12.4.16 The magnitude of change will initially be moderate reducing to negligible some 10 to 15 years following opening of the proposed scheme to use as the proposed planting establishes and begins to mature. The resultant impact will be slight and adverse initially, reducing to neutral.

12.4.17 The introduction of the proposed Watford Hospital Station will involve the addition of a simple modern two-storey structure into a localised
composition of recently constructed three and four-storey flats /
apartments and extensive allotments. It is a composition which is
physically and perceptually set apart from the substantial areas of housing
that determine the character of the zone.

12.4.18 The loss of some localised tree and scrub planting to accommodate the
building will not have a marked detrimental impact on the planting
structure in this part of the zone whilst the new building will prove a
complimentary addition to the composition.

12.4.19 Activity in the form of crowds using the station during match days will
have an impact on the character of Vicarage Road during match days in
particular. The overall impact in this part of the zone will, however, remain
beneficial.

12.4.20 There will be no marked impact on the zone as a whole. The magnitude
of impact local to Vicarage Road will, however, be moderate and the
impact in this area of low sensitivity to change will be slight and beneficial
in both assessment years.

Local Character Zone 6: West Watford

12.4.21 In common with Zone 5, the installation of sheet piling toe walls and
attendant re-profiling of cutting slopes will involve the removal of existing
planting along some 30% of the common boundary between the character
zone and proposed scheme corridor between Ascot Road and Laurance
Haines Primary School.

12.4.22 The existing tree and scrub planting is, in this instance, not as dense or
well-established. There are breaks where scrub and grassland afford
clear views between the zone and corridor.

12.4.23 The impacts, proposed planting and resultant effects will, however, be
similar to those described in relation to the neighbouring zone to the
south. The proposed scheme will, accordingly, not have a material impact
on the perception or quality of the zone as a whole.

12.4.24 In relation to the southern part of the zone, the magnitude of change will
initially be slight reducing to negligible as proposed planting establishes
and begins to mature. The resultant impact will be slight and adverse
initially, reducing to neutral.

12.4.25 The introduction of two new lines within the disused corridor immediately
south-east of established housing on Cardiff Road will not require marked
modification to existing landform or the loss of established tree and scrub
planting. The relationship will effectively be unchanged other than for the
introduction of trains into the corridor. The magnitude of change will be
negligible in the context of a townscape which is of low sensitivity to
change such that the impact will be neutral upon opening of the proposed scheme to use and thereafter.

12.4.26 Impacts associated with the introduction of the proposed Watford Hospital Station will also reflect those described in relation to Zone 5. The station will constitute the addition of a simple and complimentary modern two-storey structure into a localised composition of school and open space on Vicarage Road which is set apart from the substantial areas of housing that determines the character of the zone as a whole.

12.4.27 There will accordingly be no marked impact on the zone as a whole. The magnitude of impact local to Vicarage Road will, however, be moderate and the impact in this area of low sensitivity to change will be slight and beneficial.

Local Character Zone 7: Watford Metropolitan Station

12.4.28 The closure of the station to passenger services and continued use of the existing line for stabling will not have a material impact on the character of the townscape in this zone.

Local Character Zone 8: The Colne Valley

12.4.29 The introduction of two new lines along the disused corridor in this zone will not require marked modification to existing landform or the loss of established tree planting beyond that required to ensure future safe operation of the trains. Modifications to the existing bridges crossing the watercourse will result in localised improvement to structures which appear dilapidated. The relationship between the reinstated line and existing landscape / townscape will effectively be unchanged other than for the introduction of trains into the corridor.

12.4.30 The magnitude of impact in this zone of low sensitivity to change will be negligible and the impact will be neutral upon completion of construction and thereafter. The magnitude of change will be negligible in the context of a townscape which will be subject to marked change; with the proposed and approved health campus development there will be no material impact on this part of the zone or the wider zone.

Local Character Zone 9: Oxhey

12.4.31 The proposed scheme will not have any influence on the character of this zone which is visually separated by some distance and screened by the River Colne Valley.

Visual impacts

12.4.32 The detailed evaluation of impacts on views experienced by sensitive receptors during construction, upon opening of the line to use and 15 years following opening are provided in Volume 3, Appendix 12C. A
summary of the orders of impact specific to the 103 receptor groups assessed is provided in Table 12-8.

Table 12-8: Summary of visual impacts by receptor groups

<table>
<thead>
<tr>
<th>Impact Rating</th>
<th>Construction</th>
<th>Opening</th>
<th>15 Years On</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Adverse</td>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Moderate Adverse</td>
<td>8</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Slight Adverse</td>
<td>74</td>
<td>39</td>
<td>18</td>
</tr>
<tr>
<td>Neutral</td>
<td>15</td>
<td>51</td>
<td>73</td>
</tr>
<tr>
<td>Slight Beneficial</td>
<td>-</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

12.4.33 The table demonstrates that the substantial majority of receptors will not be subject to impacts greater than slight at any of the three assessment points.

12.4.34 It is anticipated that a total of 14 receptors will be subject to moderate to large impacts during construction and that these will reduce to 8 and 7 upon opening of the proposed scheme to use and 15 years following opening to use.

12.4.35 The large and moderate adverse impacts during construction will be associated with the construction of the viaduct and the proposed new stations.

12.4.36 None of the three large impacts following opening will affect residential properties. One relates to the Harvester Public House located at the junction of Baldwins Lane and Watford Road immediately south of the viaduct as it will diverge for the Metropolitan Line. The second is the Watford Road Playground which will be located in very close proximity to the viaduct. The third is a commercial property located to the north of the viaduct in the same area. Impact for the latter two will remain large 15 years following opening whilst that at the Public House will reduce to moderate.

12.4.37 Of the five receptors predicted to be subject to moderate impact upon opening of the proposed scheme to use, four relate to residential properties. These are at Cavendish Court (R23, Volume 3, Appendix 12C), Beggars Bush Lane (R33), Rickmansworth Road (R34) and Kelmscott Crescent (R56). The first three groups would remain moderate 15 years following opening whilst the group at Kelmscott Crescent will reduce to slight.

12.4.38 The fifth of the receptors predicted to be subject to moderate impact upon opening of the proposed scheme to use is a group of commercial...
workshops at Baldwins Lane. The impact here will remain moderate 15 years following opening.

12.5 Mitigation

12.5.1 Landscape measures included as part of the proposed scheme and referred to in the impact assessments above have been described in Chapter 6 and are illustrated in Figures 6.7A and 6.7B.

12.6 Conclusions and effects

Townscape

12.6.1 The assessment has demonstrated that on completion of construction the proposed scheme will have no impact on three of the nine local townscape character zones, neutral impact on three zones, slight adverse impact on two zones and moderate adverse impact on one zone.

12.6.2 It has further demonstrated that as existing planting associated with the receiving townscape continues to mature and new planting included as part of the proposed scheme establishes and begins to mature adverse impacts will be reduced. Predicted impacts for the nine zones will then be no impact on three zones, neutral impact on five zones and slight adverse impact on one zone.

12.6.3 The slight adverse impact relates to the introduction of the proposed viaduct at the western end of the proposed scheme corridor within the Watford Gateway West LCZ. The viaduct will intrude into an ordinary gateway townscape in which tree planting plays an important cohesive role. The urbanising impact of the viaduct will be partially contained by the tree planting, particularly in the summer. Whilst the impact on the local composition of components cannot be readily mitigated by new landscape design measures, it will be partly reduced as the existing planting in the area continues to mature, increases in scale and modifies the impact of the long and relatively high structure.

12.6.4 The reinstatement of the disused branch line between Ascot Road and Stripling Way as part of the underground network will initially have a slight and adverse impact on the townscape through which this section of the branch line is routed. The impact primarily relates to the removal of sections of existing linear tree planting which extend along embankment and cutting slopes on both sides of the corridor. The linear woodland and scrub planting currently serves two important functions. It separates and defines boundaries between distinct character zones and provides an important backdrop of tree planting in many views from residential areas and communal open spaces within the urban fabric. The initial impacts will reduce to one which is neutral as proposed planting to replace the
sections of linear woodland and scrub establishes and begins to mature and the integrity of the existing planting is reinstated.

12.6.5 East of Stripling Way, and as far as the merging of the reinstated branch line with the existing operational Network Rail line between Euston and Watford Junction, there will be no significant impact on character following completion of construction and opening of the line to use. Loss of some scrub and tree planting will not affect the relationship between the corridor and the Colne Valley. The introduction of trains into the corridor will not materially affect the quality or character of the valley.

12.6.6 The highly localised extension of platforms at Watford High Street and Watford Junction will not materially affect the composition and quality of the townscape in these two locations and more widely.

12.6.7 The assessment has also demonstrated that there will be two localised parts of the proposed scheme corridor where the proposed scheme will have a slight beneficial impact on townscape character, at Ascot Road and Vicarage Road. In both instances the introduction of proposed stations and associated structures will serve to improve the existing form and quality of the townscape on the two roads.

12.6.8 Taking into account the low order of predicted adverse and beneficial impacts, it has been concluded there will be no significant effect on the townscape of west and south Watford.

Visual effects

12.6.9 In common with impacts on townscape, significant visual impacts on individual receptors are primarily associated with the viaduct west of Ascot Road. Whilst of individual significance to the small number of receptors affected, the effect on the wider visual context of the proposed scheme corridor and surrounding areas will not be significant.