

12 Visual

This chapter assesses the degree of anticipated change the proposed scheme will have upon the visual amenity of the landscape along the road and predicts the likely visual impact upon local receptors, such as houses, footpaths and outdoor spaces.

The scheme design includes measures such as false cuttings and planting to minimise visual impact where possible. To represent the expected change to views over time, impacts are assessed for both the winter year of opening (when all mitigation will be in place but the immature planting will not be fully effective) and during the summer 15 years after opening (when mitigation planting has become established and contributes to screening).

Most of the impacts will result from the introduction of the road corridor, associated structures, traffic and moving headlights to rural views. During the winter year of opening, the majority of receptors will receive significant impacts, but the development of the mitigation planting will see this decrease significantly.

12.1 Introduction

- 12.1.1 This chapter presents an assessment of the visual impacts of the proposed scheme on the visual amenity of the study area on completion and during operation of the proposed scheme.
- 12.1.2 The General Context Map (Figure 12.1) provides a guide to the layout of the visual assessment mapping. The proposed scheme is illustrated on Figures 12.2 to 12.4. Figures 12.2a-d show the scheme at 1:25,000 scale, illustrating impacts on outdoor sites and distant built receptors. Figures 12.3a-h show the proposed scheme at 1:10,000 scale, illustrating the visual impact on built receptors and Figures 12.4a-d the affected urban areas at 1:5,000 scale.
- 12.1.3 The assessment determines the degree of anticipated change to the character of views and visual amenity that would result from the proposed scheme, as viewed from buildings, major and well-used minor roads, the Aberdeen to Inverurie railway, outdoor recreational spaces, Rights of Way, footpaths, cycleways and equestrian routes (collectively referred to as receptors).
- 12.1.4 The visual impacts of the proposed scheme on identified receptors are assessed for the operational phase of the scheme. Impacts during scheme construction are addressed separately in Chapter 18 (Disruption due to Construction). Landscape measures to mitigate potentially adverse visual impacts are taken into account in the visual assessment. These are described in Chapter 11 (Landscape), and illustrated on Figures 11.5a-p.
- 12.1.5 Mitigation measures to reduce potentially adverse visual impacts are identified and taken into account for winter, year of scheme opening when earthworks mitigation (e.g. false cuttings) and other built screening elements such as fences and noise barriers are in place but before new planting has become established. The scheme impacts are also assessed for the summer, 15 years after the scheme opening when mitigation is anticipated to have become effective since planting will be established. The former is intended to represent the 'worst-case scenario' and the latter the 'best-case scenario' for permanent impacts.

12.2 Approach and Methods

Study Area

- 12.2.1 The indicative study area for the visual assessment was informed by desk and site study. The theoretical visual envelope map (Figures 12.5a-d), assisted the identification of potential receptors by highlighting areas to check during the site study to confirm receptors likely to have views of the proposed scheme, subject to the surrounding topography, buildings and woodland.
- 12.2.2 This indicative study area was then checked on site to confirm with more accuracy which receptors occurring within an approximately 3km distance of the route (considered to be the approximate distance when elements of the scheme could have a discernible visual impact on a receptor) which

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would be likely to have views of the proposed scheme, subject to the surrounding topography, buildings and woodland.

- 12.2.3 Views of the proposed scheme would be possible from locations in Aberdeen City, beyond the study area. These include, but are not limited to, housing on the western edges of Mastrick and Northfield, high-rise flats in Rosehill and Cornhill and settlement on the southwest slopes of Middleton Park. It is considered that potential impacts beyond the study area will not be significant, due to distance and the scale of the existing landscape context, within which the proposed scheme will be effectively integrated.

Guidance and Approach

- 12.2.4 The visual assessment follows guidance provided in DMRB (Volume 11 Section 3 Part 5) and the 'Landscape and Visual Assessment Supplementary Guidance', issued by the Scottish Executive in 2002, with reference to Guidelines for Landscape and Visual Impact Assessment (Institute of Environmental Management and Assessment: IEMA; 2002).

- 12.2.5 With regard to landscape mitigation, reference was also made to the Scottish Executive policy document titled 'Cost Effective Landscapes: Learning from Nature' (CEL:LfN) (Scottish Office, 1998), 'Planning Advice Note (PAN) 58: Environmental Impact Assessment' (Scottish Executive, 1998).

- 12.2.6 The assessment has been carried out through:

- review of proposed scheme road design to ascertain the likely visually intrusive elements of the proposals;
- field studies to assess the likely impact of the proposals upon receptors; and,
- visual envelope mapping to assist identification of areas from which views may be gained.

Visual Envelope Mapping (VEM)

- 12.2.7 Computer generated theoretical VEMs were prepared to show areas from which views of the road, vehicles, structures and lighting may potentially be visible. The VEM extends to 5km from the proposed scheme ensure that any potential for visual change beyond the expected 3km limit of discernible impacts would be identified (the 3km limit is explained in paragraph 12.2.2).

- 12.2.8 Digital ordnance survey contour mapping at 5m intervals was used to create a ground model and the visual barriers of buildings and trees were added to allow the VEMs to be generated. Buildings were ascribed a height of 6m and existing woodland a height of 12m.

- 12.2.9 The VEMs were prepared to illustrate anticipated views during the day and at night time taking into account the anticipated impact of scheme lighting in the winter year of opening and in the summer 15 years after completion. To allow comparison between the extents of day and night visibility of the proposed scheme, the Winter Year of Opening day and night VEMs have been combined and are shown on Figures 12.5a-d in contrasting colours, and the Summer 15 years following completion day and night VEMs have been combined and are shown on Figures 12.6a-d in contrasting colours.

VEM – Winter Year of Opening (Day)

- 12.2.10 The theoretical visibility of points taken at a height of 4m (to represent the height of an HGV) above the centreline of the proposed carriageway of the road at 200m intervals was determined using Key Terra-Firma software. The outputs from this exercise were 'proposed-ground' VEMs, and represent the worst-case scenario. Although they incorporate the screening effects of the existing landscape (e.g. woodland and landform) and those of the proposed earthworks (e.g. false cuttings) which would be in place during winter, year of scheme opening (see Figures 12.5a-d), they do not take account of any screening effect of planting proposed as part of landscape mitigation

VEM – Winter Year of Opening (Night)

- 12.2.11 The theoretical visibility of points taken at lighting column positions with an assumed column height of 12m above the proposed ground model level was determined using LSS software. The outputs from this exercise were 'proposed-ground' VEMs, and represent the worst-case scenario. Although they incorporate the screening effects of the existing landscape (e.g. woodland and landform) and those of proposed earthworks (e.g. false cuttings) which would be in place during winter, year of scheme opening (see Figures 12.5a-d), they do not take account of any screening effect of planting proposed as part of landscape mitigation.

VEM – Summer 15 Years following completion (Day)

- 12.2.12 The theoretical visibility of points taken at a height of 4m (to represent the height of an HGV) above the centreline of the proposed carriageway of the road at 200m intervals was determined using LSS software. The outputs from this exercise included proposed areas of planting, which were ascribed heights ranging from 6m to 10m, depending on planting type, to represent the best-case scenario of all proposed mitigation planting being in place during the summer, 15 years after opening (see Figures 12.6a-d).

VEM – Summer 15 Years following completion (Night)

- 12.2.13 The theoretical visibility of points taken at lighting column positions with an assumed column height of 12m above the proposed ground model level was determined using LSS software. The outputs from this exercise included proposed areas of planting, which were ascribed heights ranging from 6m to 10m, depending on planting type, to represent the best-case scenario of all proposed mitigation planting being in place during the summer 15 years after opening (see Figures 12.6a-d).

Visual Impact Assessment

- 12.2.14 The assessment considers both built and outdoor receptors. Built receptors are identified as dwellings, workplaces and recreational buildings. Outdoor receptors are identified as major and well-used minor roads, the Aberdeen to Inverurie railway, outdoor recreational spaces, Rights of Way (ROW), footpaths (in accordance with the Scottish Paths Record), cycleways and equestrian routes. Built and outdoor receptors identified within the study area, and which would gain views of the proposed scheme, were assessed by teams of two or more landscape architects in the field using a standard checklist (surveys undertaken 2005-2007). Impacts on listed buildings and other sites of archaeological importance are addressed in Chapter 13 (Cultural Heritage).
- 12.2.15 Photographs from a number of key viewpoints and key receptor locations as shown on Figure 11.7 are shown in the photomontage and wireline photographs provided in Figures 11.8a-t. These images were developed as part of the mitigation design and taken into account as part of the assessment process.
- 12.2.16 The significance of visual impacts was determined through consideration of both the sensitivity of the visual receptors and the predicted magnitude of change as a result of the proposed scheme.

Sensitivity of Receptors

- 12.2.17 The sensitivity of visual receptors to changes in their views was evaluated in accordance with the criteria provided in Table 12.1, based on the following factors:
- nature and context of the viewpoint;
 - expectations of users/receptors; and
 - importance* and value of the view to the receptor.

* In the case of building receptors, 'importance' relates principally to the number and type (where known) of windows/rooms/gardens looking towards the view.

Table 12.1 – Sensitivity of Visual Receptor

Sensitivity	Criteria
High	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, (generally only remote dwellings situated to take advantage of panoramic scenic views or outdoor receptors where the view is important to users will be considered to be of high sensitivity).
Medium	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 users (the majority of dwellings have been assessed as being of medium sensitivity, as well as outdoor receptors where users are likely to spend time outside of participation in their activity looking at the view and industrial receptors that have offices with windows that take advantage of views).
Low	Receptors where the changed view is unimportant/irrelevant and/or users are not sensitive to change (the majority of industrial receptors are considered to be of low sensitivity unless they have a significant number of windows, which may raise their sensitivity to low/medium; outdoor receptors where users are unlikely to consider the views an important element of their usage of the site will generally be assessed to be of low sensitivity).

Magnitude of Visual Change

12.2.18 Evaluation of the magnitude of visual change affecting receptors was carried out by considering the scale of change in the view due to the addition or loss of features, change in character and the amount/extent of the view affected.

12.2.19 The main elements taken into account in the evaluation of magnitude of change included:

- the extent of the receptor’s available view affected by the development (including the distance from the scheme);
- the angle of view relative to the main activity of the receptor; and
- the level of integration or contrast created by the road and its associated elements within the view.

12.2.20 The criteria used to determine the magnitude of visual change are shown in Table 12.2.

Table 12.2 – Magnitude of Visual Change

Sensitivity	Criteria
High	Where the proposed scheme or elements of the scheme will dominate the view and fundamentally change its character and components.
Medium	Where the proposed scheme or elements of the scheme will be noticeable in the view, affecting its character and altering some of its components and features.
Low	Where the proposed scheme or elements of the scheme will be only a minor element of the overall view that are likely to be missed by the casual observer and/or scarcely appreciated.

Significance of Impact

12.2.21 Table 12.3 was used to help determine the thresholds of adverse or beneficial impact significance using a matrix of sensitivity and magnitude. It should be noted, however, that this is only a framework to aid consistency of reporting and provide an initial indication of the likely impact arising from the assessment of magnitude and sensitivity. Given that the significance levels of Negligible/Slight/Moderate/Substantial/Severe represent levels on a continuum or continuous gradation, application of the framework also required professional judgement and awareness of the relative balance of importance between sensitivity and magnitude.

Table 12.3 – Visual Impact Significance Criteria

Magnitude	Sensitivity		
	High	Medium	Low
High	Severe	Substantial	Moderate
Medium	Substantial	Moderate	Slight
Low	Moderate	Slight	Negligible

12.2.22 For the purposes of this assessment, impacts of Moderate or greater are considered to be significant such that they should be mitigated where possible, as this is the level at which changes would be clearly perceived.

Limitations to Assessment

12.2.23 This assessment has been undertaken on the proposed scheme design of May 2007. For the purposes of considering the potential impact of the proposed scheme in accordance with DMRB, no limitations to this assessment have been identified.

12.3 Baseline Conditions

12.3.1 The ‘Guidelines for Landscape and Visual Impact Assessment’ (IEMA, 2002), states that ‘landscape and visual assessments are separate, although linked, procedures. The landscape baseline, its analysis and the assessment of landscape effects all contribute to the baseline for visual assessment studies’. The visual context and baseline description of the study area is therefore incorporated to a considerable extent in Chapter 11 (Landscape) and supporting Appendix A11.1.

12.3.2 Baseline visual conditions within the Northern Leg of the proposed scheme are summarised below:

Kingswells to Blackdog

Kingswells (Start of Northern Leg to approx. ch315600)

12.3.3 The community at Kingswells is the most densely settled area that would be affected by the proposed scheme. The majority of the affected receptors are considered to be of medium sensitivity, as the views from this modern development are not an important factor in the siting of most of the dwellings, as their setting is already disturbed by the surrounding housing estate. Some of the older properties that were built before the development of the area and isolated receptors built to take advantage of views have slightly higher sensitivities, but the visual intrusion of the main settlement is considered to have an existing adverse impact on residents at these properties.

12.3.4 North of the A944, the farmland is initially open before becoming more enclosed by woodland on the lower slopes of Brimmond Hill. The settlement of Kingswells and the busy perimeter road are dominant visual elements both during the day and at night, and views from the settlement are partially limited by landform, tree belts, adjacent dwellings and perimeter landscaping bunds along the western boundary, while a number of scattered dwellings and farms, and several footpaths and Rights of Way across the open farmland to the east and north of Kingswells have long-range views to Aberdeen City, Kingswells and Brimmond Hill.

12.3.5 Further north, Brimmond Hill and the adjacent smaller peak of Elrick Hill creates prominent visual boundaries to the west. There are long-range views in all directions from the viewpoint in Brimmond Hill, while views from Elrick Hill are restricted by woodland to the north and east, with a broad panorama to the west.

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Craibstone (approx. ch315600 – 318000)

- 12.3.6 The majority of receptors in the area are considered to be of medium sensitivity and properties tend to be relatively isolated or in small clusters. Existing visual elements in the area, such as the A96(T) already detract from their views. Other receptors, such as the golf centre and some of the buildings in the Scottish Agricultural College, are considered to be of a lower sensitivity as the view is unlikely to be as important to users. A few isolated dwellings that do retain attractive views despite development in the area are considered to be of medium/high sensitivity.
- 12.3.7 Approaching the A96(T) from the south, views are contained by West Woods and the woodland associated with the Scottish Agricultural College at Craibstone; views are also fragmented by the topography, land use and presence of the minor road from Newhills. To the north of the A96(T), the open outlook is dominated both day and night by traffic and lighting along the existing A96 road corridor, at Aberdeen Airport and Kirkhill Industrial Estate. Combined, these features produce a continuously lit expanse at night.

Tyrebagger / Kirkhill (approx. ch318000 – 321900)

- 12.3.8 Most of the buildings in the vicinity of the proposed scheme are used for industrial or agricultural purposes and are considered to be of a lower sensitivity, as they tend to have few windows that will allow views towards the proposed scheme and views are likely to be incidental to users. Residential farm buildings and commercial office buildings with a significant number of windows are likely to be considered to be of low/medium to medium sensitivity as users are more likely to be aware of the view and register a change. A few isolated dwellings in the area that have panoramic open views into the Don Valley with few detracting elements are considered to be of high sensitivity, as they have been positioned to take advantage of the views so any change will have a significant impact on residents.
- 12.3.9 From the lower slopes of Tyrebagger Hill and eastern edge of Kirkhill Forest views of the industrial estate, airport and infrastructure within the Don Valley significantly detract from the rural character of the surrounding farmland, while the upper slopes of Tyrebagger Hill allow long-range views beyond this development to the west, north and east.

River Don Crossing (approx. ch321900 – 324400)

- 12.3.10 While the majority of receptors are dwellings of medium sensitivity, the area around the River Don valley has a number of properties considered to be of medium/high to high sensitivity, as receptors in this area tend to be scattered across the valley or in small clusters. The majority of these are older properties that were built to have open views across the valley before development took place around Dyce. The high volumes of traffic on the A947 and B977 roads and the significant existing visual impact from Aberdeen Airport detract from the views of some properties, reducing their sensitivity, but most remain highly sensitive to any significant change to their views.
- 12.3.11 The views within this area are extensive as the land descends from the northern edge of Tyrebagger Hill and crosses the Don Valley floor towards the A947. The open landscape of the river valley is heavily influenced by the presence of infrastructure and industry, former quarries, busy roads, overhead power lines and the Aberdeen to Inverness railway.

Goval (approx. ch324400 – 325900)

- 12.3.12 The area around and to the north of Goval has the highest concentration of properties considered to be of high sensitivity, as the rolling topography and areas of established woodland help to ensure the area retains a rural atmosphere screened from views of the majority of the existing visually intrusive developments around them, such as Aberdeen Airport and the industrial estates of Dyce and Kirkhill. Many of the affected receptors are scattered properties with panoramic open views that are likely to be important to the residents, so they are considered to be more sensitive to significant visual change.

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- 12.3.13 Views over the area are partially contained to the north and south by mature woodland areas across Corsehill and Red Moss, but views are available across the undulating farmland as the land rises to the north of Little Goval. As the farmland continues to the east, the rising landform around Lochgreens allows panoramic views towards the North Sea and Aberdeen City across the gently undulating plateau of farmland.

Potterton (approx. ch325900 to end of Northern Leg)

- 12.3.14 The majority of receptors around the Potterton area are considered to be of medium sensitivity, with occasional dwellings that are considered to be highly sensitive. While properties in the area tend to be relatively isolated, the majority do not have panoramic views that would be considered important to their character or they already experience adverse visual impacts from existing elements, such as the B999 and A90(T) or the industrial areas at Blackdog and Potterton. Properties within the village of Potterton itself are generally considered to be of medium sensitivity as the density of the settlement already disturbs their setting. While the small settlement at Blackdog has a potentially attractive coastal setting, the majority of the properties are orientated away from the coastal view and their setting is disturbed by the proximity of the existing A90 and the Blackdog Industrial Estate, and by the former landfill site adjacent to the southern edge of the community, which limits the sensitivity of the receptors to medium.
- 12.3.15 The farmland around the settlement of Potterton is generally very open with clear views towards the village itself, the North Sea, woodland at Blackdog Burn and the mature beech trees at the B999. The landform is gently undulating, although a ridge at Backhill of Cranbog locally limits visibility from the south. Features such as the industrial site at Blackdog and high volume traffic on the B999 and A90 roads detract from the amenity of the area.

12.4 Potential Impacts

- 12.4.1 Potential visual impacts arising from the elements of the scheme and the changes that may affect the visual amenity of receptors within the study area, from Winter Year of Opening onwards, are identified as follows:
- alteration of views and visual distraction from the landmarks of the area due to the introduction of new elements, including road surface, moving traffic, noise barriers and bunds, drainage treatment ponds and detention basins, the new River Don crossing, minor overbridges, underpass, culverts, signage, lighting and the presence and movement of vehicles, into an essentially rural landscape;
 - increased presence of artificial lighting during the hours of darkness on sections of the proposed road with permanent street lighting, lit gantries and signs, particularly at the major junctions with the A96, A947 and A90(T), and across the River Don Bridge, with additional impacts from vehicle headlights on unlit sections of the road across open countryside and from temporary lighting during maintenance works;
 - changed appearance of landform due to new rock cuttings and soft cuttings and embankments adjacent to the road and bridges; and
 - alteration to vegetation patterns and field patterns by tree loss and stripping of groundcover vegetation and topsoil, followed by reinstatement and new planting.
- 12.4.2 Visual impacts taking mitigation into account are assessed in detail within Section 12.6 (Residual Impacts).

12.5 Mitigation

Landscape Mitigation of Visual Impacts

- 12.5.1 As mitigation of adverse landscape and visual impacts are closely related and inter-dependent, visual impacts will be mitigated by the iterative approach to the design of the proposed scheme and the specific landscape mitigation measures summarised in Chapter 11 (Landscape), described in

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Appendix A11.2 (Detailed Landscape Mitigation Proposals) and illustrated in Landscape Figures 11.5a-p. All identified mitigation measures are taken into account in the visual impact assessment. Landscape proposals that may offer visual mitigation are summarised below, with their application as specific mitigation measures for individual receptors provided in the tables in Appendices A12.1 and A12.2:

- mitigation planting to screen views and reflect and reinforce the character of the existing landscape, including individual trees, tree lines, and areas of woodland (e.g. scrub, riparian, broadleaved, mixed);
- drystone walling to reflect and reinforce the existing landscape pattern;
- earthworks, including provision of false cuttings to screen or restrict views of the road; and
- sensitive grading of all disturbed areas including embankments to improve integration with the surrounding landform and to allow the potential to return some areas of land to agricultural use.

12.5.2 Cross-sections indicating the relationship between the proposed scheme and key visual receptors, together with mitigation proposals, are shown on Landscape Figures 11.6a to 11.6m.

Lighting

12.5.3 The introduction of artificial lighting from road lighting and other fixtures may create or contribute to light pollution in the form of sky glow, glare and/or light trespass/spill. It is therefore beneficial to minimise these potential adverse effects on landscape character and protect views of dark skies in rural areas.

12.5.4 Where lighting is essential, it has been incorporated as part of the proposed scheme design such that the effect on the night sky is minimised; seeking to reduce or avoid excessive, unnecessary and obtrusive lighting by appropriate selection, location and arrangement of lighting elements to achieve the necessary safety standards of useful light, while minimising intrusiveness in the form of spillage, glare and reflection.

12.5.5 It is acknowledged that the orange sky glow over settlement is predominantly caused by the refraction of light radiating from low-pressure sodium street lighting, commonly installed in the 1970s, on droplets of water or particles of pollution in the atmosphere. In order to limit light pollution from the proposed street lights and other fixtures, modern high-pressure sodium, shallow bowl luminaires will be utilised on the AWPR. This form of lighting, known as Full Cut Off lighting, directs light of appropriate strength where it is needed and controls the unwanted dispersion of obtrusive artificial light by eliminating the emission of light upwards. This choice of luminaire also enables maximum spacing between lighting columns and ensures that the minimum amount of lighting is used, without compromising safety.

12.5.6 Consideration has also been given to meeting light mitigation requirements by installing passive lighting in the form of reflective road markings and signage wherever possible.

Structures

12.5.7 The design of structures such as bridges along the length of the route, and aspects of the landscape design, have been informed by a combination of specialist aesthetic advice, design workshops and consultation with Architecture & Design Scotland.

12.6 Residual Impacts

General

12.6.1 The visual envelope (Figures 12.5 and 12.6) will reflect the route of the proposed scheme, with impacts generally contained by a landscape defined by topography, woodland and settlement across the region. Between Kingswells and the River Don, the hills around Brimmond Hill and Tyrebagger Hill will restrict the visual impact of the road on receptors to the west, while between

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Corsehill and Potterton the scattered settlement and extensive cuttings for the road will limit the number of potential receptors. Where properties are affected by long range views (such as receptors around Newmachar and from the B997), the impacts tend to be minimised due to existing visual impacts from Aberdeen Airport and Kirkhill Industrial Estate.

- 12.6.2 Visual impacts from new lighting on the proposed scheme are anticipated to be restricted to receptors located within the vicinity of the proposed junctions at the A96, A947 and the A90(T) and also the River Don Bridge, where lighting is proposed. The introduction of lighting at Goval Junction (A947) into an otherwise unlit area is likely to contribute significantly to the impact assessment within this location. The junction at the north of Kingswells will also be lit, but the remainder of the scheme will not be lit, although the presence of headlights from vehicles travelling at night will introduce lighting to the previously unlit rural landscapes between Newhills and Craibstone, and between Goval and Potterton, contributing to the impacts on the affected receptors within these sections.
- 12.6.3 When assessing magnitude and sensitivity, the impact of road lighting and headlights were taken into account, so that the level of impact significance determined for each of the receptors affected encompasses all elements of the proposed scheme. These factors also influenced the design of mitigation measures for the proposed scheme.
- 12.6.4 The visual impact assessment for each building receptor or cluster of receptors and each outdoor receptor is presented together with details of proposed mitigation measures as tables in Appendix A12.1 for built receptors and Appendix A12.2 for outdoor receptor sites. This information is summarised in Table 12.4 to show the total number of receptors affected by different degrees of impact in the winter year of scheme opening and residual impact by summer 15 years later.
- 12.6.5 The results of the visual impact assessment are summarised below and illustrated on Figures 12.2a-d (Buildings and Outdoor Sites), Figures 12.3a-h (Buildings), and Figures 12.4a-f (Buildings – Urban Areas). The summaries include reference to landscape types/areas shown on Figures 11.5a-p where appropriate to the context of the visual impact assessment (such as Tyrebagger Hill and Kirkhill Forest).

Built Receptors

- 12.6.6 The following descriptions summarise the results of the visual impact assessment and highlight the predicted residual impacts on prominent dwellings and settlement areas. For detailed information on all assessed receptors refer to Appendix A12.1 (Visual Receptors – Buildings).

Kingswells (Start of Northern Leg to approx. ch315600) (Figures 12.3a-b)

- 12.6.7 The Dykeside dwellings (receptor 3.390) and the Kepplestone and Newton Farms (receptor 3.2), situated on higher ground to the north of Kingswells (Figure 12.3a), will receive Severe short term adverse impacts to existing views, becoming Substantial after 15 years. Properties at the southern edge of the small settlement at Newhills will experience Substantial impacts during the year of opening, with clear views of the new junction, which will reduce to Moderate after 15 years for the Newhills Parish Church (receptor 3.5) and Bucksburn Nursing Home (receptor 3.6) but will remain Substantial for the Manse and the Glebe and Manse Cottages (receptor 3.3 and 3.4).
- 12.6.8 A number of receptors at the north-eastern corner of the large Kingswells settlement will be able to see the Northern Leg of the road as it crosses the farmland at Newhills, with the cutting through the hillside visible on the northern horizon, but these are located within the Southern Leg study area and are therefore assessed in Chapter 27 (Visual; Southern Leg).

Craibstone (approx. ch315600 – 318000) (Figure 12.3b)

- 12.6.9 Partial screening of the road corridor by mature woodland in the valley surrounding the Scottish Agricultural College campus will help to reduce impacts for the college and other receptors in this vicinity. However, with several buildings glimpsing the proposed A96 Junction and the main

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carriageway crossing an existing open space in front of a hall of residence, impacts ranging from Substantial/Severe through to Moderate adverse will affect buildings across the campus. These will reduce to generally Moderate after 15 years, although the Sutton Hall accommodation building (receptor 3.15) will still incur Substantial impacts, particularly from the moving headlights of the vehicles. Residential properties to the south-east of the college at Forrit Brae (receptors 3.18 to 3.23) and on the northern side of Newhills (receptors 3.7 to 3.9) will be initially affected by Moderate/Substantial to Slight/Negligible impacts from the nearby junction and the road crossing the hillside towards Kirkhill Forest, which will decrease over 15 years to become Moderate to Negligible in significance. Glimpses of Aberdeen Airport and associated industrial development already impact visually on several of these receptors both during daylight hours and when illuminated at night.

12.6.10 On the lower slopes of Brimmond Hill to the west of the proposed scheme, Craibstone Golf Centre (receptor 3.11), Parkhead (receptor 3.12), Ashtown Farm and Ashtown Cottage (receptor 3.10), will be affected by Substantial to Moderate/Substantial impacts from the road which will run in cutting across all eastern views. While the proposed mitigation planting along the carriageway will help to partially screen the road, the impacts will not reduce over time as the road will be sufficiently visible, with the volume of in traffic and movement of headlights increasing far beyond the current levels on the nearby minor local road (which sees relatively high volumes of traffic during rush hour periods as people avoid the congested roads through town, such as the A90) to continue having a significant impact on the receptors that are situated on higher ground above the road.

12.6.11 The assessed impacts upon the majority of dwellings around the A96(T) and Chapel of Stonywood at winter year of opening are Severe to Substantial, due to the scale of, proximity to and lighting from the proposed overbridge. The majority of impacts at this location will range from Substantial/Severe to Moderate/Substantial after 15 years and after mitigation planting matures.

Tyrebagger Hill/ Kirkhill (approx. ch318000 – 321900) (Figures 12.2d, 12.3c-e, 12.3g, and 12.4a-c)

12.6.12 Due to the open nature of the farmland around Newton (Figure 12.3c), north of the A96(T), the proposed route, which is predominantly on embankment, will produce either Substantial or Moderate/Substantial adverse impacts for the scattered farmsteads of Howemoss (receptor 3.37), Newton (receptor 3.36) and Standingstones (receptor 3.39). Aberdeen Airport, associated industrial development and busy traffic routes are already visually detrimental to this area and extensively lit at night.

12.6.13 The majority of receptors in the area are located within Kirkhill Industrial Estate, west of Aberdeen Airport, and south-west Dyce. Many of the receptors in the industrial estate obscure or partially obscure views of the route for other buildings. This has resulted in a broad range of impacts from Substantial to Slight, depending on the height, aspect and use of each receptor, and the low sensitivity of the majority of the industrial receptors. Long-term effects of Moderate/Substantial to Slight/Negligible are predicted throughout the estate by summer 15 years after opening.

12.6.14 Impacts from the road as it traverses the lower slopes of Tyrebagger Hill and approaches the Don Valley are predicted to range from Moderate to Slight/Moderate at winter year of opening for the majority of dwellings, such as the cluster of houses around Tulaichean (receptor 3.40) which will have views of the road as it runs to the north with additional long range views to the east as it cuts through the hillside at Corsehill. In the summer 15 years after opening this will become Moderate to Slight as mitigation planting establishes. The isolated property of Bogenjoss (receptor 3.91), immediately north east of Kirkhill Forest (Figure 12.3d), will be likely to incur Severe initial impacts that are unlikely to reduce after 15 years due to the close proximity of the road, and the introduction of noise mitigation fencing.

12.6.15 The impact on several dwellings along Pitmedden Road (receptors 3.88 and 3.92 to 3.95) are predicted to range from Substantial to Moderate due to views of the road as it emerges from Kirkhill Forest, reducing to Moderate to Slight over time as existing woodland and proposed mitigation planting matures to increase the screening of traffic and moving headlights provided by a noise mitigation fence.

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- 12.6.16 Impacts for Aberdeen Airport Terminal (receptor 3.63 on Figure 12.3c) are assessed as Slight at winter year of opening, becoming Slight/Negligible by the summer 15 years later.
- 12.6.17 Dwellings and industrial buildings on the western side of Dyce, with views of the proposed road on the hillside above the Kirkhill Industrial Estate, will have impacts on completion ranging from Substantial to Slight/Moderate, with a high percentage of receptors in the Moderate adverse significance category. These impacts will be reduced to Slight/Moderate for the majority of receptors, with only a small number of receptors receiving impacts of either Moderate/Substantial or Slight in the long term. There will also be long range views of this section of the road available from a number of properties along the B997 around Perwinnes Hill (Figures 12.2d and 12.3g), with the majority of impacts likely to be Moderate the winter year of opening, reducing to Slight/Moderate in the long term as mitigation planting matures and the cuttings for the road begin to weather and become vegetated.

River Don Crossing (approx. ch321900 – 324400) (Figure 12.2b, 12.3d-e, and 12.4c)

- 12.6.18 The route is on high embankments on the approach to the River Don crossing and across much of the eastern side of the valley, where open views are currently affected by the A947 and by industrial development and night lighting associated with Aberdeen Airport. The rolling farmland that surrounds the road allows for many open views across the river floodplain, although the existing embankments for the former railway line of the Formartine & Buchan Way help to hide the road from many of the dwellings at the northern edge of Dyce.
- 12.6.19 South of the Aberdeen to Inverness railway line and proposed road, the significant embankments required for the road, as it crosses the rolling farmland and approaches the river crossing, are predicted to cause Substantial/Severe impacts for Nether Kirkton (receptor 3.87). Substantial adverse visual effects will also affect the farms of West Overton (receptor 3.90) and Upper Kirkton (receptor 3.89), with similar impacts for Tillybrig Cottage and Lyndmoor (receptor 3.88), situated immediately to the north of the route (Figure 12.3d). At Nether Kirkton, Substantial/Severe impacts are predicted in the short and long term due to the clear views of the new bridge and the road as it continues to the east.
- 12.6.20 Settlement at Cothall and adjacent to the B977 (Figure 12.3d) will view the proposed road as it crosses the relatively open lower slopes of Tyrebagger Hill. From here, the road, the angle and illumination of the River Don bridge and the proposed overbridge at Goval Villa will be highly visible to the south and impacts will vary from Substantial to Slight/Negligible adverse on completion of the scheme, and Moderate to Negligible impacts will still register 15 years thereafter. Development east of Hatton of Fintray (Figure 12.2b) is distant from the route and for receptors here, which partially screen each other, initial impacts will range from Slight/Moderate to Negligible, becoming Slight or Negligible after 15 years, and will come primarily from the views of vehicles and the movement of headlights.
- 12.6.21 In the west, Goval Farm and Cottages (receptor 3.226), located on higher ground overlooking the proposed junction, will receive Substantial impacts that are unlikely to diminish over time, while other nearby receptors, such as Goval Villa (receptor 3.227) and Parkhill Cottage (receptor 3.228), will be initially affected by Severe to Slight/Moderate impacts due to their proximity to the road, becoming Substantial to Slight 15 years after scheme completion (Figure 12.3e).
- 12.6.22 In north Dyce, the properties affected by the route are dwellings, industrial and commercial units. Impacts for the majority of the industrial and commercial receptors tend to be of Moderate significance due to the lower sensitivity of the receptors, reducing to Slight/Moderate or Slight as mitigation planting matures over time. For the dwellings, however, adverse visual impacts are assessed as ranging from Substantial to Moderate at winter year of opening, with a minor reduction for some properties to impacts of Moderate/Substantial through to Slight after 15 years. At Kirkton of Dyce (receptor 3.222), north of Dyce Drive, Substantial adverse effects will remain unchanged. A new housing development currently being constructed on the site of the former Victoria Street works at the edge of Dyce will have views of the road, and is assessed in Chapter 54 (Cumulative Impacts).

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Goval (approx. ch324400 – 325900) (Figures 12.2c, 12.3e-f)

- 12.6.23 North of the River Don, the close proximity of the proposed scheme to receptors near the A947, B977, Goval Burn and on the slopes west of Littlejohn's Wood makes it highly visible, and impacts for these properties, including South Waulkmill (receptor 3.243), Waulkmill Croft (receptor 3.245), Meadowhead (receptor 3.244) and Laurels (receptor 3.241), will be mainly Severe to Substantial, remaining Severe for those closest to the route (Figure 12.3e). The introduction of lighting at Goval Junction into an otherwise unlit area is considered to contribute more significantly to the adverse visual impacts within this location than elsewhere in the study area. Impacts from Substantial/Severe to Slight will continue to affect the remaining receptors after 15 years. The general trend is for receptors closest to the A947 junction and embankments crossing the valley and Formartine and Buchan Way to receive the highest impacts.
- 12.6.24 As the road runs up the hill and passes through Littlejohn's Wood (Figures 12.3e and 12.3g), the small cluster of dwellings consisting of Stanedykes, Rose-lea and Birchville (receptor 3.240) will receive Severe visual impacts due to clear views of the road as it cuts through Corsehill. After 15 years, there will be no change in the impacts for these properties. Impacts on other receptors near the B977 crossroads will range from Slight/Moderate to Slight in the year of opening for Hillcrest and The Emmerick (receptor 3.302) and Corsehill Croft (receptor 3.237) respectively. Once the proposed woodland mitigation planting around the B977 East Overbridge matures, the impacts on receptor 3.302 will decrease to Slight, while receptor 3.237 will remain at the same level.
- 12.6.25 North of Goval Wood, near Newmachar Golf Course and also adjacent to the A947, scattered receptors have predominantly Slight visual impacts at winter year of opening, reducing to Negligible by summer 15 years, reflecting their distance from the proposed route (Figures 12.2c and 12.3f), with the moving headlights causing the majority of impacts. Properties west of the Formartine and Buchan Way, and furthest from the route, will have Slight impacts, which remain unchanged or become Negligible after 15 years, while closer to the route, the impacts will be Moderate, becoming Slight for Hillhead Farm (receptor 3.270). Other receptors in the vicinity will experience impacts ranging from Moderate to Negligible, with minor reductions or no change after 15 years.

Potterton (approx. ch325900 to end of Northern Leg) (Figures 12.3g-h and 12.4d)

- 12.6.26 After leaving Littlejohn's Wood (Figure 12.3g), visual impacts for the Parkhill Nursery (receptor 3.301) and the small cluster of dwellings to the north (receptor 3.300) will be Slight/Moderate and Substantial respectively in the year of opening. After 15 years, the impacts will have reduced to Slight and Moderate due to the development of proposed mitigation woodland. Between Parkhill and Blackdog, the route crosses much of the open farmland at grade or in cutting with impacts on scattered receptors, with particular adverse impact from headlights due to the remote locations of the properties. Lochgreens Cottage (receptor 3.299) will suffer Severe impacts which will not decrease over time despite the construction of a noise mitigation fence, while receptors between the farm at Lochgreens (receptor 3.297) and Hillhead Steading (receptor 3.295) will receive impacts of Severe to Substantial, reducing to Moderate/Substantial at best, by summer 15 years after scheme completion (Figure 12.3g).
- 12.6.27 Around Backhill of Cranbog (receptor 3.325), adverse impacts will range from Substantial to Slight, and will remain at these levels in the long term for most properties, apart from Newtonhill (receptor 3.323), where impacts will reduce from Moderate/Substantial to Moderate.
- 12.6.28 In the village of Potterton (Figure 12.4d), open views will permit Substantial adverse impacts for a limited number of properties that will see the cutting on the hillside and the new overbridge for the B999, with significant impacts from an increase in headlights along the road at night. For the majority of dwellings, impacts will range from Moderate to Slight adverse. An area of young plantation to the south-west of Potterton will help to reduce the impact on the settlement in the long term.

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- 12.6.29 South of Potterton, tree planting will reduce the visual impacts for properties adjacent to the B999 from a range of Substantial to Slight/Moderate, decreasing to Moderate/Substantial to Slight (Figure 12.3h).
- 12.6.30 For receptors in the settlement of Blackdog to the south of the proposed A90(T) junction, adverse impacts at winter year of opening will range from Substantial to Slight/Negligible, reflecting proximity to the roundabout and the existing views from the receptors, which are already affected adversely by the industrial site at Blackdog and high volume traffic on the B999 and A90(T) roads. Mitigation proposals will help to reduce the impact on the majority of these receptors to Slight/Moderate to Negligible, although several dwellings, such as Roseden (receptor 3.383), Blackdog Croft (receptor 3.382) and Strabathie Cottages (receptor 3.380) will remain unchanged. The new access road for the settlement will have a minor impact on a number of dwellings on Hareburn Road, with impacts ranging from Slight/Moderate to Slight/Negligible during the year of opening, reducing to Slight/Negligible to Negligible due to the development of existing woodland and proposed mitigation planting.
- 12.6.31 North of the proposed A90(T) junction, impacts at winter year of opening will generally be Substantial due to the extensive embankments required for the slip roads and the realignment of the local access roads, becoming Moderate to Slight after 15 years, although impacts for Wester Hatton Cottages (receptor 3.376) will remain Moderate/Substantial.

Outdoor Receptors

- 12.6.32 The following descriptions summarise the results of the visual impact assessment and highlight the predicted residual impacts on prominent outdoor receptors. For detailed information on all assessed receptors refer to Appendix A12.2 (Visual Receptors – Outdoor).

Kingswells (Start of Northern Leg to approx. ch315600) (Figure 12.2a)

- 12.6.33 The proposed scheme will be visible from several footpaths and Rights of Way around Kingswells across the rolling farmland that surrounds the settlement. The impacts will generally be Moderate to Slight, becoming Slight after 15 years, although for the Right of Way that runs from the Dykeside Steading down towards the Bucks Burn (receptor F3.2B) and the footpath from Newhills cemetery (receptor F3.6), the impacts will be Substantial due to the direct impacts of the road and the North Kingswells Junction that will require the realignment of the paths, and will remain at that level over time.
- 12.6.34 The football pitch at north Kingswells (receptor O3.1) will be initially affected by Moderate visual impacts, which will become Moderate to Slight as mitigation planting develops, while Auchmill Golf Course (receptor O3.2) will be affected by Substantial impacts at winter year of opening due to the open views across to the road, including the proposed junction. These impacts will reduce to Moderate after 15 years, once mitigation planting has established.
- 12.6.35 The impact upon the road that runs from Kingswells to Bucksburn will vary from Moderate/Substantial to Slight/Moderate along its length (receptors R3.1A and R3.1B respectively), which is unlikely to decrease over time.

Craibstone (approx. ch315600 – 318000) (Figures 12.2a-b)

- 12.6.36 Craibstone Golf Course (receptor O3.4) will be affected by Substantial impacts at winter year of opening because of the open views of the road as it runs along the eastern edge of the course, which is unlikely to change. The small play area beside the A96(T) at Forrit Brae (receptor O3.3) will receive Slight adverse impacts from the modifications to the road leading from the new junction, which will reduce to Negligible after 15 years.
- 12.6.37 Views will be available across long stretches of the route from the Right of Way that runs to the summit of Brimmond Hill (receptor F3.7B) and part of the Elrick Hill Right of Way (receptor F3.8) to the west of the route, both of which will have Moderate adverse impacts in the year of opening,

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which will reduce to Slight/Moderate for the Elrick Hill receptor over time. The A96(T) Junction will have a Substantial visual impact on the Walton Road Right of Way (receptor F3.9), with mitigation measures unlikely to decrease the impact.

- 12.6.38 The minor road that runs from Newhills Cemetery through Craibstone to the A96(T) and beyond to Kirkhill Industrial Estate will experience a variety of differing views of the scheme, and has been divided into three sections (receptors R3.2A to C). All sections will continue to be affected by Moderate/Substantial impacts after 15 years due to clear views of the road and new A96(T) overbridge and the realignment and partial closure of the road. Users of the link road through the Brimmond Hill area (receptor R3.3) will receive long term Substantial impacts, as the scenic views from the minor country road are considered important to the experience of the road users. The proposed A96 Junction will have Moderate/Substantial adverse impacts on the existing A96(T) road as it approaches from the east (receptor R3.4B), although the impacts as it approaches from the west will only be Slight (receptor R3.4A), both in the short and long term.

Tyrebagger / Kirkhill (approx. ch318000 – 321900) (Figure 12.2b)

- 12.6.39 Visual impacts for the airport ring road and cycleway, which passes the Thistle Hotel (receptors R3.5 and C3.1) are predicted to be Moderate because of occasional glimpses of the road running across the hillside to the west, while the road through the industrial estate (receptor R3.6A) will experience Negligible visual effects. There will also be visual impacts on stretches of Pitmedden Road as it passes between Woodlands Cottages and Guildhall (receptors R3.7B and R3.7C), with views of the road on embankment on the hillside above Pitmedden House causing impacts of Moderate to Slight that will reduce to Slight/Negligible after 15 years, while stretches of the B977 between Home Farm and East Lodge (receptors R3.8A and R3.8B) will have views across the River Don valley that will decrease from Slight down to Negligible over time.
- 12.6.40 The Right of Way and equestrian route from near the housing at Chapel of Stoneywood to Kirkhill Forest (receptors F3.10 and E3.1) will be affected by Substantial adverse impacts due to the proximity of the road as it crosses the surrounding farmland, both in the year of opening and after 15 years. The Right of Way that leads from the edge of the Kirkhill Industrial Estate up to the Tyrebagger Stone Circle (receptor F3.11) is expected to receive impacts that will remain Moderate over time. There will be further distant views for part of the Right of Way around the western edge of Perwinnes Moss to the east (receptor F3.16A), which will be able to see the road on the hillside, causing Slight adverse impacts that are unlikely to diminish as the mitigation matures.
- 12.6.41 Substantial impacts will affect the footpath that runs from the farm at Upper Kirkton across the hillside above the River Don (receptor F3.13), as it will need to be realigned in order to move it around the proposed route. A Right of Way and equestrian route that runs from Overton Dismantlers up into Kirkhill Forest near Bogenjoss is expected to experience Slight adverse impacts as it rises up the hill (receptors F3.12A and E3.2A) with no change after 15 years, although as it runs through Kirkhill Forest (receptors F3.12B and E3.2B) the impact is predicted to be Substantial and remain at that level, due to the direct impact of the road and realignment of the track.
- 12.6.42 Two outdoor spaces in Dyce, the playing fields for Dyce Academy (receptor O3.5) and the public park around the Dyce ATC hut (receptor O3.6), will gain views of the road across the airport and industrial estate that will have a Slight adverse impact on the receptors, which will decrease to Negligible for receptor O3.5 due to screening by local vegetation.

River Don Crossing (approx. ch321900 – 324400) (Figure 12.2b)

- 12.6.43 For Pitmedden Road (receptor R3.7A) and where the road through Kirkhill Industrial estate emerges at the north end and loops around towards Dyce in very close proximity to the new route (receptor R3.6B), Substantial impacts will affect the receptors and are likely to remain after 15 years. Similar adverse effects will be seen along Dyce Drive (receptor R3.9), but they are likely to decrease to Moderate/Substantial by 15 years after completion. On the northern side of the river, the B977 between East Lodge and Cothall (receptor R3.8C) will receive Slight adverse initial

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impacts from the new river crossing, becoming Slight/Negligible over time. Between Heugh Head and the A947 junction (receptor R3.8D), the impact on the B977 will be Substantial due to the introduction of the new B977 West Overbridge, and will remain at this level.

- 12.6.44 Travellers on the Aberdeen to Inverurie Railway Line between Dyce Station and Liddell's Monument (receptor RW1A) will experience Moderate/Substantial impacts that are unlikely to decrease. Between the monument and Beidleston Cottages (receptor RW1B), existing woodland will limit impacts of more intermittent views to Slight at both scheme completion and thereafter.

Goval (approx. ch324400 – 325900) (Figures 12.2b-d)

- 12.6.45 North of Dyce, sections of the Formartine and Buchan Way footpath, cycleway and equestrian route will gain views of the proposed route. Between Dyce Drive and Station House (receptors F3.14A and C3.2A), the impacts are predicted to be Substantial, reducing to Moderate over time. As the former railway line continues north (receptors F3.14B and C3.2B), the impacts will remain as Substantial after 15 years with the path running through two underpasses to take it under the road embankments. Equestrian users of the route (receptor E3.3) will have consistent Substantial impacts along the affected stretch of the path, with no improvement over time. The Right of Way that runs from the Hill of Goval farm across to Corsehill (receptor F3.15) will also require partial realignment through an underpass, which will cause Substantial impacts that are unlikely to diminish.
- 12.6.46 Visual impacts for Newmachar Golf Course (receptor O3.7) will be Slight when the road is opened, becoming Negligible after 15 years. For walkers and anglers at Corby Loch (receptor O3.8), views of the road as it cuts through the hillside to the north will cause initial Moderate impacts that will reduce to Slight/Moderate over time.
- 12.6.47 The A947 will be realigned as part of the proposed Goval Junction. Impacts in the vicinity of the diversion and junction will be Substantial (receptor R3.10B), whereas nearer to Dyce (receptor R3.10A) they will reduce to Moderate, and will remain at these levels for both stretches. North of the shelter belt at Goval near Newmachar Golf Course, Slight adverse impacts will remain for a section of the A947 (receptor R3.10C) after 15 years.
- 12.6.48 The proposed junction at Goval will require the partial realignment of the B977 between the A947 and Kinnaird (receptor R3.8E), but the significance of the change is unlikely to be greater than Moderate adverse, reducing to Slight after 15 years as mitigation planting matures. The impact will increase to Moderate/Substantial as the road continues past Little Goval to Corsehill (receptor R3.8F) which is unlikely to change over time. Further impacts will be found as the road runs between Parkhill Nursery and the cluster of houses at Moss Belt (receptor R3.8G), which will be Moderate/Substantial and will remain at this level due to the realignment of the road with an overbridge.

Potterton (approx. ch325900 to end of Northern Leg) (Figure 12.2d)

- 12.6.49 Impacts on a small play area in Potterton (receptor O3.9) will reduce from Slight/Moderate to Slight after 15 years as local planting matures. The majority of the East Aberdeenshire Golf Course (receptor O3.10) will be screened from views by the surrounding landscape, although the western edge of the course will receive Slight initial impacts, reducing to Negligible over time.
- 12.6.50 A footpath running from the south of Potterton to Newtonhill will receive Slight/Moderate impacts from the road, which will remain after 15 years (receptor F3.17B). The footpath will continue between Hillhead and Leuchlands Croft and will experience Moderate impacts which will remain after 15 years (receptor F3.17A), as it will run close to the route and will have views along the carriageway. To the south, part of the Right of Way that runs around Perwinnes Moss (receptor F3.16B) will have views of the road as it meets the A90 Junction near Blackdog, which will have Moderate adverse impacts that will not diminish over time. The new access road for the small settlement at Blackdog will have minor impacts on sections of the footpaths running through the Blackdog Community Woodland (receptors F3.18A, F3.18B and F3.19), which will cause impacts

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of Slight to Slight/Negligible significance during the year of opening, reducing to Slight/Negligible to Negligible over time.

- 12.6.51 Moderate adverse impacts on the minor road to the south west of Potterton between Newton of Shielhill and Cranfield Farm (receptor R3.13) will remain after 15 years, while the Hillhead to Potterton road to the west of the settlement (receptor R3.15) will experience unchanged Slight/Moderate impacts. Panmure Gardens (receptor R3.16), which runs through the housing area, will have occasional views of the route that will result in Slight adverse impacts for users, that will remain in effect after 15 years.
- 12.6.52 The proposed road will be visible from a section of the B999 between Hillcrest and Plodhill, with Slight impacts for southbound travellers through Potterton down to Gourdieburn (receptor R3.14B), remaining after 15 years. As the B999 continues south and is realigned via a new overbridge across the proposed scheme main alignment, there will be a Substantial impact due to views of the A90 North Junction for northbound travellers (receptor R3.14A) which will remain after 15 years. The road will be visible for users of the A90(T) (receptor R3.17) on the approach to the new junction near Blackdog, with Moderate impacts in both the short and long term.

Summary of Impacts

- 12.6.53 The Northern Leg of the new road will follow a route across predominantly open farmland resulting in a range of visual impacts for a total of approximately 1013 built receptors and 80 outdoor receptors.
- 12.6.54 Overall, 622 (61.4%) built receptors and 53 (66.25%) outdoor receptors will be affected by significant (Moderate or greater) adverse impacts in the winter, year of scheme opening. By the summer, 15 years after scheme opening, mitigation in the form of sensitive grading, false cuttings, mixed and native woodland, drystone walls and noise barriers will reduce the total number of buildings affected by significant adverse impacts to 360 (35.5%), and for outdoor receptors, the total will have reduced to 45 (56.25%).

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Table 12.4– Summary of Visual Impacts for Northern Leg

Receptor Type	Severe Adverse		Substantial/ Severe Adverse		Substantial Adverse		Moderate/ Substantial Adverse		Moderate Adverse		Slight/ Moderate Adverse		Slight Adverse	
	Winter Year of Opening	Summer 15 Years after Opening	Winter Year of Opening	Summer 15 Years after Opening	Winter Year of Opening	Summer 15 Years after Opening	Winter Year of Opening	Summer 15 Years after Opening	Winter Year of Opening	Summer 15 Years after Opening	Winter Year of Opening	Summer 15 Years after Opening	Winter Year of Opening	Summer 15 Years after Opening
No. of Built Receptors and % of Total (1013)	41	12	11	15	130	65	176	54	264	214	160	176	191	306
	4.0%	1.2%	1.1%	1.5%	12.8%	6.4%	17.4%	5.3%	26.1%	21.1%	15.8%	17.4%	18.8%	30.2%
No. of Outdoor Receptors and % of Total (80)	0	0	0	0	24	19	9	10	20	16	4	7	21	15
					30.0%	23.75%	11.25%	12.5%	25.0%	20.0%	5.0%	8.75%	26.25%	18.75%

Receptor Type	Slight/Negligible Adverse		Negligible	
	Winter Year of Opening	Summer 15 Years after Opening	Winter Year of Opening	Summer 15 Years after Opening
No. of Built Receptors and % of Total (1013)	33	59	7	112
	3.3%	5.8%	0.7%	11.1%
No. of Outdoor Receptors and % of Total (80)	1	4	1	9
	1.25%	5.0%	1.25%	11.25%

12.7 References

Countryside Commission and the Department of the Environment (1997). Lighting in the Countryside: Towards good practice.

Highways Agency et al., (1993) Design Manual for Roads and Bridges (DMRB), Volume 11 Section 3 Part 5.

House of Commons Science and Technology Committee (2003). Light Pollution and Astronomy.

Institute of Environmental Management and Assessment: IEMA (2002). Guidelines for Landscape and Visual Impact Assessment.

Scottish Executive (1998). Planning Advice Note (PAN) 58: Environmental Impact Assessment.

Scottish Executive (2002). Landscape and Visual Assessment Supplementary Guidance.

Scottish Office (1998). Cost Effective Landscapes: Learning from Nature (CEL: LfN).