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# 27 Visual

This section presents the impacts on the visual amenity of the Southern Leg section of the proposed scheme.

Views are generally open across the flatter areas of farmland between Charlestown Junction and Cleanhill Junction and more enclosed within the predominantly upland and wooded farmland area between Cleanhill Junction and Kingswells, divided by the Dee valley.

Built receptors (mainly dwellings) are scattered or clustered in small settlements in the rural areas, or located in larger settlements at Peterculter, Milltimber, Westhill and Kingswells. Outdoor receptors such as roads, pedestrian, equestrian and cycle routes are distributed throughout the area.

Proposed drystone walls and grading out of earthworks slopes will reduce visual impacts after completion of the scheme. In addition, woodland and scrub planting will reduce the initial visual impacts as the vegetation matures.

Fifteen years after opening, residual impacts are assessed as severe and substantial where the proposed scheme is located in close proximity to receptors in rural and urban locations. Impacts for the majority of more distant receptors would be slight.

#### 27.1 Introduction

- 27.1.1 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.
- The General Context Map (Figure 27.1) provides a guide to the layout of the visual assessment mapping. Figures 27.2a-c show the scheme at 1:25,000 scale, illustrating impacts on outdoor sites and distant built receptors. Figures 27.3a-h show the proposed scheme at 1:10,000 scale, illustrating the visual impact on built receptors and Figures 27.4a-e the affected urban areas at 1:5,000 scale.
- 27.1.3 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, outdoor recreational spaces, Rights of Way, footpaths, cycleways and equestrian routes (collectively referred to as receptors).
- The visual impacts of the proposed scheme on the receptors within the study area are assessed for the operational phase of the scheme. Impacts during scheme construction are addressed in Chapter 33 (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 26 (Landscape) and illustrated on Figures 26.5a-p.
- 27.1.5 Mitigation measures to reduce the potentially adverse visual impacts are identified and taken into account for winter, year of scheme opening (2012) when earthworks mitigation (e.g. false cuttings) and other built screening elements such as fences and walls 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 (2026) when mitigation is anticipated to be fully effective as planting will have become established. The former is intended to represent the 'worst case scenario' and the latter the 'best case scenario' for permanent impacts.

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For the purposes of visual assessment of the Southern Leg section of the proposed scheme, the study area starts at Charleston Junction at chainage 207200, then continues to Cleanhill Junction in Blaikiewell at chainage 100000 and ends at Kingswells at chainage 111200. The division between the Fastlink and the Southern Leg sections of the proposed scheme is indicated on Figure 27.3c. Where a receptor occurs north of the dividing line and is assessed in the Southern Leg chapter, but would also be affected by elements of the Fastlink section of the proposed scheme, the information is reported in this chapter.

# 27.2 Approach and Methods

#### **Study Area**

The indicative study area for the visual assessment was informed by desk and site study. The theoretical visual envelope map, shown on Figure 27.5a to c, assisted the identification of potential receptors by highlighting areas to check on site to confirm which receptors would be likely to have views of the proposed scheme, subject to the surrounding topography, buildings and woodland.

#### **Guidance and Approach**

- 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).
- 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) and 'Planning Advice Note (PAN) 58: Environmental Impact Assessment' (Scottish Executive, 1998).
- 27.2.4 The assessment has been carried out through:
  - review of proposed scheme 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 (VEM) to assist identification of areas from which views may be gained.

#### **Visual Envelope Mapping**

- 27.2.5 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 to ensure that any potential for visual change beyond the expected 3km limit of discernible impacts would be identified.
- 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.
- 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 27.5a-c in contrasting colours, and the Summer 15 years following completion day and night VEMs have been combined and are shown on Figures 27.6a-c in contrasting colours.

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#### VEM - Winter Year of Opening (Day)

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 27.5a-c), they do not take account of any screening effect of planting proposed as part of landscape mitigation.

#### VEM – Winter Year of Opening (Night)

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 mitigation (e.g. false cuttings) which would be in place during winter, year of scheme opening (see Figures 27.5a-c), they do not take account of any screening effect of planting proposed as part of other landscape mitigation.

#### VEM – Summer 15 Years following completion (Day)

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 27.6a-c).

#### VEM - Summer 15 Years following completion (Night)

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 27.6a-c).

# **Visual Impact Assessment**

- 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, outdoor recreational spaces, Rights of Way (ROW), footpaths, cycleways and equestrian routes (in accordance with information received from Aberdeen City and Aberdeenshire Council Access Officers). 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. Impacts on listed buildings and other sites of archaeological importance are addressed in Chapter 28 (Cultural Heritage).
- 27.2.13 Photographs from a number of key viewpoints and key receptor locations as shown on Figure 26.7 are shown in the photomontage and wireline photographs provided in Figures 26.8a-l. These images were developed as part of the mitigation design and taken into account as part of the assessment process.
- 27.2.14 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.

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#### Sensitivity of Receptors

- 27.2.15 The sensitivity of visual receptors to changes in their views was evaluated in accordance with the criteria provided in Table 27.1, 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 looking towards the view.

Table 27.1 - Sensitivity of Visual Receptor

Sensitivity	Criteria
High	Receptors where the changed view is of high value and importance and/or where the receptor would 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

- 27.2.16 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.
- 27.2.17 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.
- 27.2.18 The criteria used to determine the magnitude of visual change are shown in Table 27. 2.

Table 27.2 - Magnitude of Visual Change

Magnitude	Criteria					
High	Where the proposed scheme or elements of the scheme would dominate the view and fundamentally change its character and components.					
Medium	Where the proposed scheme or elements of the scheme would 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 would be only a minor element of the overall view that are likely to be missed by the casual observer and/or scarcely appreciated.					

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# Significance of Impact

Tables 27.3 and 27.4 were 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 and 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 27.3 - Visual Impact Significance Criteria

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

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Table 27.4 - Visual Impact Significance

Impact	Criteria					
Negligible	No noticeable deterioration or improvement in the existing view					
Negligible to Slight Adverse/Beneficial	Where the changed view is unimportant and/or users are not sensitive to change and the proposed scheme or elements of the scheme would be only very minor elements of the overa view that are likely to be missed by the casual observer and scarcely appreciated.					
Slight Adverse/ Beneficial	Where the changed view is unimportant and/or users are not sensitive to change and the proposed scheme or elements of the scheme would be only minor elements of the overall view.					
Slight to Moderate Adverse/Beneficial	Where the changed view is unimportant and/or users are not sensitive to change and the proposed scheme or elements of the scheme would be noticeable in the view, affecting its character and altering some of its components and features; or					
	Where the changed view is not critical to amenity and/or the nature of the view is not a primary consideration of the users and the proposed scheme or elements of the scheme would be only minor elements of the overall view.					
Moderate Adverse/ Beneficial	Where the changed view is not critical to amenity and/or the nature of the view is not a primary consideration of the users and the proposed scheme or elements of the scheme would be clearly noticeable in the view, affecting its character and altering some of its components and features; or					
	Where the changed view is of high value and importance and/or where the receptor would notice change to visual amenity by reason of the nature of use and their expectations, but the proposed scheme or elements of the scheme would be only minor elements of the overall view; or					
	Where the changed view is unimportant and/or users are not sensitive to change and the receptor would notice change to visual amenity by reason of the nature of use and their expectations and the proposed scheme or elements of the scheme would dominate the view fundamentally changing its character and components.					
Moderate to Substantial Adverse/Beneficial	Where the changed view is not critical to amenity and/or the nature of the view is not a primary consideration of the users and the proposed scheme or elements of the scheme would dominate the view fundamentally changing its character and components; or					
	Where the changed view is of high value and importance and/or where the receptor would notice change to visual amenity by reason of the nature of use and the proposed scheme or elements of the scheme would be clearly noticeable in the view, affecting its character and altering some of its components and features					
Substantial Adverse/ Beneficial	Where the changed view is of high value and importance and/or where the receptor would notice change to visual amenity by reason of the nature of use and their expectations and the proposed scheme or elements of the scheme would dominate the view fundamentally changing its character and components.					
Severe Adverse	Where the changed view is of very high value and importance and where the receptor would notice change to visual amenity by reason of the nature of use and their expectations and the proposed scheme or elements of the scheme would dominate the view and fundamentally change its character and components.					

27.2.20 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**

- 27.2.21 This assessment has been undertaken on the preliminary design of May 2007. With regard to the assessment of visual impacts in accordance with DMRB, the following limitation to this assessment were identified:
  - a field study to assess the likely impact of the proposals upon the property at 309 North Deeside Road was not undertaken as, at the time of the assessment, it was anticipated that this property would be demolished. However, following completion of the assessment, design alteration resulted in this property no longer requiring demolition. Impacts at this property are considered to be similar to adjacent properties, for example receptors 81 and 82, shown on Figure 27.3d.

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#### 27.3 Baseline Conditions

- The 'Guidelines for Landscape and Visual Impact Assessment' (IEMA; 2002), states '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 26 (Landscape) and supporting Appendix A26.1.
- 27.3.2 Baseline visual conditions within the Southern Leg of the proposed scheme are summarised below:

#### Loirston (approximate ch206250 - Charleston Junction)

- 27.3.3 This area alternates between an open agricultural landscape and industrial development, busy roads, street lighting and pylons associated with the A90(T) corridor.
- 27.3.4 Settlement is mainly to the east of the A90(T) and comprises a number of scattered former farmsteads and more modern dwellings.
- 27.3.5 The area is very open and the visual character is degraded by what appears to be declining agricultural use and development, with views of Loirston Loch adversely influenced by the fragmented landscape.

#### Duff's Hill (approximate ch205250 - 206250)

27.3.6 Immediately west of the A90(T), the dense coniferous plantation at Duff's Hill partially screens the views from scattered settlement across the open expanse of Hare Moss.

# Hare Moss (approximate ch202300 - 205250)

- 27.3.7 This wide, open and gently undulating farmland basin, featuring the raised bog area of Hare Moss, is enclosed by higher ground to the north (Cran Hill and Blue Hill), west (Hill of Blairs) and south (Clochandighter), with more extensive views possible to the east.
- Forestry plantation, including the remaining section at Duff's Hill, contains views to the northeast of the low lying topography, creating a tranquil landscape, except where there is disturbance from the A90(T) with its traffic and associated noise.
- 27.3.9 Settlement comprises isolated scattered farms and dwellings accessed from a network of tracks branching from two local routes, one of which is a popular walking and cycle route.

#### Merchant's Croft (approximate ch201400 - 202300)

- 27.3.10 This, small-scale, upland landscape, between Clochandighter Hill and Hill of Blairs is rugged and although relatively close to Aberdeen, appears, remote and isolated, with small crofts and farmhouses scattered through the area, linked by stony tracks and separated by large areas of gorse and occasional scrubby trees.
- 27.3.11 Enclosed by higher wooded grounds to the north and east, there are scenic views west to distant hills and south to Durris Forest.

# Blaikiewell (approximate ch201400 (Cleanhill to Charleston section) to approximate ch100300 (Cleanhill to Kingswells section)

Views within this relatively flat plateau, which is overlooked from surrounding high ground, are limited by Stranog Hill to the south and the woodlands of Durris Forest and Cleanhill Wood to the north, but there are extensive and panoramic views west across this open, rural area to the Grampian Mountains.

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27.3.13 Small, scattered stands of mixed woodland provide screening for isolated farms and small clusters of properties adjacent to the roads around the site, with the most significant blocks of woodland around the clusters of properties at Burnside, Blaikiewell and Inverceynoch.

### Craigingles (approximate ch100300 - 101900)

- This wooded, hill landscape on the southern ridge of the Dee valley is enclosed by the coniferous plantation of Craigingles Wood in the east, Durris Forest in the west and mixed woodland of Cleanhill Wood in the central area. The northern edges of Cleanhill and Craigingles Woods become more open and fragmented on the lower slopes of the Dee Valley which allows views across the valley from parts of Kingcausie Estate.
- 27.3.15 The small settlement of Craigend lies between Craigingles Wood and Hill of Blairs and has restricted views out due to topography and woodland.
- 27.3.16 Kirkton of Maryculter is located relatively high on the southern slopes of the Dee Valley which allows open views to the north across the valley towards Peterculter and Milltimber. Views to the east from Maryculter are limited by topography and vegetation.

#### River Dee Crossing (approximate ch101900 - 102800)

27.3.17 The River Dee valley and floodplain is relatively open along the river corridor with only minor screening provided by pockets of woodland and riverside trees. The valley floor is peaceful and mainly screened from the busy B9077 to the south by trees and from the A93 to the north by a steeply wooded bluff slope.

#### Milltimber (approximate ch102800 to 103400)

27.3.18 The large, detached houses in this suburb are set within extensive, mature wooded gardens, offering considerable screening and privacy at close range, with filtered views south across the Dee Valley from the upper levels.

# Craigton (approximate ch103400 - 104600)

27.3.19 Settlement in this area is generally scattered farms and houses. There are attractive, rural views to the north across fields and rolling landform towards Beanshill and distant views to the south towards the southern slopes of the Dee valley. The extents of Milltimber and Peterculter encroach on the eastern, southern and western boundaries of this area and introduce a slightly sub-urban character. The estate grounds of Kippie Lodge and the International School are well wooded with areas of open space and obtain attractive, open views to the south across the Dee valley to the slopes of Cleanhill.

#### Beanshill (approximate ch104600 - 106000)

- 27.3.20 Immediately northwest of the settlement of Milltimber, this gently undulating area features several gorse covered rocky outcrops.
- 27.3.21 Settlement is scattered and comprises isolated farms and dwellings on the higher ground, with a notable cluster of converted farm buildings at Upper Beanshill.
- Views and focal points change throughout this area due to the varying topography and degrees of enclosure from woodland trees, blocks of shelter planting along field boundaries and clumps of deciduous and mixed woodland. From higher ground there are panoramic views south to the Dee valley and the distant edge of the Grampian Highlands to the west.

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#### Broomfold (approximate ch106000 - 107600)

- 27.3.23 Several areas of small to medium sized coniferous, broadleaved and mixed plantations divide and enclose the small, irregular fields in this area southwest of Kingswells, creating short-range views.
- 27.3.24 There are a relatively high number of scattered dwellings, typically located on the steeper ground in the south of the area and most dwellings are concentrated at Broomfold where two local roads meet.
- 27.3.25 Views into the area are possible from the higher ground of Contlaw/Beanshill to the south and the higher areas of Westhill.

#### Fifeshill (approximate ch107600 - 108500)

- 27.3.26 Gairnhill and Kingshill are enclosed by mature coniferous plantation and accessed by a network of tracks and public footpaths. The areas of woodland are dense and create a strong sense of enclosure and seclusion for the scattered farms and dwellings.
- 27.3.27 Views out of the area are restricted by forestry but views from the forestry edges are possible across the lower lying areas of Clinterty/West Brimmond and Kingswells to the north and west.
- 27.3.28 The high ground of Fifeshill provides the backdrop to views from the north from areas such as Clinterty/West Brimmond, Kingswells and Maidencraig.

#### Kingswells (approximate ch108500 - 111400)

- 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 its perimeter road are dominant visual elements both during the day and at night. Views from the settlement are partially limited by landform, tree belts, adjacent dwellings and perimeter landscaped bunds along the western boundary, while the open farmland east and north of Kingswells has long-range views to the City of Aberdeen, Kingswells and Brimmond Hill.
- 27.3.30 To the north, the ridges of Brimmond Hill and the adjacent smaller peak of Elrick Hill create a strong visual boundary. There are long-range views in all directions from the viewpoint on Brimmond Hill and Elrick Hill allows views to the north, east and west.
- Further west, the settlement of Westhill is prominent on the horizon and its elevated location means that several areas within it have views across the surrounding lower ground north of the A944, towards the Fifeshill area.

#### 27.4 Potential Impacts

- Potential visual impacts arising from the elements of the proposed 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, noise barriers and bunds, drainage treatment and
    detention ponds, the new River Dee crossing, minor overbridges, underpasses, 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 scheme with permanent street lighting (i.e. junctions), lit signs, particularly at the
    major junctions such as Charleston, Cleanhill, Milltimber and South Kingswells with additional
    impacts from vehicle headlights on unlit sections of the scheme across open countryside and
    from temporary lighting during maintenance works;

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- 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.
- 27.4.2 Visual impacts, taking mitigation into account, are assessed in detail within Section 27.6 (Residual Impacts).

# 27.5 Mitigation

#### **Landscape Mitigation of Visual Impacts**

- As mitigation of adverse landscape and visual impacts are closely related and inter-dependent, visual impacts will be mitigated by the iterative approach to design of the proposed scheme and the specific landscape mitigation measures summarised in Chapter 26 (Landscape), described in Appendix A26.1 (Detailed Landscape Mitigation Proposals) and illustrated in Figures 26.5a-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 A27.1 and A27.2.
  - 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.
- 27.5.2 Cross-sections indicating the relationship between the proposed scheme and key visual receptors, together with mitigation proposals, are shown on Figures 26.6a-m.

#### Lighting

- 27.5.3 The introduction of artificial lighting from road lighting and other fixtures might 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.
- 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.
- 27.5.5 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 1970's, 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 luminaries 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.
- 27.5.6 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.

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#### **Structures**

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

# 27.6 Residual Impacts

#### General

- The visual envelope (Figures 27.5a-c and 27.6a-c) reflects the route of the proposed scheme, with longer range visual impacts generally contained by topography, woodland and settlement. Between Charleston and Cleanhill Junctions the landscape along the corridor is relatively flat, open farmland with several small areas of woodland which locally restrict views. Between Cleanhill Junction and Kingswells, the landscape comprises a series of hills separated by lower lying areas of woodled farmland and the Dee valley. Views of the proposed scheme are limited by these hills, while, in the lower areas views are generally more open and wide ranging. Built receptors are scattered or clustered in small settlements in the rural areas, with larger settlements at Peterculter, Milltimber, Westhill and Kingswells on the outskirts of Aberdeen.
- Visual impacts from new lighting of the proposed scheme are anticipated to be restricted to receptors located in the vicinity of proposed junctions at Charleston, Cleanhill, Milltimber and South Kingswells where lighting is proposed. The introduction of lighting at Cleanhill and Milltimber Junctions into otherwise unlit areas is likely to contribute significantly to the impact assessment in these locations. 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 Charleston and the South Kingswells junction.
- 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.
- 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 A27.1 for Built Receptors and Appendix A27.2 for Outdoor Receptors. This information is summarised in Table 27.5 to show the total number of receptors affected by different degrees of impact in the winter year of scheme opening and the residual impact in summer 15 years later.
- The results of the visual impact assessment are summarised below and illustrated on Figures 27.2a-c (Buildings and Outdoor Sites), Figures 27.3a-h (Buildings), and Figures 27.4a-e (Buildings Urban Areas). The summaries are organised using the landscape types/areas shown on Figures 26.2a-c.

#### **Built receptors**

27.6.6 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 built receptors refer to Appendix A27.1 (Built Receptors).

Loirston (approximate ch206250 - Charlestown Junction)

The proposed scheme links into the existing Charleston Junction area and the properties close to the junction, which have an existing view of the A90(T) and junction with the A956, would not be affected by significant additional visual impacts (receptors 1034, 1035, 1036, 1037, 1251, 1252, 1038, 1039 and 1040). Receptor 1 would be affected by Moderate adverse impacts in winter year of opening, reducing to Slight/Moderate, therefore not significant, after 15 years.

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27.6.8 Slightly further away from the proposed scheme, there are two clusters of receptors, 1041 and 1042 which have views towards the cutting through Duff's Hill and would receive Moderate and Moderate/Substantial adverse impacts respectively, both reducing to non-significant after 15 years. All other receptors, 1045, 1043, 1044, 1325, and 1046 in this area would be affected by non-significant impacts in winter year of opening.

Duff's Hill (approximate ch205250 – 206250)

- Two receptors, 1032 and 1033 at the eastern edge of Duff's Hill, are located higher than the existing A90(T) and have a view towards the proposed Charleston Junction area, therefore receiving impacts of Moderate and Substantial adverse respectively in winter year of opening, with 1032 reducing to non-significant and 1033 remaining significant with Moderate adverse impacts after 15 years.
- 27.6.10 There are two receptors, 1323 and 1324, located just north of the Haremoss to Checkbar Road which, due to recent forestry felling, would receive significant impacts in both winter year of opening and after 15 years.

Hare Moss (approximate ch202300 – 205250)

- The proposed scheme crosses the flat, open landform of Hare Moss on embankment up to 6m high. This increases its visibility and as a result there are many receptors in this area which would accrue significant impacts which would not reduce over time. Large areas of screen planting are generally not proposed in this area as it would not be in keeping with the open landscape. The impacts range from Severe to Moderate for receptors 51, 49, 4, 5, 6, 3, 7, 9, 11, 8, 10, 1025, 1028, 1000, 1029, 1030, 1322, 1344, 1321, 1320 and 1031 both in winter year of opening and after 15 years.
- 27.6.12 Several receptors in the area, 1026, 1027 and 1024 would receive non-significant impacts in winter year of opening.

Merchant's Croft (approximate ch201400 – 202300)

27.6.13 The proposed scheme would pass through this small scale landscape in deep cutting. This would mitigate the visibility of moving traffic, but the introduction of the large scale cutting will have a significant impact on the few properties nearby. The impacts for receptors 12, 13, 14, 223 and 224 would range from Severe to Moderate/Substantial, with the impacts on all receptors remaining significant after 15 years.

Blaikiewell (approximate ch201400 (Cleanhill to Charlestown section) to approximate ch100300 (Cleanhill to Kingswells section))

- The proposed scheme would cross from the Merchant's Croft area into the larger scale, flatter landscape of Blaikiewell, on slight embankment and cutting as it moves west towards Cleanhill junction. North of Cleanhill Junction, the road would be on high embankment across Blaikiewell Burn and Blaikiewell/Maryculter Road.
- 27.6.15 There are several dwellings in this area and receptors 15, 17, 19, 222 and 223 would be affected by significant impacts, ranging from Severe to Moderate in winter year of opening, remaining significant after 15 years due to their close proximity to the proposed scheme in a relatively open landscape. Receptor 17 would be affected by both the Southern Leg and the Fastlink sections of the proposed scheme and would receive Substantial adverse impacts in winter year of opening, reducing to Moderate after 15 years.
- 27.6.16 Receptor 16 would receive Severe adverse impacts in both winter year of opening and after 15 years, due to views of the proposed Fastlink section. Visual impacts associated with receptors located south of the dividing line shown on Figure 27.3c are described in Chapter 42 (Visual).

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Craigingles (approximate ch100300 – 101900)

- 27.6.17 The proposed scheme enters the Craigingles area and immediately goes into deep cutting to pass through the western slopes of the ridge of Cleanhill. As it descends from the ridge it moves onto embankment.
- 27.6.18 In the Craigingles area there are several receptors, namely 21, 22, 50, 54 and 1022 which would be affected by significant impacts ranging from Substantial/Severe to Moderate in winter year of opening due to views of the proposed scheme as it crosses the Dee Valley. After 15 years the impact would become non-significant for several of these receptors but receptors 21 and 50 would remain significant with impacts of Moderate and Moderate/Substantial respectively. There are also a number of receptors in the Craigingles area which would receive non-significant impacts, such as receptors 1319, 1020, 1021 and 1310.
- 27.6.19 Kingcausie House, receptor 226, which has enclosed views across the estate parkland and distant views across the Dee valley, would receive a significant impact of Severe in winter year of opening, reducing to Substantial/Severe in summer after 15 years. North Lodge, receptor 1013, would also receive a significant impact of Severe in winter year of opening, reducing to Substantial/Severe after 15 years. Receptor 1243, in Kingcausie Estate, would receive Substantial/Severe adverse impacts in both winter year of opening and after 15 years. Lying to the west of the proposed scheme in Kingcausie Estate, receptors 1241 and 1242, Eastland Cottage and Eastland House respectively, would receive impacts of Substantial/Severe adverse in both winter year of opening and after 15 years.

River Dee Crossing (approximate ch101900 – 102800)

- The proposed scheme descends from Cleanhill and crosses the Dee Valley on embankment up to 10m above existing ground level. The open nature of the valley would result in significant impacts, particularly for dwellings located in Milltimber on the north side of the valley and for receptors 205, 71, 72, 73, 78, 77, 74, 75, 76, 107, 108, 109, 84, 85, 99, 1100, 1316, 1317 and 1014. Impacts would range from Severe to Moderate in winter year of opening and will remain significant in summer after 15 years for the majority of these receptors. Non-significant impacts would occur in winter year of opening for receptors 1109, 1108, 1111, 1110, 1113, 1102, 1112, 1103, 1106, 1104, 1105, 1101 and 1107 in the Peterculter area, which have existing views across the Dee Valley.
- There are several receptors, 1345, 1346 and 1347, at the eastern end of the Camphill Estate at Milltimber which would receive significant impacts of Moderate/Substantial adverse in winter year of opening, reducing to Slight or Slight/Moderate adverse after 15 years. Other residential receptors in the Camphill Estate, 1348, 1349, 1350, 1351, 1352, 1353 and 1354 would receive non-significant impacts in winter year of opening, ranging from Slight/Negligible to Slight/Moderate, and reducing after 15 years.
- 27.6.22 Receptor 1318, the caravan park south of the River Dee, would receive an impact of Substantial in winter year of opening, reducing to Moderate/Substantial after 15 years. The Old Mill Inn, receptor 55, would receive a significant impact in winter year of opening with an impact of Moderate adverse, reducing to non-significant after 15 years.

Milltimber (approximate ch102800 - 103400)

- As the proposed scheme ascends from the Dee valley and passes to the west of Milltimber, it moves into a cutting up to 10m deep. This would reduce the visibility of traffic but the introduction of the cutting and removal of existing mature woodland would have significant adverse visual impacts on receptors 80, 81, 82, 87, 1015, 1016, 79, 71 and 1343 which are close to the proposed scheme. Impacts range from Severe to Moderate in winter year of opening, with all receptors except for 1016 and 79 remaining significant with Severe to Moderate/Substantial impacts after 15 years.
- 27.6.24 There are also several receptors in the Milltimber area, which are not in close proximity to the proposed scheme as it passes through the area, but have existing views across the Dee Valley and

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would receive significant visual impacts ranging from Severe to Moderate adverse, receptors 99, 1019, 85, 84, 77, 78, 76, 108, 109, 107, 1306, 1304, 1307, 1273, 74, 75, 72, 73 and 1272. Receptors 99, 85, 84, 77, 78, 74, 75, 72 and 1272 would remain significant after 15 years.

27.6.25 Several non-significant impacts would occur in the Milltimber area for receptors which are further away from the proposed scheme but have existing views across the Dee Valley, receptors 1284, 1283, 1282, 1278, 1305 and 204.

Craigton (approximate ch103400 – 104600)

- The proposed scheme passes through the Craigton area in cutting up to 10m deep, which helps reduce the visibility of the scheme from receptors in the area. However, the removal of existing mature woodland, and the proposed Milltimber Junction, would introduce visual impacts for receptors 83, 88, 89, 90, 96, 97, 98 and 227. In winter year of opening, these impacts would range from Severe for properties closest to the proposed scheme, to Moderate for those furthest away. After 15 years, once mitigation planting has begun to mature, the impacts would reduce slightly but are likely to remain significant.
- Within the Craigton area there are several receptors in the higher part of Milltimber which have views across the Dee Valley to the high ground of Craigingles Hill on the southern slopes of the valley. These receptors, 1288, 1287, 1286, 1285, 1293, 1301, 1280, 1299, 1300, 1293, 1281, 1279, 1302, 1303, 1292, 1277, 1275, 1276, 1290, 1291 and 1289, would receive non-significant impacts in winter year of opening as their views of the proposed scheme would be distant.

Beanshill (approximate ch104600 - 106000)

27.6.28 The proposed scheme passes through the Beanshill area in deep cutting. Due to their proximity to the scheme, receptors 91, 92, 93, 94, 95, 1313, 1308 and 1017 will receive significant impacts in winter year of opening, ranging from Severe to Moderate/Substantial adverse. After 15 years impacts will remain significant.

Broomfold (approximate ch106000 - 107600)

- 27.6.29 As the proposed scheme crosses the Silverburn valley it would be on high embankment. Beyond the valley it would ascend Gairnhill, alternating between slight cutting and slight embankment.
- 27.6.30 Receptors 165, 168, 169, 167, 202, 170, 100, 166, 1314, 1010, 1012 and 1011 are clustered on the slopes of the Silverburn valley and would receive significant impacts on views to the south towards the valley crossing. Impacts range from Severe to Moderate in winter year of opening, generally remaining significant in summer after 15 years.
- 27.6.31 Lying north of Silverburn Road, receptors 157 and 158 would receive significant impacts both during winter year of opening and summer, 15 years after, as they view the proposed scheme at close proximity on slight embankment or in slight cutting.

Fifeshill (approximate ch107600 - 108500)

- 27.6.32 The proposed route is in slight cutting as it passes between the summits of Kingshill and Auchlea. It then descends towards the A944 and crosses at the proposed South Kingswells junction on embankment up to 12m above existing ground level.
- 27.6.33 Lying to the south of the A944, receptors 160, 161, 159, 177, 176, 102, 104, 175, 163, 164, 162, 1009, 1312, and 1007 would receive significant impacts in winter year of opening. By summer after 15 years the impacts on receptors 160, 176, 102, 164, 162, 1312 and 1009 will remain significant.

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Kingswells (approximate ch108500 - 111400)

- The proposed South Kingswells junction is on an embankment up to 12m above the existing ground level which would increase its visibility from the surrounding, relatively open landscape. Receptors 101, 103, 172, 173, 180, 181, 182, 178, 1047, 1298 and 1005 would receive significant adverse impacts ranging from Severe to Moderate in winter year of opening and reducing after 15 years to range from Severe to Slight.
- The proposed route continues north alternating between embankment and cutting. Receptors 171, 174, 179, 195, 196, 197, 198, 199, 200, 201, 1294 and 3.399 located east and west of the proposed scheme would receive significant impacts, ranging from Severe to Moderate in winter year of opening. These impacts would reduce but generally remain significant after 15 years due to their close proximity and existing predominantly rural views.
- The location of Westhill, elevated above the open landscape north of the A944, would result in several receptors in the settlement receiving impacts from the proposed scheme, although they are some distance away. The pattern of receptors tends to be clustered around the western side of Westhill or in the higher areas in the north of Westhill. The majority of these receptors, approximately forty five, would be non-significant in winter year of opening. However, three receptors, 1188, 187 and 183 would receive Substantial adverse impacts in winter year of opening, reducing to Moderate after 15 years. Two other receptors, 188 and 186, would receive Moderate impacts both in the winter year of opening and after 15 years and approximately twenty receptors would be Moderate adverse in winter year of opening reducing to Slight after 15 years.
- 27.6.37 Many receptors located in Kingswells would receive significant impacts in winter year of opening as the proposed route cuts across the eastern slope of Cloghill. The impacts would generally be significant in winter year of opening, with the majority reducing to non-significant after 15 years.
- 27.6.38 Several receptors located in the northern corner of Kingswells may also receive visual impacts from the Northern Leg section of the proposed scheme as well as the Southern Leg section. Their impacts would be significant in winter on the year of opening, ranging from Substantial to Moderate, with the majority reducing to non-significant after 15 years. Visual impacts associated with receptors located north of the dividing line shown on Figure 27.3h are described in Chapter 12 (Visual).

#### **Outdoor receptors**

The following descriptions summarise the results of the visual impact assessment and highlight the potential residual impacts on prominent outdoor receptors. For detailed information on all assessed outdoor receptors refer to Appendix A27.2 (Outdoor Receptors).

Loirston (approximate ch206250 – Charlestown Junction)

There are no outdoor receptors in the Loirston area that would receive a significant visual impact. Loirston Loch (O1003), the A90(T) (R1006), Wellington Road (R1001A and R1001B), Cove Road (R1000) and Charleston Road (R1002A and R1002B), Rigfa Farm road (R/C1057), R/C1059 and R1058 would receive impacts ranging from Slight/Moderate to Negligible, therefore non-significant impacts in winter year of opening.

Duff's Hill (approximate ch205250 - 206250)

A short section of the Haremoss to Checkbar Road, receptor R1005, which passes through the Duff's Hill area, would be affected by Moderate visual impacts in both winter year of opening and after 15 years, and part of the equestrian route, receptor E1004, would receive significant visual impacts of Substantial adverse in winter year of opening remaining significant after 15 years due to the road being on high embankment as it crosses an open area.

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#### Hare Moss (approximate ch202300 - 205250)

- 27.6.42 The shared road, pedestrian and cycle route, receptor R/F/C6, which follows Causeyport Road, would be affected by a significant visual impact of Substantial adverse in winter year of opening, reducing to Moderate/Substantial after 15 years.
- 27.6.43 The shared road and cycle route, R/C109, between The Crossroads and Cowford, would receive a significant impact of Substantial adverse in winter year of opening as the proposed scheme crosses the flat, open Hare Moss landscape on embankment. The impact will remain significant after 15 years.
- 27.6.44 The southern half of the minor road past Bishopston Farm, receptor R1008A, would receive significant impacts of Moderate/Substantial adverse in winter year of opening, reducing to Moderate after 15 years. The northern half of the route would receive non-significant impacts of Slight both in winter year of opening and after 15 years.
- 27.6.45 The site of the model aeroplane club at Hare Moss, receptor O1007, would receive a non-significant visual impact of Slight/Moderate adverse in both winter year of opening and after 15 years.
- Further away from the proposed scheme, two outdoor receptors would receive non-significant impacts, namely receptor R1081 which passes south-east of the Hill of Auchlee and receptor R1079, which is the minor road passing Scatterburn Farm.

#### Merchant's Croft (approximate ch201400 - 202300)

There are several outdoor receptors in the Merchant's Croft area which would receive significant impacts. Impacts would range from Substantial to Moderate in the winter year of opening for receptors F107, R/F/C1A and R/C1B, remaining significant after 15 years for receptors R/C1B and F107 due to the close proximity of the paths to the proposed scheme.

Blaikiewell (approximate ch201400 (Cleanhill to Charlestown section) to approximate ch100300 (Cleanhill to Kingswells section))

The proposed scheme through the Blaikiewell area is generally at grade, with Cleanhill Junction on embankment. Receptors F106, F/C/R1009, R/F83, R/F/C8, R/F/C105D, F1066 and F1010, which are a variety of pedestrian, cycle routes and roads, would all receive significant impacts in winter year of opening, ranging from Severe to Moderate, and remaining significant after 15 years.

#### Craigingles (approximate ch100300 – 101900)

- Various routes around the Maryculter area, such as R/C105B, R/C105A and R1011, would receive significant visual impacts over short stretches, ranging from Moderate to Substantial adverse in winter year of opening, with R/C105B and R/C105A remaining significant and R1011 reducing to non-significant after 15 years. Routes R1072A and R1072B would receive non-significant impacts in both winter year of opening and after 15 years. The cemetery at Maryculter Church, receptor O112, would receive a significant impact of Substantial adverse in winter year of opening, reducing to Moderate/Substantial after 15 years but still remaining significant.
- Outdoor receptors closer to the proposed scheme such as F1045, F1040, F1039, F1042, F1043, F1050, F1044, F1041, F1049 and F1048 in Kingcausie Estate and O1046 and F1047 in Storybook Glen, would accrue impacts ranging from Severe to Moderate in winter year of opening, with all impacts remaining significant after 15 years.

#### River Dee Crossing (approximate ch101900 – 102800)

27.6.51 The B979 which crosses the River Dee is also a proposed National Cycle Route, receptor R/C86, and would receive Substantial adverse impacts in winter year of opening. Woodland planting

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between the two roads will help to reduce adverse impacts over time, however, the existing open view east along the River Dee valley would be largely blocked by the proposed scheme and visual impact will remain significant in summer, 15 years after opening.

- The sections of footpath along the northern bank of the Dee, namely F87, F88, F89 and F90 would also be affected by impacts ranging from Severe to Moderate/Substantial, mostly remaining significant in summer after 15 years. The Old Deeside Line Walk, receptors F/C/E2 and F/C/E91, is a shared pedestrian, cycle and equestrian route. It would be affected by a range of visual impacts from Severe to Substantial adverse in winter year of opening. The F/C/E91 section will remain significant after 15 years but the F/C/E2 section reduces to a non-significant impact of Slight/Moderate after 15 years.
- 27.6.53 Camphill Estate at Milltimber has several outdoor spaces and footpaths around its grounds which have existing views to the south and east along the Dee Valley. Receptors F1083A, O1087, F1084, O1089, F1088, F1083B and F1085 would receive significant visual impacts ranging from Substantial to Moderate in winter year of opening. These impacts would reduce to non-significant after 15 years except for receptor F1088, the estate driveway, which lies closest to the proposed scheme. Other outdoor receptors in Camphill Estate, O1082, the kitchen garden, and O1086, community spaces, would receive non-significant impacts in winter year of opening.
- The B9077 along the southern edge of the Dee Valley, receptor R1012, would receive a significant impact for the section between the B979 junction and the access road to Kincairn House. This impact would be Substantial in winter year of opening, remaining significant after 15 years.
- 27.6.55 The Corbie Park playing fields next to the hotel at Maryculter Bridge, receptor O53, would receive an impact of Moderate adverse in both winter year of opening and after 15 years due to the close proximity views of the proposed Dee bridge crossing and road on embankment.

#### Milltimber (approximate ch102800 - 103400)

- 27.6.56 The B979 road and cycleway, receptor C/R1013, runs parallel with the proposed scheme as it moves into cutting near Milltimber Farm, and would receive significant impacts of Substantial adverse in winter year of opening reducing to Moderate adverse after 15 years.
- 27.6.57 The North Deeside Road is a shared road and cycle route where receptors C/R1014 and R/C85 would receive Substantial and Moderate adverse impacts respectively, as they have open views across the Dee Valley. These impacts will remain significant after 15 years.
- 27.6.58 Receptor F98 is a short stretch of path linking North Deeside Road and the Old Deeside Railway Line Walk, which would receive impacts of Moderate/Substantial in winter year of opening and Moderate after 15 years.

# Craigton (approximate ch103400 - 104600)

- A section of Culterhouse Road, receptor R/F/E47, which is also a pedestrian and equestrian route, would be affected by a Substantial impact in winter year of opening, reducing to Moderate in summer after 15 years. The footpath which runs between Kippie Lodge and its golf course, receptor F48, would receive impacts of Moderate/Substantial in winter year of opening, reducing to Moderate after 15 years.
- 27.6.60 The outdoor recreation spaces O44, O45 and O46 would receive significant impacts in winter year of opening, remaining so in summer after 15 years.
- 27.6.61 A short section of the shared footpath and equestrian route between Nether Beanshill Farm and Contlaw Road, receptor F/E49, would receive Substantial adverse impacts which reduce to Moderate after 15 years.

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27.6.62 The outdoor space at Milltimber Playing Fields, receptor O1067, would receive non-significant impacts of Slight/Negligible adverse in winter year of opening reducing to Negligible after 15 years.

#### Beanshill (approximate ch104600 - 106000)

- The Beanshill area has several pedestrian and equestrian routes following Contlaw Road and nearby tracks. Receptors R/E 50, R/E51 and F/E52 are sections of these routes closest to the proposed scheme and would receive significant impacts, ranging from Substantial to Moderate impacts in winter year of opening, with R/E50 reducing to Moderate after 15 years, and R/E51 and F/E52 reducing to Slight adverse after 15 years.
- 27.6.64 The combined footpath and equestrian route E/F1078 which follows the track from Contlaw Road to North Westfield Farm would receive non-significant impacts of Slight adverse in both winter year of opening and after 15 years. A very short section of Hillhead Road, receptor E/F1071, would receive non-significant impacts in both winter year of opening and after 15 years.

#### Broomfold (approximate ch106000 - 107600)

- 27.6.65 Silverburn Road is a shared road, cycle and equestrian route and would receive significant impacts in stretches, receptors R/C69A, R/C69B, R/C/E69C and R/C/E69D, with impacts ranging from Severe to Substantial. The visual impacts will remain significant after 15 years. Further east on Silverburn Road, the impacts will reduce to non-significant for receptors C/R1015 and R1070.
- 27.6.66 Receptor F/E92, which is a combined Right of Way and equestrian route running south from Silverburn Road towards North Westfield Farm, would receive impacts of Moderate/Substantial in winter year of opening, reducing to Moderate after 15 years.

#### Fifeshill (approximate ch107600 - 108500)

- There are many footpaths within Gairnhill Wood but only those along the western edge of the wood, which currently have long distance views to the west, would obtain views of the proposed scheme. Visual impacts for F/C/E67A, F/C/E67B, F/C/E67C, F/C/E67D, F/C/E67E, F/C/E67F, F/C/E67G and F/C/E67H would be significant, ranging from Substantial/Severe to Moderate in winter year of opening. Due to their close proximity to the proposed scheme, which is on slight embankment and in slight cutting, the impacts would remain significant after 15 years for the majority of these receptors.
- A combined Right of Way and equestrian route from the A944 leading to Auchlea, receptors F/E68A, F/E 68B, F/E 68C, F/E 68D and F/E1017, would have views of the proposed scheme as it descends from Gairnhill towards the proposed South Kingswells junction. Impacts would be significant in winter year of opening, remaining significant after 15 years for F/E 68B, F/E 68D and F/E1017.
- 27.6.69 Short sections of pedestrian routes, receptors F95 and F96, located south-east of the A944 would receive significant impacts of Moderate/Substantial adverse in winter year of opening, with views towards the proposed South Kingswells junction.

# Kingswells (approximate ch108500 - 111400)

- There are several outdoor receptors north of the A944 which are a mixture of road, equestrian and pedestrian routes. Receptors F/E61, E1016, R/F/E59, F60, F54, R/F/E58, F/E55D, F/E55C, F55B, F/E55A, E1018 and E1019B would receive significant impacts in winter year of opening, ranging from Substantial/Severe to Moderate. These impacts would remain significant in summer after 15 years due to their close proximity to the proposed scheme.
- 27.6.71 The playing fields on the eastern edge of Westhill, receptor O62, and Westhill Golf Course, receptor O63, would receive Moderate, and therefore significant, impacts in winter year of opening, which will reduce to non-significant in summer, 15 years after opening. Several outdoor routes in

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the Westhill area, receptors R1068A, R1068B, R1068C, R1069, R1064, R1063, R1062, R1061 and F1022, would receive non-significant impacts in winter year of opening.

- Outdoor recreation spaces in Kingswells, namely O3, O4 and O5, would receive significant impacts in winter year of opening, with O4 and O5 reducing to non-significant by summer after 15 years. Footpaths in Kingswells such as receptors F111A, F111B and F66 would all receive non-significant impacts in winter year of opening. Footpath F3.3A to the north of Kingswells would receive a Moderate adverse impact in winter year of opening due to its view of the Northern Leg, reducing to Slight after 15 years. The Kingswells bypass, receptor R3.1A, would receive Moderate/Substantial adverse impacts in winter year of opening, remaining after 15 years.
- On the southern and eastern edges of Brimmond Hill, several sections of footpaths F57, F56A, F56B, F56C, F3.3B and F1065 would be affected by significant impacts in winter year of opening, remaining significant in summer after 15 years for all except F56C. Several paths in this area receiving non-significant impacts in winter year of opening are F1075, F1076, F1073, F1074 and F1077.
- 27.6.74 The A944 road between Kingswells and Westhill, receptors R/C64 and R/C65, would receive significant visual impacts of Moderate adverse. The impacts will remain significant in summer after 15 years.

#### 27.7 Overview

- 27.7.1 The proposed scheme would follow a route through undulating agricultural and wooded land with several hills and a wide river valley, resulting in a range of visual impacts for a total of approximately 1326 built receptors and 224 outdoor receptors, of which approximately 544 built receptors and approximately 50 outdoor receptors are affected by non significant impacts in winter year of opening.
- Overall, 782 built receptors and 174 outdoor receptors would be affected by significant (Moderate or greater) adverse impacts in winter year of opening, when mitigation measures such as drystone walls and grading out of embankment and cutting slopes have been completed but proposed planting does not provide effective screening. By summer 15 years after opening, mixed/broadleaf, riparian and scrub woodland will have become established reducing the total number of built receptors affected by significant adverse impacts to 436, and for outdoor receptors, the total will have reduced to 137.

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Table 27.5 – Visual Impacts Summary Table

Receptor Type	Severe Adverse		Severe/Substantial Adverse		Substantial Adverse		Substantial/Moderate Adverse		Moderate Adverse		Moderate/Slight Adverse		Slight Adverse	
	Winter Year of Opening (2012)	Summer 15 Years after Opening (2027)												
Number of Buildings Receptors and % of the Total	77 5.8%	2.0%	3.6%	1.9%	175	3.6%	152 11.5%	108	330 24.9%	229	174	170	310 23.4%	275
Total = 1326														
Number of Outdoor Receptors and % of the Total	15	6	6.2%	2.7%	60 26.8%	25	18.3%	39	19.6%	61	15 6.7%	9.4%	23	30
Total = 224		,5	5.2.3			, 0	1010/0		1010/0			3.1.0		

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Receptor Type	Slight/Neg Adverse	ligible	Negligible			
	Winter Year of Opening (2012)	Summer 15 Years after Opening (2027)	Winter Year of Opening (2012)	Summer 15 Years after Opening (2027)		
Number of Buildings Receptors and % of the Total	59 4.4%	186	0.1%	259 19.5%		
Total = 1326						
Number of Outdoor Receptors and % of the	8	19	4	17		
Total Total = 224	3.6%	8.5%	1.8%	7.6%		