**Chapter 7** Landscape and Visual Amenity

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#### Landscape and Visual Amenity 7

## Introduction

- 7.1 This chapter presents the findings of the assessment of the likely significant effects of the proposed Kendoon to Tongland 132 kilovolt (kV) Reinforcement Project ('the KTR Project') on landscape and visual amenity, details of which are provided in Chapter 4: Development Description and Chapter 5: Felling, Construction, Operational Maintenance and Decommissioning.
- The assessment considers potential effects on: 7.2
  - landscape character and resources, including effects upon the physical elements, character and/or qualities of the landscape;
  - views and visual amenity, including effects upon potential receptors (people) and viewing groups caused by change in the appearance of the landscape.
- 7.3 Landscape character and resources are of importance in their own right, and are valued independently of whether they are seen by people. Effects on views and visual amenity as perceived by people are clearly distinguished from, although closely linked to, effects on landscape character and resources. Landscape and visual impact assessment (LVIA) are therefore separate, although linked, processes.
- 7.4 The assessment methodology for the LVIA and Cumulative LVIA (CLVIA) has been developed in accordance with the Guidelines for Landscape and Visual Impact Assessment (Version 3, 2013) (GLVIA3), and is detailed in Appendix 7.1. The assessment has been undertaken by Chartered Landscape Architects (Chartered Members of the Landscape Institute (CMLI)) from LUC with extensive experience in the assessment of landscape and visual effects, including in relation to electricity transmission infrastructure of the type proposed.
- 7.5 The chapter should be read alongside the following appendices contained in **Volume 3** of the Environmental Impact Assessment (EIA) Report:
  - Appendix 7.1: LVIA Assessment Methodology;
  - Appendix 7.2: ZTV Mapping & Visualisation Methodology;
  - Appendix 7.3: Summary of Consultation & Viewpoint Selection;
  - Appendix 7.4: Landscape Baseline; and
  - Appendix 7.5: Visual Baseline.
- The assessment chapter presents landscape and visual effects separately, including an assessment of 7.6 cumulative landscape and visual effects where relevant. The assessment is supported by map **Figures** 7.1 to Figure 7.20 and accompanying viewpoint (VP) visualisations. Visualisations are presented as Figures 7.21 to 7.52 and are contained in Volumes 4 - 6 of the EIA Report, prepared in accordance with the methodologies set out in **Appendix 7.2**.
- Planning policies of relevance to this assessment are detailed in Chapter 6: Planning Policy Context, 7.7 and the chapter should be read in conjunction with the following chapters:
  - Chapter 2: The Routeing Process and Design Strategy;
  - Chapter 4: Development Description;
  - Chapter 5: Felling, Construction, Operational Maintenance and Decommissioning;
  - Chapter 8: Forestry;

- Chapter 12: Cultural Heritage; and
- Chapter 15: Socio-Economics, Tourism and Recreation.

## Scope of the Assessment

- 7.8 The assessment considers the landscape and visual effects which are likely to arise from the KTR Project both individually, collectively (KTR as a Whole) and cumulatively (both with other KTR Project Connections and with other developments). The approach to the assessment of effects is set out in Chapter 3: Approach to the EIA. The proposed connections comprising the KTR Project are described in detail in **Chapter 4**, shown on **Figures 4.1** to **4.7** and summarised below:
  - a new 132kV double circuit steel lattice tower (L7) overhead line (OHL), of approximately 10.1km in length, between Polguhanity and the existing Glenlee substation, via Kendoon substation (approximately 3km south of the Polguhanity terminal tower) (P-G via K);
  - a new 132kV single circuit wood pole (Trident) OHL, of approximately 2.6km in length, between Carsfad and Kendoon (C-K);
  - a new 132kV single circuit wood pole (Trident) OHL, of approximately 1.6km in length, between Earlstoun and Glenlee (E-G);
  - a new 132kV double circuit steel lattice tower (L4) OHL deviation of the existing BG route, from Glenlee substation approximately 1.2km in length (BG Deviation); and
  - a new 132kV double circuit steel lattice tower (L4) OHL, of approximately 32.3km in length, between Glenlee and Tongland (G-T).
- Construction of the KTR Project connections will also require the removal, realignment, relocation or 7.9 undergrounding of existing distribution infrastructure<sup>1</sup> which is currently located within close proximity of the proposed connections. This relocation and undergrounding will be delivered as ancillary development as part of the P-G via K connection pre-enabling works and construction activities. In some instances, the relocation of this infrastructure underground has been identified as embedded landscape and visual mitigation as detailed in paragraph 7.66 and paragraph 7.67 below. The full extent of existing distribution infrastructure to be removed and relocated is shown on Figure 4.12.
- 7.10 The introduction of the new OHL connections of the KTR Project detailed above will also enable the decommissioning and removal of approximately 43.3km of existing 132kV steel lattice tower OHLs shown on **Figure 1.3**, comprising:
  - the removal of 2.5km of existing 132kV steel lattice tower (PL1) OHL from Polguhanity to Kendoon (N Route, towers: N230 - N240);
  - the removal of approximately 7.6km of existing 132kV steel lattice tower (PL1) OHL between Kendoon, Carsfad, Earlstoun and Glenlee (R Route (north) – northern section, towers: R000A – R29); and
  - the removal of approximately 33.1km of existing 132kV steel lattice tower (PL1) OHL between Glenlee and Tongland (R Route (south) – southern section, towers: R30 (R) – R153).
- 7.11 The decommissioning and removal of this infrastructure following energisation of the new KTR Project connections will result in a reduction in the extent of transmission infrastructure present across the Study Area (defined below) from that present during the construction phase of the KTR Project.
- 7.12 The effects of removal of this infrastructure are generally considered within the assessment of operational effects associated with each relevant individual new connection where the proposed new KTR Project connections are in proximity to, and effectively replace, the existing transmission infrastructure. However, in the case of a substantial proportion of R Route (south) within the Glenkens Valley between Glenlee and Dunjop, the decommissioning and removal of this existing infrastructure is not within close proximity or similar geographic area to the introduction of the new KTR Project connections.

<sup>&</sup>lt;sup>1</sup> Elements of the existing 240v, 33kV and 11kV electricity distribution network.

The Kendoon to Tongland 132kV Reinforcement Project

7.13 The approach taken to the consideration of the beneficial (positive) effects arising from the decommissioning and removal of N Route, R Route (north) and R Route (south) (between Glenlee and Dunjop) is outlined in the assessment section for removal of N Route and R Route. The assessment assumes that the decommissioning and removal of this existing infrastructure will take place following construction and energisation of the proposed KTR Project connections and commences within the first 12 months of the operational phase. The assessment of operational effects (and cumulative operational effects) therefore considers the long-term effects once the existing infrastructure of N Route, R Route (north and south) has been decommissioned, removed and any associated disturbance reinstated.

#### **Effects Assessed in Full**

- 7.14 In accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) ('EIA Regulations'), the objective of the assessment is to identify, describe and assess the likely significant landscape and visual effects of the individual connections comprising the KTR Project as well as the removal of the N and R Routes, the KTR Project as a whole (cumulative effects), and in combination with other existing and/or proposed developments (cumulative effects).
- 7.15 On this basis, the following effects have been assessed in full:
  - Effects on the physical landscape within the Study Area;
  - Effects on the landscape character within the Study Area;
  - Effects which could be of relevance to the reasons for designation as described by key characteristics/special qualities of designated landscapes within the Study Area;
  - Effects on views and visual amenity experienced by visual receptors (people) at representative VPs;
  - Effects on views and visual amenity experienced by visual receptors within settlements;
  - Effects on views and visual amenity experienced by visual receptors at publicly accessible locations in the vicinity of residential properties located within 150m of the KTR Project;
  - Effects on views and visual amenity experienced by visual receptors travelling along routes in the Study Area; and
  - Cumulative landscape and visual effects (including combined, successive and sequential visual effects) arising from the individual connections in conjunction with other KTR Project connection and other developments (as detailed in **Chapter 3** and shown on **Figure 3.1**), and the KTR Project as a whole (including the five individual KTR Project connections) in conjunction with other developments. Chapter 17: Assessment of Intra-Connection and Intra-KTR Effects considers the 'intraconnection effects' arising from each connection comprising the KTR Project i.e. the combined effects on a single receptor resulting from a number of separate effects caused by each connection of the KTR Project, including removal of the existing N and R routes. Chapter 17 also considers the 'intra-KTR effects' on environmental receptors as a result of the KTR Project as a whole as if it were arising from a single Section 37 Application i.e. the combined effects on a single receptor resulting from a number of separate effects.

#### **Effects Scoped Out**

- 7.16 On the basis of the desk based and survey work undertaken, application of professional judgements made by the assessment team, experience from other relevant projects and policy guidance or standards, the following topic areas have been scoped out of the assessment:
  - Effects on views and visual amenity of visual receptors beyond a 5km radius from the KTR Project, where it is judged that potential significant effects are unlikely to occur;

- Effects on the landscape character of the Study Area beyond a 3km radius from the KTR Project, where it is judged that potential significant effects on landscape character are unlikely to occur;
- Effects on designated landscapes beyond a 3km radius from the KTR Project, from where it is judged that potential significant effects on key characteristics and/or special gualities, or views are judged unlikely to occur; and
- Effects on landscape and visual receptors that have minimal or no theoretical visibility (as predicted by the Zone of Theoretical Visibility<sup>2</sup> (ZTV)) and/or very distant visibility beyond the 5km Study Area, and are therefore significant effects are considered unlikely;
- Cumulative landscape and visual effects arising during the construction phase in conjunction with other developments beyond the KTR Project connections, given the intervening distance between developments and the uncertainty of these being under construction at the same time;
- Effects arising from the physical decommissioning and reinstatement activities involved with the removal of N and R Route as detailed in Chapter 5; and
- Effects arising from the physical decommissioning and reinstatement activities involved with the relocation, including sections of undergrounding, of existing distribution infrastructure, given the scale of the infrastructure and extent of the associated activities.

#### **Guidance and Data Sources**

7.17 In summary, the LVIA has been carried out in accordance with, and with reference to the EIA Regulations and the information and principles contained in the following guidance and data sources:

#### Assessment Guidance

- Landscape Institute and the Institute of Environmental Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3<sup>rd</sup> Edition ('GLVIA3');
- Scottish Natural Heritage (SNH) (2012) Assessing the cumulative impact of onshore wind energy developments<sup>3</sup>;
- SNH (2018) A Handbook on Environmental Impact Assessment, Appendix 2: Landscape and Visual Impact Assessment, Version 5;
- SNH (2017) Visual Representation of wind farms, Version 2.2<sup>4</sup>;
- Landscape Institute Advice Note 01/11 Photography and photomontage in landscape and visual impact assessment;
- Landscape Institute (2017) Technical Guidance Note 02/17 Visual representation of development proposals<sup>5</sup>;
- The Holford Rules: Guidelines for the Routeing of New High Voltage Overhead Transmission Lines (with National Grid Company plc (NGC) 1992 and Scottish Hydro-Electric Transmission plc (SHETL) 2003 Notes);
- The Horlock Rules: NGC Substations and the Environment: Guidelines on Siting and Design (2006); and
- Landscape Institute (2019) Residential Visual Amenity Assessment (RVAA) Technical Guidance Note  $2/19^{6}$ .

#### Design and Locational Guidance

• Scottish Government (2014) Scottish Planning Policy; and

 $<sup>^{2}</sup>$  The extent of the area from which the development is potentially or theoretically visible as identified using computer modelling. Methodology for production of the ZTV mapping and visualisations based on good practice. Further details below.

 $<sup>^3</sup>$  The guidance concentrates on the particular issue of assessing the cumulative effects of wind energy development, however the methods are also useful when considering the cumulative landscape and visual effect of other forms of development.

 $<sup>^4</sup>$  The guidance relates to the production of visualisations of wind farm development, however elements of the methodology and approach are applicable for other types of development.

 $<sup>^{5}</sup>$  Visualisations prepared in accordance with the guidance listed above and detailed in Appendix 7.2: ZTV Mapping & Visualisation Methodology, prior to publication of Landscape Institute (2019) Advice Note 06/19 Photography and photomontage in landscape and visual impact assessment in September 2019.

<sup>&</sup>lt;sup>6</sup> Para. 4.7 states "when assessing effects of overhead transmissions lines, generally only those properties within 100 - 150 metres of the finalised route are potentially considered for inclusion in a RVAA".

Scottish Government (2017) Scottish Energy Strategy: The future of energy in Scotland.

#### Landscape Character

- SNH (2019) Scottish Landscape Character Types Map and Descriptions;
- LUC (1998) Dumfries and Galloway Landscape Assessment No. 94;
- Dumfries and Galloway Council (D&GC) (2017) Dumfries and Galloway wind farm Landscape Capacity Study (DGWFLCS);
- LUC (2016) Kendoon to Tongland 132kV Reinforcement Project Routeing and Consultation Document; and
- Northlight Heritage for Galloway Glens Landscape Partnership (2017) Landscape Character Assessment & Historic Environment Audit for the Galloway Glens Landscape Partnership.

#### Data Sources

- Ordnance Survey (OS) 1:10,000, 1:25,000, 1:50,000 and 1:250,000 base mapping;
- OS Terrain® 5mid-resolution and 50mid-resolution height data (DTM); and
- D&GC Planning Portal (website) and Energy Consents Unit (ECU) (website) application portal information to inform the cumulative assessment.

#### Consultation

- 7.18 An EIA Scoping Report was submitted to the ECU of the Scottish Government, in May 2017. A Scoping Opinion was received from ECU in August 2017 which included comments from statutory and nonstatutory consultees, some of which were specifically relevant to the approach and scope of the LVIA.
- 7.19 In preparing and undertaking the assessment, consideration has been given to the scoping responses and further consultation undertaken during the design and assessment phase of the EIA. D&GC, SNH and Forest Enterprise Scotland (FES)<sup>7</sup> were consulted in relation to the scope and approach to the LVIA, specifically to agree the extent of the Study Area to be used, the selection of representative assessment VPs, the approach to the CLVIA and inclusion of other developments to be considered in the assessment<sup>8</sup>.
- 7.20 A summary of all consultation undertaken is detailed in **Appendix 7.3.**

#### **Study Area**

- 7.21 An initial bare earth ZTV was prepared to inform the EIA Scoping process and presented within the Scoping Report<sup>9</sup> to establish the extent of the Study Area to be agreed with statutory consultees. The initial ZTV was based on the centre line position of the proposed OHL connections and indicative tower and wood pole positions for the steel lattice tower routes (L7c and L4 towers) and wood pole routes (Trident wood poles), with an average 250m spacing. The theoretical visibility of individual towers or wood poles was limited to a maximum distance of 10km, beyond which it is judged that the perceptibility of the proposed infrastructure would diminish considerably in most instances, and in all but the clearest of viewing conditions.
- 7.22 Informed by this initial ZTV, the type of OHL infrastructure proposed, and professional judgement, a Study Area of 5km radius from the final steel tower and wood pole<sup>10</sup> positions were agreed through consultation with statutory consultees, as detailed in **Appendix 7.3**. This was defined on the basis that at distances greater than 5km significant, effects on the physical landscape and landscape character and visual amenity are unlikely to occur. The Scoping alignment and final alignment do not differ substantially, and a 5km radius study area is still sufficient to capture all likely significant effects. A

10km radius Study Area was agreed for the consideration of potential cumulative landscape and visual effects arising in conjunction with other existing, consented and/or proposed developments<sup>11</sup>.

#### **Field Survey**

- 7.23 Extensive field survey was undertaken during the routeing phases of the KTR Project (and formerly the Dumfries and Galloway Strategic Reinforcement Project) between 2014 and 2017 providing a detailed understanding of the underlying landscape character and designated areas, the range and distribution of visual receptors and the influence of existing transmission infrastructure on the landscape and visual receptors within the Study Area.
- 7.24 Field survey was undertaken to inform the LVIA, and multiple site visits were made, under differing weather conditions, between January 2017 and April 2019. Records were made in the form of field notes and photographs. Field survey work included visits to settlements and publicly accessible locations close to residential properties, assessment VPs and designated landscapes, and extensive travel around the Study Area to consider potential effects on landscape character, and views and visual amenity as experienced from across the Study Area.

## Assessment Methodology

7.25 The LVIA and CLVIA methodology has been prepared in accordance with the principles contained within GLVIA3 and is described in detail in **Appendix 7.1**. The methodology should be referred to when reviewing the findings of this assessment to gain a clear understanding of how judgements of sensitivity and magnitude of change are made and considered in conjunction, and how the findings of significance have been informed.

#### **Overview**

- 7.26 The key steps in the methodology for assessing both landscape and visual effects are as follows:
  - A 5km radius Study Area was defined based on professional judgement and agreed through consultation with statutory consultees including D&GC and SNH;
  - The extent from which the components of the KTR Project may be visible across the Study Area was established through creation of ZTVs informed by the type and scale of steel lattice tower and trident wood pole described in **Chapter 4**;
  - The landscape of the proposed KTR Project and surrounding Study Area were analysed in terms of baseline landscape character and overall sensitivity;
  - The visual baseline was recorded in terms of the different groups of people (visual receptors) who may experience views of the KTR Project, the locations where they will experience views and the nature of these views and existing visual amenity;
  - VPs were selected to represent a broad range of views and types of viewer (receptor) likely to be affected by the KTR Project, and agreed through consultation with statutory consultees including D&GC and SNH;
  - Potentially significant effects, including potential cumulative effects, on landscape and visual receptors were identified;
  - The significance of landscape and visual effects was assessed with reference to the sensitivity of the resource/receptor (including a consideration of both its susceptibility and value) and the magnitude of change (including a consideration of the size/scale, geographical extent, duration and reversibility of effects); and

<sup>&</sup>lt;sup>7</sup> From April 2019 Forest Enterprise Scotland (FES) became Forestry and Land Scotland, however reference is made in this chapter to FES as this was the body present during the consultation process.

<sup>&</sup>lt;sup>8</sup> A cut-off date of 27<sup>th</sup> April 2020 was applied for the inclusion of other developments within the cumulative assessment.

<sup>&</sup>lt;sup>9</sup> The Kendoon to Tongland Reinforcement Project Environmental Impact Assessment: Scoping Report (April 2017) LUC on behalf of SP Energy Networks.

<sup>&</sup>lt;sup>10</sup> Despite the smaller scale and reduced perceptibility of wood pole transmission infrastructure over distance the same 5km radius Study Area was used for the purposes of the assessment of each of the individual KTR Project connections and the KTR Project as a whole, for consistency. <sup>11</sup> Other developments considered in the cumulative assessment are limited to other electricity transmission infrastructure, wind farms and single wind turbines and other large scale built developments which may have the potential to result in significant effects on landscape or visual receptors, either in isolation or in combination with the proposed development.

Mitigation measures to avoid, reduce or mitigate identified likely effects of the KTR Project, including cumulative effects, were identified and the likely residual effects were assessed.

#### **Assessing Significance**

- 7.27 The assessment of landscape and visual effects considers both the sensitivity of the landscape or visual receptor and the magnitude of effect. Appendix 7.1 provides full details of the criteria considered in judging the identified aspects of sensitivity (combining judgements of susceptibility and value) and magnitude of change (combining judgements of size/scale, geographical extent, duration and reversibility), and the grades used to describe each. It explains how these judgements are combined to make an informed professional judgment on the significance of each landscape and visual effect (see a diagrammatic indication of the process in GLVIA3 - Figure 5.1, Page 71 and Figure 6.1, Page 99).
- 7.28 In relation to the consideration of both the duration and reversibility, when determining the overall magnitude of effect, the duration of construction effects is judged to be short-term (generally lasting zero to five years). Operational effects are judged to be long-term (generally lasting five to 80 years<sup>12</sup>) unless otherwise stated, and as detailed in the specific assessment sections below. Temporary effects occurring during the construction phase are generally judged to be reversible or partially reversible, following the removal of construction related ancillary development and reinstatement activities reversing temporary disturbance. Effects arising during the operational phase are judged to be irreversible and will remain throughout the life of the KTR Project infrastructure.
- 7.29 The level (and significance) of landscape and visual effects are judged with reference to the sensitivity of the receptor (alternatively referred to as the nature of the receptor), and the magnitude of effect (or change) (alternatively referred to as nature of the effect). These are those expected as a result of the works associated with each proposed connection forming part of the KTR Project and removal of the N and R Routes, both individually and cumulatively, as well as the KTR Project as a whole and in combination with other developments.
- Levels of landscape or visual effect are identified as **none**, **minor**, **moderate** or **major**. '**Moderate**' and 7.30 'major' effects are considered significant in the context of the EIA Regulations. Effects are considered to be adverse, unless otherwise stated.
- 7.31 This determination requires the application of professional judgement and experience to balance the many different variables which need to be considered, and which are given different weight according to site-specific and location-specific considerations. Judgements of the potential landscape and visual effects which may arise from the KTR Project, either individually or cumulatively when considered in combination with other existing, consented or proposed developments, are made on a case by case basis, guided by the principles set out in **Diagram 1** in **Appendix 7.1** and the typical descriptions/definitions as detailed in Table 7-1 below.

#### Table 7-1: Levels of Effect and Significance

Significance of Effect	Receptor	Description/Definition
Major	Landscape	The proposed development will result in an obvious change in landscape features and character, and is likely to affect a landscape with a moderate or high susceptibility to that type of change. This level of effect may also occur when a medium scale of effect acts on a nationally valued landscape. The effect is likely to be long-term and affect a relatively large area.
	Visual	The proposed development will result in an obvious change in view and is likely to affect a visual receptor with a moderate or high susceptibility to that type of change. This level of effect may also occur when a medium scale of effect acts on a nationally valued view and/ or a high susceptibility receptor.

Significance of Effect	Receptor	Description/Definition
		The effect is likely to be lo large number of people.
	Landscape	The proposed developmen characteristics and charac susceptibility to that type This level of effect may al widely valued landscape, a more local level.
Madamata		This level of effect may al relatively short period or a
Moderate		The proposed developmen to affect a viewer with a r locally valued view.
	Visual	This level of effect may al susceptibility receptor or effect acting on a lower so This level of effect may al
		relatively short period or
Minor	Landscape	The proposed developmen and character over a long This level of effect may al duration or confined to th
Minor	Visual	The proposed developmen duration and is likely to a This level of effect may al duration or is confined in
None	Landscape	The proposed developmen change in landscape chara
	Visual	The proposed developmen change in views or visual

#### **Assessment Assumptions**

- 7.32 Based on the proposed construction programme set out in **Chapter 5**, the assessment of landscape and visual effects arising from the KTR Project takes account of the sequence of construction and decommissioning/removal activities. It considers the implications this has for the baseline situation for each individual connection forming part of the KTR Project, including removal of N Route and R Route (north and south), and the KTR Project as a Whole.
- 7.33 As a consequence, a number of assumptions in relation to the baseline situation for the assessment of each individual connection and KTR as a Whole have been made, to reflect the 'maximum case effect' for each phase of the relevant assessment.
- 7.34 In the assessment of each the connection, comprising the KTR Project this 'maximum case effect' scenario, considers the point in time within both the construction phase and operational phase when associated activities, and the presence of other infrastructure is considered likely to give rise to the greatest magnitude of change (either in isolation or cumulatively) and therefore the highest level of potential landscape and visual effect. The assumptions below were made in this respect, when considering the assessment of each individual connection comprising the KTR Project, unless otherwise stated in the relevant assessment section.

long-term and affect a relatively large area or relatively

- ent will result in a noticeable change in landscape cter and is likely to affect a landscape with a moderate of change.
- also occur when a smaller scale of effect acts on a more or a larger scale of effect acting on a landscape valued at
- also occur when a large scale of effect occurs over a over a small area.
- ent will result in a noticeable change in a view and is likely moderate susceptibility to that type of change and/ or
- also occur when a smaller scale of change acts on a higher affects a large number of people, or a larger scale of susceptibility receptor or affecting fewer people.
- also occur when a large scale of effect occurs over a over a small area/ affects few people.
- ent will result in a small change in landscape characteristics a-term duration.
- also occur when a larger scale of effect is of short-term he site.
- ent will result in a small change in view over a long-term affect a smaller geographic extent and/ or fewer people. also occur when a larger scale of effect is of short-term its geographical extent.
- ent will not result in a noticeable (barely perceptible) racteristics/character.
- ent will not result in a noticeable (barely perceptible) amenity.

<sup>&</sup>lt;sup>12</sup> Based on the length of time the existing transmission infrastructure (N Route and R Route) has been present and the predicted likely lifespan of the proposed infrastructure.

#### Construction Phase

- All KTR Project connections, which are mutually exclusive of one another (i.e. the construction of one connection does not require the prior introduction of another)<sup>13</sup> are present;
- All existing connections (i.e. N Route and R Route), which are mutually exclusive of the proposed new connections (i.e. the construction of one connection does not require the prior decommissioning and removal of another) are present; and
- All other existing transmission infrastructure not forming part of the KTR Project is present (e.g. BG Route, S Route etc. as shown on **Figure 3.1**).

#### **Operational Phase**

- All KTR Project connections are present;
- The existing distribution infrastructure to be undergrounded or relocated as part of the KTR Project has been undergrounded (as shown on **Figure 4.12**);
- All existing infrastructure to be removed as part of the KTR Project (i.e. N Route and R Route) has been decommissioned and removed;
- The additional areas of windthrow felling outside the wayleave corridor have been replanted in accordance with the approach set out in Chapter 5, and detailed in paragraph 7.68 and paragraph 7.70 below; and
- All other existing transmission infrastructure not forming part of the KTR Project (i.e. BG Route, S Route etc. as detailed in **Table 7.3**) is present.

#### Cumulative Operational Phase

- All KTR Project connections are present;
- All existing infrastructure (i.e. N Route and R Route) has been decommissioned and removed;
- The existing distribution infrastructure to be undergrounded as part of the KTR Project has been undergrounded (as shown on Figure 4.12); and
- All other developments listed in Table 7-3 and Table 7-4 are present.

#### 7.35

- 7.36 Table 7-2 sets out how the assessment of landscape and visual effects for each KTR Connection is presented, including cumulative effects in the presence of all other KTR Connections and other consented or proposed developments listed in Table 7-3 and Table 7-4.
- 7.37 For the avoidance of doubt, the assessment of both construction and operational effects considers the magnitude of landscape or visual change and associated effects arising from that of the pre-existing baseline situation which includes the existing N Route and R Route (north and south), and the existing distribution infrastructure to be undergrounded as part of the KTR Project.
- 7.38 In some instances, potential landscape and visual effects arising from the introduction of the KTR Project may not be attributed to one particularly connection in isolation, and therefore the same effects may be assessed in relation to more than one connection. For example, where two proposed new connections of the KTR Project are to be introduced within the same wayleave corridor, the necessary felling of woodland and adjacent additional felling of woodland at risk of windthrow, and the same resultant landscape and visual effects may be attributed to each individual connection within the assessment (e.g. P-G via K and C-K, P-G via K and E-G, and BG Deviation and G-T). Where this is the case, these predicted effects are considered collectively when considering the effects of the KTR Project as a Whole.

#### Table 7-2: Example Assessment Table for Landscape or Visual Effects

Example Assessment Table for Landscape or Visual Effects						
Landscape or Visual Receptor	Sensitivity	Magnitude of Change and Significance of Effects - Construction Phase	Magnitude of Change and Significance of Effects - Operational Phase	Magnitude of Change and Significance of Cumulative Effects		
Receptors identified for assessment set out in <b>Appendix</b> 7.4 and <b>Appendix</b> 7.5.	Judgements of sensitivity set out in <b>Appendix</b> 7.4 and <b>Appendix</b> 7.5.	Magnitude of landscape or visual change arising from construction (short- term) of proposed KTR Connection, in the presence of the existing N and/or R Route (north and/or south). All construction activities associated with proposed KTR Connection assumed to be present concurrently, unless otherwise stated. Judgement on the magnitude of landscape or visual change, and the level and significance of the likely landscape or visual effect.	Magnitude of landscape or visual change arising during operation (long- term) of the proposed KTR Connection, after construction activities and all reinstatement works have been completed and following decommissioning and removal of existing N and/or R Route. All other proposed KTR Connections assumed to be present in operational phase, unless otherwise stated. Judgement on the magnitude of landscape or visual change, and the level and significance of the likely <u>landscape or</u> visual effect.	Effects arising during operation (long-term) of the proposed KTR Connection, in the presence of all other proposed KTR Connections, <b>and all</b> other developments listed in <b>Table 7-3</b> and <b>Table 7-4</b> . Judgement on the <u>cumulative</u> <u>magnitude of landscape or visual change</u> , and the <u>level</u> and <u>significance</u> of the likely <u>cumulative landscape or visual</u> <u>effect</u> .		

#### **Assessment Limitations**

- 7.39 In accordance with Part 1 of Schedule 4 of the EIA Regulations, the EIA Report should state where any technical deficiencies have arisen. No substantial information gaps have been identified during the preparation of baseline information or undertaking of the assessment, and it is considered that there is sufficient information to enable an informed decision to be taken in relation to the identification and assessment of likely significant effects on landscape, views and visual amenity.
- Whilst no information gaps have been identified, consideration was given and assumptions made as to 7.40 the current and future baseline situation in relation woodland cover and commercial forestry found across the Study Area for the LVIA. Due to the ever-evolving nature of commercial forestry, it is acknowledged that the existing baseline is likely to change throughout the operational lifespan of the KTR Project, informed by the current Forest Management Plans which cover the immediate future situation (c.ten years). As such, the effects identified for landscape and visual receptors may vary throughout the operational lifespan of the KTR Project. Where this can be predicted (e.g. where there are intervening areas of existing or proposed commercial forestry which may currently screen or heavily filter views of the proposed connections of the KTR Project), consideration is given to how these effects may predictably change over time as a consequence of forestry/woodland removal or establishment.

#### **ZTV** Mapping, Visualisations, and 3D Modelling

7.41 The methodology for the production of the ZTV mapping and visualisations was based on current good practice guidance as set out by SNH and the Landscape Institute. Detailed information about the approach to VP photography, and ZTV and visualisation production is provided in **Appendix 7.2**.

<sup>&</sup>lt;sup>13</sup> This scenario specifically relates to where the construction of a particular KTR Project connection(s) is reliant on a specific sequence of decommissioning and construction activities i.e. in the instance of the C-K connection, construction of P-G via K and decommissioning of the existing R Route connection are necessary to allow construction of the C-K connection. However, for consistency and simplicity the assessment

assumes all construction activities will occur concurrently and for the entirety of the construction phase, representing the maximum case construction phase scenario

7.42 Accompanying visualisations are presented as Figure 7.21 to Figure 7.52 contained in Volumes 4 - 6 of the EIA Report and have been prepared in accordance with the methodology set out in Appendix 7.2.

## Future Baseline in the Absence of the Development

7.43 In the absence of the KTR Project it is likely that the land will continue under the same land use, and the character of the Study Area is therefore unlikely to change notably. The landscape and visual amenity of the Study Area is likely to continue to be influenced by a number of 'forces of change'. Forces for change are those factors affecting the evolution of the landscape and which may, consequently, affect the perception of the Study Area in the near or distant future, although prediction of these is necessarily speculative based on professional judgement, those of particular relevance are discussed briefly below.

#### **Other Changes to Electricity Transmission Network**

7.44 Further reinforcement and extension of the electricity transmission network, predominantly to connect further renewable energy generation, is likely to occur within the vicinity of the KTR Project, and there is current evidence of this both within the 50km radius Study Area used for the LVIA and 10km radius Study Area used for the consideration of cumulative landscape and visual effects. **Figure 3.1** illustrates the location of the existing and proposed electricity transmission network within the Study Area<sup>14</sup>.

#### **Renewable Energy Development/Deployment**

7.45 Deployment of onshore wind farm development is an ongoing force for change across the Study Area, and Dumfries and Galloway more widely, and is likely to continue. Figure 3.1 illustrates the location and extent of operational, consented and proposed wind farms<sup>14</sup> within the wider Study Area. In addition, there are an increasing number of operational, consented and proposed domestic wind turbines of varying heights and rotor diameters located across the surrounding agricultural landscape. As farmers diversify income and seek opportunities to generate energy for domestic and commercial use, it is likely that interest in this type of development will continue.

#### **Afforestation and Deforestation**

7.46 Land dedicated to commercial forestry covers a substantial proportion of the Study Area, including large extents of the Galloway Forest Park managed by Forestry and Land Scotland (FLS). A degree of certainty as to the rotational felling and replanting of particular areas of coniferous forest within the Study Area is provided by current Forest Management Plans, however there is also potential for felling and replanting plans to change in respect of both timing and extents due to the introduction of other potential developments, unforeseen circumstances and events.

#### **Changes in Agricultural Land Use**

7.47 In certain parts of the Study Area, agriculture continues to represent the dominant land use, predominantly focused on the rearing of cattle and sheep and dairy farming, with some evidence of arable farming in the low-lying southern extents of the Study Area. It is expected that this will continue, and there is evidence that consolidation of farming operations to a smaller number of larger farms is occurring across Dumfries and Galloway leading to development of new agricultural buildings and infrastructure within the landscape.

#### **Implications of Climate Change**

- 7.48 Qualitatively, the UKCP18<sup>15</sup> projects the following for Dumfries and Galloway:
  - an increase in summer and winter temperatures;
  - an increase in dry spells, particularly in summer months;
  - an increase in winter rainfall; and

- an increase in wind speeds, including an increase in the frequency of winter storms.
- 7.49 A number of the above 'forces for change' are likely to occur as a consequence of climate change, and man-made responses to climate change. Of particular relevance to the landscape resource, changes in soils and vegetation, the form and distribution of agricultural land use and forestry, and the form of rivers and floodplains are likely to lead to potential physical and perceptible long-term and often irreversible changes in the landscape.
- 7.50 The deployment of further renewable energy generation development (e.g. hydroelectric power and onshore wind energy) as part of the man-made decarbonisation of the energy system is a likely consequential response to climate change. This is likely to lead to further perceptibility of renewable energy development across the Study Area, and Dumfries and Galloway more widely, and although the presence of wind energy development is often highly perceptible due to its nature, scale and location, changes in the landscape and views are largely reversible.
- 7.51 The assessment of landscape and visual effects arising from the introduction of the proposed KTR Project presented in this chapter is not anticipated to change in the event that the climate change projections set out above occur during the lifetime of the project. There is potential for future cumulative landscape and visual effects to occur in relation to the deployment of further renewable energy generation development within the Study Area, however the contribution of the KTR Project (individual connections and/or collectively) will not change from the effects presented in this assessment.

## Consideration of Alternatives

- 7.52 Potential alternative options for each individual connection of the proposed KTR Project were considered during the routeing and consultation process detailed in **Chapter 2**, including comparative appraisal to determine the preferred option for each connection considering economic, technical and environmental considerations.
- 7.53 Potential alternatives were explored for each of the connections comprising the proposed KTR Project. These included alternative solutions in the form of Re-stringing the Existing N and R Route OHLs, and Undergrounding, as well as alternative technologies in the form of twin Trident wood poles and the T-Pylon.
- 7.54 Underground cable options were considered as an alternative to the proposed OHL connections and the locations which emerged during the three rounds of pre-application consultation which were undertaken as part of the KTR Project. In each instance, the identification of these route sections for potential undergrounding was linked to concerns raised by stakeholders in respect of potential landscape and visual effects arising from the introduction of an OHL solution. SP Energy Networks (SPEN) commissioned a comprehensive comparison of underground and overhead options, to consider the technical, economic and environmental differences between an OHL and underground cable. The full report can be found here: https://www.spenergynetworks.co.uk/pages/dumfries galloway project documents.aspx
- 7.55 Following the consideration of these alternatives, SPEN concluded that proceeding with an OHL solution for each of the six connections comprising the KTR Project, is a conclusion which remains consistent with the overall KTR routeing objective.

## Infrastructure Location Allowance

- 7.56 A micrositing tolerance or Infrastructure Location Allowance (ILA) of 50m is proposed for all infrastructure components of the KTR Project as described in Chapter 4.
- 7.57 The assessment considers the potential change in landscape or visual effects which may occur as a consequence of the micrositing of permanent components of the KTR Project (e.g. steel lattice towers and wood pole infrastructure). This micrositing allowance has been considered in the assessment of a

 $<sup>^{14}</sup>$  Based on publicly available data accurate on  $\rm 27^{th}\,April$  2020.

<sup>&</sup>lt;sup>15</sup> UK Climate Projections (2019) [online], available at: http://www.metoffice.gov.uk/research/collaboration/ukcp Accessed August 2019

maximum case effect scenario and is unlikely to result in a change in the landscape or visual effects identified in the assessment for most receptors, however, in some instances where the relocation of steel lattice towers or wood pole infrastructure in close proximity to residential properties (high sensitivity receptors) may lead to an increase in the level of visual effect to those identified in the assessment, and potentially lead to additional significant visual effects a specific constraint on the micrositing of towers or poles has been adopted.

7.58 It is proposed that any micrositing of steel lattice towers (P-G via K, BG Deviation and G-T) or wood pole (C-K and E-G) infrastructure located in relative proximity (within 200m) to highly sensitive receptors (e.g. residential properties) are not microsited any closer to the relevant properties if at all possible.

## Embedded Mitigation Measures

- As explained in **Chapter 2**, the main strategy for minimising adverse environmental effects of the KTR 7.59 Project has been avoidance through careful routeing. The embedded mitigation measures forming an integral part of the KTR Project are set out in Chapter 3, and Chapter 5 and Appendix 5.2: Embedded and Additional Mitigation and Monitoring Measures of the EIA Report.
- 7.60 **Chapter 3** details the approach to mitigation and good practice measures which have been considered as part of the EIA process. Mitigation has been recognised throughout the EIA in two ways:
  - Embedded mitigation items that are embedded through the design of the KTR Project, and those which will be delivered during the construction process; and
  - Additional mitigation items that are further required to mitigate the likely adverse effects of the KTR Project and which will be implemented to avoid, reduce or offset these effects identified.
- 7.61 The assessment of landscape and visual effects has been undertaken on the basis that the embedded mitigation forms an integral part of the KTR Project. The measures which form the embedded mitigation to be implemented during the construction process are, by their nature, ones which are well understood, and for which there is a high degree of confidence as to their effectiveness. Mitigation measures to address localised site/issue specific likely adverse effects are detailed in the schedule of embedded and additional mitigation found in **Appendix 5.2**.
- 7.62 Whilst mitigation of potential landscape and visual effects has been embedded through the design process, specific additional mitigation measures may also be proposed to prevent, reduce and offset likely adverse landscape and visual effects which could not be avoided through design. These additional mitigation measures have been identified where relevant through the assessment process, and in line with the statutory duty imposed on SPEN under Schedule 9 of the Electricity Act 1989<sup>16</sup>.
- Where no additional mitigation measures are identified in response to specific adverse significant 7.63 landscape or visual effects, this is due to the nature of the effects identified and the limitations for further potential mitigation (e.g. the scale of the proposed infrastructure negates the feasibility to screen potential views).

#### **Construction Phase Mitigation**

- 7.64 Mitigation measures which will be delivered during the construction process are detailed in **Chapter 5** and Appendix 5.2, including an example Construction and Decommissioning Environmental Management Plan (CDEMP) presented in Appendix 5.4: Example Environmental Management Plan.
- 7.65 A number of embedded mitigation measures will be adopted to avoid or minimise effects occurring during construction and avoid long term effects persisting following completion of all post construction restoration activities.

7.66 All embedded mitigation of potential landscape and visual effects arising from the construction phase of the KTR Project, such as the protection of vegetation during construction and the restoration of disturbed areas after construction will be detailed in the CDEMP.

#### **Operational Phase Mitigation**

#### Undergrounding of Distribution Infrastructure

- 7.67 Existing distribution infrastructure will be relocated as part of the enabling works to facilitate the construction of the proposed KTR Project. Where the existing distribution infrastructure is located in close proximity to more than one of the proposed KTR Project connections, e.g. between Polquhanity and Glenlee (where the C-K and E-G connections will be located in parallel with the P-G via K connection) the opportunity for these overhead transmission and distribution lines or varying scales to contribute to cumulative landscape and visual effects, and the creation of potential 'wirescape' in views was considered.
- 7.68 In collaboration with SPEN, and with reference to the SHETL 2003 Notes on Rule 7 of the Holford Rules Error! Bookmark not defined., opportunities to underground the lowest voltage distribution lines were explored and resulted in the proposed undergrounding of a number of existing overhead distribution lines (currently supported by wood pole infrastructure) between Polguhanity Terminal Tower location and Glenlee substation. The alignment of the proposed underground cable routes is shown on Figure 4.12, and the assessment of landscape and visual effects assumes that these undergrounding cable works, and any associated reinstatement works have been completed prior to the main KTR Project construction activities commencing<sup>17</sup>. This mitigation is considered as an embedded mitigation measure within the assessment.

### Replanting of Areas of Felled Woodland (Windthrow Areas)

- 7.69 A number of areas of proposed tree felling, out with the proposed wayleave have been identified for semi-mature and mature forest judged to be vulnerable to potential windthrow risk. These are detailed in Chapter 5 and Chapter 8 and shown on Figure 5.2. In some instances, the removal of this existing semi-mature or mature forestry may contribute to additional landscape effects, and/or result in a change in potential views towards the proposed KTR Project for visual receptors. The assessment of operational landscape and visual effects therefore considers the maximum case effects arising from the introduction of the KTR Project in the context of this additional felling and assumes that all felling would take place as part of the operations to create the required wayleave for the KTR Project. This maximum case effect is illustrated in the relevant VP visualisations where these areas of forestry felling to mitigate windthrow risk are evident.
- 7.70 The felling of these areas will potentially lead to an increase in the magnitude of effects on landscape and visual receptors, however these areas of forestry lost due to windthrow will be restocked in line with the Forestry and Land Management (Scotland) Act 2018 ("2018 Act") and associated regulations<sup>18</sup>. SPEN has no mechanism to control felling and replanting/restocking within the areas vulnerable to windthrow, however the felling of these areas would require the agreement of the relevant landowners and would be delivered in line with conditions of a felling permission to be applied for by the landowner and granted by the Scottish Forestry (SF<sup>19</sup>) on behalf of the Scottish Ministers. The assessment of operational effects therefore considers both the effects arising prior to the restocking of these areas of windthrow felling, and the residual effects arising following restocking and establishment of these areas to a similar condition (in terms of species and composition<sup>20</sup>) during the operational life of the KTR Project. More detail of the approach to the restocking of these areas is provided in **Chapter 8**, and **Appendix 5.1**: Forestry Design Concept where the areas of restocking are shown on Figure 2.1 to Figure 2.3. These areas area expected to be replanted two and five years post-felling, and the replanting is considered as an additional mitigation measure (as the replanting will either be delivered voluntarily by the landowner or through powers exercised by SF) and is presented as such within the assessment.

<sup>&</sup>lt;sup>16</sup> Schedule 9 of the Electricity Act 1989, para 3(1) states (amongst others) that in formulating any relevant proposals, a licence holder shall '( do what it reasonably can to mitigate any effects which the proposals would have on the natural beauty of the countryside or any such flora, fauna, features, sites, buildings or objects.

<sup>&</sup>lt;sup>17</sup> Works to relocate sections of the electricity distribution network underground will be delivered as ancillary development to the KTR Project as detailed in Chapter 4.

<sup>&</sup>lt;sup>18</sup> The Felling (Scotland) Regulations 2019.

<sup>&</sup>lt;sup>19</sup> As of the 1<sup>st</sup> of April 2019 Forestry Commission Scotland, as the statutory forestry authority, changed its name to Scottish Forestry (SF). <sup>20</sup> SF normally expect an area which has been clear felled to be restocked and will normally attach what is referred to as a continuing condition to felling permissions to secure the restocking (see Chapter 8: Forestry for details).

7.71 Where the restocking of these areas of windthrow felling results in potential change in the residual effects identified in the assessment, additional visualisations have been prepared to illustrate the resultant change in views. The approach to the modelling and presentation of this replanting in the accompanying visualisations is detailed in **Appendix 7.2**.

Green Networks Scheme (GNS)

- 7.72 Appendix 5.1: Forestry Design Concept sets out SPEN's approach to delivery of green networks for the KTR Project, which will be agreed with stakeholders once the applications for section 37 consent and deemed planning permission for the component parts of the KTR Project have been determined by the Scottish Ministers. The overall aim of the KTR Green Networks Scheme (GNS) will be to promote and secure additional schemes of environmental mitigation within the areas and communities affected by the OHLs, and likely to comprise areas within 1-2km of the proposed OHLs, where schemes can be expected to provide landscape mitigation linked to the KTR Project which maximises benefits for communities.
- 7.73 Schemes which focus on landscape and visual enhancement will be encouraged, such as:
  - Additional forestry and woodland planting (hedgerows/shelterbelts/screening of the overhead lines);
  - Planting around and within settlements;
  - Integrated habitat networks; and
  - Greenspace improvements.
- 7.74 As these potential measures, which may deliver further mitigation of landscape and visual effects, will be devised and developed post-consent no certainty can currently be attached to their potential delivery which will be contingent on negotiation and agreement with communities and third-party landowners. As such, no mitigation measures which may be proposed and developed through the GNS have been considered in the assessment.

## Existing Conditions – Landscape Baseline

- 7.75 The KTR Project is situated wholly within Dumfries and Galloway and covers a linear area, running broadly north to south from Polguhanity (approximately 3km to the north of the existing Kendoon substation), to the existing substation at Tongland (approximately 1.5km to the north of Kirkcudbright).
- 7.76 **Appendix 7.4** details the baseline conditions in relation to landscape, including existing landscape character types and designated landscapes within the Study Area. It also includes commentary on existing landscape condition and judgement on landscape sensitivity, with reference to both susceptibility and value, with specific reference to the proposed components of the KTR Project.
- 7.77 The landscape of the Study Area is defined by the SNH National Landscape Character Assessment (2019), a national dataset of 389 Landscape Character Types (LCTs), and LCTs within 5km of the KTR Project are illustrated on **Figure 7.7**. The assessment of landscape effects is based on these LCTs, however where relevant, reference is made to additional detail provided by the Local Landscape Areas (LLAs) defined by The Landscape Character Assessment & Historic Environment Audit for Galloway Glens Landscape Partnership (2017)<sup>21</sup>, shown on **Figure 7.8** which was reviewed and verified during field survey.
- 7.78 Designated landscapes and protected areas (the Galloway Forest Park, Dark Sky Park and Galloway and South Ayrshire Biosphere)<sup>22</sup> within the Study Area are shown on **Figure 7.6**, and on **Figure 7.7** and Figure 7.8 in relation to the underlying LCTS and LLAs. Theoretical visibility across the LCTs and designated landscapes within the Study Area is indicated on **Figure 7.9**.
- 7.79 There are a number of existing high voltage overhead transmission lines located within the Study Area. These include the existing 132kV network between Polguhanity and Tongland via Glenlee (N Route and R Route) which will be removed following commissioning of the new KTR Project OHLs. Other existing OHL connections include the 132kV network between Glenlee and Glenluce (BG Route) which will be subject

The Kendoon to Tongland 132kV Reinforcement Project

to minor deviation as part of the KTR Project (BG Deviation). The 132kV network between Polguhanity and Dalmellington (the southernmost extents of the South West Scotland Connections Project), and the 132kV network between Tongland and Dumfries ('S' Route). The deployment of renewable energy developments within the upland areas surrounding the Glenkens Valley required associated electricity transmission infrastructure to provide connection of these generation stations to the wider electricity transmission network, including the 132kV connection between Blackcraig and Margree wind farms and Polguhanity terminal tower. Figure 1.3 illustrates the location of the existing electricity transmission network within the Study Area.

7.80 **Figure 7.1** shows the location of the existing 132kV network, including the points of connection and the existing network which will be removed as a result of the KTR Project, outlined in **Chapter 1**: Introduction and Chapter 4.

## Existing Conditions – Visual Baseline

- 7.81 The Study Area includes much of the central and southern extents of the Glenkens Valley and includes the settlements of St John's Town of Dalry, New Galloway, Crossmichael, Kirkcudbright and the smaller communities of Dundeugh, Kendoon, Glenlee, Mossdale, and Laurieston. The public road network includes the A713 which runs north to south along the Glenkens Valley between Polguhanity in the north and Castle Douglas in the south, passing through the settlements of St John's Town of Dalry, New Galloway and Crossmichael. The A762 runs south along the lower western slopes of the valley between Earlstoun and Ringford, linking the A713 and the A75 and passing through the settlement of New Galloway. The A712 crosses the valley between Balmaclellan in the east and New Galloway to the west, before continuing westwards into the Galloway Forest Park. To the south of the Study Area the A75 crosses from east to west and acts as a key arterial road between the towns of Dumfries and Stranraer. South of the A75 the A762 and A711 link the A75 with Kirkcudbright via the small settlement of Tonaland.
- 7.82 **Appendix 7.5** details the baseline conditions in relation to views and visual amenity, including the distribution of different visual receptor (people) groups across the Study Area, as well as commentary on existing views and judgement on visual receptor sensitivity, with reference to both susceptibility and value, with specific reference to the proposed components of the KTR Project.
- 7.83 A total of 32 assessment VPs were selected through desk study, site work and consultation. The selection of assessment VPs is detailed in Appendix 7.3, including details of consideration of VP location suggestions made by consultees but not included in the LVIA. All assessment VPs are located in publicly accessible locations and are shown on Figure 7.10 and Figure 7.11.

### **Analysis of Theoretical Visibility**

- 7.84 ZTV mapping has been undertaken to illustrate theoretical visibility of both the existing transmission network to be removed (N Route and R Route) and the proposed new KTR Project OHL connections. The ZTVs have been prepared to inform the identification of visual receptors for consideration in the LVIA and are based on the steel lattice tower and Trident wood pole OHL infrastructure as described in Chapter 4.
- 7.85 'Bare earth' ZTVs have been prepared, with visibility of individual steel lattice towers and wood poles limited to a maximum distance of 10km as agreed with D&GC and SNH and detailed in Appendix 7.3. The methodology applied for the production of ZTV mapping is set out in detail in **Appendix 7.2**.

#### Existing Infrastructure ZTVs

7.86 Theoretical visibility of the existing N Route and R Route (north) between Kendoon substation and Glenlee substation is indicated by the ZTV coverage illustrated on **Figure 7.4.1** to **Figure 7.4.2**. Theoretical visibility of the existing R Route (south) between Glenlee substation and Tongland substation is illustrated on Figure 7.4.3 to Figure 7.4.6.

<sup>&</sup>lt;sup>21</sup> Galloway Glens Landscape Partnership (2017) Landscape Character Assessment & Historic Environment Audit for Galloway Glens Landscape Partnership

<sup>&</sup>lt;sup>22</sup> Protected areas may have some regard for landscape or scenic quality underpinning their protection or designation but are not formally designated solely for the purposes of landscape protection and/or enhancement.

#### N Route (between Polguhanity Terminal Tower and Kendoon substation) and R Route (North, between Kendoon substation and Glenlee substation)

Figure 7.4.1 to Figure 7.4.2 indicate relatively widespread theoretical visibility of the existing steel lattice towers of N Route within 5km, with areas of limited visibility to the north associated with the elevated landform of Bardennoch Hill (330m Above Ordnance Datum (AOD)) and the lower lying Water of Deugh. Actual visibility is limited by the valley landform through which existing N Route passes, including Dundeugh Hill (271m AOD) in the east and Barlae Hill (194m AOD). The slopes and summits of both hills have a land cover of existing conifer forest which further screens and filters views of the route. Close proximity views (within 1km) of existing steel lattice towers and OHLs are experienced from the A713 (Galloway Tourist Route), the small settlements of Dundeugh and Kendoon, and a number of individual properties and farmsteads located between Polguhanity and Kendoon. Longer distance views of the existing steel lattice towers are gained from elevated positions to the east and west, including from the B7000 which traverses the eastern slopes of the valley north-south. Pockets of limited visibility associated with lower lying watercourses including Polharrow Burn and Glenlee Burn in the west, and Black Water and Trolane in the east. Close proximity views of the existing steel lattice towers and OHLs are often limited by valley landform and screened or heavily filtered by mixed woodland when experienced in views from the A713 between Kendoon and Glenlee. Similar views between these locations are gained from recreational routes and Core Paths including the Southern Upland Way, the settlements of St John's Town of Dalry, the smaller communities of Kendoon and Glenlee, and a number of individual properties and farmsteads. Longer distance views are gained from the elevated valley sides including the B7000, less than 1km east of R Route at its closest point near Kendoon.

#### *R* Route (South, between Glenlee substation and Tongland substation)

- Figure 7.4.3 to Figure 7.4.6 indicate widespread theoretical visibility of the existing steel lattice towers of the southern section of R Route between Glenlee and to the west of Crossmichael where the route crosses the River Dee at the southern extent of Loch Ken. The existing towers are evident as it crosses the Glenkens Valley south-west of St John's Town of Dalry before ascending the eastern slopes of the valley and traversing the undulating drumlin pastures found along the eastern flanks of the valley. Limited woodland cover results in views of steel lattice towers from elevated positions, the lower settled areas of the valley and from the settlements of St John's Town of Dalry, Balmaclellan, New Galloway and Crossmichael. Further south the OHL runs in close proximity to the A713 with towers visible in sequential views from the road, nearby residential properties and farmsteads, and in views from across and neighbouring Loch Ken. From the A762 and promoted recreational areas on the western side of the loch, the existing towers can often be seen skylined in longer distance views eastwards across the valley.
- South of the crossing of Loch Ken, approximately 1km north of Crossmichael, the existing OHL passes through drumlin pastures with extensive visibility of towers possible across much of the lowlying farmland which is dissected by a network of minor roads, with blocks of deciduous and coniferous woodland providing some screening and filtering of towers in wider views across the landscape. The route crosses the A75 east of Ringford where the towers are evident in sequential views experienced from the road, before ascending onto the plateau of elevated ground between the River Dee valley (and A711) to the east and the Tarff Water Valley (and A762) to the west. Widespread theoretical visibility is indicated by the ZTV however views from these valleys to the east and west are largely restricted by the presence of woodland cover along the A711 and A762 respectively. However, views of towers crossing the elevated skyline of the plateau are possible from elevated areas which enclose the valleys to the east and west.

#### **Comparative ZTVs**

7.87 The ZTVs shown on **Figure 7.5.1** to **Figure 7.5.6** illustrate the potential theoretical visibility of the new OHLs comprising the KTR Project in comparison with the existing N Route and R Route. The ZTVs illustrate locations where the existing N Route and/or R Route only are seen (areas shown in yellow), the proposed new OHLs of the KTR Project only are potentially visible (areas shown in blue) and where the existing and proposed connections may potentially be seen in combination (areas shown in purple).

to Glenlee

- 7.88 Comparative theoretical visibility of the existing N Route and R Route (north) which will effectively be replaced by the proposed P-G via K, C-K and E-G connections is illustrated on Figure 7.5.1 and Figure 7.5.2.
  - The ZTV indicates very limited additional theoretical visibility of transmission infrastructure from the introduction of the proposed new KTR Project connections (P-G via K, C-K and E-G), to the south of Bardennoch Hill, north of Polharrow Burn and some elevated locations to the east including around Glenshimmeroch (shown in blue).
  - Some limited additional theoretical visibility of transmission infrastructure is also indicated west of Waterside Hill within the narrow-wooded valley of Garroch Burn north of Glenlee.
  - The general pattern of theoretical visibility across the Study Area remains largely consistent with that result of the introduction of the proposed steel lattice towers of the proposed P-G via K connection, with the wood pole infrastructure of the proposed C-K and E-G often appearing in combination with this connection and inferior in both scale and perceptibility over distance.
  - be removed following their decommissioning are illustrated by the comparative ZTV (shown in yellow), however taking account of the influence of woodland cover this visibility is limited to that experienced in longer distance views south-east along Polharrow Burn which are largely screened by intervening woodland cover.

### *R* Route (south) vs BG Deviation and Glenlee to Tongland

- 7.89 Comparative theoretical visibility of the existing R Route (south) which will effectively be replaced by the proposed G-T connection is illustrated on Figure 7.5.3 to Figure 7.5.6. The BG Deviation will continue to occupy a similar alignment to the existing BG Route.
  - Additional theoretical visibility of transmission infrastructure is largely related to the introduction of the proposed G-T connection between Glenlee substation and Dunjop north of the A75. Areas of visibility are generally related to the western extents of the Glenkens Valley and the eastern fringes of the Galloway Forest Park (shown in blue).
  - To the south-west of Glenlee substation, the proposed G-T connection will introduce theoretical visibility of transmission infrastructure across the Foothills with Forest LCT, however the extensive areas of visibility indicated will be limited by the presence of coniferous woodland between Back Hill of Glenlee and Airie Bennan, and visibility of towers from the lower lying areas associated with Craigshinnie Burn will be in the context of the existing BG Route.
  - South of the A712 the proposed G-T connection will introduce additional theoretical visibility of of Stroan Loch, however the ZTV indicates that this theoretical visibility will predominantly extend across areas of continuous conifer forest where actual visibility will be substantially reduced by its presence. Views of partially screened towers will be possible from areas around Stroan Loch, including Stroan viaduct and sections of the Mossdale to Gatehouse Station Railway Walk (Core Path 485).
  - To the south and south-west of Stroan Loch additional theoretical visibility of transmission infrastructure introduced by G-T is evident west of Airie Hill and Laughenghie Hill, however this will also be substantially reduced in reality by the presence of dense conifer plantations of Laurieston Forest to the east.
  - Glimpsed views of G-T towers will be possible from short sections of the A762 east of Woodhall Loch and areas of additional visibility are indicated across the west facing slopes of Drumglass Hill and Ullioch Hill which otherwise screen views towards the existing R Route (south) to the east of Loch Ken.
  - The proposed G-T connection and the existing R Route (south) converge close to Dunjop approximately 1.5km north of the A75. Across the low-lying settled areas at the southern extent of

### N Route and R Route (north) vs Polguhanity to Glenlee via Kendoon, Carsfad to Kendoon and Earlstoun

of the existing N Route and R Route (north), with any areas of additional visibility likely to occur as a

• Very limited areas of the Study Area from where visibility of the existing N Route and/or R Route will

transmission infrastructure across the eastern extents of the Galloway Forest Park north, north-west

the Glenkens Valley the extents of visibility of the proposed G-T connection will be broadly similar to that of the existing R Route (south), with some small areas of additional visibility introduced to the west of Barstobrick Hill, reduced somewhat by the presence of woodland cover along the route of the A762.

- To the south of the A75 the proposed towers of the G-T connection will introduce some limited additional visibility of transmission infrastructure to areas along the broad valley of Tarff Water and the A762, where the towers will appear in views towards the elevated plateau to the east.
- A number of areas across the Study Area from which existing visibility of the towers of R Route will be removed following its decommissioning, are indicated by the comparative ZTV (areas shown in yellow). To the north of the existing R Route, visibility from the A702 east of St John's Town of Dalry will be removed, whilst to the south, areas of visibility indicated within the foot of the Glenkens Valley will be removed, including existing visibility indicated across the majority of the settlement of New Galloway, the A762 south of its junction with the A712, Bennan Hill and areas along the western shore of Loch Ken.
- Further south, areas of existing visibility of transmission towers near Loch Ken Viaduct, the open water of Loch Ken and across the east facing slopes of Drumglass Hill and Ullioch Hill will be removed. The low-lying floodplain of the River Dee to the west of Crossmichael near where the existing R Route (south) crosses the south extent of Loch Ken and visibility of towers is currently seen extensively. The removal of R Route (south) as part of the KTR Project will largely remove visibility of steel lattice towers from these areas.

#### **Proposed KTR Project ZTVs**

7.90 Individual Bare Earth ZTVs for the new connections of the KTR Project have been combined to reflect the KTR Project as a whole, and are shown in relation to Landscape Character Types (LCTs) on Figure 7.9, VP locations and promoted routes on Figure 7.11 and residential properties on Figure 7.12.

#### Individual New Connections forming part of the KTR Project ZTVs

7.91 ZTVs presented on Figure 7.13 to Figure 7.17 illustrate the theoretical visibility of each individual proposed new connection comprising the KTR Project (e.g. P-G via K, C-K, E-G, BG Deviation, G-T). Descriptive analysis of these ZTVs is included in the relevant assessment of each individual connection detailed below.

## Developments Considered in Cumulative Assessment

- 7.92 The developments considered within the assessment of cumulative landscape and visual effects are detailed in **Chapter 3**. The developments considered in the assessment are limited to those which are of a comparable type, scale and/or extent, and with the potential to result in similar landscape and visual effects to those of the proposed KTR Project.
- 7.93 Developments within a 10km radius of the proposed KTR Project connections<sup>23</sup> and included in the cumulative assessment have been selected as follows:
  - All existing, consented and proposed<sup>24</sup> electricity transmission infrastructure (≥ 132kV) developments;
  - All existing, consented and proposed wind energy developments (single wind turbines or wind farms) of  $\geq$ 50m blade tip height; and

- Selected existing, consented and proposed<sup>24</sup> large scale built development.
- 7.94 Operational developments (existing electricity transmission connections and wind energy developments) and those under construction are included as part of the baseline for the LVIA. Developments with consent (but not as yet implemented) and those currently in-planning, or at appeal, are considered as part of the assessment of potential future cumulative effects and included in the CLVIA. These developments are listed in Table 7-3 and Table 7-4 below and shown on Figure 3.1<sup>25</sup>.

#### Table 7-3: wind farm Developments included in the Cumulative Assessment

Development	Status <sup>26</sup>	No. of Turbines	Blade tip Height (m)	Approximate Distance to closest KTR Project Connection (km) <sup>27</sup>
Blackcraig	Operational	23	110m	8km (E-G)
Knockman Hill	Consented	5	81m	6km (E-G)
Mochrum Fell <sup>28</sup>	Consented	8	126.5m	8km (G-T)
Little Sypland	Consented	1	74m	13km (G-T)
Shepherds Rig	Application	177	149.9m	6km (P-G via K)
Troston Loch	Application	14	149.9m	8km (C-K)
Cornharrow	Application	88	149.9m	10km (C-K)
Glenshimmeroch <sup>29</sup>	Application	10	180m	5km (C-K)
Fell	Application	9	200m	11.5km (E-G)

#### Table 7-4: Transmission Infrastructure Developments included in the Cumulative Assessment

Transmission Infrastructure Development	Status <sup>26</sup>	Main Infrastructure	Approximate Distance (km) <sup>30</sup>
BG Route Connection	Operational	132kV Steel Lattice Tower (L4) OHL infrastructure	0km (BG Deviation)
Blackcraig and Margree Connection	Operational	132kV Heavy Duty Wood Pole OHL infrastructure	0.5km (P-G via K)
Polquhanity - Dalmellington (SWS) Connection	Operational	132kV Steel Lattice Tower Connection (L7) OHL infrastructure	0.5km (P-G via K)
S Route Connection	Operational	132kV Steel Lattice Tower (PL1) OHL infrastructure	0km (G-T)
Glenlee Substation Extension	Application Submitted <sup>31</sup>	132kV Electricity substation and terminal gantry structures	0km (P-G via K, E-G, G-T, BG Deviation)

<sup>26</sup> A cut-off date of 27<sup>th</sup> April 2020 was applied for the inclusion of other developments within the cumulative assessment. <sup>27</sup> Approximate distance between the nearest component of the KTR Project and the nearest component of the development listed.  $^{\mbox{$^{28}$}}$  Subject of scoping application to potentially vary consented scheme.

 $^{29}$  S42 application to vary consented scheme of 10 turbines at 149.9m to blade tip height.

<sup>30</sup> Approximate distance between the nearest component of the KTR Project and the nearest component of the development listed.

<sup>31</sup> Glenlee substation extension subject to a separate planning application submitted to D&GC in September 2019 - 19/1498/FUL

<sup>&</sup>lt;sup>23</sup> Study Area limited to a 10km radius of the KTR Project connections, excluding the N Route and R Route connections which will be decommissioned and removed, and are therefore not included in the consideration of potential cumulative landscape and visual effects.

<sup>&</sup>lt;sup>24</sup> Subject to a valid planning application – e.g. undetermined applications or appeals

<sup>&</sup>lt;sup>25</sup> As detailed in Chapter 3: Approach to the EIA, existing developments, unimplemented development proposals which benefit from unexpired consents and proposed developments which have not yet been granted development consent, but which are subject to valid applications, have been included in the list of other developments. Information on schemes subject to scoping applications submitted to D&GC is also presented, but these have not been assessed as part of the cumulative assessments for the purposes of EIA.

## Potential Landscape and Visual Effects

7.95 The assessment of landscape and visual effects follows the methodology presented in this chapter and is based upon the KTR P description outlined in Chapter 4. The assessment of each proposed connection of the KTR Project considers the infrastructure being introduced in a particular sequence, informed by the proposed construction and decommissioning programme found in **Chapter 5** and as set out in the relevant section of the assessment considered in turn below. This Chapter reports on landscape and visual effects which are likely to arise during the construction phase, operational phase and cumulative operational effects separately.

## **Construction Effects**

### Sources of Effect during Construction

- 7.96 During the proposed 58-month construction phase potential short-term (generally lasting zero to five years) landscape and visual effects will arise from the presence of partially constructed infrastructure and undertaking of construction activities. All construction activities will be undertaken in accordance with an approved CDEMP (including the measures noted in the document provided as **Appendix 5.4** which includes reference to construction method statements).
- 797 The changes arising during the construction phase of the KTR Project will include presence of the following which represents a 'maximum case' scenario:
  - Forestry felling, including the wayleave requirements and anticipated areas of associated windthrow;
  - Working of seven quarries;
  - Construction of six temporary construction compounds;
  - Preparation of accesses including bellmouths and temporary access tracks;
  - Provision of watercourse crossings for access track construction;
  - Preparation of temporary working areas including excavation and construction of tower/pole foundations;
  - Removal, relocation and undergrounding of existing distribution infrastructure identified on Figure **4.12**<sup>32</sup>;
  - Delivery, assembly and erection of towers/poles;
  - Tower/pole conductor 'stringing' and commissioning of the OHL;
  - Removal of temporary infrastructure and reinstatement; and
  - Movement of associated construction vehicles and personnel accessing temporary construction tracks on minor roads and publicly accessible tracks.
- 7.98 At the temporary construction compounds security lighting will be required (activated by detected movement) during the hours of darkness. However, it is not expected that lighting will be required outside of the intended working hours for the construction phase. The assessment of construction effects considers a maximum case effect scenario which assumes the greatest presence of construction activities prior to removal and reinstatement works (for example the presence of all access tracks, temporary construction compounds, erected towers/poles and felled woodland including windthrow areas).
- 7.99 The vast majority of effects occurring during the construction phase will be **short-term** and largely reversible unless otherwise stated e.g. creation of new landform which remains as a permanent feature beyond the lifespan of the operational phase (c.80 years) of the KTR Project.

- 7.100 Effects will be limited to areas in relatively close proximity to each new OHL connection of the KTR Project and the immediate surrounding vicinity from which construction activities may be perceptible. The main exception to this is construction of the steel lattice tower and Trident wood pole infrastructure which will be evident across a wider area and remain present into the operational phase of the KTR Project.
- 7.101 On the basis that the majority of construction activities associated with the proposed KTR Project connections will be conducted prior to the decommissioning and removal of the N and R Route infrastructure, landscape and visual effects which will occur during the construction phase of the KTR Project are generally anticipated to exceed those which will occur during the long-term operational phase following decommissioning and removal of N and R Route. This is due to the greater presence of infrastructure and construction activity disturbance which will be evident during the construction phase.

## **Operational Effects**

### Sources of Effects during Operation

- 7.102 Following completion of all construction activities, reinstatement and restoration works will be undertaken to reverse much of the short-term temporary disturbance which will occur during the construction phase of the KTR Project connections and decommissioning of the N and R Routes.
- 7.103 The decommissioning and removal of N and R Routes will involve the removal of approximately 169 steel lattice towers (11 towers for N Route and 158 towers for R Route) and 43.3km of existing 132kV OHLs and will result in a reduction in the extent of transmission infrastructure evident across the Study Area during the construction phase. The assessment does not consider landscape and visual effects arising from decommissioning, removal and reinstatement activities associated with N and R Route, however the operational phase effects assume that these activities have commenced (within approximately the first 12 months of the operational phase) and all the proposed new OHL connections of the KTR Project are present.
- 7.104 The assessment of operational effects of the new OHL connections of the KTR Project considers all connections to be operational and effects to be **long-term** (over five years > c.80 years), **reversible** and adverse unless stated otherwise e.g. creation of new landform which remains as a permanent feature beyond the lifespan of the operational phase (c.80 years) of the KTR Project.
- 7.105 The assessment of landscape and visual effects arising during the operational phase of the new overhead connections of the KTR Project has considered the presence of the following, which represents a 'maximum case' scenario:
  - Presence of the P-G via K connection, consisting of a 132kV OHL supported on 37 steel lattice L7 towers with an approximate 10.1km length between Polquhanity, Kendoon and Glenlee;
  - Presence of the C-K connection, consisting of a 132kV single circuit OHL supported on Trident wood poles with an approximate length of 2.6km between Carsfad and Kendoon;
  - Presence of the E-G connection, consisting of a 132kV single circuit OHL supported on Trident wood poles with an approximate length of 1.6km between Earlstoun and Glenlee. A section of approximately 250m of underground cable required to connect into the Glenlee substation;
  - Presence of the BG Route Deviation, consisting of a 132kV OHL supported on L4 steel lattice towers of approximately 1.2km in length between Glenlee substation and the existing BG Route;
  - Presence of the G-T connection, consisting of a 132kV OHL supported on 119 L4 steel lattice towers of approximately 32.3 km in length;
  - Felling of trees within the required 'wayleave corridor' (including additional areas of forest clearance required for construction works including stone guarries, construction compounds and access tracks)

<sup>&</sup>lt;sup>32</sup> Delivered as ancillary development as part of the main KTR Project pre-enabling and construction activities. Effects arising from the physical decommissioning and reinstatement activities involved with the relocation, including sections of undergrounding of existing distribution infrastructure have been scoped out.

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during construction, along with the requirement to minimise the risk of subsequent windthrow (as detailed in **Chapter 8** and shown on **Figure 5.2**); and

• Operational maintenance, including wayleave maintenance.

Chapter 7: Landscape and Visual Amenity

August 2020

## Polguhanity to Glenlee via Kendoon

### Introduction

- 7.106 The assessment of landscape and visual effects in relation to the P-G via K connection considers the potential effects arising from the following:
  - a new 132kV double circuit steel lattice tower (L7) OHL, of approximately 10.1km in length, between Polguhanity and the existing Glenlee substation, via Kendoon substation (approximately 3km south of the Polquhanity terminal tower) (P-G via K Connection) - during the construction phase and operational phase;
  - the decommissioning and removal of 2.5km of existing 132kV steel lattice tower (PL1) OHL from Polguhanity to Kendoon (N Route, towers: N230 - N240) - during operational phase; and
  - the decommissioning and removal of approximately 7.6km of existing 132kV steel lattice tower (PL1) OHL between Kendoon, Carsfad, Earlstoun and Glenlee (R Route (north) – northern section, towers: R000A – R29) – during operational phase.
- 7.107 The P-G via K connection will run between the existing Polquhanity terminal tower west of the A713 and the hydroelectric power station at Glenlee, via the existing substation at Kendoon. The 132kV OHL will be supported on 35 steel lattice towers (L7). The OHL components of the proposed P-G via K connection are described in detail in **Chapter 4** and shown on **Figure 4.3** and **Figure 4.7**.
- 7.108 Based on the proposed construction programme set out in **Chapter 5**, the assessment of landscape and visual effects arising from the introduction of the P-G via K connection is based on the following assumptions in relation to the baseline situation for each part of the assessment:

#### Construction Phase

- All other proposed new KTR Project connection construction activities are evident;
- N Route (between Polguhanity and Kendoon) present; and
- R Route (northern section between Kendoon and Glenlee and southern section between Glenlee and Tongland) present.

#### **Operational Phase**

- All other proposed new KTR Project connections are present;
- N Route (between Polquhanity and Kendoon) has been decommissioned and removed;
- R Route (northern section between Kendoon and Glenlee and southern section between Glenlee and Tongland) has been decommissioned and removed; and
- 11/33kV wood pole as part of the existing distribution infrastructure between Polguhanity and Glenlee has been relocated/undergrounded (as shown on Figure 4.12).

#### Cumulative Operational Phase

• As for the operational phase, plus all developments listed in **Table 7-3** and **Table 7-4** are present.

#### **Existing Conditions**

7.109 The landscape of the P-G via K connection of the KTR Project is contained within the Dundeugh and Kenmure Valleys in the central area of the Galloway Glens known as the Glenkens Valley. This northern part of the V shaped valley is relatively narrow, enclosed by elevated undulating landform to the east and west, and watercourses Drumness Lin, the Water of Deugh and the Water of Ken flow into Carsfad Loch south of Dundeugh Hill (271m AOD). After passing Kendoon, the shape of the valley becomes slightly wider and the landscape varies between more intimate enclosed areas near Knocknalling, and more open elevated moorland and farmland west of Earlstoun Loch and close to the settlement of St John's Town of Dalry. Land use at lower elevation generally consists of farmland and mixed woodland, contrasting with dense conifer plantations and areas of open moorland at higher elevations. Field sizes vary and are mainly defined by distinctive stone walls.

- 7.110 Settlement pattern is largely focused along the A713 and at the confluence of watercourses. The small hamlet of Dundeugh is located west of the Water of Deugh where properties straddle either side of the A713, whilst the hamlet of Kendoon is located on the eastern side of the Water of Ken directly adjacent to the existing Kendoon substation. The settlement of St John's Town of Dalry is located east of the Water of Ken across the valley from the existing Glenlee substation and Glenlee is located to the west of the Water of Ken at the confluence with Coom Burn.
- 7.111 The existing N Route runs between the Polguhanity terminal tower and Kendoon substation, running broadly parallel to west of the A713, before crossing the road and Water of Ken south of Dundeugh, and connecting into Kendoon substation. The northern section of the existing R Route runs along the western slopes of the Glenkens Valley between Kendoon substation, where it crosses eastwards over the Water of Ken, and Glenlee substation where it crosses Coom Burn as it approaches the substation from the north-east.
- 7.112 The existing condition of the Study Area in relation to landscape and visual receptors is presented in greater detail in Appendix 7.4 and Appendix 7.5, respectively.

## Analysis of Visibility of the Polguhanity to Glenlee via Kendoon (P-G via K) Connection

7.113 Figure 7.13.1 to Figure 7.13.2 indicates relatively widespread theoretical visibility within 5km between Polquhanity and Balmaclellan. Actual visibility will be limited by forestry at Dundeugh Hill, Barlae Hill and Galloway Forest Park and small pockets of woodland along the Kenmure valley. However, the P-G via K connection will remain visible in close proximity along sections of the A713 from Bardennoch to St John's Town of Dalry. Visibility is also indicated from the A762 from Earlstoun to Fintloch and screened by intervening landform and vegetation approaching New Galloway. Longer distance views are afforded from the elevated valley sides, including from sections of the B7000, and the elevated landform of Mackilston Hill and Waterside Hill (including elevated sections of the Southern Upland Way).

#### Landscape Effects on Landscape Character Types

- 7.114 The landscape baseline for the P-G via K connection is described in **Appendix 7.4** and indicated on Figure 7.7. Potential effects on landscape character are considered for the following LCTs in Table 7-5 below:
  - Upper Dale Dumfries & Galloway LCT (165) (Host LCT);
  - Foothills with Forest Dumfries & Galloway LCT (176); and
  - Flooded Valley LCT (164).

#### **Effects on views from Representative Viewpoints**

7.115 Potential visual effects from ten representative VPs (VP1 to VP10) have been considered for the P-G via K connection. Visual effects from these representative VPs are considered in **Table 7-6** below.

#### **Effects on Views from Settlements**

7.116 Potential visual effects from settlements in the Study Area from which potential views of the P-G via K connection may be experienced will be limited to Dundeugh, Kendoon, St John's Town of Dalry and Glenlee, and are assessed in **Table 7-7** below. It should be noted individual properties indicated on Figure 7.12. associated with the settlements of Dundeugh, Kendoon and Glenlee have been group accordingly and are assessed in **Table 7-7**.

#### **Effects on Views from Residential Properties**

7.117 Potential visual effects from publicly accessible locations in the vicinity of the residential properties located within approximately 150m of the proposed P-G via K connection, and which may experience potential views of the connection are assessed in **Table 7-8** below, and shown on **Figure 7.12**.

#### **Effects on Views from Routes**

7.118 Potential visual effects from routes in the Study Area from which potential views of the P-G via K connection may be experienced from are assessed in Table 7-9 below.

#### Table 7-5: Assessment of Landscape Effects – Landscape Character Types (LCTs): Polquhanity to Glenlee via Kendoon (P-G via K)

Landscape	Sensitivity	Magnitude of Change and Significance of Landscape	Magnitude of Change and Significance of Landscape	Magnitude o
Character Type (LCT)		Effects - Construction Phase	Effects - Operational Phase	Landscape E
Upper Dale Dumfries &	Sensitivity is judged to be <b>medium</b> .	The entirety of the P-G via K connection is located within this LCT.	Direct effects will arise during the operational phase from the introduction of the P-G via K connection.	A number of t partially locate
Galloway LCT (165)		This LCT will experience direct landscape change arising from the construction of the P-G via K connection. Between Polquhanity and Kendoon, the introduction of the connection will result in the loss of conifer forest around Barlae Hill, south-west of Polquhanity and south of Dundeugh creating a permanent wayleave corridor. Disturbance to arable and pastoral farmland south of Dundeugh, and mixed woodland west of Kendoon will occur. Between Kendoon and Glenlee the connection crosses arable and pastoral farmland, with riparian vegetation found at watercourse crossings of Polharrow Burn and Coom Burn and mixed woodland on the east side of Knocknalling Wood and Hag Wood (see Figure 5.2). Direct effects arising during construction will include the removal of some landscape features, the introduction of temporary construction compounds north of Polquhanity and north-west of Carsfad substation, the eastern part of a quarry working area at Barlae Hill (Q1) and temporary access tracks. The main OHL components constructed during this phase will remain present throughout the operational phase. Temporary construction compound one and the quarry working area at Barlae Hill (Q1) will be largely imperceptible from much of the LCT, screened by neighbouring conifer forest. Visibility of temporary construction compound 2, west of Carsfad Loch and the A713 will be limited by intervening landform. The existing N Route and R Route (north) will remain evident within the LCT during the construction of the P-G via K connection. Construction activities associated with the C-K, E-G and G-T connections and the BG Deviation will be seen in combination with the P-G via K connection from within the LCT will be subject to localised geographical extent within the southern part of the LCT largely between Allangibbon Bridge and Glenlee substation. Combined views towards these connections from within the LCT will be subject to localised screening. The introduction of the P-G via K connection when seen in combination with the e-G via K connection	The P-G via K connection will introduce additional transmission infrastructure into this LCT occupying a similar geographical area to the existing N Route and R Route (north), however its introduction will not adversely alter the scale or predominant landcover of the LCT. There will be opportunities where the P-G via K connection will be seen against skylines mainly from locations in close proximity to the OHL. Longer distance views of proposed towers will predominantly appear backclothed against the upper western slopes of the Glenkens Valley reducing their perceptibility with distance across the LCT. The ZTVs shown on <b>Figure 7.9</b> (all connections) and <b>Figure 7.1</b> 3 (P-G via K) indicate that theoretical visibility will be relatively widespread across the southern part of this LCT and largely limited north of Bardennoch (east of Bardennoch Hill, 330m AOD). Localised vegetation including roadside hedgerows and tree lines limit visibility of the connection between Polquhanity and Dundeugh, with relatively close proximity views (within 1-3km) gained between Dundeugh, Kendoon and Glenlee. Views from beyond 3km will be experienced from elevated parts of the LCT including the B7000 on the eastern side of the Glenkens Valley, from where the proposed towers will be seen as relatively distant features, backclothed by landform and vegetation. From much of the southern part of the LCT the P-G via K connection will be largely seen within the context of other manmade features including existing transmission and distribution infrastructure hydroelectric power station infrastructure, residential built development and agricultural buildings, and influence a similar geographical area to that of the existing N Route and R Route (north) as illustrated by the comparative ZTV shown on <b>Figure 7.5</b> . The removal of temporary construction compounds and the reinstatement of areas including the quary working area and temporary access tracks will reduce the overall perceptible disturbance within the LCT.	A section of the with the C-K of between Kend From localised Allangibbon Bit the P-G via K connection an BG Deviation in In terms of ot substation ext LCT. The P-G east of the sul connections w west. Combined view substation ext localised scree mainly to loca No other cons <b>3.1</b> will contri The new OHL similar propor removed N Ro distribution int increase in the The introducti C-K, E-G, and influence of el parts of this L The scale of la medium (with 1km) and exp the LCT. As such the ac within approxi seen in combi substation ext account of the are judged to reducing to <b>m</b>

of Change and Significance of Cumulative Effects - Operational Phase

f the KTR Project connections will be either fully or ated within this LCT.

the P-G via K connection will be seen in combination K connection from localised central parts of the LCT ndoon and Carsfad.

sed southern parts of the LCT largely between Bridge and Glenlee substation the southern section of K connection will be seen in combination with the E-G and the northern sections of the G-T connection and the in association with Glenlee substation.

other consented or proposed developments Glenlee extension will be located within the southern part of the G via K and E-G connections will connect from the northsubstation extension, whilst the BG Deviation and G-T s will link into the substation extension from the south-

views of these KTR Project connections and Glenlee experienced from within this LCT will be subject to reening by vegetation and landform and will be limited icalised southern parts of the LCT.

nsented or proposed developments illustrated on **Figure** tribute to additional cumulative effects within this LCT.

L connections forming the KTR Project will occupy a portion of available views from within the LCT to the Route and R Route (north) and undergrounded existing infrastructure, however there will be a perceptible the height of the new KTR Project connections.

ction of the P-G via K connection in combination with the nd G-T connections and BG Deviation will increase the electricity infrastructure in the central and southern s LCT in association with Glenlee substation extension. f landscape change within these affected areas will be ithin approximately 1km) reducing to small (beyond xperienced locally, from a small geographical extent of

additional cumulative magnitude of change will be low oximately 1km of where the P-G via K connection will be abination with other KTR Project connections and Glenlee extension, and low for the LCT as a whole. Taking the medium sensitivity, the landscape effects for this LCT to be **moderate** and **significant** for a localised area and **minor** and **not significant** for the LCT as a whole.

Foothills with Forest Dumfries & Galloway LCT (176)	Sensitivity is judged to be medium.	The P-G via K connection is located outside this LCT which occurs in several locations across the Study Area. Two areas of this LCT are in the western part of the Study Area to the north and south of the Rugged Uplands with Forest - Dumfries and Galloway LCT (181), directly west of the neighbouring the third area is located to Upper Dale Dumfries & Galloway LCT (165). The third area is located directly east of LCT (165). This LCT will experience some direct effects associated with construction activities during the construction phase, whilst effects during the operational phase will be limited to views of P-G via K connection from this LCT. Direct effects will arise within the area of this LCT that occurs west of the Upper Dale Dumfries & Galloway LCT (165). North-eastern and southern parts of this LCT will be affected by construction activities associated with quarry working areas at Barlae Hill (Q1), Will Hill (Q2) and Gallows Knowe (Q3) and temporary access tracks. Indirect effects will also arise from construction activities within the neighbouring LCT which will be evident from parts of the Foothills with Forest Dumfries and Galloway LCT (176) to the east and west, at distances within 0.2km to 5km subject to localised screening by landform and vegetation. The existing N Route and R Route (north) will remain evident in the neighbouring Upper Dale Dumfries & Galloway LCT (165) during the construction of the P-G via K connection from a localised geographical extent of southern parts of the LCT near to and in association with Glenlee substation. In the context of other man-made features evident in the neighbouring LCT whic will net encome and the BG Deviation will the nedium within 1km reducing to small and experienced from a localised extent of the LCT. The introduction of the P-G via K connection will not result in the loss of key landscape characteristics of this LCT. There will be medium within 1km reducing to small and experienced from a localised extent of the LCT. The introduction of the LCT locally (wi	Indirect effects will arise during the operational phase from the introduction of the P-G via K connection in the neighbouring LCT. The connection will be evident from parts of the LCT at distances within 0.2km to 5km, subject to localised screening by landform and vegetation. The ZTVs shown on <b>Figure 7.9</b> (all connections) and <b>Figure 7.13</b> (P-G via K) indicate that theoretical visibility will be relatively widespread across this LCT, however dense coniferous forestry largely limits the visibility of the connection to the open valley sides to the east and west. This includes the high points of Knockclune and Barskeoch Hill, within 2km to the west and Culmark Hill and Bogue Moor within 5km to the east. Longer-distance views are afforded from areas of elevated landform, including Stranfasket Hill, Snab Hill and Dunveoch Hill. In longer distance views the P-G via K connection will be seen as a relatively distant feature backclothed by landform within the context of other existing electricity infrastructure including hydroelectric power schemes and substations within the neighbouring LCT. The existing Operational wind farm Black Hill is located in the eastern area of the LCT. The P-G via K connection will influence a similar geographical area to that of the existing R Route (north) as illustrated by the comparative ZTV shown on <b>Figure 7.5</b> . The reinstatement of areas including the quarry working area and temporary access tracks will reduce the overall perceptible disturbance within the LCT. The P-G via K connection will occupy a similar portion of available views from within the LCT as N Route and R Route (north) resulting in a small scale change experienced locally (within 1km) reducing to barely perceptible for the LCT as a whole.	Sections of within the sithe neighbo Within the recombination localised cere localised soft Dunveoch H with the E-C association In terms of substation en eighbourin from the no Deviation w west. Combined v substation en to localised The propose are all location the P-G via cumulative lo occur from ti illustrated in distinctly se landscapes. The introduc combination Deviation a scale chang of the LCT. The addition approximate landscape e <b>significant</b> connection)
looded Valley LCT 164)	Sensitivity is judged to be <b>medium</b> .	The P-G via K connection is located outside this LCT approximately 0.8km north-west at the nearest point. Effects will be indirect as the P-G via K connection is located outside this LCT. Indirect effects will arise from construction activities within the neighbouring LCT which will be evident from the north-western part of the LCT at distances within 0.8km to 5km subject to screening by landform and vegetation. The existing R Route (north) will remain evident in the neighbouring Upper Dale Dumfries & Galloway LCT (165), and within the Flooded Valley LCT (164) during the	Indirect effects will arise during the operational phase from the introduction of the P-G via K connection in the neighbouring LCT. The connection will be evident from north-western parts of the LCT at distances within 0.8km to 5km, subject to localised screening by landform and vegetation. The ZTVs shown on <b>Figure 7.9</b> (all connections) and <b>Figure 7.13</b> (P-G via K) indicates regular theoretical visibility from the north-western part of the LCT within 3km from an area south of St John's Town of Dalry and north of New Galloway, including elevated views from the slopes and summit of Mulloch Hill. Beyond 3km visibility is intermittent and indicated mainly from limited elevated northern and eastern parts of the LCT.	From localis areas at fur will be seen E-G and G-T Glenlee sub In terms of substation e neighbourin from the no Deviation w west.

the G-T connection and the BG Deviation will be located south-eastern part of the area of this LCT directly west of buring Upper Dale Dumfries & Galloway LCT (165).

neighbouring LCT the P-G via K connection will be seen in n with the C-K connection in longer distance views from ntral parts of the LCT east of Stranfasket Hill. From uthern parts of the LCT around and to the south of Hill the P-G via K connection will be seen in combination G and G-T connections and the BG Deviation largely in with Glenlee substation in the neighbouring LCT.

other consented or proposed developments, Glenlee extension will be located within the southern part of the ng LCT. The P-G via K and E-G connections will connect orth-east of the substation extension and the BG vill connect into the substation extension from the south-

views of these KTR Project connections and Glenlee extension experienced from within this LCT will be subject screening by vegetation and landform.

ed wind farms Shepherds Rig, Troston Loch and Margee red in this LCT. However, given the lower lying location of K connection within the neighbouring LCT significant landscape effects on this LCT are not predicted likely to the addition of the consented or proposed schemes n **Figure 3.1.** which will appear as distant and/or eparate developments within this LCT or neighbouring

ction of the P-G via K connection when seen in n with other KTR Project connections (E-G, G-T and BG and Glenlee substation extension will result in a small ge experienced from a small, localised geographical extent

nal cumulative magnitude of change will be low within ely 1km. Taking account of the medium sensitivity, the effects for this LCT are judged to be **minor** and **not** t locally (within approximately 1km of the P-G via K and **none** and **not significant** for the LCT as a whole.

sed low-lying north-western parts of the LCT and elevated ther distance including Mulloch Hill the P-G connection in relatively long-distance views in combination with the T connections and the BG Deviation in association with estation within the neighbouring LCT.

other consented or proposed developments Glenlee extension will be located within the southern part of the ng LCT. The P-G via K and E-G connections will connect orth-east of the substation extension and the BG vill connect into the substation extension from the south-

Assessment of Landscape Effects – Landscape Character Types (LCTs): Polquhanity to Glenk	ee via Kendoon (P-G via K)
The introduction of the P-G via K connection will t in combination with construction activities associa the C-K, E-G and G-T connections, and the BG De in the neighbouring LCT near to and in association Glenlee substation. The scale of the effect on the landscape will be m within 2km reducing to small and experienced fro small (very localised) geographical extent of the v LCT, south of St John's Town of Dalry. The introdu the P-G via K connection will not result in the loss landscape characteristics. The magnitude of landscape change during constr will be medium for the LCT locally and low for the a whole. Taking account of the medium sensitivity LCT, a <b>minor</b> and <b>not significant</b> landscape effe arise locally within approximately 2km of the P-G connection, reducing to <b>none</b> and <b>not significant</b> LCT as a whole.	<ul> <li>ted with viation in with</li> <li>Indirect effects will arise from the construction of the P-G via K connection in the neighbouring Upper Dale Dumfries &amp; Galloway LCT (165) to the north-west. Visibility of these medium scale changes will be experienced over a relatively small geographical area of the LCT. Effects on the landscape will be localised when considering the full extent of the LCT within the Study Area.</li> <li>The P-G via K connection will influence a similar geographical area to that of the existing R Route (north) as illustrated by the comparative ZTV shown on Figure 7.5.</li> <li>The scale of the change will be medium locally (within 1km) reducing to barely perceptible for the LCT as a whole.</li> <li>Overall, the magnitude of change is judged to be low during the</li> </ul>

#### Table 7-6: Assessment of Visual Effects – Representative Viewpoints: Polquhanity to Glenlee via Kendoon (P-G via K)

Viewpoint	Receptors and	Magnitude of Change and Significance of Visual	Magnitude of Change and Significance of Visual Effects -	Magnitude
	Sensitivity	Effects - Construction Phase	Operational Phase	Effects - Oj
VP1: Layby on A713 near Polquhanity (259332, 589035) ( <b>Figure 7.21.1-</b> 13)	The VP is representative of sequential views experienced by road users, including tourists and visitors travelling on the A713, which forms part of the promoted Galloway Tourist Route, and similar views experienced from nearby residential properties to the south of the VP. Sensitivity is judged to be <b>medium</b> .	During the construction phase, disturbance associated with preparatory groundworks including the felling of the wayleave and additional areas of forestry identified as being of windthrow risk (as illustrated on <b>Figure 5.2</b> ) and the introduction of temporary access tracks between Polquhanity and Dundeugh will be evident in views looking south-west from this location. The steel lattice towers, and OHLs of the P-G via K connection introduced during the construction phase will remain evident in views throughout the operational phase. Combined with associated construction activities this will result in a large scale change when viewed in combination with the existing N Route which will remain evident during construction. Similar views will occur from parts of the A713 and nearby residential properties, representing a medium geographical extent. The magnitude of visual change during construction will be high and taking account of the medium sensitivity will result in a <b>major</b> and <b>significant</b> visual effect.	Looking south-east to north-west from this location the P-G via K connection will be seen in the middle distance of these successive views, appearing partially backclothed by landform and coniferous forestry. Further south the P-G via K connection will be largely screened by existing conifer forest. The creation of the proposed wayleave and temporary access tracks through coniferous woodland located between Polquhanity and Dundeugh will require the additional felling of forestry east of the wayleave, within the windthrow area indicated on <b>Figure 5.2</b> . The towers of the P-G via K connection will continue to occupy a similar proportion of the view to those of N Route, although appearing further west from the VP, resulting in a medium scale change in the view. The P-G via K connection will run broadly parallel to the A713 through much of the northern extents of the Study Area, from Polquhanity to Glenlee thus similar views will be experienced from a medium geographical extent. The magnitude of visual change during the operational phase will be medium. Overall, the level of effect during the operational phase will be <b>moderate</b> and <b>significant</b> . The replanting of felled areas of coniferous woodland east of the P-G via K connection wayleave within the area of potential windthrow risk near Polquhanity will result in the screening and filtering of views of towers which will mitigate the significance of effects, however the upper portions of some towers are likely to remain visible as woodland matures.	Figure 7.21 views lookin However, int screen views Figure 7.21 (application) developmen There are no views from t The cumulat none and no

I views of these KTR Project connections and Glenlee n extension experienced from within this LCT will be subject of screening by vegetation and landform.

no other consented or proposed schemes located within

luction of the P-G via K connection when seen in on with other KTR Project connections and Glenlee n extension will result in a small scale change experienced ised geographical extents of the LCT.

onal cumulative magnitude of change will be low within ately 2km. Taking account of the medium sensitivity, the effects for this LCT are judged to be **minor** and **not nt** locally (within approximately 2km of the P-G via K n) and **none** and **not significant** for the LCT as a whole.

#### e of Change and Significance of Cumulative Visual Operational Phase

**21.2** indicates theoretical visibility of the C-K connection in ing south in combination with the P-G via K connection. intervening dense broadleaved woodland and forestry will ws of the C-K connection from this location.

**21.5** indicates that the Glenshimmeroch wind farm n) are situated to the east, however visibility of this ent will be limited by intervening landform and vegetation.

no other consented or proposed developments visible in a this location.

ative visual effect from this VP is therefore judged to be **not significant**.

P2: Dundeugh at	The VP is representative of	During the construction phase disturbance associated with	The P-G via K connection will be seen in the middle distance of	Figure 7.22.
ccess to Polmaddy 259871, 588004) Figure 7.22.1-8)	sequential views experienced by receptors on the A713, which forms part of the Galloway Tourist Route. Similar views are gained from nearby residential properties and eastern parts of Core Path 164 Bardennoch Trail Pack Road. Sensitivity is judged to be high.	<ul> <li>preparatory groundworks and the introduction of temporary access tracks will be seen in close proximity to middle distance successive views from west to south-west from this location. From the A713 construction vehicles will use the existing access directly north-west of the VP. Some screening of this access will be provided by existing vegetation.</li> <li>The P-G via K connection will appear beyond the steel lattice towers of the existing N Route, which are seen partly backclothed with the upper parts of towers and OHL visible against the skyline.</li> <li>Conifer forestry retained to the north of Polmaddy Burn</li> </ul>	successive views looking west to south-west to from this location. Four towers will be visible in views to the south-west, one tower will be seen partly backclothed with the top of the tower evident against the horizon, two towers will be seen against the skyline, the most southerly tower is largely screened by landform with the top of the tower visible on the skyline distance. In views looking west two towers are evident in the middle distance, the lower parts of the towers are partly backclothed with the tops of the towers visible against the skyline. Further successive views looking north-west towards the P-G via K connection will be screened by conifer forest.	connection w to additional <b>Figure 7.22.</b> Cornharrow, visible in succ in the foregro proposed dev No other cons views from th this location i
		<ul> <li>will largely screen ground-level disturbance associated</li> <li>with felling within the Galloway Forest Park north-west of</li> <li>Dundeugh.</li> <li>Combined with associated construction activities this will</li> <li>result in a large scale change, when experienced in</li> <li>combination with the existing N Route which will remain</li> <li>evident during construction. Similar views will be</li> <li>experienced from a small geographical area.</li> </ul>	Sequential views of the P-G via K connection will be experienced from the A713 through much of the northern extents of the Study Area, from Polquhanity to Glenlee, with similar views afforded from nearby residential properties. Therefore, the geographical extent of similar views will be medium. The steel lattice towers, and OHLs of the P-G via K connection introduced during the construction phase will remain evident in views throughout the operational phase.	
		The magnitude of visual change during construction will be medium and taking account of the high sensitivity will result in a <b>moderate</b> and <b>significant</b> visual effect.	The decommissioning and removal of N Route will reduce the presence of electricity transmission infrastructure in the immediate foreground of views from this location.	
			The steel lattice towers of the P-G via K connection will be seen at a greater distance beyond the western edge of the settlement and occupying a similar proportion of the view but introducing towers into views where they are seen above the skyline to the west, resulting in a medium scale change. Similar views will be experienced from a small geographical area. Overall, the magnitude of visual change during the operational	
			phase will be medium and taking account of the high sensitivity will result in <b>moderate</b> and <b>significant</b> visual effect.	
/P3: Polmaddy Settlement 259233, 587841) Figure 7.23.1-5)	Represents views experienced by visitors to Polmaddy and similar views experienced from Core Path 164, Bardennoch Trail Pack Road. (Also considered as Cultural Heritage VP1) Sensitivity is judged to be high.	The P-G via K connection will introduce electricity transmission infrastructure into the available view, seen as a new focal point against the skyline in the middle distance of views looking east from this location. However, associated ground-level construction disturbance and forestry felling will be largely screened by coniferous forestry and landform in views to the east. The introduction of the P-G via K connection will result in a small scale change seen across a small proportion of the view and experienced from a small geographical extent from which similar views are afforded.	The P-G via K connection will introduce visibility of one steel lattice tower in middle distance views looking east beyond Polmaddy Burn, partially backclothed by landform with the top of the tower seen against the skyline. Conductors will be seen in the middle distance crossing above the Core Path and access track from Dundeugh, resulting in a small scale change in the view. However, further visibility of steel lattice towers will be largely screened by intervening conifer forestry, barely perceptible from this location, and the main focus of views east across Polmaddy Settlement to the Galloway Hills beyond will be unaffected, and views of the core summits within the Galloway Hills RSA which are visible in views to the west will be uninterrupted.	No other KTR Figures 7.23 Rig, Cornharr theoretically b east. Existing Shepherds Rig However, the farms will be intervening be background o This will resul
		The magnitude of visual change during construction will be low and taking account of the high sensitivity will result in a <b>minor</b> and <b>not significant</b> visual effect.	Visual effects experienced from Core Path 164 and Polmaddy will be relatively localised as coniferous forestry screens views of the P-G via K connection from much of Core Path 164. The geographical extent of similar views will be small.	There are no views from th The magnitud location will b receptors, the
			Overall, the magnitude of visual change during the operational phase will be low and taking account of the high sensitivity will result in a <b>minor</b> and <b>not significant</b> visual effect.	significant.
/P4: Footbridge access to Kendoon 260335, 587605) Figure <b>7.24.1-8</b> )	Represents views experienced by receptors/residents accessing Kendoon via the public footpath and footbridge east of the A713.	Given the close proximity of the VP to the P-G via K connection, ground-level disturbance associated with construction activities will be evident across a large proportion of the available view. Temporary access tracks for construction vehicles from the A713 will cross the foreground of the view looking west to south.	The steel lattice towers of the P-G via K connection will be seen in close proximity and longer distance views to the north-west to south-west from this location. The lower parts of towers will be partially backclothed by landform and vegetation, whilst the upper parts of the towers and OHLs will be visible against the skyline.	Figures 7.24 be seen in co south, south- running large backclothed a The new KTR
		The steel lattice towers, and OHLs of the P-G via K connection introduced during the construction phase will	Due to the felling of woodland around the footbridge to the east and south-east of the VP, steel lattice towers will be seen in	view to the re underground

**22.2** to **7.22.3** indicate that visibility of the C-K will be barely perceptible and will not therefore contribute al cumulative effects from this location.

**22.2** indicates that the proposed wind farms of w, Troston Loch and Glenshimmeroch will theoretically be successive views to the west. However, existing vegetation ground of view will screen potential views of these developments.

consented or proposed developments will be visible in this location, therefore the cumulative visual effect from on is judged to be **none** and **not significant**.

TR Project connections will be visible from this location.

**7.23.2** and **7.23.3** indicate that the proposed Shepherds narrow, Troston Loch, and Glenshimmeroch wind farms will lly be visible in successive views to the north-east and :ing conifer forest will screen views of the proposed s Rig and Cornharrow wind farms.

the proposed Troston Loch and Glenshimmeroch wind be seen as distant features partially screened by g broadleaf woodland against the skyline in the nd of view in combination with the P-K via G connection. esult in a small scale change, experienced locally.

no other consented or proposed developments visible in a this location.

itude of cumulative visual change to the view from this ill be low. Taking account of the sensitivity of the the cumulative visual effect will be **minor** and **not** 

**.24.2** to **7.24.6** indicate that the P-G via K connection will combination with the C-K via connection in views to the th-east and south-west. The C-K connection will be seen rgely parallel to the P-G via K connection partly ed and partly seen against the skyline.

CTR Project connections will occupy a similar proportion of e removed N Route and R Route (north) and unded existing distribution infrastructure, however there

	Sensitivity is judged to be	remain evident in views throughout the operational phase.	views in this direction, crossing the Water of Deugh into the	will be a perce
	Sensitivity is judged to be high.	remain evident in views throughout the operational phase. Combined with ancillary construction activities this will result in a large scale change when viewed in combination with the existing N Route and R Route (north) which will remain evident during the construction phase, but will be experienced from a small geographical area. The magnitude of visual change during construction will be high and taking account of the high sensitivity will result in a <b>major</b> and <b>significant</b> visual effect.	<ul> <li>substation at Kendoon. In longer-distance views looking south, steel lattice towers will be partially screened by woodland, however the tops of towers and conductors will remain visible.</li> <li>This VP is representative of the specific view experienced from the public footpath and footbridge, where the P-G via K connection will be seen in close-proximity views. The geographical extent will therefore be small.</li> <li>The P-G via K connection will occupy a similar geographical area to the existing N Route and R Route (north), and associated distribution lines are visible in successive views looking northwest to south-west from this location.</li> <li>The undergrounding of existing distribution infrastructure located within close proximity of the proposed P-G via K connection will reduce the presence and influence of vertical infrastructure in views from this location.</li> <li>The P-G via K connection will occupy a similar portion of the view to the existing infrastructure. One steel lattice tower of P-G via K will be seen within close proximity to the VP as the connection enters Kendoon substation to the east, whilst the majority of the connection will be seen in middle to longer-distance views running along the west side of the A713.</li> <li>The P-G via K connection will result in a medium scale change in views, with similar views experienced from a small geographical extent.</li> </ul>	will be a perce infrastructure infrastructure location. This locally. No other KTR developments The magnitud- location will be receptors, the <b>significant</b> .
			Overall, the magnitude of visual change during the operational phase will be medium and taking account of the high sensitivity will result in a <b>moderate</b> and <b>significant</b> visual effect.	
VP5: B7000 west of Glenhoul Hill (261375, 586905) ( <b>Figure 7.25.1-7</b> )	The VP is representative of open views westwards across the Upper Glenkens Valley experienced by road users travelling on the B7000 and similar views experienced from nearby residential properties. Sensitivity is judged to be high.	Notwithstanding the intervening distance between this location and P-G via K connection, ground-level disturbance associated with construction activities will be perceptible, including the presence of temporary access tracks. When viewed in combination with the existing N Route and R Route (north) which will remain evident during construction, the P-G via K connection will result in a medium scale additional change evident across a relatively large proportion of the available middle distance views, however the towers will appear backclothed against the western slopes of the valley and not break the skyline formed by the Galloway Hills beyond. Similar views will be experienced from a small geographical area, where elevated views are afforded across the valley. The magnitude of visual change during construction will be medium and taking account of the high sensitivity will result in a <b>moderate</b> and <b>significant</b> visual effect.	From this relatively elevated VP the P-G via K connection will be seen in longer-distance successive views looking south-west to north-west, across the valley floor backed by landform, moorland, and woodland vegetation on the opposite side of the Upper Glenkens Valley. While sections of the B7000 afford elevated views across the valley towards the distant summits of the Galloway Hills RSA, some of the outward views from this minor road are screened by intervening woodland and forestry. The geographical extent of similar views will therefore be medium. The P-G via K connection will occupy a similar geographical location to the existing N Route and R Route (north) and associated distribution lines, visible in successive views looking north-west to south-west from this location, and result in a small scale change in the view. Views towards the summits of the wider Galloway Hills from this location will be uninterrupted from the introduction of the P-G via K connection which will traverse the lower slopes of the valley, and similar views will be experienced from a small geographical extent. Overall, the magnitude of visual change during the operational phase will be low and taking account of the high sensitivity will result in a <b>minor</b> and <b>not significant</b> visual effect.	Figure 7.25.2 connection and via K connection the south-wes be barely pero contribute to a Figure 7.25.2 connection will connection bac south-west. This will result effects will be section of the be small. No other conse views from thi The magnitude be low and tak cumulative vis
VP6: Layby on A713 near Knocknalling Wood (261375, 586905) ( <b>Figure 7.26.1-8</b> )	The VP is representative of sequential views experienced by road users travelling on the A713, which forms part of the Galloway Tourist Route. Sensitivity is judged to be <b>medium.</b>	Construction activities associated with the introduction of the P-G via K connection will be seen in close proximity and longer distance views looking north to south from this location. This will include vehicle movements, the felling of an area of mixed woodland at the north-eastern extents of Knocknalling Wood, and the introduction of temporary access tracks seen to the north-west. The P-G via K connection and ancillary construction activities, viewed in combination with the existing R Route	Looking south to north from this location, eight steel lattice towers of P-G via K will be seen in close-proximity and longer distance successive views, running parallel to the A713 through relatively flat pastoral farmland. In views looking south, towers in closest proximity and in the background of the view will be seen against the skyline. Towers visible in the middle distance of views to the south will be	Figure 7.26.4 views looking and indicates Glenshimmerc However, inte of these devel These develop cumulative eff

perceptible increase in the height of the propose ture and an increase in the presence of electricity ture within views south, south and south-west from this This will result in a medium scale change experienced

TR Project connections or other consented or proposed ents will be visible in views from this location.

itude of cumulative visual change to the view from this vill be medium. Taking account of the sensitivity of the , the cumulative visual effect will be **moderate** and

**25.2** indicates limited theoretical visibility of the G-T n and the BG Deviation seen in combination with the P-G nection in long distance views (approximately 6.3km) to west. In reality, the G-T connection and BG Deviation will perceptible from this location and will not therefore to additional cumulative effects.

**25.2** to **Figure 7.25.3** indicate that the P-G via K will be seen in successive combined views with the C-K backclothed by landform in views looking north-west to

esult in a small scale change in the view, and similar visual I be relatively localised and experienced from a short the B7000. The geographical extent of similar views will

onsented or proposed developments will be visible in a this location.

tude of cumulative change in views from this location will I taking account of the sensitivity of receptors the e visual effect will be **minor** and **not significant**.

**26.4** indicates theoretical visibility of the C-K connection in ing north in combination with the P-G via K connection tes that the proposed wind farms of Shepherds Rig and neroch may be visible in successive views to the north. intervening dense broadleaved woodland will screen views evelopments.

elopments will not therefore contribute to additional effects from this location.

Assessment of Vis	-	(nouth) which will remain proceed during construction (1)		These areas
		(north) which will remain present during construction, will result in a medium scale change in the view, with similar views experienced from a small geographical area.	partially backclothed by landform and vegetation, whilst two towers will be seen against the skyline to the north, north-west.	There are no o or proposed de
		The magnitude of visual change during construction will	The introduction of P-G via K will result in a medium scale change in the view.	The cumulativ be <b>none</b> and <b>i</b>
		be medium and taking account of the medium sensitivity will result in a <b>moderate</b> and <b>significant</b> visual effect.	The P-G via K connection runs roughly parallel to the A713 for the majority of the length of the connection from Polquhanity to Glenlee, however similar views in close proximity to the route are relatively infrequent thus the geographical extent will be small.	
			The P-G via K connection will occupy a similar geographical area to the existing R Route (north) and associated distribution lines, visible in successive views looking north to south from this location, as the connection passes Knocknalling between Inverharrow Bridge and Carsfad with additional towers visible against the skyline to the west of the road.	
			Overall, the magnitude of visual change during the operational phase will be medium and taking account of the medium sensitivity will result in a <b>moderate</b> and <b>significant</b> visual effect.	
VP7: Southern Upland Way near Waterside Hill	The VP represents specific elevated panoramic views experienced by recreational	The introduction of the P-G via K connection during the construction phase will bring electricity transmission infrastructure closer to the VP than the existing R Route	In successive views looking north to south from this location, the P-G via K connection will be seen extending along the Kenmure Valley floor backclothed by rolling landform and mixed woodland.	Figure 7.27.5 will be barely contribute to a
(260843, 582064) ( <b>Figure 7.27.1-</b> <b>12</b> )	receptors on the Southern Upland Way long distance footpath at this elevated point on the trail. Sensitivity is judged to be high.	<ul> <li>(north).</li> <li>Construction activities associated with other KTR Project connections comprising E-G, G-T and the BG Deviation will be evident in successive views looking north to south form this location. Whilst some ground-level disturbance associated with construction will be screened by the immediate landform in views looking north-east and east, access tracks for construction vehicles will be seen in the middle distance of views looking north and south.</li> <li>When viewed in combination with the existing R Route (north) which will remain evident during this phase, the P-G via K connection and ancillary construction activities will result in a medium scale change across a large proportion of the view.</li> <li>The magnitude of visual change during construction will be medium and taking account of the high sensitivity will result in a moderate and significant visual effect.</li> </ul>	This VP is located at a relatively elevated position along the Southern Upland Way and open views are afforded across the Kenmure Valley to the east and towards the summits of the Galloway Hills Regional Scenic Area (RSA) to the west. Similar visual effects will be relatively localised and experienced from a short section of the Southern Upland Way. The geographical extent of similar views will therefore be small. The P-G via K connection will occupy a similar portion of the available views to the decommissioned R Route (north), however the connection will bring electricity transmission infrastructure closer to the VP, visible in successive views looking north to south resulting in a medium scale of change to views. Overall, the magnitude of visual change during the operational phase will be medium and taking account of the high sensitivity will result in a <b>moderate</b> and <b>significant</b> visual effect.	<b>Figures 7.27</b> . connection will to the south w connection is I backclothed and Both the G-T of combined view The G-T connection backclothed by south-west so these views lo screened by co connection as The introduction electricity infra connection. In terms of oth extension will are foreshorte backclothed as A number of p relatively dista north-east and located at low interactions w appear as dist The scale of co small, with sin extent.
VP8: Southern	The VP is representative of	Whilet come ground-level disturbance accepted with	Six steel lattice towers of the D.C. via K connection will be seen in	location when will be medium the cumulative
Upland Way near St John's Town of Dalry (261776, 581389)	The VP is representative of views experienced by recreational receptors on the Southern Upland Way long distance footpath, and similar views experienced	Whilst some ground-level disturbance associated with construction will be screened by intervening landform and vegetation, access tracks will be seen in the middle distance of views north-west to south-west on the western slopes of the valley.	Six steel lattice towers of the P-G via K connection will be seen in the middle distance of successive views looking north-west to south-west from this location, passing out of view behind existing broadleaf trees in successive views looking further south. All visible towers will be seen against the skyline from this location	Figures 7.28 visible in succo landform looki the towers of t

o other KTR Project connections and no other consented developments visible in views from this location.

ive visual effect from this location is therefore judged to d **not significant**.

**7.5** and **Figure 7.27.6** indicate that the C-K connection ly perceptible from this location and will not therefore o additional cumulative effects.

**27.2** to **Figure 7.27.12** indicate that the P-G via K will be seen in combined middle to longer distance views n with the E-G, and G-T and BG Deviation. The E-G is located closest to the VP and will be seen partially I and screened by intervening landform and vegetation.

T connection and the BG deviation will be seen in iews to the south, south-west of the existing substation. nection will be seen in long distance views south, I by landform as it ascends the slopes of the valley to the south, east of Shiel Hill. BG Deviation will be seen in clooking south, backclothed by landform and partially conifer forest and seen in parallel with the G-T as it passes over the south-eastern flank of Glenlee Hill. ction of these connections will increase the influence of nfrastructure seen in combination with the P-G via K

other proposed developments, Glenlee substation vill be largely imperceptible in views to the south, which rtened by landform, largely screened by vegetation and l against the semi-improved pasture beyond.

f proposed wind farms will theoretically be visible as stant features on the skyline in successive views to the and east. However, the backclothed P-G via K connection ower elevation will not contribute to potential cumulative with these other proposed developments which will listant and/or distinctly separate developments.

f cumulative change in views from this location will be similar views experienced from a small geographical

ude of cumulative visual change to the view from this en considered in the presence of the above developments ium. Taking account of the sensitivity of the receptors, tive visual effect will be **moderate** and **significant**.

**28.2** to **7.28.5** indicate that the E-G connection will be accessive combined views to the west backclothed by oking north-west to south-west and appearing in front of of the P-G via K connection.

(Figure 7.28.1-4)	by residents and visitors	When viewed in combination with the existing R Route	with the lower parts of two towers partially backclothed by the	All other KTR F
	within the settlement of St John's Town of Dalry. Sensitivity is judged to be <b>medium</b> .	<ul> <li>(north) which will remain evident during construction, the P-G via K connection and ancillary construction activities will result in a medium scale change across a large proportion of the view, representing a small geographical area.</li> <li>The magnitude of visual change during construction will be medium. Taking account of the high sensitivity of receptors, the Overall, level of effect will be <b>moderate</b> and <b>significant</b> visual effect.</li> </ul>	rolling drumlin landform in the background of view. The operational P-G via K connection will occupy a similar portion of the view to the decommissioned R Route (north) and will introduce additional visibility of towers seen above the skyline formed by the enclosing western ridge of the valley in successive views to the north-west and south-west. The introduction of the P-G via K connection will result in a medium scale change in the view and in combination with the E- G connection will occupy a similar geographic area to the existing R Route, visible in successive views from north-west to south- west from this location. The geographical extent of similar views will be small. Overall, the magnitude of visual change during the operational phase will be medium and taking account of the medium	intervening ver cumulative effe No other conse views from this The scale of cu small, with sim extent. The magnitude be low and tak cumulative visu
VP9: Mulloch Hill (263152, 580664) ( <b>Figure 7.29.1-</b> <b>11</b> )	The VP represents specific elevated panoramic views experienced by recreational receptors on Core Path 224. Sensitivity is judged to be high.	This VP is representative of the specific panoramic views across the Dundeugh and Kenmure Valleys afforded from this elevated location. Given the longer-distance nature of the view, ground-level disturbance associated with the construction of the P-G via K connection will be seen as distant small scale features in the view from this VP. Construction activities associated with other KTR Project connections will be evident, albeit in the background of long-distance successive views backclothed by landform looking north-west to south-west from this location. This includes construction activities associated with the E-G connection which will be seen in combination with the introduction of the P-G via K connection in views looking west to north-west. Construction activities associated with the BG Deviation and G-T connection will be seen in views to the south-west. As a result, low level linear construction activities including the introduction of temporary access tracks and the felling of woodland north and south of Glenlee will affect a large portion of the available view. When viewed in combination with R Route (north and south) and the BG connection, which will remain evident during construction, the introduction of the P-G via K connection will result in a small scale change and introduce relatively distant features into the view, experienced from a medium geographical area where similar elevated views are afforded across the valley. The magnitude of visual change during construction will be low and taking account of the high sensitivity will result in a <b>minor</b> and <b>not significant</b> visual effect.	sensitivity will result in a <b>moderate</b> and <b>significant</b> visual effect. From this elevated location the P-G via K will be seen in longer- distance successive views looking west to north-west extending along the floor of the Dundeugh and Kenmure valleys between Glenlee substation and Kendoon. The steel lattice towers will be backclothed by rolling landform, woodland, and occasional small blocks of coniferous forestry. In combination with the E-G connection, the towers of P-G via K connection will appear as a relatively small scale feature in longer-distance views across the valley and will occupy a similar geographical area to the existing R Route (north), located in slightly closer proximity toto the VP, in views to the west, north- west. The decommissioning and removal of R Route (south) will reduce the presence of electricity transmission infrastructure within the Kenmure Valley in views towards the valley floor to the west, south-west from this location. The scale of change to the view will be small, and similar views will be experienced from the elevated eastern side of the valley representing a small geographical extent. Overall, the magnitude of visual change during the operational phase will be low and taking account of the high sensitivity will result in a <b>minor</b> and <b>not significant</b> visual effect.	Figure 7.29.2 will be barely p contribute to a Figures 7.29. connection will combined view substation in v The G-T conne views partly ba beyond Glenlee connection. In terms of oth extension will b intervening wo cumulative effe A number of pr distant feature to south-east. in the middle d seen in combin proposed deve The scale of cu small, with sim area. The magnitude location will be receptor, the c significant.
VP10: A762 north of Glenlee (261181, 580510) ( <b>Figure 7.30.1-7</b> )	The VP is representative of sequential views experienced by recreational receptors and road users travelling on the A762. Sensitivity is judged to be <b>medium</b> .	Ground-level disturbance associated with the felling of coniferous woodland at Hag Wood and temporary access tracks for construction vehicles will be evident in close- proximity views north-west. The creation of the proposed wayleave through Hag Wood will require the felling of coniferous woodland to the east identified as being at risk of windthrow that would otherwise screen the steel lattice towers. The P-G via K connection and ancillary construction activities, seen in combination with the R Route (north),	In successive views looking west to north-west the steel lattice towers of P-G via K will be seen against the skyline. The lower parts of towers in closest proximity will be partially screened and backclothed by vegetation and landform. Views to the south-west to the terminal tower located in close proximity to Glenlee substation will be screened by mixed mature woodland located along Coom Burn. The P-G via K connection runs parallel to the A762 for a relatively short section of the road between Allangibbon Bridge and Glenlee, however the geographical extent of similar views is small.	Figures 7.30. visible backclot successive view with the P-G vi All other KTR P intervening ver cumulative effe No other conse views from this

TR Project connections will be screened by existing vegetation and will not therefore contribute to additional effects from this location.

onsented or proposed developments will be visible in this location.

f cumulative change in views from this location will be similar views experienced from a small geographical

tude of cumulative change in views from this location will taking account of the sensitivity of receptors the visual effect will be **minor** and **not significant**.

**29.2** to **Figure 7.29.11** indicate that the C-K connection ely perceptible from this location and will not therefore to additional cumulative effects from this location.

**29.2** to **Figure 7.29.11** indicates that the E-G will be seen backclothed by landform in successive views with the P-G via K connection approaching Glenlee in views looking north-west to south-west.

nnection and BG Deviation will be seen within similar y backclothed and partly visible against the skyline nlee substation in combination with the P-G via K

other proposed developments Glenlee substation vill be barely perceptible in views to the west beyond the woodland and will not therefore contribute to additional effects from this location.

of proposed wind farms will theoretically be visible as tures on the skyline in successive views to the north-east ast. However, the backclothed P-G via K connection visible dle distance of views to the west, north-west will not be mbined cumulative views with these other consented or developments.

f cumulative change in views from this location will be similar views experienced from a small geographical

tude of cumulative visual change to the view from this Il be low. Taking account of the high sensitivity of the ne cumulative visual effect will be **minor** and **not** 

**30.2** to **7.30.6** indicates that the E-G connection will be colothed by landform and partly screened by vegetation in views looking north-west to south-west in combination G via K connection.

TR Project connections will be screened by existing vegetation and not therefore contribute to additional effects from this location.

onsented or proposed developments will be visible in this location.

Assessment of Visual Effects – Representative Viewpoints: Polquhanity to Glenlee via Kendoon (P-C	S via K)	
will result in a medium scale change across a medium proportion of the available view. The magnitude of visual change during construction will be medium and taking account of the medium sensitivity will result in a <b>moderate</b> and <b>significant</b> visual effect.	<ul> <li>The P-G via K connection will occupy a similar geographical area and proportion of the available views to the decommissioned and removed R Route (north) and associated distribution lines, visible in successive views to the north-west to south-west from this location, resulting in a medium scale change in the view.</li> <li>Overall, the magnitude of visual change during the operational phase will be medium and taking account of the medium sensitivity will result in a moderate and significant visual effect.</li> <li>The replanting of felled windthrow areas of coniferous woodland which forms Hagwood east of the P-G via K connection wayleave will result in the partial screening and filtering of views towards towers, however the upper portions of some towers are likely to remain visible as woodland matures.</li> <li>As the woodland outside the wayleave matures the magnitude of visual change will reduce to low, and the level of residual effect during the operational phase will be minor and not significant.</li> </ul>	The magnitude be low and tak cumulative vis

#### Table 7-7: Assessment of Visual Effects – Settlements: Polquhanity to Glenlee via Kendoon (P-G via K)

Settlement	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Magnitude of Effects - Ope
Dundeugh (Including residential properties: P9, P10, P11, P13, P15, P16, P18, P19, P21, P22, P23, P25, P26, P27 and P28)	Residents within the settlement of Dundeugh. Sensitivity is judged to be high.	During the construction phase disturbance associated with preparatory groundworks including the introduction of temporary access tracks will be evident in views to the west. Felling of conifer forest within the Galloway Forest Park north-west of the settlement and within the wayleave will be largely screened by retained vegetation to the east of the P-G via K connection. The introduction of the P-G via K connection and associated construction activities will result in a medium scale change when viewed in combination with the existing N Route which will remain present during construction. Similar views will occur from a number of residential properties representing a small localised geographical extent of the settlement. The magnitude of visual change during construction will be medium and taking account of the high sensitivity will result in a <b>moderate</b> and <b>significant</b> visual effect on views from this settlement.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.13</b> (P-G via K) indicate widespread theoretical visibility across the settlement, with the P-G via K connection running 0.2km west of the nearest residential property P26. Views of the P-G via K connection will vary across Dundeugh. Where properties are orientated with principal and secondary views looking west to south-west the tops of the P-G via K connection will be seen against the skyline in close proximity views. The P-G via K connection will be seen beyond the existing N Route. Views will be subject to localised screening and filtered by vegetation within property grounds, and VP2: Dundeugh at access to Polmaddy, illustrates similar views experienced from the northern part, and small geographical extent of the settlement. The undergrounding of existing distribution infrastructure located within close proximity of the proposed P-G via K connection will reduce the presence and influence of vertical infrastructure in views to the south of the settlement. The P-G via K connection will be seen at a further distance to the west of the decommissioned N Route in available views. Where open views are afforded from properties with principal views west or south-west, steel lattice towers will be seen against the skyline in relatively close proximity, resulting in a medium scale change in views.	There is potent combined view P27 and P28 ir a medium scal extent of the s No other conse <b>3.1</b> will be visi therefore contr from this locat view from this sensitivity of th <b>moderate</b> (ad
Kendoon (Including residential properties: P30, P31, P34, P35,	Residents within the settlement of Kendoon directly adjacent to the existing Kendoon substation. Sensitivity is judged to be <b>high</b> .	Whilst construction activities will largely be accommodated in within areas of occupied by elements of electricity infrastructure the creation of the wayleave and required felling of mixed woodland at Glenhoul Wood and Dundeugh Wood will be visible in views from the majority of locations within the settlement .	The P-G via K connection passes within approximately 0.1km north of the settlement into Kendoon substation, and widespread theoretical visibility is indicated in the ZTVs shown on <b>Figure</b> <b>7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.13</b> (P-G via K). Where properties are orientated with principal and secondary views looking west to north-west, steel lattice towers of P-G via K	The P-K conne connection froi south-east. Th from a small e No other KTR F consented or p not be visible i

Ide of cumulative change in views from this location will aking account of the sensitivity of receptors the residual *v*isual effect will be **minor** and **not significant**.

of Change and Significance of Cumulative Visual perational Phase

ential for the P-G via K connection to be seen in ews with the C-K connection from outlying properties B in views looking south to south-east. This will result in cale of change experienced from a small geographical e settlement.

nsented or proposed developments illustrated on **Figure** visible in views from this settlement and will not ontribute to additional cumulative effects experienced cation. The magnitude of cumulative visual change to the his location will be medium. Taking account of the f the receptors, the cumulative visual effect will be (adverse and long-term) and **significant**.

nection will be seen in combination with the C-K from a number of properties with views looking south to This will result in a medium scale of change experienced I extent of the settlement.

R Project connections will be evident, whilst other r proposed developments illustrated on **Figure 3.1** will e in views from this settlement and will therefore not

Assessment of Vis	sual Effects – Settlements: P	olquhanity to Glenlee via Kendoon (P-G via K)		
P36, P39, P40, P41, P43)		Viewed in combination with the N Route, R Route (north) which will remain evident during this phase and ancillary construction activities, the P-G via K connection is will introduce a medium scale change across a large proportion of the view. A high magnitude of change has been identified for VP4	will be seen against the skyline in close proximity views. In middle to longer-distance views looking west to south-west, the P-G via K connection will be seen partially screened by intervening vegetation and backed by rolling landform crossing the Water of Ken and running south along the Dundeugh Valley. Similar views will be afforded from most properties within	contribute to settlement. The magnituc settlement wi receptors, the <b>significant</b> .
		during the construction phase. The magnitude of visual change during construction will be high and taking account of the high sensitivity will result in a <b>major</b> and <b>significant</b> visual effect on views from this settlement.	Kendoon, however given the relatively small size of the settlement, the geographical extent of similar views will be small. Decommissioning and removal of N Route and R Route (north), and the undergrounding of existing distribution infrastructure will reduce the presence of electricity transmission infrastructure in views from the settlement.	
			<ul> <li>However, the introduction of the P-G via K connection will be considered a medium scale change across a large proportion of available views.</li> <li>Overall, the magnitude of visual change during the operational phase will be medium for the settlement as a whole and will result in a <b>moderate</b> and <b>significant</b> visual effect.</li> </ul>	
St John's Town of Dalry	Residents within the settlement of St John's Town of Dalry. Sensitivity is judged to be <b>high</b> .	Ground-level disturbance associated with construction activities will be seen in longer-distance views from the settlement. Seen in combination with the existing R Route (north) and BG connection, the P-G via K connection will introduce a medium scale change seen in successive views to the west and south-west from the western edge of the settlement, representing a small geographical area. The magnitude of visual change during construction will be medium and taking account of the high sensitivity will result in a <b>moderate</b> and <b>significant</b> visual effect on views from this settlement.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.13</b> (P-G via K) indicate widespread theoretical visibility from across the settlement. Where open views are experienced by properties with principal and secondary views to the north-west, west and south-west the steel lattice towers of P-G via K will be seen in longer-distance views running along the opposite side of the Dundeugh Valley, partially screened by landform and vegetation, and terminating at the Glenlee substation. The scale of change in views will be small. Outward views from the settlement towards the P-G via K connection are gained from properties along the western edge of the settlement. Given the limited number of residential properties from which views of P-G via K will be afforded, and the small size of the settlement within the Study Area, the geographical extent of similar views will be small. The P-G via K connection, in combination with the proposed E-G connection will occupy a similar proportion of the available views to the decommissioned R Route (north) from the settlement. The decommission infrastructure within the foot of the Kenmure Valley in views to the south from the settlement.	Where the P- west and sour combination i and the G-T of The E-G com- vegetation ar will be seen p formed by GI In terms of o extension will not therefore location. It is consider development this settleme Introduction with these ot influence of e occupy a sim the BG Route towers and g experienced I The magnitud will be low ar cumulative vit
Glenlee (Including residential properties P57, P58, P59, P60, P61, P62, P63, P64, P65)	Residents within the settlement of Glenlee directly adjacent to the hydroelectric power station and substation. Sensitivity is judged to be <b>high</b> .	With the exception of properties P57 and P58 which have principal views orientated to the north-east, residencies within this small linear settlement are orientated to the south-east away from the proposed P-G via K connection. There will be some opportunity for direct to oblique principal and secondary views of the P-G via K connection experienced from properties in the northern part of the settlement (properties P57, P58 and P59). However actual visibility will be limited by existing vegetation forming property boundaries and north of the settlement. Construction activities required to introduce the P-G via K connection and the adjacent E-G connection will be largely screened by intervening features including existing infrastructure and vegetation to the north of the settlement	The P-G via K connection runs less than 0.1km north of the settlement into Glenlee substation. Widespread theoretical visibility is indicated in the ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.13</b> (P-G via K). Given existing screening to the north of the settlement, visibility of the P-G via K connection will be largely limited to the tops of towers in closest proximity to the settlement. The scale of visual change will be small and will affect a small geographical area. The decommissioning and removal of the R Route (south) terminal tower to the north-east of the settlement and in close proximity to P57 and P58 will reduce the immediate presence of electricity transmission infrastructure in principal views from these properties.	Potential com connection w vegetation to The BG Devia skyline in clo the southern In terms of o extension wil Deviation and will increase It is consider development this settleme

to additional cumulative effects experienced from this

ude of cumulative visual change to views from this will be medium. Taking account of the sensitivity of the the cumulative visual effect will be **moderate** and

P-G via K connection is seen in views to the north-west, buth-west from the settlement it will be seen in n with the E-G connection approaching Glenlee substation I connection and BG Deviation behind Glenlee.

nnection will be largely seen backclothed by existing and landform. The G-T connection and the B-G Deviation partly backclothed and partly visible against the skyline Glenlee Hill.

other proposed developments Glenlee substation vill be largely screened by intervening vegetation and will re contribute to additional cumulative effects from this

ered unlikely that other consented or proposed nts illustrated on **Figure 3.1** will be visible in views from nent.

n of the P-G via K connection when seen in combination other proposed KTR connections will increase the electricity infrastructure in the view, the connections will milar proportion of available views to R Route (north) and te there will be a perceptible difference in the number of geometry. This will result in a small scale of change d locally.

ude of cumulative change in views from this settlement and taking account of the sensitivity of receptors the visual effect will be **minor** and **not significant**.

ombined views of the P-G via K connection and the E-G will be screened by existing infrastructure, buildings and to the north, north-west of the community.

viation and the G-T connection will be seen against the lose proximity rear views from a number of properties at n extents of the settlement.

other proposed developments Glenlee substation vill be evident in combined rear views with the BG nd the G-T connection from a number of properties and e the influence of electricity infrastructure.

ered unlikely that other consented or proposed nts illustrated on **Figure 3.1** will be visible in views from nent.

Assessment of Visual Effects – Settlements: P	<ul> <li>Olquhanity to Glenlee via Kendoon (P-G via K)</li> <li>Construction activities associated with the introduction of the BG Deviation and the G-T Connection will be evident in close proximity views from much of the settlement. However, the P-G via K connection will not be seen in combination with these KTR Project connections during construction.</li> <li>Taking account of the screening of outward views looking north from the settlement, the introduction of the P-G via K connection and ancillary construction activities will result in a small scale change in views experienced from this settlement.</li> </ul>	Overall, the magnitude of visual change during the operational phase will be low for the settlement as a whole and will result in a <b>minor</b> and <b>not significant</b> visual effect.	The P-G via K settlement and Project connect The scale of cu small, with sin extent. The m settlement wil receptors the <b>significant</b> .
	The magnitude of visual change during construction will be low and taking account of the high sensitivity will result in a <b>minor</b> and <b>not significant</b> visual effect on views from this settlement.		

#### Table 7-8: Assessment of Visual Effects – Residential Properties: Polquhanity to Glenlee via Kendoon (P-G via K)

Residential Property or Group	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential Cun
P5: Dalshangan Wood, North	Residents. Sensitivity is judged to be <b>high</b> .	The property is set to the east of the A713, with principal views are orientated south-west across the A-road and towards the P-G via K connection. Disturbance associated with the creation of temporary construction tracks and preparatory groundworks including forestry felling will be largely screened in views from this location. The scale of visual change from this property will be barely perceptible. Overall, the magnitude of visual change during the construction phase will be low and the level of visual effect resulting from the introduction of P-G via K will be <b>none</b> and <b>not significant</b> .	<ul> <li>Visibility of the P-G via K connection will be limited by vegetation on either side of the A713 to the south.</li> <li>Decommissioning and removal of N Route will increase the distance of transmission infrastructure from this property.</li> <li>The scale of visual change from this property will be barely perceptible.</li> <li>Overall, the magnitude of visual change during the operational phase will be low and the level of visual effect resulting from the introduction of P-G via K will be <b>none</b> and <b>not significant</b>.</li> </ul>	No other KTR F developments this residential Therefore, the <b>significant.</b>
P6: Dalshangan Lodge	Residents. Sensitivity is judged to be <b>high</b> .	<ul> <li>Principal views are orientated south-west across the A713 and towards the P-G via K connection. Mixed woodland on the western side of the A713 largely foreshortens views, including those of the existing N Route.</li> <li>Disturbance associated with the creation of temporary construction tracks, forestry felling and preparatory groundworks will be largely screened in views from this location. The scale of visual change from this property will be barely perceptible.</li> <li>Given limited visibility experienced from the property the overall magnitude of visual change will be low, and the level of visual effect during the construction phase will be none and not significant.</li> </ul>	<ul> <li>Decommissioning and removal of N Route will increase the distance of transmission infrastructure from this property.</li> <li>The scale of visual change from this property will be barely perceptible.</li> <li>Overall, the magnitude of visual change during the operational phase will be low and the level of visual effect resulting from the introduction of P-G via K will be <b>none</b> and <b>not significant</b>.</li> </ul>	No other KTR F developments this residential Therefore, the <b>significant.</b>
P7: Karnak	Residents. Sensitivity is judged to be <b>high</b> .	Potential for open direct views north-west towards the P-G via K connection and direct views from property curtilage to the north-west, west and south. Steel lattice towers of the existing N Route are seen in direct secondary (rear) close proximity views north-west and in views from the property curtilage looking north- west to south-west.	The P-G via K connection will occupy a similar portion of available views to N Route but will be seen at a further distance from the property. Decommissioning and removal of N Route will reduce the presence of transmission infrastructure within the immediate views from this property. The towers of P-G via K will continue to occupy a similar proportion of the view but further from the property resulting in a medium scale change.	No other KTR F developments this residential Therefore, the <b>significant.</b>

<sup>&</sup>lt;sup>33</sup> The identification of residential properties considered in the assessment of visual effects are detailed in **Table A7.5.62** in **Appendix 7.5**.

K connection will be largely screened in views from the and is unlikely to be seen in combination with other KTR nections, or Glenlee substation extension.

f cumulative change in views from this location will be similar views experienced from a small geographical magnitude of cumulative change in views from this will be low and taking account of the sensitivity of ne cumulative visual effect will be **minor** and **not** 

#### umulative Effects - Operational Phase

R Project connections or other consented or proposed ts indicated on **Figure 3.1** will be visible in views from ial property.

ne predicted cumulative effects will be **none** and **not** 

R Project connections or other consented or proposed ts indicated on **Figure 3.1** will be visible in views from ial property.

ne predicted cumulative effects will be **none** and **not** 

R Project connections or other consented or proposed ts indicated on **Figure 3.1** will be visible in views from ial property.

ne predicted cumulative effects will be **none** and **not** 

The Kendoon to Tongland 132kV Reinforcement Project

		During the construction phase disturbance associated with preparatory groundworks including the felling of forestry and the introduction of temporary access tracks will be evident from this property. This will include an access track to the south of the property which will be seen in principal close proximity views looking south-east and views from property curtilage looking south-west. The removal and undergrounding of existing distribution infrastructure in close proximity views to the rear of the property will reduce the presence of vertical man-made elements in the view. Overall, the magnitude of change during construction will be medium, and the level of visual effect during the construction phase on views from this property will be	Overall, the magnitude of change during construction will be medium, and the level of visual effect during the operational phase of P-G via K will be <b>moderate</b> and <b>significant</b> . The replanting of felled windthrow areas of coniferous woodland east of the P-G via K connection wayleave will result in the screening and filtering of views of towers, however the upper extents of some towers are likely to remain visible as woodland matures. As the woodland matures the magnitude of visual change will reduce to low, and the level of residual effect during the operational phase will be <b>minor</b> and <b>not significant</b> .	
P8: Hawkrigg	Residents. Sensitivity is judged to be <b>high</b> .	<ul> <li>moderate and significant.</li> <li>Potential for open direct views south-west from the rear of the property towards the P-G via K connection and from the property curtilage to the north-west, west and south.</li> <li>Steel lattice towers of the existing N Route are seen in direct secondary (rear) close proximity views south-west and in views from the property curtilage looking north-west to south-west. The P-G via K connection will occupy a similar portion of available views to N Route but will be seen at a further distance from the property.</li> <li>During the construction phase disturbance associated with preparatory groundworks including the felling of forestry and the introduction of temporary access tracks will be evident from this property. This will include an access track to the south-west of the property and curtilage.</li> <li>Overall, the magnitude of change during construction will be medium, and the level of visual effect during the construction phase on views from this property will be moderate and significant.</li> </ul>	Decommissioning and removal of N Route will reduce the immediate presence of transmission infrastructure within views from this property. The towers of P-G via K will occupy a similar proportion of the view resulting in a medium scale change, with towers seen at a greater distance than the decommissioned N Route. Overall, the magnitude of change during construction will be medium, and the level of visual effect resulting from the introduction of P-G via K will be <b>moderate</b> and <b>significant</b> . The replanting of felled windthrow areas of coniferous woodland east of the P-G via K connection wayleave will result in the screening and filtering of views of towers, however the upper extents of some towers are likely to remain visible as woodland matures. As the woodland matures the magnitude of visual change will reduce to low, and the level of residual effect during the operational phase will be <b>minor</b> and <b>not significant</b> .	No other KTR developments this residentia Therefore, the <b>not significa</b>
P44: Stroangassel Farm	Residents. Sensitivity is judged to be <b>high</b> .	Principal views from the property are orientated south- east towards the Water of Ken/Carsfad Loch. Potential for views west towards the P-G via K connection and views from the property curtilage to the north-west, west and south-west. Temporary accesses, and movement of construction vehicles, will be visible during the construction phase in close to middle-distance secondary views and views from the property curtilage to the north-west and south-west of the property. Seen in combination with R Route (north) and C-K the P-G via K connection will introduce a small scale change, primarily resulting from visibility of ancillary construction activities where the connection crosses the A713. The magnitude of visual change during construction will be low. Overall, the magnitude of change will be low, and the level of visual effect during the construction phase on views from this property will be <b>minor</b> and <b>not</b> <b>significant</b> .	Visibility of the P-G via K connection will be partially screened by dense vegetation located on either side of the A713 to the west of the property. The towers of P-G via K will occupy a similar proportion of the view to the decommissioned R Route (north) resulting in a small scale change in the view, affecting a small geographical area limited to views from the property curtilage. The effects of undergrounding of existing distribution infrastructure located to the west of the A713 will be largely undiscernible from this property, but where evident it will reduce the presence and influence of vertical infrastructure in views west from the curtilage of the property. Overall, the magnitude of visual change will be low, and the level of visual effect during the operational phase will be <b>minor</b> and <b>not significant</b> .	The C-K conne from the prop partially scree connection wil west, south-w west of the A7 No other conse <b>3.1</b> will be vis The predicted <b>significant</b> .
P45: Carsfad Cottage	Residents. Sensitivity is judged to be <b>high</b> .	Principal views from the property are orientated west towards the P-G via K connection but heavily screened by adjacent trees and vegetation. The property is located at lower elevation to the P-G via K connection with outward views to the west and south-west largely limited by	Given the low elevation of the property east of the A713 and the presence of intervening screening provided by vegetation within the property curtilage and east of the A713, visibility of the proposed P-G via K connection will be limited from the property and its curtilage.	The C-K conne south from thi towards Carsfa woodland. The

R Project connections or other consented or proposed ts indicated on **Figure 3.1** will be visible in views from ial property.

ne predicted cumulative visual effects will be **none** and **rant.** 

nection will be visible in views to the west, south-west operty and its curtilage, with views of wood poles sened or filtered by intervening woodland. The P-G via K vill appear in combined views with C-K in views to the west where the two connections run in parallel to the A713.

nsented or proposed developments indicated on **Figure** isible in views from this residential property.

d cumulative visual effects will be **none** and **not** 

nection will also be visible in views to the west and this property and its curtilage as the connection descends sfad, partially screened or filtered by intervening he P-G via K will appear in combined views with C-K in

		operties: Polquhanity to Glenlee via Kendoon (P-G via K		vioue to the
		vegetation within the property's curtilage and along the A713. Construction activities will be evident to the west, and	Towers of the will be evident in views to the south-west as it passes south in in parallel with the A713, partially screened or filtered by intervening woodland.	views to the so the west of the No other conse
		south-west of the property as the P-G via K connection is constructed in close proximity to the west of the A713. A small scale change in the view will occur, resulting in a low magnitude of visual change in views from this	The towers of P-G via K will occupy a similar position and proportion of available views to the decommissioned R Route (north) resulting in a small scale change in the view, affecting a small geographical area limited to views from the property	3.1 will be visi The predicted significant.
		property during construction. Given limited visibility experienced from the property the overall level of visual effect during the construction phase will be <b>minor</b> and <b>not significant</b> .	curtilage. The undergrounding of existing distribution infrastructure located to the west of the A713, and south of the property where it crosses the A713, will remove this infrastructure from immediate views from the property curtilage.	
			Overall, the magnitude of visual change in views from this property will be low, and the level of visual effect during the operational phase will be <b>minor</b> and <b>not significant</b> .	
P46: Inverharrow	Residents. Sensitivity is judged to be <b>high</b> .	Principal views from the property are orientated south- east, away from P-G via K towards the Water of Ken. Potential for visibility of P-G via K at access to the property from the A713 and from the property curtilage, however vegetation on either side of the A713 will partially screen views.	R Route (north) passes less than 0.1km west of the property, with open and close-proximity views of towers afforded to the north-west from the property and curtilage. The P-G via K connection will occupy a similar portion of available views to R Route (north) but will be seen at a greater distance from the property.	No other KTR I developments this residential Therefore, the <b>not significar</b>
		During the construction phase disturbance associated with preparatory groundworks and the introduction of temporary access tracks will be seen in close to middle- distance views from this property, partially screened by vegetation on either side of the A713.	Decommissioning and removal of R Route (north) will reduce the presence of transmission infrastructure in immediate views from this property. The towers of P-G via K will continue to occupy a smaller proportion of the view, seen at a greater distance from the property than the decommissioned R Route (north).	
		P-G via K and ancillary construction activities will introduce a medium scale change across a medium proportion of the view, resulting in a medium magnitude	A small scale change in the view will occur resulting in a low magnitude of visual change in views from this property.	
		of visual change. Overall, the level of visual effect during the construction phase on views from this property will be <b>moderate</b> and <b>significant</b> .	Overall, the level of visual effect during the operational phase will be <b>minor</b> and <b>not significant</b> .	
P53: Staffa	Residents. Sensitivity is judged to be <b>high</b> .	<ul> <li>The construction of temporary access tracks and movement of construction vehicles will be seen filtered by vegetation in principal looking views south-west and in views experienced from the property curtilage.</li> <li>The steel lattice towers, and OHL of the P-G via K connection introduced during the construction phase will remain throughout the operational phase. However, the P-G via K connection will be largely screened by intervening landform and vegetation. The existing R Route (north) will remain evident during this phase but will be largely screened by intervening features west of the A762. A small scale change in the view will occur during construction.</li> <li>Given the limited visibility experienced from the property the magnitude of visual change will be low, and the level of effect during the construction phase will be <b>minor</b> and <b>not significant</b>.</li> </ul>	<ul> <li>Principal views are orientated south-west towards the P-G via K connection. However, views looking in this direction will be foreshortened by landform and partially screened by vegetation within the property curtilage and adjacent Craiggubble Wood and on the west side of the A762.</li> <li>The P-G via K connection will occupy a similar portion of available views to R Route but will be seen at a further distance from the property.</li> <li>The decommissioning and removal of R Route (north) will reduce the presence of electricity transmission infrastructure in immediate views looking west from this residential property.</li> <li>The P-G via K connection will be partly screened by landform and vegetation west of the A762, and the scale of change to views from this property will be low.</li> <li>Overall, the magnitude of visual change will be low, and the level of effect during the operational phase will be minor and not significant.</li> </ul>	The E-G conne west from this the west side of No other conse <b>3.1</b> will be visi Therefore, the <b>not significar</b>
P56: Waterside, Glenlee	Residents. Sensitivity is judged to be <b>high</b> .	There is potential for open views from the property and curtilage from north-west to south-west towards the P-G via K connection. Disturbance associated with preparatory groundworks and the felling of forestry for the creation of wayleave at Hag Wood will be evident in close-distance secondary views north-west to south-west from the property. The creation of temporary access from the A762 will be seen in	Steel lattice towers of P-G via K will appear partially skylined in close proximity views partially backclothed by landform and partially screened by agricultural buildings in middle to longer- distance views to the north-west to south-west. The P-G via K connection will be evident in views to the west from this property, occupying a similar proportion of the available views to that of the decommissioned R Route (north)) and will be partly screened by landform, agricultural buildings	The P-G via K connection in s property. It is considered illustrated on I and will not th from this locat

south-west where the two connections run in parallel to the A713.

nsented or proposed developments indicated on **Figure** isible in views from this residential property.

d cumulative visual effects will be **none** and **not** 

R Project connections or other consented or proposed ts indicated on **Figure 3.1** will be visible in views from ial property.

ne predicted cumulative visual effects will be **none** and **rant**.

nection will be barely perceptible in views west, southnis property, passing behind Craiggubble Wood and on e of the A762.

nsented or proposed developments indicated on **Figure** isible in views from this residential property.

ne predicted cumulative visual effects will be **none** and **rant**.

K connection will be seen in combination with the E-G n successive views north-west to south-west from this

red unlikely that other proposed developments n **Figure 3.1** will be visible in views from this location therefore contribute to additional cumulative effects ration.

	principal views looking south. A medium scale change in views from the property and its curtilage will occur during construction. Overall, the magnitude of visual change will be medium, and the level of effect will be <b>moderate</b> and <b>significant</b> .	<ul> <li>and vegetation to the west of the property and its immediate curtilage.</li> <li>The undergrounding of existing distribution infrastructure directly south and south-west of the property curtilage will reduce the immediate presence of OHL infrastructure in views from the property.</li> <li>The scale of change to views from this property will be small, with similar views experienced from a very small geographical area.</li> <li>During the operational phase, the magnitude of visual change will be low, and the level of visual effect will be minor and not significant.</li> </ul>	The scale of cu small, with sim area. Overall, the ma will result in a on views from t
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### Table 7-9: Assessment of Visual Effects – Routes: Polquhanity to Glenlee via Kendoon (P-G via K)

Route	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential Cu
A713 - between Carsphairn and Parton (part of the Galloway Tourist Route, the Scottish Castle Route and Loch Ken and River Dee Galloway and Southern Ayrshire Biosphere Route)	Road users, including tourists Sensitivity is judged to be medium.	During the construction phase disturbance associated with preparatory groundworks, the felling of forestry and mixed woodland at Galloway Forest Park and Knocknalling Wood, and the introduction of temporary access tracks will be evident in sequential views experienced from the A713. Steel lattice towers of P-G via K and ancillary construction activities will be seen in combination with the existing steel lattice towers of N and R Route (north), typically resulting in a medium to large scale change in views from the road. A medium magnitude of change in views from sections of this route is predicted to arise during the construction phase resulting in <b>moderate</b> and <b>significant</b> visual effects from sections of this road between Polquhanity and Allangibbon Bridge.	The P-G via K connection runs broadly parallel and to the west of the A713 through much of the northern extent of the Study Area between Polquhanity and Allangibbon Bridge. The ZTVs shown on <b>Figure 7.11</b> (all connections) and <b>Figure 7.13</b> (P-G via K) indicate potential theoretical visibility of the P-G via K connection from the A713 between Polquhanity and Glenlee. VP1: Layby on A713 near Polquhanity, indicates close proximity views experienced from the northern section of this road. VP2: Dundeugh at access to Polmaddy indicates views experienced near the settlement of Dundeugh. VP6: Layby on A713 near Knocknalling Wood indicates close-proximity views experienced from the road north of Polharrow Bridge. Steel lattice towers of P-G via K will be seen in direct to oblique short to long distance sequential views from the road, partially backclothed by landform and vegetation with tops of towers skylined. The steel lattice towers of P-G via K will typically be seen at a greater distance from the road than the decommission entructure in views from this route between New Galloway and Crossmichael. The undergrounding of existing distribution infrastructure located within close proximity of the proposed P-G via K connection will reduce the presence and influence of vertical infrastructure seen from the A713 between Dundeugh and Earlstoun. A medium scale change in views will occur for short sections of this route, mainly between Knocknalling and Polquhanity where towers appear in close proximity to the road or areas of additional felling are evident. Overall, a medium magnitude of change in views from sections of this route between Polquhanity and Allangibbon Bridge. The replanting of felled windthrow areas of coniferous woodland near to this route between Polquhanity and Dundeugh, will result in the partial screening and filtering of views towards towers, however the upper portions of some towers are likely to remain	The P-G via K connection in Between Earls in combination The BG Deviat intervening lar contribute to a There are likel developments unlikely that ti distant schem cumulative eff The scale of cu small, with sin of the route. The introduction magnitude of and <b>not signi</b> from this route

cumulative change in views from this property will be similar views experienced from a small geographical

magnitude of cumulative visual change will be low, and a **minor** and **not significant** cumulative visual effect m this residential property.

#### umulative Effects - Operational Phase

K connection will be seen in combination with the C-K n direct to oblique views between Kendoon and Carsfad. Istoun and Glenlee the P-G via K connection will be seen on with the E-G connection.

ation and G-T connection will be largely screened by landform and vegetation and will not therefore additional cumulative effects.

tely to be some glimpsed views of consented or proposed ts illustrated on **Figure 3.1**, however it is considered t the P-G via K connection will interact with these more mes and will not therefore contribute to additional effects with these developments.

cumulative change in views from this route will be similar views experienced from a small geographical area

tion of the P-G via K connection, will result in a low of visual change during operation, resulting in a **minor nificant** cumulative visual effects on sequential views ute between Polquhanity and Glenlee.

			visible as woodland matures, and the scale of change in views	
			from the route will reduce to small.	
			As the woodland matures the magnitude of visual change will reduce to low, and the level of residual effect during the operational phase will be <b>minor</b> and <b>not significant</b> .	
A762 – between Allangibbon Bridge and Tongland (part of the Galloway Red Kite Trail and the	Road users, including tourists Sensitivity is judged to be <b>medium</b> .	Construction activities will be evident from this road, including felling of coniferous woodland at Hag Wood, temporary access tracks and construction vehicles. Between Allangibbon Bridge and the Water of Ken the construction of the P-G via K connection will be seen in combination with the existing R Route, and construction activities associated with the E-G and G-T connections and the BG Deviation. This will result in medium to large scale change in views experienced from a small geographical extent of the road. Overall, the magnitude of visual change will be medium, resulting in a <b>moderate</b> and <b>significant</b> sequential effect during construction for the section of the route between Allangibbon Bridge and to the east of Glenlee.	From the A762 the ZTVs shown on <b>Figure 7.11</b> (all connections) and <b>Figure 7.13</b> (P-G via K) indicate potential theoretical visibility of the P-G via K connection from a section of the route between Allangibbon Bridge to the north and to the south of the Water of Ken, east of Glenlee.	From a sect the P-G via combination at Waterside connection a
och Ken and River Dee Galloway and Southern Ayrshire			VP10: A762 north of Glenlee indicates the potential change in views from part of this section of the road east of Glenlee.	in combinati Glenlee subs
Biosphere Route)			The P-G via K connection will be visible in largely oblique views to the west. Screening along this section of the road is largely limited to individual trees and clumps of vegetation. The tops of some steel lattice towers will be seen against the skyline, as indicated in VP10.	the road, an other conser <b>3.1</b> , it is cor interact with contribute to
			The removal and undergrounding of existing distribution infrastructure east of the road will reduce the presence of vertical man-made elements in views from a short section of this road between Allangibbon Bridge and Glenlee.	The scale of small, with s of the route. The introduc
			The P-G via K connection will occupy a similar proportion of the available views to the decommissioned R Route (north) from this route.	magnitude o a <b>minor</b> and sequential ro Glenlee.
			The undergrounding of existing distribution infrastructure located within close proximity of the proposed P-G via K connection will reduce the presence and influence of vertical infrastructure seen from the A762 between Earlstoun and Glenlee.	Gieniee.
			The scale of change will be medium with views experienced from a small geographical extent of the road, and overall, the magnitude of change toto views from this route will be medium.	
			Overall, the level of effect during the operational phase will be <b>moderate</b> and <b>significant</b> for the section of the route between Allangibbon Bridge and to the east of Glenlee.	
			The replanting of felled windthrow areas of coniferous woodland near to this route at Hagwood will result in the partial screening and filtering of views towards towers, however the upper portions of some towers are likely to remain visible as woodland matures.	
			As the woodland matures the magnitude of visual change will reduce to low, and the level of residual effect during the operational phase will be <b>minor</b> and <b>not significant</b> .	
B7000 – between High Bridge of Ken and St John's Town of Dalry (part of route forms National Byway cycle route)	Road users Sensitivity is judged to be <b>medium</b> .	<ul> <li>Notwithstanding the intervening distance between the route and P-G via K connection, ground-level disturbance associated with construction activities will be perceptible including the presence of temporary access tracks.</li> <li>Viewed in combination with the N and R Route (north), the introduction of P-G via K will introduce a small scale change seen across a medium proportion of the available long distance views from the B7000, however these views will be experienced from a relatively short section of this route in predominantly oblique views from the main direction of travel.</li> <li>Overall, the magnitude of visual change will be low, resulting in a minor and not significant visual effect from a section of this road largely between Glenhoul Hill and Millquarter.</li> </ul>	The ZTVs shown on Figure <b>7.11</b> (all connections) and <b>Figure</b> <b>7.13</b> (P-G via K) indicate potential theoretical visibility within less than 2km of the P-G via K connection from sections of the B7000 between Glenhoul Hill and Millquarter, which is not part of the National Byway. However, outward views from the road are filtered and screened by pockets of forestry, mixed woodland, and roadside vegetation.	The C-K conr route, appea western slop barely percep visible across sections of th No other con
			VP5: B7000 west of Glenhoul Hill indicates the potential change in views experienced from the northern section of the road. The P-G via K connection will be seen in oblique to slightly oblique conjunctial views backed by landform meerland, and	will be evider however the Glenshimmer sections of th
			oblique sequential views backed by landform, moorland, and woodland vegetation. Sections of the B7000 afford elevated views across the valley towards the distant summits of the Galloway Hills RSA.	development The magnitue operation fro the receptors
			The P-G via K connection will occupy a similar proportion of the available views to the decommissioned R Route (north) in longer-	and not sig

tion of this road between Allangibbon Bridge and Glenlee K connection will be seen in direct to oblique views in n with the E-G connection. Between agricultural buildings e and Coom Bridge the southern part of the P-G via K approaching Glenlee substation will be seen in brief views tion with the G-T connection and BG Deviation.

station extension will be screened by vegetation west of nd although there are likely to be some glimpsed views of inted or proposed developments, illustrated on **Figure** nsidered unlikely that the P-G via K connection will h these more distant schemes and will not therefore to additional cumulative effects with these developments.

f cumulative change in views from this route will be similar views experienced from a small geographical area

ction of P-G via K connection will result in a low of cumulative visual change during operation, resulting in d **not significant** visual effect on views from this route between Allangibbon Bridge and to the east of

nnection will be visible in combined views west from this earing in parallel to the P-G via K connection on the lower pes of the valley. Other KTR Project connections will be eptible from much of this route, with the E-G connection ss the valley in relatively distant views from short the road north of St John's Town of Dalry.

nsented or proposed schemes illustrated on **Figure 3.1** ent in combined views with the proposed connection, e proposed Shepard's Rig, Cornharrow, Troston Loch and eroch wind farms will be evident in views from some the route, appearing as distant and/or distinctly separate ints in long views to the north and east.

ude of additional cumulative change in views during rom this location will be low. Considering the sensitivity of rs and the level of cumulative change predicted, **minor prificant** cumulative visual effects will occur for

			distance views across the valley from this road, resulting in a	sequential vi
			small scale change in the view.	Millquarter.
			Given the P-G via K connection will cross the lower elevation foothills and valley sides, views towards the summits of the wider RSA will be uninterrupted by the introduction of the connection, and the magnitude of change in views will be low.	
			Overall, the magnitude of visual change will be low, resulting in a <b>minor</b> and <b>not significant</b> visual effect from sections of this road during the operational phase, where open views exist between Glenhoul Hill and Millquarter.	
Southern Upland Way long distance Sootpath (Core Path No. 504 within Dumfries and Galloway).	Recreational users Sensitivity is judged to be <b>high</b> .	Construction activities will be evident from the route, including felling of coniferous woodland at Hag Wood, and the introduction of access tracks, one of which will cross the route south of Earlstoun Loch. Views along the route will be subject to localised screening by landform and vegetation.	The ZTVs shown on <b>Figure 7.11</b> (all connections) and <b>Figure 7.13</b> (P-G via K) indicate that theoretical visibility will be relatively widespread from this route. There are areas of limited visibility shown at lower elevations west of the connection near Hannaston Wood and east of Ardoch Hill. The Southern Upland Way passes under the P-G via K connection west of the Water of Ken and St John's Town of Dalry.	The E-G con from this rou appearing in western slop Craiggubble perceptible f cumulative e
		The P-G via K connection will be seen in combination with the existing R Route (north) resulting in a medium scale change in views experienced from a localised geographical extent of the route, largely within approximately 1km.	VP7: Southern Upland Way near Waterside Hill and VP8: Southern Upland Way near St John's Town of Dalry illustrate the potential changes in views from this route.	Both the G-T combined vie substation.
		During construction, a medium magnitude of change will occur for views within close proximity, reducing to low for longer distance views.	The removal and undergrounding of existing distribution infrastructure north and south of the route will reduce the presence of vertical man-made elements in views from the route.	In terms of c extension wi are foreshort
		Overall, the level of visual effect during the construction phase on views from the Southern Upland Way will be <b>moderate</b> and <b>significant</b> within approximately 1km of the P-G via K connection.	From higher elevations along the route the P-G via K connection will be largely seen backclothed by landform in direct close proximity to longer distance views. At lower elevations there will be opportunities to view parts of the connection against the skyline. Where visible the P-G via K connection will occupy a similar portion of available views to the existing R Route (north and south) from sections of this route.	A number of relatively dis the route on the back clot not contribut or proposed
			The decommissioning and removal of R Route (south) which crosses the Kenmure Valley from east to west will reduce the presence of electricity transmission infrastructure in some views from the route.	distinctly sep The scale of medium, wit area of the r
			The southern part of the P-G via K connection will occupy a proportion of available views similar to the decommissioned R Route (north). The scale of change will be small, experienced from a localised geographical extent of the route (approximately 2km).	The magnitu location whe will be mediu level of cum cumulative v
			During operation a low magnitude of change will occur for views within close proximity, reducing to barely perceptible for longer distance views towards from this promoted walking route.	route betwee
			Overall, level of effect during the operational phase on close proximity views within approximately 1km from the Southern Upland Way will be <b>minor</b> and <b>not significant</b> .	
Core Path No. 164 Bardennoch Trail Pack Road	Recreational users Sensitivity is judged to be high.	Construction activities, including the felling of forestry and creation of temporary access tracks, will be evident from a localised section of the Core Path between Polmaddy and Dundeugh. The Barlae Hill Quarry (Q1) will be evident in close-distance views east from the Core Path as it passes Barlae Hill. The P-G via K will be seen in combined views with the existing N Route, resulting in a medium scale change in views from a limited localised extent of the route (less	The ZTVs shown on <b>Figure 7.11</b> (all connections) and <b>Figure 7.13</b> (P-G via K) show theoretical visibility to be localised from this route, whilst further reduced by the presence of coniferous forestry limiting views of the P-G via K connection from much of the Core Path. Views of towers located to the north and south of Polmaddy Burn will be afforded from the route where it follows the access track towards Polmaddy settlement from Dundeugh, whilst views of conductors crossing the burn will be possible from the small	No other KTF route. Figures 7.2 Rig, Troston be visible in conifer forest However, Tro as distant fea
		than 1km). The magnitude of visual change during construction will be medium resulting in a <b>moderate</b> and <b>significant</b> visual effect experienced from open sections of the route	footbridge east of Polmaddy Settlement. VP3: Polmaddy Settlement illustrates the potential change in the view from the picnic site immediately east of the Polmaddy historic settlement and directly west of the route of Core Path 164.	woodland ag connection. locally. There are no views from t

iews from this route between Glenhoul Hill and

nnection will be visible in combined views experienced oute between St John's Town of Dalry and Waterside Hill in parallel to the P-G via K connection on the lower pes of the valley and crossing the route west of e Wood. The C-K connection to the north will be barely from this location and will not contribute to additional effects.

T connection and the BG Deviation will be seen in iews to the south, south-west of the existing Glenlee

other proposed developments, Glenlee substation vill be largely imperceptible in views to the south, which rtened by landform, largely screened by vegetation and l against the semi-improved pasture beyond.

f proposed wind farms will theoretically be visible as stant features on the skyline from elevated sections of n the west side of the valley and Waterside Hill. However, othed P-G via K connection located at lower elevation will ute to potential cumulative interactions with these other d developments which will appear as distant and/or eparate developments.

f cumulative change in views from this route will be th similar views experienced from a small geographical route.

ude of cumulative visual change to the view from this en considered in the presence of the above developments ium. Considering the sensitivity of the receptors and the nulative change predicted, **minor** and **not significant** visual effects will occur for sequential views from this een St John's Town of Dalry and Waterside Hill.

R Project connections will be visible from this sequential

**23.2** and **7.23.3** indicate that the proposed Shepherds a Loch, and Glenshimmeroch wind farms will theoretically a successive views to the north-east and east. Existing st will screen views of Shepherds Rig.

roston Loch and Glenshimmeroch wind farms will be seen eatures partially screened by intervening broadleaf gainst the skyline in combination with the P-K via G This will result in a small scale change experienced

o other consented or proposed developments visible in this location.

Assessment of Visual Effects – Routes: Polquh	anity to Glenlee via Kendoon (P-G via K)		
	within approximately 1km of the P-G via K connection and areas of temporary construction activity.	Opportunities for views from the route north of Polmaddy Burn, where the path heads north towards Barlae Hill, will be limited by the presence of intervening coniferous woodland to the east.	The magnitud location will b receptors, the
		Visibility is indicated from more distance sections of the route, including Bardennoch Hill to the north and a small section of the path between Dundeugh and Polmaddy, where the P-G via K connection crosses the route.	significant.
		The existing N Route crosses the southern part of this Core Path close to the A713, from where the decommissioning and removal of N Route and the northern section of R Route (north) will reduce the presence of electricity transmission infrastructure in views from sections of this route near Dundeugh.	
		The P-G via K connection will be evident from a proportion of this route similar to that of the decommissioned R Route (north) and will be experienced from a localised area east of Polmaddy, resulting in a small scale of change in views experienced from the path.	
		The magnitude of visual change during operation will be low, resulting in a <b>minor</b> and <b>not significant</b> visual effect experienced from open sections of the route within approximately 1km of the P-G via K connection.	

ude of cumulative visual change to the view from this Il be low. Taking account of the sensitivity of the the cumulative visual effect will be **minor** and **not** 

August 2020

#### Potential Implications of Proposed P-G via K Connection for Designated Landscapes

- 7.119 Potential implications for the Galloway Hills Regional Scenic Area (RSA) are considered in relation to how the identified effects on landscape character, and views and visual amenity potentially affect the objectives and key characteristics for which the area is designated, as well as the overall integrity of the designated area. As set out in **Appendix 7.4**, no defined special qualities exist for the RSA.
- 7.120 The proposed P-G via K connection will occupy and influence a small area of the RSA on its eastern periphery between Polguhanity Terminal Tower, Kendoon substation and Glenlee substation (as shown on Figure 7.9.1-2). The proposed steel lattice tower (L7) infrastructure (shown on Figure 2.5a) will occupy an area similar to that of the existing N Route and R Route (north), although the towers will appear larger in scale than the existing steel lattice (PL1) towers.

#### Potential Landscape Effects

- 7.121 As defined within the RSA Technical Paper<sup>Error! Bookmark not defined.</sup> the eastern boundary of the RSA in this area is defined by the 'outward facing visual envelope' (page 20) of the Upper Glenkens Valley (Upper Dale LCT). The proposed P-G via K connection will cross the east facing slopes of the Glenkens Valley. There will be opportunities where the P-G via K connection will be seen against skylines mainly from locations in close proximity within the RSA. However, in longer distance views including the eastern elevated valley sides (Upper Dale LCT (165)) the connection will not interrupt westward views looking towards the core area of the Galloway Hills within Rugged Uplands LCT (180).
- 7.122 Likely **significant** effects on LCTs within the RSA arising from the introduction of the proposed P-G via K connection will be limited to a localised area of the Upper Dale LCT (165) during construction (Moderate) and operation (Moderate) and will not significantly affect the wider landscape of the RSA. The P-G via K connection will occupy a similar geographical extent within the RSA as the existing N Route and R Route (north) and will be seen in association with other existing communication routes and elements of electricity infrastructure, including the hydroelectric power stations and substations at Kendoon, Carsfad and Earlstoun present within the Upper Dale LCT (165) within the RSA.

#### Potential Visual Effects

- 7.123 Visibility of the steel lattice towers, and OHLs will be largely limited to the eastern part of the RSA. Significant visual effects during the construction and operational phases are predicted to arise from the following assessment VPs located within the RSA, however in each instance the P-G via K connection would replace the existing N Route and R Route (north) which are present and have an existing influence on views from each of these locations:
  - VP1: Layby on A713 near Polguhanity
  - VP2: Dundeugh at access to Polmaddy
  - VP4: Footbridge access to Kendoon
  - VP5: B7000 west of Glenhoul Hill (construction phase only)
  - VP6: Layby on A713 near Knocknalling Wood
  - VP7: Southern Upland Way near Waterside Hill
  - VP8: Southern Upland Way near St John's Town of Dalry
  - VP10: A762 north of Glenlee
- 7.124 **Significant** visual effects are also predicted to arise during the construction phase from a short section of the Southern Upland Way promoted long distance footpath where the route passes through the RSA between St John's Town of Dalry and Waterside Hill and from Core Path 164 where the path passes through the RSA between Polmaddy and Dundeugh.
- 7.125 **Significant** visual effects are predicted to arise during the construction phase in sequential views from the A713, as it passes through the RSA between Carsphairn and Parton and in views from a short section of the A762, as it passes through the RSA between Allangibbon Bridge and the Water of Ken.

#### Conclusion

7.126 Likely **significant** adverse effects on landscape and visual receptors will be localised within the Upper Dale LCT (165). The P-G via K connection will occupy a similar proportion of available views from within this LCT to existing infrastructure (N Route and R Route) that will be removed during the operational phase. The steel lattice towers and OHLs will not interrupt longer distance westward views of the Rugged Uplands LCT (180), and given the extensive area of the Galloway Hills RSA and the introduction of the P-G via K connection within a relatively small proportion of the RSA, the proposed connection will not adversely affect the integrity of the wider RSA when considered as a whole.

## Summary of Significant Effects – Polguhanity to Glenlee via Kendoon

to arise from the introduction of the proposed Polquhanity to Glenlee via Kendoon (P-G via K) connection (including the associated decommissioning and removal of N Route and R Route (north)), and outlines additional mitigation measures to be implemented and the resultant likely residual effects.

#### **Construction Effects**

#### Landscape Effects

7.128 Moderate (adverse, short-term) significant effects on the Upper Dale – Dumfries and Galloway LCT (165) are likely to occur for a localised area during the construction phase, reducing to Minor (adverse, short-term), not significant for the LCT as a whole.

#### Visual Effects

7.129 **Table 0-1** below summarises the significant visual effects likely to arise during the construction phase for the P-G via K connection.

#### Table 0-1: Likely significant Visual Effects during the construction phase: Polquhanity to Glenlee via Kendoon (P-G via K)

Likely significant Visual Effects during the construction phase: Polquhanity to Glenlee via Kendoon (P-G via K)				
VP1: Layby on A713 near Polquhanity	Major (adverse, short-term) and significant			
VP2: Dundeugh at access to Polmaddy	Moderate (adverse, short-term) and significant			
VP4: Footbridge access to Kendoon	Major (adverse, short-term) and significant			
VP5: B7000 west of Glenhoul Hill	Moderate (adverse, short-term) and significant			
VP6: Layby on A713 near Knocknalling Wood	Moderate (adverse, short-term) and significant			
VP7: Southern Upland Way near Waterside Hill	Moderate (adverse, short-term) and significant			
VP8: Southern Upland Way near St John's Town of Dalry	Moderate (adverse, short-term) and significant			
VP10: A762 north of Glenlee	Moderate (adverse, short-term) and significant			
Dundeugh	Moderate (adverse, short-term) and significant			
Kendoon	Major (adverse, short-term) and significant			
St John's Town of Dalry	Moderate (adverse, short-term) and significant			

7.127 This section summarises the **significant** landscape and visual effects, including cumulative effects, likely

Likely significant Visual Effects during the construction phase: Polquhanity to Glenlee via Kendoon (P-G via K)

P7: Karnak	Moderate (adverse, short-term) and significant
P8: Hawkrigg	Moderate (adverse, short-term) and significant
P46: Inverharrow	Moderate (adverse, short-term) and significant
P56: Waterside, Glenlee	Moderate (adverse, short-term) and significant
A713	Moderate (adverse, short-term) and significant
A762	Moderate (adverse, short-term) and significant
Southern Upland Way	Moderate (adverse, short-term) and significant
Core Path 164	Moderate (adverse, short-term) and significant

#### **Operational Effects**

Landscape Effects

7.130 Moderate (adverse, long-term) significant effects on the Upper Dale – Dumfries and Galloway LCT (165) are predicted to occur for a localised area during the operational phase, reducing to Minor, not significant for the LCT as a whole.

Visual Effects

7.131 **Table 0-2** below summarises the **significant** visual effects likely to arise during the operational phase for the P-G via K connection, and where relevant the additional mitigation proposed, and resultant likely residual effects identified.

### Table 0-2: Likely significant Visual Effects during Operational Phase: Polquhanity to Glenlee via Kendoon (P-G via K)

Summary of Likely significant Visual Effects during Operational Phase: Polquhanity to Glenlee via Kendoon (P-G via K)		Additional Mitigation Measures	Likely residual Effect
VP1: Layby on A713 near Polquhanity	Moderate (adverse, long- term) and significant	Replanting of areas of additional windthrow felling.	Minor (adverse, long-term) and not significant
VP2: Dundeugh at access to Polmaddy	Moderate (adverse, long- term) and significant	n/a	n/a
VP4: Footbridge access to Kendoon	Moderate (adverse, long- term) and significant	n/a	n/a
VP6: Layby on A713 near Knocknalling Wood	Moderate (adverse, long- term) and significant	n/a	n/a
VP7: Southern Upland Way near Waterside Hill	Moderate (adverse, long- term) and significant	n/a	n/a

Summary of Likely significant Visual Effects during Operational Phase: Polquhanity to Glenlee via Kendoon (P-G via K)		Additional Mitigation Measures	Likely residual Effect	
VP8: Southern Upland Way near St John's Town of Dalry	Moderate (adverse, long- term) and significant	n/a	n/a	
VP10: A762 north of Glenlee	Moderate (adverse, long- term) and significant	Replanting of areas of additional windthrow felling.	<b>Minor</b> (adverse, long-term) and <b>not significant</b>	
Dundeugh	Moderate (adverse, long- term) and significant	n/a	n/a	
Kendoon	Moderate (adverse, long- term) and significant	n/a	n/a	
P7: Karnak	Moderate (adverse, long- term) and significant	Replanting of areas of additional windthrow felling.	Minor (adverse, long-term) and not significant	
P8: Hawkrigg	Moderate (adverse, long- term) and significant	Replanting of areas of additional windthrow felling.	Minor (adverse, long-term) and not significant	
A713	Moderate (adverse, long- term) and significant	Replanting of areas of additional windthrow felling.	Minor (adverse, long-term) and not significant	
A762	Moderate (adverse, long- term) and significant	Replanting of areas of additional windthrow felling.	Minor (adverse, long-term) and not significant	

#### **Cumulative Effects**

7.132 Table 0-3 below summarises the significant cumulative landscape and/or visual effects likely to arise during the operational phase for the P-G via K connection.

Table 0-3: Likely significant Cumulative Effects during Operational Phase: Polquhanity to Glenlee via Kendoon (P-G via K)

Summary of likely significant Cumulative Effects durin Kendoon (P-G via K)		
Upper Dale – Dumfries and Galloway LCT (165)	Moc loca sigr	
VP4: Footbridge access to Kendoon	Мос	
VP7: Southern Upland Way near Waterside Hill	Мос	
Dundeugh	Мос	
Kendoon	Мос	

g Operational Phase: Polquhanity to Glenlee via

oderate (adverse, long-term) and significant for a alised area, **Minor** (adverse, long-term) and **not nificant** for the LCT as a whole

oderate (adverse, long-term) and significant

oderate (adverse, long-term) and significant

oderate (adverse, long-term) and significant

derate (adverse, long-term) and significant

### **Proposed Mitigation Measures**

7.133 No further additional mitigation measures (beyond those set out in **Table 0-2** above) have been identified to reduce the level and significance of specific identified landscape and visual effects. This is due to the nature of the effects identified and the limitations for further potential mitigation (e.g. the scale of the proposed infrastructure negates the feasibility to screen potential views).

#### Monitoring

7.134 No monitoring of landscape and visual effects or embedded mitigation measures is proposed.

Chapter 7: Landscape and Visual Amenity

August 2020

# Carsfad to Kendoon

# Introduction

- 7.135 The assessment of landscape and visual effects in relation to the Carsfad to Kendoon (C-K) connection considers the potential effects arising from the following:
  - a new 132kV single circuit wood pole (Trident) OHL, of approximately 2.6km in length, between C-K connection – during the construction phase and operational phase.
- 7.136 The C-K connection will connect the existing hydroelectric power station at Carsfad and the existing substation at Kendoon. The 132kV OHL will be supported on 24 Trident wood poles. The OHL components of the proposed C-K connection are described in detail in Chapter 4 and shown on Figure 4.3 and Figure 4.7.
- 7.137 Based on the proposed construction programme set out in **Chapter 5**, the assessment of landscape and visual effects arising from the introduction of the C-K connection is based on the following assumptions in relation to the baseline situation for each part of the assessment:

## Construction Phase

- All other proposed new KTR Project connection construction activities are evident;
- N Route (between Polguhanity and Kendoon) present; and
- R Route (northern section between Kendoon and Glenlee) present.

#### **Operational Phase**

- All other proposed new KTR Project construction connections are present;
- N Route (between Polquhanity and Kendoon) has been decommissioned and removed;
- R Route (northern section between Kendoon and Glenlee) has been decommissioned and removed; and
- Existing distribution infrastructure between Polguhanity and Glenlee has been relocated/undergrounded (as shown on Figure 4.12).

### Cumulative Operational Phase

As for the operational phase, plus all developments listed in Table 7-3 and Table 7-4 are present.

### **Existing Conditions**

7.138 The landscape of the C-K connection (C-K) of the KTR project is contained within the Dundeugh valley, although much of this part of the valley is relatively open comprising Carsfad Loch and adjacent farmland elevated moorland. Tree cover is relatively sparse with some copse, individual broadleaf trees, and mixed woodland plantation (some ancient) at the southern end of Carsfad Loch. The absence of tree cover generally allows for longer distance views along and across the valley. Settlement pattern is largely limited to individual residences and farmsteads mainly accessed from the A713 and B7000, and the hamlet of Kendoon.

#### Analysis of Visibility of the Carsfad to Kendoon (C-K) Connection

- Figure 7.14.1 indicates theoretical visibility within close and middle-distance views along the A713 between Polquhanity and Knocknalling. Further south, pockets of woodland begin to screen views of the connection from the road. Longer distance views are largely screened by intervening landform and woodland cover and vegetation. Visibility is indicated from elevated landform including the summits of Mulloch Hill, Glenlee Hill and Cairnsmore or Black Craig of Dee and from scattered residential properties and farmsteads along the A762.
- Existing woodland cover and vegetation located along the A713 between Kendoon and Carsfad is limited, with visibility indicated in close proximity to the road, whilst longer distance views available across the valley from the B7000 and elevated points at Barlaes Hill, Mackilston Hill and Ardoch Hill

to the east, where the proposed wood pole infrastructure will appear backclothed against the underlying landform.

# Landscape Effects on Landscape Character Types

- 7.139 The landscape baseline for the C-K connection is described in **Appendix 7.4** and shown on **Figure 7.7**. Potential effects on landscape character types are considered in Table 0-4 below:
  - Upper Dale Dumfries & Galloway LCT (165) (Host LCT).

#### **Effects on views from Representative Viewpoints**

7.140 Potential visual effects from three representative VPs (VP4, and VP 5) have been considered for the C-K connection. Visual effects from these representative VPs are considered in Table 0-5 below.

#### **Effects on Views from Settlements**

7.141 Potential visual effects from settlements in the Study Area from which potential views of the C-K connection may be experienced will be limited to Dundeugh and Kendoon and are assessed in Table 0-6 below. It should be noted individual properties indicated on Figure 7.12 associated with the settlements of Dundeugh, Kendoon have been group accordingly and are assessed in **Table 0-7**.

#### **Effects on Views from Residential Properties**

7.142 Potential visual effects from residential properties located within approximately 150m of the proposed C-K connection, and which may experience potential views of the connection are assessed in Table 0-7 below.

## **Effects on Views from Routes**

7.143 Potential visual effects from routes in the Study Area from which potential views of the C-K connection may be experienced from are assessed in **Table 0-8** below.

Landscape Character Type (LCT)	Sensitivity	Magnitude of Change and Significance of Landscape Effects - Construction Phase	Magnitude of Change and Significance of Landscape Effects - Operational Phase	Magnitude o Landscape E
Upper Dale Dumfries & Galloway LCT (165)	Sensitivity is judged to be medium.	<ul> <li>The entirety of the C-K connection is located within this LCT, between Carsfad and Kendoon.</li> <li>The LCT will experience direct landscape changes from the construction of the C-K connection. There will be a localised loss of mixed woodland and arable and pastoral farmland along the length of the connection, including woodland to the west of Kendoon and to the north, south and east of Carsfad substation. However, in the context of the LCT as a whole, this loss of vegetation is unlikely to result in a noticeable change.</li> <li>Direct landscape effects arising during construction will include the removal of landscape features and the introduction of a temporary construction compound north-west of Carsfad substation and temporary access tracks. The main OHL components associated with the C-K connection constructed during the construction phase will remain present into the operational phase.</li> <li>The existing N Route and R Route (north) will remain evident within the landscape during the construction of the C-K connection.</li> <li>The introduction of the C-K connection will result in a small scale change experienced at a localised level within the Dundeugh Valley. Perceptibility of the wood pole infrastructure will reduce substantially with distance and will be barely perceptible beyond approximately 1km.</li> <li>Overall, the magnitude of landscape change during construction will be low and taking account of the medium sensitivity, the landscape effect for this LCT will be minor and not significant locally within approximately 1km of the C-K connection, reducing to none and not significant for the LCT as a whole.</li> </ul>	The ZTVs shown on <b>Figure 7.9</b> (all connections) and <b>Figure 7.14</b> (C-K) indicate that theoretical visibility will be largely limited to localised areas within 1km of the C-K connection, with views beyond 1km afforded from elevated valley sides, including along the B7000 on the eastern side of the Glenkens Valley. From such locations the C-K connection will be seen as a relatively distant small scale feature backclothed by landform and vegetation. From a limited southern part of the LCT the C-K connection will be seen in combination with the P-G via K connection, between Carsfad and Kendoon. The connection will largely be seen within the context of other existing elements of electricity infrastructure including Kendoon and Carsfad substation and main communications route the A713. The proposed development will introduce additional electricity transmission infrastructure into this LCT occupying a similar geographical area as a section of the existing R Route (north) and associated existing distribution infrastructure between Carsfad and Kendoon. However, its introduction will be subject to localised screening by landform and vegetation and the proposed wood pole infrastructure will predominantly appear backclothed against the upper western slopes of the wider Glenkens Valley reducing their perceptibility with distance across the LCT. The removal of the temporary construction compound and the reinstatement of temporary access tracks will reduce the overall perceptible distribution of the C-K connection will remain evident throughout the operational phase. The C-K connection will be evisting R Route (north) between Carsfad and Kendoon, and its introduction will remain evident throughout the operational phase. The undergrounding of existing distribution infrastructure located within close proximity of the proposed C-K connection will remain evident throughout the operational phase. The undergrounding of existing distribution infrastructure located within close proximity of the proposed C-K connection will reduce th	The C-K connection from Kendoon, how towards the op subject to loca These KTR Pro- available view R Route (north infrastructure change in the Carsfad and K appear in clos cumulative lar be low (within No other cons <b>Figure 3.1</b> wit this LCT. As such the ac Taking account landscape effe

# Table 0-5: Assessment of Visual Effects – Representative Viewpoints: Carsfad to Kendoon (C-K)

Assessment of Visi	ual Effects – Representative	e Viewpoints: Carsfad to Kendoon (C-K)		
Viewpoint	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential Cu

#### of Change and Significance of Cumulative Effects - Operational Phase

nnection will be seen in combination with the P-G via K from a localised extent of the LCT between Carsfad and owever, combined views from within the LCT looking e operational C-K and P-G via K connections will be ocalised screening by landform and vegetation.

Project connections will occupy a similar proportion of ews from within the LCT to the sections of N Route and orth) to be removed, and the existing distribution are to be undergrounded. There will be some perceptible he presence of transmission infrastructure between d Kendoon where the C-K and P-G via K connections lose conjunction with one another. The scale of landscape change within a localised area of the LCT will hin approximately 1km).

nsented or proposed developments illustrated on will contribute to additional cumulative effects within

e additional cumulative magnitude of change will be low. bunt of the medium sensitivity, the cumulative effect will be **minor** and **not significant**.

**Cumulative Effects - Operational Phase** 

Assessment of Visu	ıal Effects – Representative	e Viewpoints: Carsfad to Kendoon (C-K)		
VP4: Footbridge access to Kendoon (260335, 587605) (Figure 7.24.1-8)	The VP is representative of views experienced by receptors/residents accessing Kendoon via the public footpath and footbridge east of the A713. Sensitivity is judged to be high.	During the construction phase, disturbance associated with preparatory groundworks and the introduction of temporary access tracks east and west of the A713 will be evident in close proximity from this location and seen in the context of the existing N Route and R Route (north) which will remain present during construction. The scale of change will be medium but will be experienced from a small geographical area. The magnitude of visual change during construction will be medium and taking account of the high sensitivity will result in a <b>moderate</b> and <b>significant</b> effect is anticipated for receptors at this VP.	<ul> <li>Figure 7.24.5 indicates theoretical visibility of the wood poles of the C-K connection in views looking south to southeast. Figure 7.24.6 the tops of two wood poles will be seen against the skyline in the middle distance and background of view with the lower parts of these towers backclothed and partly screened by landform. The other wood poles will be backclothed by landform and partially screened by intervening vegetation.</li> <li>This VP is representative of the specific view experienced from the public footpath and footbridge, where the C-K connection will be seen in close-proximity views. The geographical extent of similar views will therefore be small.</li> <li>From this location the C-K connection will occupy a similar portion of the available view towards the existing R Route (north).</li> <li>The wood poles and OHLs of the C-K connection introduced during the construction phase will remain evident in views throughout the operational phase. The undergrounding of existing distribution infrastructure located within close proximity of the proposed C-K connection will reduce the presence and influence of vertical infrastructure in views looking south to south-east, however the wood pole infrastructure will be seen in the context of the larger and closer infrastructure of the P-G via K connection. The introduction of the C-K connection will result in a small scale change, affecting a small proportion of the view and experienced from a small geographical area.</li> <li>Overall, the magnitude of visual change during the operational phase will be low and taking account of the high sensitivity will result in a minor and not significant visual effect.</li> </ul>	Figures 7.24 seen in comb the south, so seen running backclothed a The C-K conn connection in west from thi portion of ava (north) and tl This will resul affecting a sn There are no consented or location. The magnitud location will b receptors, the significant.
VP5: B7000 west of Glenhoul Hill (261375, 586905) ( <b>Figure 7.25.1-7</b> )	The VP is representative of open views westwards across the Upper Glenkens Valley experienced by road users travelling on the B7000 and similar views experienced from nearby residential properties. Sensitivity is judged to be high.	Ground level disturbance to facilitate the construction of the C-K connection, including the presence of access tracks and the removal of small areas of vegetation, will be seen as relatively distant features from this location. The wood poles and OHLs of the C-K connection introduced during the construction phase will remain evident in views throughout the operational phase, and the existing N Route and R Route which will remain during construction. This will result in a small scale change in successive views afforded from this location. The magnitude of visual change during construction will be low and taking account of the high sensitivity will result in a <b>minor</b> and <b>not significant</b> visual effect from this VP.	From this relatively elevated location, the Trident wood poles of the C-K connection will be seen in longer-distance successive views looking south-west to north-west. Where the C-K connection enters Kendoon to the north and Carsfad to the south the Trident wood poles and OHL will be partly screened by intervening woodland. The C-K connection will occupy a similar proportion of the available view to the existing R Route (north) between Kendoon and Carsfad in views across the valley, whilst the undergrounding of existing distribution infrastructure south of Kendoon will be largely undiscernible at this distance. The introduction of the C-K connection will result in a small scale change in the view. While sections of the B7000 afford elevated views across the valley towards the distant summits of the Galloway Hills RSA, some of the outward views from this minor road are screened by intervening woodland and forestry, and the geographical extent of similar views will be small. Views towards the distant hills and summits of the RSA will remain uninterrupted from the introduction of the C-K connection which will be seen at lower elevation than existing N and R Route (north), backclothed by slopes of the valley. Overall, the magnitude of visual change during the operational phase will be barely perceptible and taking account of the high sensitivity will result in a <b>none</b> and <b>not</b> <b>significant</b> visual effect.	Figure 7.25. connection, E combination reality the G- perceptible fr additional cur Figure 7.25. will be seen ( views north towers of the Upper Glenke These connec views to the underground a small scale There are no views from th The magnitud will barely per receptor the significant.

**24.2** to **7.24.6** indicate that the C-K connection will be abination with the P-G via K via connection in views to south-east and south-west. The C-K connection will be a glargely parallel to the P-G via K connection partly and partly seen against the skyline.

nnection will be seen in combination with the P-G via K in close to longer distance views looking east to souththis location. These connections will occupy a similar vailable views to the removed N Route and R Route the undergrounded existing distribution infrastructure. sult in a small scale of change experienced locally small portion of the available views.

no other KTR Project connections and no other or proposed developments visible in views from this

ude of cumulative visual change to the view from this I be low. Taking account of the sensitivity of the the cumulative visual effect will be **minor** and **not** 

**5.2** indicates limited theoretical visibility of the G-T, BG Deviation and P-G via K connection seen in n with C-K in long distance views to the south-west. In G-T connection and BG Deviation will be barely from this location and will not therefore contribute to cumulative effects.

**5.2** to **Figure 7.25.3** indicates that the C-K connection (although barely perceptible) in successive combined n-west to south-west with the larger scale steel lattice he P-G via K connection, on the opposite side of the kens Valley.

ections will occupy a similar proportion of available e removed N Route and R Route (north) and the ided existing distribution infrastructure and will result in le change experienced locally.

to other consented or proposed developments visible in this location.

ude of cumulative change in views from this location perceptible and taking account of the sensitivity of e cumulative visual effect will be **none** and **not** 

## Table 0-6: Assessment of Visual Effects – Settlements: Carsfad to Kendoon (C-K)

Assessment of visu	al Effects – Settlements: C	arstad to Kendoon (C-K)		
Settlement	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential Cum
Dundeugh (Including the residential properties: P9, P10, P11, P13, P15, P16, P18, P19, P21, P22, P23, P25, P26, P27 and P28)	Residents within the settlement of Dundeugh. Sensitivity is judged to be high.	During the construction phase, disturbance associated with preparatory groundworks including the felling of mixed woodland west of Kendoon and the introduction of Trident wood poles supporting OHLs closest to Dundeugh will be evident in views looking south from the southern part of the settlement. Taking account of localised vegetation screening within curtilages of properties, and other intervening features including hedgerows and individual trees, visibility of other project elements including temporary access tracks will be limited. Views will also be subject to localised screening, filtered by vegetation within curtilages of properties. The magnitude of visual change during construction will be low and taking account of the high sensitivity will result in a <b>minor</b> and <b>not significant</b> visual effect on views from this settlement.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.14</b> (C-K) indicate widespread theoretical visibility across the settlement, with the C-K connection running 0.4km south of the nearest residential properties within this settlement. Given intervening screening by landform and vegetation actual visibility of the C-K connection will be largely limited to the outlying properties P27 and P28 at the southern extent of the settlement and will be seen in longer-distance views filtered by vegetation. Given the limited number of residential properties affording principal and secondary views towards the C-K connection, the geographical extent of similar views will be small. The decommissioning and removal of N Route and R Route (north) which pass through the interior of the settlement west of the A713 will reduce the immediate presence of electricity transmission infrastructure in views experienced by residents within the settlement. The undergrounding of existing distribution infrastructure to the north of the C-K connection and the southern extent of the settlement will further reduce the presence and influence of vertical infrastructure in views to the south of the settlement. The introduction of the C-K connection will result in a small scale change affecting a small proportion of available views. Overall, the magnitude of visual change during the operational phase will be barely perceptible and the visual effect will be <b>none</b> and <b>not significant</b> .	There is potentiviews with the land P28 in view will occupy a sin Route, this will experienced loc There are no ot settlement. It is proposed develviews from this additional cumu. The magnitude settlement will sensitivity of the none and not settlement settlement will sensitivity of the none and not settlement settlement will sensitivity of the none and not settlement settlement settlement settlement settlement settlement settlement settlement will sensitivity of the none and not settlement
Kendoon (Including the residential properties: P30, P31, P34, P35, P36, P39, P40, P41, P43)	Residents within the settlement of Kendoon directly adjacent to the existing Kendoon substation. Sensitivity is judged to be high.	During the construction phase, disturbance associated with preparatory groundworks including the felling of mixed woodland to the north and west, and the introduction of Trident wood poles supporting OHLs closest to Kendoon will be evident from the settlement. Taking account of localised vegetation screening within the curtilages of properties, visibility of other project elements including temporary access tracks and other ancillary development will be limited. Views will also be subject to localised screening, filtered by vegetation within the curtilages of properties. Viewed in combination with the N Route, R Route (north) which will remain evident during this phase, the construction of infrastructure and ancillary construction activities will result in a medium scale change in views during the construction phase, perceptible from a localised geographical extent but affecting much of the small settlement. Overall, the magnitude of change will be medium, resulting in a <b>moderate</b> and <b>significant</b> visual effect during construction for views from the settlement.	The wood poles and OHLs of the C-K connection introduced during the construction phase will remain evident in views throughout the operational phase. The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.14</b> (C-K) indicate widespread theoretical visibility from across the settlement. Given that C-K connects with Kendoon substation and OHLs pass over the western part of the settlement, visibility will be experienced from most properties and their curtilages within the settlement of Kendoon. The C-K connection will be seen in close proximity views from properties, with the tops of wood poles located within Kendoon substation seen against the skyline beyond the northern edge of the settlement as the connection crosses the Water of Ken into Kendoon substation. This will result in a small scale change in views in the context of the adjacent electricity transmission infrastructure within the existing Kendoon substation, and visibility across the settlement partly limited by intervening features including intervening buildings and vegetation. Similar views will be afforded from most properties within Kendoon, however given the relatively small size of the settlement, the geographical extent of similar views will be small. The decommissioning and removal of N Route and R Route (north) and the undergrounding of existing distribution infrastructure will reduce the presence of electricity	The C-K connect connection in cl south-west from similar portion of Route. This will portion of availa There are no ot this settlement. proposed devel- views from this additional cumu The magnitude settlement will receptors, the o <b>significant</b> .

#### umulative Effects - Operational Phase

ential for the C-K connection to be seen in combined ne P-G via K connection from outlying properties P27 iews looking south to south-east. These connections a similar portion of available views to the removed N vill result in a barely perceptible scale of change locally.

other KTR Project connections evident from this it is considered unlikely that other consented or velopments illustrated on **Figure 3.1** will be visible in his settlement and will not therefore contribute to mulative effects experienced from this settlement.

de of cumulative visual change to views from the vill be barely perceptible. Taking account of the the receptors, the cumulative visual effect will be of significant.

nection will be seen in combination with the P-G via K n close to longer distance views looking north to rom this location. These connections will occupy a on of available views to the removed N Route and R will result in a small scale change occupying a large railable views.

other KTR Project connections evident views from ent. It is considered unlikely that other consented or velopments illustrated on **Figure 3.1** will be visible in his settlement and will not therefore contribute to mulative effects experienced from this settlement.

de of cumulative visual change to views from the vill be low, and taking account of the sensitivity of the e cumulative visual effect will be **minor** and **not** 

infrastructure in views across the Water of Ken from
properties on the western edge of the settlement.
Overall, the magnitude of visual change during the
operational phase will be low for the settlement as a whole and will result in <b>minor</b> and <b>not significant</b> visual effects

Table 0-7: Assessment of Visual Effects – Residential Properties: Carsfad to Kendoon (C-K)

Assessment of Visu	al Effects – Residential Pro	perties: Carsfad to Kendoon (C-K) <sup>34</sup>		
Residential Property or Group	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential Cu
P44: Stroangassel Farm	Residents. Sensitivity is judged to be <b>high</b> .	Principal views from the property are orientated south-west towards the Water of Ken/Carsfad Loch, with potential for secondary (rear) views from the property curtilage to the north-west, west and south-west. Temporary accesses, and movement of construction vehicles, will be visible during the construction phase in close to middle- distance secondary views and views from the property curtilage to the north-west and south-west of the property. Seen in combination with R Route (north) which will remain evident during this phase, and the P-G via K connection the introduction of the C-K connection will result in a small scale change experienced locally from the property curtilage, primarily resulting from visibility of ancillary construction activities, and overall the magnitude of visual change during construction will be low. Overall, the level of visual effect during the construction phase on views from this property will be <b>minor</b> and <b>not significant</b> .	Visibility of the operational C-K connection will be partially screened by dense deciduous vegetation located on either side of the A713 to the west of the property. The removal and decommissioning of R Route (north) will reduce the immediate presence of electricity transmission infrastructure in views from this property, however the C-K connection will occupy a similar proportion of available views to the removed towers resulting in a small scale change in the view, affecting a small geographical area limited to views from the property curtilage. The undergrounding of existing distribution infrastructure located to the west of the A713 will be largely undiscernible from this property, but where evident will reduce the presence and influence of vertical infrastructure in views west from the curtilage of the property. Overall, the magnitude of change will be low, and the level of visual effect during the operational phase will be <b>minor</b> and <b>not significant</b> .	The C-K connection in vegetation wit A713 will filter occupying sim Route and R R cumulative ch available view Besides the P- visible from th consented or be visible in v additional cum Overall, the m and the predic significant.
P46: Carsfad Cottage	Residents. Sensitivity is judged to be <b>high</b> .	<ul> <li>Principal views from the property are orientated west towards the A713 and the C-K connection but heavily screened by adjacent trees and vegetation.</li> <li>To the south of the property the existing R Route (north) is evident as it connects into the substation at Carsfad with conductors evident in views south from the property and its curtilage.</li> <li>This property is located at lower elevation to the C-K connection with outward views largely limited by vegetation within the property's curtilage.</li> <li>Construction activities will be evident to the south of the property as the wood pole infrastructure of the C-K connection is constructed in close proximity immediately to the south of the property and east of the A713.</li> <li>A small scale change in the view will occur, experienced from a small geographical extent, and overall will result in a low magnitude of visual change in views from this property the overall level of visual effect during the construction phase will be minor and not significant.</li> </ul>	Due to the low elevation of the property east of the road and the presence of intervening screening provided by vegetation within the property curtilage and east of the A713, visibility of the proposed connection will be limited. The removal and decommissioning of the R Route (north) will reduce the immediate influence of steel lattice electricity transmission infrastructure in views from this property. The undergrounding of existing distribution infrastructure located to the west and south of the property where it crosses the A713 will remove infrastructure from immediate views from the property curtilage. The C-K connection will be evident in views to the south as the wood pole connection crosses the A713 eastwards and connects into the substation at Carsfad with conductors evident in views south from the property and its curtilage, resulting in a small scale change in the view. Views will be experienced from a very localised geographical area, and overall will result in a low magnitude of visual change. Given limited visibility from the property and the low magnitude of change, the level of visual effect during the operational phase will be <b>minor</b> and <b>not significant</b> .	The P-G via K and south from passes south the by intervening combined view connections ru Given the low screening no co on <b>Figure 3.1</b> property. Overall, the m and the predice <b>significant</b> .

# umulative Effects - Operational Phase

nnection will be seen in combination with the P-G via K in views looking west from this property. Existing with the property's curtilage and along the sides of the ter views of these connections which will be seen similar proportion of available views to the removed N R Route (north). This will result in a small scale change in the view affecting a small proportion of the ews from this property and its curtilage.

P-G via K connection no other KTR Project connections this property, and it is considered unlikely that other or proposed developments indicated on **Figure 3.1** will n views from this residence that may contribute to cumulative effects.

magnitude of cumulative visual change will be low, dicted cumulative visual effect will be **minor** and **not** 

K connection will also be visible in views to the west rom this property and its curtilage as the connection th to the west of the A713, partially screened or filtered ing woodland. The P-G via K connection will appear in iews with C-K in views to the south-west where the two is run in parallel west of the A713.

we elevation and presence of intervening vegetation o other consented or proposed developments indicated **3.1** are likely to be evident in views from this residential

magnitude of cumulative visual change will be low, dicted cumulative visual effect will be **minor** and **not** 

<sup>&</sup>lt;sup>34</sup> The identification of residential properties considered in the assessment of visual effects are detailed in **Table A7.5.62** in **Appendix 7.5**.

The Kendoon to Tongland 132kV Reinforcement Project

## Table 0-8: Assessment of Visual Effects – Routes: Carsfad to Kendoon (C-K)

Route	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential Cum
A713 - between Carsphairn and Parton (part of the Galloway Tourist Route, Scottish Castle Route and Loch Ken and River Dee Biosphere Route)	Road users, including tourists Sensitivity is judged to be <b>medium</b> .	The C-K connection will run broadly parallel to the west of the A713 from Kendoon to Carsfad. During the construction phase disturbance associated with preparatory groundworks, the felling of mixed woodland for the creation of the wayleave, and the introduction of temporary access tracks and ancillary development will be evident in sequential and relatively close proximity views experienced from the A713 between Kendoon and Carsfad. These short-term construction activities and the appearance of wood pole infrastructure of the C-K connection introduced during this phase will result in a small scale change to views, experienced from a relatively short section of the route as a whole and representing a small geographical extent. Overall, the magnitude of change will be low, and a <b>minor</b> and <b>not significant</b> visual effect is anticipated during the construction phase between Carsfad and Kendoon.	The ZTVs shown on <b>Figure 7.11</b> (all connections) and <b>Figure 7.14</b> (C-K) indicate relatively localised theoretical visibility from a section of the road between the southern extent of Dundeugh and Carsfad substation. The removal and decommissioning of N Route and R Route (north) will reduce the immediate presence of electricity transmission infrastructure in views from the A713, and although the C-K connection will occupy a similar alignment to the existing steel lattice towers, the infrastructure will appear less perceptible in views from the A713. The removal of R Route (south) will largely remove any presence of electricity transmission infrastructure in views from this route between New Galloway and Crossmichael. The wood poles of the C-K connection will be seen in direct to oblique close proximity views from this road and will be evident when crossing the road near Kendoon and Carsfad Given the limited presence of vegetation along this section of road, views of the C-K connection will be relatively open, resulting in a small scale change to views which will be experienced from a small geographical extent. The undergrounding of existing distribution infrastructure, located within close proximity of the proposed C-K connection and in close proximity to the A713 between Carsfad and Dundeugh, will reduce the immediate presence and influence of OHL infrastructure seen from the road. Overall, the magnitude of visual change will be low, resulting in a <b>minor</b> and <b>not significant</b> visual effect anticipated during the operational phase, from the section of this road between Carsfad and Kendoon.	The C-K connect connection bety front of P-G via connections will the removed N scale cumulativ Other connection of the road close not be seen in therefore contr of the A713. There are likely proposed devel considered unli more distant de additional cumu The introductio magnitude of c visual effect wi
B7000 - between High Bridge of Ken and St John's Town of Dalry (part of route forms National Byway cycle route)	Road users Sensitivity is judged to be <b>medium</b> .	<ul> <li>Sections of the B7000 afford elevated views west across the Dundeugh Valley towards the distant summits of the Galloway Hills RSA.</li> <li>Given the intervening distance between the road and C-K, ground-level disturbance associated with the construction of C-K will be largely imperceptible from the B7000.</li> <li>Seen across the valley, these short-term construction activities and the appearance of wood pole infrastructure of the C-K connection introduced during this phase will result in a small scale change to views, experienced from a relatively short section of the route as a whole and representing a small geographical extent, appearing in the context of the existing N Route and R Route (north) which will remain during construction phase.</li> <li>Overall, the magnitude of change will be low, and the level of visual effect during the construction phase will be minor and not significant for views from a section of this road between Glenhoul Hill and Millquarter.</li> </ul>	The ZTVs shown on <b>Figure 7.11</b> (all connections) and <b>Figure 7.14</b> (C-K) indicate theoretical visibility from a section of the road between Arndarroch and north of Barlaes Plantation. The extent of similar views will be limited, representing a small geographical area. The wood poles of the C-K connection will be seen backclothed against the western slopes of the valley, partially screened by intervening woodland vegetation in long distance oblique views in a westerly direction from this road. The removal and decommissioning of the N Route and R Route (north) and the undergrounding of the existing distribution infrastructure will reduce the presence of electricity infrastructure overall in views from the B7000, and although the C-K connection will occupy a similar alignment to that of the existing R Route (north) between Kendoon and Carsfad Loch, the wood pole infrastructure will appear less perceptible at this distance. The introduction of C-K will result in a small scale change to relatively long distance views from this road, experienced from a limited geographical area from where similar views will be afforded. Given the low magnitude of visual change, overall, the visual effect for views from this road will be <b>minor</b> and <b>not</b> <b>significant</b> .	The P-G via K of from this route the C-K connect Other KTR com vicinity of Gleni road. These connective to the removed undergrounded a small scale of be relatively loo locations along small. No other conse <b>3.1</b> will be evid connection, how Troston Loch an views from som and/or distinct and east. The magnitude will be low and cumulative visu

#### umulative Effects - Operational Phase

nection will be seen in combination with the P-G via K etween Kendoon and Carsfad, with C-K largely seen in via K and forming a smaller feature in the view. These will occupy a similar proportion of available views to N Route and R Route (north) and result in a medium tive change in the available views from this route.

ctions of the KTR Project will be visible from sections lose to St John's Town of Dalry. However, they will in conjunction with the C-K connection and will not ntribute to additional cumulative effects on this section

ely to be some glimpsed views of consented or velopments illustrated on **Figure 3.1**, however it is nlikely that the C-K connection will interact with these developments and will not therefore contribute to mulative effects.

tion of the C-K connection will result in a low f cumulative visual change and overall, the cumulative will be **none** and **not significant**.

K connection will be visible in combined views west ate appearing in parallel and more perceptible beyond nection on the lower western slopes of the valley. Connections located much further south within the enlee will be barely perceptible in views from the

ctions will occupy a similar portion of available views red N Route and R Route (north) and the led existing distribution infrastructure and will result in change experienced locally. Similar visual effects will localised and experienced from similar elevated ng the B7000, the geographical extent of which will be

sented or proposed schemes illustrated on **Figure** vident in combined views with the proposed however the proposed Shepard's Rig, Cornharrow, and Glenshimmeroch wind farms will be evident in ome sections of the route, appearing as distant ctly separate developments in long views to the north

de of cumulative change in views from this location nd taking account of the sensitivity of receptors the risual effect will be **minor** and **not significant**.

## Potential Implications of proposed C-K Connection for Designated Landscapes

- 7.144 Potential implications for the Galloway Hills RSA are considered in relation to how the identified effects on landscape character, and views and visual amenity potentially affect the objectives and key characteristics for which the area is designated, as well as the overall integrity of the designated area. As set out in **Appendix 7.4**, no defined special gualities exist for the RSA.
- 7.145 The proposed C-K connection will occupy a very small area of the RSA on its eastern periphery between Carsfad hydroelectric power station and Kendoon substation (as shown on Figure 7.9.1). The proposed wood pole infrastructure will occupy an area similar to that of the existing R Route (north) but will appear inferior in scale to the existing steel lattice (PL1) towers with their perceptibility diminishing over distance and appearing almost imperceptible at distances beyond approximately 2km, particularly when backclothed against landform or woodland.

# Potential Landscape Effects

- 7.146 The C-K connection is entirely located within the Upper Dale LCT (165). In views looking west from within the RSA towards the core of the Galloway Hills including forested foothills (Foothills with Forest LCT (176)) and rugged summits (Rugged Uplands LCT (180)) the C-K connection will be seen back clothed by landform. The C-K connection will not therefore interrupt views of the core area of the RSA.
- 7.147 Effects on the Upper Dale LCT (165) within the RSA arising from the introduction of the proposed C-K connection will be limited to a small linear area between Carsfad and Kendoon.
- 7.148 No long-term significant landscape effects are predicted to arise from the introduction of the C-K connection within eastern periphery of the RSA.

# Potential Visual Effects

- 7.149 From within the RSA views of the Trident wood poles and OHLs will be experienced from a small proportion of the overall area of the RSA. The C-K connection will be experienced in close proximity views between Carsfad and Kendoon occupying a similar portion of available views to the existing R Route and seen in association with other existing infrastructure elements including hydroelectric power schemes, substations, and communication routes.
- 7.150 **Significant** visual effects during the construction phase are predicted to arise from the introduction of the C-K connection from locations within close proximity to the proposed connection, limited to views from residential properties within the settlement of Kendoon and those experienced from footbridge access to the settlement (VP4: Footbridge access to Kendoon), located within the RSA.
- 7.151 No long-term significant visual effects are predicted to arise from the introduction of the C-K connection from locations within the RSA.

#### Conclusion

7.152 Taking account of the adverse effects on landscape and visual receptors detailed above, these effects are not considered likely to affect the key characteristics of the wider Galloway Hills RSA. Given that the connection will occupy a similar proportion of available views to existing infrastructure elements that will be removed before the operational phase the RSA would not be adversely significantly affected by the introduction proposed Trident wood pole OHL connection. The overall integrity of the Galloway Hills RSA will not be affected by the introduction of the proposed C-K connection.

# Summary of Significant Effects – Carsfad to Kendoon

7.153 This section summarises the significant landscape and visual effects, including cumulative effects, arising from the introduction of the proposed Carsfad to Kendoon (C-K) connection, and outlines potential additional mitigation measures to be implemented and the resultant residual effects predicted.

#### **Construction Effects**

## Landscape Effects

7.154 **No significant** landscape effects are predicted to arise during the construction phase.

# Visual Effects

7.155 **Table 0-9** below summarises the significant visual effects predicted to arise during the construction phase for the Carsfad to Kendoon (C-K) connection.

Table 0-9: Significant Visual Effects during the construction phase: Carsfad to Kendoon (C-K)

Significant Visual Effects during the constructi	on phas
VP4: Footbridge access to Kendoon	Moder
Kendoon	Moder

#### **Operational Effects**

Landscape Effects

- 7.156 **No significant** landscape effects are predicted to arise during the operational phase. Visual Effects
- 7.157 **No significant** visual effects are predicted to arise during the operational phase.

#### **Cumulative Effects**

7.158 **No significant** cumulative landscape or visual effects are predicted to arise during the operational phase.

#### **Proposed Mitigation Measures**

7.159 No additional mitigation measures have been identified to reduce the level and significance of specific identified landscape and visual effects. This is due to the nature of the effects identified and the limitations for further potential mitigation (e.g. the scale of the proposed infrastructure negates the feasibility to screen potential views).

#### Monitoring

7.160 No monitoring of landscape and visual effects or embedded mitigation measures is proposed.

e: Carsfad to Kendoon (C-K)

rate (adverse, short-term) and significant

rate (adverse, short-term) and significant

# Earlstoun to Glenlee

# Introduction

- 7.161 The assessment of landscape and visual effects in relation to the E-G connection considers the potential effects arising from the following:
  - a new 132kV single circuit wood pole (Trident) OHL, of approximately 1.6km in length, between Earlstoun and Glenlee (E-G Connection) – during the construction phase and operational phase.
- 7.162 The E-G connection will connect the hydroelectric power station at Earlstoun and the existing substation at Glenlee, adjacent to the Glenlee hydroelectric power station. The 132kV OHL will be supported on 16 Trident wood poles, whilst a short section of underground cable of approximately 250m will be required to connect into the Glenlee substation.
- 7.163 Two minor temporary deviations to the final alignment of the E-G Connection will be required in the vicinity of the existing R Route (north) alignment west and north of Waterside. Three temporary wood poles (EG018T, EG019T, EG006) will be used for the duration of the construction phase of the project and until the existing R Route (north) is decommissioned and removed following commissioning of the P-G via K connection. These temporary poles will then be replaced by the final EG006R wood pole which will remain for the duration of the operational phase. It is not considered that the final positions of EG010 and EG006R will result in a change in the landscape and visual effects between the construction and operational phases of the KTR Project.
- 7.164 The OHL components of the proposed E-G connection are described in detail in **Chapter 4** and shown on Figure 4.4 and Figure 4.7.
- 7.165 Based on the proposed construction programme set out in **Chapter 5**, the assessment of landscape and visual effects arising from the introduction of the E-G connection is based on the following assumptions in relation to the baseline situation for each part of the assessment:

#### Construction Phase

- All other proposed new KTR Project connection construction activities are evident;
- R Route (northern section between Kendoon and Glenlee and southern section between Glenlee and Tongland) present.

#### **Operational Phase**

- All other proposed new KTR Project connections are present;
- R Route (northern section between Kendoon and Glenlee and southern section between Glenlee and Tongland) has been decommissioned and removed; and
- Existing distribution infrastructure between Polguhanity and Glenlee has been relocated/undergrounded (as shown on Figure 4.12).

#### Cumulative Operational Phase

• As for the operational phase, plus all developments listed in **Table 7-3** and **Table 7-4** are present.

#### **Existing Conditions**

- 7.166 The landscape of the E-G connection includes the lower wooded transitional landscape south of Earlstoun Loch, elevated largely open arable farmland west of the A713 and afforested Hag Wood. The closest settlement is St John's Town of Dalry to the west, the settlement of Glenlee to the south and a relatively small number of properties along the A713.
- 7.167 The E-G connection heads first south-westerly, and then southerly from Earlstoun hydroelectric power station, following the existing 132kV OHL across the western slopes of the Glenkens Valley, avoiding the higher ground to the west. The alignment then deviates south-westerly where it passes through Hag Wood, before crossing Coom Burn in parallel with the proposed alignment of the P-G via K connection. Once adjacent to the Glenlee hydroelectric power station, the Trident wood pole OHL will terminate, and

• Figure 7.15.1 indicates theoretical visibility within close and middle-distance views from the south from residential properties and their curtilages. Longer distance views are limited to elevated areas, track to the north of Cairn Edward Hill.

extension to Glenlee substation.

 The presence of woodland south of Earlstoun Loch limits visibility to the north, and Dunveoch Wood, Black Bank Wood and Gaistone Plantation, partly limits visibility to the south and west. However, theoretical visibility is indicated across St John's Town of Dalry to the east and the western summits of Dunveoch Hill, Glenlee Hill and Maggot Hill to the west and south. In practice, views of the from where the infrastructure will be seen across the Glenkens Valley, backclothed against the western slopes of the valley beyond.

# Landscape Effects on Landscape Character Types

- 7.168 The landscape baseline for the E-G connection is described in **Appendix 7.4** and shown on **Figure 7.7**. Potential effects on landscape character types are considered in **Table 0-10** below:
  - Upper Dale Dumfries & Galloway LCT (165) (Host LCT).

# **Effects on views from Representative Viewpoints**

- 7.169 Potential visual effects from four representative VPs (VP7 to VP10) have been considered for the E-G connection. Visual effects from these representative VPs are considered in
- 7.170 **Table** 0-11 below.

#### **Effects on Views from Settlements**

7.171 Potential visual effects from settlements in the Study Area from which potential views of the E-G connection may be experienced will be limited to St John's Town of Dalry and Glenlee and are assessed in Table 0-12 below. It should be noted individual properties indicated on Figure 7.12 associated with the settlement of Glenlee have been group accordingly and are assessed in Table 0-12.

# **Effects on Views from Residential Properties**

7.172 Potential visual effects from residential properties located within approximately 150m of the proposed E-G connection, and which may experience potential views of the connection are assessed in Table 0-13 below.

# **Effects on Views from Routes**

7.173 Potential visual effects from routes in the Study Area from which potential views of the E-G connection may be experienced from are assessed in Table 0-14 below.

an underground cable will follow the alignment of the minor public roads to access the south-westerly

# Analysis of Visibility of the Earlstoun to Glenlee (E-G) Connection

of Carsfad Loch to Fintloch, including the settlement of St John's Town of Dalry. Visibility is indicated from Balmaclellan, however intervening landform and roadside vegetation will reduce actual visibility including Ardoch Hill, Mulloch Hill, Cairnsmore or Black Craig of Dee and exposed sections of forestry

proposed wood pole infrastructure will be limited to locations on the western fringes of the settlement

# Table 0-10: Assessment of Landscape Effects – Landscape Character Types (LCTs): Earlstoun to Glenlee (E-G)

Assessment of La	ndscape Effects – Lands	ccape Character Types (LCTs): Earlstoun to Glenlee (E-G		
Landscape Character Type (LCT)	Sensitivity	Magnitude of Change and Significance of Landscape Effects - Construction Phase	Magnitude of Change and Significance of Landscape Effects - Operational Phase	Potential Cum
Upper Dale Dumfries & Galloway LCT (165)	Sensitivity is judged to be <b>medium</b> .	The entirety of the E-G connection is located within the southern part of this LCT. The LCT will experience direct landscape change arising from the construction of the E-G connection. Between Earlstoun and Glenlee the introduction of the connection will result in the loss of small areas of mixed woodland vegetation west of Earlstoun substation, conifer plantation within the wayleave at Hag Wood and riparian vegetation along Coom Burn. There will also be some disturbance to arable and pastoral farmland along the length of the connection. Direct landscape effects from construction activities will include the removal of landscape features and the introduction of temporary access tracks between Earlstoun substation and Glenlee substation. The main OHL components constructed during this phase will remain present throughout the operational phase. The existing R Route (north) will remain evident within the landscape during the construction of the E-G connection, and the neighbouring P-G via K connection. Construction activities will be evident in close proximity views (within 1km of the connection) from within the LCT between Allangibbon Bridge and Glenlee substation. However, v towards the connection from within the LCT will be subject to localised screening by landform and vegetation and the perceptibility of the infrastructure and construction disturbance will diminish substantially beyond 1km and will become barely perceptible. The introduction of the E-G connection will result in a small scale change experienced across a very localised geographical extent of the LCT, resulting in a low magnitude of change. Taking account of the medium sensitivity, the landscape effect during the construction phase will be <b>minor</b> and <b>not significant</b> locally within approximately 1km of the E-G connection, reducing to <b>none</b> and <b>not significant</b> for the LCT as a whole.	The ZTVs shown on <b>Figure 7.9</b> (all connections) and <b>Figure 7.15</b> (E-G) indicate localised theoretical visibility within 1km of the E-G connection. The E-G connection will introduce additional electricity transmission infrastructure into this LCT, occupying a similar geographical area to the southern section of the existing R Route (north) and associated existing distribution infrastructure between Earlstoun hydroelectric power station and Glenlee substation. However, its introduction will not adversely alter the key features or predominant landcover of the LCT. The proposed wood pole infrastructure will appear largely backclothed against the upper western slopes of the Glenkens Valley reducing their perceptibility with distance across the wider extents of the LCT. Longer-distance views will be gained from elevated landform at Barlaes Hill and Bogue Moor, from where the E-G connection will appear as a small scale feature within the context of other manmade features such as the hydroelectric power scheme at Earlstoun Loch and the existing substation at Glenlee, and barely perceptible backclothed against the slopes of the valley and underlying landcover. Direct effects will arise from the introduction of the wood pole infrastructure and OHLs of the E-G connection into the landscape, which will remain evident throughout the operational phase. Decommissioning and removal of the existing R Route (north) will reduce the presence of transmission infrastructure within the southern part of the LCT between Earlstoun and Glenlee, however this infrastructure will be replaced by the P-G via K connection will appear alongside the E-G connection throughout the operational phase. The undergrounding of existing distribution infrastructure within a localised area of the LCT. The scale of change of the LCT. The E-G connection will occupy a similar portion of available views from within the LCT as the R Route (north) between Earlstoun substation and Glenlee substation, although its presence will be less perceptible due to its com	A number of the LCT. The E-G cd via K connection between Allang Glenlee substat seen in combina- connections, fro Combined view substation expe- localised screer to localised screer to localised screer to localised screer to localised screer <b>3.1</b> will contrib The introduction via K, and G-T influence of ele parts of this LC representing a cumulative land small (within ap As such the add within approxin in combination substation exter landscape effect the LCT as a whether the the the the the the the the the the the the the the the the the

#### umulative Effects - Operational Phase

the KTR Project connections will be located within this G connection will be seen in combination with the P-G ction from localised central parts of the LCT largely angibbon Bridge and Glenlee substations. Close to station the southern part of the E-G connection will be bination with the P-G via K, G-T and BG Deviation from some very localised areas of the LCT.

ews of these KTR Project connections and Glenlee xperienced from within this LCT will be subject to eening by vegetation and landform and limited mainly southern parts of the LCT where elevated views across be afforded.

sented or proposed developments illustrated on **Figure** ribute to additional cumulative effects within this LCT.

tion of the E-G connection in combination with the P-G -T connections and BG Deviation will increase the electricity infrastructure in the central and southern LCT in association with Glenlee substation extension, a very small localised geographical extent. The scale of andscape change within these affected areas will be approximately 1km).

additional cumulative magnitude of change will be low ximately 1km of where the E-G connection will be seen on with other KTR Project connections and Glenlee xtension. Taking account of the medium sensitivity, the fects for this LCT will be **none** and **not significant** for whole.

# Table 0-11: Assessment of Visual Effects – Representative Viewpoints: Earlstoun to Glenlee (E-G)

Viewpoint	Receptors and	Magnitude of Change and Significance of Visual	Magnitude of Change and Significance of Visual Effects -	Potential Cun
viewpoint	Sensitivity	Effects - Construction Phase	Operational Phase	Potential Cun
VP7. Southern Upland Way near Waterside Hill (260843, 582064) (Figure 7.27.1- 12)	The VP represents specific elevated and panoramic views experienced by recreational receptors of the Southern Upland Way at this elevated point on the trail. Sensitivity is judged to be <b>high</b> .	During the construction phase, the introduction of temporary access tracks and disturbance to areas of vegetation within the wayleave, will be seen in the middle distance of views looking south-east to south. From this elevated location construction of the E-G connection will be seen in the middle distance and background of successive views looking south to south- east and will be backclothed by rolling pastoral farmland and woodland vegetation along the Dundeugh Valley, and appearing beyond the steel lattice towers of the existing R Route (north) to the south, south-east of the VP. Whilst some ground-level disturbance associated with construction will be screened by the immediate landform in views looking north-east and east, access tracks for construction vehicles will be seen in the middle distance of views looking to the south. When viewed in combination with the existing R Route (north) which will remain evident during this phase, the E-G connection and ancillary construction activities will be seen as a small scale change affecting a small proportion of the view. Given the availability of the similar elevated views afforded from this section of the Southern Upland Way, the geographical extent of similar views will be small. Overall, the magnitude of visual change during construction will be low. Taking account of the high sensitivity of receptors at this location, the visual effect will be <b>minor</b> and <b>not significant</b> .	The E-G connection will occupy a similar proportion of the available views occupied by the existing R Route (north), visible in successive views clockwise from north to south from this location. The existing Glenlee substation is partially visible foreshortened by landform and largely screened be vegetation in the middle distance of the view, whilst the steel lattice towers of BG Route can be seen ascending the slopes of the valley to the south-west of the substation adjacent to the Glenlee hydroelectric power station. Views west, north-west to the summits within the Galloway Hills RSA will be uninterrupted by the introduction of the proposed development. The decommissioning and removal of R Route (north and south) will reduce the prominence of electricity transmission infrastructure in views from this location, however the P-G via K will appear adjacent to the E-G connection in the foreground of views. The introduction of the E-G connection will result in a barely perceptible scale change in the view, limited to views from elevated areas in the vicinity of the VP and representing a small geographical extent. The undergrounding of existing distribution infrastructure in parallel to the alignment of the existing R Route (north) will be largely imperceptible from this location. Overall, the magnitude of visual change during the operational phase will be low and taking account of the high sensitivity will result in a <b>minor</b> and <b>not significant</b> visual effect.	Figure 7.27.5 connection will this location ar cumulative effe Figures 7.27.4 connection will distance views Deviation conn The G-T conne south backcloth whilst the BG D landform and p slopes of the v. with the G-T co of Glenlee Hill. In terms of oth extension will the are foreshorter backclothed ag A number of pr relatively dista north-east and located at lowe cumulative inter which will apped developments. The magnitude location when of developments of the minor and not
VP8: Southern Upland Way near St John's Town of Dalry (261776, 581389) (Figure 7.28.1- 5)	The VP is representative of views experienced by recreational receptors on the Southern Upland Way long distance footpath, and similar views experienced by residents and visitors within the settlement of St John's Town of Dalry. Sensitivity is judged to be <b>medium</b> .	The E-G connection will be seen in the middle distance of successive views from north-west to south-west from this location, backclothed by the underlying rolling drumlin landform. During the construction phase, disturbance associated with preparatory ground works including the introduction of temporary access tracks will be partly screened by vegetation and landform in views from this location. The wood poles and OHLs of the E-G connection introduced during the construction phase will remain evident in views throughout the operational phase. Combined with presence of the existing R Route (north) which will remain during construction, resulting in a small scale change evident across much of the available view, with similar views experience from a small geographical area. Overall, the magnitude of visual change during construction will be low. Taking account of the medium sensitivity of receptors at this location, the level of effect will be <b>minor</b> and <b>not significant</b> visual effect.	The decommissioning and removal of and R Route (north) will reduce the immediate presence of electricity transmission infrastructure within the view, however the steel lattice towers of the P-G via K will appear beyond the E-G connection from this location and appear as more perceptible features in the view. The E-G will occupy a similar portion of views to the existing R Route (north). Elsewhere, visual effects experienced within the Study Area from the Southern Upland Way will be relatively localised, as outward views from the walking route are often screened by intervening features. Therefore, the geographical extent will be small. The E-G connection will occupy a similar portion of views looking south to south-east to this route, and the introduction of the wood pole OHL will result in a small scale change occupying a medium proportion of the available view, with similar views experience from a small geographical area. The undergrounding of existing distribution infrastructure in parallel to the alignment of the existing R Route (north) will be largely imperceptible from this location. Overall, the magnitude of visual change during the operational phase will be low and taking account of the medium sensitivity, the visual effect during the operational phase will be <b>minor</b> and <b>not</b> <b>significant</b> .	Figures 7.28. be visible in su connection, ba west. All other KTR P intervening veg additional cum No other conse views from this The introductio via K connectio The magnitude will be low and cumulative visio

#### umulative Effects - Operational Phase

**.5** and **Figure 7.27.6** indicate that the C-K vill be barely perceptible in views to the north from and will not therefore contribute to additional effects from this location.

**7.4** to **Figure 7.27.12** indicate that the E-G vill be seen in combined middle distance to longer vs to the south with the P-G via K and G-T and BG nnections.

nection will be seen in long distance views looking othed by landform crossing south behind Shiel Hill, 6 Deviation connection will be seen backclothed by d partially screened by conifer forest as it ascends the valley south-west of Glenlee substation in parallel connection as it passes over the south-eastern flank II.

other proposed developments, Glenlee substation Il be largely imperceptible in views to the south, which cened by landform, largely screened by vegetation and against the semi-improved pasture beyond.

proposed wind farms will theoretically be visible as tant features on the skyline in successive views to the nd east. However, the backclothed E-G connection wer elevation will not contribute to potential nteractions with these other proposed developments pear as distant and/or distinctly separate .s.

de of cumulative visual change to the view from this n considered in the presence of the above s will be barely perceptible. Taking account of the the receptor, the cumulative visual effect will be **not significant**.

**8.2** to **7.28.5** indicates that the E-G connection will successive combined views with the P-G via K backclothed by landform looking north-west to south-

R Project connections will be screened by existing vegetation and will not therefore contribute to mulative effects from this location.

sented or proposed developments will be visible in his location.

tion of the E-G connection alongside the proposed P-G tion will result in a small scale visual change.

de of cumulative change in views from this location nd taking account of the sensitivity of receptors the risual effect will be **minor** and **not significant**.

Assessment of Vis	sual Effects – Represent	ative Viewpoints: Earlstoun to Glenlee (E-G)		
VP9: Mulloch Hill (263152, 580664) (Figure 7.29.1- 11)	The VP represents elevated panoramic views experienced from this local hill summit accessed by recreational receptors of Core Path 224. Sensitivity is judged to be <b>high</b> .	This VP is representative of the specific panoramic views across the Dundeugh and Kenmure Valleys afforded from this elevated location. Similar views will be experienced from much of the elevated eastern side of the valley representing a medium widespread geographical extent. Given the longer-distance nature of views from this elevated location, ground-level disturbance associated with the construction of the E-G connection will be seen as distant features from this VP in successive long-distance views from north-west to west, backclothed by rolling landform and screened by woodland at Coom Burn as the connection approaches Glenlee substation. Construction activities associated with other KTR Project connections will be evident, albeit in the background of long-distance successive views and backclothed by landform in views to the north-west to south-west from this location. As a result, construction activities, including the introduction of temporary access tracks and the felling of woodland north of Glenlee substation will be seen at a lower level across the valley, and affect a small proportion of the available views. When viewed in combination with the existing R Route (north) which will remain evident during construction, the introduction of the E-G connection and construction activities will be seen as a small scale and relatively distant change in the view, with similar views experienced from a small geographical area. The magnitude of visual change during construction will be low, resulting in a <b>minor</b> and <b>not significant</b> visual effect from this VP.	The E-G will occupy a similar proportion of views to the existing R Route (north) as it contours across the western slopes of the valley, however the steel lattice towers of the P-G via K will appear beyond the E-G connection from this location and appear as more perceptible features in the view. In combination with the towers of P-G via K, the E-G connection will occupy a similar position and proportion of available views to the decommissioned R Route (north) resulting in a small scale change in the view, affecting a small geographical area limited to views from the property curtilage. The decommissioning and removal of R Route (south) will reduce the presence of electricity transmission infrastructure within the Kenmure Valley in views towards the valley floor to the west, south-west from this location. The undergrounding of existing distribution infrastructure between Earlstoun hydroelectric power Station and Glenlee will be largely imperceptible in views across the valley. As the E-G connection is contained within the lower valley sides and foothills, views west towards the elevated summits of the Galloway Hills RSA will remain uninterrupted. The scale of change to the view will be barely perceptible, and similar views will be experienced from the elevated eastern side of the valley representing a small geographical extent. Overall, the magnitude of visual change will be low, and the visual effect will be <b>none</b> and <b>not significant</b> .	The addition Project conne <b>7.29.11111</b> Figures 7.29 connection w combined vie substation in The G-T conn views partly I beyond GlenI A number of distant featur east to south visible in the not be seen i consented or The magnitud location will b receptors, the significant.
VP10: A762 north of Glenlee (261181, 580510) (Figure 7.30.1- 7)	The VP is representative of sequential views experienced by recreational users and road users travelling on the A762. Sensitivity is judged to be <b>medium</b> .	The E-G connection runs broadly parallel to A762 for a short length of the road within the Study Area between Earlstoun and Glenlee. Construction of the E-G connection will be evident in successive views looking north to west from this location. In views to the north, wood poles will be partially backclothed by elevated landform and can be seen glimpsed between intervening mature trees. In views to the north-west, felling of the wayleave and neighbouring forestry will result in open views of the wood poles and OHL, with partial backclothing by landform and forestry beyond. In views looking south-west, the connection will be seen partially screened by woodland and backclothed by the wood slopes beyond. As the connection approaches Glenlee substation, mature woodland along Coom Burn will screen views of the wood pole OHL where it terminates. Ground-level disturbance associated with the felling of coniferous woodland at Hag Wood and temporary access tracks for construction vehicles will be visible in close-proximity views looking north-west. The wood poles and OHL of the E-G connection, felling of woodland and associated construction activities introduced during the construction phase will be seen in conjunction the existing R Route (north) which will remain evident during the construction phase.	In combination with the towers of P-G via K connection, the E-G connection will occupy a similar alignment and proportion of available views to the decommissioned R Route (north), passing north-south beyond the felled woodland of Hag Wood to the west of Waterside Farm from this location, and resulting in a small scale change in the view, and affecting a small geographical area limited to similar views from a short section of the A762. The undergrounding of the existing distribution infrastructure in the foreground of views north, north-west from this location will be largely imperceptible. The magnitude of visual change will be low, and the level of effect will be <b>minor</b> and <b>not significant</b> . The replanting of felled windthrow areas of coniferous woodland which form Hag Wood east of the wayleave will result in the partial screening and filtering of views towards the wood poles, and the infrastructure will become barely perceptible as the woodland matures. As the woodland matures the magnitude of visual change will reduce to barely perceptible, and the level of residual effect during the operational phase will be <b>none</b> and <b>not significant</b> .	Figures 7.30 be visible bac vegetation ea Waterside Fa west in comb All other KTR intervening v cumulative ef There are no views from th The E-G and the available the E-G conn lattice towers visual change The magnitud will be low ar cumulative vi The replantin which form H screening and connection, r woodland ma As the woodl change arisin reduce to bar <b>none</b> and <b>no</b>

n of the E-G connection in the context of the other KTR nections is indicated in **Figure 7.29.2** to **Figure** 

**.29.2** to **Figure 7.29.11111** indicate that the E-G will be seen backclothed by landform in successive views with the P-G via K connection approaching Glenlee in views looking north-west to south-west.

nnection and BG Deviation will be seen within similar y backclothed and partly visible against the skyline enlee substation in combination with the E-G connection.

of proposed wind farms will theoretically be visible as tures on the skyline in successive views to the northuth-east. However, the backclothed E-G connection he middle distance of views to the west, north-west will n in combined cumulative views with these other or proposed developments.

tude of cumulative visual change to the view from this Il be low. Taking account of the sensitivity of the the cumulative visual effect will be **none** and **not** 

**30.2** to **7.30.6** indicates that the E-G connection will backclothed by landform and partially screened by east of the felled woodland of Hag Wood and west of Farm in successive views looking north-west to south-nbination with the P-G via K connection.

R Project connections will be screened by existing vegetation and not therefore contribute to additional effects from this location.

no other consented or proposed developments visible in this location.

nd P-G via K connection will occupy a similar portion of ole view to removed R Route (north). The wood poles of nnection will appear small alongside the adjacent steel ers of P-G via K, resulting in a small scale of cumulative nge.

tude of cumulative change in views from this location and taking account of the sensitivity of receptors the visual effect will be **minor** and **not significant**.

ing of felled windthrow areas of coniferous woodland Hag Wood east of the wayleave will result in the partial nd filtering of views towards the wood poles of E-G and the partial screening of towers of the P-G via K reducing the perceptibility of both connections as the natures.

dland matures the magnitude of cumulative visual ing from the introduction of the E-G connection will arely perceptible, and the level of residual effect will be **not significant**.

Assessment of Visual Effects – Representative Viewpoints: Earlstoun to Glenlee (E-G)			
	Overall, the magnitude of visual change during construction will be medium and will result in a <b>moderate</b> and <b>significant</b> visual effect on views from this VP.		

### Table 0-12: Assessment of Visual Effects – Settlements: Earlstoun to Glenlee (E-G)

Settlement	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential Cun
St John's Town of Dalry	Residents within the settlement of St John's Town of Dalry. Sensitivity is judged to be <b>high</b> .	The E-G connection will be seen in front of the steel lattice towers of the existing R Route (north). Disturbance associated with preparatory groundworks and the felling of the coniferous forestry of Hag Wood will be seen as a relatively distant change in views to the west, south-west from the settlement. Construction activities associated with the E-G connection will be evident across east facing slopes of the valley, to the west of the A762 from the western edge of the settlement. The wood poles and OHL of the E-G connection introduced during the construction phase will remain evident in views throughout the operational phase. The existing R Route (north and south) will remain evident in views during this phase. A small-scale change in longer-distance successive views from the settlement will arise, with similar views experienced from a small geographical area. The overall magnitude of visual change will be low, and the level of visual effect will be <b>minor</b> and <b>not significant</b> .	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.15</b> (E-G) indicate widespread theoretical visibility from across the settlement. Where open views are afforded from properties with views to the southwest to north-west, the wood poles of the E-G connection will be seen in longer-distance views as the connection contours across the slopes of the valley, backclothed and partially screened by landform and vegetation. The E-G will occupy a similar portion of views to the existing R Route (north) and will be seen in the foreground of views with the steel lattice towers of the P-G via K connection evident beyond. In combination with the towers of P-G via K connection, the E-G connection will occupy a similar alignment and proportion of available views to the decommissioned R Route (north) in views west and south from the settlement. The undergrounding of existing distribution infrastructure between Earlstoun hydroelectric power Station and Glenlee will be largely imperceptible in views across the valley from the settlement. The introduction of the E-G connection will result in a barely perceptible scale change affecting a very small proportion of the longer-distance views available to the west, south-west from the settlement.	Where the E-G and south-wes with the P-G via The P-G via K of existing vegeta discernible feat E-G connection seen partly bac formed by Glen When seen in of introduction of electricity infra scale of change the settlement In terms of oth extension will I will not therefor this location. N illustrated on <b>F</b> settlement and from this locat The magnitude will be barely p be <b>none</b> and <b>r</b>
Glenlee (Including residential properties: P57, P58, P59, P60, P61, P62, P63, P64, P65)	Residents within the settlement of Glenlee directly adjacent to the hydroelectric power station and substation. Sensitivity is judged to be <b>high</b> .	The E-G connection passes approximately 0.1km north- east of the settlement of Glenlee. Ground-level disturbance associated with preparatory groundworks, including felling and the construction of access tracks and compounds will be largely imperceptible due to intervening screening by mixed woodland between the settlement and Coom Burn. Most construction activities associated with the E-G connection infrastructure and the adjacent P-G via K connection will be largely screened by vegetation and existing built features north of the settlement, however the working area directly north of the settlement and activities therein will be evident throughout the construction phase. Construction activities associated with the introduction of the BG Deviation and the G-T Connection will be evident in close proximity views from much of the settlement. However, the P-G via K connection will not	<ul> <li>Widespread theoretical visibility is indicated from across the settlement in the ZTVs shown on Figure 7.11 and Figure 7.12 (all connections) and Figure 7.15 (E-G).</li> <li>With the exception of properties P57 and P58, residences within this small settlement are orientated with principal views looking south-east away from the E-G connection. Properties P57 and P58 are orientated with principal views looking north-east, however, views towards the E-G connection will by existing vegetation forming property boundaries and mixed woodland south of Coom Burn.</li> <li>The decommissioning and removal of the R Route (south) terminal tower to the north-east of the settlement and in close proximity to P57 and P58 will reduce the immediate presence of electricity transmission infrastructure in principal views from these properties.</li> <li>During the operational phase, the E-G connection will not be visible from the settlement, with the OHL terminating to the north of the settlement beyond intervening vegetation and connecting into Glenlee substation via underground cable.</li> </ul>	Given the low of significant visus from this settle addition of the Projects conner In terms of othe extension will I and views from be seen in comscreening by e electricity infracumulative effect There are no oviews from this The magnitude settlement will receptors, the significant.

#### umulative Effects - Operational Phase

-G connection is seen in views to the north-west, west est from the settlement it will be seen in combination is via K connection approaching Glenlee substation.

K connection will be seen largely backclothed by etation and landform, however the towers will be more eatures alongside the wood pole infrastructure of the ion. The G-T connection and the B-G Deviation will be packclothed and partly visible against the skyline ilenlee Hill in longer distance views to the south-west.

n combination with the P-G via K connection the of the E-G connection will increase the influence of frastructure in the view. This will result in a small nge experienced from the limited western extents of ent.

other proposed developments Glenlee substation ill be largely screened by intervening vegetation and efore contribute to additional cumulative effects from . No other consented or proposed developments in **Figure 3.1** will be visible in views from this and will not therefore contribute to cumulative effects ration.

de of cumulative change in views from this settlement / perceptible and overall, the level of visual effect will | **not significant**.

w magnitude of change and predicted none and not isual effect, significant cumulative effects on views ttlement are not predicted likely to occur from the he E-G connection in the context of the other KTR nections.

other proposed developments Glenlee substation ill be seen west of the settlement in secondary views om properties' curtilages. The E-G connection will not ombination with this proposed development given v existing features including vegetation, buildings and frastructure and will not therefore contribute to effects from this location.

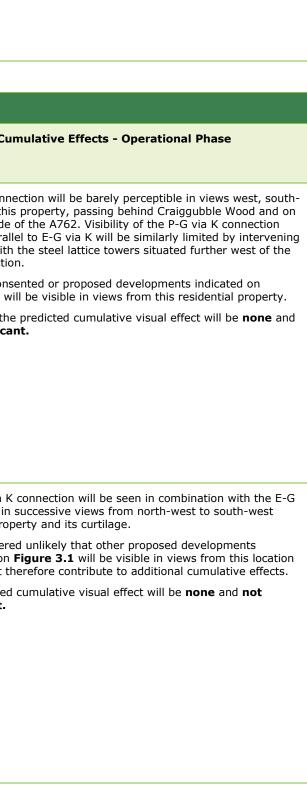
o other consented or proposed developments visible in his settlement.

Ide of cumulative visual change to the view from this vill be low. Taking account of the sensitivity of the ne cumulative visual effect will be **none** and **not** 

Assessment of Visual Effects – Settlements: Earlstoun to Glenlee (E-G)				
	be seen in combination with these KTR Project connections during construction.	Overall, the magnitude of visual change will be barely perceptible, and the visual effect will be <b>none</b> and <b>not significant</b> .		
	Taking account of the screening of outward views from the settlement, the introduction of the E-G connection and ancillary construction activities will result in a small scale change in the views experienced from the settlement during the construction phase. The magnitude of visual change will be low, and the visual effect will be <b>minor</b> and <b>not significant</b> .			

Residential	Receptors and	Magnitude of Change and Significance of Visual	Magnitude of Change and Significance of Visual Effects -	Potential Cu
Property or Group	Sensitivity	Effects - Construction Phase	Operational Phase	
P53: Staffa	Residents. Sensitivity is judged to be <b>high</b> .	The construction of temporary access tracks and movement of construction vehicles will be seen filtered by vegetation in principal looking views south-west and in views experienced from the property curtilage. The wood poles and OHL of the E-G connection introduced during the construction phase will remain throughout the operational phase, however these will be largely screened by intervening landform and vegetation. Construction activities, including construction access to the south-west of the property, will be seen in conjunction with the existing R Route (north) which will remain evident during this phase but appear largely screened by intervening features west of the A762. The scale of change will be small, with similar views experienced from a very small geographical area Given the limited visibility of the E-G connection experienced from the property, the overall magnitude of change will be low, and the level of effect will be <b>minor</b> and <b>not significant</b> during the construction phase.	Principal views are orientated south-west towards the E-G connection. However, views looking in this direction will be foreshortened by landform and partially screened by vegetation within the property curtilage and adjacent Craiggubble Wood and on the west side of the A762. In combination with the towers of P-G via K connection, the E-G connection will occupy a similar alignment and proportion of available views to the decommissioned R Route (north), but will appear barely perceptible in these in views as the connection passes behind Craiggubble Wood west of the A762. The undergrounding of existing distribution infrastructure directly south of the property curtilage will reduce the immediate presence of OHL infrastructure in views from the property. Overall, the level of effect during the operational phase will be <b>none</b> and <b>not significant</b> .	The E-G conner west from this the west side running parall features, with E-G connectio No other cons <b>Figure 3.1</b> with Therefore, the <b>not significa</b>
P56: Waterside, Glenlee	Residents. Sensitivity is judged to be <b>high</b> .	Potential for open views from property and its curtilage to the north-west, west and south-west towards the E-G connection, with the P-G via K connection appearing beyond to the west. Disturbance associated with preparatory groundworks and the felling of forestry for the creation of the wayleave through Hag Wood will be evident in close- distance views north-west to south-west from the property. The creation of temporary access from the A762 will be seen in principal views south from the property, with most construction activities to the west screened by intervening agricultural buildings and vegetation. The scale of change will be small, with similar views experienced from a very small geographical area Overall, the magnitude of change will be low during the construction phase, and the level of visual effect will be <b>minor</b> and <b>not significant</b> .	The wood poles of E-G will appear partially skylined in closer distance views west and backclothed by landform in middle to longer-distance views north-west to south-west. In combination with the towers of P-G via K connection, the E-G connection will occupy a similar alignment and proportion of available views to the decommissioned R Route (north) in views from the property and its curtilage. The wood poles of the E-G connection will be largely screened in views from the property and its curtilage. Where evident to the north-west and south-west, the introduction of the E-G connection into views will result in a barely perceptible scale change experienced from a small geographical area, resulting in a low magnitude of change during the operational phase. The undergrounding of existing distribution infrastructure directly south and south-west of the property curtilage will reduce the immediate presence of OHL infrastructure in views from the property. The decommissioning and removal of R Route (south) will be evident in views south-east across the valley from the principal outlook and curtilage of the property.	The P-G via K connection in from this prop It is considere illustrated on and will not th The predicted <b>significant</b> .

<sup>&</sup>lt;sup>35</sup> The identification of residential properties considered in the assessment of visual effects are detailed in **Table A7.5.62** in **Appendix 7.5**.



The Kendoon to Tongland 132kV Reinforcement Project

### Table 0-14: Assessment of Visual Effects – Routes: Earlstoun to Glenlee (E-G)

Route	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential Cu
A762 – between Allangibbon Bridge and Tongland (part of the Scottish Castle Route, Loch Ken and River Dee Biosphere Route)	Road users, including tourists Sensitivity is judged to be <b>medium</b> .	Construction activities will be evident from this road, including felling of coniferous woodland at Hag Wood, the introduction of temporary access tracks and movement of construction vehicles. Between Allangibbon Bridge and the Water of Ken the construction of the E-G connection will be seen in combination with the existing R Route (north), and the P-G via K connection. This will result in a small scale change in views experienced from a small geographical extent of the route. The magnitude of visual change will be low, and overall a <b>minor</b> and <b>not significant</b> visual effect is anticipated during construction for the section of the route between Allangibbon Bridge and Glenlee.	The ZTVs shown on <b>Figure 7.11</b> (all connections) and <b>Figure 7.15</b> (E-G) indicate theoretical visibility of the E-G connection from the road between Earlstoun and the named property of Fintloch. The E-G connection will be visible in largely oblique views to the west, with screenings along this section of the road largely limited to individual trees and vegetation. The decommissioning and removal of R Route (north) will reduce the concentration of electricity transmission infrastructure in views from the road, however, in combination with the P-G via K connection, the E-G connection will occupy a similar proportion of the available views from this route. The undergrounding of existing distribution infrastructure located within close proximity of the proposed E-G connection will reduce the immediate presence and influence of vertical infrastructure seen from short sections of the A762 between Earlstoun and Glenlee. The scale of change will be small with views experienced from a small geographical extent of the road, and the overall magnitude of change in views from this route will be low. The level of effect during the operational phase will be <b>minor</b> and <b>not significant</b> for the section of the route between Allangibbon Bridge and to the east of Glenlee.	From a section Glenlee the E- in combination buildings at W E-G connectio Deviation con Glenlee substa west when tra Glenlee substa of the road an views of other <b>Figure 3.1</b> in will not intera therefore cont developments The introducti Project other developments view. Overall, operation will <b>significant</b> for Allangibbon B
Southern Upland Way long distance footpath – between St. John's Town of Dalry and Waterside Hill (Core Path No. 504 within D&G).	Recreational users Sensitivity is judged to be <b>high</b> .	The Southern Upland Way passes under the E-G connection west of the Water of Ken and St John's Town of Dalry. Construction activities will be evident from the route, including some felling of coniferous woodland at Hag Wood, and the introduction of access tracks, one of which will cross the route south of Earlstoun Loch. The E-G connection will be seen in combination with the existing R Route (north and south), and the P-G via K connection, resulting in a small scale change in views experienced from a small localised geographical extent of the route, largely within approximately 1km. During construction a low magnitude of change will occur for views experience from sections of the route within close proximity to construction activities, and overall, the level of visual effect during the construction phase will be <b>minor</b> and <b>not significant</b> .	The ZTVs shown on <b>Figure 7.11</b> (all connections) and <b>Figure 7.15</b> (E-G) indicate theoretical visibility of the E-G connection between Waterside Hill and St John's Town of Dalry. The wood poles of the E-G connection will be seen in close-proximity views from sections of this long distance footpath between St John's Town of Dalry and Waterside Hill. Visual effects will be relatively localised, with perceptibility of the wood pole infrastructure limited to within approximately 2km of the connection. Given views from this section of the long-distance footpath are glimpsed between intervening features including buildings and vegetation, the geographical extent of similar views will be small. The removal and undergrounding of existing distribution infrastructure north and south of the route in the vicinity of Craiggubble Wood will reduce the immediate presence of vertical man-made elements from a short section of the route south-west of Earlstoun hydroelectric power station. The southern part of the E-G connection will occupy a much smaller proportion of the available views from the route to the existing R Route (north), however it will be seen in combination with the P-G via K connection which crosses the route to the west The scale of change will be small and will be experienced from a very localised geographical extent of the route (e approximately 2km). During operation, a low magnitude of change will occur for these views, becoming imperceptible in longer distance views from this route between St John's Town of Dalry and Waterside Hill.	The P-G via K experienced fr Waterside Hill lower western C-K connectio location and w Both the G-T combined long existing Glenk In terms of ot extension will are foreshorte backclothed a A number of p relatively dista the route on t However, the elevation will with these oth distant and/or The magnitud location when developments receptors and and <b>not signi</b> sequential vie and Waterside

#### umulative Effects - Operational Phase

ion of this road between Allangibbon Bridge and E-G connection will be seen in direct to oblique views ion with the P-G via K connection. Between agricultural Waterside and Coom Bridge, the southern part of the cion will be seen combination with the G-T and BG onnections as they ascend the valley slopes beyond station in longer distance views to the west, southcravelling south on the A762.A762

station extension will be screened by vegetation west and although there are likely to be some glimpsed er consented or proposed developments illustrated on in long distance views to the north, the E-G connection ract with these more distant schemes and will not ntribute to additional cumulative effects with these ts.

ction of E-G, seen in combination with other KTR r KTR connections and other more distant ts will result in a barely perceptible scale change in the II, the magnitude of cumulative visual change during ill be low, and the visual effect will be **none** and **not** for sequential views from this route between Bridge and to the east of Glenlee.

K connection will be visible in combined views from this route between John's Town of Dalry and lill appearing in parallel to the E-G connection on the rn slopes of the valley west of Craiggubble Wood. The tion to the north will be barely perceptible from this will not contribute to additional cumulative effects.

Γ connection and the BG deviation will be seen in ng distance views to the south, south-west of the nlee substation.

other proposed developments, Glenlee substation ill be largely imperceptible in views to the south, which tened by landform, largely screened by vegetation and against the semi-improved pasture beyond.

f proposed wind farms will theoretically be visible as stant features on the skyline from elevated sections of a the west side of the valley and Waterside Hill. The backclothed E-G connection located at a lower Il not contribute to potential cumulative interactions other or proposed developments which will appear as for distinctly separate developments.

ude of cumulative visual change to the view from this en considered in the presence of the above its will be low. Considering the sensitivity of the nd the level of cumulative change predicted, a **minor nificant** cumulative visual effect will occur for riews from this route between St John's Town of Dalry de Hill.

## Potential Implications of Proposed E-G Connection for Designated Landscapes

- 7.174 Potential implications for the Galloway Hills RSA are considered in relation to how the identified effects on landscape character, and views and visual amenity potentially affect the objectives and key characteristics for which the area is designated, as well as the overall integrity of the designated area. As set out in **Appendix 7.4**, no defined special gualities exist for the RSA.
- 7.175 The proposed E-G connection will occupy a very small area of the RSA on its eastern periphery between Earlstoun hydroelectric power station and Glenlee substation (as shown on Figure 7.9.2). The proposed wood pole infrastructure will occupy an area similar to that of the existing R Route (north) but will appear inferior in scale to the existing steel lattice (PL1) towers and their perceptibility will diminish over distance appearing almost imperceptible at distances beyond 2km.

#### Potential Landscape Effects

- 7.176 As defined within the RSA Technical Paper<sup>Error! Bookmark not defined.</sup> the eastern boundary of the RSA in this area is defined by the 'outward facing visual envelope' (page 20) of the Upper Glenkens Valley (Upper Dale LCT). The proposed E-G connection will cross the east facing slopes of the Glenkens Valley, appearing backclothed in views from the lower lying areas of the valley (Flooded Valley LCT) but will not interrupt the longer distance views towards the Rugged Granite Uplands of the core area of the Galloway Hills to the west which are available from the lower reaches of the valley and the elevated eastern slopes of the Glenkens Valley (beyond the boundary of the RSA).
- 7.177 Effects on the Upper Dale LCT (165) within the RSA arising from the introduction of the proposed E-G connection will be limited to a small linear area between Earlstoun and Coom Burn near Glenlee substation.
- 7.178 **No long-term significant** landscape effects are predicted to arise from the introduction of the E-G connection within the eastern periphery of the RSA.

#### Potential Visual Effects

- 7.179 Views of the proposed wood pole infrastructure and OHLs will be limited to a very small proportion of the overall area of the RSA, contained within areas of the RSA which are currently influenced by the presence of the existing steel lattice towers and OHLs R Route (north) and other man-made elements in the landscape.
- 7.180 Significant visual effects during the construction phase are predicted to arise from the introduction of the E-G connection from locations within close proximity to the proposed connection, limited to localised extents of the A762 near Coom Burn (VP10: A762 north of Glenlee).
- 7.181 **No long-term significant** visual effects are predicted to arise from the introduction of the E-G connection from locations within the RSA.

# Conclusion

7.182 Taking account of the adverse effects on landscape and visual receptors detailed above, these effects are not considered likely to affect the key characteristics of the very large Galloway Hills RSA, and the area would not be adversely affected by the proposed wood pole OHL connection. The overall integrity of the Galloway Hills RSA will not be affected by the introduction of the proposed E-G connection.

# Summary of Significant Effects – Earlstoun to Glenlee

7.183 This section summarises the significant landscape and visual effects, including cumulative effects, arising from the introduction of the proposed E-G connection, and outlines potential additional mitigation measures to be implemented and the resultant residual effects predicted.

# **Construction Effects**

Landscape Effects

7.184 **No significant** landscape effects are predicted to arise during the construction phase.

#### Visual Effects

7.185 Moderate (adverse, short-term) significant effects on views from VP10: A762 north of Glenlee are predicted to occur during the construction phase, attributed predominantly to the creation of the wayleave and the felling of adjacent coniferous woodland at Hag Wood deemed to be at risk of windthrow.

#### **Operational Effects**

# Landscape Effects

7.186 **No significant** landscape effects are predicted to arise during the operational phase.

# Visual Effects

7.187 **No significant** visual effects are predicted to arise during the operational phase.

#### **Cumulative Effects**

7.188 **No significant** cumulative landscape or visual effects are predicted to arise during the operational phase.

#### **Proposed Mitigation Measures**

7.189 Additional mitigation measures have been identified to reduce the level and significance of specific identified landscape and visual effects. Table 0-15 below details the additional mitigation measures proposed and the implications for the identified operational phase effects, and resultant residual effects predicted.

# Table 0-15: Additional Mitigation Measures: Earlstoun to Glenlee (E-G)

Additional Mitigation Measures: Earlstoun to Glenlee (E-G)			
Receptor	Operational Effects	Additional Mitigation Measures	Residual Operational Effects
VP10: A762 north of Glenlee	Minor (adverse, long-term) and not significant	Replanting of areas of additional windthrow felling	None (adverse, long-term) and not significant
A762 – between Allangibbon Bridge and Tongland	Minor (adverse, long-term) and not significant	Replanting of areas of additional windthrow felling	None (adverse, long-term) and not significant

7.190 No further additional mitigation measures (beyond those set out in Table 0-15 above) have been identified to reduce the level and significance of specific identified landscape and visual effects. This is due to the nature of the effects identified and the limitations for further potential mitigation (e.g. the scale of the proposed infrastructure negates the feasibility to screen potential views).

# Monitoring

7.191 No monitoring of landscape and visual effects or embedded mitigation measures is proposed.

# **BG** Deviation

# Introduction

- 7.192 The assessment of landscape and visual effects in relation to the BG Route Deviation (BG Deviation) considers the potential effects arising from the following:
  - a new 132kV double circuit steel lattice tower (L4m) OHL deviation of the existing BG route, from Glenlee substation approximately 1.2km in length (BG Deviation) – during the construction phase and operational phase.
- 7.193 The BG Deviation will comprise five new steel lattice towers (L4m) running south-west from the existing Glenlee substation, and the replacement of an existing tower with a new L4m tower on the existing BG Route south of Glenlee Hill. The OHL components of the proposed BG Deviation connection are described in detail in Chapter 4 and shown on Figure 4.5 and Figure 4.7.
- 7.194 Based on the proposed construction programme set out in **Chapter 5** the assessment of landscape and visual effects arising from the BG Deviation is based on the following assumptions in relation to the baseline situation for each part of the assessment:

# Construction Phase

- Existing BG Route (132kV double circuit steel lattice tower (L4m) OHL) alignment is present;
- All other proposed new KTR Project connection construction activities are evident; and
- R Route (north) present.

#### **Operational Phase**

- All KTR Project connections are present;
- R Route (north)) has been decommissioned and removed; and
- The existing distribution infrastructure between Polguhanity and Glenlee has been removed/undergrounded (as shown on Figure 4.12).

#### Cumulative

• As for the operational phase, plus all developments listed in **Table 7-3** and **Table 7-4** are present.

#### **Existing Conditions**

7.195 The landscape of the BG Deviation is largely limited to the rough grassland and moorland on the eastern flank of Glenlee Hill (271m AOD) and the lower wooded area of Black Bank Wood. Settlement within close proximity to the BG Deviation is largely limited to the detached and semi-detached properties associated with Glenlee. The BG Deviation heads south-west from Glenlee substation though Black Bank Wood along the eastern to south-eastern side of Glenlee Hill into the Craigshinnie valley.

#### Analysis of Visibility of the BG Route Deviation

- Figure 7.16.1 indicates theoretical visibility from short to middle distance views within the lower lying areas of the Glenkens Valley to the east, watercourses and valley sides nearest the connection from Earlstoun to Fintloch, including the settlements of St John's Town of Dalry and Glenlee. Theoretical visibility is indicated from Balmaclellan, however intervening landform and vegetation will limit views of the connection from residential properties and their curtilages. Longer distance views may be afforded from elevated valley sides, including the B7000 and the Southern Upland Way near Waterside Hill.
- Visibility from the south, south-west will largely be limited to close proximity views from across the neighbouring elevated landform of Glenlee Hill, Maggot Hill and Gallows Knowe, whilst woodland cover across the lower eastern flanks of Dunveoch Wood, Hag Wood Black Bank Wood and conifer forest plantation between Back Hill of Glenlee and Airie Bennan limits wider visibility of the proposed towers. Woodland does not limit views of the northern section of the connection where it approaches

the existing Glenlee substation, however views experienced from parts of St John's Town of Dalry and open summits to the north and south including Dunveoch Hill and Cairnsmore will be in the context of the existing BG route infrastructure which will be utilised for the proposed G-T connection and the adjacent pen stock and pipeline of the Glenlee hydroelectric power station.

#### Landscape Effects on Landscape Character Types

- 7.196 The landscape baseline for the BG Route Deviation is described in **Appendix 7.4.** Potential effects on landscape character types are considered in **Table 0-16** below:
  - Upper Dale Dumfries & Galloway LCT (165) (Host LCT); and
  - Foothills with Forest Dumfries & Galloway LCT (176) (Host LCT).

### **Effects on views from Representative Viewpoints**

7.197 Potential visual effects from four representative VPs (VPs 7, 9, 11 and 12) have been considered for the BG Route Deviation. Visual effects from these representative VPs are consider in **Table 0-17** below.

#### **Effects on Views from Settlements**

7.198 Potential visual effects from settlements in the Study Area from which potential views of the BG Deviation may be experienced will be limited to St John's Town of Dalry and Glenlee and are assessed in Table 0-18 below. It should be noted individual properties indicated on Figure 7.12 associated with the settlement of Glenlee have been group accordingly and are assessed in Table 0-18.

#### **Effects on Views from Residential Properties**

7.199 Potential visual effects from residential properties located within approximately 150m of the proposed BG Deviation, and which may experience potential views of the connection are assessed in Table 0-19 below.

# **Effects on Views from Routes**

7.200 Appendix 7.5 sets out the routes considered within the assessment of the BG Deviation. Potential visual effects on routes beyond those experienced from VP7: Southern Upland Way near Waterside Hill and VP10: Mulloch Hill are largely imperceptible and are not therefore considered in the assessment that follows.

# Table 0-16: Assessment of Landscape Effects – Landscape Character Types (LCTs): BG Deviation

Assessment of La	ndscape Effects – Lands	cape Character Types (LCTs): BG Deviation		
Landscape Character Type (LCT)	Sensitivity	Magnitude of Change and Significance of Landscape Effects - Construction Phase	Magnitude of Change and Significance of Landscape Effects - Operational Phase	Potential Cumula
Upper Dale Dumfries & Galloway LCT (165)	Sensitivity is judged to be <b>medium</b> .	The northern part of the BG Deviation is located within this LCT, and will introduce additional transmission infrastructure in this LCT occupying a similar geographical area adjacent to the existing BG Route. The southern part of the LCT will experience direct landscape change arising from the construction of the BG Deviation, where between Glenlee substation and the southern extent of Black Bank Wood the introduction of the connection will result in the loss of mixed woodland and conifer forest to create the wayleave and some disturbance to areas of rough grazing along the length of the connection. Direct effects will arise from construction activities including the removal of landscape features and the introduction of temporary access tracks within farmland south-west of Glenlee substation. The main OHL components constructed during this phase will remain present throughout the operational phase. The existing BG and R Route (north) will remain evident within the landscape during the construction of the BG Deviation connection and G-T connection will be constructed along the existing alignment of the BG Route, however views towards these connections from within the LCT will be subject to localised screening by landform and vegetation along Coom Burn and Black Bank Wood across the eastern slopes of Glenlee Hill. Other elements of construction within this LCT including temporary construction compounds one and two, however these will not be evident in combination with the main construction activities associated with the BG Deviation. When seen in combination with the existing BG and R Route (north) the introduction of the BG Deviation OHL will result in a small scale change. This will be experienced from a localised geographical extent of the LCT and appear almost imperceptible in longer distance elevated views from the wider extents of the LCT. The magnitude of landscape change during construction will be low where the BG Deviation is seen from a very localised part of the LCT near Glenlee substations representi	The ZTVs shown on <b>Figure 7.9</b> (all connections) and <b>Figure 7.16</b> (BG Deviation) indicates that theoretical visibility from within the LCT is limited by landform to the north-west west and south with close proximity views within 1km along the length of the connection and more widespread theoretical visibility indicated within 3km to the north-east and east. The proposed towers will largely appear backclothed against the eastern and south-eastern slopes of Glenlee Hill and partly contained by the adjacent retained woodland of Black Bank Wood reducing their perceptibility with distance across the LCT and the introduction of the connection will not adversely alter the scale or predominant landcover of the LCT. Views beyond 3km will be possible from elevated valley slopes of the 6 the Kenmure Valley to the north-east. In these longer-distance views the BG Deviation will be seen as a relatively distant small scale feature predominantly backclothed by landform and vegetation and partly screened by vegetation neighbouring Glenlee hydroelectric power station. From much of the southern part of the LCT the BG Deviation will be seen within the context of Glenlee substation and other existing transmission infrastructure. The removal of temporary construction compounds and the reinstatement of areas including the quarry working area and temporary access tracks will reduce the overall perceptible disturbance within the LCT. The existing R Route (north) will be replaced within the LCT north-east of Glenlee substation by the P-G via K and E-G connections, and will be seen in combination with the BG Deviation (and G-T connection) from some localised and elevated areas of the LCT . The towers of the BG Deviation will result in a small scale change experienced from localised and small geographical extent of the LCT.	A number of the K LCT, including the Deviation will be s connections from y associated with Gl- distance it is consi occur between the The northern secti with the G-T come Glenlee Hill, whilst lower elevations as east. The P-G via K and views from within undergrounded low The introduction o the G-T connection infrastructure in th Glenlee substation In terms of other of substation extensi LCT, where the P-C existing substation connection will cor west. Combined views of substation experie localised screening localised southern No other consente <b>3.1</b> will contribute The introduction o K, E-G, and G-T co substation extensi infrastructure in a scale of cumulative Deviation connecti As such the addition within approximate combination with o substation extensi account of the meno- on this LCT will be
Foothills with Forest – Dumfries & Galloway LCT (176)	Sensitivity is judged to be <b>medium</b> .	The southern part of the BG Deviation is located within this LCT and will experience direct landscape change arising from the construction of the connection. Within the LCT between the southern extent of Black Bank Wood and Craigshinnie Burn the introduction of the connection will result in disturbance to areas of farmland and rough grazing along the length of the connection and will introduce additional electricity transmission infrastructure into this LCT in close proximity to the existing BG Route, which will be replaced by the G-T connection. The proposed towers will largely appear backclothed against the southern slopes of Glenlee Hill and contained within the	The ZTVs shown on <b>Figure 7.9</b> (all connections) and <b>Figure 7.16</b> (BG Deviation) indicates that theoretical visibility is limited by the elevated landform of Glenlee Hill to the north, Maggot Hill and Gallows Knowe to the south, Shiel Hill and Flintloch Hill to the south-east, and landform to the west. Whilst the presence of coniferous woodland to the west will substantially reduce visibility of the towers further. Close proximity views are predicated within 1km along the length of the connection and from the slopes and neighbouring hilltops. Beyond this distance visibility is largely limited to elevated areas including the open ground of Dunveoch Hill to the north and Cairnsmore to the south. In these longer-	Both the BG Devia southern part of the introduction of the connection and the connections within From localised sou Dunveoch Hill the with the P-G via K In terms of other of substation extensio

#### ulative Effects - Operational Phase

KTR Project connections will be located within this ne P-G via K, C-K, E-G and G-T connections. The BG e seen in combination with the P-G via K, E-G and G-T n within a localised southern part of the LCT Glenlee substation. However, given the intervening nsidered unlikely that cumulative interactions will he BG Deviation and C-K connection.

ction of the BG Deviation will be seen in combination nection on the eastern and south-eastern side of Ist the P-G via K and E-G connections will be seen at as they approach Glenlee substation from the north-

nd E-G connections will occupy a similar proportion of in the LCT to the removed R Route (north) and low voltage distribution network west of the A762.

n of the BG Deviation when seen in combination with tion will increase the influence of existing electricity the southern part of the LCT, to the south-west of tion and hydroelectric power station.

er consented or proposed developments Glenlee hsion will be located within the southern part of the P-G via K and E-G connections will connect into the ion from the north-east and the BG Deviation and G-T connect into the substation extension from the south-

of these KTR Project connections and Glenlee rienced from within this LCT, will be subject to ng by vegetation and landform and limited mainly to rn parts of the LCT.

ted or proposed developments illustrated on **Figure** te to additional cumulative effects within this LCT.

of the BG Deviation in combination with the P-G via connections in conjunction with the proposed Glenlee nsion will increase the influence of electricity a small and localised area of this LCT, however the tive landscape change from the introduction of the BG ction will be small.

itional cumulative magnitude of change will be low ately 1km of where the BG Deviation will be seen in h other KTR Project connections and Glenlee asion, and none for the LCT as a whole. Taking nedium sensitivity, the cumulative landscape effects be **minor** and **not significant**.

viation and G-T connection will directly affect the this LCT. Indirect effects will be experienced from the he northern sections of the BG Deviation and the G-T the southern sections of the P-G via K, E-G hin the neighbouring Upper Dale LCT.

outhern parts of the LCT around and to the south of the BG Deviation connection will be seen in combination K and E-G, and G-T connections.

r consented or proposed developments Glenlee nsion will be located within the southern part of the

Assessment of Landscape Effects – Landscape Ch	haracter Types (LCTs): BG Deviation		
Glenlee their per Direct of the rem and qu Knowe connec through The exi landsca will be The int scale cl extent and lim beyond Taking magnit constru	landform south-west of Glenlee substation between the Hill to the north and Maggot Hill to the south reducing berceptibility with distance across the LCT. effects will arise from construction activities including moval of landscape features and the introduction of brary access tracks within farmland south of Glenlee Hill uarry working areas at Will's Hill (Q3) and Gallows e (Q2). The main OHL components of the BG Deviation ction constructed during this phase will remain present ghout the operational phase. kisting BG Route will remain evident within the cape during the construction of the BG Deviation and e replaced by the towers of the G-T connection. troduction of the BG Deviation will result in a small change experienced within a very localised geographical c of the LCT, seen in close proximity views within 1km mited longer distance views from elevated locations d 1km. g account of the medium sensitivity, and the low tude of change, the landscape effect during the function phase will be <b>minor</b> and <b>not significant</b> locally <b>one</b> and <b>not significant</b> beyond 1km.	distance views the BG Deviation will be seen as a relatively distant small scale feature predominantly backclothed by landform. From much of the south-eastern part of the LCT the BG Deviation will be seen within the context of Glenlee substation and other existing transmission and distribution infrastructure. The removal the reinstatement of areas including the quarry working areas and temporary access tracks will reduce the overall perceptible disturbance within the LCT. Direct effects will arise during the operational phase from the introduction of the southern part of the BG Deviation within the LCT south of Glenlee Hill. The towers of the BG Deviation will occupy a similar proportion of available views from within the LCT as the BG Route. The scale of the change will be small locally (within 1km) reducing to barely perceptible for the LCT as a whole. Overall, the magnitude of change will be low during the operational phase. Combined with the medium sensitivity of the LCT, the landscape effect will be <b>minor</b> and <b>not significant</b> locally, reducing to <b>none</b> and <b>not significant</b> for the LCT as a whole.	neighbouring LC into the substation Combined views substation exten to localised screet The proposed Glall located in this the BG Deviation which will appea distance views to turbines east of Blackcraig Hill. The introduction the G-T connection infrastructure in a small scale char extent of the LC The additional cu account of the minor and

Viewpoint	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential Cum
VP7: Southern Upland Way near Waterside Hill (260843, 582064) (Figure 7.27.1- 12)	The VP represents specific elevated panoramic views experienced by recreational receptors of the Southern Upland Way at this elevated point on the trail. Sensitivity is judged to be <b>high</b> .	This VP is located at a relatively elevated position along the Southern Upland Way and open views are afforded across the Dundeugh and Kenmure Valleys to the east and towards the summits of the Galloway Hills RSA to the west. From this elevated location the BG Deviation will be seen ascending the south-eastern flank of Glenlee Hill partially screened by mixed woodland and backclothed by landform, passing out of view behind the summit of Glenlee Hill in middle distance views to the south. During the construction phase, disturbance associated with preparatory groundworks including the felling of woodland at Black Bank Wood and the introduction of temporary access tracks will be evident across the valley slopes and lower elevations adjacent to Glenlee substation. The existing R Route (north and south) and BG Route (until replaced by the G-T connection) will remain evident in views to the south across the valley during the construction phase. Whilst some ground-level disturbance associated with construction and the felling of woodland at Black Bank Wood will be evident, the scale of visual change during construction will be small. Similar visual effects will be relatively localised and experienced from a short section of the Southern Upland Way and neighbouring elevated slopes and hilltops. The geographical extent will therefore be small. The magnitude of visual change during construction will be low and combined with the high sensitivity will result in a <b>minor</b> and <b>not significant</b> visual effect from this VP.	The BG Deviation will occupy a similar portion of the view to the existing steel lattice towers of BG Route which can be seen ascending the slopes of the valley to the south-west of the substation adjacent to the Glenlee hydroelectric power station The steel towers and OHLs will introduce additional electricity transmission infrastructure of comparable scale to the existing BG Route into views to the south from this location, with the G- T connection appearing in parallel to the south-east replacing the existing BG Route connection. R Route (north) will be replaced by the P-G via K and E-G connections which will be evident in the foreground of views to the south, south-east from this elevated location, whilst the removal of R Route (south) will reduce the presence of transmission infrastructure within the foot of the Kenmure Valley in views to the south-east. The introduction of the BG Deviation connection will result in a small scale change in the view, and similar views will be experienced from a small geographical area. Overall, the magnitude of visual change during the operational phase will be low and the visual effect will be <b>minor</b> and <b>not</b> <b>significant</b> .	Figure 7.27.2 a will be barely per contribute to add Figures 7.27.2 be seen in comb P-G via K, E-G, a connections are backclothed and successive views The BG Deviation in combined view The G-T connect backclothed by 1 connection (which seen in parallel a Hill. The introdu- electricity infrast Glenlee substation toto the south w screened by veg beyond. The intri influence of elect Deviation and th toto the south. A number of pro- relatively distant north-east and e at lower elevation interactions with appear as distant

CT, with the P-G via K and E-G connections connecting tion extension from the north-east.

s of these KTR Project connections and Glenlee ension experienced from within this LCT will be subject eening by vegetation and landform.

Glenshimmeroch, Troston Loch and Fell wind farms are nis LCT. From some elevated locations near Glenlee Hill on will be seen in combination with these wind farms ar as distant features against the skyline in long to the north-east, and extend the influence of wind f the Glenkens Valley alongside the operational

n of the BG Deviation when seen in combination with tion will increase the presence of electricity n the south-eastern extent of the LCT and will result in nanged from a very localised and small geographical CT.

cumulative magnitude of change will be small. Taking medium sensitivity, the cumulative landscape effect and **not significant**.

# mulative Effects - Operational Phase

**2** and **Figure 7.27.6** indicate that the C-K connection perceptible from this location and will not therefore additional cumulative effects from this location.

**.2** to **Figure 7.27.12** indicate that the BG Deviation will nbined middle distance to longer distance views with the G, and G-T connections. The P-G via K and E-G re located closest to the VP and will be seen partly nd partially screened by landform and vegetation in two from north to south.

tion will be seen in combination with the G-T connection iews to the south, south-west of the existing substation. action will be seen in middle distance views to the south y landform crossing south behind Shiel Hill. The G-T hich will utilise the existing BG Route alignment) will be as it passes over the south-eastern flank of Glenlee duction of this connection will increase the influence of astructure seen in combination with BG Deviation.

ation extension will be seen in middle distance views which are foreshortened by landform and heavily egetation and backclothed by the slopes of the valley ntroduction of the substation extension will increase the ectricity infrastructure seen in combination with the BG the other KTR Project connections in combined views

roposed wind farms will theoretically be visible as ant features on the skyline in successive views to the d east. However, the backclothed BG Deviation located tion will not contribute to potential cumulative ith these other proposed developments which will ant and/or distinctly separate developments.

Assessment of Vis	sual Effects – Represent	ative Viewpoints: BG Deviation		
VP9: Mulloch Hill (263152, 580664) ( <b>Figure 7.29.1-</b> <b>11</b> )	The VP represents specific elevated panoramic views experienced by recreational receptors on Core Path 224. Sensitivity is judged to be <b>high</b> .	This VP is representative of the panoramic views across the Dundeugh and Kenmure Valleys afforded from this elevated location and on the route of Core Path 224 from St John's Town of Dalry. During the construction phase disturbance associated with preparatory groundworks including the felling of woodland at Black Bank Wood will be evident, along with the introduction of temporary access tracks at lower elevations, in long distance views to the west, south-west. R Route (north) north-east of Glenlee, R Route (south) east of Glenlee where it crosses the valley floor and the existing BG Route (which will be replaced by the G-T connection) will remain evident within the landscape during the construction of the BG Deviation. A small scale change in the view will occur from the introduction of the connection and associated construction activities, experienced from a small and localised geographical area. The magnitude of visual change during construction will be low, resulting in a <b>minor</b> and <b>not significant</b> visual effect.	<ul> <li>Figure 7.29.8 illustrates that the BG Deviation will be seen backclothed against the eastern slopes of Glenlee Hill in long distance views to the south-west from this location. Mixed woodland vegetation will partially screen the lower parts of towers in closest proximity to Glenlee substation and hydroelectric power station.</li> <li>The decommissioned R Route (north and south) will be replaced by the P-G via K and E-G connections which will be evident in the foreground of views to the south, south-east from this elevated location, whilst the removal of R Route (south) will reduce the presence of transmission infrastructure within the foot of the Kenmure Valley in views to the southwest.</li> <li>The G-T connection (which will utilise the existing BG Route alignment) will be seen ascending the slopes of the valley in parallel with the BG Deviation, appearing backclothed beyond Glenlee substation.</li> <li>The BG Deviation will be seen in long distance views to the south-west backclothed by landform and appearing alongside the proposed G-T connection which will occupy the alignment of the existing BG Route. The BG Deviation will continue to occupy a similar proportion of the view as the BG Route, resulting in a small scale change in the view, experienced from a small and localised geographical area.</li> <li>Overall, the magnitude of visual change during the operational phase will be low and the visual effect will be minor and not significant.</li> </ul>	The addition of the cumulative change short sections of th offer open views to views will therefore. Overall, the magnit this location will be <b>minor</b> and <b>not sign</b> <b>Figure 7.29.2</b> and will be barely percecontribute to additi <b>Figures 7.29.2</b> to G connections will views to the west, from the north. Glenlee substation west beyond the in contribute to additi A number of propodistant features on south-east. Howev in the middle distant combined cumulati developments. The similar views will b The magnitude of colocation will be low and <b>not significant</b> .
VP11: Unclassified road (U3S) south- west of Glenlee (259631, 579281) ( <b>Figure 7.31.1-</b> <b>7</b> )	This VP is representative of views from nearby residential properties at Bucks Linn, and of views experienced by road users travelling on the unclassified road between the A762 and Galloway Forest Park which forms part of the National Byway cycle route. Sensitivity is judged to be <b>medium</b> .	During the construction phase, disturbance associated with preparatory groundworks including disturbance of areas of rough grazing and the introduction of temporary access tracks will be evident in the middle distance of view looking north- east. Construction activities associated with the introduction of the adjacent G-T connection will be seen in successive views to the north-east to south-west. The existing BG Route will remain evident within the landscape during the construction of the BG Deviation. The introduction of the BG Deviation connection and associated construction activities will result in a small scale change experienced from a small and localised geographical area. The magnitude of visual change during construction will be low and will result in a <b>minor</b> and <b>not significant</b> visual effect from this VP.	Looking north-east from this location two of the steel lattice towers of the BG Deviation connection will be seen against the skyline formed in part by the south-eastern flanks of Glenlee Hill in the middle distance of the view. The steel lattice towers will largely appear within a similar proportion of the view to the existing BG Route which will remain evident in the foreground of the view, with the BG Deviation towers appearing further north and a greater distance from the VP. The G-T connection will be evident in views to the north-east and -south-east where it passes southwards towards Gallows Knowe, initially following the alignment of the existing BG Route. During the operational phase, the two visible towers of the BG Deviation will remain evident against the skyline in the middle distance of views to the north-east from this location and will be seen in combination with the northern part of G-T connection. Visual effects will be relatively localised in extent, with similar views experienced along the unclassified road (U3S) south of Craigshinnie Burn between Bucks Linn Bridge (east) and Craigshinnie Bridge (west). The introduction of the BG Deviation connection will result in a small scale change in the view, with similar views limited to a localised and small geographical extent.	Figures 7.31.2 to in conjunction with north-east. The G- to the east and sou Within the available visible. Two towers landform the other connection will intr to the south-east f No other KTR Proje will not therefore c location. The proposed wind Glenshimmeroch a features against th Glenkens Valley ex northwards from th appearing in combi The consented Moo the skyline in long The addition of the G-T connection and increase the presen infrastructure in su from this location.

the BG Deviation connection will result in small scale ige in the view, with similar visual effects limited to f the Southern Upland Way and elevated slopes which to the south. The geographical extent of similar fore be small.

gnitude of cumulative visual change to the view from be low, and the cumulative visual effect will be **significant**.

and **Figure 7.29.6** indicate that the C-K connection creptible from this location and will not therefore ditional cumulative effects from this location.

to **Figure 7.29.12** indicate that the P-G via K and Eiill be seen backclothed by landform in successive st, north-west where they approach Glenlee substation

on extension will be barely perceptible in views to the e intervening woodland and will not therefore ditional cumulative effects from this location.

posed wind farms will theoretically be visible as on the skyline in successive views to the north-east to ever, the backclothed BG Deviation connection visible stance of views to the west, will not be seen in lative views with these other consented or proposed The scale of cumulative visual change will be small and I be limited to a small geographical area.

of cumulative visual change to the view from this ow, and the cumulative visual effect will be **minor** cant.

to **7.31.7** indicate that the BG Deviation will be seen ith the G-T connection in combined views to the G-T connection will also be seen in successive views south-east, occupying a larger proportion of the view.

able view five towers of the G-T connection will be ers of the G-T connection will be backclothed by her three will be seen against the skyline. The G-T ntroduce additional electricity infrastructure into views at from this location.

oject connections will be visible from this location and e contribute to additional cumulative effects from this

ind farms of Knockman Hill (consented), Troston Loch, and Fell (applications) will be visible as distant the skyline formed by hills and plateau east of the extending the influence of wind energy development a the operational Blackcraig Hill wind farm, and nbination with the BG Deviation and G-T connections. Mochrum Fell wind farm will be barely visible against ng distance successive views to the south-east.

the BG Deviation when seen in combination with the and proposed wind farms on the distant skyline will sence and influence of electricity transmission successive views looking north-east to south-east n.

			Overall, the magnitude of visual change during the operational phase will be low and taking account of the medium sensitivity will result in a <b>minor</b> and <b>not significant</b> visual effect.	The scale of cumu BG Deviation will b geographical area.
				Overall, the magni the cumulative vis
VP12: Core Path 516 south-west of Glenlee (260291, 579239) (Figure 7.32.1- 88)	The VP is representative of views experienced by recreational receptors on the north-western portion of Core Path 516. Sensitivity is judged to be <b>medium</b> .	During the construction phase, disturbance associated with preparatory groundworks including disturbance of rough grazing and the introduction of temporary access tracks will be evident in the middle distance of views looking to the north-east and north-west. Construction activities including the felling of woodland at Black Bank Wood and associated activities with the introduction of the G-T connection will be seen in combination with the introduction of the BG Deviation in views to the north-east. The existing BG Route will remain evident within the landscape to the west during the construction of the BG Deviation. In views to the north and north-east from this location four steel lattice towers of the BG Deviation will be seen in the middle distance of the view, partially backclothed by the landform of Glenlee Hill beyond. The steel lattice towers will largely appear within a similar proportion of view to the existing BG Route, the most northerly towers of which will be replaced by the G-T alignment. The introduction of the BG Deviation OHL and associated construction activities will result in a small scale change when viewed in combination with the existing BG Route and construction of the adjacent G-T connection and will be experienced from a vary localised small geographical area. Overall, the magnitude of visual change during construction will be low and will result in a <b>minor</b> and <b>not significant</b> visual effect from this VP.	During the operational phase towers BG Deviation will be evident in the middle distance of views to the north, and north- east where towers will be seen predominantly backclothed by the landform of Glenlee Hill beyond. In views to the north-east the upper portions of two towers will be seen against the skyline formed in part by Glenlee Hill and seen in combination with the towers of the G-T connection in views to the north- east. The towers of the BG Deviation will continue to occupy a similar proportion of the view as the existing BG Route but will be located slightly further north from the VP. The remaining towers of the BG Route, which the BG Deviation will connect to the north, will be evident to the west of the VP. The introduction of the BG Deviation will result in a small scale change in views from this location, limited to a localised and small geographical extent, with similar views experienced from the northern section of Core Path 516. Overall, the magnitude of visual change during the operational phase will be low and will result in a <b>minor</b> and <b>not</b> <b>significant</b> visual effect.	Figures 7.32.2 to in combined views the G-T connection where towers will I between Shiel Hill Other KTR Project extension will be in and intervening sc therefore not contri- location. The turbines of the small scale feature largely backclothed and the G-T conne In views to the non farm and the prop- and Troston Loch vi- distant forested for collectively as one Evident in long dis distant and distinc Deviation connecti The addition of the G-T connection and presence and influ- successive views to cumulative change The magnitude of a location will be low and <b>not significan</b>

#### Table 0-18: Assessment of Visual Effects – Settlements: BG Deviation

Assessment of Vis	ssessment of Visual Effects – Settlements: BG Deviation					
Settlement	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential Cumulat		
St John's Town of Dalry	Residents within the settlement of St John's Town of Dalry. Sensitivity is judged to be <b>high</b> .	During the construction phase, disturbance associated with preparatory groundworks including the felling of forestry at Black Bank Wood, and the introduction of temporary access tracks will be evident at lower elevations in long distance views to the south-west. Construction activities associated with the introduction of the adjacent G-T connection will be seen in successive views looking south-west. The existing R Route (north and south) north and east of Glenlee and the existing BG Route to the south will remain evident within the landscape during the construction of the BG Deviation, and the adjacent G-T connection. The construction of the P-G via K and E-G connections will be evident in views across the valley to the west.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.16</b> (BG Deviation) indicate widespread theoretical visibility of the connection from across the settlement. Where open views to the south-west are afforded from properties within the settlement, the steel lattice towers of the BG Deviation will be seen ascending the slopes of the valley beyond Glenlee substation and adjacent to the Glenlee hydroelectric power station, partly backclothed by landform and vegetation and ascending the slopes of the valley in parallel to the proposed G-T connection which will occupy the alignment of the existing BG Route. The P-G via K and E-G connections will occupy a similar alignment and proportion of available views west towards the decommissioned R Route (north), whilst the decommissioning of R Route (south) will reduce the presence of transmission	The towers of BG D combination with th surrounds Glenlee s north-east of Glenle P-G via K and E-G o successive views to Glenlee substation f The G-T connection Route) will be seen the BG Deviation, a The proposed Glenle in views to the sout intervening woodlar cumulative effects f		

nulative visual change arising from the addition of the Il be small and will be experienced from a small ea.

gnitude of cumulative visual change will be low, and visual effect will be **minor** and **not significant**.

to **7.32.9** indicate that the BG Deviation will be seen ws to the north-east with the G-T connection, whilst ion is also seen in successive views to the south-east ill be seen against the skyline formed by moorland fill and Maggot Hill.

ct connections, and the proposed Glenlee substation e imperceptible from this location given their distance screening by landform and vegetation and will ntribute to additional cumulative effects from this

the proposed Shepherds Rig wind farm will be seen as ares in distant views to the north-east, appearing ned by landform beyond the towers of BG Deviation nection.

north-east and east the consented Knockman Hill wind oposed wind farms of Cornharrow, Glenshimmeroch h will be seen against the skyline formed by the foothills, with the latter proposed schemes perceived ne large wind farm to the east of the Glenkens Valley. distance views, these developments will appear as nctly separate developments to the proposed BG ction and adjacent G-T connection.

the BG Deviation when seen in combination with the and other proposed developments will increase the fluence of electricity transmission infrastructure in s to the north-east resulting in a small scale ge in the view.

of cumulative visual change to the views from this ow, and the cumulative visual effect will be **minor** cant.

## ulative Effects - Operational Phase

G Deviation will be seen in views to the south-west in h the G-T connection, above woodland which ee substation, and the P-G via K and E-G connections enlee.

-G connections will be seen backclothed by landform in s to the west, north-west where they approach on from the north.

tion (which will utilise the existing alignment of BG een ascending the slopes of the valley in parallel with n, appearing backclothed beyond Glenlee substation.

lenlee substation extension will be barely perceptible south-west from the settlement beyond the dland and will not therefore contribute to additional cts from this location.

Assessment of Vis	sual Effects – Settlemen	its: BG Deviation		
		The scale of visual change during construction will be small, and similar views will be experienced from a small geographical area. The magnitude of visual change during construction will be low and will result in a <b>minor</b> and <b>not significant</b> visual effect.	infrastructure within the foot of the Kenmure Valley in views south from the settlement. The undergrounding of existing distribution infrastructure between Earlstoun hydroelectric power Station and Glenlee will be largely imperceptible in views across the valley from the settlement.	No other consent will be visible in v The addition of th change in views f extent from areas valley to the sout
			The BG Deviation will be seen in long distance views across the Kenmure Valley from the settlement, with towers appearing backclothed by landform as the connection ascends the eastern slopes of Glenlee Hill in parallel to the proposed G-T connection which will occupy the alignment of the existing BG Route, and towers appearing on the skyline as the pass over the southern flanks of Glenlee Hill. The introduction of the BG Deviation connection will result in a small scale change in views from this settlement, whilst similar	Overall, the mag settlement will be and <b>not signific</b>
			views will be experienced from a small geographical area. Overall, the magnitude of visual change during the operational phase will be low and the visual effect will be <b>minor</b> and <b>not</b> <b>significant</b> .	
Glenlee <sup>36</sup> (Including residential properties P57, P58, P59, P60, P61, P62, P63, P64, P65)	Residents within the settlement of Glenlee directly adjacent to the hydroelectric power station and substation. Sensitivity is judged to be <b>high</b> .	<ul> <li>With the exception of properties facing north-east (P57 and P58), residencies within this small settlement are orientated with principal views looking east, south-east onto the unclassified road (U3S) whist views are afforded west, northwest from the rear of the properties and their curtilages. Properties P57 and P58 is orientated with principal views to the north-east and rear views to the south-west.</li> <li>During the construction phase, disturbance associated with preparatory groundworks including the introduction of temporary access tracks to the west, south-west of the properties. The felling of woodland at Black Bank Wood will be evident from much of the settlement in close proximity views experienced from the property curtilages and upper storey rear windows, reduced in some instances by the presence of screening present along the rear boundaries of properties (properties P61 to P65).</li> <li>The existing R Route (north and south) infrastructure will remain evident during the initial period of the construction phase, until replaced by the G-T connection.</li> <li>Construction activities associated with the introduction of the adjacent G-T connection, which will occupy the alignment of the existing BG Route, will be seen in the immediate foreground of views from the settlement. The introduction of the BG Deviation and associated construction phase.</li> <li>The magnitude of visual change during the construction phase will be medium. Considering the high sensitivity of the residential receptors, a moderate and significant visual effect is anticipated for views from properties within this settlement during the construction phase.</li> </ul>	<ul> <li>Widespread theoretical visibility is indicated from across the settlement by the ZTVs shown on Figure 7.11 and Figure 7.12 (all connections) and Figure 7.16 (BG Deviation).</li> <li>The closest tower of the BG Deviation connection will be located approximately 0.1km west, north-west of properties at the southern extent of the settlement (properties P61 to P65), where the connection will enter Glenlee substation.</li> <li>During the operational phase, the first tower (R-BG-102) of the BG Deviation will be seen in combination with the GG-T connection which will occupy the existing alignment of the BG Route, in views from the rear of properties P61 to P65 within the settlement. In practice, actual visibility will be limited by existing vegetation along the rear boundaries of properties and occupying a similar proportion of the available views.</li> <li>The removal and reinstatement of all temporary construction works, and disturbance will return the underlying landcover to semi-improved pasture as evident in existing views from the rear of the properties.</li> <li>The decommissioning and removal of the R Route (north) terminal tower adjacent to the Glenlee hydroelectric power station in the north-western extents of the existing substation will be evident from properties within the settlement, whilst the removal of the R Route (south) terminal tower located north of the minor road north-east of Glenlee will be evident in views from the properties at the north-eastern extents of the settlement (P57 and P58).</li> <li>Whilst the G-T connection will be evident in the immediate foreground views from the settlement, the proposed towers will occupy the existing tower positions of the BG Route.</li> <li>The introduction of the BG Deviation will result in a medium scale change experienced from a very localised small geographical area.</li> <li>Overall, the magnitude of visual change during the operational phase will be medium, principally associated with the introduction of the first tower and OHLs of the BG Devia</li></ul>	The P-G via K and largely screened north, north-west The introduction towers and OHLs to Glenlee substa close proximity v settlement, with remaining partial settlement (P59 t No other consent will be visible in v The scale of cum will be medium w increasing the pro- infrastructure in i within the settlem The magnitude of settlement will be <b>moderate</b> and <b>s</b>

<sup>&</sup>lt;sup>36</sup> Representative views from residential properties located within the small settlement of Glenlee were considered in the LVIA for the proposed Glenlee Substation Extension. Accompanying visualisations (Figures 6.4.1-5 and Figures 6.5.1-5) which illustrate the introduction of the proposed Deviation and G-T connections are contained within the separate planning application submitted to D&GC in September 2019 - 19/1498/FUL

ented or proposed developments shown on Figure 3.1 in views from this settlement.

the BG Deviation will result in a small scale cumulative s from the settlement, limited to a small geographical eas of the settlement where open views across the outh-west are possible.

agnitude of cumulative visual change in views from the be low, and the cumulative visual effect will be **minor** icant.

and E-G connections north of Glenlee substation will be d by intervening infrastructure and vegetation to the est in views from the settlement.

on of the BG Deviation will be seen in combination the Ls of the G-T connection, whilst the proposed extension station and adjacent mitigation planting will be seen in views from the rear of properties within the th terminal gantries and upper extents of infrastructure ially visible in views from some properties within the 9 to P65) once the intervening planting matures.

ented or proposed developments shown on Figure 3.1 n views from this settlement.

mulative visual change in views from the settlement with the additional tower of the BG Deviation presence and influence of electricity transmission n immediate views west, south-west from properties ement, representing a small geographical area.

of cumulative visual change to views from the be medium, and the cumulative visual effect will be significant.

Assessment of Visu	Assessment of Visual Effects – Settlements: BG Deviation						
			visual effect will occur for properties located at the southern extent of the settlement.				

 Table 0-19: Assessment of Visual Effects – Residential Properties: BG Deviation

Residential Property or Group	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential Cumula
P76: Glenlee Kennels	Residents. Sensitivity is judged to be <b>high</b> .	Property is orientated with principal views east towards the unclassified road (U3S) and secondary views orientated to the west, north-west. The existing BG Route can be seen in views from the rear of the property and curtilage where trees and deciduous vegetation partially screens and filters views towards the eastern shoulder of Glenlee Hill. During the construction phase ground-level disturbance associated with the felling of mixed woodland at Black Bank Wood and the introduction of temporary access tracks north of Craigshinnie Burn will be seen in views west from the property, and partially screened by mature trees on the property's northern boundary. The existing BG Route will remain evident during the initial period of the construction phase, until replaced by the G-T connection. Construction activities associated with the introduction of the adjacent G-T connection, which will occupy the alignment of the existing BG Route, will be seen in the immediate foreground of views from the property. The scale of visual change during the construction phase will be small, with views experienced from the rear and curtilage of the property representing a very small geographical area. Overall, the magnitude of visual change during construction will be low and will result in a <b>minor</b> and <b>not significant</b> visual effect on views from this residential property.	Potential for partially-screened and filtered direct to slightly oblique views from the rear of the property and its curtilage, with the upper extents of towers of the BG Deviation visible as the connection contours around the south-eastern flanks of Glenlee Hill. Where open views are afforded from the rear and curtilage of the property, steel lattice towers will appear partially above the skyline and partially backclothed by landform beyond. The BG Deviation will occupy a similar proportion of the views towards as the existing BG Route, which will be replaced by the towers of the proposed G-T connection. The introduction of the BG Deviation connection will result in a small scale change in views from the property, experienced from the rear and curtilage of the property representing a very small geographical area. Overall, the magnitude of visual change during the operational phase will be low and will result in a <b>minor</b> and <b>not</b> <b>significant</b> visual effect on views from this residential property.	The BG Deviation views to the west property. The tops skyline, partially by No other KTR Proje property, and the primperceptible due landform. No other consented <b>3.1</b> will be visible in contribute to addit The introduction of with the G-T connect electricity transmist rear of the propert visual change expect The magnitude of of be low, and the cut <b>significant</b> .

#### ulative Effects - Operational Phase

on will be seen in combination with the G-T connection west, south-west from the rear and curtilage of the ops of steel lattice towers will be visible against the y backclothed by Glenlee Hill beyond.

roject connections will be visible in views from the ne proposed extension to Glenlee substation will be ue to the presence of intervening woodland and

nted or proposed developments illustrated on **Figure** le in views from this property and will therefore not ditional cumulative effects.

n of the BG Deviation when seen in combined views nnection will increase the presence and influence of mission infrastructure in successive views from the erty, and will result in a small scale of cumulative xperienced from a very small geographical area.

of cumulative change in views from this property will cumulative visual effect will be **minor** and **not** 

<sup>&</sup>lt;sup>37</sup> The identification of residential properties considered in the assessment of visual effects are detailed in **Table A7.5.62** in **Appendix 7.5**.

The Kendoon to Tongland 132kV Reinforcement Project

## Potential Implications of proposed BG Deviation Connection for Designated Landscapes

- 7.201 Potential implications for the Galloway Hills RSA are considered in relation to how the identified effects on landscape character, and views and visual amenity potentially affect the objectives and key characteristics or special qualities for which the area is designated, as well as the overall integrity of the designated area.
- 7.202 The proposed BG Deviation connection will occupy a very small area of the RSA on its eastern periphery (as shown on Figure 7.9.2). The proposed steel tower infrastructure will occupy an equivalent area to that of the existing BG Route, which will be replaced by the proposed G-T connection.

#### Potential Landscape Effects

- 7.203 As defined within the RSA Technical PaperError! Bookmark not defined. the eastern boundary of the RSA in this area is defined by the 'outward facing visual envelope' (page 20) of the Upper Glenkens Valley (Upper Dale LCT). The towers and OHLs of the BG Deviation will be seen against local skylines in close proximity views from within Upper Dale LCT (165). This includes localised views west, north-west from within the southern part of LCT 165 and the north-eastern part of the neighbouring Flooded Valley LCT (164). From these locations the towers and OHLs of the BG Deviation will be seen against the skyline formed by the eastern flanks of Glenlee Hill.
- 7.204 The presence of the proposed towers on this elevated ground within the Foothills with Forest LCT (176), defined in the RSA Technical Paper<sup>Error! Bookmark not defined.</sup> as 'Those areas which form part of the setting to the valued areas of the Galloway Hills, and/or which have an attractive upland forested, character in their own right.' however, the introduction of the BG Deviation into the south-western part of the Upper Dale LCT (165) and eastern part of the Foothills with Forest LCT (176) will not interrupt longer distance views looking west, north-west towards the core of the RSA, defined by the Rugged Uplands LCT (180).
- 7.205 There will be a perceptual increase in the presence of steel lattice towers within a small extent of the RSA in close vicinity to the existing BG Route, however the key characteristics of the wider designated area will not be adversely affected.
- 7.206 **No long-term significant** landscape effects are predicted to arise from the introduction of the BG Deviation within the eastern periphery of the RSA.

## Potential Visual Effects

- 7.207 From within the RSA views of the steel towers of the BG Deviation will be limited to a small part of the RSA where the towers and OHLs will be evident south-west of Glenlee substation. This area is currently influenced by the existing BG Route, Glenlee hydro station and substation.
- 7.208 **Significant** visual effects during the construction and operational phases are predicted to arise from the introduction of the BG Deviation from locations within close proximity to the proposed connection, limited to views from residential properties within the settlement of Glenlee, located within the RSA.

#### Conclusion

7.209 Taking account of the adverse effects on landscape and visual receptors detailed above, these effects are not considered likely to affect the key characteristics of the very large Galloway Hills RSA, and the area would not be significantly adversely affected by the introduction of the BG Deviation, which will occupy a similar proportion of available views to the existing section of the BG Route that will be removed following during the operational phase.

# Summary of Significant Effects – BG Deviation

7.210 This section summarises the significant landscape and visual effects, including cumulative effects, arising from the introduction of the proposed BG Deviation connection, and outlines potential additional mitigation measures to be implemented and the resultant residual effects predicted.

#### **Construction Effects**

## Landscape Effects

7.211 **No significant** landscape effects are predicted to arise during the construction phase.

# Visual Effects

7.212 **Table 0-20** below summarises the significant visual effects predicted to arise during the construction phase for the BG Deviation connection.

Table 0-20: Significant Visual Effects during the construction phase: BG Deviation

Significant Visual Effects during the constructi	on phas
Glenlee	Moder

#### **Operational Effects**

Landscape Effects

7.213 **No significant** landscape effects are predicted to arise during the operational phase.

Visual Effects

7.214 **Table 0-21** below summarises the significant visual effects predicted to arise during the operational phase for the BG Deviation connection.

Table 0-21: Significant Visual Effects during the construction phase: BG Deviation

Significant Visual Effects during the operation	al phase
Glenlee	Moder

#### **Cumulative Effects**

7.215 **Table 0-22** below summarises the significant cumulative landscape and/or visual effects likely to arise during the operational phase for the BG Deviation connection.

Table 0-22: Likely significant Cumulative Effects during Operational Phase: BG Deviation

Summary of likely significant Cumulative Effect	ts durin
Glenlee	Modera

## **Proposed Mitigation Measures**

7.216 No additional mitigation measures have been identified to reduce the level and significance of specific identified landscape and visual effects. This is due to the nature of the effects identified and the limitations for further potential mitigation (e.g. the scale of the proposed infrastructure negates the feasibility to screen potential views).

#### Monitoring

7.217 No monitoring of landscape and visual effects or embedded mitigation measures is proposed.

e: BG Deviation

rate (adverse, short-term) and significant

e: BG Deviation

rate (adverse, long-term) and significant

g Operational Phase: BG Deviation

rate (adverse, long-term) and significant

# Glenlee to Tongland

# Introduction

- 7.218 The assessment of landscape and visual effects in relation to the G-T connection considers the potential effects arising from the following:
  - a new 132kV double circuit steel lattice tower (L4m) OHL, of approximately 32.3 km in length, between G-T connection; and
  - the removal of approximately 33.1km of existing 132kV steel lattice tower (PL1) OHL between Glenlee and Tongland (R Route (south) – southern section, towers: R30 (R) – R153).
- 7.219 The G-T connection will run between the existing Glenlee substation adjacent to the hydroelectric power station at Glenlee and Tongland substation. The 132kV OHL will be supported on 118 steel lattice towers (L4m). The OHL components of the proposed G-T connection are described in detail in Chapter 4 and shown on **Figure 4.6** and **Figure 4.7**.
- 7.220 Based on the proposed construction programme set out in Chapter 5, the assessment of landscape and visual effects arising from the introduction of the G-T connection is based on the following assumptions in relation to the baseline situation for each part of the assessment:

# Construction Phase

- All other KTR Project construction activities are evident; and
- R Route (north) and (south) present.

# **Operational Phase**

- All KTR Project connections are present;
- R Route (north) and (south) has been decommissioned and removed; and
- The existing distribution infrastructure between Polguhanity and Glenlee has been removed/undergrounded (shown on Figure 4.12).

#### Cumulative

• As for the operational phase, plus all developments listed in **Table 7-3** and **Table 7-4** are present.

# **Existing Conditions**

- 7.221 The landscape of the G-T connection of the KTR Project is varied including partly elevated open farmland and moorland associated with the Craigshinnie valley, lower foothills with dense conifer plantations, and lower settled valleys. Settlements located within the Study Area for the G-T connection include St John's Town of Dalry, New Galloway, Kirkcudbright and the smaller communities of Glenlee, Mossdale and Laurieston. A number of more scattered residences and farmsteads are also located largely in the more settled valleys east of the G-T connection. While there are a number of settlements and properties within 5km much of the G-T connection passes through areas with no settlements, largely between Glenlee Hill and Laurieston Forest.
- 7.222 From the south-western extension to Glenlee substation, the G-T connection ascends the western slopes of the Glenkens Valley in parallel with the existing alignment of the 132kV OHL which connects Glenlee and Newton Stewart substations. (BG route)) The G-T connection runs south-west until deviating south, south-eastwards near Bucks Linn Bridge to cross higher ground between Shiel Hill (200m AOD) and Gallows Knowe (232m AOD) before crossing the A712 and Knocknairling Burn. The G-T connection then enters the coniferous forestry of Galloway Forest Park and runs southwards, whilst taking a westerly alignment avoiding the highest ground of Peal Hill, before deviating south-eastwards to contour around the southern slopes of Cairn Edward Hill (325m AOD) and Bennan Hill (258m AOD), before passing east of Stroan Loch.
- 7.223 The G-T connection continues south, south-eastwards around the western flanks of Kenick Hill (263m AOD) before crossing the minor road running west from Laurieston at Kenick Wood. The connection then

takes a minor deviation southward emerging from the coniferous forestry at the south-eastern extent of Laurieston Forest. Once south of the Gatehouse Burn, the G-T connection heads south-eastwards towards the A762, crossing near Edgarton Loch before passing around the southern shores of Bargatton Loch and northern flanks of Whirstone Hill.

7.224 The G-T connection then passes to the north of the small hill and cluster of woodland north of Upper Balannan, before reaching the alignment of the existing 132kV R Route (south) south-west of Dunjop. From here, the connection follows a closely parallel alignment to the existing R Route, passing east of Upper Balannan before crossing the A75 to the north-east of Ringford. The G-T connection then crosses the existing R Route (south) alignment from east to west and runs in parallel to the west of the existing R route (south) to Tongland substation.

# Analysis of Visibility of the Glenlee to Tongland (G-T) Connection

- Figure 7.17.1 to Figure 7.17.4 indicate widespread theoretical visibility within 5km between St John's Town of Dalry to Kirkcudbright, including much of the A713 between St John's Town of Dalry and Crossmichael. Shorter distance views from the A762 are largely screened by forestry, however to New Galloway and Laurieston to Ringford. Visibility from recreational and promoted routes within Galloway Forest Park and Laurieston Forest will be due to intervening forestry, however the connection can be seen from the elevated unforested summit of Cairnsmore or Black Craig of Dee and exposed sections of forestry track to the north of Cairn Edward Hill.
- Actual visibility of much of the G-T connection will be limited by the presence of dense conifer forest within the Galloway Forest Park, which will largely limit closer proximity views of this connection between the A712 (the Queen's Way) and Laurieston Forest, south-west of Laurieston. However, theoretical visibility is indicated from elevated areas of the Study Area to the west including Cairnsmore, Shaw Hill and Airie Hill, and longer distance elevated views from east of the A762. The location of the connection within existing conifer forest largely limits views from settlements in closest proximity to the east including St John's Town of Dalry, New Galloway and Laurieston. South of Laurieston, relative widespread visibility is indicated as the connection passes through a more open landscape as it crosses the lower reaches of the Glenkens Valley before converging with the some closer proximity views near to the loch, however visibility of the proposed towers will be evident from some sections of the A762 to the west of Barstobrick Hill.

# Landscape Effects on Landscape Character Types

- 7.225 The landscape baseline for the G-T connection is described in **Appendix 7.4.** Potential effects on landscape character types are considered in Table 0-23 below:
  - Upper Dale Dumfries & Galloway LCT (165) (Host LCT);
  - Foothills with Forest Dumfries & Galloway LCT (176) (Host LCT);
  - Rugged Uplands with Forest LCT (181); and
  - Drumlin Pastures LCT (169).

# **Effects on views from Representative Viewpoints**

7.226 Potential visual effects have been assessed from 19 representative VPs (VPs 7, 9, 11, 12, 14, 16-18, 20-24, 26, and 28-32) for the G-T connection. Visual effects from these representative VPs are considered in

some visibility is indicated in longer distance views experienced from the road, including from Glenlee

existing R Route (south) south-west of Dunjop. Woodland north and south of Bargatton Loch will limit

Table 0-24 below.

### **Effects on Views from Settlements**

7.227 Potential visual effects from settlements in the Study Area from which potential views of the G-T connection may be experienced will be limited to St John's Town of Dalry, New Galloway, Laurieston, Glenlee and Mossdale are assessed in **Table 0-25** below.

# **Effects on Views from Residential Properties**

7.228 Potential visual effects from residential properties located within approximately 150m of the proposed G-T connection, and which may experience potential views of the connection are assessed in **Table 0-26** below.

# **Effects on Views from Routes**

7.229 Potential visual effects from routes in the Study Area from which potential views of the G-T connection may be experienced from are assessed in **Table 0-27** below.

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# Table 0-23: Assessment of Landscape Effects – Landscape Character Types (LCTs): Glenlee – Tongland (G-T)

Landscape Character Type (LCT)	Sensitivity	Magnitude of Change and Significance of Landscape Effects - Construction Phase	Magnitude of Change and Significance of Landscape Effects - Operational Phase	Potential Cumu
Upper Dale – Dumfries & Galloway LCT (165)	Sensitivity is judged to be <b>medium</b> .	A short section of the northern most extent of the G-T connection is located within this LCT, between Glenlee substation and the southern extent of Black Bank Wood. The G-T connection will not introduce additional transmission infrastructure into this LCT, as the connection will occupy the tower positions of the existing BG Route following construction of the proposed BG Deviation connection. The LCT will experience direct landscape change arising from the construction of the G-T connection and result in the loss of mixed woodland and conifer forest to create the wayleave and some disturbance to areas of rough grazing along the length of the connection between Glenlee substations and the southern extent of Black Bank Wood. The main OHL components constructed during this phase will remain present into the operational phase. Construction of the G-T connection to commence and will be evident in parallel to the west. The construction activities associated with the G-T connection will result in a medium scale change experienced within a very localised geographical extent, seen in close proximity views within 0.5km and in longer distance elevated views from the east and west. The magnitude of landscape change during construction will be low where the G-T connection will be seen from a small and localised part of the LCT in close proximity to existing electricity infrastructure at Glenlee substation and the adjacent hydroelectric power station. The landscape effect during the construction phase will be <b>minor</b> and <b>not significant</b> .	The ZTVs shown on <b>Figure 7.9</b> (all connections) and <b>Figure 7.17</b> (G-T Connection) indicate that theoretical visibility will be localised within 1km where the G-T connection will be seen within the context of Glenlee substation from within the LCT. Views beyond 3km are gained from valley sides and elevated landform including elevated Stroangassel Hill and Hannayston Hill on the western side of the Glenkens Valley and sections of the B7000 to the east. In these longer-distance views the G-T connection will be seen as a relatively distant small scale feature predominately backclothed by landform and vegetation, and partly screened by vegetation north of the connection. The decommissioning and removal of R Route (north) will reduce the prominence and perceptibility of transmission infrastructure within the LCT to the north-east of Glenlee, however this connections. As the G-T connection will utilise the alignment and tower positions of the existing BG Route within the LCT between Glenlee substation and the lower eastern slopes of Glenlee Hill barely perceptible landscape change is predicted to arise during the operational phase from the introduction of the G-T connection, and the influence of electricity transmission infrastructure within this LCT will not change from the introduction of the proposed G-T connection.	A number of the LCT to the north C-K, and BG Dev From localised pa Glenlee substatio with the P-G via I association with t extension. Combined views substation extens to localised scree to localised south No other consent <b>3.1</b> will contribut As such the addit and the cumulativ <b>significant</b> .
Foothills with Forest LCT – Dumfries and Galloway (176)	Sensitivity is judged to be <b>medium</b> .	<ul> <li>The G-T connection will pass through two areas of this LCT which occur to the north and south of the Rugged Uplands with Forest - Dumfries and Galloway LCT (181).</li> <li>The existing BG Route is located within this LCT to the west, southwest of Glenlee substations and proposed development will introduce additional transmission infrastructure into the eastern and south-eastern extents of the LCT found within the Galloway Forest Park. Direct effects arising during construction activities to facilitate construction of the G-T connection in the LCT north of LCT (181) will include the removal of landscape features, the introduction of temporary access tracks largely between Craigshinnie Burn and the A712 and quarry working areas at Gallow Knowe (Q2) and Will's Hill (Q3). In the south of the LCT, construction activities will include the felling of coniferous plantation along the wayleave corridor on the eastern flanks of Slogarie Hill, Laurieston Forest and quarry working areas at Lochenbreck (Q5), Craigelwhan (Q6 and Craigelwhan West (Q7).</li> <li>The BG Deviation connection will be present within the LCT following construction of the connection to facilitate the construction of the G-T connection along the alignment of the existing BG Route south-west of Glenlee substation.</li> <li>The wayleave created through coniferous woodland and the OHL components constructed during this phase will remain present into the operational phase.</li> </ul>	In the north of the LCT the ZTVs shown on <b>Figure 7.9</b> (all connections) and <b>Figure 7.17</b> (G-T connection) indicate that theoretical visibility will be localised within 1km with longer distance views beyond 1km gained from elevated locations within the LCT to the north, including Dunveoch Hill and Drumbuie Hill. A short section of the G-T connection (approximately ten steel lattice towers) will be located within the south-eastern part of this LCT, between Glenlee Hill and the A712. At its southern extent (approximately 30 towers), the G-T connection will be located within this LCT as it passes through Laurieston Forest between Ross Hill in the north and Craigelwhan in the south. In the north of the LCT the proposed towers will be largely contained at lower elevations between Shiel Hill and Fintloch to the east and Maggot Hill and Achie Hill to the west reducing their perceptibility with distance across the LCT and adjacent LCTs. In the south of the LCT towers will be largely contained within the dense coniferous plantations of Laurieston Forest and often appearing screened or backclothed in views from within the LCT. Longer distance views eastwards towards the connection from within the LCT will be largely limited by the presence of coniferous plantations west of Glenlee Hill and Maggot Hill, from where towers will be seen as relatively distant small scale features, predominately backclothed by landform, and partly screened by woodland north and west of the connection.	Cumulative lands LCT north of the connection and o developments (sh occur with in the the Foothills with account of screer forest and limited KTR Project conn Both the G-T and area of the LCT n introduction of th (approximately te towers). The proposed P-C distance views fra and Shiel Hill, site Dumfries & Gallor In terms of other substation extens neighbouring Upp developments will the LCT around G vegetation and late

#### nulative Effects - Operational Phase

he KTR Project connections will be located within this th of Glenlee substation, including P-G via K, E-G and peviation to the south-west of Glenlee substation.

parts of the LCT between Allangibbon Bridge and ation the G-T connection will be seen in combination ia K and E-G connections and the BG Deviation in th the existing Glenlee substation and its proposed

vs of these KTR Project connections and Glenlee ension experienced from within this LCT will be subject reening by vegetation and landform and limited mainly uthern parts of the LCT.

ented or proposed developments illustrated on **Figure** bute to additional cumulative effects within this LCT.

Iditional cumulative magnitude of change will be low, ative landscape effect will be **Minor** and **not** 

Adscape effects will be largely limited to the area of this the A712. Cumulative interactions between the G-T d other KTR Project connections and other (shown on **Figure 3.1**) are considered unlikely to the area of this LCT to the south of LCT 181 (west of ith Forest LCT – Dumfries and Galloway (176)) taking eening afforded by landform and coniferous plantation ted opportunity to experience intervisibility with other nnections.

and BG Deviation connections will directly affect the T north of the A712, where effects will arise from the the northern section of the G-T connection y ten towers) and the BG Deviation (approximately four

P-G via K and E-G connections will be seen in longer from localised parts of the LCT between Glenlee Hill situated in the neighbouring LCT (Upper Dale – illoway LCT (165)).

her consented or proposed developments, Glenlee ension will be located within the southern part of the Jpper Dale LCT, and combined views of both will be limited to very localised and elevated areas of d Glenlee Hill, and subject to localised screening by d landform.

		Taking account of the dense coniferous plantation found across	In the south of the LCT the ZTVs indicate that visibility will be	The existing and
		much of the LCT, visibility of construction activities and disturbance will be largely limited to close proximity views and longer distance views from more open elevated areas. The introduction of the G-T connection and associated construction	experienced from open areas within 1km to the north and north- west of Slogarie Hill and south, south-east of Laurieston Forest, whilst wider views will be limited by the presence of dense coniferous plantation.	and Mochrum Fel Glenkens Valley a valley from locali and Maggot Hill n
		activities will result in a medium to large scale change experienced from a localised geographical extent of the LCT, seen in close proximity views within 1km and from limited longer distance elevated views to the north and east.	Views of the G-T connection from areas of this LCT located on the east of the Glenkens valley are indicated by the ZTV, however at distances of over 4km the proposed towers will be barely perceptible in these distant views.	The proposed Gle all located in this Hill, Shiel Hill and combination with
		The LCT will experience direct landscape change arising from the construction of the G-T connection. The introduction of the connection will result in the felling of coniferous plantation south of Craigshinnie Burn and within Laurieston Forest, and disturbance to areas of rough grazing along the length of the connection within this LCT north of the A712 and north of Bennan Hill.	Within the northern occurrence of the LCT the G-T connection will be seen in combination with the operational BG Deviation in close proximity views within 1km between the southern extent of Black Bank Wood and the A712 and in longer distance views from elevated locations to the north and east beyond 1km within the	distant features a north-east and ex east of the Glenk Hill wind farm. The introduction
		The magnitude of landscape change during construction will be high for the LCT locally, and low for the LCT as a whole. Taking account of the medium sensitivity, the landscape effect for this LCT during construction will be <b>moderate</b> and <b>significant</b> locally	northern occurrence of the LCT. Within the south of the LCT, close proximity to longer distance views will be limited to the open areas of the LCT outside Laurieston Forest to the north and south.	with the BG Devia presence of elect geographical exte cumulative chang
		within approximately 1km of the G-T connection and <b>minor</b> and <b>not significant</b> for the LCT as a whole.	The introduction of the G-T connection will create an area of open ground through dense conifer forest; however this long- term change will affect a very localised area of the LCT and will be perceptible from within approximately 1km. Its introduction will create a new linear manmade feature formed by the felled wayleave and occupied by the OHL infrastructure within the LCT, but largely imperceptible in longer distance views due to the influence of surrounding intervening coniferous plantation.	The additional cu within approxima the medium sens <b>moderate</b> and <b>s</b> G-T connection) a whole.
			The scale of the change will be high locally (within 1km) and small for the LCT as a whole.	
			The magnitude of landscape change during the operational phase will be medium for the LCT locally and low for the LCT as a whole. Taking account of the medium sensitivity, the landscape effects for this LCT during operation will be <b>moderate</b> and <b>significant</b> locally within approximately 1km of the G-T connection reducing to <b>minor</b> and <b>not significant</b> for the LCT as a whole.	
Rugged Uplands with Forest - Dumfries and Galloway LCT (181)	Sensitivity is judged to be <b>medium</b> .	The central section of the G-T connection is located within this LCT between the A712 and Stroan Loch where the connection passes east of Ross Hill. The LCT will experience direct landscape change arising from the construction of the G-T connection and will result in the loss of coniferous plantation to create the wayleave as it passes through areas of commercial plantation south of the A712. Direct effects arising during construction activities for the G-T connection will include the removal of coniferous plantation to create the permanent wayleave, the introduction of temporary access tracks, a quarry working area at Hind Craig Quarry (Q4) and temporary construction compounds north of Tannoch Flow (CC3) and south of Cairn Edward Hill CC4). Areas of woodland in the LCT which are managed for long-term or permanent retention within Galloway Forest Park will be unaffected by the creation of the G-T connection will result in a large scale change experienced within a localised and small geographical extent of the wider LCT, with changes perceptible in close proximity views from within 1km and in longer distance open elevated views from limited unforested locations within the LCT.	The ZTVs shown on <b>Figure 7.9</b> (all connections) and <b>Figure 7.17</b> (G-T connection) indicate that theoretical visibility across much of the LCT. Actual visibility will be relatively contained by coniferous plantation with potential views from unforested summits located within 1km to 5km of the connection. This will include the open summits and southern slopes of Cairnsmore and Benbrack to the north and the eastern slopes and summits of Shaw Hill to the south-west, whilst towers of the connection will appear in views towards these summits from unforested locations within the LCT in the vicinity of Stroan Loch. Direct effects will arise during the operational phase from the presence of the wayleave and the steel lattice towers and OHLs of the G-T connection. The connection will introduce electricity transmission infrastructure into this LCT where there are currently no existing elements of electricity infrastructure present and will directly affect key characteristics of the LCT within the eastern part of the LCT. This will primarily relate to the removal of sections of conifer forest ( <i>Sitka</i> spruce), however this change will be perceptible from a small area due to the surrounding presence of dense conifer plantations within this area of the Galloway Forest Park, and will diminish with distance across the LCT.	Visibility of the G and proposed dev limited given inter forest. Cumulative lands as visible propose or/distinctly sepa from this LCT, an barely perceptible The magnitude of account of the se be <b>none</b> and <b>not</b>
		The magnitude of landscape change during construction will be high for the LCT locally within 1km of the proposed connection, and low for the LCT as a whole. Taking account of the medium sensitivity, the landscape effect for this LCT will be <b>moderate</b> and	The introduction of the G-T connection will alter the forested character of the LCT within 1km, with the introduction of the long-term wayleave creating a linear feature of open ground through the otherwise densely forested extents of the landscape north of Stroan Loch. Areas of woodland in the LCT which are	

and consented wind farms of Blackcraig, Knockman Hill m Fell are located within this LCT to the east of the alley and will appear in combined views east across the localised elevated areas of the LCT such as Glenlee Hill Hill north of the A712.

d Glenshimmeroch, Troston Loch and Fell wind farms are n this LCT. From some elevated locations such as Glenlee II and Maggot Hill, these wind farms will be seen in with the G-T and BG Deviation connections appearing as ares against the skyline in long distance views to the nd extending the influence of wind energy development Glenkens Valley and north of the operational Blackcraig

tion of the G-T connection when seen in combination Deviation and other developments will increase the electricity infrastructure from a very localised I extent of the LCT, resulting in a medium scale change.

al cumulative magnitude of change will be medium eximately 1km of the G-T connection. Taking account of sensitivity, the cumulative landscape effect will be and **significant** locally (within approximately 1km of the ion) and **minor** and **not significant** for the LCT as a

the G-T connection with other KTR Project connections ad developments shown on **Figure 3.1** will be largely in intervening distance and screening by existing conifer

landscape effects on this LCT are not predicated to occur oposed developments will largely appear as distant and separate developments within more distant landscapes T, and the scale of cumulative landscape change will be optible.

Ide of cumulative landscape change will be low. Taking he sensitivity of the LCT, the cumulative visual effect will d **not significant**.

		<b>significant</b> locally within approximately 1km of the G-T connection and <b>minor</b> and <b>not significant</b> for the LCT as a whole.	managed for long-term or permanent retention within Galloway Forest Park will be unaffected by the proposed connection.	
			The scale of the change will be high locally (within 1km) and small for the LCT as a whole.	
			Overall, the magnitude of landscape change will be low during the operational phase. Combined with the medium sensitivity of the LCT, the landscape effect will be <b>moderate</b> and <b>significant</b> locally within 1km of the G-T connection, reducing to <b>minor</b> and <b>not significant</b> for the LCT as a whole.	
Drumlin Pastures .CT (169)	Sensitivity is judged to be medium.	The southern section of the G-T connection is located within this LCT, extending south from farmland west of the A762 south of Laurieston Bridge and Tongland. The LCT will experience direct landscape change arising from the construction of the G-T connection. The creation of the required wayleave corridor will result in the loss of coniferous plantation south of Bargatton Loch and a small shelterbelt of woodland west of Tongland Golf Centre, and the disturbance of arable and pastoral farmland along the length of the connection. The towers of the connection will introduce additional transmission infrastructure into this LCT in close proximity to the existing R Route (south) between Dunjop and Tongland, however its introduction will not adversely alter the scale or predominant landcover of the LCT as a whole. The proposed steel lattice towers will be evident in close proximity views subject to localised screening by landform and vegetation, and from elevated areas of the LCT from which longer distance views are afforded such as Barstobrick Hill. Direct effects arising during construction of the G-T connection will include the removal of landscape features including coniferous woodland to create the linear wayleave south of Bargatton Loch, the introduction of the G-T connection and associated construction and the steel lattice towers of 'S' Route will be evident within a very small part of the LCT, extending eastwards from Tongland substation. The introduction of the G-T connection and associated construction activities will result in a medium scale change experienced within a localised and medium geographical area of the LCT, seen in close proximity views within 1km and in longer distance open views from elevated areas of the LCT.	The ZTVs shown on <b>Figure 7.9</b> (all connections) and <b>Figure 7.17</b> (G-T connection) indicate relatively widespread theoretical visibility across the LCT from distances within 1km to 5km of the proposed steel lattice towers. However, actual visibility within the northern part of the LCT will be limited by vegetation including mixed woodland south of Laurieston and coniferous woodland and landform surrounding Bargatton Hill. South of Whirstone Hill the G-T connection will pass through more open farmland where wider visibility is indicated across the southern part of the LCT, which are already largely influenced by the presence of the existing R Route (south). <b>Figure 7.5</b> indicates comparative visibility between the proposed G-T connection and the existing R Route (south). and other man-made features including other existing transmission and distribution infrastructure, mineral extraction development, residential built development, agricultural buildings, and communications infrastructure. The southern section of the route between Dunjop and Tongland will occupy a similar extent of the LCT. The decommissioned and removed R Route (south), however the towers of the connection will appear discernibly larger, whilst the introduction of towers between the A762 south of Laurieston and Dunjop will extend the influence of transmission infrastructure within a greater geographical extent of the LCT. The existing 'S' Route will remain evident within a very small part of the LCT as a whole.	Visibility of the and proposed from this LCT screening by I proposed deve separate deve Therefore, the be <b>none</b> and the set of the second sec

the G-T connection with other KTR Project connections ed developments shown on **Figure 3.1** will be limited CT due to distanced and the presence of intervening y landform and woodland, and where visible other evelopments will appear as distant and or/distinctly velopments within neighbouring but distant LCTs.

he predicted cumulative landscape effects on this LCT will d not significant.

August 2020

# Table 0-24: Assessment of Visual Effects – Representative Viewpoints: Glenlee – Tongland (G-T)

Viewpoint	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential C
VP7: Southern Upland Way near Waterside Hill	The VP represents specific elevated panoramic views	The VP is located at a relatively elevated position along the Southern Upland Way and open views are afforded across the Kenmure Valley to the east and towards the summits of the	In views south, the G-T connection will be seen crossing elevated ground west of the Kenmure Valley, partially screened and backclothed by landform and coniferous woodland.	Figure 7.22 connection not therefor
(260843, 582064) (Figure 7.27.1- 12)	experienced by recreational receptors of the Southern Upland Way at this elevated point on the trail. Sensitivity is judged to be high.	Galloway Hills RSA to the west. The existing R Route (north and south) is seen in the middle distance across the lower slopes of Waterside Hill and the foot of the Kenmure Valley in successive views from north to south-east from this location. During the construction phase, disturbance associated with preparatory groundworks including the felling of forestry and the introduction of temporary access tracks will be evident at lower elevations in long distance views to the north and south of Glenlee substation. The BG Deviation will be present during the construction of G-T, whilst the existing towers of BG Route will be removed to construct the G-T connection along the same alignment. Whilst some ground-level disturbance associated with construction and the felling of woodland at Black Bank Wood will be evident, the scale of visual change during construction will be small and will be limited to similar views experienced from a small geographical extent. The existing R Route (north and south) will remain evident in views to the south during the construction phase. The magnitude of visual change during construction will be low and will result in a <b>minor</b> and <b>not significant</b> visual effect during construction from this VP.	The existing Glenlee substation is partially visible in middle distance views towards the G-T connection towers, foreshortened by landform and largely screened be vegetation in the middle distance of the view, whilst the steel lattice towers of BG Deviation connection will be seen ascending the slopes of the valley to the south-west of the substation adjacent to the Glenlee hydroelectric power station and penstock and parallel to the G-T connection. Beyond, the G-T connection will introduce additional electricity transmission infrastructure into long distance views to the south from this location as the connection continues southwards over higher ground to the west of the valley. Towers will appear backclothed by landform and partially screened by coniferous woodland, and whilst towers will be evident west of Shiel Hill, the connection will become less perceptible from this location as it continues south. The decommissioned R Route (north) will be replaced by the P-G via K and E-G connections which will be evident in the foreground of views to the south, south-east from this elevated location, whilst the removal of R Route (south) will reduce the presence of transmission infrastructure within the foot of the Kenmure Valley in views to the south-east. The G-T connection will be seen in parallel with BG Deviation as it passes over the south-eastern flank of Glenlee Hill in combined views to the south, south-west. The addition of the G-T connection will increase the influence of electricity infrastructure when seen in combination with the other KTR Connections visible in immediate (P-G via K and E-G) and middle distance (BG Deviation) views from this VP. The introduction of the G-T connection will result in a small scale change in the view, with similar views afforded from a small geographical area.	this location <b>Figures 7.2</b> connection distance vie connections closest to th partially scr views from Glenlee sub of views to by vegetation beyond. A number on distant feat east and ean contribute th proposed ded distinctly set east of the A small scal addition of the relatively lo Upland Ways south. The the small. The magnitted location will receptors, the significant
VP9: Mulloch Hill (263140, 580659) ( <b>Figure 7.29.1-</b> <b>11</b> )	The VP represents elevated panoramic views experienced from this local hill summit accessed by recreational receptors of Core Path 224. Sensitivity is judged to be <b>high</b> .	<ul> <li>This VP is representative of the panoramic views across the Dundeugh and Kenmure Valleys afforded from this elevated location and on the route of Core Path 224 from St John's Town of Dalry.</li> <li>During the construction phase disturbance associated with preparatory groundworks including the felling of woodland at Black Bank Wood will be evident, along with the introduction of temporary access tracks at lower elevations, in long distance views to the west, south-west. However, ground level disturbance and construction activities associated with towers of the connection south of Shiel Hill and beyond will be largely imperceptible at this distance.</li> <li>The existing R Route (north and south) and the BG Deviation, P-G via K and E-G connections will be evident within the landscape during the construction of the G-T connection.</li> <li>A small scale change in the view will occur from the introduction of the connection and associated construction activities, experienced from a small and localised geographical area.</li> </ul>	<ul> <li>Figure 7.29.8 illustrates that the G-T connection will be seen backclothed against the south-eastern slopes of Glenlee Hill in long distance views across the Kenmure Valley to the south-west from this location. Mixed woodland vegetation will partially screen the lower parts of towers in closest proximity to Glenlee substation and hydroelectric power station, and the adjacent BG Deviation.</li> <li>Further south of Glenlee Hill, the towers of the G-T connection will be seen extending southwards across higher ground backclothed and partially screened by the intervening hills of Shiel Hill and Fintloch Hill and shelterbelts of coniferous woodland, and backclothed against landform to the west and below the skyline formed by the interior of the Galloway Forest Park beyond, and often backclothed or partially screened by the presence of extensive coniferous plantation.</li> <li>South of the A712 the connection will be seen in longer distance views where towers ascend the slopes south of the Queen's Way and cross the skyline west of Peal Hill, forming very small features in the view at this distance.</li> <li>The decommissioned R Route (north and south) will be replaced by the P-G via K and E-G connections which will be evident in the foreground of views to the south, south-east from this elevated</li> </ul>	Figure 7.2 connection not therefo this location Figures 7. and E-G co successive Glenlee sub The G-T co Deviation in substation G-T connect infrastructu Project con transmissio Glenlee sub to the west therefore co location.

#### Cumulative Effects - Operational Phase

**27.5** and **Figure 7.27.6** indicate that the C-K will be barely perceptible from this location and will bre contribute to additional cumulative effects from on.

**.27.2** to **Figure 7.27.12** indicate that the G-T a will be seen in combined middle distance to longer iews with the P-G via K, E-G, and BG Deviation as. The P-G via K and E-G connections are located the VP and will be seen partly backclothed and creened by landform and vegetation in successive a north to south.

bstation extension will be seen in the middle distance the south foreshortened by landform, partly screened ion and backclothed by semi-improved pasture

of proposed wind farms will theoretically be visible as atures on the skyline in successive views to the northast. However, the backclothed G-T connection will not to potential cumulative interactions with these other developments which will appear as distant and/or separate developments in views to the east, and northbe Dundeugh Valley.

ale cumulative change in the view will arise from the f the G-T connection, and similar visual effects will be ocalised, limited to a short section of the Southern ay and elevated slopes which offer open views to the geographical extent of similar views will therefore be

itude of cumulative visual change to the view from this ill be low. Taking account of the sensitivity of the the cumulative visual effect will be **minor** and **not it**.

**29.2** and **Figure 7.29.6** indicate that the C-K will be barely perceptible from this location and will bre contribute to additional cumulative effects from on.

**1.29.2** to **Figure 7.29.11** indicate that the P-G via K onnections will be seen backclothed by landform in a views to the west, north-west where they approach obstation from the north.

onnection will be seen in combination with the BG in views to the south-west of the existing Glenlee and hydroelectric power station. The addition of the ction will increase the influence of electricity ure when seen in combination with the other KTR nnections, extending the influence of electricity on infrastructure south of Glenlee Hill

bstation extension will be barely perceptible in views t beyond the intervening woodland and will not contribute to additional cumulative effects from this

	idal Elicets Repre	esentative Viewpoints: Glenlee – Tongland (G-T)		• :
		The magnitude of visual change during the construction phase will be low and will result in a <b>minor</b> and <b>not significant</b> visual effect.	location, whilst the removal of R Route (south) will reduce the presence of transmission infrastructure within the foot of the Kenmure Valley in views to the south-west.	A number o distant feat east to sout
			The introduction of the G-T connection will result in a small scale change in the panoramic views available from this elevated location, with similar views experienced from a small and localised geographical area.	visible in th seen in com or proposed change will geographica
			Overall, the magnitude of visual change during the operational phase will be low, and the visual effect will be <b>minor</b> and <b>not significant</b> .	The magnit location will <b>minor</b> and
VP11: Unclassified road (U3S) south- west of Glenlee (259631, 579281) ( <b>Figure 7.31.1-</b> <b>7</b> )	This VP is representative of views from nearby residential properties at Bucks Linn, and of views experienced by road users travelling on the unclassified road between the A762 and Galloway Forest Park which forms part of the National Byway cycle route. Sensitivity is judged to be <b>medium</b> .	During the construction phase, disturbance associated with preparatory groundworks including disturbance of areas of rough grazing and the introduction of temporary access tracks will be evident in the foreground and middle ground of views to the north- east to south-east. The felling of woodland along Craigshinnie Burn will be seen in middle-distance views partially screened by retained woodland along the watercourse. The BG Deviation and BG Route will be evident within the landscape during the construction of the G-T connection, occupying the foreground and middle distance of views to the west, north and north-east. The introduction of the G-T connection and associated construction activities will result in a medium scale change in the view experienced from a small localised area. The magnitude of visual change during construction will be medium and will result in a <b>moderate</b> and <b>significant</b> visual effect from this VP.	Towers of the G-T Connection will be seen against the skyline formed in part by the south-eastern flank of Glenlee Hill in the middle distance (within a similar proportion of the view occupied by the existing BG Route and BG Deviation). The existing steel lattice towers of BG Route are evident in the foreground of views to the north-east, and views west along the unclassified road (U3S), whilst the operational Blackcraig wind farm is seen against the skyline to the east, in distant views across the Glenkens Valley. In successive views from north-east to south-east five steel lattice towers of the G-T connection will be seen partially skylined in middle distance views, framed by Glenlee Hill to the north and Maggot Hill to the south-east, and partially backclothed by the landform of Shiel Hill. Views further south will be screened by the intervening northern slopes of Maggot Hill to the south, south-east of the VP. During the operational phase, the G-T connection will be seen in combination with the BG Deviation and retained towers of BG Route and will increase the proportion of the available views occupied by electricity infrastructure. The connection will introduce additional vertical structures visible against the skyline in successive views to the north-east, east, and south-east from this location. This will result in a small scale change in the view from a relatively localised extent, with similar views experienced from along the U3S south of Craigshinnie Burn between Bucks Linn Bridge to the east and Craigshinnie Bridge to the west. Overall, the magnitude of visual change during the operational phase will be low and will result in a <b>minor</b> and <b>not significant</b> visual effect.	Figures 7.3 be seen in c east and ex southwards location. Tw skyline part No other KT location and effects from In terms of Knockman I visible as di plateau eas wind energy Blackcraig F G-T and BG wind farm v distance sud The addition with the BG skyline will transmissio east to sout The magnitu this location <b>minor</b> and
VP12: Core Path 516 south-west of Glenlee (260291, 579239) ( <b>Figure 7.32.1-</b> 9)	The VP is representative of views experienced by recreational receptors on the north-western portion of Core Path 516. Sensitivity is judged to be <b>medium</b> .	The existing steel lattice towers of BG Route are evident in the foreground of views to the north, and north-west along the unclassified road (U3S). Given the proximity of the G-T connection to the VP, ground-level disturbance associated with preparatory groundworks and the introduction of temporary access tracks which partly follow the footprint of the Core Path will be seen in close proximity views looking north to south-east. The introduction of the G-T connection and associated construction activities will increase the presence of electricity transmission infrastructure in views from this location which are affected by the presence of the BG Deviation and existing BG Route to the north and west. The introduction of construction activities and partially constructed towers of the G-T connection will result in a large scale change in views from this location. The magnitude of visual change during construction will be high. Overall, the level of visual effect will be <b>major</b> and <b>significant</b> .	The ZTV ( <b>Figure 7.17</b> ) indicates theoretical visibility across the majority of the Core Path 516 from which the VP represents views. During the operational phase, the G-T connection will be seen approaching from the south-eastern flank of Glenlee Hill towards the VP as it crosses Craigshinnie Burn. Towers will extend southwards past the VP, running parallel with the route of Core Path 516 towards the A712 (Queen's Way). Six steel lattice towers of the G-T connection will be seen against the skyline in close proximity views to the north and south-east, with three towers partially backclothed by landform. The towers of the G-T connection will be seen in successive views from this location with towers of the BG Deviation and BG Route to the north and north-west but will nevertheless increase the proportion of the available views occupied by electricity transmission infrastructure. The towers will introduce additional vertical structures visible against the skyline in close proximity views to the east, south-east from this location and sections of the Core Path 516 between the U3S and the A712. The scale of change in the view from this location will be large, however given the relatively short length of the Core Path 516 it represents views from, similar views will be relatively localised and limited to a small geographical area.	Figures 7.3 be seen in c east and ref The P-G via this location backclothed vegetation a cumulative The turbine seen as sma appearing la BG Deviatio In views to wind farm a Glenshimme skyline form proposed so to the east views, these separate de adjacent BC The addition with the BG

of proposed wind farms will theoretically be visible as atures on the skyline in successive views to the northuth-east. However, the backclothed G-T connection the middle distance of views to the west, will not be ombined cumulative views with these other consented ed developments. The scale of cumulative visual ill be small and similar views will be limited to a small cal area.

itude of cumulative visual change to the view from this vill be low, and the cumulative visual effect will be d **not significant**.

**7.31.2** to **7.31.7** indicate that the G-T connection will a combined views with the BG Deviation to the northextend the presence of transmission infrastructure ds in successive views to the east, south-east from this Two towers of the BG Deviation will be seen against the artly formed by the eastern side of Glenlee Hill.

KTR Project connections will be visible from this nd will not therefore contribute to additional cumulative om this location.

of other proposed developments, the proposed n Hill, Glenshimmeroch and Fell wind farms will be distant features against the skyline formed by hills and ast of the Glenkens Valley extending the influence of gy development northwards from the operational Hill wind farm, and appearing in combination with the G Deviation connections. The consented Mochrum Fell will be barely visible against the skyline in long successive views to the south-east.

on of the G-T connection when seen in combination 3G Deviation and proposed wind farms on the distant 1I increase the presence and influence of electricity ion infrastructure in successive views looking northuth-east from this location.

itude of cumulative visual change to the views from on will be low, and the cumulative visual effect will be d **not significant**.

**7.32.2** to **7.32.7** indicate that the G-T connection will n combined views with the BG Deviation to the north-retained BG Route to the north-west.

ia K and E-G connections will be barely visible from on given their distance in views to the north-east, ed by landform and partially screened by landform and n and will not therefore contribute to additional e effects from this location.

nes of the proposed Shepherds Rig wind farm will be mall scale features in distant views to the north-east, largely backclothed by landform beyond the towers of cion and the G-T connection.

to the north-east and east the consented Knockman Hill and the proposed wind farms of Cornharrow, meroch and Troston Loch will be seen against the rmed by the distant forested foothills, with the latter schemes perceived collectively as one large wind farm at of the Glenkens Valley. Evident in long distance ese developments will appear as distant and distinctly developments to the proposed G-T connection and BG Deviation connection.

on of the G-T connection when seen in combination G Deviation and other proposed developments will

Assessment of Vis	sual Effects – Repre	esentative Viewpoints: Glenlee – Tongland (G-T)		
			Overall, the magnitude of visual change during the operational phase will be high and will result in a <b>major</b> and <b>significant</b> visual effect.	increase the infrastructur medium sca The magnitu this location be <b>moderat</b>
VP14: A712, The Queen's Way (262272, 577456) ( <b>Figure 7.34.1-</b> <b>7</b> )	This VP is representative of sequential views experienced by road users travelling on the A712, which forms part of the Queen's Way, Robert the Bruce Trail and Galloway Kite Trail. Sensitivity is judged to be <b>medium</b> .	This VP represents a similar glimpsed view experienced from a short section of the A712 between Cairnraws and north of Darsalloch Hill. Ground-level disturbance associated with the construction of the G-T connection will be largely screened by intervening landform and vegetation in views to the north-west, west and south-west from this location. Felling of forestry associated with the creation of the wayleave for the G-T connection will be seen across the north-eastern flanks of Peal Hill to the south of the A712, resulting in a medium scale change in the view. Overall, the magnitude of visual change during construction will be medium and will result in a <b>moderate</b> and <b>significant</b> visual effect from this VP.	Two steel lattice towers of the G-T connection will be seen in the middle distance of views to the west, south-west from this location, with the upper extents of towers appearing above the skyline south of the A712. Further towers are screened by intervening vegetation located in the foreground of views to the west, north-west. The G-T connection will introduce electricity transmission infrastructure into views to the west, south-west from this location. Visibility of towers to the north of the A712 will be screened by intervening vegetation located in the foreground of the view, whilst views from similar locations along the A712 to the west will be screened or heavily filtered by the presence of roadside broadleaf woodland and vegetation. This will result in a medium scale change affecting a small proportion of the available views from this location, whilst the geographical extent of similar views is judged to be small and limited to sections of the A712 experienced by receptors travelling west and east along this road into the Galloway Forest Park. Overall, the magnitude of visual change during the operational phase will be medium and will result in a <b>moderate</b> and <b>significant</b> visual effect. The replanting of felled windthrow areas of coniferous woodland across the eastern and north-eastern flanks of Peal Hill to the east of the wayleave will result in the partial screening and filtering of views towards the visible towers, and the infrastructure will become less perceptible as the woodland matures, with the upper extents of towers remaining visible on the skyline above the treeline. As the woodland matures the scale of change will reduce to small and the overall magnitude of visual change will reduce to low. The level of residual visual effect during the operational phase will be <b>minor</b> and <b>not significant</b> .	No other KT proposed de views from t from woodla cumulative v Therefore, tl and <b>not sig</b>
VP16: Core path near Tannoch Flow (260870, 574440) ( <b>Figure 7.36.1-</b> <b>4</b> )	This VP is representative of elevated views experienced by recreational receptors of the western section of Core Path 142 in Galloway Forest Park. Sensitivity is judged to be <b>medium</b> .	Construction access tracks will use existing forestry access tracks in close proximity to the VP which are shared by sections of the Core Path. Movement of construction vehicles and felling of forestry to create wayleave will be evident in close proximity and longer distance views from this location. The introduction of the G-T connection and ancillary construction activities will result in a medium scale change in the view, with similar views experienced from a small geographical area where views are afforded from open areas within the dense forest. Overall, the magnitude of visual change will be medium. Overall, the level of visual effect during the construction phase will be <b>moderate</b> and <b>significant</b> .	<ul> <li>Steel lattice towers of the G-T connection will be seen in close proximity to longer-distance successive views from the east to south-east from this location, largely backclothed by landform and partially screened by the presence of intervening dense coniferous plantation.</li> <li>The upper extents of two towers located in close proximity to the east, will be seen above the skyline formed by Cairn Edward Hill to the east, north-east of the VP.</li> <li>In views to the south-east the G-T connection will be seen contouring south-eastwards across the lower slopes of Cairn Edward Hill, before crossing high ground north of Ross Hill and heading south to the east of this intervening landform. In long-distance views to the south, south-east towers will be seen ascending the northern flanks of Bennan Hill before crossing the skyline to the north-east of Slogarie Hill.</li> <li>The introduction of the steel lattice towers, and OHLs of the G-T connection will result in a medium scale change in views affecting a medium proportion of the available views to the east and south-east from this location. However, as the existing intervening coniferous plantation matures and contains outwardly views and reducing the proportion of towers visible from this location the scale of change will reduce.</li> <li>Similar views will be relatively localised, with opportunities for open views from sections of Core Path 142 limited by the presence of</li> </ul>	No other KT proposed de views from t are predicte Therefore, t and <b>not sig</b>

the presence and influence of electricity transmission ture in successive views to the north-east resulting in a scale cumulative change in the view.

nitude of cumulative visual change to the views from ion will be medium, and the cumulative visual effect will **rate** and **significant**.

KTR Project connections or other consented or developments indicated on **Figure 3.1** will be visible in n this VP due to the presence of intervening screening dland and roadside vegetation, and therefore no e visual effects are predicted to arise.

, the predicted cumulative visual effect will be **none** significant.

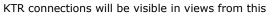
KTR Project connections or other consented or developments indicated on **Figure 3.1** will be visible in m this VP, and therefore no cumulative visual effects cted to arise.

, the predicted cumulative visual effect will be **none** significant.

Assessment of Vis	sual Effects – Repre	esentative Viewpoints: Glenlee – Tongland (G-T)		
			<ul> <li>intervening dense coniferous woodland, and the geographical extent will be small, with similar views experienced from areas where open views are afforded from within the dense forest.</li> <li>Overall, the magnitude of visual change will be medium, and the level of effect during the operational phase will be <b>moderate</b> and <b>significant</b>.</li> </ul>	
VP17: The Otter Pool (259453, 573573) ( <b>Figure 7.37.1-</b> <b>4</b> )	This VP is representative of views experienced by recreational receptors and tourists at this location within the Galloway Forest Park and is representative of similar views experienced by recreational receptors on Core Path 143. Sensitivity is judged to be <b>high</b> .	The VP represents views from a section of Core Path 143 where open views across the River Dee are afforded, and the popular tourist visitor attraction of the Otter Pool situated on the River Dee and accessed via the Raiders' Road Forest Drive. Disturbance associated with construction activities will be barely perceptible in views from this location, screened by dense woodland to the north-east, east, and south-east. The geographical extent of similar views will be small, with outward views from along the river corridor contained by adjacent dense coniferous plantation and the corridor of mixed mature woodland found along the route of the Raiders' Road which is managed for long-term retention. Similar views will be experienced from a very small localised geographical area. Overall, the magnitude of visual change will be low and the level of effect during construction will be <b>none</b> and <b>not significant</b> . In the absence of the stand of larch woodland on the south side of the River Dee to the east of the VP (affected by Larch disease and wind damage at time of survey), distant views of towers crossing the forested skyline north of Ross Hill, which would result in a small scale change to a very small proportion of the available views. The magnitude of change would be low, resulting in a <b>minor</b> and <b>not significant</b> visual effect.	The G-T connection will be screened by intervening coniferous woodland in views to the north-east, east, and south-east from this location, and the scale of change to the view will be barely perceptible, with similar views limited to a small localised geographical area. Overall, the magnitude of visual change during operation will be low, and the level of effect will be <b>none</b> and <b>not significant</b> . In the absence of the stand of larch woodland, distant views of towers crossing the forested skyline north of Ross Hill, which would result in a small scale change to a very small proportion of the available views. The magnitude of change will be low, resulting in a <b>minor</b> and <b>not significant</b> visual effect.	No other KTR proposed dev views from th are predicted Therefore, th and <b>not sign</b>
VP18: Core Path 177 near Bennan Moss (264446, 572539) ( <b>Figure 7.38.1-</b> <b>6</b> )	The VP is representative of views experienced by recreational receptors from the middle section of Core Path 177 Cairn Edward Hill within the Galloway Forest Park. Sensitivity is judged to be <b>high</b> .	Ground-level disturbance associated with the construction of the G-T connection, including the felling of forestry to create the wayleave corridor will be largely screened by intervening forestry in views from this location, resulting in a barely perceptible scale change in the view, limited to the glimpsed open views across recently clear felled and restocked areas of forestry and otherwise densely forested areas further west of the VP. The introduction of the towers of the G-T connection will become evident during the construction phase and overall will result in low magnitude of visual change effecting a small proportion of the views to the west from this location. Overall, the level of visual effect during construction will be <b>minor</b> and <b>not significant</b> .	<ul> <li>Steel lattice towers and OHLs of the G-T connection will be seen in middle-distance views to the west, south-west from the VP, with visibility partially screened and filtered by intervening forestry and backclothed by landform.</li> <li>The view afforded of G-T from this location will be glimpsed between intervening forestry, with vegetation limiting outwards views to the south-west and north-east, and representing views afforded from Core Path 177 which are limited from sections of the route by the presence of dense coniferous plantation. Evidence of felling and restocking of intervening coniferous woodland is visible in views toto the west, and the composition of available views is anticipated to continue to change over time.</li> <li>The upper extents of a small number of steel lattice towers of the G-T connection (approximately four towers) will be seen above the intervening backclothed against the landform of Benbrack and coniferous plantation beyond. This limited visibility of towers will result in a small scale change in the view, experienced from a very localised geographical area.</li> <li>Overall, the magnitude of visual change will be low, and the level of visual effect during the operational phase will be <b>minor</b> and <b>not significant</b>.</li> </ul>	No other KTR proposed dev views from th are predicted Therefore, th and <b>not sign</b>
VP20: Raiders' Road, north of Stroan Loch (264581, 570656) ( <b>Figure 7.40.1-</b> <b>7</b> )	The VP is representative of views experienced by visitors to Stroan Loch, road users travelling through the Galloway Forest Park on Raiders' Road, which	Views towards the G-T connection to the north-west, north and east of the VP will be screened by intervening mixed woodland located in close proximity to the VP. Much of this screening is provided by the corridor of mixed mature woodland found along the route of the Raiders' Road and northern and eastern shores of Stroan Loch which is managed for long-term retention. Disturbance associated with the felling of forestry associated with the creation of the wayleave, the construction of temporary access tracks and movement of construction vehicles will be barely	During the operational phase, steel lattice towers of G-T will be seen occupying a small proportion of the available views across Stroan Loch to the south-east and south. The towers and OHLs will be seen in the middle distance beyond Stroan Viaduct as the connection crosses the River Dee before the towers pass behind Stroan Hill before entering the coniferous plantation on Slogarie Hill to the west of Kenick Hill. In distant views to the south, the most southerly perceptible towers of the connection will be seen where they cross over higher ground	No other KTR proposed dev views from th are predicted Therefore, th and <b>not sign</b>

TR Project connections or other consented or levelopments indicated on <b>Figure 3.1</b> will be visible in this VP, and therefore no cumulative visual effects ed to arise.
the predicted cumulative visual effect will be <b>none</b> gnificant.
TR Project connections or other consented or levelopments indicated on <b>Figure 3.1</b> will be visible in this VP, and therefore no cumulative visual effects ed to arise.
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TR Project connections or other consented or levelopments indicated on <b>Figure 3.1</b> will be visible in this VP, and therefore no cumulative visual effects ed to arise.
the predicted cumulative visual effect will be <b>none</b> gnificant.
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	forms part of the	perceptible in views from this location, given the retention of	between Tormollan Hill and Bennan Hill. Towers will be largely	
	Galloway Kite Trail, and similar views gained from the eastern part of Core Path 143. Sensitivity is judged to be <b>high</b> .	mixed woodland to the north and east and the intervening distance to the G-T connection to the south, south-east. Construction of the steel towers of the G-T connection will introduce vertical features into the view, resulting in a small scale change in the view experienced from a very localised small geographical area. Overall, the magnitude of visual change will be low, and the level of visual effect during the construction phase will be <b>minor</b> and <b>not significant</b> .	backclothed by landform and vegetation, with the upper extent of one tower breaking the skyline. The towers and OHLs of the G-T connection will introduce electricity transmission infrastructure into views south-east to south from this location, however similar views from the adjacent Raiders' Road and loch side locations are limited, with views often partially screened or filtered by the presence of coniferous forestry and loch side vegetation. The introduction of the G-T connection will result in a small scale change in the available views, and the geographical extent of similar views will be small. Overall, the magnitude of visual change during the operational phase will be low, and the level of visual effect will be <b>minor</b> and <b>not</b> <b>significant</b> .	
VP21: Mossdale (265948, 570399) (Figure 7.41.1- 8)	The VP is representative of sequential views experienced by recreational receptors on the eastern section of Core Path No. 485 and similar views afforded from nearby residential properties and footpaths (Core Path No. 205). Sensitivity is judged to be <b>high</b> .	This VP represents specific views afforded from the small cluster of properties/community at Mossdale, and similar views experienced from the Core Path 485 which follows the route of the former railway line. Intervening trees and vegetation located along the route of the Core Path will screen or filter views to the west, southwest, and the nearby network of footpaths, including Core Path No. 205 (Mossdale Walk, Red Kite Trail). Given the presence of intervening landform, coniferous plantation and foreground vegetation, ground level disturbance associated with construction activities for the G-T connection will be largely imperceptible in views west from this location. Evidence of felling of coniferous plantation to create the wayleave east of Slogarie Hill and southwards between Tormollan Hill and Kenick Hill will be evident in long distance views to the south-west. The closest steel lattice towers of the G-T connection will be seen in views to the north-west as the partially constructed towers extend above the skyline and underlying forestry, resulting in a medium scale change in the view, with similar views available from a small geographical area. Overall, the magnitude of visual change will be medium, and the level of effect during the construction phase will be <b>moderate</b> and <b>significant</b> .	The G-T connection will be seen in anticlockwise successive views from north-west to south-west during the operational phase from this VP Towers will be evident as the connection crosses higher ground north of Ross Hill to the east of Stroan Loch, with two towers appearing above the skyline to the north-west. In views west along the Core Path, which follows the former railway line, towers of the connection will be seen as they pass through coniferous plantation to the east and south-east of Stroan Loch before crossing the River of Dee and ascending the northern flanks of Bennan Hill where towers will be seen on the distant forested skyline north of Slogarie Hill. As the line deviates southwards, the felling of the wayleave corridor along the eastern flanks of Slogarie Hill and between Tormollan Hill and Kenick Hill where the connection passes over the skyline will be evident. The introduction of the G-T connection will result in a small scale change affecting a medium proportion of the available views to the north-west, west and south-west from this location, with similar views experienced from a relatively small geographical area in the vicinity of Mossdale, the adjacent Core Path 485 following the former railway line and the nearby network of footpaths, including Core Path No. 205 (Mossdale Walk, Red Kite Trail). Overall, the magnitude of visual change during operation will be medium, and the level of visual effect will be <b>moderate</b> and <b>significant</b> .	No other K location. In views to is seen in o residential The conser the propos Troston Lo be screene north and No other c views from are predict Therefore, and <b>not si</b>
VP22: Core Path 485 Mossdale to Gatehouse Station Railway Walk (262761, 570049) ( <b>Figure 7.42.1-</b> 5)	The VP is representative of views experienced by recreational receptors on the Core Path and views similar to those experienced from the nearby isolated residential property at Airie. Sensitivity is judged to be <b>high</b> .	This VP is representative of views experienced from sections of Core Path No. 485 which follows the disused railway between Mossdale and Gatehouse Station, and from where outward views northwards are afforded due to lack of intervening vegetation or woodland. Felling of coniferous plantation to create the wayleave across the lower slopes of Cairn Edward Hill will be evident in views north beyond Stroan Loch. Construction of temporary access tracks, construction compounds and other construction activities will be largely imperceptible from this location. The presence of intervening landform and dense coniferous plantation will largely screen preparatory groundworks along the proposed alignment north of Stroan Loch, as much of this screening is provided by the corridor of mixed mature woodland found along the route of the Raiders' Road and northern and eastern shores of Stroan Loch which is managed for long-term retention. Disturbance associated with construction, including felling of forestry for creation of the wayleave will appear as a medium scale change in views, whilst similar views will be experienced from a	Steel lattice towers and OHLs of the G-T connection will be seen in middle to longer-distance views to the north, north-east, with towers predominantly appearing backclothed against the landform of Cairn Edward Hill and underlying landcover of coniferous plantation to the north. To the north-west, towers can be seen against the skyline where the connection crosses higher ground east of Benbrack. Views to the west, and south from the VP are screened by mature vegetation, and the geographical extent of similar views will therefore be small. The OHL and associated wayleave will appear as a linear feature as the connection contours south-eastwards across the lower slopes of Cairn Edward Hill, partially screened by the intervening mixed mature woodland found along the route of the Raiders' Road which is managed for long-term retention, and backclothed against the neighbouring landform and coniferous woodland which will further reduce the perceptibility of the infrastructure in views at this distance. Where the connection crosses higher ground between Benbrack and Cairn Edward Hill, approximately five towers will be visible above the skyline affecting a small proportion of the available views, however they will not interrupt views towards the core area of the Galloway Forest Park and the hills of Cairnsmore or Black Craig of Dee or Benniguinea which form the skyline of views to the west, north-west.	No other K this locatio The conser visible in lo shown on I largely imp by interver Loch and n available v No other co views from are predict Therefore, and <b>not si</b>



to the north-east the operational Blackcraig wind farm n distant glimpsed between intervening vegetation and al buildings at Mossdale.

ented Knockman Hill and Mochrum Fell wind farms and osed Shepherds Rig, Glenshimmeroch, Cornharrow, och and Fell wind farms (shown in **Figure 7.41.4**) will ned by intervening features in successive views to the 1 north-east.

consented or proposed developments are visible in m this location therefore no cumulative visual effects cted to arise.

e, the predicted cumulative visual effect will be **none** significant.

KTR Project connections will be visible in views from ion.

ented Mochrum Fell wind farm will theoretically be long distance views north-east from this location (as **Figure 7.42.3**) however the proposed turbines will be nperceptible at this distance and will be largely screened ening coniferous woodland situated north-east of Stroan mature vegetation in the immediate foreground of the views from the VP Core Path.

consented or proposed developments are visible in m this location therefore no cumulative visual effects cted to arise.

e, the predicted cumulative visual effect will be **none** significant.

		small geographical area, extending to sections of the Core Path to	The introduction of the steel lattice towers of the G-T connection will	
		the west and east of the VP. Overall, the magnitude of visual change will be medium and the level of visual effect during construction will be <b>moderate</b> and <b>significant</b> .	appear as a medium scale change in the view, affecting views from a small geographical extent where similar views are afforded northwards from sections of the Core Path following the former railway west and east of the VP.	
			Overall, the magnitude of visual change will be medium, and the level of effect during the operational phase will be <b>moderate</b> and <b>significant</b> .	
/P23: Stroan /iaduct (264676, 570000) ( <b>Figure 7.43.1-</b> <b>B</b> )	The VP is representative of elevated views experienced from Core Path 485, where the path intersects the Galloway Kite Trail and crosses Stroan Viaduct. Sensitivity is judged to be high.	Outward views are afforded from this section of Core Path 485 across Stroan Loch, whilst similar views are also afforded from the loch side adjacent to the visitor car park north of the viaduct and to the south. This VP represents a specific point on the Core Path from where similar sequential views of the G-T connection will be afforded. The presence of intervening landform and dense coniferous plantation will screen preparatory groundworks, construction of temporary access tracks and compounds and other construction activities from this location, and much of this screening is provided by the corridor of mixed mature woodland found along the route of the Raiders' Road and northern and eastern shores of Stroan Loch which is managed for long-term retention. Felling of coniferous plantation to create the wayleave beyond this corridor of permanent woodland will be evident across the lower slopes of Cairn Edward Hill to the. to the north Construction activities, including ground disturbance and the removal of some broadleaved trees, associated with the section of the River of Dee, will be evident in views to the south-east. Disturbance associated with construction, including felling of forestry for creation of the wayleave and the movement of construction vehicles, will appear as a small scale change in views, and the geographical extent from where similar views will be afforded will be small. Overall, the magnitude of visual change during construction will be low, and the level of effect will be <b>minor</b> and <b>not significant</b> .	As indicated in <b>Figure 7.43.6</b> , during operation the steel lattice towers and conductors of the G-T connection will be evident in views to the north across Stroan Loch towards Cairn Edward Hill. The upper extents of these towers will be partially visible above the mixed mature woodland found along the route of the Raiders' Road which is managed for long-term retention, and backclothed against the neighbouring landform and coniferous woodland which will further reduce the perceptibility of the infrastructure in views at this distance. In views to the north-west three towers will be seen above the skyline as they cross higher ground between Cairn Edward Hill and Benbrack, however, views towards the core area of the Galloway Forest Park and the hills of Cairnsmore or Black Craig of Dee or Benniguinea which form the skyline of views to the west will not be interrupted by towers. Intervening coniferous forestry screens views of steel lattice towers in successive views from north, to south-east where the connection passes east of Ross Hill. To the south, south-east towers of the connection either side of the crossing of the River of Dee will be partially visible beyond intervening landform and vegetation. Overall, the magnitude of visual change during the operational phase will be low, and the visual effect will be <b>minor</b> and <b>not significant</b> .	No other KTF proposed deviews from t are predicted Therefore, th and <b>not sign</b>
VP24: A762 east of Woodhall Loch (266956, 568259) ( <b>Figure 7.44.1-</b> <b>6</b> )	The VP is representative of sequential views experienced by road users of the A762, which forms part of the Galloway Kite Trail, and views similar to those experienced from nearby residential properties. Sensitivity is judged to be <b>medium</b> .	The VP represents sequential views experienced from the A762, however similar open views towards the proposed connection from this route are limited by the presence of intervening landform and dense roadside vegetation. The geographical extent from where similar views will afforded is judged to be small. Disturbance associated with construction will be limited to visibility of the felling of forestry on the eastern flanks of Slogarie Hill to create the wayleave and remove additional forestry deemed to be at risk of windthrow. A small number of steel lattice towers of G-T will be seen as they are constructed within the wayleave, appearing backclothed against the coniferous plantation which covers Slogarie Hill to the west of the connection. This evidence of ground level disturbance predominantly associated with forestry felling will result in a small scale change in the view from this location, with similar views limited to oblique glimpsed views west from short sections of the A762 north and south of the VP representing a small geographical area. Overall, the magnitude of visual change during construction will be low, and the level of effect will be <b>minor</b> and <b>not significant</b> .	Steel lattice towers of the northern section of G-T connection where the OHL crosses higher ground west of Cairn Edward Hill will be barely perceptible in views from this location. Visibility of towers of the connection as the OHL passes east of Slogarie Hill will be seen in glimpsed views to the west of the VP, intermittently screened and filtered by the presence of intervening mixed woodland and landform. During the operational phase approximately five towers will be seen in views west from this VP, appearing backclothed against the coniferous plantation and landform of Slogarie Hill. Areas of felling to create the wayleave and removal of additional forestry deemed to be at risk of windthrow will remain evident in views from this location following the introduction of the towers, however overall the scale of change in the view will be small, and similar views will be experienced from a small geographical area. Overall, the magnitude of visual change during the operational phase will be low, and the level of effect will be <b>minor</b> and <b>not</b> <b>significant</b> . The replanting of felled areas of coniferous woodland east of the wayleave for the G-T connection where it passes east of Slogarie Hill will result in the screening and filtering of views towards the wayleave and towers, however the upper extents of some towers will remain visible as woodland matures. As the woodland matures the magnitude of visual change will reduce	No other KTF proposed dev views from ti are predicted Therefore, th and <b>not sigr</b>

TR Project connections or other consented or developments indicated on **Figure 3.1** will be visible in this VP, and therefore no cumulative visual effects ted to arise.

the predicted cumulative visual effect will be **none** gnificant.

(TR Project connections or other consented or developments indicated on **Figure 3.1** will be visible in n this VP, and therefore no cumulative visual effects ted to arise.

the predicted cumulative visual effect will be **none** ignificant.

Assessment of Vis	ual Effects – Repre	esentative Viewpoints: Glenlee – Tongland (G-T)		
			filtered, and the level of residual effect during the operational phase will be <b>none</b> and <b>not significant</b> .	
VP26: Kennick Burn picnic area (266101, 564964) ( <b>Figure 7.46.1-</b> <b>5</b> )	The VP is representative of specific views experienced by recreational receptors using the amenities offered at this stopping point on Core Path 144. Sensitivity is judged to be <b>high</b> .	Disturbance associated with construction will be largely limited to visibility of the felling of forestry and broadleaved woodland to the west of the picnic area. Beyond this, ground level disturbance and the introduction of temporary access tracks to the north-west, west and south of the VP will be largely screened by vegetation in views from this location. The presence of partially constructed steel lattice towers of the G-T connection will result in a medium scale change in views from the picnic area, with similar views limited to a very small and localised geographical area. Overall, the magnitude of visual change during construction will be medium, and the level of effect will be <b>moderate</b> and <b>significant</b> .	Successive views of the G-T connection will theoretically be possible from the north-west to south-west, although towers will be heavily screened by the presence of intervening dense coniferous plantation and mature mixed woodland and dense vegetation on either side of the minor road to the north of the VP. Given the presence of dense coniferous plantation which surrounds the picnic area to the west and south, similar views towards towers of the G-T connection will be limited to a small localised geographical extent. During operation, the upper extents of approximately three steel lattice towers of the G-T connection will be evident in views above the intervening mixed woodland to the west, north-west and south of the VP, resulting in a medium scale change in the view. However, as the existing intervening mixed woodland directly west of the picnic area matures and contains outward views, the proportion of towers visible from this location will reduce. Overall, the magnitude of visual change during the operational phase will be medium, and the level of effect will be <b>moderate</b> and <b>significant</b> .	No other KTR proposed dev views from th are predicted Therefore, the and <b>not sign</b>
VP28: A762 south of Laurieston (267942, 562824) ( <b>Figure 7.48.1-</b> <b>8</b> )	The VP is representative of sequential views experienced by road users travelling on the A762. Sensitivity is judged to be <b>low</b> .	Intervening mature roadside vegetation partially screens views of the connection to the east, south-east of the VP and similar locations along the A762 to the north and south. Similar sequential views of the G-T connection will be experienced from a relatively short section of the A762 between Laurieston and Beoch Moor as the connection crosses the road from north-west to south-east. Disturbance, associated with introduction of temporary access tracks and gantries and scaffold at the road crossing, will be evident in close-distance views to the north-west, north and north- east from this location. Additional construction access will use existing tracks located to the east of this location, and movement of construction vehicles will be evident in close-distance views. The steel lattice towers of the G-T connection and ancillary construction activities will become visible to the north-west and north-east, on either side of the A762, resulting in a large scale change in the view. The geographical extent of similar views will be small, limited to views experienced from sections of the A762 north and south of the VP. Overall, a medium magnitude of visual change will arise during the construction phase, and the level of effect will be <b>moderate</b> and <b>significant</b> .	The steel lattice towers of the G-T connection will be seen in close proximity to longer-distance successive views from the north-west to south-east, with some towers partially backclothed by landform. During operation, approximately six steel lattice towers of the G-T connection will be visible in views from north-west north of the VP, as the connection descends towards the A762 from the west with towers appearing above the skyline as it passes north of Edgarton Mote. The connection will cross the A762 directly north of the VP, with one tower appearing directly east of the A762 in views to the north-east. To the south-east, towers of the G-T connection will extend into the distance to the north of Barstobrick Hill but will be screened from this location by the presence of a block of coniferous woodland directly east of the A762. The introduction of the connection during the operational phase will result in a medium scale change in the view from this location, with similar views experienced from sections of the A762 immediately to the north and south of the VP, where views of the closest towers located to the east and west, and OHLs crossing the road will be evident. Overall, the magnitude of visual change will remain medium following removal of all construction activity and reinstatement of construction disturbance, and the level of effect during the operational phase will be <b>moderate</b> and <b>significant</b> .	No other KTR this location. A number of otheoretically I <b>Figures 7.48</b> operational B the Glenkens woodland situ Laurieston wi location. Turb located to the intervening w will appear at farm develop operational B turbines of Fe consented tur Visibility of th Troston Loch north will be location. The proposed with these ex scale cumulat geographical farms are not Overall, the c cumulative vi <b>significant</b> .
VP29: Barstobrick Hill (Neilson's Monument) (268782, 560683) ( <b>Figure 7.49.1-</b> <b>12</b> )	The VP represents panoramic views experienced by recreational receptors from the local landmark and monument atop Barstobrick Hill on Core Path 170.	The VP is representative of specific panoramic views afforded from this elevated location, and similar elevated locations on Core Path 170 which provides access to this locally distinguishable hill and landmark monument. During the construction phase disturbance associated with preparatory groundworks including the introduction of temporary access tracks and the felling of forestry to create the wayleave north of Whirstone Hill will be evident in views to the north-west, north, east, and south-east from this VP.	The removal of R Route (south) will reduce the presence of electricity infrastructure in views to the north-east whilst the G-T connection will occupy a similar proportion of views to the east and south-east during the operational phase. The introduction of the steel towers and OHLs of the G-T connection will bring the presence of electricity transmission infrastructure closer to this VP, introducing a linear feature evident in successive clockwise views from north-west to south-east, and occupying a larger proportion of the panoramic views available from this location.	No other KTR this location. A number of theoretically <b>Figures 7.49</b> operational B the Glenkens developments

TR Project connections or other consented or levelopments indicated on **Figure 3.1** will be visible in this VP, and therefore no cumulative visual effects ed to arise.

the predicted cumulative visual effect will be **none** gnificant.

TR Project connections will be visible in views from n.

of other consented and proposed wind farms will also ly be visible in views to the north, north-east (see **.48.55** and **7.48.7**), appearing alongside the existing I Blackcraig wind farm on the distant skyline east of ens Valley. However, the presence of intervening situated along the route of the A762 and B795 east of will screen most visibility of wind turbines from this urbines of the consented Mochrum Fell wind farm the east of Loch Ken will be partially visible above g woodland in views to the north, north-east. Turbines above the skyline extending the presence of wind opment across the horizon to the right of the I Blackcraig wind farm, whilst the larger proposed Fell wind farm may be evident beyond and left of the turbines of Mochrum Fell.

f the proposed Shepherds Rig, Glenshimmeroch, ch and Cornharrow wind farms in distant views to the be screened by intervening vegetation from this

ed G-T connection will be seen in combined views existing and proposed wind farms, resulting in a small lative visual change experienced from a small al area from where long-distance views of these wind not screened by the presence of intervening woodland.

e cumulative magnitude of change will be low, and the visual effect from this location will be **minor** and **not t**.

TR Project connections will be visible in views from n.

of other consented and proposed wind farms will also by be visible in views to the north, north-east (see **49.2** and **7.49.5**), appearing alongside the existing I Blackcraig wind farm on the distant skyline east of ns Valley. However, at this distance turbines of these nts will appear as small features in the view, and

	This VP is also	The wayleave through the coniferous plantation of Laurieston	Views towards the distant skylines formed by the summits of the	predominan
	considered as Cultural Heritage VP12. Sensitivity is judged to be high.	Forest will be evident in the views to the north-west, whilst where the wayleave crosses through coniferous plantation east of Whirstone Hill areas of additional felling to accommodate windthrow will be evident. Where the connection passes across enclosed farmland to the north and east of the VP, temporary disturbance will be evident increasing the perceptibility of the linear corridor across a large proportion of the available successive views, experienced clockwise from north-west to south-east. From this elevated location the steel lattice towers of the G-T connection will be seen in longer-distance successive views from north-west to south-east, backclothed by landform, and seen to the west of the existing R Route (south) in views to the east, south-east. Overall, the magnitude of visual change during construction will be medium, and the level of effect will be <b>moderate</b> and <b>significant</b> .	Galloway Hills RSA to the north-west and Cairnsmore of Carsphairn to the north will be uninterrupted by the introduction of the towers of the G-T connection. However, the G-T connection will be evident below the skyline in the direction of these landscapes backclothed by landform and partially screened by intervening woodland. Due to the lower elevation of the G-T connection in relation to the VP as it crosses from north-west to south-east, the towers will appear backclothed by landform and the underlying landcover of improved pasture farmland. Where the G-T connection passes south, south- west of Bargatton Loch, the towers and OHLs will be partially screened by vegetation. The scale of visual change will be medium, and the geographical extent of similar views will be small, limited to elevated locations. Overall, the magnitude of visual change during the operational phase will be medium, and the level of effect during the operational phase will be medium, and the level of effect during the operational phase will be moderate and significant. The replanting of felled windthrow areas of coniferous woodland east, north-east of Whirstone Hill will result in the screening and filtering of views towards the wayleave. A small number of steel towers will be seen within a relatively small proportion of the available views from this VP; however, the upper extents of some towers will remain visible as the restocked woodland matures. As the replanting of this woodland will affect only a small proportion of views of towers and overall, the magnitude of visual change will remain medium, the level of residual effect during the operational phase will be <b>moderate</b> and <b>significant</b> .	landform. Turbines of east of Loch presence of south of the proposed tu consented t Extending n Hill (consen and Cornhal long distand The propose with these e medium sca small geogr G-T connect screened by Overall, the and the cun <b>moderate</b> a
VP30: A75 at junction with unclassified road (270152, 558386) ( <b>Figure 7.50.1-</b> <b>6</b> )	The VP is representative of views experienced by road users of the A72. Sensitivity is judged to be <b>low</b> .	Disturbance associated with construction activities including the introduction of temporary construction access tracks, and gantries and scaffold at the road crossing will be evident in views to the north-east, appearing to the north and south of A75 from this location. A small number of steel lattice towers of the G-T connection will be seen against the skyline partially screened by vegetation as the connection crosses the A75 from north to south. The towers will appear in the foreground of views towards the steel lattice towers of the existing R Route (south) which crosses the A75 to the north of the VP and will remain present during the construction phase. The introduction of the G-T connection OHL and associated construction activities will result in a medium scale change in the view when viewed in combination with the existing towers of R Route (south), evident within a large proportion of the close proximity available views. The geographical extent of similar views will be small, limited to views experienced from short sections of the A75 south-west and north-east of the VP. Overall, the magnitude of visual change during the construction phase will be medium, and the level of effect will be <b>moderate</b> and <b>significant</b> .	<ul> <li>During the operational phase R Route (south) will have been decommissioned and removed.</li> <li>The towers of the G-T connection will occupy a similar proportion of the available views as the existing R Route (south) from this location as the OHL crosses the A75. Towers will be seen in oblique views to the north and south when in close proximity.</li> <li>Views of more distant towers to the north and south of the A75 crossing will be screened by intervening landform and roadside vegetation directly north and south of the road corridor.</li> <li>Longer distance outward views to the east, north and west from this location are largely limited by intervening foreground landform and vegetation.</li> <li>Similar sequential views of the G-T connection will be experienced from localised sections of the A75 between Moor Hill and the Bridge of Dee. The geographical extent of similar views will therefore be small.</li> <li>The introduction of the G-T connection will result in a small scale change in the view, with similar views experienced from a localised geographical extent for receptors travelling east and west along the A75.</li> <li>Overall, the magnitude of visual change during the operational phase will be low, and the level of effect phase will be <b>minor</b> and <b>not significant</b>.</li> </ul>	No other KT proposed de views from are predicte Therefore, t and <b>not sig</b>
VP31: Unclassified road (U43S) near Argrennan Mains (269974, 556606) ( <b>Figure 7.51.1-</b> <b>7</b> )	This VP is representative of views experienced from nearby residential properties and their curtilages.	Ground-level disturbance associated with construction will be partially screened by intervening landform and roadside vegetation alongside the minor road from this location, however, construction vehicle activity and working areas to the south of the VP will be visible in close-proximity views, and the construction of the G-T towers will be evident above intervening screening features. The towers of the G-T connection will appear directly adjacent to smaller steel lattice towers of the existing R Route (south) which passes north to south past the VP, between Argrennan Cottages to the west, and the cluster of residential properties situated at	During the operational phase R Route (south) will have been decommissioned and removed. The larger steel lattice towers of G-T will be seen against the skyline in views the north and south from this location. Intervening vegetation and buildings will screen longer-distance views along the OHL, however similar long distance views will be possible from west of the VP, when accessing the property of Woodlands.	No other KT proposed de views from are predicte Therefore, t and <b>not sig</b>

# antly visible backclothed against the underlying

of the consented Mochrum Fell wind farm located to the och Ken will be visible above the skyline, extending the of wind farm development across the horizon to the the operational Blackcraig wind farm, whilst the large turbines of Fell wind farm will be evident beyond the d turbines of Mochrum Fell.

g northwards along the distant skyline the Knockman ented), Shepherds Rig, Glenshimmeroch, Troston Loch harrow wind farms (applications) will be discernible in ince views towards Cairnsmore of Carsphairn.

osed G-T connection will be seen in combined views se existing and proposed wind farms, resulting in a scale cumulative visual change experienced from a ographical area from where long-distance views of the section in combination with these wind farms are not by the presence of intervening woodland.

the cumulative magnitude of change will be medium, cumulative visual effect from this location will be te and **significant**.

KTR Project connections or other consented or I developments indicated on **Figure 3.1** will be visible in m this VP, and therefore no cumulative visual effects cted to arise.

, the predicted cumulative visual effect will be **none** significant.

KTR Project connections or other consented or I developments indicated on **Figure 3.1** will be visible in m this VP, and therefore no cumulative visual effects icted to arise.

, the predicted cumulative visual effect will be **none** significant.

	Sensitivity is judged to be <b>high</b> .	The scale of visual change during the construction phase will be	Wider, longer distance views to the east and west are largely contained from this location, by intervening landform and the presence of broadleaved woodland shelterbelts.	
		large, and experienced by residential occupiers of nearby properties, however similar views will be limited to a small geographical area where intervening roadside vegetation and woodland will not contain views towards the OHL and associated	Towers of the G-T connection will be evident in views to the north and south from this location, appearing broadly along the alignment of the existing R Route (south) which they will replace.	
		construction activities. Overall, the magnitude of visual change during construction will be high, and the level of effect will be <b>major</b> and <b>significant</b> .	The towers will be evident against the skyline from the minor road which provides access to the neighbouring residential properties. The height of the towers will be noticeably larger than those of R Route (south) and an additional tower will be seen against the skyline in views to the south-west, with long distance views along the connection possible to the south and north of the minor road, which provides access to the adjacent residential properties.	
			The scale of visual change will be medium, however similar views will be limited to a small geographical area, experienced from nearby residential properties and their curtilages. Intervening roadside vegetation and woodland along the minor access road to these properties will screen views towards the OHL and overall the magnitude of visual change during the operational phase will be medium, and the level of visual effect will be <b>moderate</b> and <b>significant</b> .	
VP32: A711 north of Tongland substation (269603, 553802) ( <b>Figure 7.52.1-</b> <b>7</b> )	The VP is representative of views experienced by road users of the A711 and similar views experienced from nearby residential properties. Sensitivity is judged to be high.	<ul> <li>Appearing in the presence of the existing steel lattice towers of R Route (south) ground level disturbance and construction activities will be evident in views to the west of the A711.</li> <li>From the A711 construction vehicles will use existing access directly south-west of the VP, passing beyond the G-T connection and R Route. Existing vegetation along this access and near the Tongland substation will minimise disturbance associated with construction works in close-proximity views in this direction.</li> <li>In views to the north-west, the steel lattice towers of R Route (south) will be seen beyond those of the G-T connection where the connections approach Tongland substation.</li> <li>Existing transmission infrastructure forms a key feature in views to the west, south-west and south from this location, with the existing R Route (south), Tongland substation and 'S' Route which exits the substation and heads eastwards towards Dumfries.</li> <li>Seen in combination with R Route, the G-T connection will introduce a medium scale change across a large proportion of the available view.</li> <li>Overall, the magnitude of visual change during the construction phase will be medium, and the level of effect will be moderate and significant.</li> </ul>	<ul> <li>During the operational phase R Route (south) will have been decommissioned and removed.</li> <li>The towers of the G-T connection will be visible in views from northwest to south-west of the VP. Three towers will be seen as the connection descends towards the existing Tongland substation crossing through enclosed semi-improved pasture to the west of the A711, where towers will appear above the skyline.</li> <li>The terminal tower of the G-T connection will replace the existing R Route (south) terminal tower located at the north-eastern extent of the existing substation, occupying a similar proportion of the available views from this location. The existing 'S' Route will remain evident in views towards Tongland substation, with OHL infrastructure extending eastwards and crossing the A711 south of the VP.</li> <li>Similar sequential views will be experienced from a relatively localised section of the A711 when approaching Tongland from the north and south, and neighbouring residential properties to the north and west of the G-T connection will experience views of the towers approaching the substation from the north. The geographical extent of similar views will be small.</li> <li>The introduction of the G-T connection will result in a medium scale change in view, experienced from a localised area in close proximity to the Tongland substation, neighbouring residential properties and a</li> </ul>	No other k proposed a views fron are predic Therefore, and <b>not s</b>
			short section of the A711. Overall, the magnitude of visual change during the operational phase will be medium, and the level of effect will be <b>moderate</b> and <b>significant</b> .	

## Table 0-25: Assessment of Visual Effects – Settlements: Glenlee – Tongland (G-T)

Assessment of Visual Effects – Settlements: Glenlee – Tongland (G-T)							
Settlement	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential C			

r KTR Project connections or other consented or d developments indicated on **Figure 3.1** will be visible in om this VP, and therefore no cumulative visual effects licted to arise.

e, the predicted cumulative visual effect will be **none** significant.

Cumulative Effects - Operational Phase

Assessment of Vis	sual Effects – Settle	ements: Glenlee – Tongland (G-T)		
St John's Town of Dalry	Residents within the settlement of St John's Town of Dalry. Sensitivity is judged to be <b>high</b> .	The G-T connection will be located approximately 1.4km south- west of this settlement ascending the slopes of the valley south- west of Glenlee substation. During the construction phase, disturbance associated with preparatory groundworks, including the felling of forestry at Black Bank Wood and the introduction of temporary access tracks will be evident at lower elevations in long distance views to the south- west. Construction activities associated with the introduction of the adjacent G-T connection will be seen in successive views to the south-west. The existing R Route (north and south) north and east of Glenlee will remain evident within the landscape during the construction of the G-T connection, whilst the BG Deviation connection will be evident in the view following its construction to allow the existing BG Route towers to be removed and the G-T connection to be constructed. The construction of the P-G via K and E-G connections will be evident in views across the valley to the west. The scale of visual change during construction will be small, and similar views will be experienced from a small geographical area. The magnitude of visual change during construction will be low and will result in a <b>minor</b> and <b>not significant</b> visual effect.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate widespread theoretical visibility from across the settlement, however outward views from the interior of the settlement are generally screened by intervening built form and vegetation. Where open views to the south-west are afforded from properties within the settlement, the steel lattice towers of the G-T connection will be seen ascending the slopes of the valley beyond Glenlee substation and adjacent to the Glenlee hydroelectric power station, partly backclothed by landform and vegetation and ascending the slopes of the valley beyond Glenlee substation and adjacent to the Glenlee hydroelectric power station. Where the new towers of the G-T connection deviate southwards and cross Craigshinnie Burn, the upper extents of towers will be seen above the western skyline of the Kenmure Valley, partially screened by this landform and coniferous woodland, and backclothed against the landform of Maggot Hill beyond. The P-G via K and E-G connections will occupy a similar alignment and proportion of available views west towards the decommissioned R Route (north), whilst the decommissioning of R Route (south) will reduce the presence of transmission infrastructure within the foot of the Kenmure Valley in views south from the settlement. The undergrounding of existing distribution infrastructure between Earlstoun hydroelectric power station and Glenlee will be largely imperceptible in views across the valley from much of the settlement. The additional towers of the G-T connection will occupy a small proportion of the available distant views from the settlement and will result in a small scale visual change experienced from a very localised extent of the settlement.	The G-T co combinatio substation, Glenlee. The P-G via backclothe the Kenmu connection and partly The propose perceptible beyond the contribute It is consid illustrated settlement cumulative The additic proposed k result in a settlement the settler west are pu Overall, the from the se will be <b>mir</b>
Glenlee <sup>38</sup> (Including residential properties P57, P58, P59, P60, P61, P62, P63, P64, P65)	Residents within the community of Glenlee directly adjacent to the hydroelectric power station and substation, including residential properties P57, P58, P59, P60, P61, P62, P63, P64, P65. Sensitivity is judged to be <b>high</b> .	With the exception of properties facing north-east (P57 and P58), residencies within this small settlement are orientated with principal views looking east, south-east onto the unclassified road (U3S), whist views from the rear are afforded to the west, north-west. Properties P57 and P58 are orientated with principal views looking to the north-east and rear views to the south-west. The G-T connection will pass within 0.1km to the north-west of the settlement, where it will connect into Glenlee substation, following the route of the existing alignment of BG Route. During the construction phase, disturbance will be associated with preparatory groundworks, including the introduction of temporary access tracks to the west, south-west of the properties. The felling of woodland at Black Bank Wood will be evident from much of the settlement in close proximity views experienced from the property curtilages and upper storey rear windows. Available views are reduced in some instances by the presence of screening present along the rear boundaries of properties (properties P61 to P65). The existing R Route (north and south) infrastructure will remain evident to the north and north-east of the settlement during the construction phase. The existing BG Route will remain evident during the initial period of the construction phase, until removed to be replaced by the new towers of the G-T connection. Construction activities associated with the introduction of the G-T connection towers will be seen in the immediate foreground of views from the settlement, whilst the BG Deviation connection will be evident in the view following its construction to allow the	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate widespread theoretical visibility from the settlement. The G-T connection, utilising the location of the existing BG Route towers, will be evident in the immediate foreground of views from the rear of properties within the settlement, and will occupy the same proportion of the available views. The introduction of the BG Deviation connection, beyond, will introduce two additional steel lattice towers seen in combination the towers and OHLs of the G-T connection. The towers of the BG Deviation will be evident beyond, with the most discernible change in views evident from properties P61 to P65 within the settlement. Actual visibility will be limited by existing vegetation along the rear boundaries of properties and occupying a similar proportion of the available views. The removal and reinstatement of all temporary construction works, and disturbance will return the underlying landcover to semi-improved pasture, as evident in existing views from the rear of the properties. The decommissioning and removal of the R Route (north) terminal tower adjacent to the Glenlee hydroelectric power station in the north-western extents of the existing substation will be evident from properties within the settlement, whilst the removal or the R Route (south) terminal tower located north of the minor road north-east of	The P-G via will be larg vegetation settlement The introdu combinatio whilst the p mitigation rear of pro and upper compound properties intervening No other co <b>3.1</b> will be The scale co introductio limited to a The magnit settlement be <b>modera</b>

<sup>&</sup>lt;sup>38</sup> Representative views from residential properties located within the small settlement of Glenlee were considered in the LVIA for the proposed Glenlee Substation Extension. Accompanying visualisations (Figures 6.4.1-5 and Figures 6.5.1-5) which illustrate the introduction of the proposed Deviation and G-T connections are contained within the separate planning application submitted to D&GC in September 2019 - 19/1498/FUL

connection will be seen in views to the south-west in tion with the BG Deviation to the south-west of Glenlee n, and the P-G via K and E-G connections north-east of

via K and E-G connections will be largely seen ned by existing vegetation and landform in views across nure Valley, whilst the most northerly towers of the G-T on and B-G Deviation will be seen partly backclothed y visible against the skyline formed by Glenlee Hill.

osed Glenlee substation extension will be barely ble in views to the south-west from the settlement he intervening woodland and will not therefore e to additional cumulative effects from this location.

sidered unlikely that other proposed developments on **Figure 3.1** will be visible in views from this nt and will not therefore contribute to additional ve effects from this location.

tion of the G-T connection in combination with the KTR Project connections and other developments will a small scale cumulative change in views from the nt, limited to a small geographical extent from areas of ement where open views across the valley to the southpossible.

the magnitude of cumulative visual change in views settlement will be low, and the cumulative visual effect inor and not significant.

via K and E-G connections north of Glenlee substation rgely screened by intervening infrastructure and on to the north, north-west in views from the nt.

duction of the G-T connection will be seen in tion with the towers and OHLs of the BG Deviation, proposed extension to Glenlee substation and adjacent n planting will be seen in close proximity views from the roperties within the settlement. The terminal gantries r extents of infrastructure within the substation d will remain partially visible in views from some s within the settlement (P59 to P65), once the ng mitigation planting matures.

consented or proposed developments shown on Figure be visible in views from this settlement.

of cumulative visual change in views from the ion of the G-T connection will be small and medium but a small geographical area.

nitude of cumulative visual change to views from the nt will be medium, and the cumulative visual effect will rate and significant.

Assessment of Vis	sual Effects – Settle	ements: Glenlee – Tongland (G-T)		
		existing BG Route towers to be removed and the G-T connection to be constructed.	Glenlee will be evident in views from the properties at the north- eastern extents of the settlement (P57 and P58).	
		The introduction of the G-T connection, and associated construction disturbance and activities will result in a medium scale change in views from properties within the settlement, experienced from a very localised and small geographical area. The magnitude of visual change during the construction phase will be medium and will result in a <b>moderate</b> and <b>significant</b> visual effect.	The G-T connection will be evident in the immediate foreground views from the settlement, however the proposed towers will occupy the existing tower positions of the BG Route and resulting in a medium scale change experienced from a very localised small geographical area. Overall, the magnitude of visual change during the operational phase will be medium, and the visual effect will be <b>moderate</b> and <b>significant</b> .	
New Galloway	Residents within the settlement of New Galloway. Sensitivity is judged to be <b>high</b> .	A number of towers of the existing R Route (south) are evident in views east from the settlement, seen passing southwards through farmland on the east side of the valley, and will remain present during the construction phase Ground-level disturbance associated with construction will not be evident from the settlement, however views of forestry felling on the north-eastern flanks of Peal Hill and partially constructed steel lattice towers of G-T connection may be glimpsed from the northern and western edges of the settlement. The change in the view will be barely perceptible during the construction phase, and views will be experienced from a very localised geographical extent of the settlement. Overall, the magnitude of visual change will be low, and the visual effect during the construction phase will be <b>none</b> and <b>not</b> <b>significant</b> .	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate theoretical visibility from a limited number of properties in the north and west of the settlement. Actual visibility of the G-T connection will be limited by the presence of intervening landform and mixed woodland to the north and west of the settlement, with vegetation and woodland along property boundaries at the western and north-western edge of the settlement and woodland west of New Galloway golf course likely to screen long-distance views westwards towards the G-T connection towers. Where visible in glimpsed views beyond intervening features, visibility of the towers of the G-T connection will be limited to their upper extents appearing in middle distance views. Decommissioning and removal of R Route (south) will remove the presence of transmission infrastructure in views east across the valley from the settlement. The towers of the G-T connection will be imperceptible in views from the settlement. Overall phase, resulting in a barely perceptible change in views experienced from a small geographical extent of the settlement.	No other KTR this settlemen predicted to a Visibility of ot <b>3.1</b> will be lin Mochrum Fell located on hig extending the operational B settlement. T views from th developments cumulative vi Therefore, the and <b>not sign</b>
Mossdale	Residents within the small community of Mossdale. Sensitivity is judged to be high.	The G-T connection will be located approximately 1.1km west of the settlement of Mossdale, where the majority of properties have principal views orientated south-east away from the G-T connection. Given the presence of intervening landform, coniferous plantation and foreground vegetation, ground level disturbance associated with construction activities for the G-T connection will be largely imperceptible in views west from the settlement. Evidence of felling of coniferous plantation to create the wayleave east of Slogarie Hill and southwards between Tormollan Hill and Kenick Hill will be evident in long distance views to the south-west. Where views from property curtilages and accesses within the settlement afford views towards the nearest partially constructed towers of the G-T connection, these will be partially screened by deciduous woodland to the west of the settlement and dense commercial plantation at the eastern periphery of the Galloway Forest Park beyond. The steel lattice towers of G-T will be seen partly backclothed and screened by coniferous woodland and intervening landform resulting in a relatively small scale change in longer-distance views, experienced from a small and very localised geographical area. The magnitude of visual change during construction will be low and will result in a <b>minor</b> and <b>not significant</b> visual effect on views from properties within this settlement.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate theoretical visibility across the settlement. During the operational phase, steel lattice towers of G-T will be seen in successive views from north-west to south-west from the curtilages of some properties located at the western edge of the settlement, resulting in a small scale change in views affecting a small proportion of the available views from the settlement resulting in a small scale change in the view, with similar views available from a small geographical area. Principal views south-east from properties within the settlement will be unaffected by the introduction of the G-T connection. Overall, the magnitude of visual change during the operational phase will be low and will result in a <b>minor</b> and <b>not significant</b> visual effect on views from properties within this settlement.	No other KTR this settlemer predicted to a Where visible <b>3.1</b> will large developments The G-T conn cumulative ef Therefore, the and <b>not sign</b>

TR Project connections will be visible in views from nent therefore no cumulative visual effects are to arise.

f other proposed developments illustrated on **Figure** limited to views of the consented Knockman Hill and Fell wind farms and the proposed Fell wind farm higher ground to the east of the Glenkens Valley, and the existing presence of wind turbines alongside the I Blackcraig Hill wind farm in views from the

The G-T connection will not be evident in successive the settlement in combination with these other ents and will not therefore contribute to additional e visual effects.

the predicted cumulative visual effect will be **none** gnificant.

TR Project connections will be visible in views from nent therefore no cumulative visual effects are to arise.

ble other proposed developments indicated on **Figure** gely appear as distant and or/distinctly separate ents within more distant landscapes.

onnection will not therefore contribute to additional effects from this location.

the predicted cumulative visual effect will be **none** gnificant.

Assessment of Vis	Assessment of Visual Effects – Settlements: Glenlee – Tongland (G-T)						
Laurieston	Residents within the small settlement of Laurieston and nearby scattered residential properties along the B795. Sensitivity is judged to be <b>high</b> .	At the closest point, the G-T connection will be located approximately 1.6km south, south-west of the settlement. Outward views from the lineal interior of the settlement along the A762 are largely contained and screened by the presence intervening buildings and vegetation. Open principal views south, south-west towards the proposed G-T connection are afforded from properties along Church Road at the north-eastern extents of the settlement. During the construction phase, movement of construction vehicles via the A762 and a temporary access track south of the settlement will be evident. Ground level disturbance and activities along the route of the proposed OHL connection will be largely imperceptible at this distance and screened by intervening woodland to the south of the settlement. Partially constructed steel lattice towers will become visible in the latter stages of the construction phase. The introduction of the G-T connection will result in a small scale change in views, limited to a small and localised geographical extent of the settlement.	<ul> <li>The ZTVs shown on Figure 7.11 and Figure 7.12 (all connections) and Figure 7.17 (G-T) indicate theoretical visibility across much of the settlement.</li> <li>The upper extents of steel lattice towers and OHLs of the G-T connection will be seen in relatively long-distance views to the south, south-west from areas of settlement where open views are afforded. However, views will be substantially screened by forestry at Laurieston Forest and blocks of woodland to the west and east of the A762, south of the settlement.</li> <li>The introduction of the steel lattice towers and OHLs of the G-T connection will result in a small scale change views, which will be experienced from a limited small geographical extent of the settlement, with open long distance views generally limited to properties situated along Church Road and occupying a slightly elevated position above the central part of the settlement on the A762</li> <li>The magnitude of visual change will be low. Considering the high sensitivity of the receptor, the visual effect during the operational phase will be minor and not significant.</li> </ul>	No other I this settle predicted Where vis <b>3.1</b> will la developm The G-T c cumulativ Therefore and <b>not s</b>			

Residential Property or Group	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential C
P76: Glenlee Kennels	Residents. Sensitivity is judged to be <b>high</b> .	Property is orientated with principal views east towards the unclassified road (U3S) and secondary views orientated to the west, north-west. The existing BG Route can be seen in views from the rear of the property and curtilage where trees and deciduous vegetation partially screens and filters views towards the eastern shoulder of Glenlee Hill. During the construction phase ground-level disturbance associated with the felling of mixed woodland at Black Bank Wood and the introduction of temporary access tracks north of Craigshinnie Burn will be seen in views west from the property, and partially screened by mature trees on the property's northern boundary. The BG Deviation will be evident in views during the construction of the G-T connection, backclothed in views towards Glenlee Hill to the north-west. The scale of change to views during the construction phase will be small and experienced from the rear and curtilage of the property representing a very small geographical area. Overall, the magnitude of visual change during construction will be low and will result in a <b>minor</b> and <b>not significant</b> visual effect on views from this residential property.	The G-T connection will be evident against the skyline formed by Glenlee Hill in views to the west, north-west. Views will be filtered by vegetation within the curtilage and along the boundaries of the property. The G-T connection will occupy a similar proportion of views from the property and its curtilage as the existing BG Route, with an additional tower introduced into views to the west of the property where the G-T connection deviates southwards before crossing Craigshinnie Burn. The towers of the G-T connection will occupy the alignment of the existing BG Route towers and will be seen in the immediate foreground of views from the rear of the property partially screened and filtered by intervening landform and woodland. The introduction of the G-T connection with the BG Deviation evident beyond will result in a small scale change in the view, experienced from the rear and curtilage of the property representing a very small geographical area. Overall, the magnitude of visual change during the operational phase will be low and will result in a <b>minor</b> and <b>not significant</b> visual effect on views from this residential property.	The G-T con Deviation in property and visible again beyond. No other KTF property. No other pro visible in vie to additional The introduc views with th and influence successive v The magnitu will be low a cumulative v
P77: Airie Cottage	Residents. Sensitivity is judged to be <b>high</b> .	Principal views from the property are orientated to the south-east. The property boundaries are delineated by mature vegetation, and the are no existing elements of energy infrastructure evident in close proximity views from the property. The G-T connection will be located approximately 200m to the south-west of the property boundary, and will be evident in views from the curtilage, and	Visibility of the G-T connection experienced from the property and its immediate curtilage will be limited by vegetation screening views to the north-west, west and south-west of the property. However, open views towards the towers and OHLs will be experienced from the access track when approaching the property from the A712 to the south-east from where the connection will appear as a large scale feature in views to the north, north-west.	No other KTF development this resident effects are p Therefore, th <b>not signific</b>

<sup>&</sup>lt;sup>39</sup> The identification of residential properties considered in the assessment of visual effects are detailed in **Table A7.5.62** in **Appendix 7.5**.

r KTR Project connections will be visible in views from clement therefore no cumulative visual effects are ed to arise.

visible other proposed developments indicated on **Figure** largely appear as distant and or/distinctly separate ments within more distant landscapes.

connection will not therefore contribute to additional ive effects from this location.

re, the predicted cumulative visual effect will be **none** t **significant.** 

### Cumulative Effects - Operational Phase

nnection will be seen in combination with the BG n views to the north-west to west from the rear of the nd its curtilage. The tops of steel lattice towers will be nst the skyline, partially backclothed by Glenlee Hill

TR Project connections will be visible in views from the

roposed developments illustrated on **Figure 3.1** will be ews from this location and will not therefore contribute al cumulative effects from this residential property.

iction of the G-T connection when seen in combined the BG Deviation connection will increase the presence ce of electricity transmission infrastructure in views from the rear of the property.

ude of cumulative change in views from this property and taking account of the sensitivity of receptors the visual effect will be **minor** and **not significant**.

TR Project connections or other consented or proposed nts indicated on **Figure 3.1** will be visible in views from ntial property, and therefore no cumulative visual predicted to arise.

the predicted cumulative visual effect will be **none** and **cant.** 

The Kendoon to Tongland 132kV Reinforcement Project

		access track (followed by Core Path 516) when approaching the	A medium scale change in the view will arise from this property, its	
		<ul> <li>property from the A712 to the south-east.</li> <li>Disturbance associated with the creation of temporary construction tracks and preparatory groundworks will be largely screened by intervening vegetation within the property curtilage in views from this property and its curtilage, however construction activities and the introduction of towers will be evident in views from the long access track when approaching the property.</li> </ul>	curtilage, and the access track to the south, representing a small geographical extent. Overall, a medium magnitude of visual change in views will occur, and the level of effect during the operational phase will be <b>moderate</b> and <b>significant</b> .	
		A medium scale change in views will occur, resulting in a medium magnitude of visual change in views from this property during the construction phase, and level of effect will be <b>moderate</b> and <b>significant</b> .		
P79: Darsalloch	Residents. Sensitivity is judged to be <b>high</b> .	<ul> <li>Principal views from the property are orientated to the north, north-east. Much of the eastern property boundary is delineated by mature vegetation, whilst there are no elements of energy infrastructure evident in existing views from the property.</li> <li>The G-T connection will be located approximately 0.4km east of the property; however, visibility will be heavily screened and filtered by the presence of conifer plantation to the north-east, east and south-east of the property.</li> <li>During construction, creation of the wayleave and felling of areas of additional forestry at risk of windthrow will occur approximately 0.2km south of the property and will be evident in close-distance views south and south-east filtered and screened by vegetation within the property's boundary.</li> <li>An existing access track within passes within 0.2km to the south of the property views, limited by intervening vegetation.</li> <li>A medium scale change in views from the property and its curtilage will occur during the construction phase, representing a small geographical extent.</li> <li>Overall, a medium magnitude of visual change in views from this property during construction, and the level of visual effect will be moderate and significant.</li> </ul>	Towers will be visible in views from the principal outlook of the property as the connection crosses the A712 to the north-east of the property and at a distance of approximately 0.5km. However, visibility will be heavily filtered and screened by mature vegetation within the property's boundaries and conifer forest to the north- east, east, and south-east of the property. As this intervening forestry matures and contains outward views, the proportion of towers visible from this location will reduce resulting in a small scale change in the view, experienced from a small geographical area, and resulting in a low magnitude of visual change to views from this property. Overall, the level of visual effect during operation will be <b>minor</b> and <b>not significant</b> .	No other KTR developments this residentia effects are pre Therefore, the <b>not significa</b>
P167: Upper Balannan Farm	Residents. Sensitivity is judged to be <b>high</b> .	<ul> <li>Principal views from the property are oriented to the south-west, away from the proposed G-T connection. However, there is potential for partially screened secondary views from the property and its curtilage to the east. The existing R Route (south) is evident 0.2km east of the property partially screened by agricultural buildings and vegetation.</li> <li>During the construction phase, disturbance associated with preparatory groundworks including the introduction of temporary access tracks will be evident from this property, its curtilage and access.</li> <li>The introduction of the G-T connection and associated construction activities will be seen in combination with the existing R Route (south) filtered by vegetation and partially screened by buildings and resulting in a medium scale change in views from the property.</li> <li>Overall, the magnitude of change will be medium, and level of effect during the construction phase will be mediate and significant.</li> </ul>	Visibility of the G-T connection will be limited by intervening agricultural buildings and vegetation to the east of the property. During the operational phase R Route (south) will have been decommissioned and removed, and the G-T connection will continue to occupy a similar proportion of the available views east from this property, with towers located slightly further east than the smaller PL1 towers of the existing R Route (south) connection. The introduction of the G-T connection will continue to occupy a similar proportion of views from the property, however with towers located slightly further east than the existing R Route (south), the introduction of these towers will result in a small scale change in the view which will not affect the principal views from the property. Views of the G-T connection will be experienced from a small geographical extent of the property and its curtilage, with the majority of towers screened by intervening agricultural buildings directly east of the property.	No other KTR developments this residentia effects are pre Therefore, the <b>not significa</b>
P170: North Cottage, Upper Balannan,	Residents. Sensitivity is judged to be <b>high</b> .	Properties are orientated with principal views focused west, whilst the existing R Route (south) is evident in secondary views, located approximately 0.25km to the east of the properties.	During the operational phase R Route (south) will have been decommissioned and removed, and the G-T connection will continue to occupy a similar proportion of the available views east from these	No other KTR developments these resident effects are pre

TR Project connections or other consented or proposed hts indicated on **Figure 3.1** will be visible in views from itial property, and therefore no cumulative visual predicted to arise.

he predicted cumulative visual effect will be **none** and **cant.** 

R Project connections or other consented or proposed its indicated on **Figure 3.1** will be visible in views from tial property, and therefore no cumulative visual predicted to arise.

he predicted cumulative visual effect will be **none** and **cant.** 

R Project connections or other consented or proposed its indicated on **Figure 3.1** will be visible in views from ential properties, and therefore no cumulative visual predicted to arise.

	<del>sual effects</del> – Res	idential Properties: Glenlee – Tongland (G-T) <sup>39</sup>		
P171: Upper Balannan Cottages,		The G-T connection will occupy a similar proportion of available views from the property with potential for open direct views of the connection and associated construction activities.	properties, with towers located slightly further east than the smaller PL1 towers of the existing R Route (south) connection. A small scale change in the view will occur from the introduction of	Therefore, the not significat
P172: South Cottage, Upper Balannan		Ground-level disturbance associated with temporary construction access and movement of construction vehicles will be evident in secondary close proximity views to the east of the properties.	the G-T connection resulting in a low magnitude of visual change in views from this group of properties.	
		The introduction of the G-T connection will be seen in combination with the existing R Route (south) largely unfiltered in views east from the property. A medium scale change in views will occur, resulting in a medium magnitude of visual change in views from this group of properties during construction.	Overall, the level of visual effect during the operational phase will be <b>minor</b> and <b>not significant</b> .	
		Overall, the level of effect resulting during construction will be <b>moderate</b> and <b>significant</b> .		
P173: Woodlands	Residents. Sensitivity is judged to be <b>high</b> .	Potential for views to the north-east south and south-east from the principal outlook of the property, its curtilage and access, partially screened and filtered by intervening vegetation. The existing R Route (south) passes less than 0.2km east of the property in close proximity to the property curtilage.	During the operational phase R Route (south) will have been decommissioned and removed, and the G-T connection will continue to occupy a similar proportion of the available views north-east, east and south-east from this property, with towers located west and closer to the property than those of the smaller PL1 towers of the existing R Route (south) connection.	No other KTR developments these resident effects are pre Therefore, the
		The G-T connection will occupy a parallel alignment west and slightly closer to the property to that of the existing R Route (south).	A medium scale change in the view will occur resulting in a medium magnitude of visual change in views from this property and its	not significa
		During construction, disturbance associated with temporary access tracks and the felling of a small strip of woodland to the east will be evident in filtered close proximity views to the north-east and south-east of the property, its curtilage and the access to the property. Both the G-T connection and R Route (south) will cross the access to the east of the property.	curtilage. Overall, the level of visual effect during the operational phase will be <b>moderate</b> and <b>significant</b> .	
		A medium scale change in the view will occur, resulting in a medium magnitude of visual change in views from this property during construction.		
		Overall, the level of effect during the construction phase will be <b>moderate</b> and <b>significant</b> .		
P174: Dalriada P175: Dunaverty	Residents. Sensitivity is judged to be	The existing R Route (south) passes less than 0.2km west of this cluster of properties. The G-T connection will occupy a similar location slightly further east to R Route (south).	There will be potential for views of the G-T connection filtered and screened by vegetation located within and in close proximity to the property's boundaries, however towers will appear on the skyline in views wast from the properties and their surflexes?	No other KTR developments these resident
P176: The Upper Cottage P177: Dunroamin P178: Davaar	roamin	There will be potential for some relatively open views west from properties (P176, P179 and P175) in the northern cluster. Views from properties (P177, P178, P174 and P180) will be filtered and screened by intervening vegetation and neighbouring properties.	views west from the properties and their curtilages'. During the operational phase R Route (south) will have been decommissioned and removed, and the G-T connection will continue to occupy a similar proportion of the available views west from this	effects are pre Therefore, the <b>not significa</b>
P179: Lower Cottage		During construction, disturbance associated with the felling of a small strip of woodland to the west of the properties and the introduction of temporary access tracks will be evident in views from located on the western edge of this group (P175, P176 and	<ul><li>group of properties, with towers appearing slightly further west of the smaller PL1 towers of the existing connection.</li><li>A medium scale change in the view will occur resulting in a medium magnitude of visual change in views from properties located on the</li></ul>	
P180: Argrennan Mains Farm		P179) and their associated curtilage and accesses.	western edge of this group (P175, P176 and P179).	
		Where visible the introduction of the G-T connection will be seen in combination with the existing R Route (south) in open to filtered views west of this cluster of properties. A medium scale change in views will occur, resulting in a medium magnitude of visual change in views from this group of properties during the construction phase.	Overall, the level of visual effect from this group of properties will be <b>moderate</b> and <b>significant</b> during the operational phase.	
		Overall, the level of effect will be <b>moderate</b> and <b>significant</b> .		
P185: Carrick Lodge P186: Cairnsmore	Residents. Sensitivity is judged to be	The existing R Route (south) passes less than 0.3km west of this cluster of properties. The G-T connection will occupy a similar alignment to that of the existing R Route (south), although towers will be located slightly further west.	There will be potential for views of the G-T connection filtered and screened by vegetation located within and in close proximity to the property's boundaries.	No other KTR developments these resident effects are pre
Lodge	high.	Disturbance associated with preparatory groundworks and temporary construction accesses, including movement of	During the operational phase R Route (south) will have been decommissioned and removed, and the G-T connection will continue to occupy a similar proportion of the available views west from this	Therefore, the <b>not significa</b>

he predicted cumulative visual effect will be **none** and **cant.** 

R Project connections or other consented or proposed hts indicated on **Figure 3.1** will be visible in views from ential properties, and therefore no cumulative visual predicted to arise.

he predicted cumulative visual effect will be **none** and **cant.** 

R Project connections or other consented or proposed its indicated on **Figure 3.1** will be visible in views from ential properties, and therefore no cumulative visual predicted to arise.

he predicted cumulative visual effect will be **none** and **cant.** 

R Project connections or other consented or proposed its indicated on **Figure 3.1** will be visible in views from ential properties, and therefore no cumulative visual predicted to arise.

he predicted cumulative visual effect will be **none** and **cant.** 

P187: Criffel Chalet		construction vehicles, and the felling of mixed woodland will be evident in views west from the properties, filtered and screened	group of properties, with towers appearing, slightly further west of the smaller PL1 towers of the existing connection.	
P188: Criffel Lodge P189: Hilldrop Lodge P190: Bengairn Lodge	Decidents	<ul> <li>by intervening vegetation.</li> <li>Where visible, the introduction of the G-T connection will be seen in combination with the existing R Route (south) in largely filtered views west of this cluster of properties.</li> <li>A medium scale change in views will occur, resulting in a medium magnitude of visual change in views from this group of properties during construction.</li> <li>Overall, the level of effect will be <b>moderate</b> and <b>significant</b>.</li> </ul>	A small scale change in the view will occur resulting in a low magnitude of visual change in views from this group of properties. Overall, the level of visual effect during operation for this group of properties will be <b>minor</b> and <b>not significant</b> .	
P195: High Clachan	Residents. Sensitivity is judged to be <b>high</b> .	<ul> <li>Principal views from the property are oriented south-east, away from the G-T connection. However, there is potential for visibility of the connection and associated construction activities from the property curtilage in views to the west and south-west. Intervening agricultural buildings will largely screen views to the north-west and north.</li> <li>The existing R Route (south) is located 0.2km west of the property, and the G-T connection will occupy a similar alignment slightly further west of the existing connection.</li> <li>Movement of construction vehicles using existing access tracks will be evident in principal views to the south, along with other construction disturbance and partially constructed towers resulting in a medium magnitude of change during construction.</li> <li>Overall, the level of visual effect during construction will be moderate and significant.</li> </ul>	The G-T connection will be evident in views to the west and south- west of the property, whilst towers located to the north, north-west will be largely screened by intervening agricultural buildings. During the operational phase R Route (south) will have been decommissioned and removed, and the G-T connection will continue to occupy a similar proportion of the available views west, south- west from this property. Where visible, the towers of the G-T connection will be seen in combination with, but beyond, the existing R Route (south) to the west of the property resulting in a low magnitude of change during the operational phase. Overall, the level of effect will be <b>minor</b> and <b>not significant</b> .	No other KTR F developments this residential effects are pre- Therefore, the <b>not significan</b>
P199: Langbarns Cottage P201: Kenmore P207: Barhullion P208: Meikleyett P216: Barwood P220: Comhla P221: Meikleyett House	Residents. Sensitivity is judged to be <b>high</b> .	<ul> <li>The existing R Route (south) passes less than 0.2km west of this cluster of properties, and the G-T connection will occupy a similar alignment to the existing connection with towers located slightly closer to this group of properties.</li> <li>The existing R Route (south) is evident in principal views from properties P207 and P208 and secondary views from properties P221, P220, P216 and P199. Visibility from this cluster of properties is partially limited by vegetation along and within property boundaries.</li> <li>Ground-level disturbance associated with preparatory groundworks, the introduction of temporary access tracks and movement of construction vehicles on existing tracks will be evident in filtered views north-west to south from this group of properties.</li> <li>Where visible, the introduction of the G-T connection will be seen in combination with the existing R Route (south) in views west from this group of properties. 'S' route will remain evident in views to the south from properties which afford open views to the south.</li> <li>A medium scale change in views will occur, resulting in a medium magnitude of visual change in views from this group of properties during construction. Overall, the level of effect at construction will be moderate and significant.</li> </ul>	The introduction of the new terminal tower and final towers of the connection which descend towards Tongland substation will be evident in views to the west and south-west from this group of properties and their curtilages. Towers of the G-T connection will be located slightly closer to residential properties within this group, most notably P220 and P221. During the operational phase R Route (south) will have been decommissioned and removed, and the G-T connection will continue to occupy a similar proportion of the available views west, south-west from these properties, whilst 'S' Route will remain evident in views to the south from properties at the southern extent of the group. A medium scale change in the view will occur resulting in a medium magnitude of visual change in views from this group of properties. Overall, the level of effect during operation will be <b>moderate</b> and <b>significant</b> .	No other KTR P developments i these residenti- effects are pred Therefore, the <b>not significan</b>
P225: Langbarns P226: Weir House, Langbarns	Residents. Sensitivity is judged to be <b>high</b> .	The existing R Route (south) passes less than 0.1km and is evident in secondary views orientated north-east from both properties P225 and P225. Views are partially filtered by vegetation along and within the property boundaries. The existing 'S' Route will remain evident to the south-west of these two properties. The G-T connection will occupy a similar location, with towers situated slightly further west from the existing R Route (south).	The introduction of the new terminal tower and last towers of the connection which descend towards Tongland substation will be evident in views to the north and east from these properties and their curtilages. During the operational phase R Route (south) will have been decommissioned and removed, however the G-T connection will continue to occupy a similar proportion of the available views east, south-east west from these properties, whilst 'S' Route will remain evident in views to the south-east.	No other KTR F developments these residenti effects are pred Therefore, the <b>not significan</b>

R Project connections or other consented or proposed ats indicated on <b>Figure 3.1</b> will be visible in views from tial property, and therefore no cumulative visual predicted to arise.
he predicted cumulative visual effect will be <b>none</b> and <b>cant.</b>
R Project connections or other consented or proposed ats indicated on <b>Figure 3.1</b> will be visible in views from ential properties, and therefore no cumulative visual predicted to arise.
he predicted cumulative visual effect will be <b>none</b> and <b>cant.</b>
R Project connections or other consented or proposed its indicated on <b>Figure 3.1</b> will be visible in views from ential properties, and therefore no cumulative visual predicted to arise.
he predicted cumulative visual effect will be <b>none</b> and <b>cant.</b>

		Movement of construction vehicles on the existing access track and the introduction of temporary access tracks to the north-east and south-west will be evident in views from the properties.	A medium scale change in the view will occur during the operational phase resulting in a medium magnitude of visual change in views from this group of properties, and the level of effect will be	
		Where visible, the introduction of the G-T connection will be seen in combination with the existing R Route (south) and S Route. R Route (south) will be evident in views north-east to south-west of these properties, 'S' Route will remain evident to the south-west, whilst some views from properties will be partially filtered by intervening vegetation.	moderate and significant.	
		A medium scale change in views will occur, resulting in a medium magnitude of visual change in views from this group of properties during the construction phase, and the level of visual effect will be <b>moderate</b> and <b>significant</b> .		
P236: Lynnbank, Culdoach Road	Residents. Sensitivity is judged to be <b>high</b> .	Principal views from the property are orientated south-west away from the towers of the G-T connection. However, there is potential for visibility from the extents of the property curtilage in views looking west to north-west.	The introduction of the new terminal tower and last towers of the connection which descend towards Tongland substation will be evident in views across the A711 to the north-west from this property and its curtilage.	The G-T conne evident in view No other KTR
	Steel lattice towers of the existing 'S' Route are prominent in principal views looking south-west and steel lattice towers of R Route (south) are seen looking west from the property curtilage.During the operational phase R Route (south) will have be decommissioned and removed, however the G-T connection continue to occupy a similar proportion of the available view	During the operational phase R Route (south) will have been decommissioned and removed, however the G-T connection will continue to occupy a similar proportion of the available views northwest of from this property, whilst 'S' Route will remain evident in views to the south-west.	It is considered illustrated on residential pro additional curr Therefore, the	
		Ground level disturbance associated with preparatory groundworks and the movement of construction vehicles from access off the A711 will be seen in middle-distance views northwest.	A small scale change in the view will occur, limited to views experienced from the western curtilage of the property and resulting in a low magnitude of visual change in views from this group of properties.	not significa
		Where visible, the introduction of the G-T connection will be seen in combination with the existing R Route (south) in partially filtered views north-east to south-west of these properties, whilst 'S' Route will remain evident in views to the south-west.	Overall, the level of visual effect will be <b>minor</b> and <b>not significant</b> .	
		A small scale change in views will occur, resulting in a low magnitude of visual change in views from this property during construction, and the level of effect will be <b>minor</b> and <b>not significant</b> .		

Assessment of Vis	Assessment of Visual Effects – Routes: Glenlee – Tongland (G-T)				
Route	Receptors and Sensitivity	Magnitude of Change and Significance of Visual Effects - Construction Phase	Magnitude of Change and Significance of Visual Effects - Operational Phase	Potential Cun	
A713 – between Carsphairn and Parton (part of the Galloway Tourist Route, the Scottish Castle Route and Loch Ken and River Dee Galloway and Southern Ayrshire Biosphere Route)	Road users, including tourists Sensitivity is judged to be <b>medium</b> .	Given the intervening distance between the A713 and the G-T connection, evidence of construction activities will be largely limited to oblique and long-distance views gained from sections of this road to the north and south of St John's Town of Dalry. At the closest point, between New Galloway and Parton, construction activities associated with the introduction of the G-T connection will be largely imperceptible. The G-T connection will introduce a barely perceptible scale change seen from localised sections of the road, representing a small geographical area. Overall, the magnitude of change in views from this route will be low, and the visual effect will be <b>none</b> and <b>not significant</b> during the construction phase.	<ul> <li>The ZTVs shown on Figure 7.11 and Figure 7.12 (all connections) and Figure 7.17 (G-T) indicate widespread theoretical visibility from the road within the Study Area, largely between Allangibbon Bridge and Parton.</li> <li>Visibility of the G-T connection will be foreshortened by landform and filtered and screened by vegetation. The G-T connection will be located beyond 1km west of the A713 in contrast to the existing R Route which passes in close proximity and crosses the road near St John's Town of Dalry and Crossmichael. The removal of R Route (south) will largely remove any presence of electricity transmission infrastructure in views from this route between New Galloway and Crossmichael.</li> <li>Oblique long-distance views of the G-T connection will be experienced to the north and south of St John's Town of Dalry filtered by roadside vegetation and mixed planting near Glenlee. Where the G-T connection enters Galloway Forest Park the steel</li> </ul>	From a short se John's Town of combination wi these KTR proj filtered by inter There are likely developments, considered unli more distant se not therefore c developments. The introductio the other noted magnitude of c significant cur experienced fro north and sout	

nnection and the existing S Route will be experienced views in views to the looking south-west.

TR Project connections will be visible from the property.

ered unlikely that other proposed developments on **Figure 3.1** will be visible in views from this property location and will not therefore contribute to cumulative visual effects from this residential property.

the predicted cumulative visual effect will be **none** and **cant.** 

umulative Effects - Operational Phase

t section of the road to the north and south of St of Dalry the G-T connection will be seen in with the P-G via K, E-G and BG Deviation. Visibility of roject connections experienced from the road will be itervening vegetation.

tely to be some views of consented or proposed ts, as illustrated on **Figure 3.1**, however it is unlikely that the G-T connection will interact with these t schemes located east of the Glenkens Valley. It will e contribute to additional cumulative effects with these ts.

tion of G-T connection when seen in combination with ted KTR project connections will result in a low of cumulative visual change, and a **minor** and **not** cumulative visual effect on sequential views from this route between passing through and to the buth of St John's Town of Dalry.

Assessment of Visual Effects – Routes: Glenlee – Tongland (G-T)				
			lattice towers will be largely screened by conifer forest limiting potential oblique views west between New Galloway and Parton.	
			The removal and decommissioning of R Route (south) will reduce the presence of electricity transmission infrastructure in views from the A713 between St John's Town of Dalry and Parton.	
			Where the G-T connection is evident in limited glimpsed sequential views to the west, towers of the connection will be seen as relatively distant and small features in the view.	
			The introduction of the G-T connection will result in a barely perceptible change experienced from very localised section of the road.	
			Overall, the magnitude of change will be low, and the visual effect will be <b>none</b> and <b>not significant</b> during the operational phase.	
A762 – between Allangibbon Bridge and Tongland (part of the Galloway Red Kite Trail and the Loch Ken and River Dee Galloway and Southern Ayrshire Biosphere Route)	Road users, including tourists Sensitivity is judged to be <b>medium</b> .	Construction activities associated with the introduction of the G-T connection will be evident between Allangibbon Bridge and Glenlee, to the east of Bennan Hill (access tracks and construction compound 5) and between Laurieston and Edgarton loch (access tracks and construction compound 6). An increase in vehicle movements associated with construction are likely to be evident along the A762 between Allangibbon Bridge and Glenlee. Construction activities associated with the G-T connection will typically result in a small scale change in views experienced from this road, however construction activities will be evident in close proximity views from a short section of the road where the G-T connection crosses the road south of Laurieston. Overall, the magnitude of visual change in views from this route will be low, and level of visual effect will be <b>minor</b> and <b>not significant</b> .	<ul> <li>The ZTVs shown on Figure 7.11 and Figure 7.12 (all connections) and Figure 7.17 (G-T) indicate widespread theoretical visibility from the sections of the road between Allangibbon Bridge and New Galloway and to the south-east of Bennan Hill and Ringford. Between New Galloway and Bennan Hill visibility is shown to be very limited with the G-T connection screened by intervening landform.</li> <li>Between Allangibbon Bridge and New Galloway actual visibility of the G-T connection will be foreshortened by landform and screened and filtered by intervening vegetation west of the road.</li> <li>Between Bennan Hill and Ringford the G-T connection will be largely screened by conifer forest but will be evident as it emerges into more open areas east of Gatehouse Burn crossing the A762 and passing south-west of Bargatton Loch.</li> <li>The removal and decommissioning of R Route (south) will reduce the presence of electricity transmission infrastructure in views from the A762 largely between Glenlee and Laurieston.</li> <li>The G-T connection will introduce electricity infrastructure in relatively limited views near Glenlee, Woodhall Loch and brief direct unfiltered views south of Laurieston.</li> <li>The magnitude of visual change for views experienced from this route will be low overall, but higher locally where the G-T connection crosses the road south of Laurieston. A minor and not significant visual effect will occur for views from this route as a whole.</li> </ul>	From a short Waterside and connection wi via K, E-G and Glenlee subst although ther consented or is considered these more di additional cur The addition co of cumulative <b>significant</b> v of this route b
A712 – between Clatteringshaws Loch and Balmaclellan (part of The Queens Way, Scottish Castle Route and National Byway cycle route)	Road users, including tourists Sensitivity is judged to be <b>medium</b> .	The G-T connection crosses the A712 to the east of Darsalloch between Achie Hill and Peal Hill. Construction activities and disturbance associated with the G-T connection including the introduction of temporary access tracks south and east of Gallows Knowe and Gallows Knowe Quarry (Q2), and the presence of gantries and scaffold at the road crossing, will be evident in close-distance oblique views to the north and south experienced from a short section of the route between Darsalloch Hill and the intersection with Old Edinburgh Road. Felling of forestry associated with the creation of the wayleave for the G-T connection will be seen across the north-eastern flanks of Peal Hill to the south of the A712. The introduction of the G-T connection will result in a medium scale change experienced from a short localised section of the road during construction. Overall, the magnitude of visual change during construction will be medium, and a <b>moderate</b> and <b>significant</b> visual effect will occur for views from sections of the route between Darsalloch Hill and the intersection with Old Edinburgh Road.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate theoretical visibility from a section of the road, between the named property of Darsalloch in the west and Balmaclellan in the east. Actual visibility of the G-T connection will be largely limited to close proximity views of towers and OHLs experienced from a short section of the road between Darsalloch and the intersection with Old Edinburgh Road. The decommissioning and removal of R Route (south) will reduce the presence of electricity infrastructure in views from a short section of the road between New Galloway and Balmaclellan. The G-T connection will introduce electricity infrastructure to direct relatively close proximity views west of the intersection with Old Edinburgh Road. This will result in a medium scale change in views from this road between Darsalloch Hill and the intersection with Old Edinburgh Road.	No other KTR It is considere illustrated on and will not th effects. Therefore, the <b>not significa</b>
			The replanting of felled windthrow areas of coniferous woodland across the eastern and north-eastern flanks of Peal Hill to the east of	

ort section of this road between agricultural buildings at and Coom Bridge the northern part of the G-T will be seen in brief views in combination with the P-G and BG Deviation connections.

ostation extension will be screened by vegetation and here are likely to be some glimpsed views of other or proposed developments illustrated on **Figure 3.1**. It ed unlikely that the G-T connection will interact with distant schemes and will not therefore contribute to cumulative effects with these developments.

n of the G-T connection, will result in a low magnitude ve visual change, resulting in a **minor** and **not t** visual cumulative effect on views from a short section e between Allangibbon Bridge and Glenlee.

TR Project connections will be visible from this route

ered unlikely that other proposed developments on **Figure 3.1** will be visible in views from this route t therefore contribute to additional cumulative visual

the predicted cumulative visual effect will be **none** and **cant.** 

Assessment of Vis	sual Effects – Route	es: Glenlee – Tongland (G-T)		
			the wayleave will result in the partial screening and filtering of views towards the visible towers south of the road, where the infrastructure will become less perceptible to receptors travelling east or west along the road.	
			As the woodland matures the scale of change will reduce to small and the overall magnitude of visual change will reduce to low. The level of residual visual effect during the operational phase will be <b>minor</b> and <b>not significant</b> .	
A75 – between Moor Hill and Castle Douglas	Road users, including tourists Sensitivity is	The G-T connection crosses the A75 near Low Balannan, crossing the road roughly perpendicular and in parallel with the existing R Route (south).	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate theoretical visibility from the majority of the route within the Study Area.	No other KTR P developments v cumulative visu
(part of the South West Coastal Route 300, Burns Heritage Trail,	judged to be <b>low</b> .	Disturbance associated with construction activities including the introduction of temporary construction access tracks, and gantries and scaffold at the road crossing will be evident in views to the north and south of A75.	Actual visibility of the G-T connection will be largely limited to relatively close proximity direct to slightly oblique views where the connection crosses the A75 east of the unclassified road.	Therefore, the <b>not significan</b>
Scottish Castle Route)		Construction activities associated with the G-T connection including the introduction of temporary access tracks south and east of Low Balannan will be experienced from a short section of	A small number of steel lattice towers of the G-T connection will be seen against the skyline partially screened by vegetation as the connection crosses the A75 from north to south to the east of Low Balannan.	
		the road between Low Balannan and East Lodge and the intersection with Old Edinburgh Road. This will result in a medium scale change when seen in combination with the existing R Route (south) experienced from a very localised section of the	Longer distance views will be foreshortened by landform and filtered and screened by immediate roadside vegetation and blocks of mixed and conifer woodland in the middle distance.	
		road which will remain evident throughout the construction phase. Overall, the magnitude of visual change will be medium, resulting in <b>moderate</b> and <b>significant</b> visual effects from a short section of the road approximately between Low Balannan and East Lodge during construction	R Route (south) will have been decommissioned and removed during the operational phase, however, the G-T connection will remain occupying a similar proportion of available views from this route. The steel lattice towers will appear discernibly larger than those of R Route (south) resulting in a small scale visual change experienced locally from a localised geographical extent for receptors travelling along the A75 between Low Balannan and East Lodge.	
			The magnitude of visual change will be low, and the level of effect will be <b>minor</b> and <b>not significant</b> .	
A711 – between the A75 and Tongland.	Road users Sensitivity is judged to be <b>low</b> .	The G-T connection runs broadly parallel to the A711 from the junction with A75 to Tongland. The existing 'S' Route will remain evident in views from this road, where it crosses the road eastwards from Tongland substation.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate relatively widespread theoretical visibility between the intersection with the A75 near East Lodge in the north and Kirkcudbright in the south.	No other KTR P developments v cumulative visu
			VP32: A711 north of Tongland substation indicates views looking west from the southern extents of the road.	Therefore, the <b>not significan</b>
		and construction vehicles). Construction activities associated with the G-T connection will typically result in a small to medium scale change experienced	Given intervening distance and screening by roadside vegetation actual visibility of the G-T connection will be largely limited to a section of the road between East Lodge and the intersection with the A762 north of Kirkcudbright.	
		from localised sections of the road. The magnitude of visual change will be low but higher where the G-T connection is seen in combination with the existing R Route (south) close to Tongland substation. Overall, the level of visual effect on views from this route during construction will be <b>minor</b> and <b>not significant</b> .	R Route (south) will have been decommissioned and removed during the operational phase, however, the G-T connection will remain, occupying a similar proportion of available views from this route. The steel lattice towers will appear discernibly larger than those of R Route (south) resulting in a small scale visual change experienced locally from a localised geographical extent within close proximity to Tongland substation and seen in the context of the existing towers of 'S' Route which will remain evident in views from this road.	
			Overall, the magnitude of visual change will be low, and the level of effect will be <b>minor</b> and <b>not significant</b> .	
B795/Burns Country Run – between	Road users Sensitivity is judged to be <b>low</b> .	Given the intervening distance and screening vegetation construction activities associated with the G-T connection will be largely imperceptible from much of the B795.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate theoretical visibility from the B795 between Laurieston and Glenlochan.	No other KTR P developments v cumulative visu
Laurieston and Glenlochar (Sections of route form part of		The existing R Route is evident in close proximity views where the route crosses the road south of the property of Creochs and to the east of Laurieston and will remain present during the construction phase. The G-T connection will introduce a small	Actual visibility of the G-T connection will be limited by roadside vegetation and large mixed woodland and conifer plantations south of the road including Bargatton Plantation, and Greenlane Plantation. Longer distance views of the G-T connection filtered and screened by	Cumulative visi

R Project connections or consented or proposed ts will be visible in views from this route and no visual effects are predicted to arise. ne predicted cumulative visual effect will be **none** and ant. R Project connections or consented or proposed ts will be visible in views from this route and no visual effects are predicted to arise. ne predicted cumulative visual effect will be **none** and ant. Project connections or consented or proposed ts will be visible in views from this route therefore no visual effects are predicted to arise. visual effects will be **none** and **not significant**.

Assessment of Vi	sual Effects – Route	es: Glenlee – Tongland (G-T)		
Galloway Kite Trail)		scale change seen across a localised section of the road largely between Laurieston and the intersection with Kirk Road.	vegetation will be experienced between Laurieston and the intersection with Kirk Road.	
		Overall, the magnitude of visual change will be low, and the visual effects on views from this route will be <b>none</b> and <b>not</b>	Decommissioning and removal of R Route will reduce the presence of electricity transmission infrastructure in views from this road this	
		significant during construction.	The introduction of the G-T connection will result in a barely perceptible change in views experienced from a very localised geographical extent of this road.	
			Overall, the magnitude of visual change will be low, and the visual effects on views from this route will be <b>none</b> and <b>not significant</b> during the operational phase.	
C13S – between Laurieston and north of Fell of Laghead (Gatehouse of Fleet road).	Road users Sensitivity is judged to be <b>medium</b> .	The G-T connection crosses the C13S west of Kennick Burn picnic area. Sections of the road to the west and east are lined by mature deciduous and coniferous woodland which screens and/or heavily filters outward views from the route. During the construction phase disturbance associated with preparatory groundworks, including the felling of coniferous and broadleaf woodland to the north and south of the road to create the wayleave and the introduction of temporary access tracks, will be evident in views from a short section of the C13S. The majority of accesses to nearby quarries will follow the footprint of existing forestry tracks, however new access tracks will be created along the route of the connection and will be seen as the connection crosses the road from north to south.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate theoretical visibility from much of the road. However, visibility of the G-T connection from the road will be largely screened by forestry and woodland, with occasional areas of recently felled forestry affording longer-distance outward views to the north and south into Laurieston Forest. The G-T connection will introduce close proximity views of steel lattice towers where the G-T connection crosses the minor road, approximately 0.4km to the west of the Kennick Burn picnic area. Views north-west and south-east along the wayleave corridor will be possible at a slightly oblique angle to the direction of travel whilst the OHLs will be seen above the road as the connection crosses from north to south.	No other KTR developments cumulative vis Cumulative vis
		The introduction of G-T will result in a small scale change experienced from a small geographical extent of the road, within close proximity of the wayleave where the G-T connection crosses this minor road. Overall, the magnitude of visual change will be low, and the level of visual effect during construction will be <b>minor</b> and <b>not</b> <b>significant</b> .	<ul><li>This will result in a small scale change experienced from a localised section of this minor road, and therefore the geographical extent of similar views will be small.</li><li>Overall, the magnitude of visual change will be low, and the level of visual effect during operation will be minor and not significant.</li></ul>	
U34S – between Barstobrick and Upper Balannan.	Road users Sensitivity is judged to be <b>low</b> .	This minor road dead end road provides local access to Barstobrick and other scattered properties north of the A75. The G-T connection will run broadly parallel with this road between Culcrae and Upper Balannan, with intervening landform situated between. Construction access from the road at Culcrae uses existing access tracks, however movement of construction vehicles will be evident in close proximity views from the road. Temporary access tracks running parallel to the G-T connection will be visible in longer distance views looking north-east to south-east. The G-T connection and ancillary construction activities, seen in combination with the existing R Route (south), will introduce a small scale change in views from this minor road, experienced from a small geographical extent of the road. Overall, the magnitude of visual change during construction will be low, and the level of effect will be <b>minor</b> and <b>not significant</b> during the construction phase.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate widespread theoretical visibility from this road. Outward views from the southern extents of the U34S are largely open towards Tarff Water. Outward views towards the connection from the northern extents of the road between Crumquhill and Culcrae will be subject to screening by intervening localised landform and vegetation. R Route (south) will be decommissioned and removed prior to the operational phase. The G-T connection will occupy a similar proportion of the available views to R Route (south) in the vicinity of Upper Balannan, whilst views of the steel lattice towers will be possible to the north where the OHL exits forestry east of Whirstone Hill and will be evident in views as the road passes of higher ground north of Crumquhill and descends towards Culcrae. The towers will appear as relatively small features and affect only a small proportion of the available views from a short section of this minor road. Given the relatively short length of the road and the limited opportunity for visibility of the G-T connection from sections of the road, the geographical extent of similar views will be small. Overall, the magnitude of visual change during operation will be low, and the level of visual effect will be <b>minor</b> and <b>not significant</b> .	No other KTR developments cumulative vis Cumulative vis
C7S – between Glenlochar and A75; C45S – between Creochs and Balannan	Road users Sensitivity is judged to be <b>low</b> .	The G-T connection will run broadly parallel to the C45S between Dunjop and Upper Balannan, crossing the minor road from west to east to the south of Longwood. The existing R Route (south) runs broadly parallel with the road network between the B762 and the A75 and is often evident in close proximity views.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate widespread theoretical visibility from the network of minor roads in this area. Outward views are generally open, however intervening screening features including small blocks of coniferous and mixed woodland limit some longer-distance views from these roads.	No other KTR developments cumulative vis Cumulative vis

R Project connections or consented or proposed ts will be visible in views from this route therefore no <i>v</i> isual effects are predicted to arise. visual effects will be <b>none</b> and <b>not significant</b>
R Project connections or consented or proposed ts will be visible in views from this route therefore no visual effects are predicted to arise. visual effects will be <b>none</b> and <b>not significant</b>
R Project connections or consented or proposed ts will be visible in views from this route therefore no visual effects are predicted to arise. visual effects will be <b>none</b> and <b>not significant</b>

U151S – between		Ground-level disturbance associated with the introduction of	R Route (south) will be decommissioned and romoved prior to the	
Glentoo Wood and C7S C39S – between Boreland Cottage and Bridge of Dee.		<ul> <li>Cround-level disturbance associated with the introduction of construction access points and access tracks, working areas and will be evident in views west from the C45S, however ancillary construction activities will be foreshortened by landform and screened and filtered by vegetation in views from roads further east (C7S, U151S, C39S).</li> <li>The G-T connection and ancillary construction activities, seen in combination with steel lattice towers of the R Route (south), will result in a small scale change in views from a small proportion of these minor roads.</li> <li>Overall, the magnitude of visual change during the construction phase will be low, and the level of effect will be minor and not significant.</li> </ul>	R Route (south) will be decommissioned and removed prior to the operational phase. The G-T connection will occupy a similar proportion of views to R Route (south) from the southern sections of the minor road network between Dunjop and the A75, limited to the presence of the steel lattice towers within the section of the connection south of Longwood, appearing to the west and east of the road and crossing the road between Dunjop and Upper Balannan. Once east of the road the towers will appear further east of the existing R Route (south), which despite their increased comparable vertical scale will reduce their perceptibility in views from the road network. The introduction of the G-T connections of the minor road network in this area, therefore the geographical extent of similar views will be small. Overall, the magnitude of visual change during the operational phase will be low, and the level of effect will be <b>minor</b> and <b>not significant</b> .	
Raiders' Road Forest Drive - between A712 and A762 (sharing the same route as Core Path No. 143 Raiders Road).	Road users, including tourists Sensitivity is judged to be <b>medium</b> .	The Raiders' Road Forest Drive passes through the Galloway Forest Park. The G-T connection will introduce views of electricity transmission infrastructure from short sections of the Raider's Road. From much of this route ground-level disturbance associated with construction will be screened by an intervening corridor of mixed mature woodland found along the route of the Raiders' Road which is managed for long-term retention. Potential visibility of felling of forestry and construction access associated with the creation of the wayleave will be limited to a short section of the route near the Upper Gairloch car park and from a short section of the route east of Ross Hill. Disturbance associated with the felling of forestry associated with the creation of the wayleave, the construction of temporary access tracks and movement of construction vehicles will be barely perceptible in views from south across Stroan Loch from this route, given the retention of mixed woodland to the north and east and the intervening distance to the G-T connection to the south, south-east. Construction of the steel towers of the G-T connection will introduce vertical features into the view, resulting in a small scale change in the view experienced from a very localised and small geographical area where oblique and open views are possible to the south from the route. Overall, the magnitude of visual change during construction will be low, and the level of visual effect during the construction phase will be <b>minor</b> and <b>not significant</b> .	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate intermittent theoretical visibility of the G-T connection between Holly Island to the west and Boddon's Island car park to the east. Relatively widespread theoretical visibility is indicated from a short section of this route between Stroan Loch and the intersection with the A762, whilst the G-T connection crosses the Raider's Road east of Ross Hill passing through dense coniferous plantation either side of the forest drive. Actual visibility of the G-T connection from this route will be limited to glimpsed views in areas where felled coniferous forestry affords open views, and where the creation of the wayleave is evident east of Ross Hill, where G-T crosses the Raider's Road. Visibility of the connection in longer distance views across Stroan Loch to the south will be limited to glimpses of towers as the OHL ascends the northern flanks of Bennan Hill towards Slogarie Forest. In distant views to the south, the most southerly perceptible towers of the connection will be seen where they cross over higher ground between Tormollan Hill and Bennan Hill. Towers will be largely backclothed by landform and vegetation, with the upper extent of one tower breaking the skyline. The towers and OHLs of the G-T connection will rom short sections of the Raider's Road, with views often partially screened or filtered by the presence of coniferous forestry and loch side vegetation which is managed along the corridor of the drive for long-term retention. The introduction of the G-T connection will result in a small scale change in the available views, and the geographical extent of similar views will be low, and the level of visual change during the operational phase will be low, and the level of visual effect will be <b>minor</b> and <b>not significant</b> .	No other KTR developments cumulative vis Cumulative vi
Core Path No. 205 Mossdale Kite Walk, Red Kite Trail	Recreational users Sensitivity is judged to be high.	The route of the path passes through open ground and mixed woodland to the east of the Raider's Road Forest Drive and provides access to the western shore of Mossdale Loch. Close proximity views of the G-T connection will be experienced from this route where it connects with the Raider's Road and Core Path No. 143. Visibility from the eastern section of the route which connects with Core Path No. 485 will be partially limited by conifer forest west of the route. Construction activities associated with felling of mature coniferous plantation to create the wayleave corridor, creation of access tracks and vehicle movements will be experienced from the north-western sections of this route close to the Raider's Road.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate relatively widespread theoretical visibility from this route between the Raider's Road to the north and Core Path No. 485 Mossdale. The G-T connection will introduce views of electricity transmission infrastructure to short north-western sections of this route close to the Raider's Road. This will include close proximity views where the G-T connection passes over the higher ground of Aird's Crag before crossing the forest drive east of Ross Hill, where the felled wayleave and adjacent additional felling of windthrow areas will open up views towards the steel lattice towers and OHLs in some limited locations. Where closer proximity views of the G-T connection are experienced from sections of the route in close proximity to Ross Hill the scale of	No other KTR It is considere illustrated on and will not th effects. Therefore, the <b>not significa</b>

TR Project connections or consented or proposed nts will be visible in views from this route therefore no visual effects are predicted to arise.

visual effects will be **none** and **not significant** 

TR Project connections will be visible from this route.

ered unlikely that other proposed developments on **Figure 3.1** will be visible in views from this route t therefore contribute to additional cumulative visual

the predicted cumulative visual effect will be **none** and **cant.** 

Assessment of Visual Effects – Routes: Glenlee – Tongland (G-T)				
Cours Path No. 152	Descritional	Where closer proximity views of construction activities are gained from these sections of the route close to Ross Hill, the scale of visual change will be medium and experienced from a small geographical extent. Overall, the magnitude of visual change will be medium, and the level of effect will be <b>moderate</b> and <b>significant</b> during the construction phase.	visual change will be medium, limited to sections of the footpath where outward views are possible beyond the otherwise densely woodland which surrounds this route. Overall, the magnitude of visual change will be medium, and the level of effect will be <b>moderate</b> and <b>significant</b> during the operational phase.	
Core Path No. 153 Airie near Mossdale	Recreational users Sensitivity is judged to be high.	The G-T connection crosses the core path between Stroan Bridge to the north-west and Slogarie Bridge to the south-east. Construction activities associated with temporary access tracks, wayleave felling to the south-west on the flanks of Slogarie Hill, and to the north-east as the route passes through forestry between the former railway line and the River of Dee and vehicle movements, will be experienced from much of the route within close proximity of the G-T connection, and predominantly between Stroan Hill and Bennan Hill. Where closer proximity views of construction activities are gained from the route, the scale of visual change will be large for views experienced in close proximity to the wayleave corridor, but representing a relatively large proportion of this short footpath. Overall, the magnitude of visual change will be high, and the level of effect will be <b>major</b> and <b>significant</b> during the construction phase.	The ZTVs shown on <b>Figure 7.11</b> and <b>Figure 7.12</b> (all connections) and <b>Figure 7.17</b> (G-T) indicate relative widespread theoretical visibility from much of this route. Actual visibility will include close proximity and longer distance views of the G-T connection, experienced from much of the route. Localised landform and coniferous woodland associated with the northern flanks Slogarie Hill will screen views from the north-western section of the path as it ascends from Stroan Bridge. The G-T connection will introduce views of electricity transmission infrastructure from much of the Core Path. This will include close proximity views of the steel lattice towers as the connections ascend the north-eastern flanks of Bennan Hill from the River Dee, and views of the felled wayleave and areas of additional felling on the eastern flanks of Slogarie Hill. Where closer proximity views of the G-T connection are gained from the route, the scale of visual change will be large, with the greatest change in views experienced from a short length of the route where it passes beneath the OHL, as it crosses the northern flanks of Bennan Hill, and representing a relatively large proportion of this short footpath Overall, the magnitude of visual change will be high, and the level of effect will be <b>moderate</b> and <b>significant</b> during operation.	No other KTR Pr however the ren the east side of views to the nor It is considered illustrated on <b>Fi</b> and will not ther effects. Therefore, the p <b>not significant</b>

R Project connections will be visible from this route, removal of towers of the existing R Route (south) on of Loch Ken may be discernible in long distance north-east.

red unlikely that other proposed developments • **Figure 3.1** will be visible in views from this route therefore contribute to additional cumulative visual

ne predicted cumulative visual effect will be **none** and **ant.** 

#### Potential Implications of the proposed G-T connection for Designated Landscapes

- 7.230 Potential implications for the Galloway Hills RSA and Solway Coast RSA are considered in relation to how the identified effects on landscape character, and views and visual amenity potentially affect the objectives and key characteristics for which the areas are designated, as well as the overall integrity of the designated areas. As set out in **Appendix 7.4**, no defined special qualities exist for the RSAs.
- 7.231 The northern section of the G-T connection will occupy and influence an area of the Galloway Hills RSA between the existing Glenlee substation and Slogarie Hill north of Laurieston Forest within the Galloway Forest Park (as shown on Figures 7.9.2-4). The proposed steel lattice tower (L4) infrastructure (shown on **Figure 2.5b**) will occupy a smaller area of the RSA to that of the existing R Route (south), although the towers will appear larger in scale than the existing steel lattice (PL1) towers.
- 7.232 The most southerly section of the G-T connection will occupy a very small area of the Solway Coast RSA where the proposed connection enters Tongland substation along the broad alignment of the existing R Route (south) (as shown on Figure 7.9.5).

### Potential Landscape Effects

- 7.233 Within the Galloway Hills RSA, the G-T connection crosses three LCTs. Three of the northern towers are located within the Upper Dale LCT (165), much of the connection is proposed within the Foothills with Forest LCT (176) and the Rugged Uplands with Forest LCT (181). Visibility of the G-T connection experienced from within these LCTs will largely be limited to closer proximity views, given the dense coniferous forest covering much of LCT 176 and 181, and pockets of conifer and mixed woodland within LCT 165. Within such close proximity views, there will be opportunities for the G-T connection to be seen against some largely localised skylines of the Galloway Hills RSA.
- 7.234 Significant adverse effects on the LCTs within the Galloway Hills RSA, arising from the introduction of the proposed G-T connection, will be limited to localised areas of the Foothills with Forest LCT (176) and Rugged Uplands with Forest LCT (181) during both the construction (Moderate) and operational (Moderate) phase. Significant effects on the wider landscape, and areas of the RSA beyond approximately 1km of the proposed steel lattice towers and their associated wayleave, are not predicted to occur.
- 7.235 A short section of the G-T connection will also pass through a small northern part of the Solway Coast RSA within the Drumlin Pastures LCT (169), connecting with Tongland substation in the southern part of this LCT. As defined within the RSA Technical Paper<sup>Error! Bookmark not defined.</sup> the area of the RSA within this LCT includes a 'small extent within visual envelope of Dee estuary'. Visibility of the G-T connection experienced from within this small part of the RSA will be largely localised and will occupy a proportion of available views similar to the existing R Route (south) and Tongland substation.
- 7.236 Significant adverse effects on the Drumlin Pastures LCT (169) will be localised during both the construction (moderate) and operational (moderate) phase of the G-T connection. Significant effects on the wider landscape, and area of the Solway Coast RSA beyond approximately 1km of the proposed steel lattice towers, are not predicted to occur.

### Potential Visual Effects

- 7.237 Visibility of the steel lattice towers, and OHLs of the proposed G-T connection will be largely limited to the eastern part of the Galloway Hills RSA, where the connection passes through the densely forested area of the Galloway Forest Park. Significant visual effects during the construction and operational phases are predicted to arise from the following assessment VPs, which are located within the RSA:
  - VP12: Core Path 516 south-west of Glenlee;
  - VP11: Unclassified road (U3S) south-west of Glenlee (construction phase only);
  - VP12: Core Path 516 south-west of Glenlee;
  - VP14: A712, The Queen's Way;
  - VP16: Core path near Tannoch Flow;
  - VP21: Mossdale; and
  - VP22: Core Path 485 Mossdale to Gatehouse Station Railway Walk.

- 7.238 Within the Galloway Hills RSA much of the G-T connection will pass through dense coniferous forest, where visibility will be largely limited to closer proximity views. Longer distance views will be gained where the connection passes through more open areas of the landscape, including a short section of the connection between Glenlee substation and the A712 (VP12). South of Slogarie Hill (256m AOD) the G-T connection will pass out of the RSA.
- 7.239 **Significant** visual effects during the construction phase are predicted to arise from the introduction of the G-T connection, as seen from views experienced from residential properties within Glenlee.
- 7.240 Significant visual effects during the construction and operational phases are also predicted to arise from a short section of the A712 between Darsalloch Hill and the intersection with Old Edinburgh Road, a short section of Core Path No. 205 (Mossdale Kite Walk) near Ross Hill and sections of Core Path No. 153 (Airie near Mossdale) between Stroan Hill and Bennan Hill.
- 7.241 Significant visual effects are also predicted to arise from a short section of the G-T connection, located within the Solway Coast RSA. Significant visual effects on localised views experienced from within the Solway Coast RSA are represented by:
  - VP32: A711 north of Tongland substation.
- 7.242 The G-T connection will largely replace the presence and influence of the existing R Route (south) within the Solway Coast RSA, although there will be a perceptible change in the scale of the steel lattice towers of the G-T connection.

## Conclusion

- 7.243 Significant adverse effects on landscape and visual receptors will be localised within the Upper Dale LCT (165), Foothills with Forest LCT (176) and Rugged Uplands with Forest LCT (181). The introduction of the G-T connection, including the long-term wayleave corridor and steel lattice towers, will result in significant landscape and visual effects arising within a localised and contained geographical extent of the Galloway Hills RSA.
- 7.244 The steel lattice towers and OHLs will not interrupt longer distance views to the Rugged Uplands LCT (180) at the core of the Galloway Hills RSA and, given the extensive area of the Galloway Hills RSA and the limited proportion which will be affected by the introduction of the G-T connection, the G-T connection will not significantly compromise the integrity of the wider Galloway Hills RSA when considered as a whole.
- 7.245 Significant adverse effects on landscape and visual receptors within the Solway Coast RSA will be very limited within the Drumlin Pastures LCT (169). The steel lattice towers, and OHLs will not interrupt longer distance coastal views across the neighbouring Peninsula with Gorsey Knolls LCT (157) and Peninsula LCT (156). The G-T connection will not significantly compromise the integrity of the wider Solway Coast RSA given its limited footprint which largely replaces the existing R Route (south).

# Summary of Significant Effects – Glenlee to Tongland

7.246 This section summarises the significant landscape and visual effects, including cumulative effects, arising from the introduction of the proposed Glenlee to Tongland (G-T) connection, and outlines potential additional mitigation measures to be implemented and the resultant residual effects predicted.

#### **Construction Effects**

### Landscape Effects

7.247 **Table 0-28** below summarises the significant landscape effects predicted to arise during the construction phase for the Glenlee to Tongland (G-T) connection.

Table 0-28: Significant Landscape Effects during the construction phase: Glenlee to Tongland (G-T)

Significant Landscape Effects during the construction phase: Glenlee to Tongland (G-T)			
Foothills with Forest LCT – Dumfries and Galloway (176)	Moderate (adverse, short-term) and significant - Locally (Minor - Not significant for LCT as a whole)		
Rugged Uplands with Forest LCT – Dumfries and Galloway (181)	Moderate (adverse, short-term) and significant - Locally (Minor - Not significant for LCT as a whole)		
Drumlin Pastures LCT (169)	Moderate (adverse, short-term) and significant - Locally (Minor - Not significant for LCT as a whole)		

Visual Effects

7.248 **Table 0-29** below summarises the significant visual effects predicted to arise during the construction phase for the Glenlee to Tongland (G-T) connection.

Table 0-29: Significant Visual Effect	s during the construction phas	e: Glenlee to Tongland (G-T)
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Significant Visual Effects during the construction phase: Glenlee to Tongland (G-T)				
VP11: Unclassified road (U3S) south-west of Glenlee	Moderate (adverse, short-term) and significant			
VP12: Core Path 516 south-west of Glenlee	Major (adverse, short-term) and significant			
VP14: A712, The Queen's Way	Moderate (adverse, short-term) and significant			
VP16: Core path near Tannoch Flow	Moderate (adverse, short-term) and significant			
VP21: Mossdale	Moderate (adverse, short-term) and significant			
VP22: Core Path 485 Mossdale to Gatehouse Station Railway Walk	Moderate (adverse, short-term) and significant			
VP26: Kennick Burn picnic area	Moderate (adverse, short-term) and significant			
VP28: A762 south of Laurieston	Moderate (adverse, short-term) and significant			
VP29: Barstobrick Hill (Neilson's Monument)	Moderate (adverse, short-term) and significant			
VP30: A75 at junction with unclassified road	Moderate (adverse, short-term) and significant			
VP31: Unclassified road (U43S) near Argrennan Mains	Major (adverse, short-term) and significant			
VP32: A711 north of Tongland substation	Moderate (adverse, short-term) and significant			
Glenlee	Moderate (adverse, short-term) and significant			
P77: Airie Cottage	Moderate (adverse, short-term) and significant			
P79: Darsalloch	Moderate (adverse, short-term) and significant			
P167: Upper Balannan Farm	Moderate (adverse, short-term) and significant			

Significant Visual Effects during the construction phase: Glenlee to Tongland (G-T)			
Property Group consisting of: P170, P171, P172	Moderate (adverse, short-term) and significant		
P173: Woodlands	Moderate (adverse, short-term) and significant		
Property Group consisting of: P174, P175, P176, P177, P178, P179, P180	Moderate (adverse, short-term) and significant		
Property Group consisting of: P185, P186, P187, P188, P189, P190	Moderate (adverse, short-term) and significant		
P195: High Clachan	Moderate (adverse, short-term) and significant		
Property Group consisting of: P199, P201, P207, P208, P216, P220, P221	Moderate (adverse, short-term) and significant		
Property Group consisting of: P225, P226	Moderate (adverse, short-term) and significant		
A712	Moderate (adverse, short-term) and significant		
A75	Moderate (adverse, short-term) and significant		
Core Path No. 205 Mossdale Kite Walk, Red Kite Trail	Moderate (adverse, short-term) and significant		
Core Path No. 153 Airie near Mossdale	Major (adverse, short-term) and significant		

## **Operational Effects**

Landscape Effects

7.249 **Table 0-30** below summarises the significant landscape effects predicted to arise during the operational phase for the Glenlee to Tongland (G-T) connection.

 
 Table 0-30: Significant Landscape Effects during the operational phase: Glenlee to Tongland
 (G-T)

Significant Landscape Effects during the Operat	ional p
Foothills with Forest LCT - Dumfries and Galloway (176)	<b>Mo</b> (Mir
Rugged Uplands with Forest LCT – Dumfries and Galloway (181)	<b>Mo</b> (Mir
Drumlin Pastures LCT (169)	<b>Mo</b> (Mir

## Visual Effects

7.250 **Table 0-31** below summarises the significant visual effects predicted to arise during the operational phase for the Glenlee to Tongland (G-T) connection, and where relevant the additional mitigation proposed, and resultant likely residual effects identified.

## phase: Glenlee to Tongland (G-T)

oderate (adverse, long-term) and significant - Locally linor - Not significant for LCT as a whole)

oderate (adverse, long-term) and significant - Locally inor - Not significant for LCT as a whole)

oderate (adverse, long-term) and significant - Locally linor - Not significant for LCT as a whole)

Table 0-31: Significant Visual Effects during Operational Phase: Glenlee to Tongland (G-T)

Summary of Likely sig during Operational Pha (G-T)	nificant Visual Effects ase: Glenlee to Tongland	Additional Mitigation Measures	Likely residual Effect
VP12: Core Path 516	Major (adverse, long-	n/a	Major (adverse, long-term)
south-west of Glenlee	term) and significant		and significant
VP14: A712, The	Moderate (adverse, long-	Replanting of areas of additional windthrow felling	<b>Minor</b> (adverse, long-term)
Queen's Way	term) and significant		and not significant
VP16: Core path near	Moderate (adverse, long-	n/a	Moderate (adverse, long-
Tannoch Flow	term) and significant		term) and significant
VP21: Mossdale	Moderate (adverse, long- term) and significant	n/a	Moderate (adverse, long- term) and significant
VP22: Core Path 485 Mossdale to Gatehouse Station Railway Walk	Moderate (adverse, long- term) and significant	n/a	Moderate (adverse, long- term) and significant
VP26: Kennick Burn	Moderate (adverse, long-	n/a	Moderate (adverse, long-
picnic area	term) and significant		term) and significant
VP28: A762 south of	Moderate (adverse, long-	n/a	Moderate (adverse, long-
Laurieston	term) and significant		term) and significant
VP29: Barstobrick Hill	Moderate (adverse, long-	Replanting of areas of additional windthrow felling	Moderate (adverse, long-
(Neilson's Monument)	term) and significant		term) and significant
VP31: Unclassified road (U43S) near Argrennan Mains	Moderate (adverse, long- term) and significant	n/a	Moderate (adverse, long- term) and significant
VP32: A711 north of	Moderate (adverse, long-	n/a	Moderate (adverse, long-
Tongland substation	term) and significant		term) and significant
Glenlee	Moderate (adverse, long- term) and significant	n/a	Moderate (adverse, long- term) and significant
P77: Airie Cottage	Moderate (adverse, long- term) and significant	n/a	Moderate (adverse, long- term) and significant
P173: Woodlands	Moderate (adverse, long- term) and significant	n/a	Moderate (adverse, long- term) and significant
Property Group consisting of: P174, P175, P176, P177, P178, P179, P180	Moderate (adverse, short-term) and significant	n/a	Moderate (adverse, long- term) and <b>significant</b>
Property Group	Moderate (adverse, long-	n/a	Moderate (adverse, long-
consisting of: P199,	term) and significant		term) and significant

Summary of Likely significant Visual Effects during Operational Phase: Glenlee to Tongland (G-T)		Additional Mitigation Measures	Likely residual Effect
P201, P207, P208, P216, P220, P221			
Property Group consisting of: P225, P226	Moderate (adverse, long- term) and significant	n/a	Moderate (adverse, long- term) and significant
A712	Moderate (adverse, short-term) and significant	Replanting of areas of additional windthrow felling	Minor (adverse, long-term) and not significant
Core Path No. 205 Mossdale Kite Walk, Red Kite Trail	Moderate (adverse, long- term) and significant	n/a	Moderate (adverse, long- term) and significant
Core Path No. 153 Airie near Mossdale	Moderate (adverse, long- term) and significant	n/a	Moderate (adverse, long- term) and significant

## **Cumulative Effects**

7.251 **Table 0-32** below summarises the significant cumulative landscape and/or visual effects predicted to arise during the operational phase for the Glenlee to Tongland (G-T) connection.

T)

Summary of Significant Cumulative Effects during	оре
Foothills with Forest – Dumfries and Galloway LCT (176)	<b>Moc</b> loca sign
VP12: Core Path 516 south-west of Glenlee	Мос
VP29: Barstobrick Hill (Neilson's Monument)	Мос
Glenlee	Мос

## **Proposed Mitigation Measures**

7.252 No further additional mitigation measures (beyond those set out in **Table 0-31** above) have been identified to reduce the level and significance of specific identified landscape and visual effects. This is due to the nature of the identified effects, and the limitations for further potential mitigation (e.g. the scale of the proposed infrastructure limits the possibility of screening views).

## Monitoring

7.253 No monitoring of landscape and visual effects or embedded mitigation measures is proposed.

## Table 0-32: Significant Cumulative Effects during Operational Phase: Glenlee to Tongland (G-

## erational Phase: Glenlee to Tongland (G-T)

oderate (adverse, long-term) and significant for a alised area, Minor (adverse, long-term) and not nificant for the LCT as a whole

oderate (adverse, long-term) and significant

oderate (adverse, long-term) and significant

oderate (adverse, long-term) and significant

# Removal of N Route and R Route

## Introduction

- 7.254 The introduction of the new OHL connections of the KTR Project also enable the decommissioning and removal of approximately 169 steel lattice towers (PL1) (11 towers of N Route – 2.5km and 158 towers of R Route – 40.8km) and 43.3km of existing 132kV OHLs as detailed below, and described in Chapter 4 and Chapter 5.
  - the removal of 2.5km of existing 132kV OHL supported on steel lattice towers (PL1) from Polguhanity to Kendoon (N Route, towers: N230 – N240);
  - the removal of approximately 7.6km of existing 132kV OHL supported on steel lattice towers (PL1) between Kendoon, Carsfad, Earlstoun and Glenlee (R Route (north), towers: R000A - R29); and
  - the removal of approximately 33.1km of existing 132kV OHL supported on steel lattice towers (PL1) between Glenlee and Tongland (R Route (south), towers: R30 (R) – R153).
- 7.255 The decommissioning and removal of this infrastructure, following energisation of the new KTR Project connections, will result in a reduction in the extent of transmission infrastructure evident across the Study Area from that present during the construction phase of the KTR Project.
- 7.256 The removal of this infrastructure is generally considered within the assessment of operational effects associated with each relevant individual connection, where the proposed new KTR Project connections are in proximity to, and effectively replace, the existing transmission infrastructure. However, in the case of a substantial proportion of R Route (south) within the Glenkens Valley between Glenlee and Duniop, the decommissioning and removal of this existing infrastructure is not within close proximity or in a similar geographic area to the introduction of the new KTR Project infrastructure, and as such is considered separately.
- 7.257 The approach taken to the consideration of the largely beneficial (positive) effects arising from the decommissioning and removal of N Route, R Route (north) and R Route (south) is outlined below.

## Removal of N Route

7.258 As the existing steel lattice towers (PL1) of N Route occupy and influence a similar geographical area as the proposed KTR Project connections of P-G via K and first spans of C-K, the long-term operational effects of decommissioning and removal of this infrastructure has been considered in the assessment of landscape and visual effects arising from the operation of these proposed new connections. Any beneficial (positive) landscape and visual effects arising from the decommissioning and removal of the existing N Route infrastructure are considered against the pre-existing baseline situation, and are reflected in the reduction in identified effects which occurs between the construction phase (when all existing and proposed infrastructure is present) and the operational phase (when only the proposed new KTR Project connections are present), and are therefore not assessed separately.

## Removal of R Route (north)

7.259 As the existing steel lattice towers (PL1) of R Route (north) occupy and influence a similar geographical area as the proposed KTR Project connections of P-G via K, C-K and E-G, the long-term operational effects of decommissioning and removal of this infrastructure has been considered in the assessment of landscape and visual effects arising from the operation of these proposed new connections. As outlined for N Route above, any beneficial (positive) landscape and visual effects arising from the decommissioning and removal of the existing infrastructure are considered against the pre-existing baseline situation, and are reflected in the reduction in identified effects which may occur between the construction phase and the operational phase of the KTR Project, and are therefore not assessed separately.

## Removal of R Route (south)

7.260 The proposed G-T connection (facilitated by the short BG Deviation) will effectively replace and upgrade the existing R Route (south) 132kV connection between Glenlee substation and Tongland which is currently supported on steel lattice towers (PL1). The G-T connection will however, follow a different geographical alignment to the existing connection over a length of approximately 25km between the existing the terminal R Route (south) terminal tower (tower 30) near Glenlee substation and R Route

tower 126), near Longwood to the west of Dunjop north of the A75. At this point the proposed G-T connection continues southwards closely following the alignment of the existing R Route (south) to its termination at Tongland substation.

- 7.261 The assessment of the proposed G-T connection considers effects arising from its introduction, however it does not consider the removal and potential beneficial (positive) landscape and visual effects which may arise from the decommissioning and removal of a proportion of R Route (south) (97 towers comprising tower 30 to tower 126) located between Glenlee substation and Dunjop. The potential beneficial (positive) landscape and visual effects within the local area arising from the decommissioning and removal of this infrastructure (considered against the pre-existing baseline situation) are assessed below.
- 7.262 The assessment does not consider effects arising from the physical decommissioning and reinstatement activities as part of the removal of R Route (south) during the construction phase, as these short-term effects are not likely to give rise to significant landscape or visual effects and have therefore been scoped out, as detailed in **paragraph 7.16**.
- 7.263 Based on the proposed construction programme set out in **Chapter 5**, the assessment of landscape and visual effects arising from the decommissioning and removal of the towers of R Route (south) (between Glenlee substation and Dunjop) is based on the following assumptions in relation to the baseline situation for the assessment:

## **Operational Phase**

- All new proposed KTR Project connections are present; and
- R Route (north) has been decommissioned and removed.
- 7.264 Significant cumulative landscape or visual effects are considered unlikely to occur where other KTR Project connections will not be present, therefore no assessment of cumulative landscape and visual effects arising in conjunction with the new KTR Project connections or other developments, as listed in Table 7-3 and Table 7-4, has been undertaken.
- 7.265 The consideration of potential cumulative effects arising from the removal of N Route, R Route (north), the southern extent of R Route (south) (tower 127 to 153), and other KTR connections are assessed in the context of the other connections, set out in the preceding sections of the assessment, and the assessment of KTR as a Whole.

### **Existing Infrastructure ZTVs**

- 7.266 Theoretical visibility of the existing R Route (south) between Glenlee substation and Tongland substation is illustrated on Figure 7.4.3 to Figure 7.4.6.
- 7.267 Analysis of this existing visibility is detailed beneath **paragraph 7.86** earlier in this chapter and was used to inform the identification of landscape and visual receptors to illustrate the beneficial (positive, long term) effects which will arise from the decommissioning and removal of R Route (south), which are detailed below.

## Landscape Effects on Landscape Character Types

- 7.268 The landscape baseline for the R Route (south) is described in Appendix 7.4 and shown on Figure 7.7. Potential effects on landscape character types are considered in **Table 0-33** below:
  - Upper Dale Dumfries & Galloway LCT (165) (Host LCT);
  - Flooded Valley LCT (164) (Host LCT);
  - Drumlin Pastures LCT (169) (Host LCT);
  - Foothills with Forest Dumfries & Galloway LCT (176) (Host LCT).

## **Effects on views from Representative Viewpoints**

7.269 Potential visual effects from five representative VPs (VPs 13, 15, 19, 25 and 27) (shown on Figure 7.10) have been considered for the removal of R Route (south) (between Glenlee substation and Dunjop) in Table 0-34 below.

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## **Effects on Views from Settlements**

7.270 Potential visual effects from settlements in the Study Area from where existing views of R Route (south) (between Glenlee substation and Dunjop) and its removal may be experienced are limited to St John's Town of Dalry, New Galloway, Crossmichael, Balmaclellan and Glenlee, and are assessed in Table 0-35 below. Settlements are indicated on Figure 7.10.

### **Effects on Views from Residential Properties**

7.271 Potential visual effects from residential properties located within approximately 150m of the existing towers of R Route (south) (between Glenlee substation and Dunjop) resulting from its removal are assessed in Table 0-36 below. Residential properties are indicated on Figure 7.12.

#### **Effects on Views from Routes**

7.272 Potential visual effects on routes from where views of the existing R Route (south) are seen, and where its removal (between Glenlee substation and Dunjop) will be potentially be apparent, are assessed in Table 0-37 below. Promoted routes are indicated on Figure 10.

## Table 0-33: Assessment of Landscape Effects – Landscape Character Types (LCTs): Removal of R Route (south)

Assessment of Landscape Effects – Landscape Character Types (LCTs): Removal of R Route (south)			
Landscape Character Type (LCT) and Sensitivity	Baseline (includes presence of R Route (south) and Proposed KTR Project Connections)	Magnitude of Change and Significance of Landscape Effects	
Upper Dale Dumfries & Galloway LCT (165) Sensitivity is judged to be <b>medium</b> .	The existing R Route (south) passes through this LCT on the western side of the A713. R Route (south) crosses the A713 east of Glenlee. Other elements of exiting electricity infrastructure within the LCT include Kendoon Power Station, Carsfad Power Station, Earlstoun Power Station and Glenlee Power Station. During the operational phase, the P-G via K, C-K, and E-G connections will occupy a similar proportion of available views from within the LCT.	The decommissioning and removal of R Route (south) will reduce the presence of electricity transmission infrastructure within a small south-eastern part of the LCT where the existing R Route (south) crosses the A713. The P-G via K, C-K, and E-G connections north-east of Glenlee will occupy a similar proportion of available views to the removed R Route (north). This will result in a small scale change experienced across a small geographical extent of the LCT. The magnitude of change will be low. Overall, the level of effect resulting from the removal of R Route (south) will be <b>minor</b> (beneficial) and <b>not significant</b> .	
Flooded Valley LCT (164) Sensitivity is judged to be <b>medium</b> .	The existing R route (south) passes through this LCT largely on the eastern side of Loch Ken. The existing R Route (south) features in key views from within the LCT, including transport routes, settlements, numerous properties, the open waters of Loch Ken and the promoted VP to the north-east of Airds House. No new KTR Project connections are proposed within this LCT.	The decommissioning and removal of R Route (south) will remove any presence of electricity transmission infrastructure within the LCT between Holm of Dalry in the north and the west of Bridgestone in the south. Opportunities for replanting of the redundant wayleave corridor where it passes through blocks of adjacent woodland may be possible within this LCT <sup>40</sup> . This will result in a medium scale change experienced across a medium sized geographical extent of the LCT. Overall, the level of effect resulting from the removal of R Route (south) will be <b>moderate</b> (beneficial) and <b>significant</b> .	

Assessment of Lands	scape Effects – Landscape Character Type	s (LCTs): Removal of R Route (south)
Drumlin Pastures LCT (169) Sensitivity is judged to be <b>medium</b> .	The existing R route (south) passes through this LCT on the eastern side of the A713 before crossing Loch Ken north of Crossmichael and continuing towards Tongland. Other elements of electricity infrastructure include Tongland hydroelectric power station and two small scale wind turbines at Slagnaw Farm. Much of the G-T connection will occupy a similar proportion of available views to the existing R Route (south) between Kirk Road and Balannan. However, the route of the G-T connection will introduce visibility of towers from Laurieston, where G-T crosses the A762 to the south of the settlement.	The decommissioning and removal of R Route (south) will reduce the presence of electricity transmission infrastructure largely between Kirk Road and the cluster of properties near Upper Balannan. The G-T connection will occupy a similar proportion of available views between Upper Balannan and Tongland. Opportunities for replanting of the redundant wayleave corridor where it passes through blocks of adjacent woodland may be possible within this LCT <sup>40</sup> . This will result in a small scale change experienced across a small geographical extent of the LCT. The magnitude of change will be low. Overall, the level of effect resulting from the removal of R Route (south) will be <b>minor</b> (beneficial) and <b>not significant</b>
Foothills with Forest LCT (176) Sensitivity is judged to be <b>medium</b> .	The existing R Route (south) will pass through a small part of this LCT south of Barend Hill. The G-T connection will introduce electricity transmission infrastructure into the area of this LCT associated with the Galloway Forest Park west of the Drumlin Pastures LCT (169)	The decommissioning and removal of R Route (south) will reduce the presence of electricity transmission infrastructure within a small southern part of the LCT where the existing R Route crosses the southern slopes of Barend Hill. This will result in a small scale change experienced across a small geographical extent of the LCT. The magnitude of change will be low. Overall, the level of effect resulting from the removal of R Route (south) will be <b>minor</b> (beneficial) and <b>not significant</b> for a localised area of the LCT.

## Table 0-34: Assessment of Visual Effects – Representative Viewpoints: Removal of R Route (south)

Assessment of Visua	Assessment of Visual Effects – Representative Viewpoints: Removal of R Route (south)			
Viewpoint	Receptors and Sensitivity	Baseline (includes presence of R Route (south) and Proposed KTR Project Connections)	Magnitude of Change and Significance of Visual Effects - Operational Phase	
VP13: A712 west of Balmaclellan (264653, 578354) ( <b>Figure 7.33.1-3</b> )	The VP is representative of sequential views experienced by road users travelling on the A712 and similar views experienced from nearby residential properties at Balmaclellan. Sensitivity is judged to be <b>medium</b> .	Towers of the existing R Route (south) are visible in views west from the VP and A712. The OHL traverses the eastern slopes of the Glenkens Valley within close proximity to the VP and the nearby settlement of Balmaclellan. Towers of the proposed G-T connection will be largely imperceptible from this location as they pass southwards on the west side of the Glenkens Valley, screened by immediate vegetation and landform in views west and south-west.	The steel lattice towers of the G-T connection will be barely perceptible from this location. The decommissioning and removal of R Route (south) will remove the presence of electricity transmission infrastructure from views looking west from this location and from this location and from much of the A712 east of the intersection with Old Edinburgh Road. This will result in a small to medium scale change, experienced locally.	

<sup>40</sup> SP Energy Networks (SPEN) does not have control over these areas and any replanting would be subject to the agreement of landowners. Any replanting is therefore not presented as committed mitigation.

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			Overall, the magnitude of change will be low, and the level of effect		nearby residential properties.	to south-west from this location.	5	from a relatively small geographical area.
			resulting from the removal of R Route (south) will be <b>minor</b> (beneficial) and <b>not</b> significant.		Sensitivity is judged to be <b>high</b> .	The towers are located parallel to the A713 the much of the Study Are crossing the road south	rough a,	Overall, the magnitude of change will be medium, resulting in a moderate (beneficial) and significant effect.
/P15: A762 west of .och Ken 265151, 573211) <b>Figure 7.35.1-4</b> )	The VP is representative of sequential views experienced by road users travelling on the A762, which forms part of the Galloway Kite Trail.	Due to intervening landform and forestry to the west of this location, no towers of the G-T connection will be visible from this VP. Steel lattice towers of the existing R Route (south) are seen in successive long-distance	The decommissioning and removal of R Route (south) will remove the presence of electricity transmission infrastructure from views east across Loch Ken from this location and similar areas alongside the western shore of the loch including much of the A762 between New Galloway and			John's Town of Dalry a of Crossmichael and ca seen in close to middle views from the road. T geographical extent of views will be medium, removal of the towers in a medium scale char view.	nd north in be -distance he similar and the will result	
	Sensitivity is judged to be <b>medium</b> .	views looking east to south-east across Loch Ken, occasionally seen on the skyline in views to the south-east.	Mossdale. This will result in a small scale change experienced from medium geographical area, included views from the western shore and open water of Loch Ken. Overall, the magnitude of change will be low. Overall, the level of effect resulting from the removal of R Route (south) will be <b>minor</b> (beneficial) and <b>not</b> significant.	VP27: B795 east of Laurieston (271279, 564101) ( <b>Figure 7.47.1-7</b> )	This VP is representative of sequential views experienced by road users travelling on the B795, which forms part of the Galloway Red Kite Trail, and views similar to those experienced from nearby residential properties.	The steel lattice towers existing R Route (south seen against the skylin middle distance of succ views, looking north-w south-west. The steel lattice towers will be screened in view looking west, south-we this location by interve landform and features forestry, mixed woodla	n) are e in the cessive est to s of G-T vs est from ning including nd and	The steel lattice towers of the G- connection will be largely screened by intervening vegetation to the south-west of this location. The decommissioning and removal of R Route (south) will remove the presence of electricit transmission infrastructure from views looking north-west to south-west from this location, and from much of the A795 east
(P19: Promoted VP ear Parton/Airds louse 268740, 570842) Figure 7.39.1-9)	The VP is representative of elevated views experienced by recreational receptors on Core Path 192 and the Galloway Red Kite Trail, given the VP's promotion as part of the trail. Sensitivity is judged to be <b>high</b> .	Long-distance views looking north-west to south-west towards the G-T connection will be largely screened by landform and forestry in views. Steel lattice towers of the existing R Route are seen in middle to longer distance successive views looking east to south-east backclothed by woodland and landform in views looking east but otherwise seen on the skyline in views to the south-east.	The steel lattice towers of the G-T connection will be barely perceptible from this location. The decommissioning and removal of R Route (south) will remove the presence of electricity transmission infrastructure visible against the skyline from views looking north, north-west to south-east from this recognised VP. The removal of R Route (south)		Sensitivity is judged to be <b>medium</b> .	agricultural buildings a imperceptible in views VP.		of the intersection with Kirk Road This will result in a small to medium scale change, experienced from across a medium sized geographical area. The decommissioning and removal of R Route will largely remove the presence of any electricity transmission infrastructure in views from this location. Overall, the magnitude of change will be low, resulting ir a <b>minor (beneficial)</b> and <b>not</b> <b>significant</b> effect.
		This location represents the specific and elevated view	will result in a small scale change in the view experienced from a small geographical extent.	Table 0-35: Asses	sment of Visual Effe	ects – Settlements: R	Removal	of R Route (south)
		afforded by visitors to the promoted VP. The geographical	Overall, the magnitude of change will be low, and the level of effect	Assessment of Visu	ıal Effects – Settlemer	nts: Removal of R Rout	e (south)	
		extent of similar views will be small. No other existing elements of energy infrastructure are	resulting from the removal of R Route (south) will be <b>minor</b> (beneficial) and not significant.	Settlement, Receptors and Sensitivity	Baseline in Presence and Proposed KTR P			de of Change and Significance I Effects - Operational Phase
P25: A713 near arton Mill Bridge 272155, 568242) Figure <b>7.45.1-4</b> )	The VP is representative of sequential views experienced by road users on the A713, which forms part of the Robert the Bruce Trail, Galloway Tourist Route and Galloway Kite Trail, and similar views	evident in the view. Given the intervening distance and screening features including forestry at Laurieston Forest and Galloway Forest Park, the G-T connection will be barely perceptible in views from this location. The existing steel lattice towers of the R Route (south) are seen in relatively close-proximity,	The decommissioning and removal of R Route (south) will remove the presence of electricity transmission infrastructure in views looking north to south, south-west from this location and some direct to oblique views experienced from the A713. The removal of R Route (south) will result in a medium scale	Glenlee Residents within the settlement. Sensitivity is judged to be <b>high</b> .	elements are evident i and existing steel lattic feature (primarily exis from the settlement. T (north) extends north substation, whilst the (Tower R30) of R Rout the south-eastern exte from the closest reside	ce towers form a key ting BG Route) in views The existing R Route wards from Glenlee southern terminal tower te (south) is evident at ent of the settlement	Route (se electricity views no settleme The BG I remain, o views loo settleme change, geograph	ommissioning and removal of R outh) will reduce the presence of y transmission infrastructure in rth-east and south-east of this nt. Deviation and G-T connection will occupying a similar proportion of oking west and south-west from thi nt. This will result in a small scale experienced from a small nical extent of the settlement. the magnitude of change will be

		the removal of R Route (south) will be minor (beneficial) and not significant.
St John's Town of Dalry Residents within the settlement. Sensitivity is judged to be <b>high</b> .	From parts of the settlement, including the southern settlement edge, existing electricity transmission infrastructure is visible in views toto the south and west. The Glenlee substation and existing steel lattice towers of R Route (north and south) are seen partly screened by vegetation and backclothed by landform. From some parts of the settlement, the existing number of steel lattice towers (existing BG Route) can be seen against the skyline on the eastern flank of Glenlee Hill.	The decommissioning and removal of R Route (south) will remove the presence of electricity transmission infrastructure in views from the west, south of the settlement where the existing R Route (south) crosses the A713. The P-G via K and E-G connections north- east of Glenlee will remain occupying a similar proportion of available views to the removed R Route (north). This will result in a small scale change, experienced from a small geographical extent of the settlement. Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor (beneficial)</b> and <b>not significant</b> .
New Galloway Residents within the settlement. Sensitivity is judged to be <b>high</b> .	Existing electricity transmission infrastructure elements are not a predominant feature of the outward views from the settlement. Views of the existing steel lattice towers of R Route (south) cancan be seen from dwellings on the north settlement edge along the A712 looking across the Water of Ken.	The decommissioning and removal of R Route (south) will remove the presence of electricity transmission infrastructure in views east from the settlement. The G-T connection in the west, will be barely perceptible from much of the settlement. This will result in a small scale change experienced from a small geographical extent of the settlement. Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor (beneficial)</b> and <b>not significant</b> .
Balmaclellan Residents within the settlement. Sensitivity is judged to be <b>high</b> .	Existing steel lattice towers of the R Route (south) are largely seen in glimpsed longer distance views looking east, partly screened by intervening features including forestry and landform.	The decommissioning and removal of R Route (south) will reduce the presence of electricity transmission infrastructure west of the settlement. The G-T connection will be barely perceptible from much of the settlement. This will result in a small scale change experienced from a small geographical extent of the settlement. Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor (beneficial)</b> and <b>not significant</b> .
Crossmichael Residents within the settlement. Sensitivity is judged to be <b>high</b> .	Existing steel lattice towers of R Route (south) are seen in longer distance views looking north-west to west from Crossmichael, crossing Loch Ken to the north- west of the village and passing through the Ken Valley and drumlin pasture west of Loch Ken, backed by the Laurieston Foothills beyond.	The decommissioning and removal of R Route (south) will remove the presence of electricity transmission infrastructure in views north and west of the settlement. The G-T connection will be barely perceptible from much of the settlement. This will result in a small scale change experienced from a small geographical extent of the settlement. Overall, the magnitude of change will be

		the removal of R Route (south) will be <b>minor (beneficial)</b> and <b>not significant</b>
able 0-36: Assessment	of Visual Effects - Residential Pro	operties: Removal of R Route (sout
Assessment of Visual Effe	cts – Residential Properties: Removal	of R Route (south) <sup>41</sup>
Residential Property or Group, Receptors and Sensitivity	Baseline in Presence of R Route (south) and Proposed KTR Project Connections	Magnitude of Change and Significance of Visual Effects - Operational Phase
P82: Boatknowe Residents. Sensitivity is judged to be <b>high</b> .	Steel lattice towers of the existing R Route (south) are seen in close- proximity views from property curtilage looking north-west and south-east, with OHLs passing over	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from the property and its curtilage and access from the north-east.
	the north of the property curtilage. Outward views are partially screened by woodland and vegetation along the property boundary.	The scale of change will be medium, limit to similar views from a small geographica area, and resulting in an overall medium magnitude of change.
		Overall, the level of effect resulting from removal of R Route (south) will be <b>moderate (beneficial)</b> and <b>significant</b>
P83: Grennan Farm P84: Grennan Cottage P85: Dairy Cottage,	less than 0.1km north and east of the properties and steel lattice towers are seen in close-proximity views looking north-east and north-west, partially screened by intervening buildings and mixed woodland along the property line	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from these properties, curtilage, and access.
Grennan Farm Residents. Sensitivity is judged to be <b>high</b> .		The scale of change will be medium, limit to similar views from a small geographica area, and resulting in an overall medium magnitude of change.
IIIgii.		Overall, the level of effect resulting from removal of R Route (south) will be <b>moderate (beneficial)</b> and <b>significant</b>
P86: Mallard Cottage Residents. Sensitivity is judged to be	Principal views from the property are orientated south-west towards the existing R Route (south). Steel lattice towers of the existing R Route (south)	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from the property and its curtilage and access.
high.	are seen in open and direct close- proximity views looking south and north-west with OHLs passing directly adjacent to the south-west of the property.	The scale of change will be large, limited similar views from a small geographical area, and resulting in an overall high magnitude of change.
		Overall, the level of effect resulting from removal of R Route (south) will be <b>major</b> (beneficial) and significant.
P87: Plover Cottage P88: Curlew Cottage Residents. Sensitivity is judged to be <b>high</b> .	Steel lattice towers of the existing R Route (south) are seen in open and direct middle-distance principal views looking south-east and close-distance views from property curtilage looking north-east.	Decommissioning and removal of R Route will remove presence of electricity transmission infrastructure in views from these properties, curtilage, and access. The scale of change will be medium, limit to similar views from a small geographica area, and resulting in an overall medium

<sup>&</sup>lt;sup>41</sup> The identification of residential properties considered in the assessment of visual effects are detailed in **Table A7.5.62** in **Appendix 7.5**.

The Kendoon to Tongland 132kV Reinforcement Project

Assessment of Visual Effe	ects – Residential Properties: Removal	of R Route (south) <sup>41</sup>	Assessment of Visual Effe	ects – Residential Proper
		Overall, the level of effect resulting from the removal of R Route (south) will be <b>moderate (beneficial)</b> and <b>significant</b> .	Sensitivity is judged to be <b>high</b> .	west filtered by intervenivegetation. Intervening features, inc
289: Garplefoot Residents. Sensitivity is judged to be <b>high</b> .	Principal views from the property are orientated south-west towards the existing R Route (south) and OHLs pass over the south-western corner of the property curtilage. Steel lattice towers are seen in close-proximity views looking south, partially screened by vegetation along the property line.	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from the property and its curtilage and access. The scale of change will be medium, limited to similar views from a small geographical area, and resulting in an overall medium magnitude of change. Overall, the level of effect resulting from the removal of R Route (south) will be <b>moderate (beneficial)</b> and <b>significant</b> .	P112: Mosscroft Residents. Sensitivity is judged to be <b>high</b> .	forestry at Galloway Fore screen the G-T connection from this location. Steel lattice towers of R are seen in partially scre proximity views looking s north-west. G-T connection will not b
91: Old Gateside 92: Craig View Residents. Gensitivity is judged to be <b>igh</b> .	Principal views are orientated north- east and south-east, away from G-T and the existing R Route (south). Steel lattice towers of existing R Route (south) are seen in secondary views and views from property curtilage less than 0.3km west of the properties, partially screened by intervening features including localised landform in views to the west and a small block of forestry in views north-west. Intervening features, including landform and forestry at Galloway Forest Park, will screen the G-T connection in views from this location.	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from these properties, curtilage, and access. The scale of change will be small, limited to similar views from a small geographical area, and resulting in an overall low magnitude of change. Overall, the level of effect resulting from the removal of R Route (south) will be <b>minor</b> (beneficial) and not significant.	P114: Ken Tor Residents. Sensitivity is judged to be <b>high</b> .	this location. R Route (south) passes a north-eastern property b direct views of steel latti afforded in principal view and secondary views to t filtered by vegetation. G-T connection will not b this location.
106: Killochy Farm esidents. ensitivity is judged to be <b>igh</b> .	Secondary views are orientated north- east towards the existing R Route (south), which passes less than 0.2km north-east and east of the property. Steel lattice towers are seen in close- proximity views partially screened by the adjacent farmstead building.	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views to the east from this property, and its curtilage and access. This will result in a medium scale change in views from the property experienced from a small geographical extent. Overall, the magnitude of change will be medium, and the level of effect resulting from the removal of R Route (south) will be <b>moderate (beneficial)</b> and <b>significant</b> .	P115: Nether Ervie Farm P116: Nether Ervie Cottage Residents. Sensitivity is judged to be <b>high</b> .	Steel lattice towers of R are seen in largely open secondary views and vie north to east from prope G-T connection will not b this location.
110: Midpark esidents. ensitivity is judged to be <b>igh</b> .	Principal views are orientated south- east away from G-T and the existing R Route (south). Steel lattice towers of existing R Route are seen in partially screened middle-distance secondary views looking north-west and close- distance views looking less than 0.3km west to south-west from the property curtilage. Intervening features, including forestry at Galloway Forest Park, will screen the G-T connection in views from this location.	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from this property, curtilage, and access. This will result in a small scale change in views from the property experienced from a small geographical extent. Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor (beneficial)</b> and <b>not significant</b> .	P129: Barbershall Residents. Sensitivity is judged to be <b>high</b> .	The existing R Route (so within approximately 0.8 west of the property and towers are seen in open proximity views from the its property curtilage for localised landform. Intervening landform an will screen views of the 0 connection.
2111: Roanbank Residents.	Steel lattice towers of R Route (south) are seen in direct relatively close- distance principal views looking south-	Decommissioning and removal of R Route will remove the presence of electricity	P131: Cogarth Cottage P132: Cogarth	Steel lattice towers of R are evident in close prox

perties: Removal	of R Route (south) <sup>41</sup>
vening	transmission infrastructure in views from this property, curtilage, and access.
including Forest Park, will ection in views	This will result in a small scale change in views from the property experienced from a small geographical extent.
	Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor (beneficial)</b> and <b>not significant</b> .
f R Route (south) screened close- ng south-west to	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from this property, curtilage, and access.
ot be visible from	This will result in a small scale change in views from the property experienced from a small geographical extent.
	Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor (beneficial)</b> and <b>not significant</b> .
es along the ty boundary with attice towers views to the south to the south	Decommissioning and removal of R Route will reduce the presence of electricity transmission infrastructure in views from this property, curtilage, and access.
to the north ot be visible from	The scale of change will be medium, limited to similar views from a small geographical area, and resulting in an overall medium magnitude of change.
	Overall, the level of effect resulting from the removal of R Route (south) will be <b>moderate (beneficial)</b> and <b>significant</b> .
f R Route (south) ben and direct views looking operty curtilage.	Decommissioning and removal of R Route will reduce the presence of electricity transmission infrastructure in views from these properties, curtilage, and access.
ot be visible from	The scale of change will be medium, limited to similar views from a small geographical area, and resulting in an overall medium magnitude of change.
	Overall, the level of effect resulting from the removal of R Route (south) will be <b>moderate (beneficial)</b> and <b>significant</b> .
(south) passes 0.8km to the and steel lattice en close-	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from this property, curtilage, and access.
the property and foreshortened by	This will result in a medium scale change in views from the property experienced from a small geographical extent.
and vegetation ne G-T	Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>moderate (beneficial)</b> and <b>significant</b> .
f R Route (south) roximity views	Decommissioning and removal of R Route will remove the presence of electricity

Assessment of Visual Effects – Residential Properties: Removal of R Route (south) <sup>41</sup>			
Residents.	looking north-west to south-west from the properties, curtilage, and access.	transmission infrastructure in views from these properties, curtilage, and access.	
Sensitivity is judged to be <b>high</b> .	Intervening landform and vegetation will screen views of the G-T connection.	This will result in a small scale change in views from the property experienced from a small geographical extent.	
		Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor (beneficial)</b> and <b>not significant</b> .	
P133: Waterside Residents. Sensitivity is judged to be <b>high</b> .	Principal views are orientated north- west towards the R Route. Steel lattice towers are partially screened by vegetation along the property line in principal views, however open and direct views are afforded from access to the property. Intervening landform and vegetation will screen views of the G-T connection.	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from this property, curtilage, and access. This will result in a small scale change in views from the property experienced from a small geographical extent. Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor (beneficial)</b> and <b>not significant</b> .	
P136: Auchenhay Residents. Sensitivity is judged to be <b>high</b> .	Principal views are orientated north. R Route (south) is evident in close proximity views looking north-west from the property filtered and screened by intervening vegetation. Views of the steel lattice towers of R Route are afforded from the property curtilage in views looking north-west to south-west. Intervening landform and vegetation will screen views of the G-T connection.	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from this property, curtilage, and access. This will result in a small scale change in views from the property experienced from a small geographical extent. Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor (beneficial)</b> and <b>not significant</b> .	
P138: Drumlane Cottage P139: Drumlane House P140: Drumlane Farm Residents. Sensitivity is judged to be <b>high</b> .	Steel lattice towers of the existing R Route (south) are seen in close- proximity principal and secondary views north-east and east from the properties filtered by intervening vegetation. In middle to longer- distance views to the north-east, steel lattice towers are partially screened by intervening woodland at Drumlane Strip. Intervening landform and vegetation will screen views of the G-T connection.	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from these properties, their curtilages', and access. This will result in a small scale change in views from the property experienced from a small geographical extent. Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor (beneficial)</b> and <b>not significant</b> .	
P142: Neuk Farm Residents. Sensitivity is judged to be <b>high</b> .	Steel lattice towers of the existing R Route (south) are seen in largely open close-proximity views looking south- east to north-east from property curtilage and access. Intervening landform and vegetation will screen views of the G-T connection.	Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from these properties, curtilage, and access. This will result in a small scale change in views from the property experienced from a small geographical extent. Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor (beneficial)</b> and <b>not significant</b> .	

Assessment of Visual Effec	cts – Residential Properties: R
P143: Glentoo Cottage P143a: Bluebell Cottage P144: Glentoo Farm Residents. Sensitivity is judged to be <b>high</b> .	Steel lattice towers of the existi Route (south) are seen in relativ open close-proximity principal a secondary views, and from prop curtilage and access to propertie Intervening landform and veget will screen views of the G-T connection.

## Table 0-37: Assessment of Visual Effects – Routes: Removal of R Route (south)

Assessment of	Visual Effects – Repre	esentative Viewpoints: Removal o	f R Route (south)
Route	Receptors and Sensitivity	Baseline in Presence of R Route (south) and Proposed KTR Project Connections	Magnitude of Change and Significance of Visual Effects - Operational Phase
A713 – between Carsphairn and Parton (part of the Galloway Tourist Route,	Road users, including tourists Sensitivity is judged to be <b>medium</b> .	The existing R Route (south) is evident from sections of the road south of St John's Town of Dalry where it crosses the A713 south of Mulloch Hill and then runs roughly parallel to the eastern side of the road crossing again	Decommissioning and removal of R Route (south) will reduce the presence of electricity transmission infrastructure in close proximity sequential views from much of the route between St John's Town of Dalry and Crossmichael.
the Scottish Castle Route and Loch Ken and River Dee Galloway and		north of Crossmichael.	This will result in a small scale change experienced from a moderately widespread geographical extent of the A713.
Southern Ayrshire Biosphere Route)			Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor</b> (beneficial) and <b>not significant</b> .
B795/Burns Country Run – between Laurieston and Glenlochar	Road users, including tourists Sensitivity is judged to be <b>medium</b> .	Existing steel lattice towers of R Route (south) can be seen in close-distance views crossing the B795 at Drumlane approximately at the road's midpoint between Glenlochar and Laurieston.	Decommissioning and removal of R Route (south) will reduce the presence of electricity transmission infrastructure in close proximity to longer distance sequential views between Glenlochar and Laurieston.
(Sections of route form part of Galloway Kite			This will result in a small scale change experienced from a small geographical extent of the B795.
Trail)			Overall, the magnitude of change will be low, and the level of effect resulting from the removal of R Route (south) will be <b>minor</b> (beneficial) and <b>not significant</b> .
Core Path No.	Recreational users	The existing R Route south is	Decommissioning and removal of R
21 Dalry to New Galloway.	Sensitivity is judged to be <b>high</b>	evident in views looking north to east from much of this Core Path which largely passes along the eastern side of the Water of Ken between St John's Town of Dalry and New Galloway.	Route (south) will remove the presence of electricity transmission infrastructure in close proximity to sequential views from this footpath between St John's Town of Dalry and New Galloway.

## Removal of R Route (south)<sup>41</sup>

isting R atively al and roperty erties.

getation

Decommissioning and removal of R Route will remove the presence of electricity transmission infrastructure in views from these properties, their curtilages', and accesses (most notably P143 and P144 located in closest proximity to the existing towers and OHL).

This will result in a medium scale change in views from the property experienced from a small geographical extent.

Overall, the magnitude of change will be medium, and the level of effect resulting from the removal of R Route (south) will be **moderate (beneficial)** and **significant**.

## Assessment of Visual Effects – Representative Viewpoints: Removal of R Route (south)

Assessment of	Visual Effects – Repre	esentative Viewpoints: Removal o	f R Route (south)
			Visibility of KTR Project connections from this Core Path will be limited by the lower elevation of the route and intervening vegetation screening.
			This will result in a medium scale change experienced from a moderately widespread geographical extent of this Core Path.
			Overall, the magnitude of change will be medium, and the level of effect resulting from the removal of R Route (south) will be <b>moderate</b> (beneficial) and significant.
Core Path No. 224 Mulloch Hill, Dalry	Recreational users Sensitivity is judged to be <b>high</b> .	The existing R south crosses this Core Path close to the intersection with Core Path No. 21 near the Water of Ken. This Core Path links St John's Town of Dalry with Mulloch Hill, Holme	Decommissioning and removal of R Route (south) will remove the presence of electricity transmission infrastructure in views looking largely south to south-east from the Core Path.
		Plantation to the east and the Water of Ken to the south. Close proximity to longer distance views of the existing northern and southern sections of R Route are	The P-G via K, C-K, and E-G connections north-east of Glenlee will remain, they will occupy a similar proportion of available views to those of the removed R Route (north).
		evident from much of the Route.	This will result in a small scale change experienced from a moderately widespread geographical extent of this Core Path.
			Overall, the magnitude of change will be medium, and the level of effect resulting from the removal of R Route (south) will be <b>minor</b> (beneficial) and not significant.
Core Path No. 29 Glengunnock Wood.	Recreational users Sensitivity is judged to be <b>high</b> .	The existing R Route (south) crosses this Core Path east of Glengunnock Hill. The Core Path extends through part of Glengunnock Wood between the A713 and the unclassified road	Decommissioning and removal of R Route (south) will reduce the presence of electricity transmission infrastructure in close proximity views looking north and south from the Core Path.
		adjacent to Craichie Burn. Close proximity views of R (south) are evident between the named area of Culdoach and	This will result in a medium scale change experienced from a small geographical extent of this Core Path.
		where the Core Path emeries from Glengunnock Wood west of Donald's Hill.	Overall, the magnitude of change will be medium, and the level of effect resulting from the removal of R Route (south) will be <b>moderate</b> (beneficial) and significant.
Core Path No. 208 Livingston Hill.	Recreational users Sensitivity is judged to be <b>high</b> .	The existing R Route (south) crosses this Core Path south-east of Lockhart Hill. The Core Path provides a route through conifer and mixed woodland on Livingston Hill.	Decommissioning and removal of R Route (south) will reduce the presence of electricity transmission infrastructure in close proximity views looking north to south from the Core Path.
		The existing R Route (south) is evident in more open close proximity views from the southern section part of the Core Path to the north, west and south	This will result in a medium scale change experienced from a small geographical extent of this Core Path.

ooints: Removal o	oints: Removal of R Route (south)	
and to the south gestone Hill.	Overall, the magnitude of change will be medium, and the level of effect resulting from the removal of R Route (south) will be <b>moderate</b> (beneficial) and significant.	

#### Potential Implications of the Proposed Removal of R Route for Designated Landscapes

- 7.273 Potential implications for the Galloway Hills RSA are considered in relation to how the identified effects on landscape character, and views and visual amenity potentially affect the objectives and key characteristics for which the area is designated, as well as the overall integrity of the designated area. As set out in **Appendix 7.4**, no defined special qualities exist for the RSA.
- 7.274 The RSA Technical Paper<sup>Error! Bookmark not defined.</sup> defines the Flooded Valley LCT (164) area of the RSA as 'The whole of this unique, distinctive and attractive character area except for a small area outwith the visual envelope of the loch.' The extent of the Drumlin Pastures LCT (169) included within the RSA is described as 'Peripheral areas within the immediate visual envelope of Loch Ken.'

### Potential Landscape Effects

- 7.275 The proposed removal of R Route (south) will reduce the presence and influences of electricity transmission infrastructure within the settled eastern part of the RSA, and from the 'visual envelopes' associated with the Flooded Valley LCT (164) and small transitional parts of the Drumlin Pastures LCT (169).
- 7.276 The removal of the R Route (south) between Glenlee and the southern extents of Loch Ken will remove all pre-existing electricity transmission infrastructure from the Flooded Valley LCT (164). Landscape effects on the Flooded Valley LCT (164) and the Drumlin Pastures LCT (169) will be moderate (beneficial) and significant.

#### Potential Visual Effects

- 7.277 From within the RSA, views of the existing steel lattice towers of R Route (south) are experienced from a small proportion of the overall extents of the RSA, generally limited to views from lower lying areas in close proximity to the OHL between Glenlee and Laurieston within the Glenkens Valley, and the mid slopes of the valley and surrounding foothills where views of steel lattice towers are possible when the OHL crosses over higher ground and through enclosed drumlin pastures to the east of Loch Ken.
- 7.278 Following removal of the steel lattice towers of R Route (south), existing significant visual effects experienced from within the RSA will be reversed, and no transmission infrastructure will remain within the eastern fringes of the RSA to the east of the A713 between St John's Town of Dalry and the B795 east of Laurieston. Locations representative of the potential change in view experienced from within the eastern part of the RSA following the removal of R Route (south) include:
  - VP13: A712 west of Balmaclellan;
  - VP15: A762 west of Loch Ken;
  - VP19: Promoted viewpoint near Parton/Airds House; and
  - VP25: A713 near Parton Mill Bridge.

#### Conclusion

- 7.279 The removal of R Route (south) will result in moderate (beneficial) and significant effects on the Flooded Valley LCT (164) across a medium sized geographical extent and **minor (beneficial)** and **not** significant effects from smaller localised areas of the Drumlin Pastures LCT (169) including transitional valley slopes and foothills in close proximity to the valley.
- 7.280 Visual effects will be largely minor (beneficial) and not significant with some significant beneficial effects experienced from sections of promoted Core Paths within the RSA where the existing steel lattice towers of R Route (south) will be removed from some close proximity and longer distance views experienced from within the RSA.
- 7.281 Given the beneficial nature of the likely effects associated with the removal of the R Route (south), the integrity of the wider Galloway Hills RSA will not be compromised. The reduction in the presence of vertical infrastructure within the promoted and frequently visited eastern periphery of the RSA along Loch Ken, and specifically the landscape of the Flooded Valley LCT from which all existing electricity transmission infrastructure will be removed, will enhance 'The whole of this unique, distinctive and

attractive character area' and the 'Peripheral areas within the immediate visual envelope of Loch Ken' formed by the adjacent Drumlin Pastures LCT east of the loch.

# Summary of Significant Effects – Removal of N Route and R Route

7.282 This section summarises the significant landscape and visual effects, arising during the operational phase of the KTR Project following removal of R Route (south)<sup>42</sup>.

## **Operational Effects**

## Landscape Effects

7.283 Moderate (beneficial, long-term) and significant landscape effects are predicted to arise for the Flooded Valley LCT (164), from which all existing electricity transmission infrastructure will be removed, during the operational phase for the following Removal of R Route (south).

## Visual Effects

7.284 **Table 0-38** below summarises the (beneficial, long-term) significant visual effects predicted to arise during the operational phase following removal of R Route (south).

## Table 0-38: Significant Visual Effects during Operational Phase: Removal of R Route (south)

Summary of Significant Visual Effects during Operational Phase: Removal of R Route (south)		
Flooded Valley LCT (164)	Moderate (beneficial, long-term) and significant	
VP25: A713 near Parton Mill Bridge	Moderate (beneficial, long-term) and significant	
P82: Boatknowe	Moderate (beneficial, long-term) and significant	
Property Group consisting of: P83, P83, P85	Moderate (beneficial, long-term) and significant	
Property Group consisting of: P87, P88	Moderate (beneficial, long-term) and significant	
P86: Mallard Cottage	Major (beneficial, long-term) and significant	
P89: Garplefoot	Moderate (beneficial, long-term) and significant	
P106: Killochy Farm	Moderate (beneficial, long-term) and significant	
P114: Ken Tor	Moderate (beneficial, long-term) and significant	
Property Group consisting of: P115, 116	Moderate (beneficial, long-term) and significant	
P129: Barbershall	Moderate (beneficial, long-term) and significant	
Property Group consisting of: P143, P143a, P144	Moderate (beneficial, long-term) and significant	
Core Path No. 21 Dalry to New Galloway	Moderate (beneficial, long-term) and significant	
Core Path No. 29 Glengunnock Wood	Moderate (beneficial, long-term) and significant	
Core Path No. 208 Livingston Hill	Moderate (beneficial, long-term) and significant	

<sup>&</sup>lt;sup>42</sup> The removal of N route and R route (north) were not assessed separately for the reasons explained in paragraphs 7.258 and 7.259 above. The Kendoon to Tongland 132kV Reinforcement Project

## **Proposed Mitigation Measures**

7.285 No additional mitigation measures have been identified as required to reduce the level and significance of specific identified landscape and visual effects arising following the removal of R Route (south).

## Monitoring

7.286 No monitoring of landscape and visual effects or embedded mitigation measures is proposed.

Chapter 7: Landscape and Visual Amenity

August 2020

# KTR Project as a Whole: Assessment of Effects

- 7.287 This section presents an assessment of landscape and visual effects arising from the KTR Project as a Whole, both individually and cumulatively. The proposed KTR Project connections and ancillary development comprising the KTR Project as a Whole, are described in detail in **Chapter 4**, shown on Figures 4.1 to 4.7 and summarised below:
  - a new 132kV double circuit steel lattice tower (L7) OHL, of approximately 10.1km in length, between Polguhanity and the existing Glenlee substation, via Kendoon substation (approximately 3km south of the Polguhanity terminal tower) (P-G via K Connection);
  - a new 132kV single circuit wood pole (Trident) OHL, of approximately 2.6km in length, between Carsfad and Kendoon (C-K Connection):
  - a new 132kV single circuit wood pole (Trident) OHL, of approximately 1.6km in length, between Earlstoun and Glenlee (E-G Connection);
  - a new 132kV double circuit steel lattice tower (L4) OHL deviation of the existing BG route, from Glenlee substation approximately 1.2km in length (B-G Deviation); and
  - a new 132kV double circuit steel lattice tower (L4) OHL, of approximately 32.3km in length, between Glenlee and Tongland (G-T Connection).
- 7.288 Construction of the KTR Project connections will also require the removal, realignment, relocation or undergrounding of existing distribution infrastructure<sup>43</sup> which is currently located within close proximity of the proposed connections.
- 7.289 The introduction of the new OHL connections of the KTR Project detailed above will also enable the decommissioning and removal of approximately 43.3km of existing 132kV steel lattice tower OHLs shown on **Figure 1.3**, comprising:
  - the removal of 2.5km of existing 132kV steel lattice tower (PL1) OHL from Polquhanity to Kendoon (N Route, towers: N230 - N240);
  - the removal of approximately 7.6km of existing 132kV steel lattice tower (PL1) OHL between Kendoon, Carsfad, Earlstoun and Glenlee (R Route (north) – northern section, towers: R000A – R29); and
  - the removal of approximately 33.1km of existing 132kV steel lattice tower (PL1) OHL between Glenlee and Tongland (R Route (south) - southern section, towers: R30 (R) - R153).

## **Approach to Assessment**

- 7.290 Where the assessment of landscape and visual effects, including cumulative effects, for each individual connection comprising the KTR Project identifies significant effects arising from the introduction of one or more connection these effects are summarised below, along with a judgement on the overall likely effect for the KTR Project as a Whole.
- 7.291 Where receptors which are considered in the assessment will only be affected by the introduction of one individual proposed connection, comprising the KTR Project, effects arising from the introduction of the KTR Project as a Whole are considered to be the same as the effects identified in the assessment of each individual connection. As such, they are therefore not repeated below.

## **Construction Effects**

7.292 The landscape and visual effects predicted to arise during the construction phase of the individual KTR Project connections are generally localised in nature, however, there is potential for construction related activities associated with more than one connection of the KTR Project to overlap in such a way that they could combine to result in an increased level of effect for a particular receptor (or group of receptors). This section considers the situation where there is potential for combined effects to occur on receptors / groups of receptors in a particular location relevant to multiple connections of the KTR Project, taking

into account the description of the works set out in Chapter 4 and Chapter 5, shown on Figures 4.1 to 4.7 and summarised beneath paragraph 7.8 above. Unless otherwise stated, these combined effects are judged to be adverse (negative).

## Likelv Effects

7.293 **Table 0-39** below sets out the residual effects identified for each receptor / group of receptors in a particular location likely to be affected by one or more of the proposed KTR Connections, which comprise the KTR Project as a Whole (highlighted in green), during the construction phase of the project.

## Table 0-39: Summary of Residual Construction Effects for the Individual Connections and the **KTR Project as a Whole**

Receptor	KTR Project Connection(s)	Likely Residual Effect during Construction Phase for Individual Connections and KTR Project as a Whole
Landscape Effects		
Upper Dale – Dumfries & Galloway (165)	P-G via K	Moderate (adverse, short-term) significant – locally, Minor (adverse, short-term) not significant for LCT as a whole
	С-К	Minor (adverse, short-term) not significant locally, and for LCT as a whole
	E-G	Minor (adverse, short-term) not significant locally, and for LCT as a whole
	BG Deviation	Minor (adverse, short-term) not significant locally, and for LCT as a whole
	G-T	Minor (adverse, short-term) not significant locally, and for LCT as a whole
	KTR as a Whole	Moderate (adverse, short-term) significant – locally, Minor (adverse, short-term) not significant for LCT as a whole
Foothills with Forest – Dumfries and Galloway LCT (176)	P-G via K	Minor (adverse, short-term) not significant locally, and for LCT as a whole
	BG Deviation	Minor (adverse, short-term) not significant locally, and for LCT as a whole
	G-T	Moderate (adverse, short-term) significant – locally, Minor (adverse, short-term) not significant for LCT as a whole
	KTR as a Whole	Moderate (adverse, short-term) significant – locally, Minor (adverse, short-term) not significant for LCT as a whole
Visual Effects		
VP4: Footbridge access to Kendoon	P-G via K	Major (adverse, short-term) significant
	С-К	Moderate (adverse, short-term) significant
	KTR as a Whole	Major (adverse, short-term) significant
	P-G via K	Moderate (adverse, short-term) significant

 $<sup>^{43}</sup>$  Elements of the existing 240v, 33kV and 11kV electricity distribution network.

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eceptor	KTR Project Connection(s)	Likely Residual Effect during Construction Phase for Individual Connections and KTR Project as a Whole	Receptor	KTR Project Connec
/P5: B7000 west of Glenhoul	С-К	Minor (adverse, short-term) not significant		KTR as a Whole
Hill	KTR as a Whole	Moderate (adverse, short-term) significant	St Johns Town of Dalry	P-G via K
VP7: Southern Upland Way	P-G via K	Moderate (adverse, short-term) significant		E-G
near Waterside Hill	E-G	Minor (adverse, short-term) not significant	-	BG Deviation
	BG Deviation	Minor (adverse, short-term) not significant		 G-Т
	G-T	Minor (adverse, short-term) not significant		KTR as a Whole
	KTR as a Whole	Moderate (adverse, short-term) significant	Glenlee	P-G via K
VP8: Southern Upland Way near St John's Town of Dalry	P-G via K	Moderate (adverse, short-term) significant		 E-G
hear St John's Town of Dairy	E-G	Minor (adverse, short-term) not significant		BG Deviation
	KTR as a Whole	Moderate (adverse, short-term) significant		G-T
VP9: Mulloch Hill	P-G via K	Minor (adverse, short-term) not significant		KTR as a Whole
	E-G	Minor (adverse, short-term) not significant	P44: Stroangassel Farm	P-G via K
	BG Deviation	Minor (adverse, short-term) not significant		
	G-T	Minor (adverse, short-term) not significant	···	С-К
	KTR as a Whole	Minor (adverse, short-term) not significant	••••••••••••••••••••••••••••••••••••••	KTR as a Whole
VP10: A762 north of Glenlee	P-G via K	Moderate (adverse, short-term) significant	P45: Carsfad Cottage	P-G via K
	E-G	Moderate (adverse, short-term) significant		С-К
	KTR as a Whole	Moderate (adverse, short-term) significant		KTR as a Whole
VP11: Unclassified road (U3S) south-west of Glenlee	BG Deviation	Minor (adverse, short-term) not significant	P53: Staffa	P-G via K
(035) south-west of Giennee	G-T	Moderate (adverse, short-term) significant		E-G
	KTR as a Whole	Moderate (adverse, short-term) significant		KTR as a Whole
VP12: Core Path 516 south- west of Glenlee	BG Deviation	Minor (adverse, short-term) not significant	P56: Waterside, Glenlee	P-G via K
west of Glemee	G-T	Major (adverse, short-term) significant		E-G
	KTR as a Whole	Major (adverse, short-term) significant		KTR as a Whole
Dundeugh	P-G via K	Moderate (adverse, short-term) significant	P76: Glenlee Kennels	BG Deviation
	С-К	Minor (adverse, short-term) not significant		G-T
	KTR as a Whole	Moderate (adverse, short-term) significant		KTR as a Whole
Kendoon	P-G via K	Major (adverse, short-term) significant	A713	P-G via K
	С-К	Moderate (adverse, short-term) significant		]

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ı(s)	Likely Residual Effect during Construction Phase for Individual Connections and KTR
	Project as a Whole Major (adverse, short-term) significant
	Moderate (adverse, short-term) significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Moderate (adverse, short-term) significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Moderate (adverse, short-term) significant
	Moderate (adverse, short-term) significant
	Moderate (adverse, short-term) significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Moderate (adverse, short-term) significant
	Minor (adverse, short-term) not significant
	Moderate (adverse, short-term) significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Minor (adverse, short-term) not significant
	Moderate (adverse, short-term) significant
	1

Receptor	KTR Project Connection(s)	Likely Residual Effect during Construction Phase for Individual Connections and KTR Project as a Whole
	С-К	Minor (adverse, short-term) not significant
	G-T	Minor (adverse, short-term) not significant
	KTR as a Whole	Moderate (adverse, short-term) significant
A762	P-G via K	Moderate (adverse, short-term) significant
	E-G	Minor (adverse, short-term) not significant
	G-T	Minor (adverse, short-term) not significant
	KTR as a Whole	Moderate (adverse, short-term) significant
B7000	P-G via K	Minor (adverse, short-term) not significant
	С-К	Minor (adverse, short-term) not significant
	KTR as a Whole	Minor (adverse, short-term) not significant
Southern Upland Way	P-G via K	Moderate (adverse, short-term) significant
	E-G	Minor (adverse, short-term) not significant
	KTR as a Whole	Moderate (adverse, short-term) significant

- 7.294 Likely significant landscape and visual effects arising during the construction phase of the KTR Project as a Whole will generally be concentrated within the northern extent of the KTR Project area, between the existing Polguhanity terminal tower compound and Glenlee substation, and within the vicinity of the existing Glenlee substation and its proposed extension<sup>44</sup>. Within this area, the P-G via K, C-K and E-G connections of the KTR Project will effectively replace the existing N Route and R Route (north) during operation of the KTR Project. Due to the relatively contained geographical area within which the proposed infrastructure of these connections will be introduced, alongside the existing infrastructure of N Route and R Route (north) which will remain present in an operational/energised state throughout the construction phase, a concentration of likely significant landscape and visual effects is anticipated to arise for landscape and visual receptors located in relatively close proximity to the proposed connections. As identified within the assessment of the individual connections, and owing to the scale of the proposed infrastructure and associated level of construction activity and disturbance, where receptors will be affected by more than one connection of the KTR Project, effects arising from the introduction of the P-G via K connection will generally exceed those arising from the introduction of the smaller C-K or E-G connections.
- 7.295 Some receptors will experience effects arising from the introduction of multiple KTR Project connections in combination, when considered as KTR as a Whole, however these effects are not considered to exceed those identified for the P-G via K connection, which will in each instance make the greatest contribution to the landscape and visual effects which are identified.
- 7.296 In the vicinity of the small settlement of Glenlee and the adjacent existing substation, a number of connections comprising the KTR Project will be constructed in close proximity to one another, as well as to the existing infrastructure of R Route (north and south) and BG Route, which will remain present in an operational/energised state throughout the construction phase. When considering the KTR Project as a Whole, the combination of landscape and visual effects arising from the individual connections will potentially give rise to significant effects. The effects which will arise from the construction of each

<sup>44</sup> Glenlee substation extension subject to a separate planning application submitted to D&GC in September 2019 - 19/1498/FUL

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## Proposed Mitigation

7.297 On the assumption that the mitigation measures identified for the individual KTR Project connections are all implemented, the identified effects predicted to arise for the KTR as a Whole are informed by the residual effects of each KTR Project connection. No additional mitigation measures for landscape and visual effects are identified for the KTR Project as a Whole during the construction phase, beyond those identified for the individual KTR Project Connections.

## Residual Effects

7.298 The residual significant landscape and visual effects which will arise from the introduction of the KTR Project as a Whole during the construction phase are therefore those presented in **Table 0-39** above, and summarised in Table 0-42 below.

## **Operational Effects**

7.299 The assessment of effects of the KTR Project as a Whole considers the combined effects arising during the operational phase of the KTR Project, as outlined in Chapter 4, shown on Figures 4.1 to 4.7 and summarised beneath **paragraph 7.8** above. Unless otherwise stated, these combined effects are judged to be adverse (negative).

## Likely Effects

7.300 **Table 0-39** below sets out the effects identified for each receptor/group of receptors in a particular location likely to be affected by one or more of the proposed KTR Connections and/or the removal of N Route or R Route during the operational phase of the KTR Project.

## Table 0-40: Summary of Residual Operational Effects for the Individual Connections and the **KTR Project as a Whole**

Receptor	KTR Project Connection(s)	Likely Residual Effect during Operational Phase for Individual Connections and KTR Project as a Whole
Landscape Effects		
Upper Dale – Dumfries & Galloway (165)	P-G via K	Moderate (adverse, long-term) significant
	С-К	Minor (adverse, long-term) not significant
	E-G	Minor (adverse, long-term) not significant
	BG Deviation	Minor (adverse, long-term) not significant
	G-T	Minor (adverse, long-term) not significant
	Removal of R Route (south)	Minor (beneficial, long-term) not significant
	KTR as a Whole	Moderate (adverse, long-term) significant
Foothills with Forest – Dumfries and Galloway LCT	P-G via K	Minor (adverse, long-term) significant
(176)	BG Deviation	Minor (adverse, long-term) significant
	G-T	Moderate (adverse, long-term) significant

Receptor	KTR Project Connection(s)	Likely Residual Effect during Operational Phase for Individual Connections and KTR Project as a Whole
	Removal of R Route (south)	Minor (beneficial, long-term) not significant
	KTR as a Whole	Moderate (adverse, long-term) significant
Flooded Valley LCT (164)	P-G via K	Minor (adverse, long-term) not significant
	Removal of R Route (south)	Moderate (beneficial, long-term) significant
	KTR as a Whole	Moderate (beneficial, long-term) significant
Drumlin Pastures LCT (169)	G-T	Moderate (adverse, long-term) significant
	Removal of R Route (south)	Minor (beneficial, long-term) not significant
	KTR as a Whole	Moderate (adverse, long-term) significant
Visual Effects		
VP4: Footbridge access to Kendoon	P-G via K	Moderate (adverse, long-term) significant
Kendoon	С-К	Minor (adverse, long-term) not significant
	KTR as a Whole	Moderate (adverse, long-term) significant
VP5: B7000 west of Glenhoul Hill	P-G via K	Minor (adverse, long-term) not significant
	С-К	Minor (adverse, long-term) not significant
	KTR as a Whole	Minor (adverse, long-term) not significant
VP7: Southern Upland Way	P-G via K	Moderate (adverse, long-term) significant
near Waterside Hill	E-G	Minor (adverse, long-term) not significant
	BG Deviation	Minor (adverse, long-term) not significant
	G-T	Minor (adverse, long-term) not significant
	KTR as a Whole	Moderate (adverse, long-term) significant
VP8: Southern Upland Way	P-G via K	Moderate (adverse, long-term) significant
near St John's Town of Dalry	E-G	Minor (adverse, long-term) not significant
	KTR as a Whole	Moderate (adverse, long-term) significant
VP9: Mulloch Hill	P-G via K	Minor (adverse, long-term) not significant
	E-G	Minor (adverse, long-term) not significant
	BG Deviation	Minor (adverse, long-term) not significant
	G-T	Minor (adverse, long-term) not significant
	KTR as a Whole	Minor (adverse, long-term) not significant
VP10: A762 north of Glenlee	P-G via K	Minor (adverse, long-term) not significant

Receptor	KTR Project Connection(s)	Likely Residual Effect during Operational Phase for Individual Connections and KTR Project as a Whole	
	E-G	Minor (adverse, long-term) not significant	
	KTR as a Whole	Minor (adverse, long-term) not significant	
VP11: Unclassified road (U3S) south-west of Glenlee	BG Deviation	Minor (adverse, long-term) not significant	
(055) south west of Glemee	G-T	Minor (adverse, long-term) not significant	
	KTR as a Whole	Minor (adverse, long-term) not significant	
VP12: Core Path 516 south- west of Glenlee	BG Deviation	Minor (adverse, long-term) not significant	
west of Gleffiel	G-T	Major (adverse, long-term) significant	
	KTR as a Whole	Major (adverse, long-term) significant	
Dundeugh	P-G via K	Moderate (adverse, long-term) significant	
	С-К	Minor (adverse, long-term) not significant	
	KTR as a Whole	Moderate (adverse, long-term) significant	
Kendoon	P-G via K	Moderate (adverse, long-term) significant	
	С-К	Minor (adverse, long-term) not significant	
	KTR as a Whole	Moderate (adverse, long-term) significant	
St Johns Town of Dalry	P-G via K	Minor (adverse, long-term) not significant	
	E-G	Minor (adverse, long-term) not significant	
	BG Deviation	Minor (adverse, long-term) not significant	
	G-T	Minor (adverse, long-term) not significant	
	Removal of R Route (south)	Minor (beneficial, long-term) not significant	
	KTR as a Whole	Minor (adverse, long-term) not significant	
Glenlee	P-G via K	Minor (adverse, long-term) not significant	
	E-G	Minor (adverse, long-term) not significant	
	BG Deviation	Moderate (adverse, long-term) significant	
	G-T	Moderate (adverse, long-term) significant	
	Removal of R Route (south)	Minor (beneficial, long-term) not significant	
	KTR as a Whole	Moderate (adverse, long-term) significant	
P44: Stroangassel Farm	P-G via K	Minor (adverse, long-term) not significant	
	С-К	Minor (adverse, long-term) not significant	

Receptor	KTR Project Connection(s)	Likely Residual Effect during Operational Phase for Individual Connections and KTR Project as a Whole
	KTR as a Whole	Minor (adverse, long-term) not significant
P45: Carsfad Cottage	P-G via K	Minor (adverse, long-term) not significant
	С-К	Minor (adverse, long-term) not significant
	KTR as a Whole	Minor (adverse, long-term) not significant
P53: Staffa	P-G via K	Minor (adverse, long-term) not significant
	E-G	Minor (adverse, long-term) not significant
	KTR as a Whole	Minor (adverse, long-term) not significant
P56: Waterside, Glenlee	P-G via K	Minor (adverse, long-term) not significant
	E-G	Minor (adverse, long-term) not significant
	KTR as a Whole	Minor (adverse, long-term) not significant
P76: Glenlee Kennels	BG Deviation	Minor (adverse, long-term) not significant
	G-T	Minor (adverse, long-term) not significant
	KTR as a Whole	Minor (adverse, long-term) not significant
A713	P-G via K	Moderate (adverse, long-term) significant
	С-К	Minor (adverse, long-term) not significant
	G-T	Minor (adverse, long-term) not significant
	Removal of R Route (south)	Minor (beneficial, long-term) not significant
	KTR as a Whole	Moderate (adverse, long-term) significant
A762	P-G via K	Moderate (adverse, long-term) significant
	G-T	Minor (adverse, long-term) not significant
	KTR as a Whole	Moderate (adverse, long-term) significant
B7000	P-G via K	Minor (adverse, long-term) not significant
	С-К	Minor (adverse, long-term) not significant
	KTR as a Whole	Minor (adverse, long-term) not significant
Southern Upland Way	P-G via K	Minor (adverse, long-term) not significant
	E-G	Minor (adverse, long-term) not significant

Receptor	KTR Project Connection(s
	KTR as a Whole

- 7.301 As for the construction phase, likely significant landscape and visual effects arising during the operational phase of the KTR Project as a Whole will generally be concentrated within the northern extent of the KTR Project area, between the existing Polquhanity terminal tower compound and Glenlee substation, and within the vicinity of the existing Glenlee substation and its proposed extension. Long-term likely significant landscape and visual effects are anticipated to arise for landscape and visual receptors located in relatively close proximity to the proposed connections of P-G via K, C-K and E-G, following the decommissioning and removal of the existing N Route and R Route (north)<sup>45</sup>.
- 7.302 Some receptors will experience effects arising from multiple KTR Project connections in combination, when considering as KTR as a Whole, however these effects are unlikely to exceed those identified for the P-G via K connection. In each instance the latter will make the greatest contribution to the landscape and visual effects identified.
- 7.303 Effects on some receptors arising from the introduction of the proposed KTR Project connections will be offset by the removal of the existing N Route, R Route (north) and R Route (south). Where the KTR Project connections (P-G via K, C-K and E-G) will effectively replace the existing N Route and R Route (north), the long-term effects of removal of this infrastructure are considered in the assessment of effects predicted to arise during the operational phase of the relevant connection. In the case of a large section of R Route (south - approximately 25km between the existing R Route (south) terminal tower (tower 30) near Glenlee substation and R Route tower 126, near Longwood to the west of Dunjop north of the A75), its decommissioning and removal is likely to result in a number of long-term beneficial landscape and visual effects arising during operation of the KTR Project. Where these effects are predicted to arise for receptors which will also experience effects from the introduction of the G-T connection, they are considered in the context of the KTR Project as a Whole.

## Proposed Mitigation

7.304 On the assumption that the embedded and additional mitigation measures identified for the individual KTR Project connections are implemented, the identified effects predicted to arise for the KTR as a Whole are informed by the residual effects of each KTR Project connection. No additional mitigation measures for landscape and visual effects are identified for the KTR Project as a Whole during the operational phase, beyond those identified for the individual KTR Project Connections.

## Residual Effects

7.305 No mitigation measures additional to those identified for individual connections of the KTR Project have been identified. As such, the residual significant landscape and visual effects which will arise from the introduction of the KTR Project as a Whole during the operational phase are therefore those presented in Table 0-40 above, and summarised in Table 0-42 below.

## **Cumulative Effects**

7.306 The assessment of the individual KTR Project connections considered the potential for additional cumulative landscape and visual effects (during the operational phase only) in conjunction with all other proposed KTR Connections and all other developments listed in **Table 7-3** (wind farm developments) and **Table 7-4** (other electricity transmission infrastructure). A number of significant cumulative landscape and visual effects were identified, and these are summarised in Table 0-41 below.

## Likely Residual Effect during Operational Phase for Individual Connections and KTR Project as a Whole

Minor (adverse, long-term) not significant

<sup>&</sup>lt;sup>45</sup> Decommissioning will be completed within approximately the first six months of the new connections becoming operational.

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Table 0-41: Summary of Significant Cumulative Effects during Operational Phase

Summary of Significant Cumulative Effects during Operational Phase				
Receptor	KTR Connection(s)	Significant Cumulative Effect		
Upper Dale – Dumfries & Galloway LCT (165)	P-G via K	Moderate (adverse, long-term) significant		
Foothills with Forest – Dumfries and Galloway LCT (176)	G-T	Moderate (adverse, long-term) significant		
VP4: Footbridge access to Kendoon	P-G via K	Moderate (adverse, long-term) significant		
VP7: Southern Upland Way near Waterside Hill	P-G via K	Moderate (adverse, long-term) significant		
VP12: Core Path 516 south-west of Glenlee	G-T	Moderate (adverse, long-term) significant		
VP29: Barstobrick Hill (Neilson's Monument)	G-T	Moderate (adverse, long-term) significant		
Dundeugh	P-G via K	Moderate (adverse, long-term) significant		
Kendoon	P-G via K	Moderate (adverse, long-term) significant		
Glenlee	BG Deviation	Moderate (adverse, long-term) significant		
	G-T	Moderate (adverse, long-term) significant		

- 7.307 The majority of these significant cumulative landscape or visual effects are judged to arise from the interaction of the individual connection/s comprising the KTR Project, rather than the interaction with the other developments considered in the cumulative assessment. This is predominantly by virtue of distance between the connections comprising the KTR Project and their similar geographical area situated within, or in close proximity to, the Glenkens Valley, whilst the other developments (predominantly wind energy developments) are located on the elevated foothills and plateau landscapes to the east of the valley.
- 7.308 The exception to this is the interaction between the proposed Glenlee Substation Extension and the proposed BG Deviation and G-T connections of the KTR Project. Located in close proximity to one another, the introduction of the BG Deviation and/or G-T connections is expected to result in significant cumulative visual effects on views from residential properties within the small settlement of Glenlee.
- 7.309 In the case of the introduction of the G-T connection in views from VP 29: Barstobrick Hill (Neilson's Monument), significant cumulative visual effects are anticipated to arise when considered in the context of the consented and proposed wind farms which will form a key feature in views beyond the OHL to the north, north-east.
- 7.310 When considering the combined effects arising from the introduction of the KTR Project as a Whole, in conjunction with all other developments listed in **Table 7-3** and **Table 7-4** which are assumed to be present, no additional significant cumulative effectives are predicted to occur from the introduction of the KTR Project as a Whole beyond those identified in the assessment of cumulative effects undertaken for each individual connection.
- 7.311 As such no further consideration or assessment of cumulative landscape and visual effects arising from the KTR Project as a Whole in combination with all other developments has been undertaken, and therefore the cumulative landscape and visual effects anticipated to arise in relation to the KTR Project as a Whole are presented in Table 0-41 above.

## Potential Implications of the proposed KTR Project as a Whole for Designated Landscapes

- 7.312 Potential implications for the Galloway Hills RSA have been considered for each individual connection comprising the KTR Project, in relation to how the identified effects on landscape character, and views and visual amenity potentially affect the objectives and key characteristics for which the area is designated, as well as the overall integrity of the designated area. As set out in **Appendix 7.4**, no defined special qualities exist for the RSA.
- 7.313 Long-term significant effects are predicted to arise for landscape and visual receptors located within the RSA from the introduction of the P-G via K, BG Deviation and G-T connections, in no instance will the integrity of the wider Galloway Hills RSA be compromised.
- 7.314 When considering the introduction of these connections, along with the C-K and E-G connections, and the decommissioning and removal of N Route and R Route (north and south), collectively comprising the KTR Project as a Whole, the effects on landscape character, and views and visual amenity of the RSA are not considered to exceed those identified for the individual connections. Effects are predicted to be concentrated in close proximity to the proposed infrastructure and representing a small geographical extent of the overall area of the RSA. Significant effects will arise for both landscape and visual receptors, however the introduction of the KTR Project as a Whole will not significantly compromise the integrity of the Galloway Hills RSA.

# Interrelationship between Effects

- 7.315 The likely landscape and visual effects of the KTR Project new connections and removal of the N Route and R Route (north and south), as well as the effects of the KTR Project as a Whole may result in some potential interactions with effects assessed in relation to other disciplines as assessed in other Chapters within the EIA Report. The potential interactions are summarised in **Chapter 3**.
- 7.316 The landscape and visual effects arising from the KTR Project are influenced by the felling of forestry and woodland as detailed in **Chapter 8**. The assessment has considered the consequential implications for landscape and visual effects arising from this felling, whilst the replanting of areas of windthrow felling<sup>46</sup> has been considered as additional mitigation (as set out in paragraph 7.69 to paragraph 7.71 and detailed in Appendix 5.2) and has influenced the identification of a number of alternative residual effects.
- 7.317 In specific regard to effects of the KTR Project on landscape and visual receptors, some potential interactions may arise in relation to the setting of heritage assets. These potential effects are described in **Chapter 12**. The effects arising from the potential impacts of the proposed development on landscape and visual receptors and the setting of key heritage assets are however distinct; the first is an effect on the landscape character and how the effects are perceived by people, while the second is an effect on the heritage setting of individual or groups of assets.
- 7.318 Other interrelated effects are likely to arise in respect of receptors considered within **Chapter 15**, which considers the likely effects on visitor attractions and tourism potential. These findings are informed by the assessment of likely significant landscape and visual effects.
- 7.319 Potential effects on views and visual amenity experienced by residents are considered in relation to effects experienced by these receptors from settlements (including consideration of groups of residential properties) and from individual residential properties / small groups of residential properties. Residential visual amenity forms one component of 'residential amenity'. Development can however give rise to effects on one or more components of residential amenity, for example effects of noise, dust, access to daylight, vibration, outlook and visual amenity, sometimes collectively referred to as 'living conditions'.
- 7.320 The assessment of visual effects does not identify visual effects of such magnitude that they warrant further assessment in respect of a detailed Residential Visual Amenity Assessment (RVAA), however the identified effects on views and visual amenity, as experienced by residential receptors, are considered in

<sup>&</sup>lt;sup>46</sup> These areas of forestry lost due to windthrow will be restocked in line with the Forestry and Land Management (Scotland) Act 2018 ("2018 Act") and associated The Felling (Scotland) Regulations 2019

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the context of interrelated effects on other components of residential amenity, including those set out in **Chapter 13: Traffic and Transport** and **Chapter 14: Noise**.

- 7.321 These interrelated effects are detailed further in **Chapter 17: Assessment of Intra-Connection and Intra-KTR Effects**.
- 7.322 No further interrelationships between effects have been identified.

# Further Survey Requirements and Monitoring

7.323 No further surveying or monitoring of landscape and visual effects or embedded mitigation measures is proposed.

# Summary of Significant Effects

- 7.324 The assessment has identified significant landscape and visual effects during both the construction and operational phases of the KTR Project including cumulatively with other developments.
- 7.325 **Table 0-42**Error! Reference source not found. below summarises the predicted significant effects, including cumulative effects in relation to landscape and visual amenity.

## Table 0-42: Summary of Significant Effects

Receptor	Significance of Effect	Additional Mitigation	Significance of Residual Effect		
P-G via K	P-G via K				
Construction (all effects are	e short-term)				
Upper Dale – Dumfries and Galloway Landscape Character Type (LCT) (165)	<b>Moderate</b> locally ( <b>Minor</b> for the LCT as a whole)	n/a	<b>Moderate</b> locally ( <b>Minor</b> for the LCT as a whole)		
VP1: Layby on A713 near Polquhanity	Major	n/a	Major		
VP2: Dundeugh at access to Polmaddy	Moderate	n/a	Moderate		
VP4: Footbridge access to Kendoon	Major	n/a	Major		
VP5: B7000 west of Glenhoul Hill	Moderate	n/a	Moderate		
VP6: Layby on A713 near Knocknalling Wood	Moderate	n/a	Moderate		
VP7: Southern Upland Way near Waterside Hill	Moderate	n/a	Moderate		
VP8: Southern Upland Way near St John's Town of Dalry	Moderate	n/a	Moderate		
VP10: A762 north of Glenlee	Moderate	n/a	Moderate		

Receptor	Significance of Effect	Additional Mitigation	Significance of Residual Effect
Dundeugh	Moderate	n/a	Moderate
Kendoon	Major	n/a	Major
St John's Town of Dalry	Moderate	n/a	Moderate
P7: Karnak	Moderate	n/a	Moderate
P8: Hawkrigg	Moderate	n/a	Moderate
P46: Inverharrow	Moderate	n/a	Moderate
P56: Waterside, Glenlee	Moderate	n/a	Moderate
A713	Moderate	n/a	Moderate
A762	Moderate	n/a	Moderate
Southern Upland Way	Moderate	n/a	Moderate
<b>Operation</b> (all effects are long-term)			
Upper Dale – Dumfries and Galloway LCT (165)	Moderate locally (Minor for the LCT as a whole)	n/a	Moderate locally (Minor for the LCT as a whole)
VP2: Dundeugh at access to Polmaddy	Moderate	n/a	Moderate
VP4: Footbridge access to Kendoon	Moderate	n/a	Moderate
VP6: Layby on A713 near Knocknalling Wood	Moderate	n/a	Moderate
VP7: Southern Upland Way near Waterside Hill	Moderate	n/a	Moderate
VP8: Southern Upland Way near St John's Town of Dalry	Moderate	n/a	Moderate
Dundeugh	Moderate	n/a	Moderate
Kendoon	Moderate	n/a	Moderate
<b>Cumulative (Operation)</b> (all effects are long-term)			
Upper Dale – Dumfries and Galloway LCT (165)	<b>Moderate</b> locally ( <b>Minor</b> for the LCT as a whole)	n/a	Moderate
VP4: Footbridge access to Kendoon	Moderate	n/a	Moderate
VP7: Southern Upland Way near Waterside Hill	Moderate	n/a	Moderate
Dundeugh	Moderate	n/a	Moderate

Receptor	Significance of Effect	Additional Mitigation	Significance of Residua Effect
Kendoon	Moderate	n/a	Moderate
С-К			
<b>Construction</b> (all effects are short-term)			
VP4: Footbridge access to Kendoon	Moderate	n/a	Moderate
Kendoon	Moderate	n/a	Moderate
E-G			
<b>Construction</b> (all effects are short-term)			
VP10: A762 north of Glenlee	Moderate	n/a	Moderate
BG Deviation			
<b>Construction</b> (all effects are short-term)			
Glenlee	Moderate	n/a	Moderate
<b>Operation</b> (all effects are long-term)			-
Glenlee	Moderate	n/a	Moderate
Cumulative (Operation) (all effects are long-term)	1		
Glenlee	Moderate	n/a	Moderate
G-T	·	• •	
Construction			
(all effects are short-term)			
Foothills with Forest LCT – Dumfries and Galloway (176)	Moderate locally (Minor for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
Rugged Uplands with Forest LCT – Dumfries and Galloway (181)	Moderate locally (Minor for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
Drumlin Pastures LCT (169)	Moderate locally (Minor for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
VP11: Unclassified road (U3S) south-west of Glenlee	Moderate	n/a	Moderate

Receptor	Significance of Effect	Additional Mitigation	Significance of Residual Effect
VP12: Core Path 516 south-west of Glenlee	Major	n/a	Major
VP14: A712, The Queen's Way	Moderate	n/a	Moderate
VP16: Core path near Tannoch Flow	Moderate	n/a	Moderate
VP21: Mossdale	Moderate	n/a	Moderate
VP22: Core Path 485 Mossdale to Gatehouse Station Railway Walk	Moderate	n/a	Moderate
VP26: Kennick Burn picnic area	Moderate	n/a	Moderate
VP28: A762 south of Laurieston	Moderate	n/a	Moderate
VP29: Barstobrick Hill (Neilson's Monument)	Moderate	n/a	Moderate
VP30: A75 at junction with unclassified road	Moderate	n/a	Moderate
VP31: Unclassified road (U43S) near Argrennan Mains	Major	n/a	Major
VP32: A711 north of Tongland substation	Moderate	n/a	Moderate
Glenlee	Moderate	n/a	Moderate
P77: Airie Cottage	Moderate	n/a	Moderate
P79: Darsalloch	Moderate	n/a	Moderate
P167: Upper Balannan Farm	Moderate	n/a	Moderate
Property Group consisting of: P170, P171, P172	Moderate	n/a	Moderate
P173: Woodlands	Moderate	n/a	Moderate
Property Group consisting of: P174, P175, P176, P177, P178, P179, P180	Moderate	n/a	Moderate
Property Group consisting of: P185, P186, P187, P188, P189, P190	Moderate	n/a	Moderate
P195: High Clachan	Moderate	n/a	Moderate
Property Group consisting of: P199, P201, P207, P208, P216, P220, P221	Moderate	n/a	Moderate

Receptor	Significance of Effect	Additional Mitigation	Significance of Residua Effect
Property Group consisting of: P225, P226	Moderate	n/a	Moderate
A712	Moderate	n/a	Moderate
A75	Moderate	n/a	Moderate
Core Path No. 205 Mossdale Kite Walk, Red Kite Trail	Moderate	n/a	Moderate
Core Path No. 153 Airie near Mossdale	Major	n/a	Major
<b>Operation</b> (all effects are long-term)			
Foothills with Forest LCT - Dumfries and Galloway (176)	<b>Moderate</b> locally ( <b>Minor</b> for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
Rugged Uplands with Forest LCT – Dumfries and Galloway (181)	<b>Moderate</b> locally ( <b>Minor</b> for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
Drumlin Pastures LCT (169)	Moderate locally (Minor for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
VP12: Core Path 516 south-west of Glenlee	Major	n/a	Major
VP16: Core path near Tannoch Flow	Moderate	n/a	Moderate
VP21: Mossdale	Moderate	n/a	Moderate
VP22: Core Path 485 Mossdale to Gatehouse Station Railway Walk	Moderate	n/a	Moderate
VP26: Kennick Burn picnic area	Moderate	n/a	Moderate
VP28: A762 south of Laurieston	Moderate	n/a	Moderate
VP29: Barstobrick Hill (Neilson's Monument)	Moderate	Replanting of areas of windthrow felling	Moderate
VP31: Unclassified road (U43S) near Argrennan Mains	Moderate	n/a	Moderate
VP32: A711 north of Tongland substation	Moderate	n/a	Moderate
Glenlee	Moderate	n/a	Moderate
P77: Airie Cottage	Moderate	n/a	Moderate

Receptor	Significance of Effect	Additional Mitigation	Significance of Residual Effect
P173: Woodlands	Moderate	n/a	Moderate
Property Group consisting of: P174, P175, P176, P177, P178, P179, P180	Moderate	n/a	Moderate
Property Group consisting of: P199, P201, P207, P208, P216, P220, P221	Moderate	n/a	Moderate
Property Group consisting of: P225, P226	Moderate	n/a	Moderate
Core Path No. 205 Mossdale Kite Walk, Red Kite Trail	Moderate	n/a	Moderate
Core Path No. 153 Airie near Mossdale	Moderate	n/a	Moderate
Cumulative (Operation)			
(all effects are long-term)			
Foothills with Forest – Dumfries and Galloway LCT (176)	Moderate locally (Minor for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
VP12: Core Path 516 south-west of Glenlee	Moderate	n/a	Moderate
VP29: Barstobrick Hill (Neilson's Monument)	Moderate	n/a	Moderate
Glenlee	Moderate	n/a	Moderate
Removal of R Route South	ı		
Operation			
(all effects are long-term)			
Flooded Valley LCT (164)	Moderate (beneficial)	n/a	Moderate (beneficial)
VP25: A713 near Parton Mill Bridge	Moderate (beneficial)	n/a	Moderate (beneficial)
P82: Boatknowe	Moderate (beneficial)	n/a	Moderate (beneficial)
Property Group consisting of: P83, P83, P85	Moderate (beneficial)	n/a	Moderate (beneficial)
P86: Mallard Cottage	Major (beneficial)	n/a	Major (beneficial)
Property Group consisting of: P87, P88	Moderate (beneficial)	n/a	Moderate (beneficial)
P89: Garplefoot	Moderate (beneficial)	n/a	Moderate (beneficial)
P106: Killochy Farm	Moderate (beneficial)	n/a	Moderate (beneficial)

Receptor	Significance of Effect	Additional Mitigation	Significance of Residual Effect
P114: Ken Tor	Moderate (beneficial)	n/a	Moderate (beneficial)
Property Group consisting of: P115, 116	Moderate (beneficial)	n/a	Moderate (beneficial)
P129: Barbershall	Moderate (beneficial)	n/a	Moderate (beneficial)
Property Group consisting of: P143, P143a, P144	Moderate (beneficial)	n/a	Moderate (beneficial)
Core Path No. 21 Dalry to New Galloway	Moderate (beneficial)	n/a	Moderate (beneficial)
Core Path No. 29 Glengunnock Wood	Moderate (beneficial)	n/a	Moderate (beneficial)
Core Path No. 208 Livingston Hill	Moderate (beneficial)	n/a	Moderate (beneficial)
KTR as a Whole			
Construction			
(all effects are short-term)			
Upper Dale – Dumfries & Galloway (165)	Moderate locally (Minor for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
Foothills with Forest – Dumfries and Galloway LCT (176)	<b>Moderate</b> locally ( <b>Minor</b> for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
Rugged Uplands with Forest LCT – Dumfries and Galloway (181)	<b>Moderate</b> locally ( <b>Minor</b> for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
Drumlin Pastures LCT (169)	Moderate locally (Minor for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
VP1: Layby on A713 near Polquhanity	Major	n/a	Major
VP2: Dundeugh at access to Polmaddy	Moderate	n/a	Moderate
VP4: Footbridge access to Kendoon	Major	n/a	Major
VP5: B7000 west of Glenhoul Hill	Moderate	n/a	Moderate
VP6: Layby on A713 near Knocknalling Wood	Moderate	n/a	Moderate
VP7: Southern Upland Way near Waterside Hill	Moderate	n/a	Moderate
VP8: Southern Upland Way near St John's Town of Dalry	Moderate	n/a	Moderate

Receptor	Significance of Effect	Additional Mitigation	Significance of Residual Effect
VP10: A762 north of Glenlee	Moderate	n/a	Moderate
VP11: Unclassified road (U3S) south-west of Glenlee	Moderate	n/a	Moderate
VP12: Core Path 516 south-west of Glenlee	Major	n/a	Major
VP 14: A712, The Queen's Way	Moderate	n/a	Moderate
VP16: Core path near Tannoch Flow	Moderate	n/a	Moderate
VP21: Mossdale	Moderate	n/a	Moderate
VP22: Core Path 485 Mossdale to Gatehouse Station Railway Walk	Moderate	n/a	Moderate
VP26: Kennick Burn picnic area	Moderate	n/a	Moderate
VP28: A762 south of Laurieston	Moderate	n/a	Moderate
VP29: Barstobrick Hill (Neilson's Monument)	Moderate	n/a	Moderate
VP30: A75 at junction with unclassified road	Moderate	n/a	Moderate
VP31: Unclassified road (U43S) near Argrennan Mains	Major	n/a	Major
VP32: A711 north of Tongland substation	Moderate	n/a	Moderate
Dundeugh	Moderate	n/a	Moderate
Kendoon	Major	n/a	Major
St Johns Town of Dalry	Moderate	n/a	Moderate
Glenlee	Moderate	n/a	Moderate
P7: Karnak	Moderate	n/a	Moderate
P8: Hawkrigg	Moderate	n/a	Moderate
P46: Inverharrow	Moderate	n/a	Moderate
P56: Waterside, Glenlee	Moderate	n/a	Moderate
P77: Airie Cottage	Moderate	n/a	Moderate
P79: Darsalloch	Moderate	n/a	Moderate

Receptor	Significance of Effect	Additional Mitigation	Significance of Residua Effect
P167: Upper Balannan Farm	Moderate	n/a	Moderate
Property Group consisting of: P170, P171, P172	Moderate	n/a	Moderate
P173: Woodlands	Moderate	n/a	Moderate
Property Group consisting of: P174, P175, P176, P177, P178, P179, P180	Moderate	n/a	Moderate
Property Group consisting of: P185, P186, P187, P188, P189, P190	Moderate	n/a	Moderate
P195: High Clachan	Moderate	n/a	Moderate
Property Group consisting of: P199, P201, P207, P208, P216, P220, P221	Moderate	n/a	Moderate
Property Group consisting of: P225, P226	Moderate	n/a	Moderate
A713	Moderate	n/a	Moderate
A762	Moderate	n/a	Moderate
A712	Moderate	n/a	Moderate
A75	Moderate	n/a	Moderate
Southern Upland Way	Moderate	n/a	Moderate
Core Path No. 205 Mossdale Kite Walk, Red Kite Trail	Moderate	n/a	Moderate
Core Path No. 153 Airie near Mossdale	Major	n/a	Major
Operation			
(all effects are long-term)	1		
Upper Dale – Dumfries and Galloway LCT (165)	Moderate locally (Minor for the LCT as a whole)	n/a	Moderate locally (Minor for the LCT as a whole)
Foothills with Forest LCT – Dumfries and Galloway (176)	Moderate locally (Minor for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
Rugged Uplands with Forest LCT – Dumfries and Galloway (181)	Moderate locally (Minor for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
Drumlin Pastures LCT (169)	Moderate locally (Minor for LCT as a whole)	n/a	Moderate locally (Minor for LCT as a whole)
Flooded Valley LCT (164)	Moderate (beneficial)	n/a	Moderate (beneficial)

Receptor	Significance of Effect	Additional Mitigation	Significance of Residual Effect
VP2: Dundeugh at access to Polmaddy	Moderate	n/a	Moderate
VP4: Footbridge access to Kendoon	Moderate	n/a	Moderate
VP6: Layby on A713 near Knocknalling Wood	Moderate	n/a	Moderate
VP7: Southern Upland Way near Waterside Hill	Moderate	n/a	Moderate
VP8: Southern Upland Way near St John's Town of Dalry	Moderate	n/a	Moderate
VP12: Core Path 516 south-west of Glenlee	Major	n/a	Major
VP16: Core path near Tannoch Flow	Moderate	n/a	Moderate
VP21: Mossdale	Moderate	n/a	Moderate
VP22: Core Path 485 Mossdale to Gatehouse Station Railway Walk	Moderate	n/a	Moderate
VP25: A713 near Parton Mill Bridge	Moderate (beneficial)	n/a	Moderate (beneficial)
VP26: Kennick Burn picnic area	Moderate	n/a	Moderate
VP28: A762 south of Laurieston	Moderate	n/a	Moderate
VP29: Barstobrick Hill (Neilson's Monument)	Moderate	Replanting of areas of windthrow felling	Moderate
VP31: Unclassified road (U43S) near Argrennan Mains	Moderate	n/a	Moderate
VP32: A711 north of Tongland substation	Moderate	n/a	Moderate
Dundeugh	Moderate	n/a	Moderate
Kendoon	Moderate	n/a	Moderate
Glenlee	Moderate	n/a	Moderate
P77: Airie Cottage	Moderate	n/a	Moderate
P82: Boatknowe	Moderate (beneficial)	n/a	Moderate (beneficial)
Property Group consisting of: P83, P83, P85	Moderate (beneficial)	n/a	Moderate (beneficial)
P86: Mallard Cottage	Major (beneficial)	n/a	Major (beneficial)

Receptor	Significance of Effect	Additional Mitigation	Significance of Residual Effect
Property Group consisting of: P87, P88	Moderate (beneficial)	n/a	Moderate (beneficial)
P89: Garplefoot	Moderate (beneficial)	n/a	Moderate (beneficial)
P106: Killochy Farm	Moderate (beneficial)	n/a	Moderate (beneficial)
P114: Ken Tor	Moderate (beneficial)	n/a	Moderate (beneficial)
Property Group consisting of: P115, 116	Moderate (beneficial)	n/a	Moderate (beneficial)
P129: Barbershall	Moderate (beneficial)	n/a	Moderate (beneficial)
Property Group consisting of: P143, P143a, P144	Moderate (beneficial)	n/a	Moderate (beneficial)
P173: Woodlands	Moderate	n/a	Moderate
Property Group consisting of: P174, P175, P176, P177, P178, P179, P180	Moderate	n/a	Moderate
Property Group consisting of: P199, P201, P207, P208, P216, P220, P221	Moderate	n/a	Moderate
Property Group consisting of: P225, P226	Moderate	n/a	Moderate
Core Path No. 21 Dalry to New Galloway	Moderate (beneficial)	n/a	Moderate (beneficial)
Core Path No. 29 Glengunnock Wood	Moderate (beneficial)	n/a	Moderate (beneficial)
Core Path No. 208 Livingston Hill	Moderate (beneficial)	n/a	Moderate (beneficial)
Core Path No. 205 Mossdale Kite Walk, Red Kite Trail	Moderate	n/a	Moderate
Core Path No. 153 Airie near Mossdale	Moderate	n/a	Moderate
Cumulative (Operation)	·		
(all effects are long-term)			
Upper Dale – Dumfries & Galloway LCT (165)	Moderate	n/a	Moderate
Foothills with Forest – Dumfries and Galloway LCT (176)	Moderate	n/a	Moderate
VP4: Footbridge access to Kendoon	Moderate	n/a	Moderate

Receptor	Significance of Effect	Additional Mitigation	Significance of Residual Effect
VP7: Southern Upland Way near Waterside Hill	Moderate	n/a	Moderate
VP12: Core Path 516 south-west of Glenlee	Moderate	n/a	Moderate
VP29: Barstobrick Hill (Neilson's Monument)	Moderate	n/a	Moderate
Dundeugh	Moderate	n/a	Moderate
Kendoon	Moderate	n/a	Moderate
Glenlee	Moderate	n/a	Moderate

Appendix 7.1: LVIA Assessment Methodology

# Appendix 7.1 LVIA Assessment Methodology

### Introduction

- A7.1.1 This appendix sets out the detailed methodology used for the Kendoon to Tongland 132 kilovolt (kV) Reinforcement Project (the 'KTR Project') Landscape and Visual Impact Assessment (LVIA) and Cumulative Landscape and Visual Impact Assessment (CLVIA) set out in Chapter 7: Landscape and Visual Amenity, Volume 1 of the Environmental Impact Assessment (EIA) Report.
- A7.1.2 Landscape and visual assessments are separate, although linked, processes. LVIA therefore considers the potential effects of a proposed development on:
  - Landscape as a resource in its own right (caused by changes to the constituent elements of the landscape, its specific aesthetic or perceptual qualities and the character of the landscape); and
  - Views and visual amenity as experienced by people.
- A7.1.3 Whilst landscape and visual effects are linked, this LVIA deals with landscape and visual effects separately, followed by an assessment of cumulative landscape and visual effects where relevant. Additionally, effects on the residential visual amenity are also considered.

### Guidance

- A7.1.4 This methodology has been developed by Chartered Landscape Architects (Chartered Members of the Landscape Institute (CMLI)) at LUC, who have extensive experience in the assessment of landscape and visual effects arising from electricity transmission infrastructure (e.g. overhead transmission lines, substation infrastructure etc.) and a wide range of other types and scale of development.
- A7.1.5 The methodology has been developed primarily in accordance with the principles contained within the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)<sup>1</sup>. Scottish Natural Heritage (SNH) cumulative guidance<sup>2</sup> also informs the approach to the assessment of cumulative landscape and visual effects. Whilst this SNH guidance has been prepared in relation to onshore wind energy development the overarching principles of cumulative assessment are of relevance to this methodology.
- A7.1.6 The methodology for the production of accompanying visualisations is based on current good practice guidance<sup>3</sup> as set out by SNH<sup>4</sup> and the Landscape Institute (LI)<sup>5,6</sup> and detailed information about the approach to viewpoint photography, and ZTV and visualisation production is provided in **Appendix 7.2**: ZTV Mapping and Visualisation Methodology.

## Scope of the Assessment

A7.1.7 An LVIA considers physical changes to the landscape as well as changes in landscape character. It also considers changes to areas designated for their scenic or landscape qualities, and the visual impacts of a proposed development on publicly available views as perceived by people. In other words, in terms of

visual impacts, the focus is on public views and public visual amenity. In contrast, a Residential Visual Amenity Assessment (RVAA) is a stage beyond LVIA and focusses exclusively on private views and private visual amenity. If undertaken, such an RVAA s therefore separate from, but related to the LVIA. The methodology for assessment of effects on the Residential Visual Amenity is discussed separately in a subsequent section of this appendix. All potentially significant landscape and visual effects (including cumulative effects) are examined, including those relating to construction, operation and, where relevant, decommissioning of the existing overhead transmission lines (including the N and R Routes).

- A7.1.8 Where based on professional judgement it is established that significant effects are unlikely to occur, the assessment of potential effects on some receptors may be 'scoped out'. For an EIA development this is usually agreed at scoping stage, or through the iterative detailed design of the development through the EIA process. Effects assessed in full and effects scoped out of the LVIA are detailed in Chapter 7.
- Chapter 7 reports the results of an assessment of effects of the KTR Project on views from locations in A7.1.9 very close proximity to residential properties. Based on professional judgement, it was determined that an assessment of effects on Residential Visual Amenity is not required.

## LVIA Assessment Methodology

### **Study Area**

A7.1.10 The study area for an LVIA should include the site and the extent of the wider landscape around the site which a proposed development may influence in a significant matter. The study area is therefore determined by the nature and scale of the development proposed and the nature of the surrounding area (e.g. complex topography or extensive tree cover leading to visually enclosed areas may limit the extent of likely significant effects). For the purposes of the LVIA a study area of 5km radius from the proposed KTR Project was proposed and agreed with statutory consultees including the Scottish Government Energy Consents Unit (ECU), Dumfries and Galloway Council (D&GC) and SNH as detailed in Appendix 7.3: Summary of Consultation and Viewpoint Selection, Table A7.3.1.

### **Methodological Overview**

- A7.1.11 The key steps in the methodology for assessing landscape and visual effects are as follows:
  - the landscape of the study area is analysed, and landscape receptors identified, informed by desk study and field survey;
  - the area over which the development will potentially be visible is established through the creation of an initial Zone of Theoretical Visibility (ZTV) plan<sup>7</sup>;
  - the visual baseline is recorded in terms of the different receptors (groups of people) who may experience views of the development (informed by the initial ZTV) and the nature of their existing views and visual amenity;
  - potential assessment viewpoints are selected, as advocated by GLVIA3 to represent a range of different receptors and views, in consultation with statutory consultees including the ECU, D&GC and SNH as detailed in Appendix 7.3, Table A7.3.1:
  - "Representative viewpoints, selected to represent the experience of different types of visual the views of users of particular public footpaths and bridleways;
  - the landscape, including for example specific local visitor attractions, viewpoints in areas of particularly noteworthy visual and/or recreational amenity such as landscapes with statutory landscape designations, or viewpoints with particular cultural landscape associations; and

receptor, where larger numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ – for example, certain points may be chosen to represent

**Specific viewpoints**, chosen because they are key and sometimes promoted viewpoints within

<sup>&</sup>lt;sup>1</sup> The Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition

<sup>&</sup>lt;sup>2</sup> Scottish Natural Heritage (2012) Guidance: Assessing the Cumulative Impact of Onshore Wind Energy Developments

 $<sup>^3</sup>$  Current good practice guidance valid as of 1st June 2019 was considered when undertaking the assessment

<sup>&</sup>lt;sup>4</sup> Scottish Natural Heritage (2017) Visual Representation of Wind Farms Guidance, Version 2.2

<sup>&</sup>lt;sup>5</sup> The Landscape Institute (2011) Advice Note 01/11, Photography and photomontage in landscape and visual impact assessment

<sup>&</sup>lt;sup>6</sup> The Landscape Institute (2017) Technical Guidance Note 02/17: Visual Representation of Development Proposals

<sup>&</sup>lt;sup>7</sup> A ZTV indicates areas from where a development is theoretically visible, but they cannot show what it would look like, nor indicate the nature or magnitude of landscape or visual impacts

- **Illustrative viewpoints**, chosen specifically to demonstrate a particular effect or specific issues, which might, for example, be the restricted visibility at certain locations" (GLVIA3, Para 6.19, Page 109)
- likely significant effects on both the landscape as a resource and visual receptors are identified; and
- the level (and significance) of landscape and visual effects are judged with reference to the nature of the receptor (commonly referred to as the sensitivity of the receptor), which considers both susceptibility and value, and the nature of the effect (commonly referred to as the magnitude of effect), which considers a combination of judgements including size/scale, geographical extent, duration and reversibility.

### **Description of Effects**

- A7.1.12 As required by the EIA Regulations<sup>8</sup>, the assessment must also identify the effects as either being beneficial (or positive), adverse (or negative) or neutral.
- A7.1.13 The landscape, visual and cumulative effects (**beneficial**, **adverse** or **neutral**) are determined in relation to the degree to which the proposal fits with the existing landscape character or views, and the contribution to the landscape or views that a proposed development makes, even if it is in contrast to the existing character of the landscape or views. With regard to electricity transmission infrastructure an assessment is required to take an objective approach. Therefore, to address the 'maximum case effect' situation, potential landscape and visual effects relating to the introduction of electricity transmission infrastructure are generally assumed to be adverse (negative), however, the removal of existing transmission infrastructure (N and R Routes) as part of the KTR Project is likely to result in beneficial (positive) landscape and visual effects for some receptors.

## Method for Assessing Landscape Effects

- A7.1.14 As outlined in GLVIA3 'An assessment of landscape effects deals with the effects of change and development on landscape as a resource.' (GLVIA3, Para 5.1, Page 70). Changes may affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character.
- A7.1.15 An assessment of landscape effects requires consideration of the nature of landscape receptors (sensitivity of receptor) and the nature of the effect on those receptors (magnitude of effect). GLVIA3 states that the nature of landscape receptors, commonly referred to as their sensitivity, should be assessed in terms of the susceptibility of the receptor to the type of change proposed, and the value attached to the receptor. The nature of the effect on each landscape receptor, commonly referred to as its magnitude, should be assessed in terms of size and scale of effect, geographical extent, duration and reversibility.
- A7.1.16 These aspects are considered together, to form a judgement regarding the overall significance of landscape effects (GLVIA3, Figure 5.1 Page 71). The following sections set out the methodology used to evaluate sensitivity and magnitude.

### Sensitivity of Landscape Receptors

A7.1.17 In accordance with GLVIA3 the sensitivity of a landscape receptor to change is based on weighing up professional judgements regarding susceptibility and value (GLVIA3, Para 5.39, Page 88). The types of receptors considered are described in Appendix 7.4: Landscape Baseline.

### Susceptibility of Landscape Receptors

A7.1.18 Susceptibility is defined by GLVIA3 as "the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies" (GLVIA3 paragraph 5.40).

A7.1.19 A series of criteria are used to evaluate the susceptibility of Landscape Character Types (LCTs) to electricity transmission infrastructure as set out in **Table A7.1.1** below. Aspects of these criteria are drawn from a range of published sources relating to electricity transmission infrastructure, including the Holford Rules<sup>9</sup>, The Horlock Rules<sup>10</sup> and GLVIA3.

Table A7.1.1: Aspects Influencing Susceptibility of Landscape Receptors to Electricity **Transmission Infrastructure** 

Aspects Influencing Susceptibility of Landscape Receptors to Electricity Transmission Infrastructure					
Criteria	Aspects indicating greater susceptibility to electricity transmission infrastructure	$\longleftrightarrow$	Aspects indicating reduced susceptibility to electricity transmission infrastructure		
Scale	Smaller scale	$\longleftrightarrow$	Larger scale		
Topography and landform	Presence of strong topographical variety or distinctive landform features Absence of strong topographical variety, featureless, convex or flat with little opportunity for screening and backclothing of electricity transmission infrastructure	$\longleftrightarrow$	Undulating and valley landscapes which offer opportunities for screening and backclothing of electricity transmission infrastructure		
Landcover, pattern and complexity	Limited woodland/forestry cover to help reduce views of electricity transmission infrastructure (e.g. providing screening or backclothing of infrastructure) Complex Rugged and irregular	←→	Extensive areas of woodland/forestry cover to reduce views of electricity transmission infrastructure (e.g. providing screening or backclothing of infrastructure) Simple Regular or uniform		
Settlement and man-made influence	Absence of modern development Presence of small scale, historic or vernacular settlement	$\longleftrightarrow$	Presence of contemporary structures e.g. utility, infrastructure or industrial elements		
Ridges and Skylines	Distinctive, undeveloped skylines Skylines that are highly visible over large areas or exert a large influence on landscape character Skylines with important historic landmarks	←→	Non-prominent/screened skylines Presence of existing modern man-made features (e.g. other electricity transmission infrastructure, telecommunications masts or wind turbines)		
Inter-visibility with adjacent landscapes	Strong inter-visibility with sensitive landscapes Forms an important part of a view from sensitive viewpoints Visually open	$\leftrightarrow$	Little inter-visibility with adjacent sensitive landscapes or viewpoints Visually enclosed		
Perceptual aspects	Remote from visible or audible signs of human activity and development	$\longleftrightarrow$	Close to visible or audible signs of human activity and development		

A7.1.20 Published landscape capacity or sensitivity studies (where they exist) have been reviewed to inform the evaluation of susceptibility (as documented in Appendix 7.4, in addition to field work undertaken across the study area. This review includes an evaluation as to the relevance of the publication to the assessment being undertaken (e.g. consideration of the purpose and scope of the published studies and whether they are still deemed to be current/up to date). Landscape susceptibility is recorded as **high**, medium or low.

<sup>&</sup>lt;sup>8</sup> The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017

<sup>&</sup>lt;sup>9</sup> The Holford Rules: Guidelines for the Routeing of New High Voltage Overhead Transmission Lines (with NGC 1992 and SHETL 2003 Notes) <sup>10</sup> The Horlock Rules: NGC Substations and the Environment: Guidelines on Siting and Design (2006)

### Value of Landscape Receptors

- A7.1.21 The European Landscape Convention advocates that all landscape is of value, whether it is the subject of defined landscape designation or not: "The landscape is important as a component of the environment and of people's surroundings in both town and country and whether it is ordinary landscape or outstanding landscape."<sup>11</sup> The value of a landscape receptor is recognised as being a key contributing factor to the sensitivity of landscape receptors.
- A7.1.22 The value of landscape receptors is determined with reference to:
  - review of relevant designations and the level of policy importance that they signify (such as landscapes designated at international, national or local level); and/or
  - application of criteria that indicate value (such as scenic quality, rarity, recreational value, representativeness, conservation interests, perceptual aspects and artistic associations) as described in GLVIA3, paragraphs 5.44 - 5.47.
- A7.1.23 Internationally and nationally designated landscapes would generally indicate landscape of higher value whereas those without formal designation (such as a widespread or common landscape type without high scenic quality) are likely to be of lower value, bearing in mind that all landscapes are valued at some level. There is however variation across both designated and undesignated areas, and so judgements regarding value are also informed by field work.

### A7.1.24 Landscape value is described as being high, medium or low, as set out in Table A7.1.2 below.

### Table A7.1.2: Value of Landscape Receptors

Value of Landscape Receptors				
High	Landscapes with high scenic quality, high conservation interest, recreational value, important cultural associations or a high degree of rarity. Areas or features designated at a national level e.g. National Parks or National Scenic Areas or key features of these with national policy level protection.			
Medium	Landscapes potentially designated at a regional or local level e.g. Regional Scenic Areas (RSAs), Special Landscape Areas (SLAs) or similar, or areas which in part may be designated in relation to their scenic quality or distinctiveness e.g. Forest Parks or Conservation Areas.			
Low	Landscape of poor condition and intactness with limited aesthetic qualities, or of character that is widespread. Areas or features that are not formally designated.			

### Sensitivity of Landscape Receptors

A7.1.25 The sensitivity of a landscape receptor to change is defined as **high**, **medium** or **low** and is based on weighing up professional judgements regarding susceptibility and value, as set out in Table A7.1.3 below.

### Table A7.1.3: Sensitivity of Landscape Receptors

Sensitivity of Landscape Receptors				
	Higher	$\longleftrightarrow$	Lower	
Susceptibility	Attributes that make up the character of the landscape offer very limited opportunities for the accommodation of change without key characteristics being fundamentally altered by electricity transmission infrastructure, leading to a different landscape character.	$\longleftrightarrow$	Attributes that make up the character of the landscape are resilient to being changed by electricity transmission infrastructure.	

#### Sensitivity of Landscape Receptors

	Landscapes with high scenic quality, high conservation interest, recreational value, important cultural associations or a high degree of rarity.
Value	Areas or features designated at a national level e.g. National Parks or National Scenic Areas or key features of these with national policy level protection.

### **Magnitude of Landscape Effect**

A7.1.26 The overall judgement of magnitude of a landscape effect is based on combining professional judgements on size and scale, geographical extent, duration and reversibility. Further information on the criteria is provided below.

### Size and Scale of Effect

- A7.1.27 For landscape elements/features this depends on the extent of existing landscape elements that would be lost or changed, the proportion of the total extent that this represents, and the contribution of that element to the character of the landscape.
- A7.1.28 In terms of landscape character, this reflects the degree to which the character of the landscape would change as a result of removal or addition of landscape components, and how the changes would affect kev characteristics.
- A7.1.29 The size and scale of the effect is described as being **large**, **medium**, **small**, or **barely perceptible**.

### Geographical Extent of Effect

A7.1.30 The geographical extent over which the landscape effect would arise is described as being **large** (widespread or scale of the landscape character type, affecting several landscape types or character areas), **medium** (more immediate surroundings) or **small** (localised, for example at a site level).

### Duration of Effect

- A7.1.31 GLVIA3 states at paragraph 5.51 on page 91 that 'Duration can usually be simply judged on a scale such as short term, medium term or long term.' For the purposes of the assessment, duration is often determined in relation to the phases of the KTR Project, as follows:
  - Short-term effects are those that occur during construction, and may extend into the early part of the operational phase, e.g. construction activities (generally lasting 0 - 5 years); and
  - Long-term effects are those which occur throughout the operational phase, e.g. presence of electricity transmission infrastructure (generally lasting 5-80 years<sup>12</sup>).

### Reversibility of Effect

- A7.1.32 In accordance with the principles contained within GLVIA3, reversibility is reported as **reversible**, partially reversible or irreversible (i.e. permanent), and is related to whether the change can be reversed at the end of the phase of development under consideration (i.e. at the end of construction or at the end of the operational lifespan of the development).
- A7.1.33 Judgements on the magnitude of landscape effect (nature of landscape effect) are recorded as **high**, medium or low and are guided by Table A7.1.4 below, based on combining professional judgements on size and scale, geographical extent, duration and reversibility.



Landscape of poor condition and intactness, with limited aesthetic qualities, or of character that is widespread.

Areas or features that are not formally designated.

<sup>&</sup>lt;sup>11</sup> Council of Europe, (2000). The European Landscape Convention – Council of Europe Treaty Series No. 176.

<sup>&</sup>lt;sup>12</sup> Based on the length of time the existing transmission infrastructure ('N' and 'R' Routes) has been present and the predicted likely lifespan of the proposed infrastructure.

### Table A7.1.4: Magnitude of Landscape Effect

Magnitude of Landscape Effect				
	Higher	$\longleftrightarrow$	Lower	
Size/ScaleExtensive loss of landscape features and/or elements, and/or change in, or loss of key landscape characteristics, and/or creation of new key landscape characteristicsGeographical ExtentChange in landscape features and/or character extending considerably beyond the immediate site and potentially affecting multiple landscape character types/areas		$\longleftrightarrow$	Limited loss of landscape features and/or elements, and/or change in or loss of some secondary landscape characteristics	
		$\longleftrightarrow$	Change in landscape features and/or character extending contained within or local to the immediate site and affecting only a small part of the landscape character type/area	
Duration	Changes experienced for a period of around five years or more		Changes experienced for a shorter period of up to five years	
Reversibility	Change to features, elements or character which cannot be undone or are only partly reversible after a long period	$\longleftrightarrow$	A temporary landscape change which is largely reversible following the completion of construction, or decommissioning of the development	

### Judging Levels of Landscape Effect and Significance

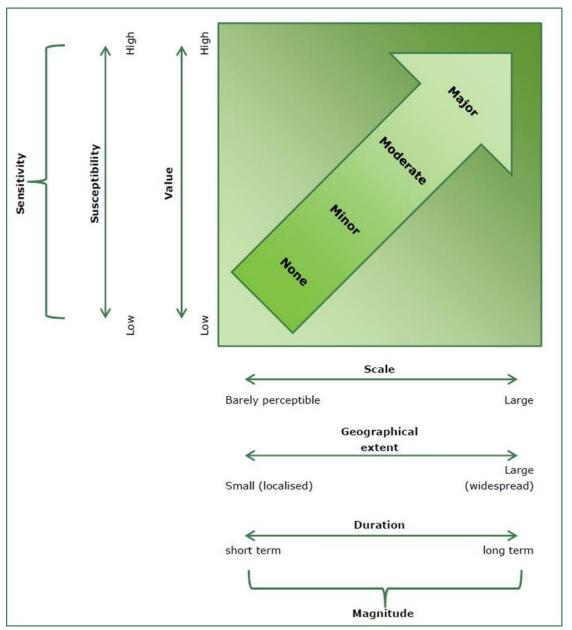
- A7.1.34 The final step in the assessment requires the judgements of sensitivity and magnitude of effect to be combined to make an informed professional assessment on the significance of each landscape effect (GLVIA3, Figure 5.1, Page 71).
- A7.1.35 There may be a complex relationship between the value attached to a landscape and the susceptibility of the landscape to a specific change. Therefore, the rationale for judgements on the sensitivity of landscape receptors needs to be clearly set out for each receptor. It should be noted that whilst landscape designations at an international or national level are likely to be accorded the highest value, it does not necessarily follow that such landscapes all have a high susceptibility to all types of change, and conversely, undesignated landscapes may also have high value and susceptibility to change (GLVIA3, Page 90).
- A7.1.36 This determination requires the application of professional judgement and experience to take on board the many different variables which need to be considered, and which are given different weight according to site-specific and location-specific considerations in every instance. Judgements are made on a case by case basis, guided by the principles set out in **Diagram 1** below and the example descriptions/definitions detailed in table A7.1.5 below. A rigid matrix-type approach, which does not take on board professional judgement and experience, and where the level of effect is defined simply based on the level of sensitivity (nature of receptor) combined with the magnitude of change (nature of effect), is not used. As such, the conclusion on the level of effect is not always the same for similar receptors or determined through a formulaic process.
- A7.1.37 Although a numerical or formal weighting system is not applied, consideration of the relative importance of each aspect is made to inform the overall decision as to the likely effect. Levels of effect are identified as **none**, **minor**, **moderate** or **major** as set out in **Table A7.1.5 below**, where moderate and major effects are considered **significant** in the context of the EIA Regulations.

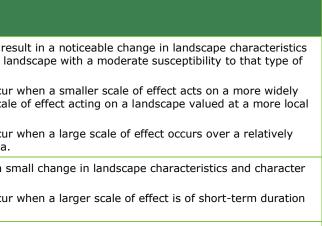
### Table A7.1.5: Level and Significance of Landscape Effects

Level and Significance of Landscape Effects	Description/Definition
Major	The proposed development will result in an obvious change in landscape characteristics and character, likely affecting a landscape with a moderate or high susceptibility to that type of change.
	This level of effect may also occur when a medium scale of effect acts on a nationally valued landscape.
	The effect is likely to be long-term and affect a relatively large area.

	Level and Significance of Landscape Effects	Description/Definition	
		The proposed development will r and character, likely affecting a change.	
	Moderate	This level of effect may also occuve valued landscape, or a larger scalevel.	
	Minor	This level of effect may also occus short period or over a small area	
		The development will result in a over a long-term duration.	
		This level of effect may also occur or confined to the site.	
	None	The development will not result i characteristics/character.	

### Diagram 1: Judging levels of effect – Landscape or Visual (including cumulative)





in a noticeable (barely perceptible) change in landscape

### Method for Assessing Visual Effects

### **Significance of Visual Effects**

- A7.1.38 As outlined in GLVIA3 "An assessment of visual effects deals with the effects of change and development on views available to people and their visual amenity" (GLVIA3, Para 6.1, Page 98). Changes in views may be experienced by people at different locations within the study area including from static locations (normally assessed using representative viewpoints) and whilst moving through the landscape (normally referred to as sequential views, e.g. from roads and walking routes).
- A7.1.39 Visual receptors are individuals or groups of people who may be affected by changes in views and visual amenity. They are usually grouped by their occupation or activity (e.g. residents, motorists, recreational users, tourists visiting a specific location or area) and the extent to which their attention is focused on the view (GLVIA3, Paras. 6.31 – 6.32, Page 113).
- A7.1.40 GLVIA3 states that the sensitivity of visual receptors should be assessed in terms of the susceptibility of the receptor to change in views and/or visual amenity and the value attached to particular views. The magnitude of effect should be assessed in terms of the size and scale, geographical extent, duration and reversibility of the effect.
- A7.1.41 These aspects are considered together, to form a judgement regarding the overall significance of visual effect (GLVIA3, Figure 6.1 Page 99). The following sections set out the methodology used to evaluate sensitivity and magnitude.

### **Sensitivity of Visual Receptors**

A7.1.42 In accordance with GLVIA3 the sensitivity of a landscape receptor to change is based on weighing up professional judgements regarding susceptibility and value (GLVIA3, Para 6.31, Page 113). The types of receptors considered are described in Appendix 7.5: Visual Baseline.

### Susceptibility of Visual Receptors

A7.1.43 The susceptibility of visual receptors to changes in views/visual amenity is a function of the occupation or activity of people experiencing the view and the extent to which their attention is focused on views (GLVIA 3, para 6.32). This is recorded as **high**, **medium** or **low** informed by **Table A7.1.6** below.

### **Table A7.1.6: Susceptibility of Visual Receptors**

Susceptibility of Visual Receptors		
Higher	$\longleftrightarrow$	Lower
<ul> <li>Viewers whose attention or interest is focussed on their surroundings, including:</li> <li>settlements where views contribute to the landscape setting enjoyed by residents;</li> <li>people engaged in outdoor recreation (including users of cycle routes, footpaths and public rights of way whose interest is likely to be focused on the landscape);</li> <li>visitors to heritage assets or other attractions where views of surroundings are an important contributor to experience;</li> <li>visitors to formal or promoted stopping places on scenic or tourist routes.</li> </ul>	People travelling in vehicles on scenic routes and tourist routes, where attention is focused on the surrounding landscape, but is transitory; People at their place of work whose attention is focused on the surroundings and where setting is important to the quality of working life.	People travelling more rapidly on more major roads, rail or transport routes (not recognised as scenic routes); People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape; People at their place of work whose attention is not on their surroundings (and where setting is not important to the quality of working life).

Value of View or Visual Amenity

GLVIA3 also requires evaluation of the value attached to the view or visual amenity and relates this to A7.1.44 planning designations and cultural associations (GLVIA3, Para. 6.37, Page 114).

A7.1.45 Recognition of the value of a view is determined with reference to:

- planning designations specific to views;
- whether it is recorded as important in relation to designated landscapes (such as views specifically mentioned in the special qualities of a National Scenic Area);
- whether it is recorded as important in relation to heritage assets (such as designed views recorded in citations of Gardens and Designed Landscapes (GDL) or views recorded as of importance in Conservation Area Appraisals); and
- the value attached to views by visitors, for example through appearances in guidebooks or on tourist maps, provision of facilities for their enjoyment and references to them in literature and art.
- A7.1.46 A designated viewpoint or scenic route advertised on maps and in tourist information, or which is a significant destination in its own right, such as a Munro summit, is likely to indicate a view of higher value. High value views may also be recognised in relation to the special qualities of a designated landscape or heritage asset, or it may be a view familiar from photographs or paintings.
- A7.1.47 Views experienced from viewpoints or routes not recognised formally or advertised in tourist information, or which are not provided with interpretation or, in some cases, formal access, are likely to be of lower value.
- A7.1.48 Judgements on the value of views or visual amenity are described as being **high**, **medium** or **low**, as set out in Table A7.1.7 below.

### Table A7.1.7: Value of Views and Visual Amenity

# Value of Views and Visual Amenity

	Views may be recorded in manage experienced by large numbers of p
High	Views may be associated with interviews recorded in citations for Gar Monuments etc.
Medium	Views may be associated with reginered and the reginered in citations for historic particular documented in local planning policity.
	Views which are not documented of
Low	Views which are more incidental, a travel to or stop, or which may be

### Sensitivity of Visual Receptors

A7.1.49 The sensitivity of a visual receptor to change is defined as **high**, **medium** or **low** and is based on weighing up professional judgements regarding susceptibility and value, and each of their component considerations, as set out in **Table A7.1.8** below. The types of receptors considered are described in Appendix 7.5.

### Table A7.1.8: Level and Significance of Visual Effects

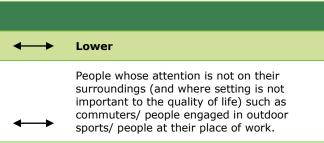
Sensitivity	/ of \	/isual	Rece	ntors
Sensitivity		Isual	Nece	pluis

	Higher
Susceptibility	Viewers whose attention or interest is focused on their surroundings, including settlements / individual residential receptors <sup>13</sup> / people engaged in outdoor recreation/ visitors to heritage assets or

<sup>&</sup>lt;sup>13</sup> Consideration of changes in views experience from private residencies informed by the approach detailed in Landscape Institute Technical Guidance Note 2/19 Residential Visual Amenity Assessment (RVAA)

### ement plans, guidebooks, and/or which are likely to be f people.

- ernationally or nationally designated landscapes; designed ardens and Designed Landscapes (GDLs)/Scheduled
- jionally or locally designated landscapes; designed views parks, gardens designated at a regional or local level, or licy (e.g. landmark hills/views, promoted viewpoints).
- or protected but may be valued at a local level.
- and less likely to be associated with somewhere people e experienced by smaller numbers of people.



	other attractions where views of surrounding area an important contributor.	
Value	Views may be recorded in management plans, guidebooks, and/or which are likely to be experienced by large numbers of people. Views may be associated with internationally or nationally designated landscapes; designed views recorded in citations for Gardens and Designed Landscapes (GDLs)/Scheduled Monuments etc.	<ul> <li>Views which are not documented or protected.</li> <li>Views which are more incidental, and less likely to be associated with somewhere people travel to or stop, or which may be experienced by smaller numbers of people.</li> </ul>

### **Magnitude of Visual Effect**

A7.1.50 The overall judgement of magnitude of visual effect (nature of visual effect) is based on weighing up professional judgements on size and scale, geographical extent, duration and reversibility. Further information on the criteria is provided below.

### Size and Scale

- A7.1.51 The size and scale of a visual change depends on:
  - the scale of the change in the view with respect to the loss or addition of features in the view and changes in its composition, including the proportion of the view occupied by the proposed development;
  - the degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line, height, colour and texture; and
  - the nature of the view of the proposed development, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpsed.
- A7.1.52 All changes are assumed to be during winter, representing a 'maximum case effect' scenario with minimal screening by deciduous vegetation and trees. Wireframes and ZTVs prepared to illustrate potential visual effects are initially calculated on the basis of a 'Bare Earth' Digital Terrain Model (DTM) and therefore demonstrate the maximum extent of visibility possible, in the absence of buildings, woodland, vegetation or other surface features which may otherwise screen of filter views of the proposed development.
- A7.1.53 The methodology and data used to inform the production of ZTV mapping is detailed in **Appendix 7.2**. Where known surface features such as coniferous forestry are present, consideration is given to potential changes in the existing composition felling regimes where screening provided by existing forestry is likely to change notably during the lifetime of the connections forming part of the KTR Project.
- A7.1.54 In this assessment size/scale of visual change is described as being large, medium, small or barely perceptible.

### Geographical Extent

A7.1.55 The geographical extent of a visual change records the extent of the area over which the changes will be visible e.g. whether this is a unique viewpoint from where the proposed electricity transmission infrastructure can be glimpsed, or whether it represents a larger area from which similar views are gained. Geographical extent is described as being large (widespread), medium or small (localised).

### Duration

A7.1.56 The duration of visual effects is reported as **short-term** or **long-term**, as defined for the duration of landscape effects (see above).

#### Reversibility

A7.1.57 Reversibility is reported as irreversible (i.e. permanent), partially reversible or reversible, and is related to whether the visual change can be reversed at the end of the phase of development under

- A7.1.58 Although unlikely for practical system operational reasons, the decommissioning and reinstatement of infrastructure located within the pre-existing substation sites is possible. However, for the purposes of the assessment all visual effects associated with substation infrastructure (e.g. all infrastructure such as terminal towers, gantries and ancillary substation componentry contained within existing or extended substation compounds) are deemed to be irreversible due to the operational lifetime of the infrastructure and long-term network requirements.
- A7.1.59 Judgements on the magnitude of visual effect are recorded as high, medium, low or barely perceptible guided by Table A7.1.9 below, based on combining professional judgements on size and scale, geographical extent, duration and reversibility.

### **Table A7.1.9: Magnitude of Visual Effects**

Magnitude of Visual Effects				
	Higher	$\longleftrightarrow$	Lower	
Size/Scale	A large visual change resulting from the proposed development is the most notable aspect of the view, perhaps as a result of the development being in close proximity, or because a substantial part of the view is affected, or because the development introduces a new focal point and/or provides contrast with the existing view and/or changes the scenic qualities of the view.	←→	A small or some visual change resulting from the proposed development as a minor or generally unnoticed aspect of the view, perhaps as a result of the development being in the distance, or because only a small part of the view is affected, and/or because the development does not introduces a new focal point or is in contrast with the existing view and/ does not change the scenic qualities of the view.	
Geographical Extent	The assessment location is clearly representative of similar visual effects over an extensive geographic area.	←→	The assessment location clearly represents a small geographic area.	
Duration	Visual change experienced over around five years or more	$\longleftrightarrow$	Visual change experienced over a short period of up to five years.	
Reversibility	A permanent visual change which is not reversible or only partially reversible following decommissioning of the proposed development.	$\leftrightarrow$	A temporary visual change which is largely reversible following the completion of construction or decommissioning of the proposed development.	

### Judging the Level of Visual Effect and Significance

- A7.1.60 As for landscape effects, the final step in the assessment requires the judgements on sensitivity of visual receptor and magnitude of visual effect to be combined to make an informed professional assessment on the significance of each visual effect.
- A7.1.61 The evaluations of the individual aspects set out above (susceptibility, value, size and scale, geographical extent, duration and reversibility) are considered together to provide an overall profile of each identified visual effect. An overview is then taken of the distribution of judgements for each aspect to make an informed professional assessment of the overall level of effect, drawing on good practice guidance provided in GLVIA3.
- A7.1.62 The sensitivity of visual receptors may involve a complex relationship between a visual receptor's (e.g. people's) susceptibility to change and the value attached to a view. Therefore, the rationale for judgements of sensitivity is clearly set out for each receptor in relation to both its susceptibility to the type of change proposed, and its value.
- A7.1.63 A rigid matrix-type approach, where the level of visual effect is defined simply based on the level of sensitivity combined with the magnitude of effect is not used. As such, the conclusion on the level of effect is not always the same for similar receptors. Although a numerical or formal weighting system is not applied, consideration of the relative importance of each aspect is made to feed into the overall

decision. Levels of visual effect are identified as **none**, **minor**, **moderate** or **major**, where moderate and major visual effects are considered **significant** in the context of the EIA Regulations.

A7.1.64 This determination requires the application of professional judgement and experience to take on board the many different variables which need to be considered, and which are given different weight according to site-specific and location-specific considerations in every instance. As such, the conclusion on the level of effect is not always the same for similar receptors. Judgements are made on a case by case basis, guided by the principles illustrated in **Diagram 1** above, and the example descriptions/definitions detailed in **Table A7.1.10** below.

### Table A7.1.10: Level and Significance of Visual Effects

Level and Significance of Visual Effects	Description/Definition
MajorThe proposed development will result in an obvious change in view, likely a visual receptor with a moderate or high susceptibility to that type of chang This level of effect may also occur when a medium scale of effect acts on a valued view and/ or a high susceptibility receptor. 	
Moderate	The proposed development will result in a noticeable change in a view, likely affecting a viewer with a moderate susceptibility to that type of change and/ or locally valued view. This level of effect may also occur when a smaller scale of change acts on a higher susceptibility receptor or affects a large number of people, or a larger scale of effect acting on a lower susceptibility receptor or affecting fewer people. This level of effect may also occur when a large scale of effect occurs over a relatively short period or over a small area/ affects few people.
Minor	The development will result in a small change in view over a long-term duration, likely affecting a smaller geographic extent and/ or fewer people. This level of effect may also occur when a larger scale of effect is of short-term duration or is confined in its geographical extent.
None	The development will not result in a noticeable (barely perceptible) change in views.

## Cumulative Landscape and Visual Impact Assessment (CLVIA)

- A7.1.65 The aim of a Cumulative Landscape and Visual Impact Assessment (CLVIA) is to identify any interactions with other types of development (including transmission infrastructure, wind farms or other large scale development) which could result in further significant landscape and visual effects not identified within the LVIA.
- A7.1.66 SNH has prepared guidance relating to the cumulative assessment of wind energy developments: Assessing the Cumulative Impact of Onshore Wind Energy Developments<sup>2</sup>. Whilst this guidance specifically relates to wind farms, many of the overarching principles are of relevance to the cumulative assessment of other types of development. This guidance states that the aim of CLVIA is to: "describe, visually represent and assess the ways in which a proposed windfarm would have additional impacts when considered together with other existing, consented or proposed windfarms" (Para. 55, SNH, 2012).
- A7.1.67 The cumulative assessment therefore focuses on the *additional* cumulative change which may result from the introduction of a proposed development. The cumulative assessment may also make reference to total (also referred to as combined) cumulative effects, where these have the potential to be significant. A cumulative assessment considers the potential interactions between different types of development (including wind farms, other energy generation stations or other large scale development) if these are likely to result in similar landscape and visual impacts.
- A7.1.68 As with LVIA, CLVIA deals with cumulative landscape and visual effects separately.

### **Differences between LVIA and CLVIA**

A7.1.69 Although both LVIA and CLVIA look at the effects of a proposed development on the landscape and on views, there are differences in the baseline against which the assessments are carried out.

- A7.1.70 For the LVIA, the baseline includes existing developments (including transmission infrastructure, wind farms other large scale development) which are present in the landscape at the time of undertaking the assessment, which may be either operational or under construction, and as such they are assumed to form a part of the baseline situation. Their presence has the potential to influence the assessment of effects on landscape (including its character) and the assessment of effects on views.
- A7.1.71 For the CLVIA the baseline is partially speculative and in addition to the KTR Project components, considers transmission infrastructure, wind farms or other large scale development which have been granted planning consent but are not yet constructed (consented); and developments which are the subject of a submitted valid application which are currently awaiting determination by the relevant consenting authority, including those at appeal. The 27<sup>th</sup> April 2020 was agreed with statutory consultees and the ECU as the cut-off for the inclusion of other developments to be considered as part of the CLVIA<sup>14</sup>. The developments considered within the CLVIA are shown on **Figure 3.1**<sup>15</sup>.
- A7.1.72 The cumulative assessment considers the operational and under construction sites, as well as consented and proposed sites, and differs from that contained in the LVIA in that it focuses specifically on the cumulative effects of the KTR Project (each connection and as a whole) arising in association with all other transmission infrastructure, wind farms or other large scale developments, and assesses the relationship between them.
- A7.1.73 Where the magnitude of change that would occur as a result of the introduction of the KTR Project in the LVIA is identified as either low or barely perceptible, potential cumulative effects are often not assessed in the cumulative assessment as it is considered that such an addition would not give rise to a significant cumulative effect.

### **Types of Cumulative Effects**

- A7.1.74 Assessing the Cumulative Impact of Onshore Wind Energy Developments<sup>2</sup> states that "cumulative landscape effects can impact on either the physical fabric or character of the landscape, or any special values attached to it" (Para. 48, SNH, 2012).
- A7.1.75 Three types of cumulative effects on visual amenity are considered in the assessment: combined, successive and sequential:
  - **Combined** effects occur where a static viewer is able to view two or more developments from a viewpoint within the viewers' same arc of vision (assumed to be about 90 degrees for the purpose of the assessment);
  - Successive effects occur where a static viewer is able to view two or more developments from a viewpoint, but needs to turn to see them; and
  - Sequential effects occur when a viewer is moving through the landscape from one area to another, for instance when a person is travelling along a road or footpath and is able to see two or more developments at the same, or at different times as they pass along the route. Frequently sequential effects occur where developments appear regularly, with short time lapses between points of visibility. Occasionally sequential effects occur where long periods of time lapse between views of developments, depending on speed of travel and distance between viewpoints.

## **CLVIA Assessment Methodology**

- A7.1.76 The assessment of cumulative landscape and visual effects is informed by the approach set out in Chapter 3: Approach to the EIA.
- A7.1.77 As required by the EIA Regulations and in accordance with good practice, the EIA considers the likely significant effects of the KTR Project, which "cover the direct effects and any indirect, secondary,

<sup>&</sup>lt;sup>14</sup> No responses were receiving following issue of the final list of proposed developments included in the CLVIA issued to statutory consultees in June 2020 – further details are provided in Appendix 7.3.

<sup>&</sup>lt;sup>15</sup> As detailed in Chapter 3: Approach to the EIA, existing developments, unimplemented development proposals which benefit from unexpired consents and proposed developments which have not vet been granted development consent, but which are subject to valid applications, have been included in the list of other developments. Information on schemes subject to scoping applications submitted to D&GC is also presented, but these have not been assessed as part of the cumulative assessments for the purposes of EIA.

cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development" (Schedule 4 Part 1 (3)).

- A7.1.78 Both 'inter-project' and 'intra-project' cumulative effects have been considered, as described in PAN 1/2013: "Cumulative effects arising from different elements of a project on environmental receptors (intra-project effects) and from projects combined with other activities (inter-project) impacts are commonly identified."
- A7.1.79 The assessment of combined and cumulative effects has been considered in five stages, as summarised below and outlined in detail in **Chapter 3**. This approach has been adopted to ensure that both the intra-project and inter-project effects arising from each connection forming part of the KTR Project, as well as those arising out of the KTR Project as a whole, have been identified and assessed.
  - Stage 1: "Intra-Connection Effects" of each connection forming part of the KTR Project
  - Stage 2: Combined Effects of the KTR Project as a whole
  - Stage 3: "Intra-KTR Effects" of the KTR Project
  - Stage 4: "Inter-connection effects" of each connection forming part of the KTR Project
  - Stage 5: "Inter-KTR effects" of the KTR Project
- A7.1.80 Cumulative landscape and visual effects have been considered as part of Stage 2, Stage 4 and Stage 5 of the above approach. Details of the assumed baseline situation and other developments considered within each of these stages are documented in the relevant assessment sections presented in **Chapter** 7.
- Assessment Stage 1 and Stage 2 are considered in Chapter 17: Assessment of Intra-Connection A7.1.81 and Intra-KTR Effects, in line with the approach set out in Chapter 3.

#### **Study Area**

A7.1.82 The study area for a CLVIA is determined by the nature and scale of the development proposed, the nature of the surrounding area (e.g. complex topography or extensive tree cover leading to visually enclosed areas may limit the extent of likely significant effects), and informed by the location, pattern and distribution of existing, consented and proposed developments which may give rise to similar landscape and visual effects as the KTR Project. For the purposes of the CLVIA assessment a study area of 10km radius from the proposed KTR Project connections was agreed with statutory consultees (e.g. Energy Consents Unit (ECU), D&GC and SNH) as detailed in **Appendix 7.3**, **Table A7.3.1**.

#### Methodological Overview

- A7.1.83 The CLVIA considers the potential effects of the addition of the KTR Project, against a baseline that includes transmission infrastructure, wind farms or other large scale development that may or may not be present in the landscape in the future, i.e. developments that are consented but not yet built, and/or undetermined planning applications<sup>16</sup>. The developments are assumed to be present in the landscape for the purposes of the CLVIA.
- The methodology for the CLVIA follows that of the LVIA, which considers the introduction of a proposed A7.1.84 development to a baseline which includes existing (operational and under construction) developments. The size and scale of cumulative change focuses on:
  - the number of existing, consented and/or proposed developments visible;
  - the pattern and arrangement of developments in the landscape or view, e.g. developments seen in one direction or part of the view (combined views), or seen in different directions (successive views in which the viewer must turn) or developments seen sequentially along a route;
  - the relationship between the scale of the developments (similar scale developments or scales of development which are clearly at odds with each other);
  - the position of the developments in the landscape, e.g. in similar landscape or topographical context;

- the position of the developments in the view, e.g. on the skyline or against the backdrop of land; or etc.); and
- the distances between developments, and their distances from the viewer.

#### Significance of Cumulative Effects

A7.1.85 As for the LVIA, judging the significance of cumulative landscape and visual effects requires consideration of the sensitivity and the magnitude of effect on those receptors. The following sections set out the methodology applied for the assessment of cumulative effects for both landscape and visual receptors and explain the terms used.

## Assessing Cumulative Landscape Effects

### Sensitivity

A7.1.86 An assessment of cumulative landscape effects requires consideration of the sensitivity of the landscape receptors. This requires consideration of susceptibility and value and is as recorded in the LVIA.

#### Magnitude of Cumulative Landscape Effects

A7.1.87 Similarly, to the methodology applied for the LVIA, the magnitude of cumulative landscape effect (nature of cumulative landscape effect) is based on combining professional judgements on size and scale, geographical extent, duration and reversibility. Judgements on the magnitude of cumulative landscape effect (nature of cumulative landscape effect) are recorded as **high**, **medium** or **low**.

#### Size and Scale

- A7.1.88 The size/scale of cumulative landscape change is the additional influence a proposed development has on the characteristics and character of the area assuming the other transmission infrastructure/energy developments considered in the CLVIA baseline scenarios are already present in the landscape. This is influenced by:
  - how the proposal fits with existing pattern of cumulative developments, with specific emphasis on energy related developments, including the relationship to landscape character types and areas; and
  - the siting and design of a proposed development in relation to other existing and proposed developments (including distance between developments, composition, size and scale).

### Geographical Extent

A7.1.89 As for the LVIA, the geographical extent over which the cumulative landscape change will be experienced is described as being **large** (scale of the landscape character type, or widespread, affecting several landscape types or character areas), medium (immediate surroundings) or small (site level).

#### Duration and Reversibility

- A7.1.90 For the purpose of the cumulative landscape assessment consideration of the judgements of the duration and reversibility of landscape effects are as recorded in the LVIA.
- A7.1.91 Judgements on the magnitude of cumulative landscape effect are recorded as **high**, **medium** or **low**.

### Levels of Cumulative Landscape Effect and Significance

- A7.1.92 The final step in the assessment of cumulative landscape effects requires the judgements of sensitivity and magnitude of cumulative landscape effect to be combined to make an informed professional assessment on the significance of each cumulative landscape effect.
- A7.1.93 As for the LVIA the levels of cumulative landscape effect are described as **none**, **minor**, **moderate** or major, where moderate and major cumulative landscape effects are considered significant in the context of the EIA Regulations.

### A7.1.94 Significant effects are likely where:

- a proposed development extends or intensifies a landscape effect;
- a proposed development 'fills' an area such that it alters the landscape resource; and / or

# how the KTR Project will be seen in association with another development (separate, together, behind

<sup>&</sup>lt;sup>16</sup> The CLVIA only considers other developments which are the subject of valid planning applications or are currently subject to a valid planning appeal. No developments which are currently at a pre-application stage, i.e. Scoping, are included as agreed with statutory consultees and the FCU.

- the interaction between a proposed development and other developments means that the total effect on the landscape is greater than the sum of its parts.
- A7.1.95 GLVIA3 states 'The most significant cumulative landscape effects are likely to be those that would give rise to changes in the landscape character of the study area of such an extent as to have major effects on its key characteristics and even, in some cases, to transform it into a different landscape type. This may be the case where the project being considered itself tips the balance through its additional effects. The emphasis must always remain on the main project being assessed and how or whether it adds to or combines with the others being considered to create a significant cumulative effect' (paragraph 7.28, page 129).
- A7.1.96 This determination of cumulative landscape effects requires the application of professional judgement and experience to take on board the many different variables which need to be considered, and which are given different weight according to site-specific and location-specific considerations in every instance. Judgements are made on a case by case basis, guided by the same principles as set out in **Diagram 1**, and the typical descriptions/definitions of potential landscape effects set out above.

## Assessing Cumulative Visual Effects

### Sensitivity

A7.1.97 The assessment of the significance of cumulative visual effects requires consideration of the sensitivity of the visual receptors. This requires consideration of susceptibility and value and is as recorded in the LVIA.

### Magnitude of Cumulative Visual Effects

A7.1.98 As for cumulative landscape effects and the methodology for the LVIA, the magnitude of cumulative visual effect (nature of cumulative visual effect) is based on combining professional judgements on size and scale; geographical extent; duration and reversibility. Judgements on the magnitude of cumulative visual effect (nature of cumulative visual effect) are recorded as high, medium, low or barely perceptible.

### Size and Scale

- A7.1.99 The size/scale of cumulative change to views depends on the additional influence a proposed development has on views assuming the other developments considered in the cumulative assessment are already present in the landscape. This is influenced by:
  - Whether a proposed development introduces development into a new part of the view so that the proportion of the developed part of the view increases;
  - the relationship between a proposed development and other developments in terms of design, size and layout;
  - the apparent visual relationship of cumulative developments to landscape character types and or landscape character areas; and/or
  - in the case of magnitude of change to routes, the relative duration of views of developments from routes.
- A7.1.100 There has to be clear visibility of more than one cumulative development, of which one must be the proposed development, for there to be a cumulative effect (given this is an assessment of the effects of a proposed development and not a broader CLVIA of combined cumulative effects or capacity study). Where a proposed development is clearly visible and other developments are not, the effect is likely to be the same as recorded in the LVIA (i.e. the effect is not a cumulative effect).

### Geographical Extent

A7.1.101 As for the LVIA, the geographical extent of cumulative visual changes records the extent of the area over which the changes will be visible e.g. whether this is a unique viewpoint from where a proposed development and other cumulative developments can be glimpsed, or whether it represents a large area from which similar views are gained from large areas. Geographical extent is described as being large, medium or small.

### Duration and Reversibility

A7.1.102 For the purpose of the cumulative visual assessment consideration of the judgements of the duration and reversibility of visual effects are as recorded in the LVIA.

### Levels of Cumulative Visual Effect and Significance

- A7.1.103 The final step in the assessment of cumulative visual effects requires the judgements of sensitivity and magnitude of cumulative visual effect to be combined to make an informed professional assessment on the significance of each cumulative visual effect.
- A7.1.104 As for the LVIA the levels of cumulative visual effect are described as **none, minor**, **moderate** or major where moderate and major cumulative visual effects are considered significant in the context of the EIA Regulations.
- A7.1.105 The evaluations of susceptibility, value, size and scale, geographical extent, duration and reversibility are considered together to provide an overall profile of each identified visual effect. An overview is taken of the distribution of judgements for each aspect to make an informed professional assessment of the overall level of each visual effect, drawing on guidance provided in GLVIA3. Levels of effect are identified as none, minor, moderate or major where moderate and major visual effects are considered significant in the context of the EIA Regulations.
- A7.1.106 Most significant effects are likely where:
  - a proposed development extends or intensifies a visual effect;
  - a proposed development 'fills' an area such that it alters the view/visual amenity;
  - the interaction between a proposed development and other developments means that the total visual effect is greater than the sum of its parts; and/or
  - a proposed development will lengthen the time over which effects are experienced (sequential effects).
- A7.1.107 This determination of cumulative visual effects requires the application of professional judgement and experience to take on board the many different variables which need to be considered, and which are given different weight according to site-specific and location-specific considerations in every instance. Again, as for the assessment of landscape and visual effects, judgements are made on a case by case basis, guided by the same principles as set out in **Diagram 1**, and the typical descriptions/definitions of potential visual effects set out above.

## **Residential Visual Amenity**

### Background

- A7.1.108 The LI published Residential Visual Amenity Assessment (RVAA) guidance<sup>17</sup> in early 2019 setting out the background and approach to the assessment of potential effects on residential visual amenity. The guidance states that "Residential Visual Amenity Assessment (RVAA) is a stage beyond LVIA and focusses exclusively on private views and private visual amenity." (Foreword, Page 2).
- A7.1.109 This is reinforced by the guidance provided in GLVIA3, which states; "Effects of development on private property are frequently dealt with mainly through 'residential amenity assessments'. These are separate from LVIA although visual effects assessment may sometimes be carried out as part of a residential amenity assessment, in which case this will supplement and form part of the normal LVIA for a project. Some of the principles set out here for dealing with visual effects may help in such assessments but there are specific requirements in residential amenity assessment." (Para. 6.17, Page 107 and 109).
- A7.1.110 It is also important to note that residential visual amenity is only one component of residential amenity and should be considered in conjunction with assessments of potential effects on the other components of residential amenity including noise, dust, access to daylight, vibration and electromagnetic field etc. and which may otherwise be referred to collectively as 'living conditions'.

<sup>&</sup>lt;sup>17</sup> The Landscape Institute (February 2019) Technical Guidance Note 2/19: Residential Visual Amenity Assessment (RVAA)

- A7.1.111 With respect to visual effects, the focus of LVIA is on public views and public visual amenity which are given due consideration in the planning process. In respect of private views and visual amenity, it is widely accepted that no one has 'a right to a view', including situations where the visual amenity of a property is judged to be significantly affected by a proposed development. As a consequence, views from private residences are not a 'material consideration' in the determination of an application for planning or associated consents. However, in instances where the views of development from a property or its curtilage are judged to be so overbearing or unavoidable in key/principal views that they become a material planning consideration which is of greater public interest, they may be considered in the planning balance by a determining authority or decision maker.
- A7.1.112 GLVIA3 provides further clarification of the differences between LVIA and RVAA: "The issue of whether residents should be included as visual receptors and residential properties as private viewpoints has been discussed in Paragraph 6.17. If discussion with the competent authority suggests that they should be covered in the assessment of visual effects it will be important to recognise that residents may be particularly susceptible to changes in their visual amenity - residents at home, especially using rooms normally occupied in waking or daylight hours, are likely to experience views for longer than those briefly passing through an area. The combined effects on a number of residents in an area may also be considered, by aggregating properties within a settlement, as a way of assessing the effect on the community as a whole. Care must, however, be taken first to ensure that this really does represent the whole community and second to avoid double counting of the effects". (Para. 6.36, Page 114).
- A7.1.113 The RVAA guidance introduces an approach to considering a potential 'Residential Visual Amenity Threshold', beyond which effects may be of "such nature and/or magnitude that it potentially affects 'Living Conditions' or residential Amenity" (Para. 2.1, Page 5).
- A7.1.114 The guidance highlights that "LVIA prepared in accordance with GLVIA3 provides an appropriate starting point for a RVAA." (Para. 2.4, Page 5), and recommends four step approach (Figure 1 RVAA Process, page 7) and which draws heavily on the GLVIA3 principles and process. The first three steps of the approach "fall broadly within the normal scope of LVIA consisting of an assessment of the magnitude and significance of visual effect (in the EIA context) and change to visual amenity likely to be experienced by occupants at those individual residential properties which were identified" (Para. 3.2, Page 6). The fourth step "requires a further assessment of change to visual amenity examining whether the Residential Visual Amenity Threshold is likely to be, or has been, reached. Whether or not this final step is engaged depends on the circumstances specific to the case." (Para. 3.3, Page 6).

### **Identification of Residential Properties to be Assessed**

- A7.1.115 In line with the key principles of the Holford Rules, avoiding settlements and residential properties was a key consideration of the routeing process for the KTR Project in order to avoid or minimise the potential for significant effects on the views and visual amenity of residential receptors.
- A7.1.116 Wherever feasible, routeing of the proposed KTR Project connections sought to avoid encroaching on the 150m 'trigger for consideration zone' adopted at the routeing stages of the project<sup>18</sup> to reflect the principles within the Further Notes on Clarification to the Holford Rules a)<sup>19</sup>.
- A7.1.117 In addition, route options sought to avoid introducing visibility of infrastructure into principal views from residential properties, informed by observations made during field work which considered the orientation of properties, the likely availability of views from the property and its curtilage and the presence of intervening screening (e.g. localised landform, woodland, forestry and vegetation, built form and other landscape features). Nevertheless, the potential remains for significant visual effects in relation to views and visual amenity, experienced from residential properties in close proximity to the proposed KTR Project connections / route phases.
- A7.1.118 The assessment of potential effects on views and visual amenity from residential properties considers all properties located within 150m of the existing N Route and R Route and the proposed KTR Project connections (Polquhanity to Glenlee via Kendoon (P-G via K), Carsfad to Kendoon (C-K), Earlstoun to Glenlee (E-G), BG Deviation and Glenlee to Tongland (G-T))<sup>20</sup> of the KTR Project to determine whether

any potential visual effects require further consideration through more detailed study as part of a RVAA, in line with the RVAA guidance (para 4.7, page 10). An assessment of potential changes in the view from each property is undertaken, however where appropriate some properties may be grouped, where similar views may be experienced from a number of properties located in particularly close proximity to one another.

A7.1.119 In addition, properties located beyond 150m distance (typically between 150m - 200m) were reviewed and a number of these properties which afford potential open views towards the existing and/or proposed connections were included in the assessment.

### Approach to Consideration of Visual Effects from Residential Properties

- A7.1.120 As set out above it is important to note that the assessment of effects on residential visual amenity is often distinctly separate from the assessment of visual effects as covered in a standard LVIA. Nevertheless, in order to determine whether more detailed consideration of effects on views and visual amenity from residential properties is required, in the form of an RVAA, potential effects on views and visual amenity from residential properties in closest proximity to the proposed KTR Project Connections, experienced during construction and operation, has been undertaken.
- A7.1.121 It is this distinction between LVIA and RVAA which has informed the approach to considering potential effects on views and visual amenity in relation to the introduction of the proposed KTR Project connections, and "In any event RVAA should be considered supplementary to LVIA following on from, and informed by, the latter's findings and conclusions." (Para. 3.3, Page 6).

### Sensitivity of Residential Receptors

- A7.1.122 As advocated in LI Guidance receptors at their homes are often judged to be most susceptible to changes in views and visual amenity. GLVIA3 states at paragraph 6.36: "in the assessment of visual effects it will be important to recognise that residents may be particularly susceptible to changes in their visual amenity - residents at home, especially using rooms normally occupied in waking or daylight hours, are likely to experience views for longer than those briefly passing through an area."
- A7.1.123 As outlined in LI Guidance (para 4.23) residential receptors (people) are considered to be of high susceptibility to changes in views from their places of residence (property, curtilage, and access). An appreciation of the surrounding views is often material to the quality of life from residential properties; therefore, the value of these views is typically considered to be high. However, this may vary and is determined in relation to the availability and nature of existing views, including the presence of other existing transmission infrastructure (such as N Route and R Route), or other infrastructure in views.
- A7.1.124 The nature of the existing view, including the direction of the view, the orientation of buildings, location of garden or curtilage areas access and the presence of intervening features such as vegetation are considered, whilst the seasonality of vegetation screening and potential changes to forestry are referred to where applicable.
- A7.1.125 Taking account of the susceptibility of receptors and the value of views from residential properties, the overall sensitivity of residential receptors is typically judged to be **high** and is referred to as such throughout the assessment.

### Magnitude of Visual Change

- A7.1.126 In order to establish whether visual effects are of such magnitude that they require further consideration as part of a more detailed RVAA (final fourth step) and thus warrant material consideration within the planning balance, it is important to determine whether these effects make the property 'an unattractive place to live'. Potential significant adverse effects on views and visual amenity, in the context of the EIA Regulations, experienced by people at their place of residence as a result of introducing a new development are not uncommon, but in themselves may not trigger further consideration in the planning balance as a 'material consideration'.
- A7.1.127 As outlined in the RVAA guidance, "Determining whether the threshold has been reached requires informed professional judgement. It is the process by which informed professional judgement is engaged to reach a conclusion regarding the Residential Visual Amenity Threshold that is the subject of this Technical Guidance Note." (Para. 2.2, Page 5), informed by the "LVIA findings of significant (adverse) effects on outlook and /or on visual amenity at a residential property do not automatically imply the need for a RVAA. However, for properties in (relatively) close proximity to a development proposal, and

<sup>&</sup>lt;sup>18</sup> The adoption of the 150 m trigger for consideration zone was designed to reduce, and where possible avoid effects on the general amenity of residential properties as detailed in para. 4.18, The Kendoon to Tongland Reinforcement Project: Routeing and Consultation Document (October 2016) SP Energy Networks and LUC

<sup>&</sup>lt;sup>19</sup> The Holford Rules: Guidelines for the Routeing of New High Voltage Overhead Transmission Lines (with NGC 1992 and SHETL 2003 Notes) <sup>20</sup> Distances calculated from the centre line of the proposed overhead line connection, therefore distances to individual towers or wood poles

may be greater than 150 m in some instances.

which experience a high magnitude of visual change, a RVAA may be appropriate, and may be required by the determining / competent authority." (Para. 2.5, Page 5).

A7.1.128 In line with Step 3 of the RVAA guidance, the consideration of visual effects from residential properties in the LVIA therefore concludes "*by identifying which properties should be assessed further in the final step in order to reach a judgement regarding the Residential Visual Amenity Threshold."* (Para. 4.16, Page 12). Typically, this will be limited to those properties judged to experience a high magnitude of visual change, resulting in major significant adverse effects, as a consequence of the introduction of a proposed development.

#### Further Residential Visual Amenity Assessment (RVAA)

- A7.1.129 In the event that more detailed examination of effects on residential visual amenity is required, as identified during Step 3 of the process advocated within the RVAA Guidance, properties which are predicted to experience the largest magnitude of visual effect will be subject to a further judgement regarding the Residential Visual Amenity Threshold.
- A7.1.130 As detailed in the RVAA Guidance, "This concluding judgement should advise the decision maker whether the predicted effects on visual amenity and views at the property are such that it has reached the Residential Visual Amenity Threshold, therefore potentially becoming a matter of Residential Amenity. This judgement should be explained in narrative setting out why the effects are considered to reach the Residential Visual Amenity Threshold. Equally, judgements should explain why the threshold has not been reached." (Para. 4.18, Page 12).
- A7.1.131 It is important to note that any judgement in relation to the Residential Visual Amenity Threshold "goes beyond the assessment undertaken in Step 3 which is restricted to judging the magnitude and significance of visual effect, typically as a supplement to the accompanying LVIA." (Para. 4.20, Page 12), and as such, the detailed approach and methodology to inform this concluding step is not presented here. In the event that effects identified within the LVIA and/or CLVIA undertaken during Step 3, and in accordance with GLVIA3 principles and processes, require further consideration, the RVAA approach to Step 4 would be undertaken in accordance with the approach advocated within the LI RVAA Guidance.

Appendix 7.1 LVIA Assessment Methodology

Appendix 7.2: ZTV Mapping & Visualisation Methodology

# Appendix 7.2 ZTV Mapping & Visualisation Methodology

## Introduction

- A7.2.1 This appendix sets out the approach to the production of Zone of Theoretical Visibility (ZTV) mapping and visualisations which accompany the Kendoon to Tongland 132 kilovolt (KV) Reinforcement Project ('the KTR Project') Landscape and Visual Impact Assessment (LVIA) and Cumulative Landscape and Visual Impact Assessment (CLVIA) set out in Chapter 7: Landscape and Visual Amenity, Volume 1 of the Environmental Impact Assessment (EIA) Report.
- A7.2.2 The methodology used to produce the ZTVs and visualisations which support the LVIA is based on current good practice guidance from Scottish Natural Heritage (SNH)<sup>1</sup> and the Landscape Institute  $(LI)^{2,3,4}$ . Further information about the approach is provided below.

### **Reference Base Mapping**

- Ordnance Survey (OS) Maps:
  - Landranger 1:50,000 Scale (Sheets 77, 78, 83, 84);
  - Explorer 1:25,000 Scale (Sheets 312, 318, 319, 320, 327, 328);
- Online map search engines:
  - Bing, mapping website. (Online Available at: www.bing.com/maps); and
  - Google, mapping website. (Online Available at: www.maps.google.com).

### Data Used for Digital Terrain Modelling (DTM) and Figures

- OS Terrain® 5 mid-resolution height data (DTM) (5m grid spacing, 2.5mRMSE);
- OS Terrain® 50 mid-resolution height data (DTM) (50m grid spacing, 4m RMSE);
- OS 1:250,000 raster data (to provide a more general location map);
- OS 1:50,000 raster data (to show surface details such as roads, forest and settlement detail equivalent to the 1:50,000 scale Landranger maps);
- OS 1:25,000 raster data (to provide detailed maps for viewpoint location maps);
- OS 1:10,000 raster data (to provide detailed mapping for residential properties); and
- Aerial Imagery (2m resolution) from July 2017 to June 2018 © Getmapping Plc.

## Zone of Theoretical Visibility (ZTV) Mapping

- A7.2.3 Evaluation of the theoretical extent to which both the existing and proposed overhead transmission infrastructure is visible across the study area is undertaken by establishing a ZTV.
- A7.2.4 ESRI's ArcMap 10.5.1 software is used to generate the ZTVs. The Spatial Analyst/Viewshed tool does not use mathematically approximate methods, and the program calculates areas from which the steel lattice towers or wood pole structures are potentially visible.
- A7.2.5 This has been performed based on a 'Bare Earth' computer generated DTM which does not take account of potential screening by buildings, woodland, vegetation or other surface features. Further detail about how the ZTVs have been generated and the data used is provided below.

### **Bare Earth ZTVs**

- A7.2.6 The bare earth DTM is comprised of OS Terrain® 5 (5m resolution) data within 5km from the KTR Project wayleave and also 5km from the existing N route and R route. OS Terrain 50 data (50m resolution) was used for further areas beyond these extents for context.
- A7.2.7 It should be noted that the software uses raster height data, but while it is defined as continuous data (with each grid square referred to as a 'cell'), it assumes a single height value from the centre of that cell for the whole cell. Therefore, any height variations between centre points of cells will not be recognised.
- A7.2.8 The DTM data has not been altered (i.e. by the addition of local surface screening features) for the production of the Bare Earth ZTV. No significant discrepancies have been identified between the DTM used and the actual topography around the study area. The effect of earth curvature and light refraction has been included in the Bare Earth ZTV analysis and a viewer height of 2m above ground level has been used in accordance with SNH Guidance<sup>1</sup>. Whilst "*This is higher than the camera height* recommended for photographic visualisations (1.5m) to compensate for potential inaccuracies in digital terrain data and to ensure that the 'worst case' is represented" (para 45, page 11), and exceeds the 1.5m to 1.7m above ground level observer eye height suggested in the Summary advice on good practice in GLVIA3<sup>3</sup> (bullet point ten, page 117).
- A7.2.9 in the interpretation and use of the ZTV:
  - The ZTV uses a 'bare ground' DTM model, and does not consider the screening effects of vegetation, buildings, or other local features that may prevent or reduce visibility.
  - The ZTV is considered to over emphasise the extent of visibility of the proposed overhead transmission infrastructure and therefore represents a 'maximum potential visibility' scenario.
  - The ZTVs are based on theoretical visibility from 2m above ground level.
  - The ZTV does not indicate the decrease in visibility that occurs with increased distance from the KTR Project. The nature of what is visible from 1km away will differ markedly from what is visible from 5km away, although both are indicated as having the same level of visibility; and
  - There is often a wide range of variation within the visibility illustrated by a ZTV, for example, an area shown as having visibility of a larger number of proposed steel lattice towers or wood poles may in reality only be the result of only a small proportion of the structures, which can make a considerable difference in the potential effects of the KTR Project on receptors within the area affected by visibility.
- A7.2.10 In light of these limitations, whilst ZTVs are used as a starting point to inform the assessment, providing an indication of where the KTR Project will theoretically be visible, the information drawn from the ZTV was verified with reference computer generated wireline images of the proposed KTR Project Connections in the field, to ensure that the assessment conclusions represent the visibility of the KTR Project accurately and based on professional judgement.
- A7.2.11 Bare Earth ZTVs have been generated for the following:

### Existing Connections to be Removed

- the removal of approximately 2.5km of 132kV steel lattice tower (PL1) overhead line (OHL) from Polquhanity to Kendoon the removal of 2km of existing 132kV steel lattice tower OHL from Polguhanity to Kendoon (N route, towers: N230 – N240);
- the removal of approximately 7.6km of 132kV steel lattice tower (PL1) OHL between Kendoon, Carsfad, Earlstoun and Glenlee (R route – northern section, towers: R000A – R29); and
- the removal of approximately 33.1km of 132kV steel lattice tower (PL1) OHL between Glenlee and Tongland (R route - southern section, towers: R30 (R) - R153).

There are limitations in the use and reliance on this theoretical visibility, and these should be considered

<sup>&</sup>lt;sup>1</sup> Scottish Natural Heritage (2017) Visual Representation of Wind Farms - Version 2.2

<sup>&</sup>lt;sup>2</sup> Landscape Institute (2011) Advice Note 01/11, Photography and photomontage in landscape and visual impact assessment

<sup>&</sup>lt;sup>3</sup> Landscape Institute and the Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3)

<sup>&</sup>lt;sup>4</sup> Landscape Institute (2017) Technical Guidance Note 02/17 Visual representation of development proposals

### Proposed Connections

- a new 132kV double circuit steel lattice tower (L7) overhead line, of approximately 10.1km in length, between Polquhanity and the existing Glenlee substation, via Kendoon substation (approximately 3km south of the Polquhanity terminal tower) (P-G via K Connection);
- a new 132kV single circuit wood pole (Trident) overhead line, of approximately 2.6km in length, between Carsfad and Kendoon (C-K Connection);
- a new 132kV single circuit wood pole (Trident) overhead line, of approximately 1.6km in length, between Earlstoun and Glenlee (E-G Connection);
- a new 132kV double circuit steel lattice tower (L4) overhead line deviation of the existing BG route, from Glenlee substation approximately 1.2km in length (B-G Deviation); and
- a new 132kV double circuit steel lattice tower (L4) overhead line, of approximately 32.3km in length, between Glenlee and Tongland (G-T Connection).
- A7.2.12 Additionally, Bare Earth ZTVs have been generated for the following existing infrastructure:
  - Existing Electricity Transmission Network Connections (Polquhanity Dalmellington (SWS) connection, Blackcraig and Margree connection, 'BG' Route, 'S' Route) within a 10km radius of the KTR Project; and
  - Wind farms (operational, consented or proposed) within a 10km radius of the KTR Project.
- A7.2.13 The structural form and I tower heights of the proposed steel lattice towers are detailed in **Chapter 4: Development Description** and shown on **Figures 2.5a-c**.

### Cumulative ZTVs (CZTVs)

A7.2.14 To construct cumulative ZTVs (CZTVs) to illustrate the cumulative visibility of the proposed KTR Project connections combined (KTR Project as a whole) and with other existing, consented and proposed developments (e.g. OHLs, wind farms and other large scale-built development), individual ZTVs have been prepared for each development to be considered in the cumulative assessment.

#### **Notes on Figures**

A7.2.15 **Table A7.2.1** below provides details of data sources and information, and the approach and methodology used for the preparation of individual figures which accompany **Chapter 7**.

### Table A7.2.1: Notes on Figures

Figure Content / Data	Notes	Relevant Figure(s)
OS Base Mapping	<ul> <li>OS 1:250,000; 1:50,000; 1:25,000; 1:10,000 raster image data © Crown copyright and database right 2019</li> </ul>	Figure 7.1 to 7.2, and 7.4 to 7.20
Aerial Imagery	<ul> <li>Aerial Imagery (2m resolution) from July 2017 to June 2018 © Getmapping Plc.</li> </ul>	Figure 7.3
Digital Terrain Model (DTM)	2 5m PMSE) obtained from Emansite 2010:	
	<ul> <li>OS Terrain® 50 mid-resolution height data (DTM) (50m grid spacing, 4m RMSE) obtained from Ordnance Survey 2018; and</li> </ul>	
	• The DTM uses a combination of OS Terrain 5 (5m resolution) within 5km of the KTR Project connections, and N route and R route, and OS Terrain 50 (50m resolution) beyond.	
Landscape Character Types (LCTs)	<ul> <li>Digital map based 2019 National Landscape Character Assessment (LCA) data obtained from SNH - 2019</li> </ul>	Figures 7.7 and 7.9

Figure Content / Data	Notes	Relevant Figure(s)
Local Landscape Areas (LLAs)	<ul> <li>Landscape Character Review &amp; Historic Environmental Audit Report (August 2017) Northlight Heritage – Local Landscape Areas Data obtained from Galloway Glens Landscape Partnership - August 2017</li> </ul>	Figure 7.8
Designated or Protect Areas	National Scenic Area (NSA) data obtained from Scottish Government 2018	Figures 7.6 to 7.9
	<ul> <li>Regional Scenic Area (RSA) data obtained from Dumfries &amp; Galloway Council (D&amp;GC)- 2018</li> </ul>	
	Wild Land Area (WLA) data obtained from SNH 2019     Calloway Forest Park and Dark Sky Park data obtained from Forestry	
	<ul> <li>Galloway Forest Park and Dark Sky Park data obtained from Forestry Commission 2018</li> </ul>	
	<ul> <li>Galloway and Southern Ayrshire Biosphere data obtained from SNH 2019</li> </ul>	
Promoted Routes	<ul> <li>Promoted route data digitised from online sources using Ordnance Survey Open Roads data from 2019</li> </ul>	Figures 7.11 to 7.20
	Core Path data obtained from D&GC- 2019	
Residential Properties	<ul> <li>Residential property data (Ordnance Survey AddressBase Plus) obtained from Emapsite 2019</li> </ul>	Figure 7.12
	• <b>Figures 7.12.1-19</b> illustrate the location of all residential properties located within a 500m radius of the proposed KTR Project connections and/or the existing N route and/or R route to be decommissioned and removed.	
Existing Infrastructure to be	• N Route data obtained from SP Energy Networks (SPEN) and relates to 132kV steel lattice towers (PL1) N230 to N240 located between Polquhanity terminal tower and Kendoon substation (Tower numbers referenced on <b>Figure 4.7.1-2</b> );	Figures 7.1 to 7.20
decommissioned and removed	• R Route (north) g data obtained from SPEN and relates to 132kV steel lattice towers (PL1) R000A to R29 located between Polquhanity terminal tower, Kendoon substation and Glenlee substation (Tower numbers referenced on <b>Figure 4.7.1-4</b> );	
	<ul> <li>R Route (south) data obtained from SPEN and relates to 132kV steel lattice towers (PL1) R030 to R153 located between Glenlee substation and Tongland substation (Tower numbers referenced on Figure 4.7.4 and Figure 4.7.16-27);</li> </ul>	
Proposed Infrastructure	<ul> <li>P-G via K data obtained from SPEN and relates to 132kV steel lattice towers (L7) 1 to 37 located between Polquhanity terminal tower, Kendoon substation and Glenlee substation (Tower numbers referenced on Figure 4.7.1-4);</li> </ul>	Figures 7.1 to 7.20
	<ul> <li>C-K data obtained from SPEN and relates to 132kV ('Trident') wood poles R001R to R024R located between Carsfad hydroelectric power station and Kendoon substation (Tower numbers referenced on Figure 4.7.2-3);</li> </ul>	
	<ul> <li>E-G data obtained from SPEN and relates to 132kV ('Trident') wood poles EG001 to EG0016 located between Earlstoun hydroelectric power station and Glenlee substation (Tower numbers referenced on Figure 4.7.4);</li> </ul>	
	• G-T data obtained from SPEN and relates to 132kV steel lattice towers (L4) 1 to 118 located between Glenlee substation and Tongland substation (Tower numbers referenced on <b>Figure 4.7.4-18</b> ); and	
	<ul> <li>BG Deviation data obtained from SPEN and relates to 132kV steel lattice towers (L4) BG-097 and R-BG-102 located between existing BG Route and Glenlee substation (Tower numbers referenced on Figure 4.7.4-5).</li> </ul>	

Figure Content / Data	Notes	Relevant Figure(s)
KTR Project ZTV	<ul> <li>The ZTVs were calculated using ArcMap 10.5.1 software and earth curvature and atmospheric refraction have been considered;</li> </ul>	Figures 7.4, 7.5, 7.9, 7.11, 7.12
	<ul> <li>A bare earth DTM was used to generate the ZTVs;</li> </ul>	
	<ul> <li>Combined KTR Project (as a whole) ZTVs generated based on data obtained from SPEN for final KTR Project Connections (P-G via K, C-K, E-G, G-T and BG Deviation); and</li> </ul>	
	• The ZTVs illustrate visibility of each steel tower/wood pole from a viewing height of 2m above ground level. Visibility of each individual steel tower has been calculated based on the specific steel tower/wood pole height to a maximum distance of 10km.	
Comparative ZTV	<ul> <li>The ZTVs were calculated using ArcMap 10.5.1 software and earth curvature and atmospheric refraction have been considered;</li> </ul>	Figure 7.5
	<ul> <li>A bare earth DTM was used to generate the ZTVs; and</li> </ul>	
	<ul> <li>Combined N Route and R Route (north) ZTV generated based on infrastructure data obtained from SPEN;</li> </ul>	
	<ul> <li>R Route (south) ZTV generated based on infrastructure data obtained from SPEN;</li> </ul>	
	<ul> <li>Combined KTR Project (as a whole) ZTVs generated based on data obtained from SPEN for final KTR Project Connections (P-G via K, C-K, E-G, G-T and BG Deviation); and</li> </ul>	
	<ul> <li>ZTVs illustrate comparative visibility of N Route and R Route (north) vs P-G via K, C-K and/or E-G (Figure 7.5.1-2) and R Route (south) vs G-T and/or BG Deviation (Figure 7.5.3-6)</li> </ul>	
KTR Project Individual	<ul> <li>The ZTVs were calculated using ArcMap 10.5.1 software and earth curvature and atmospheric refraction have been considered;</li> </ul>	Figures 7.13 to 7.17
Connection ZTV	<ul> <li>A bare earth DTM was used to generate the ZTVs; and</li> </ul>	
	• The ZTVs illustrate visibility of each steel tower/wood pole from a viewing height of 2m above ground level. Visibility of each individual steel tower has been calculated based on the specific steel tower/wood pole height to a maximum distance of 10km.	
CZTV	<ul> <li>The ZTVs were calculated using ArcMap 10.5.1 software and earth curvature and atmospheric refraction have been considered;</li> </ul>	Figures 7.18 to 7.20
	• A bare earth DTM was used to generate the ZTVs;	
	<ul> <li>The CZTVs illustrate visibility of each steel tower/wood pole from a viewing height of 2m above ground level. Visibility of each individual steel tower has been calculated based on the specific steel tower/wood pole height to a maximum distance of 10km; and</li> </ul>	
	<ul> <li>Where wind farms and wind turbines have been considered in the CZTVs, turbine tip heights have been used for each turbine and maximum radius visibility distances from each turbine calculated based on SNH Guidance (2017)<sup>1</sup>.</li> </ul>	

## Viewpoint Photography

A7.2.16 The methodology for undertaking viewpoint photography is in accordance with guidance from Scottish Natural Heritage (SNH, 2017) and the LI (LI, 2011). The focal lengths used are in accordance with recommendations contained in guidance and are stated on the figures. Photography was undertaken by LUC between June 2017 and May 2019. Nikon D600, D700 and D750 full frame sensor digital single lens

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reflex (SLR) cameras with a fixed 50mm focal length lens were used to undertake photography from all viewpoint locations.

- A7.2.17 A tripod with vertical and horizontal spirit levels was used to provide stability and to ensure a level set of adjoining images. The cameras were orientated to take photographs in landscape format. A panoramic head was used in each instance to ensure the camera rotated about the no-parallax point of the lens in order to eliminate parallax errors<sup>5</sup> between the successive images and enable accurate stitching of the images. The camera was moved through increments of  $24^{\circ}$  (degrees) and rotated through a full 360° at each viewpoint. Fifteen photographs were taken for each  $360^{\circ}$  view.
- A7.2.18 The location of each viewpoint and information about the conditions at the time of the photographs being taken was recorded in the field in accordance with SNH (SNH, 2017) and LI guidance (LI, 2011).
- A7.2.19 Weather conditions and visibility were considered an important aspect of the field visits for the photography. Where possible, visits were planned around clear days with good visibility. Viewpoint locations were visited at appropriate times of day to ensure, as far as possible, that the sun lit the scene from behind, or to one side of the photographer. South facing viewpoints can present problems particularly in winter when the sun is low in the sky. Photography opportunities facing into the sun were avoided where possible to prevent the overhead transmission infrastructure appearing in silhouette. Adjustments to lighting of the overhead transmission infrastructure were made in the rendering software to make the infrastructure appear realistic in the view under the specific lighting and atmospheric conditions present at that time the photography was taken.

### **Photography Stitching**

A7.2.20 Photographic stitching software PTGui© and Adobe Photoshop© software was used to stitch together the adjoining frames to create panoramic baseline photography.

### **Editing of Baseline Photography**

- A7.2.21 Existing electricity transmission infrastructure (N route and R route (north and south)) to be decommissioned and removed following commissioning of the proposed new KTR Project connections was removed from the baseline viewpoint photography where evident. This was undertaken using Adobe Photoshop© software.
- A7.2.22 Existing<sup>6</sup> electricity distribution infrastructure to be removed and realigned or relocated underground as part of the KTR Project to facilitate the new KTR Project connections was also removed from the baseline viewpoint photography where evident.
- A7.2.23 Areas of existing woodland felled to create the wayleave corridor necessary for the KTR Project connections (as detailed in Chapter 5: Felling, Construction, Operational Maintenance and **Decommissioning** and shown on **Figure 5.2**) were removed from the baseline viewpoint photography where evident. Additional areas of woodland, identified for felling to minimise the risk of subsequent windthrow (i.e. the uprooting of trees by the wind) by the additional felling of trees to create more windfirm edges (as detailed in **Chapter 8: Forestry**), were also removed from baseline photography where evident.

### Visualisations

### Wireline Visualisations

A7.2.24 The software package 43d Topos was used to create a DTM from OS Terrain® 5 and OS Terrain® 50 height data. The DTM includes the proposed development extents, viewpoint locations and all landform visible within the baseline photography. Overhead transmission infrastructure and viewpoint location coordinates were entered.

### **Photomontage Visualisations – Proposed Infrastructure**

A7.2.25 Photomontages have been constructed to show the proposed infrastructure including the specified tower type and tower height. A default viewer height of 1.5m above ground level is used in the 43d Topos

<sup>&</sup>lt;sup>5</sup> Parallax is the difference in the position of objects when viewed along two different lines of sight. In the case of a camera this would occur if the rotation point of the lens was not constant and would result in stitching errors in the panorama.

<sup>&</sup>lt;sup>6</sup> Works to relocate elements of the 240v, 11kV and 33kV electricity distribution network form part of the KTR Project ancillary development.

software, however on limited occasions this viewer height was increased by a small increment to achieve a closer match between the terrain data and photographic landform content<sup>7</sup>.

- A7.2.26 The next stage required the rendered overhead transmission infrastructure to be blended into the baseline photograph to create the photomontages. Adobe Photoshop<sup>©</sup> software was used to combine the images and mask out (remove) complete or partial elements of the proposed overhead transmission line infrastructure which were located behind foreground elements in the original baseline photograph.
- A7.2.27 A Shapefile containing areas of tree felling, of both the (70-80m wide) wayleave and areas of identified wind throw, was imported into 43d Topos software to determine visibility from closer viewpoints.
- Topos viewpoint exports were imported into Adobe Photoshop aligned with the photography and A7.2.28 informed the removal of existing woodland in the photomontage images.
- A7.2.29 Finally, where applicable the images were converted from Cylindrical Projection to Planar Projection using PTGui© software.

### Photomontage Visualisations – Replanting of Areas of Windthrow Felling

- A7.2.30 For applicable viewpoints<sup>8</sup> where the replanting of areas of windthrow felling would be evident and the additional mitigation is linked to alternative residual effects identified in the LVIA, this is illustrated in additional visualisations. Details of the approach to the restocking of these areas is provided in **Chapter** 8 and Appendix 5.1: Forestry Design Concept, and the extents of this restocking are shown on Figure 2.1 to Figure 2.3 contained therein.
- A7.2.31 Map Maker Prospect<sup>©</sup> (Version 2) software<sup>9</sup> was used to estimate the tree heights of the replanted areas of windthrow felling, based on the restocking and establishment of these areas to a similar condition as the pre-construction baseline situation (in terms of species and composition<sup>10</sup>). An appropriate yield class was assigned to the areas of restocking, informed by the general yield class curve<sup>11</sup> and advice provided by the forestry consultant (with reference to the assessment of the existing forestry in each area).
- A7.2.32 Tree heights were estimated for the replanted area of forestry at 10 years, 20 years, and 30 years for comparison, with wireline images generated in Map Maker Prospect<sup>®</sup> (Version 2) software. The estimated tree heights generated by the software and verified by the forestry consultant are set out in the table below:

Age of restocked forestry	Tree Species	Yield Class	Estimated tree height (m)
10 years	Sitka Spruce	18	4.4m
20 years	Sitka Spruce	18	10m
30 years	Sitka Spruce	18	16.4m

### Table A7.2.2: Estimated tree heights

- A7.2.33 These images were then used to prepare additional photomontage images illustrating the areas of restocked forestry at 20 years in order to visualise the influence of this additional mitigation (as set out in the assessment of effects presented in **Chapter 7** and summarised in **Appendix 5.2**). Trees of the specific species and age were introduced into the photomontages illustrating the operational phase of the development. Adobe Photoshop<sup>©</sup> software was used to combine the images and mask out (remove) complete or partial elements of the proposed restocking located behind foreground elements in the original baseline photograph.
- A7.2.34 No modelling of other extents of potential growth, felling and/or restocking of adjacent areas of forestry within the existing baseline views was undertaken. This is due to the degree of uncertainty attached to the future management and composition of other forestry outwith the extents of the KTR Project. As

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### **Figure Layout**

- A7.2.35 Adobe InDesign<sup>©</sup> software was used to present the figures. The dimensions for each image (printed height and field of view) are detailed below and each viewpoint visualisation has been presented as follows:
  - A3 Viewpoint location map;
  - 90° Baseline photograph (cylindrical projection) and 90° Wireline image (cylindrical projection) below. Wireline image shows all visible proposed KTR Project connections and developments considered in cumulative assessment (as detailed in **Table 7.3** and **Table 7.4** in **Chapter 7**):
    - Page size: 841 x 297mm;
    - Up to four x 90° sections presented in this format.
  - 53.5° Wireline image (planar projection) showing all visible proposed KTR Project connections:
    - Page size: 841 x 297mm.
  - 53.5° Photomontage image (planar projection) showing all visible proposed KTR Project connections and associated forestry removal where applicable:
    - Page size: 841 x 297mm;
    - Up to four x  $53.5^{\circ}$  sections presented in this format.
  - 53.5° Photomontage image (planar projection) showing replanted forestry in areas of windthrow felling (indicative 20 year age):
    - Page size: 841 x 297mm;
    - Up to two x 53.5° sections presented in this format.

<sup>10</sup> Scottish Forestry (SF) normally expect an area which has been clear felled to be restocked and will normally attach what is referred to as a continuing condition to felling permissions to secure the restocking (see Chapter 8: Forestry for details). <sup>11</sup> First published in 1966 by HMSO as Forestry Commission Booklet 16, Forest management tables. Revised edition published in 1971 as Forestry Commission Booklet 34, Forest management tables (metric). Replaced in 1981 by Forestry Commission Booklet 48, Yield models for forest management, and in 2016 by this new theory handbook published in Support of Forest Yield: a PC-based yield model for forest management in Britain.

<sup>&</sup>lt;sup>7</sup> An altered height above ground level was used for some viewpoint locations where local topography did not match the wireframes due to data resolution

<sup>&</sup>lt;sup>8</sup> Limited to Viewpoint 1 (Figure 7.21), Viewpoint 10 (Figure 7.30), Viewpoint 14 (Figure 7.34) and Viewpoint 24 (Figure 7.44).

<sup>&</sup>lt;sup>9</sup> Map Maker Prospect forest design and visualisation software was commissioned by Forestry Commission Scotland (FCS) and is now used by Forestry and Land Scotland (FLS) in their design and planning of the National Forest Estate.

Appendix 7.3: Summary of Consultation & Viewpoint Selection

	Annon				Consultee and Date	Scoping <sup>1</sup> /Other Consultation	Issue Raised
	<b>Append</b> Summa		ultation & Viewpoir	nt Selection		Cumulative Landscape and Visual Impact Assessment (CLVIA) Consultation	Details of the approach cumulative assessment including the extent of (10km radius for the pu cumulative landscape a effects) and the develo
	Summary	of Consultation	on			4/6/2019 - D&GC	included.
A7.3.1	-		visual impacts assessment (LVIA) o			No response received	
	the scoping re	sponses and other of	rcement Project ('the KTR Project'), consultation undertaken during the a rtaken is detailed in <b>Table A7.3.1</b> b	assessment phase of the Project. A		Further CLVIA Consultation 7/5/2020 – D&GC	Final updated details of to the cumulative asses outlined, including the
	Table A7.3.1:	Summary of Con	sultation			No response received	study area (10km radiu purposes of cumulative and visual effects) and
	Consultee and Date	Scoping <sup>1</sup> /Other Consultation	Issue Raised	Response/Action Taken by SPEN			developments to be inc
	Dumfries and Galloway Council (D&GC)	Scoping Response - Received 3/8/2017	<ul> <li>Intention to use landscape character types defined in the Dumfries and Galloway Landscape Assessment (1998) noted as appropriate.</li> <li>Consider if there will be any effects through construction traffic accessing the route on minor roads or publicly accessible tracks.</li> <li>Decommissioning: review potential for replanting 'redundant' or partredundant easements following removal of existing lines.</li> <li>Initial viewpoints were noted as being acceptable.</li> <li>A number of viewpoint requests were made:</li> <li>Suggested additional/alternative to Unclassified road south-west of Glenlee (Scoping VP 9), moving to the point where the minor road exits forestry;</li> <li>Suggested additional/alternative to Core Path near Tannoch Flow (Scoping VP 11), moving to Otter Pool and Car park;</li> </ul>	<ul> <li>Traffic access during construction considered in assessment of construction effects.</li> <li>The potential for replanting of redundant wayleave corridors following decommissioning and removal of N and R route infrastructure is highlighted in the LVIA. However, SP Energy Networks (SPEN) does not have control over these areas and any replanting would be subject to the agreement of landowners. Any replanting is therefore not committed mitigation.</li> <li>VP 11 located on Unclassified road (U3S) south-west of Glenlee and VP 12 Core Path 516 south-west of Glenlee and VP 12 Core Path 516 south-west of Glenlee and P 12 core path 516 south-west of seen in combination.</li> <li>VP 17 The Otter Pool added as alternative to capture potential effects of both existing and proposed connections seen in combination.</li> <li>VP 20 Raiders Road, north of Stroan Loch added in addition to VP 16 (Tannoch Flow).</li> </ul>	Scottish Natural Heritage (SNH)	Scoping Response – Received 26/5/2017	Proposed 5km study ar however it was noted th exclude part of R route Parton. Request for assessmen proximate landscape ar effects of the reinstater restoration of N and R n Initial viewpoints were being acceptable with t consideration of input f consultees. No addition requested. Written descriptions an would be helpful in exp proposed in different se route corridor, to show where tree felling will o design approach taken to, for example, minimi sky-lining.
			Suggested additional/alternative to Core Path near Tannoch Flow (Scoping VP 11), Core Path to Location midway along the Raiders Road.			LVIA Consultation 22/1/2019 – SNH response received (by email) 14/2/2019	No further comments to the final list of LVIA vie
		LVIA Consultation 22/1/2019 – Response received (by email) 14/2/2019	No further comments to provide on the final list of LVIA viewpoints.	n/a		CLVIA Consultation 19/6/2019 – SNH No response received	Details of the approach cumulative assessment including the extent of (10km radius for the pu cumulative landscape a effects) and the develo included.

<sup>3</sup> Major Electrical Infrastructure Projects: Approach to Routeing and Environmental Impact Assessment (May 2015) SP Energy Networks

	Response/Action Taken by SPEN
ach to the ent outlined, of the study area e purposes of e and visual elopments to be	n/a
s of the approach seessment he extent of the adius for the sive landscape nd the included.	Study Area and developments considered in CLVIA shown on <b>Figure 3.1</b> <sup>Error! Bookmark not defined.</sup>
r area acceptable, d this does ute south of nent of the e and visual atement and R routes. ere noted as th the ut from other ional viewpoints	Consideration of potential effects of reinstatement and restoration works associated with the decommissioning and removal of N and R routes included in the LVIA where appropriate.
and figures explaining what is t sections of the ow for example Il occur and the en with respect imising tower	In line with the principles of the Holford Rules <sup>2</sup> and SPEN's Major Electrical Infrastructure Projects: Approach to Routeing and Environmental Impact Assessment <sup>3</sup> the routeing and design of the proposed KTR Connections has sought to minimise tree felling and opportunities for sky-lining wherever possible. The approach to the routeing and design of the proposed development, including consideration of landscape and visual matters detailed in <b>Chapter 2: The</b> <b>Routeing Process and Design</b> <b>Strategy</b> .
s to provide on viewpoints.	Noted
ach to the ent outlined, of the study area e purposes of e and visual elopments to be	n/a

 $<sup>^{1}</sup>$  Formal EIA Scoping Request submitted to Scottish Government Energy Consents Unit 28th April 2017.

<sup>&</sup>lt;sup>2</sup> The Holford Rules: Guidelines for the Routeing of New High Voltage Overhead Transmission Lines (with NGC 1992 and SHETL 2003 Notes)

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Consultee and Date	Scoping <sup>1</sup> /Other Consultation	Issue Raised	Response/Action Taken by SPEN
	Further CLVIA Consultation 7/5/2020 – ECU No response received	Final updated details of the approach to the cumulative assessment outlined, including the extent of the study area (10km radius for the purposes of cumulative landscape and visual effects) and the developments to be included.	Study area and developments considered in CLVIA shown on <b>Figure</b> <b>3.1<sup>Error! Bookmark not defined</sup></b> .
Forestry Commission Scotland (FCS) (now Scottish Forestry)	Collated scoping opinion - received 4/10/2017	No response received to scoping request.	n/a
Forest Enterprise Scotland (FES) (now Forest and Land Scotland (FLS)) <sup>4</sup>	LVIA Consultation – FLS comments on potential viewpoints received (by email) 22/11/2018	<ul> <li>The choice to route so much of the line through woodlands will lead to significant impacts which should not be dismissed or discounted.</li> <li>A number of viewpoint requests were made: <ul> <li>Airie;</li> <li>Polmaddy Foot Bridge;</li> <li>Alternative A712/The Queen's Way;</li> <li>Alternative Otter Pool location; and</li> <li>Alternative Mossdale location.</li> </ul> </li> <li>In addition, consideration of effects on receptors travelling between Gairloch Car Park and Tannoch Flow, as they pass beneath and along the overhead line (OHL).</li> </ul>	Noted. The effects are fully addressed. VP 22 Core Path 485 Mossdale to Gatehouse Station Railway Walk added to represent views from cycle path and nearby isolated residential property at Airie. VP 3 Polmaddy added to represent views experienced by recreational receptors at Polmaddy and on Core Path 164. Location of VP 14 A712, The Queen's Way revised to location further east to capture views experienced at the stopping point on scenic route and at the gateway to Galloway Forest Park. VP 17 The Otter Pool added to represent views experienced by recreational receptors at this tourist attraction on Raiders Road. VP 21 Mossdale represents views experienced from the community of Mossdale and from Core Path 485. Potential effects on receptors using Core Path 142 between Gairloch Car Park and Tannoch Flow considered as part of the LVIA.
	LVIA Consultation sent 22/01/2019 – FLS response received (by email) 12/02/2019	Acceptance of final list of viewpoints to be included in the LVIA. Further request that the footbridge at Polmaddy and the bench at Mossdale were recognised in the LVIA as places that people stop to take in the view.	Potential effects experienced by receptors at the footbridge at Polmaddy and the bench at Mossdale considered as part of the LVIA.
	Collated scoping opinion - Received 4/10/2017	Scottish Ministers agreed with D&GC in regard to Scoping Viewpoint 9 Unclassified road south-west of Glenlee and requests by D&GC for viewpoints from the Otter Pool and car park midway along the Raiders	Scoping VP 9 omitted and VP 11 Unclassified road south-west of Glenlee and VP 12 Core Path 516 south-west of Glenlee added as alternatives. VP 17 The Otter Pool added to represent views experienced by

Consultee and Date	Scoping <sup>1</sup> /Other Consultation	Issue Raised	Response/Action Taken by SPEN
		Road. Viewpoints considered as noted above for D&GC.	recreational receptors at this tourist attraction on Raiders Road.
Energy Consents Unit (ECU)	CLVIA Consultation 4/6/2019 – ECU Response received (by email) 25/6/2019	Details of the approach to the cumulative assessment outlined, including the extent of the study area (10km radius for the purposes of cumulative landscape and visual effects) and the developments to be included.	Noted.
		ECU confirmed acceptance of the study area to be used for the CLVIA and the list of schemes to be included in the cumulative assessment for the KTR Project.	
	Further CLVIA Consultation 7/5/2020 No response received	Final updated details of the approach to the cumulative assessment outlined, including the extent of the study area (10km radius for the purposes of cumulative landscape and visual effects) and the developments to be included.	Study area and developments considered in CLVIA shown on Figure 3.1 <sup>Error! Bookmark not defined.</sup>

### **Assessment Viewpoints**

- A7.3.2 This section sets out the viewpoints that have been selected to represent and assess the visual effects of the KTR Project. The viewpoint list is a representative selection of locations agreed with the statutory consultees, and whilst it does not represent an exhaustive list of locations from which the KTR Project will be visible, the viewpoints have been selected to cover as broad a range of different receptors, views and distances as possible, in accordance with the approach advocated by GLVIA3 (Para 6.19, Page 109), and set out in Appendix 7.1: LVIA Assessment Methodology.
- A7.3.3 The final list of assessment viewpoints selected for inclusion in the LVIA were chosen as representative of the range of views and type of receptor likely to be affected by the KTR Project, based on responses provided in the scoping opinion, and subsequent consultation as summarised in **Table A7.3.1** above. In general terms, the initially proposed list of viewpoint locations has been expanded taking on board the majority of comments from consultees.
- A7.3.4 A total of 32 viewpoints were selected through desk study, site work and consultation, and were subsequently agreed with statutory consultees. All viewpoints are in locations which can be accessed by the public. The selection of assessment viewpoint locations includes consideration of:
  - · locations selected to represent the experience of different types of receptor;
  - locations at different distances to provide a representative range of viewing angles and distances (i.e. short, medium and long distance views);
  - developments (i.e. either in combination or succession);
  - locations which represent a range of viewing experiences (i.e. static views and points along sequential routes);
  - specific viewpoints selected because they are represent promoted views or viewpoints within the landscape; and
  - illustrative viewpoints chosen specifically to demonstrate a particular visual effect or specific issue (which could include restricted visibility in particular locations).

locations which illustrate key cumulative interactions with other existing, consented and/or proposed

<sup>&</sup>lt;sup>4</sup> Scottish Forestry (SF) and Forest and Land Scotland (FLS) were formed 1<sup>st</sup> April 2019 to take forward the work previously undertaken by Forestry Commission Scotland (FCS) and Forest Enterprise Scotland (FES) respectively following the full devolution of forestry to Scotland.

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- A7.3.5 **Table A7.3.2** below sets out the viewpoint locations selected for inclusion in the LVIA and the reasoning for their selection. A number of the assessment viewpoint locations are also considered as part of the assessment of effects on Cultural Heritage detailed in **Chapter 12: Cultural Heritage** as some cultural heritage assets are visited by visual receptors i.e. people. However, it should be noted that LVIA and Cultural Heritage assessment are distinct and the viewpoints for each are considered separately,
- A7.3.6 The viewpoints are listed in **Table A7.3.2** below and their locations within the Study Area are shown on **Figure 7.10.1** to **Figure 7.10.5** and are numbered north to south in relation to their proximity to the KTR Project. The types of receptors identified in **Table A7.3.2** are described in **Appendix 7.5: Visual Baseline**.

### Table A7.3.2: Final Assessment Viewpoint Locations

VP No.	Location	Grid Ref (NGR)	erence	Potential receptors	Elements of the KTR Project	Reason for Inclusion
1	Layby on A713 near Polquhanity	259332	589035	Road users, tourists and visitors, and nearby residential receptors.	<ul> <li>N route; and</li> <li>Polquhanity to Glenlee via Kendoon (P-G via K)</li> </ul>	Represents views experienced by road users, including tourists and visitors travelling on the Galloway Tourist Route, and views experienced by residential receptors from nearby properties.
2	Dundeugh at access to Polmaddy	259871	588004	Road users, tourists and visitors, and nearby residential receptors.	<ul> <li>N route and R route;</li> <li>P-G via K; and</li> <li>Carsfad to Kendoon (C-K).</li> </ul>	Represents views experienced by road users and tourists and visitors accessing Polmaddy Settlement, recreational receptors from Core Path 164, Bardennoch Trail Pack Road, and views from residential receptors at properties within Dundeugh.
3	Polmaddy settlement	259233	587841	Recreational receptors, tourists and visitors.	<ul> <li>N route; and</li> <li>P-G via K.</li> </ul>	Represents views experienced by recreational receptors, tourists and visitors to Polmaddy and views experienced from Core Path 164, Bardennoch Trail Pack Road. (Also considered in <b>Chapter</b> <b>12</b> , in relation to Polmaddy, medieval and post-medieval settlement (SM5391)).
4	Footbridge access to Kendoon	260335	587605	Recreational receptors, tourists and visitors, and residential receptors.	<ul> <li>N route;</li> <li>R route;</li> <li>P-G via K; and</li> <li>C-K.</li> </ul>	Represents views experienced by recreational users, and residential receptors accessing Kendoon via the public footpath and footbridge east of the A713.
5	B7000 west of Glenhoul Hill	261368	586894	Road users and nearby residential receptors.	<ul> <li>N route;</li> <li>R route;</li> <li>P-G via K; and</li> <li>C-K.</li> </ul>	Represents open views westwards across the Upper Glenkens Valley experienced by road users travelling on the B7000 and views experienced by residential receptors from nearby properties. (Also considered in <b>Chapter</b> <b>12</b> , in relation to Polharrow Burn Archaeological Sensitive Area (165)).

VP No.	Location	Grid Ref (NGR)	erence	Potential receptors	Elements of the KTR Project	Reason for Inclusion
6	Layby on A713 near Knocknalling Wood	260503	584945	Road users and tourists and visitors.	<ul> <li>R route;</li> <li>P-G via K; and</li> <li>C-K.</li> </ul>	Represents views experienced by road users and tourists and visitors travelling on the A713, which forms part of the Galloway Tourist Route.
7	Southern Upland Way near Waterside Hill	260843	582064	Recreational receptors.	<ul> <li>R route;</li> <li>P-G via K;</li> <li>C-K;</li> <li>Earlstoun to Glenlee (E-G);</li> <li>Glenlee to Tongland (G-T); and</li> <li>BG Route Deviation (BG Deviation).</li> </ul>	Representative of views experienced by recreational receptors on the Southern Upland Way long distance footpath.
8	Southern Upland Way near St John's Town of Dalry	261797	581318	Recreational receptors and nearby residential receptors.	<ul> <li>P-G via K;</li> <li>E-G;</li> <li>G-T; and</li> <li>BG Deviation.</li> </ul>	Representative of views experienced by recreational receptors on the Southern Upland Way long distance footpath, and views experienced by residential receptors across the Glenkens Valley from the settlement of St John's Town of Dalry.
9	Mulloch Hill	263140	580659	Recreational receptors.	<ul> <li>R route;</li> <li>P-G via K;</li> <li>E-G;</li> <li>G-T; and</li> <li>BG Deviation.</li> </ul>	Representative of views experienced by recreational receptors at Mulloch Hill (170m AOD) south-east of St John's Town of Dalry, Core Path 224 Mulloch Hill, Dalry. Suggested by Dumfries and Galloway Council.
10	A762 north of Glenlee	261181	580510	Road users and recreational users of promoted routes along A762.	<ul> <li>R route;</li> <li>P-G via K;</li> <li>E-G;</li> <li>G-T; and</li> <li>BG Deviation.</li> </ul>	Representative of views experienced by road users and recreational users of the A762.
11	Unclassified road (U3S) south-west of Glenlee	259631	579281	Road users and recreational users of National Byway Route.	<ul> <li>G-T; and</li> <li>BG Deviation.</li> </ul>	Represents views experienced by road users and recreational users (cyclists) of the National Byway following this unclassified road and views experienced by nearby residential receptors at properties at Bucks Linn. Requested by D&GC, and request supported by the ECU.

VP No.	Location	Grid Reference (NGR)		Potential receptors	Elements of the KTR Project	Reason for Inclusion
12	Core Path 516 south-west of Glenlee	260291	579239	Recreational receptors.	<ul><li>G-T; and</li><li>BG Deviation.</li></ul>	Represents views experienced by recreational receptors on Core Path 516, New Galloway West. Requested by D&GC and endorsed by the ECU.
13	A712 west of Balmaclellan	264653	578354	Road users and nearby residential receptors.	<ul> <li>R route; and</li> <li>G-T.</li> </ul>	Representative of 'R route removal and views experienced by transient receptors on the A712 and views experienced by residential receptors from nearby properties.
14	A712, The Queen's Way	262272	577456	Road users and tourists and visitors.	<ul> <li>R route; and</li> <li>G-T.</li> </ul>	Represents views experienced by road users and tourists and visitors travelling on the A712 which crosses the Galloway Forest Park, forming part of the Robert the Bruce Trail and Galloway Kite Trail (extended summer trail). Requested by FLS.
15	A762 west of Loch Ken	265151	573211	Road users.	• R route.	Representative of R route removal and views experienced by transient receptors on the A712/Galloway Red Kite Trail.
16	Core path near Tannoch Flow	260870	574440	Recreational receptors.	• G-T.	Represents views experienced by recreational receptors on Core Path 142. Requested by FLS.
17	The Otter Pool	259453	573573	Recreational receptors and tourists and visitors.	• G-T.	Represents views experienced by recreational receptors and tourists and visitors visiting this location and views experienced from Core Path 143, Raiders Road. Requested by D&GC, and FLS, and request supported by the ECU.
18	Core Path 177 near Bennan Moss	264446	572539	Recreational receptors.	• G-T.	Represents views experienced by recreational receptors on Core Path 177, Cairn Edward Hill within the Galloway Forest Park.
19	Promoted viewpoint near Parton/Airds House	268740	570842	Recreational receptors.	<ul> <li>`R' route; and</li> <li>G-T.</li> </ul>	Represents views experienced by recreational receptors on Core Path 192.
20	Raiders Road, north of Stroan Loch	264581	570656	Road users and tourists and visitors.	• G-T.	Represents sequential views experienced by road users and tourists and visitors travelling on this promoted route through the Galloway Forest Park. Suggested by D&GC and endorsed by the ECU.

VP	Location	Grid Ref	erence	Potential	Elements of the KTR	Reason for Inclusion
No.		(NGR)		receptors	Project	
21	Mossdale	265948	570399	Residential receptors and recreational receptors.	• G-T.	Represents views experienced by residential receptors from the small community of Mossdale and recreational receptors from Core Path 485 Mossdale to Gatehouse Station Railway. Location highlighted by local residents through routeing consultation.
22	Core Path 485 Mossdale to Gatehouse Station Railway Walk	262761	570049	Recreational receptors and nearby residential receptors.	• G-T.	Represents views experienced by recreational receptors from Core Path 485 Mossdale to Gatehouse Station Railway Walk and the residential receptors at the nearby isolated property at Airie, northwards across Stroan Loch. Requested by FLS.
23	Stroan Viaduct	264676	570000	Recreational receptors.	• G-T.	Representative of elevated views experienced by recreational receptors from Core Path 485, Mossdale to Gatehouse Station Railway, across Stroan Viaduct.
24	A762 east of Woodhall Loch	266956	568259	Road users, tourists and visitors, and nearby residential receptors.	• G-T.	Representative of R route removal and views experienced by transient receptors (road users, tourists and visitors) on the A762/Galloway Red Kite Trail and views experienced by residential receptors.
25	A713 near Parton Mill Bridge	272155	568242	Road users, tourists and visitors, and nearby residential receptors.	• R route.	Representative of R route removal and views experienced by transient receptors (road users, tourists and visitors) on the A713 (Galloway Tourist Route, Galloway Red Kite Trail and Robert the Bruce Trail) and views experienced by residential receptors.
26	Kennick Burn picnic area	266101	564964	Recreational receptors and tourists and visitors.	• G-T.	Represents views experienced by recreational receptors and tourists and visitors from the Kennick Burn picnic area and Core Path 144, Retreat Wood located within the Galloway Forest Park.
27	B795 east of Laurieston	271279	564101	Road users, tourists and visitors and nearby residential receptors.	<ul><li> R route; and</li><li> G-T.</li></ul>	Representative of R route removal and views experienced by transient receptors (road users, tourists and visitors) on the B795/Galloway Red Kite Trail and views experienced by residential receptors.

VP No.	Location	Grid Ref (NGR)	erence	Potential receptors		ements of the KTR oject	Reason for Inclusion
28	A762 south of Laurieston	267942	562824	Road users.	•	G-T.	Represents sequential views experienced by road users travelling on the A762.
29	Barstobrick Hill (Neilson's Monument)	268782	560683	Recreational receptors.	•	R route; and G-T.	Represents elevated panoramic views across the Lower Glenkens Valley experienced by recreational users from the local landmark and monument atop Barstobrick Hill, Core Path 170.
							(Also considered in <b>Chapter</b> <b>12</b> , in relation to Neilson's Monument, Barstobrick Hill (MDG3772)).
30	A75 at junction with unclassified road	270152	558386	Road users.	•	R route; and G-T.	Located on the busy A75 trunk road between Dumfries and Stranraer represents views experienced by road users.
31	Unclassified road (U43S) near Argrennan Mains	269974	556606	Road users and nearby residential receptors.	•	R route; and G-T.	Represents views experienced by road users and residential receptors from nearby properties.
32	A711 north of Tongland substation	269603	553802	Road users and nearby residential receptors.	•	R route; and G-T.	Represents views experienced by road users of the A711 and residential receptors at the nearby properties near Tongland substation.

## Other Suggested Viewpoint Locations

- A7.3.7 A number of additional viewpoint locations were suggested by consultees during the consultation process, many of which were considered as the design of the KTR Project evolved as detailed in Chapter 2: The Routeing Process and Design Strategy.
- A7.3.8 **Table A7.3.3** Below sets out details of each additional viewpoint location considered and the reasoning for its exclusion from the final list of assessment viewpoint locations included in the LVIA.

### Table A7.3.3: Other Suggested Viewpoint Locations

Location	Grid Refe (NGR)	rence	Reason for Ex
Forestry and Land	Scotland (	TFLS)	
Polmaddy Foot Bridge	259215	587878	FLS landscape Scoping VP 3 - highlighted as a view is focusse connection of t becomes more Landscape Cha currently seen
			The upper part associated with be seen from th Polmaddy Burn Foot Bridge is I outward views
			Following caref further given th 50m south-wes representative tourists and vis 164, Bardenno
Alternative Mossdale Location	265715	570282	FLS landscape 19 - Mossdale from Mossdale from long secti in the assessm alternative view west, where a overlooking the Project, and wh
			The OHL and a connection of t from the sugge
			Following caref further given th of the requeste by recreational Station Railway small settlemen

### clusion

Architect suggested an alternative/additional viewpoint to Polmaddy. The proposed alternative location was a key stopping place for tourists and visitors, where the ed along the burn in the direction of the P-G via K the KTR Project, and where the local landscape character intimate in scale than is reflected by the national aracter Type (LCT) citation. Electrical infrastructure is not from this location.

ts of steel lattice towers and overhead conductors h the P-G via K connection of the KTR Project are likely to this location in views looking east where the OHL crosses n east of the bridge. However, visibility from Polmaddy limited by the surrounding landform foreshortening and largely screened by conifer forest.

ful consideration, this viewpoint has not been considered the similarity to VP 3 Polmaddy settlement, (approximately est of Polmaddy Foot Bridge), which is considered of views experienced by recreational receptors and isitors accessing the historic settlement via the Core Path och Trail Pack Road.

Architect requested alternative viewpoint to Scoping VP given expected visibility of the proposed G-T connection Walk (part of the Galloway Kite Trail) to be sustained tions of the path, and request that the walk is considered nent of effects on views from routes. The requested ewpoint was suggested for a location slightly further southbench is currently located to take in a view directly ne proposed location of the G-T connection of the KTR hich does not currently include electrical infrastructure.

number of steel lattice towers associated with the G-T the KTR Project are likely to be seen in views looking west ested alternative location.

eful consideration, this viewpoint has not been considered the similarity to VP 21 Mossdale, (approximately 25m east ed location), which is representative of views experienced receptors from Core Path 485, Mossdale to Gatehouse ay and views experienced by residential receptors from the ent of Mossdale.

Appendix 7.4: Landscape Baseline

# Appendix 7.4

## Landscape Baseline

### Introduction

- A7.4.1 This section presents an overview of the landscape baseline receptors located within the agreed 5km Study Area (as shown of **Figure 7.1**) including the existing landscape character (and constituent landscape elements), as well as comments on landscape condition and designations assigned to the landscape (if any).
- A7.4.2 Potential landscape receptors within the Study Area are those which may experience direct or indirect effects as a consequence of the Kendoon to Tongland 132 kilovolt (kV) Reinforcement Project ('the KTR Project'). Landscape receptors can typically be defined as follows:
  - Physical Landscape Features: perceptible physical features (e.g. topographic features; woodland, hedgerows, field enclosure) which could be lost or altered through the introduction of the proposed development.
  - Landscape Character Types (LCTs), Landscape Character Units (LCUs) and Local Landscape Areas (LLAs): as defined within published landscape character assessments, and which display both physical and perceptual characteristics which could be affected by the proposed development.
  - **Designated Landscapes**: areas of landscape which are principally designated for their scenic quality or rarity and considered of particularly increased value. Often defined by a number of key characteristics and/or special qualities informed by the underlying character of the landscape, consideration is given to how these may be affected, and designation may be undermined by the proposed development.
  - **Other designated areas**: areas of designation which may in part be designated due to the contribution of landscape or scenic quality in combination with other reasons for designation (e.g. forest parks, conservation areas, biosphere reserves).
- A7.4.3 Available documents and guidelines which describe landscape character, landscape condition and landscape designations within the Study Area were reviewed, and the relevant data is detailed below. The assessment of effects on the KTR Project on landscape, contained in **Chapter 7: Landscape and** Visual Amenity, demonstrates the extent and level of effects likely to be occur as a result of the KTR Project.

### **Existing Conditions**

### **Study Area**

A7.4.4 The Study Area for the LVIA, shown in **Figure 7.1** extends to a 5km radius from the KTR Project as detailed in Appendix 7.1: LVIA Assessment Methodology and is informed by the type and scale of steel lattice tower and trident wood pole overhead line infrastructure described in Chapter 2: The **Routeing Process and Design Strategy**, and defined on the basis that at distances greater than 5km significant effects on landscape receptors are unlikely to occur. There are a number of existing high and low voltage overhead lines located within the Study Area including the existing 132kV network running from Polquhanity to Tongland via Glenlee (the N and R routes), which will be removed following commissioning of the KTR Project. The existing transmission network within the Study Area is also shown on Figure 7.1.

- A7.4.5 The KTR Project is situated wholly within Dumfries and Galloway and covers a linear area, running broadly north to south from Polquhanity (approximately 3km to the north of the existing Kendoon substation), to the existing substation at Tongland (approximately 1.5km to the north of Kirkcudbright). The KTR Project is predominantly located within the Glenkens Valley which includes a variety of different landscapes. To the west and east of the valley a number of landscapes are evident, from the densely forested foothills, rugged upland summits and rolling upland plateau, to the more settled drumlin pastures and coastal landscapes at the south-eastern and southern extents of the Study Area, where the River Dee meets Kirkcudbright Bay.
- A7.4.6 The landscape and topography of the Study Area is varied covering much of the Glenkens Valley and part of the Solway Coast to the south as illustrated on Figure 7.2. The northern and eastern extents of the Study Area comprise settled valleys with apparent existing energy infrastructure including reservoirs, dams, power stations and the existing N and R routes. In contrast the western side of the Study Area is more sparsely populated and includes upland areas with dense commercial forestry as illustrated on **Figure 7.3.1** to **Figure 7.3.5**. The southern fringe of the study area includes part of the locally designated Solway Coast Regional Scenic Area.
- A7.4.7 The highest points within the Study Area include Dundeugh Hill 271m AOD, Glenlee Hill 271m AOD, Cairnsmore (Black Craig of Dee) 493m AOD and Cairn Edward Hill 325m AOD. Much of the of the Study Area lies within the locally designated Galloway Hills Regional Scenic Area (RSA) shown on Figure 7.6.
- A7.4.8 Land use across the Study Area is varied. A patchwork of mixed farmland, broadleaf woodland and conifer plantations are found in the lower settled valleys. At higher elevation, mountains, hills, slopes, ridges and plateaux are characterised by conifer forest with pockets of open grassland and moorland. Settlements in the wider Study Area are associated with the lowlands, river valleys and coastline.

### Landscape Character Types

- A7.4.9 Landscape documents of relevance to the landscape assessment comprise:
  - Scottish Natural Heritage (SNH) (2019) Scottish Landscape Character Types Map and Descriptions;
  - Land Use Consultants (LUC) (1998) Dumfries and Galloway Landscape Assessment No. 94;
  - Dumfries and Galloway Council (D&GC) (2017) Dumfries and Galloway Wind Farm Landscape Capacity Study (DGWFLCS 2017);
  - Carol Anderson in association with Alison Grant, Landscape Architects for D&GC (2011) Dumfries and Galloway Wind Farm Landscape Capacity Study – Main Report (DGWFLCS 2011);
  - LUC (2016) Kendoon to Tongland 132kV Reinforcement Project Routeing and Consultation Document; and
  - Northlight Heritage for Galloway Glens Landscape Partnership (2017) Landscape Character Assessment & Historic Environment Audit for the Galloway Glens Landscape Partnership.

### SNH 2019 Landscape Character Types Map

A7.4.10 In 2019, SNH published the National Landscape Character Assessment (LCA) in a digital map-based format detailing a national dataset of 389 Landscape Character Types (LCTs). The LCTs included in this Scotland wide dataset were based on a review of existing regional LCAs produced between 1994 and 1999 and included updates to these original LCAs taking into account advances in digital technology, development of complementary datasets and changes in development patterns and pressures<sup>1</sup>. The review led to a number of changes to the naming, extents and boundaries and characteristics of LCTs documented in the original suite of regional LCAs, and for the purposes of this assessment the revised 2019 LCT dataset has been used. The LCTs within the Study Area are shown on Figure 7.7.1 to Figure 7.7.5.

### Dumfries and Galloway Landscape Assessment

A7,4,11 The Dumfries and Galloway Landscape Assessment (1998) describes four Regional Character Areas and 26 LCTs within Dumfries and Galloway. In one Regional Character Area, the same LCT may occur as a

<sup>&</sup>lt;sup>1</sup> https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/landscape-character-assessment-scotland

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number of different LCUs, discrete geographical areas of relatively uniform character of landscape type. Further consideration of these LCUs was included in the Kendoon to Tongland 132kV Reinforcement Project Routeing and Consultation Document (2016), which contained an appraisal of the landscape capacity of the 1998 LCTs and LCUs to accommodate overhead line (OHL) development. Further information on the 2016 appraisal of landscape capacity is provided below.

### Dumfries and Galloway Wind Farm Landscape Capacity Study (DGWFLCS)

A7.4.12 The capacity appraisal undertaken in 2016 was informed by the DGWFLCS 2011<sup>2</sup> which includes judgements of sensitivity in relation to different wind energy typologies. The small-medium wind turbine typology, which is of a similar vertical scale to the proposed height of the steel lattice tower and wood pole transmission infrastructure of the KTR Project was referenced within the 2016 appraisal and informed the routeing stages of the KTR Project. A number of revisions were made to the classifications of LCTs and LCUs within DGWLCS (2017) and where relevant these are referenced in forming the judgements of sensitivity which are presented in this appendix.

### Landscape Character Assessment & Historic Environment Audit

A7.4.13 The Landscape Character Assessment & Historic Environment Audit for Galloway Glens Landscape Partnership (2017) study combined a review of the local character of the landscapes within the Galloway Glens Landscape Partnership area, plus a 2km radius buffer area, with an audit of the area's historic environment to inform a Landscape Conservation Plan. The study identified 15no. finer grain detail LLAs using as a starting point the LCT identified in the Dumfries and Galloway Landscape Assessment (1998, LUC), and some of the LLA boundaries have been redrawn following consideration of the local context and an understanding of the landscape. A number of additional landscape character areas were also identified within the 2km radius buffer zone which draw reference to the LCTs detailed in the Dumfries and Galloway Landscape Assessment (1998, LUC). The study highlighted potential changes in characteristics of the LCTs and described more recent landscape change which has occurred since the original LCA was published in 1998. The LLAs do not necessarily nestle discretely within the 1998 LCTs therefore description of particular local variances in the boundaries, as well as differences in characteristics and qualities identified are acknowledged where relevant in the baseline information presented below. The LLAs are shown on Figure 7.8.1 to Figure 7.8.5.

### Landscape Capacity

- A7.4.14 The Kendoon to Tongland Reinforcement Project: Routeing and Consultation Document was published in October 2016<sup>3</sup>. As part of this study the ability of the landscape to accommodate steel lattice towers (L7 and L4 steel lattice towers, and Trident wood pole infrastructure) was considered in greater detail. The methodology for this study is described below.
- A7.4.15 The 2002 Landscape Character Assessment Guidance<sup>4</sup> provided a starting point for the definition of landscape capacity: "Landscape capacity refers to the degree to which a particular landscape character type or area is able to accommodate change without significant effects on its character, or overall change of landscape character type. Capacity is likely to vary according to the type and nature of change being proposed."
- A7.4.16 SNH define landscape capacity as "the extent to which a particular landscape type is able to accept a particular kind of change (e.g. mining, forestry, wind farms) without significant effects on its character. The capacity of a landscape for a specific type of change will depend upon the nature and magnitude of the change and the landscape's sensitivity."5

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- assessment of the susceptibility of the receptors in relation to change arising from the specific development proposal. "<sup>6</sup> The appraisal was presented in Appendix 3 of the Routeing and Consultation Document (2016), where landscape capacity<sup>7</sup> was considered with reference to the existing landscape characteristics and attributes of the landscape. Accordingly, the Dumfries and Galloway Landscape Character Assessment (1998) was used as the starting point in determining landscape capacity across the proposed corridor. Each LCT, and subsequently each LCU, which is potentially affected was evaluated (on its susceptibility to being affected by overhead lines of the type proposed) and categorised as having high, medium or low landscape capacity to accommodate high voltage OHLs. The appraisal relied on the application of professional judgement in the use of the LCA, and also drew on the principles set out in the Holford Rules and the Horlock Rules.
- A7.4.18 Designated landscapes within the Study Area are described below and shown on Figure 7.6.

### Nationally Designated Landscapes

### National Scenic Areas (NSAs)

A7.4.19 There are no nationally designated landscapes (National Parks or NSAs) located within the Study Area. While not considered in the assessment it should be noted that the Fleet Valley NSA is located over 7km to the south-west of the proposed KTR Project (G-T) at its nearest point, whilst the East Stewartry Coast NSA is located over 7km to the east of the proposed KTR Project (G-T) at its nearest point, as shown on Figure 7.6. Significant effects on the special qualities or views from these designated landscapes, which may affect the integrity of the areas or the gualities for which they have been designated, are considered unlikely to occur at this distance. The objectives of designation and the overall integrity of the areas will not be adversely affected by the KTR Project. Effects on the Fleet Valley NSA and East Stewartry Coast NSA are not considered further.

### Locally Designated Landscapes

- A7.4.20 Locally valued landscapes within Dumfries and Galloway are designated as Regional Scenic Areas (RSAs), as noted in the Dumfries and Galloway Council Local Development Plan (LDP) (2014)<sup>8</sup> RSAs were designated for their special scenic qualities in the previous Structure Plan (1999)<sup>9</sup>. These were based on a review of existing designations and newly identified parameters in the context of the Dumfries and Galloway Landscape Assessment.
- A7.4.21 The D&GC Technical Paper Regional Scenic Areas (2014)<sup>10</sup> was produced alongside the LDP which explains the designation process and illustrates the boundaries of the RSAs. This supersedes the Identification of Regional Scenic Areas Technical Paper No. 6 (1999)<sup>11</sup>. As part of the process of replacing the LDP with LDP2, the RSAs were reviewed. Regional Scenic Areas Technical Paper (2018)<sup>12</sup> proposed a rationalisation of some of the boundaries of the Galloway Hills RSA and the Solway Coast RSA both of which are of relevance to the KTR Project, however no changes to the boundaries of RSAs have been implemented as part of the LDP2 adoption process. Selected characteristics of the Galloway Hills RSA and the Solway Coast RSA, shown on Figure 7.6, are detailed below. The RSAs are shown on Figure 7.7.1 to Figure 7.7.5 overlaid on the underlying LCTs of the Study Area.

### Galloway Hills RSA

A7.4.22 The existing N and R routes are located within the Galloway Hills RSA, whilst all of the proposed connections of the KTR Project (P-G via K, C-K, E-G, BG Deviation and G-T) are also located within this

A7.4.17 As outlined in GLVIA3, an appraisal of landscape capacity "cannot provide a substitute for the individual

<sup>&</sup>lt;sup>2</sup> Carol Anderson in association with Alison Grant, Landscape Architects (2011) Dumfries and Galloway Wind farm Landscape Capacity Study -Main Report

<sup>&</sup>lt;sup>3</sup> LUC on behalf of SP Energy Networks October (2016) The Kendoon to Tongland 132kV Reinforcement Project Routeing and Consultation Document

<sup>&</sup>lt;sup>4</sup> Swanick, Carys and Land Use Consultants (2002). Landscape Character Assessment Guidance for England and Scotland. Countryside Agency and Scottish Natural Heritage

<sup>&</sup>lt;sup>5</sup> http://www.snh.gov.uk/protecting-scotlands-nature/looking-after-landscapes/tools-and-techniques/landscape-capacity-and-sensitivity/ <sup>6</sup> Landscape Institute & Institute for Environmental Management and Assessment (IEMA) (2013) Guidelines for Landscape and Visual Impact Assessment – Third Edition (GLVIA3)

<sup>&</sup>lt;sup>7</sup> 'Capacity' in this document means: the (relative) ability of the landscape to accommodate an overhead line.

<sup>&</sup>lt;sup>8</sup> Dumfries and Galloway Council (2014) Local Development Plan

<sup>&</sup>lt;sup>9</sup> Dumfries and Galloway Council (1999) Structure Plan

<sup>&</sup>lt;sup>10</sup> Dumfries and Galloway Council (2014) Local Development Plan Technical Paper: Regional Scenic Areas

<sup>&</sup>lt;sup>11</sup> Dumfries and Galloway Council (1999) Identification of Regional Scenic Areas Technical Paper No. 6

<sup>&</sup>lt;sup>12</sup> Dumfries and Galloway Council (2018) Local Development Plan 2: Regional Scenic Areas Technical Paper

RSA. Whilst no special qualities are defined for the Galloway Hills RSA, Page 20 of the 2018 Technical Paper provides a description of the RSA, including the following characteristics:

- "The relationship between the hills and the adjacent lowlands gives rise to sweeping and dramatic views of the hills, in particular from the western side of Wigtown Bay and certain sections of the perimeter valleys;
- The overall scale of the designated area results in some parts, particularly those areas included because of their contribution to the wider view, being of less internal scenic interest than others;
- The peripheral Narrow Wooded Valleys and the Coastal Flats of adjacent estuaries were included both for their own inherent characteristics and because of their scenic juxtaposition with the uplands, Scenic Area boundaries follow the immediate outward facing visual envelope of these *valleys;* and
- Much of the central area is uninhabited and is accessible only via forestry roads or on foot, other than via the scenic A712 'Queensway', and Rusko and Coarse of Slakes roads."
- A7.4.23 In accordance with the emerging LDP2, the siting and design of development within RSAs should respect the special qualities of the area. Development within, or which affects RSAs, may be supported where the D&GC is satisfied that the factors taken into account in designating the area would not be significantly adversely affected. Potential effects upon the landscape of the Galloway Hills RSA, including the key characteristics listed above, are considered in the assessment of the likely effects of the KTR Project, reported in **Chapter 7**.

### Solway Coast RSA

- A7.4.24 G-T and the southern existing part of R route are located within the Solway Coast RSA.
- A7.4.25 Whilst no special qualities are defined for the Solway Coast RSA, Page 25 of the 2018 Technical Paper provides a description of the RSA, including the following characteristics:
  - "The area exhibits a diverse and attractive mixture of coastal landscape types. In the west the Peninsulas and Peninsulas with Gorsey Knolls create rocky coastlines of cliffs, raised beaches and isolated coves, backed by smooth undulating open landscapes of improved pastures interspersed with knolly, gorsey areas;
  - These coastlines show similarities to the northern Rhins and the Machars RSAs, but are dissected by the major inlets of Kirkcudbright Bay, Auchencairn Bay and Rough Firth; and
  - The area is readily accessible from the more populated south-eastern part of the region and the M74. As well as the harbour town of Kirkcudbright, it includes a number of villages plus scattered farms and hamlets located on the main coast road or reached via a network of lanes."
- A7.4.26 Potential effects upon the landscape of the Solway Coast RSA, including the key characteristics listed above, are considered in the assessment of the likely effects of the KTR Project on landscape, reported in **Chapter 7**.

### Wild Land

A7.4.27 There are no Wild Land Areas (WLAs) located within the 5km radius Study Area. The Merrick WLA (01) is located over 12km west of the P-G via K, C-K, and E-G components of the KTR Project, as shown on **Figure 7.6**. Although visibility of some parts the KTR Project will be possible from the WLA, at distances of over 12km it is considered that there would be no significant effects on the qualities of the WLA. Effects on the Merrick WLA have not been considered further as part of the assessment of the likely effects of the KTR Project on landscape, reported in Chapter 7.

### <sup>13</sup> Dumfries and Galloway Council Local Development Plan 2 Dark Skies Friendly Lighting Draft Supplementary Guidance - January 2018

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### **Galloway Forest Park**

- A7.4.28 Some components of the KTR Project are located within the Galloway Forest Park. Although a nonstatutory designation, forest parks are extensive areas of forest managed for multiple benefits with particular emphasis on recreation and are managed by Forestry and Land Scotland (FLS). The P-G via K and G-T components of the KTR Project are partially proposed within the Galloway Forest Park, as shown on **Figure 7.6** at the following locations:
  - P-G via K east of Barlae Hill (194m AOD) and emerging south of Dundeugh;
  - G-T south of The Queens Way, west of New Galloway emerging south-east of Ross Hill; and
  - G-T west of Slogarie Hill and emerging near Gatehouse Burn.
- A7.4.29 Effects on the existing underlying landscape of the Galloway Forest Park (shown on Figure 7.7.1 to Figure 7.7.5 overlaid on the underlying LCTs of the Study Area.), and effects on the views and visual amenity of visual receptors (people), are considered in the assessment of landscape and visual effects respectively, however, landscape effects on the Galloway Forest Park as a whole have not been considered further in the assessment reported in **Chapter 7**.

### **Galloway Forest Dark Sky Park**

- A7.4.30 The Galloway Forest Dark Sky Park was the first Dark Sky Park (DSP) in the UK and Europe, and was awarded Gold-tier status by the International Dark-Sky Association in November 2009. The Scottish Dark Sky Observatory is situated on the Craigengillan estate, just outside the Galloway Forest Dark Sky Park over 17km to the north-west of the P-G via K connection of the KTR Project, as shown on Figure **7.6**.
- A7.4.31 D&GC has prepared draft supplementary guidance<sup>13</sup> which provides advice on good lighting practice within the Galloway Forest. This document describes Core, Buffer and Transitional Zones, and the Core and Buffer zones include land mostly within the Galloway Forest Park. The above noted components of the KTR Project proposed within the Galloway Forest Park fall within Buffer Zones of the DSP.
- A7.4.32 Table 1 of the draft supplementary guidance describes Buffer Zones and Transition Zones as:
  - "Predominantly rural, lightly populated areas which already have a good night time dark habitat (which should not be diminished). Includes some smaller settlements without street lighting."
- A7.4.33 Given the limited sources of artificial light required during the construction phase and absence of artificial lighting required for operation of the KTR Project, effects on the DSP have not been considered further as part of the assessment of the likely effects of the KTR Project on landscape, reported in Chapter 7.

### **Galloway and Southern Ayrshire Biosphere**

- A7.4.34 The Galloway and Southern Ayrshire Biosphere<sup>14</sup>, designated under the United Nations Educational, Scientific and Cultural Organisation's (UNESCO) Man and Biosphere (MAB) Reserve Programme covers a proportion of the Study Area as shown on Figure 7.6. Biosphere Reserves, usually referred to as Biospheres, are places with world-class environments that are designated to promote and demonstrate a balanced relationship between people and nature. The original criteria for Biosphere Reserves were primarily focused on scientific conservation and research, and sites were chosen to represent the main ecosystems of the planet. Most UK Biosphere Reserves were designated in 1976 under these criteria. The designation criteria changed to include the human dimension along with the natural environment after a review in 1995 (resulting in the Seville treaty). Since then, biosphere reserves must have three complementary functions<sup>15</sup>:
  - "Conservation to preserve genetic resources, species, ecosystems and landscapes;
  - Learning and Research to support research, monitoring, education and information exchange related to local, national and global issues of conservation and development; and

<sup>&</sup>lt;sup>14</sup> http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/united-kingdomof-great-britain-and-northern-ireland/galloway-and-southern-ayrshire-biosphere/

<sup>&</sup>lt;sup>15</sup> http://www.gsabiosphere.org.uk/

- Sustainable Development to foster sustainable economic and human development."
- A7.4.35 The Galloway and Southern Ayrshire Biosphere consists of three different designated zones: the Core Area, Buffer Zone and Transition Area, and reflects the characteristics of the environment. Although not a landscape designation, the broad natural heritage interests related to this large area include some appreciation of the landscape and scenic quality. However, no formal landscape characteristics or qualities are identified as part of this designation.
- A7.4.36 The Galloway and Southern Ayrshire Biosphere is based on the Galloway Hills (Core Area), a water catchment for a large part of south-west Scotland feeding rivers radiating out from the upland to the coast. The wider Transition Area covers a large extent of Galloway and Ayrshire, extending as far north as Ayr. The existing N route and R route, substations at Kendoon, Glenlee and Tongland, and each of the proposed KTR Project connections are located within the buffer zone and/or transition zone of the Galloway and Southern Ayrshire Biosphere.
- A7.4.37 Although proposed within the wider extents (i.e. buffer zone/transition zone) of the Galloway and Southern Ayrshire Biosphere designation, the KTR Project will not affect the Core Area of the Biosphere centred on the Galloway Hills and outside the Study Area (located approximately 7.5km from the KTR Project at its closest point). As such, effects on the Galloway and Southern Ayrshire Biosphere have not been considered further in the assessment of the likely effects of the KTR Project on landscape, reported in Chapter 7. However, consideration of effects on views and visual amenity experienced by visitors (receptors) travelling to and from the Galloway and Southern Ayrshire Biosphere are considered in the assessment of visual effects.

### Landscape Character Types

A7.4.38 The assessment presented in Chapter 7 uses the SNH National LCA (2019) as the basis for the assessment of effects of the KTR Project on landscape character. LCTs within the Study Area are listed in Table A7.4.1 below and shown on Figure 7.7.1 to Figure 7.7.5.

- A7.4.39 Electricity transmission infrastructure forms an existing man-made feature which is visible across a large proportion of the Study Area. Theoretical visibility of the existing N route and R route is illustrated by the Zone of Theoretical Visibility (ZTV)<sup>16</sup> shown on **Figure 7.4.1** to **Figure 7.4.2** (N route and R route north of Glenlee) and Figure 7.4.3 to Figure 7.4.6 (R route - south of Glenlee).
- A7.4.40 A comparative Bare Earth ZTV illustrating the theoretical visibility of the existing N route and R route, as well as the theoretical visibility of the proposed KTR Project is shown on Figure 7.5.1 to Figure 7.5.6, illustrating the extent to which the landscapes of the Study Area are influenced by the presence of existing transmission infrastructure.
- A7.4.41 Taking a similar approach, theoretical visibility of the KTR Project connections in the context of the Bare Earth ZTV is illustrated on **Figure 7.9.1** to **Figure 7.9.5** and is used as a means of identifying which LCTs require further consideration and which can be reasonably scoped out of the detailed assessment of landscape effects. The relevant LCUs identified in the Dumfries and Galloway Landscape Assessment (1998)<sup>17</sup> are also noted given their consideration in the LUC Kendoon to Tongland 132kV Reinforcement Project Routeing and Consultation Document (2016).

<sup>&</sup>lt;sup>16</sup> Based on the diminishing perceptibility of transmission infrastructure in the landscape over distance, the theoretical visibility of individual steel lattice towers and wood poles has been limited to a maximum distance of 10km when generating the ZTVs.

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### Table A7.4.1: Landscape Character Types within 5km

LCT (2019) <sup>18</sup> / LCU (1998) <sup>19</sup>	Existing and/or KTR Project Connection	Theoretical Visibility of KTR Project Route Connections
Southern Uplands – Dumfries & Galloway LCT (177) <sup>20</sup> Carsphairn Unit LCU	<ul> <li>P-G via K connection located within 4km to the north-east.</li> </ul>	Within 5km to the north-east of the KTR Project where the P- G via K connection passes through the neighbouring Upper Dale Dumfries & Galloway LCT (165). Some visibility is indicated from elevated central parts of the LCT, however given distance and screening by dense conifer forest, significant effects on this LCT are considered unlikely to occur. Not considered further.
Southern Uplands with Forest – Dumfries & Galloway LCT <sup>21</sup> (178)	<ul> <li>P-G via K connection located within 4km to the north-east.</li> </ul>	Within 5km to the north-east of the KTR Project where the P- G via K connection passes through the neighbouring Upper Dale Dumfries & Galloway LCT (165). Some visibility is indicated from elevated central parts of the LCT, however given distance and screening by dense conifer forest, significant effects on this LCT are considered unlikely to occur. Not considered further.
Narrow Wooded River Valley – Dumfries & Galloway LCT (160) <sup>22</sup> Fleet Unit LCU	<ul> <li>P-G via K, connection located within 4km north- east.</li> </ul>	LCT within 5km to the north-east of the KTR Project where the P-G via K connection passes through the neighbouring Upper Dale Dumfries & Galloway LCT (165). Limited visibility indicated from the western part of the LCT, given distance and likely screening by dense conifer forest, significant effects on this LCT are considered unlikely. Not considered further.
Upper Dale – Dumfries & Galloway LCT <sup>23</sup> (165) Upper Glenkens Unit LCU	<ul> <li>N route and R route located within LCT;</li> <li>P-G via K connection located within LCT;</li> <li>C-K connection located within LCT;</li> <li>E-G connection located within LCT; and</li> <li>G-T connection located within LCT; and</li> <li>BG Deviation.</li> </ul>	<ul> <li>Host LCT (i.e. connections of the KTR Project located in this LCT), all KTR Project connections are located within this LCT. Visibility indicated across much of this LCT.</li> <li>Existing N route, R route(north) and a small part of R route (south) east of Glenlee to be removed from the LCT.</li> <li>Considered within assessment.</li> </ul>

LCT (2019) <sup>18</sup> / LCU (1998) <sup>19</sup>		isting and/or KTR oject Connection	Theoret
Foothills with Forest LCT – Dumfries and Galloway (176) <sup>24</sup> Rhinns of Kells Unit and Lauriston LCUs	• • •	R route (south of Glenlee) located within LCT; P-G via K connection located within 1km to the east; C-K connection located within 1km to the east; E-G connection located within 2km to the east; BG Deviation connection located within LCT; G-T connection	Host LC west of A Gatehou: Station). Project is Indirect of Are not of Existing of the LC Conside
		located within Foothills with Forest – Rhinns of Kells Unit (LCU); and	
	•	G-T connection located within LCT.	
Flooded Valley LCT <sup>25</sup> (164) Ken Valley Unit LCU	•	R route within LCT; P-G via K	The P-G within 14 neighbou G-T conr
		connection located within 1km to the north-west;	of this L( (176). V
	•	C-K connection located within 4km to the north-west;	Host LC LCT. Conside
	•	E-G connection located within 1km to the north-west;	from the the KTR
	•	G-T connection located within 1km to the west; and	
	•	BG Deviation connection located within 1km to the west.	

### etical Visibility of KTR Project Route Connections

**CT**, G-T connection (west of Glenlee Power Station to f Achie Hill, 170m AOD and south of Ross Hill to east of buse Burn) and BG Deviation (west of Glenlee Power ). Visibility associated with these sections of the KTR is indicated from much of the LCT.

t effects and direct effects associated with the P-G via ection are considered in the assessment.

t effects associated with the C-K and E-G connections t considered in the assessment.

g R route to be removed from the north-eastern extent LCT.

lered within assessment.

G via K, E-G and part of the G-T connections pass 1km to the north and north-west of this LCT within the ouring Upper Dale Dumfries & Galloway LCT (165). The nnection and BG Deviation are located within 1km west LCT within the neighbouring Foothills with Forest LCT Visibility indicated across much of the LCT.

**.CT** to existing R route (south) to be removed from the

**lered within assessment** for indirect effects arising ne introduction of the P-G via K and E-G connections of R Project.

<sup>&</sup>lt;sup>18</sup> Scottish Natural Heritage (2019) Scottish Landscape Character Types Map and Descriptions

 $<sup>^{19}</sup>$  Land Use Consultants (1998) Dumfries and Galloway Landscape Assessment No. 94  $\,$ 

<sup>&</sup>lt;sup>20</sup> Southern Uplands – Dumfries & Galloway LCT 177

<sup>&</sup>lt;sup>21</sup> Southern Uplands with Forest – Dumfries & Galloway LCT 178

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 <sup>&</sup>lt;sup>22</sup> Narrow Wooded River Valley – Dumfries & Galloway LCT 160
 <sup>23</sup> Upper Dale – Dumfries & Galloway LCT 165

 <sup>&</sup>lt;sup>24</sup> <u>Foothills with Forest LCT – Dumfries and Galloway 176</u>
 <sup>25</sup> <u>Flooded Valley LCT 164</u>

LCT (2019) <sup>18</sup> / LCU (1998) <sup>19</sup>	Existing and/or KTR Project Connection	Theoretical Visibility of KTR Project Route Connections
Rugged Uplands - Dumfries and Galloway LCT <sup>26</sup> (180) Rhinns of Kells LCU	<ul> <li>P-G via K connection located within 5km to the west;</li> </ul>	Within 5km to the west of the KTR Project where the P-G via K connection passes through the neighbouring Upper Dale LCT (165). Some visibility is indicated from elevated central parts of the LCT predominantly beyond the Study area, however given distance and screening by intervening dense conifer forest within the Foothills with Forest LCT (176), significant effects on this LCT are considered unlikely. Not considered further.
Rugged Uplands with Forest - Dumfries and Galloway LCT <sup>27</sup> (181) Cairn Edward LCU	G-T connection     located within LCT.	Host LCT, G-T connection within LCT, south of Knocknairling Burn to Ross Hill, 109m AOD. Visibility indicated across the eastern part of the LCT. Considered within assessment.
Drumlin Pastures LCT <sup>28</sup> (169) Deeside Unit LCU	<ul> <li>R route (south of Glenlee) located within LCT; and</li> <li>G-T connection located within LCT.</li> </ul>	Host LCT, G-T connection (South of Dinnance Wood to Tongland) and R Removal (between Livingstone Hill (129m AOD) and Tongland). Visibility indicated across much of this LCT. Existing R route to be removed from the LCT. Considered within assessment.
Foothills – Dumfries & Galloway LCT <sup>29</sup> (175) Fleet Unit LCU	<ul> <li>G-T connection located within 1km to the west.</li> </ul>	Within 5km to the west and south-west of the KTR Project where the G-T route connection passes through the neighbouring Rugged Uplands with Forest LCT (181) and Foothills with Forest LCT (176). Visibility indicated from northern parts of the LCT, however given screening by dense conifer plantation, significant effects on this LCT are considered unlikely. Not considered further.
Coastal Uplands LCT <sup>30</sup> (179) Bengairn Coastal Granite Unit LCU	<ul> <li>G-T connection located within 2km to the south-east.</li> </ul>	Within 5km to the east of the KTR Project where the G-T route connection passes through the neighbouring Drumlin Pastures LCT (169). Some visibility indicated from elevated western parts of the LCT, however given distance and screening by intervening woodland and conifer plantation, significant effects on this LCT are considered unlikely. Not considered further.
Peninsula LCT <sup>31</sup> (156) Dundrennan Unit LCU	<ul> <li>R route (south of Glenlee) located within 1km of LCT; and</li> <li>G-T connection located within</li> </ul>	LCT within a distance of 1km south of the KTR Project where the G-T connection passes through the Drumlin Pastures LCT (169) to Tongland. Visibility indicated from northern parts of the LCT within 3km. Existing R Route (south of Glenlee) to be removed from adjacent Drumline Pastures LCT and evident from this LCT.
	1km.	Although some visibility is indicated from localised elevated western parts of the LCT, given the presence of existing infrastructure within a similar proximity to the LCT, and the screening afforded by intervening woodland, significant effects on this LCT are considered unlikely to occur. Not considered further.

- assessment:
  - 1998 LCUs where relevant).
  - Where relevant, guoted selected key characteristics of the 2017 LLAs given their update to the 1998 given in relation to the LCT they are located within.
  - Quoted landscape sensitivity findings<sup>32</sup> (in relation to wind farms) from the DGWFLCS 2017 for each of a similar vertical scale to the maximum height of the lattice steel tower and wood pole.
  - The landscape's capacity<sup>32</sup> to accommodate OHL development for each LCU identified in the LUC Kendoon to Tongland 132kV Reinforcement Project Routeing and Consultation Document (2016).
  - Judgements on sensitivity for LCTs which are informed by the studies noted above, field work and professional judgement, taking account of both the susceptibility of the landscape to the type and scale of development proposed and the value of the landscape.

A7.4.42 The assessment of landscape effects focuses on LCTs where significant effects are considered possible. Table A7.4.2 below presents the following information for each of the LCTs considered in the

• Quoted key characteristics and sensitivity findings of the SNH 2019 LCTs (with reference to specific

LCTs and finer grained detail in relation to the updated 2019 LCTs. Selected LLA characteristics are

LCT/LCU considered within the assessment. Sensitivity judgements referenced are made in relation to the small-medium wind turbine typology, defined as 20-50m in vertical height (to blade tip) and

<sup>&</sup>lt;sup>26</sup> <u>Rugged Uplands - Dumfries and Galloway LCT 180</u>

<sup>&</sup>lt;sup>27</sup> Rugged Uplands with Forest - Dumfries and Galloway LCT 181

<sup>&</sup>lt;sup>28</sup> Drumlin Pastures LCT 169

<sup>&</sup>lt;sup>29</sup> Foothills – Dumfries & Galloway LCT 175

<sup>&</sup>lt;sup>30</sup> Coastal Uplands LCT 179

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<sup>&</sup>lt;sup>31</sup> Peninsula LCT 156

<sup>&</sup>lt;sup>32</sup> It should be noted that judgements of landscape sensitivity, in relation to the DGWLC 2017 and appraisal of landscape capacity contained within the 2016 LUC Routeing and Consultation Document, draw on the baseline landscape information detailed in the previous Dumfries and Galloway Landscape Character Assessment (1998).

### Table A7.4.2: Landscape Character Types and Sensitivity

LCT Description and Key Characteristics <sup>33</sup>	Dumfries and	Delevent LLAs (2017) Descriptions and Key Characteristics <sup>35</sup>	Landscano Sonsitivity
LCT Description and Key Characteristics <sup>33</sup>	Galloway Landscape Character Assessment (1998) <sup>34</sup>	Relevant LLAs (2017), Descriptions and Key Characteristics <sup>35</sup>	Landscape Sensitivity findings (in relation to wind farms) from DGWLCS (2017) <sup>36</sup>
Upper Dale – Dumfries & Galloway LCT (165) <sup>23</sup>			
<ul> <li>The Upper Dale Dumfries &amp; Galloway LCT is found in the upper stretches of two of the main river valleys in the region; the Ken/Deugh above Dalry. The existing N and R routes pass through this LCT on the western side of the A713.</li> <li><b>Key Characteristics</b> <ul> <li>"Wide valleys, enclosed by high peaks and moorland;</li> <li>Open with long views;</li> <li>Notable narrower section of Upper Nithsdale between Thornhill and Mennock;</li> </ul> </li> <li>Improved valley pastures becoming rougher up the valley sides;</li> <li>Medium to large scale enclosures with dry stone dykes;</li> <li>Riparian woodlands along the main river and up tributary channels;</li> <li>Medium to large scale forestry plantations on the valley sides and extending over horizons from higher ground;</li> <li>Large scale wind farm development characteristic of some adjacent upland fringes and backdrop skylines; and</li> <li>Mining settlements and remnants of industrial activity e.g. mine ruins and bings."</li> <li>Other elements of exiting electricity infrastructure within the LCT include Kendoon Power Station, Carsfad Power Station, Earlstoun Power Station and Glenlee Power Station, and the Polquhanity to Dalmellington (SWS) connection and Blackraig and Margee connection.</li> </ul> <li>Landscape Sensitivity findings (in relation to tall structures, wind farms etc.):</li> <li>The SNH National Landscape Character Assessment (2019) notes that: "The legacy of coal mining is evident in the buildings of settlements and in the remains of mining activity, forming part of the cultural heritage of this landscape. Hydro schemes, power lines and communication routes</li>	Upper Dale (Valley) LCT (9) - Upper Glenkens LCU	<ul> <li>LLAs within LCT:</li> <li>LLA 8: Dundeugh Valley Section (visibility indicated by ZTV shown on Figures 7.9.1-2);</li> <li>LLA 9: Kenmure Valley Section (visibility indicated by ZTV shown on Figure 7.9.2).</li> <li>LLA 9: Kenmure Valley Section describes the middle part of the Galloway Glens. The LLA includes the lower part of the Upper Dale Dumfries &amp; Galloway LCT (165) with some boundary changes in the northern part of the LLA associated with LLA 7: Carsphairn Valley Section, and the southern part, where LLA 9: Kenmure Valley Section extends into the southern part of Upper Dale Dumfries &amp; Galloway LCT (165).</li> <li>Selected key characteristics: <ul> <li>"Narrow valley passing Dundeugh Hill;</li> <li>Power infrastructure including a series of reservoirs, dams, weirs, power lines and power stations;</li> </ul> </li> <li>Mixed and coniferous woodland and scattered mature trees around lochs; and</li> <li>Drystone dyke enclosures and sheep stells or fanks."</li> </ul> LLA 9: Kenmure Valley Section describes the lowest section of 'The Glenkens' and includes the flat valley floor and the Water of Ken. The LLA includes the Upper Dale Dumfries & Galloway LCT (165) largely following the lower south and eastern slopes of Waterside Hill to encompass St John's Town of Dalry and is then broadly bound by the A702. Selected key characteristics: <ul> <li>"Broad valley with flat floodplain with improved pasture on the valley floor;</li> <li>Riparian woodland along the meandering river, mixed and coniferous shelterbelts on the valley sides;</li> <li>St John's Town of Dalry;</li> <li>Drumlin hills on east valley sides, with pastures and dykes;</li> <li>Kenmure Castle and archaeological features; and</li> <li>Wetlands on the valley floor around the head of Loch Ken."</li> </ul>	Upper Dale – Upper Glenkens Unit (LCU) "The openness and more expansive scale of the broader parts of these upper dales, however, offer some opportunities for smaller typologies and there would be a Medium sensitivity to the small- medium typology (20–50 m).' (Page 142)

<sup>&</sup>lt;sup>33</sup> Scottish Natural Heritage (2019) Scottish Landscape Character Types Map and Descriptions

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LUC Appraisal – Landscape Capacity to Accommodate Overhead Line Development (2016)<sup>37</sup> Judgement of Landscape Sensitivity<sup>38</sup>

"Wide V shaped valley enclosed by high peaks and moorland which offer backclothing opportunities indicates a higher capacity for overhead line development. However, the open nature allows long views down the valley. Overall, this LCT is judged to have medium capacity to accommodate overhead line development"

The characteristics of this landscape are judged to combine to result in a medium susceptibility to linear energy development, given the medium to large scale of the landscape and presence of existing infrastructure including part of the existing N and R routes, power stations, reservoirs, dams and major road corridors. Elevated Drumlin Hills within the eastern part of the LCT have a strong visual relationship with the Galloway Hills and are of higher susceptibility to change. Much of the western side of the LCT lies within the Galloway Hills RSA and includes a number of promoted recreational routes. Overall, landscape value is therefore considered to be high.

Considering the judgements of susceptibility and value, overall sensitivity is judged to be **medium**.

<sup>&</sup>lt;sup>34</sup> Land Use Consultants (1998) Dumfries and Galloway Landscape Assessment Report No. 94

<sup>&</sup>lt;sup>35</sup> Northlight Heritage for Galloway Glens Landscape Partnership (2017) Landscape Character Assessment & Historic Environment Audit for the Galloway Glens Landscape Partnership

<sup>&</sup>lt;sup>36</sup> Dumfries and Galloway Council (2017) Dumfries and Galloway Wind Farm Landscape Capacity Study

<sup>&</sup>lt;sup>37</sup> LUC (2016) The Kendoon to Tongland 132kV Reinforcement Project Routeing and Consultation Document SP Energy Networks October 2016

<sup>&</sup>lt;sup>38</sup> Judgements of landscape sensitivity made in accordance with the criteria in Appendix 9.1: LVIA Assessment Methodology.

Landscape Character Types and Sensitivity				
windfarms are characteristic features of the upland fringes and backdrop skylines of the upland dale. They are prominent in areas of Upper Nithdale where the influence of wind energy development has an imposing effect.'				
Foothills with Forest LCT – Dumfries and Gallov	vay (176) <sup>24</sup>		1	
<ul> <li>This LCT occurs in the north-eastern and southwestern part of the study area and is closely related to the 'Foothills' landscape type but has predominantly forest land cover which creates its forest-dominated character. The existing R route passes along the southern slopes of Barend Hill in the north-eastern part of the LCT.</li> <li>Key Characteristics: <ul> <li>"Dark green blanket of forest covering undulating foothills;</li> <li>Changing landscape with areas with large and medium scale forestry operations and wind farm development;</li> <li>Forested areas dominated by Sitka Spruce, interspersed with mixed conifers and broadleaf planting, undergoing felling and replanting in large coupes;</li> <li>Tall mature conifers at roadside;</li> <li>Areas of more complex, locally distinctive and smaller-scale landscapes, with semi-improved pasture with walled enclosures on open ground, occasional lochs and estate policies, distinctive ridges and landmark summits;</li> <li>Areas of relict landscape with remains of pre-improvement settlement and agriculture clustered in burn valleys; and</li> <li>Wind farms, locally defining the character in some areas of central Dumfries and Galloway.</li> </ul> </li> <li>Blackcraig Hill Wind Farm is located within this LCT, whilst existing energy infrastructure the Blackraig and Margee connection.</li> <li>Landscape Sensitivity findings (in relation to tall structures, wind farm development is occurring in the Stroan and Ae parts of the Foothills with Forest - Dumfries &amp; Galloway, which are among the most extensive areas of this LCT, and where there are more plateau-like landscapes. This is changing local landscape character to the point where wind farms are becoming a key characteristic."</li> </ul>	Upland Fringe LCT (16) - Corsock LCU / Foothills with Forest LCT (18a) - Rhinns of Kells and Lauriston LCUs	<ul> <li>LLAs within LCT:</li> <li>LLA 5: Kells Foothills (visibility indicated by ZTV shown on Figures 7.9.1-3);</li> <li>LLA 6: Laurieston Foothills (visibility indicated by ZTV shown on Figure 7.9.3-4);</li> <li>LLA 14: Cairnsmore Uplands (visibility indicated by ZTV shown on Figure 7.9.1).</li> <li>LLA 5: Kells Foothills</li> <li>This area is characterised as rugged hills that are lower than, and form foothills to, the Rhinns of Kells. The LLA covers much of the Foothills with Forest LCT (176) area that includes Thormy Hill (378 MAOD) and Maggot Hill (263 mAOD).</li> <li>Selected key characteristics: <ul> <li>"Rugged hills descending from the Rhinns of Kells ridge;</li> <li>Extensive forest plantations;</li> <li>Lochans in the corries; and</li> <li>Drystone walls of local stone."</li> </ul> </li> <li>LAG 6: Laurieston Foothills</li> <li>The Laurieston Foothills with Forest LCT (18a), the eastern part of the LLA extends into the Drumlin Pastures LCT (176).</li> <li>Selected key characteristics: <ul> <li>"Rugged hills extending south from the Cairn Edward Uplands;</li> <li>Extensive forest plantations;</li> <li>Lochans between hills; and</li> <li>Disused railway and routes through hills."</li> </ul> </li> <li>LLA 14: Cairnsmore Uplands</li> <li>The Cairnsmore Uplands focusses on Cairnsmore of Carsphairn and describes an area to the north-east of Carsphairn above the Water of Deugh and Kendoon Loch extending into the north-east of Carsphairn above the Water of Deugh and Kendoon Loch extending into the Drumin Pastures LCT (169) and Upland Fringe LCT (172).</li> <li>Selected key characteristics: <ul> <li>"Rolling upland hills with high rounded summits and broad moorland ridges of large scale;</li> <li>Steep incised valleys contain small scale watercourses, sometimes enclosed with plantations; and</li> <li>Extended areas of coniferous forest on lower slopes, open grass or heather moor on high ridges."</li> </ul> </li> </ul>	Foothills With Forest – Rhinns of Kells Unit (LCU) No landscape sensitivity judgement provided for unit in relation to small- medium typology but the report states that: "small/medium turbines could relate to slacker lower hill slopes where they would have some visual association with smaller scale elements and settlement and would be less likely to appear 'lost' within more expansively scaled upper slopes. "(Page 310)	"A ch Fo So D La A w Co D ba So Iii D ba So Iiii D ba So Iiii N w a
Flooded Valley LCT (164) <sup>25</sup>			1	
The Flooded Valley LCT is found along the course of the River Dee and Loch Ken. The existing R route passes through this LCT largely on the eastern side of Loch Ken.	Flooded Valley LCT (8) - Ken Valley LCU	<ul> <li>LLAs within LCT:</li> <li>LLA 10: Upper Loch Ken Valley Section (visibility indicated by ZTV shown on Figures 7.9.2-3);</li> </ul>	Flooded Valley - Ken Valley Unit (LCU) "The overall low relief of the valley, the sensitivity	"g Vä Vä gl

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"All Units are similar in character to LCT 18: Foothills (in terms of scale and landform) described in the Dumfries and Galloway Landscape Character Assessment (1998) but with extensive coniferous forest cover indicating a **higher** capacity for overhead line development. Coniferous forest offers opportunities for backclothing and screening vertical and linear development if long straight visually intrusive corridors and wind throw can be avoided."

The characteristics of this landscape are judged to combine to result in a medium susceptibility to linear energy development for the more open and varied eastern parts of the Rhinns of Kells Unit (LCU) with lower susceptibility within much of the Lauriston (LCU), given the large scale and land use largely limited to commercial forestry. The entirety of the Rhinns of Kells Unit (LCU) lies within the Galloway Hills RSA, and northern and western fringes of the Lauriston (LCU) are located within this local landscape designation. Both LCUs include a number of promoted recreational routes. Overall, landscape value is therefore considered to be medium.

Considering the judgements of susceptibility and value, overall sensitivity is judged to be **medium**.

"Shallow V shaped valley with narrow valley floor, complex glacially shaped terrain, diverse Given the presence of existing infrastructure including R route and major road corridors susceptibility is judged to

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Landscape Character Types and Sensitivity				
Key Characteristics <ul> <li>"Generally shallow 'V' shaped valley with</li> </ul>		<ul> <li>LLA 11: Castle Douglas Drumlin Pastures (visibility indicated by ZTV shown on Figure 7.9.3-5).</li> </ul>	of the loch, the small scale and complexity of the	la in
<ul> <li>Generally shallow v shaped valley with narrow valley floor;</li> </ul>		LLA 10: Upper Loch Ken Valley Section	<i>landforms and the adjacent drumlin pasture</i>	th Ic
• Extensive water body with bays and wetlands;		This LLA describes a curve associated with where glacial movement was deflected round the	character results in a High-medium sensitivity to	o d
Glacially shaped terrain: drumlins, roche mountonees, rocky ridges and eroded slopes;		Cairn Edward. The LLA includes the upper part of the Flooded Valley LCT (164), north of Parton where there is a contrast between the steep forested slopes down to the river on the west side and drumlins on the east side and extends into the western part of the Drumlin Pastures LCT	the small to medium typology (20-50 m)." (Page 130)	
<ul> <li>Improved pastures of medium scale with dry stone dyke enclosures;</li> </ul>		(169).	(1090 100)	
• Rough grasslands with heather and gorse on		Selected key characteristics:		
rocky ridges;		• "Flooded transition from forested hills to drumlin lowland;		
• Small broadleaf woodlands and shelterbelts;		Distinctive character change across Loch Ken; and		
• Small coniferous plantations (except at Cairn Edward where forestry is extensive); and		<ul> <li>Undulating pasture on eastern side with mixed woodland and coniferous shelterbelts and beech trees."</li> </ul>		
Major road corridor."		LLA 11: Castle Douglas Drumlin Pastures		
Landscape Sensitivity findings (in relation to tall structures, wind farms etc.): "The valley floor and flood plain of the River Dee is		This LLA describes an area characterised as an extensive drumlin field. The LLA includes the lower part of the Flooded Valley LCT (164) and extends to lie within much of the southern part of the Drumlin Pastures LCT (169). This LLA includes where Loch Ken lies amongst drumlins and there is not the same contrast either side as further north. The drumlins around Loch Ken		
narrow in comparison to the dales and flooded valley (i.e. Loch Ken). The original ribbon loch		merge with those of the drumlin Pastures, and although variable, this area extends to beyond Castle Douglas.		
which formed on the level valley floor has since been artificially enlarged by the construction of the		Selected key characteristics:		
hydro dams down river. Although Loch Ken is long- established, in places the water's edge is not		• "Extensive drumlin field across low lying land;		
defined by a clear shoreline and appears		• Loch Ken as a flooded river with interlocking drumlin bays and islands; and		
temporary as though the loch has recently flooded a field system."		• Dyke and hedge bounded undulating pasture fields, with woodlands and shelterbelts and distinctive tree clumps on drumlin tops."		
Rugged Uplands with Forest LCT – Dumfries and	d Galloway (181) <sup>27</sup>			
This LCT, located in the south-western part of the study area, is found in the lower slopes of the	Rugged Granite Uplands with	LLAs within LCT:	With reference to the Rugged Granite Upland	ו" cl
granite hill masses around Cairnsmore of Fleet.	Forest LCT (21a) -	<ul> <li>LLA 4: Cairn Edward Uplands Section (visibility indicated by ZTV shown on Figures 7.9.2- 3).</li> </ul>	with Forest – Cairn Edward	te
This LCT was formerly described in the Dumfries and Galloway Landscape Character Assessment	Cairn Edward LCU		Unit (LCU) described within the Dumfries and	a. Ia
			Galloway Landscape	R
(1998) as the Rugged Granite Uplands with Forest		LL4: Cairn Edward Uplands		
LCT, updated to the Rugged Uplands with Forest LCT within the SNH National Landscape Character		The Cairn Edward Uplands includes the area of granite Hills to the south-east of the Merrick- Corserine uplands, overlooking Loch Ken. The LLA 4: Cairn Edward Uplands lies largely within	Character Assessment (1998). No landscape	С
		The Cairn Edward Uplands includes the area of granite Hills to the south-east of the Merrick-Corserine uplands, overlooking Loch Ken. The LLA 4: Cairn Edward Uplands lies largely within the Rugged Uplands with Forest LCT (181).	Character Assessment (1998). No landscape sensitivity judgement provided for units in	bi cc la ea
LCT, updated to the Rugged Uplands with Forest LCT within the SNH National Landscape Character Assessment (2019). Key Characteristics:		The Cairn Edward Uplands includes the area of granite Hills to the south-east of the Merrick- Corserine uplands, overlooking Loch Ken. The LLA 4: Cairn Edward Uplands lies largely within the Rugged Uplands with Forest LCT (181). Selected key characteristics:	Character Assessment (1998). No landscape sensitivity judgement provided for units in relation to small-medium typology but the report	co la ea de
<ul> <li>LCT, updated to the Rugged Uplands with Forest</li> <li>LCT within the SNH National Landscape Character</li> <li>Assessment (2019).</li> <li>Key Characteristics:</li> <li>"Dark green sitka spruce dominated forests on lower slopes of rugged granite uplands, forest</li> </ul>		<ul> <li>The Cairn Edward Uplands includes the area of granite Hills to the south-east of the Merrick-Corserine uplands, overlooking Loch Ken. The LLA 4: Cairn Edward Uplands lies largely within the Rugged Uplands with Forest LCT (181).</li> <li>Selected key characteristics:</li> <li>"Rugged hills with extensive forest plantations covering all but the tops of higher hills; and</li> </ul>	Character Assessment (1998). No landscape sensitivity judgement provided for units in relation to small-medium typology but the report does state that: "There is	co la di oi U
LCT, updated to the Rugged Uplands with Forest LCT within the SNH National Landscape Character Assessment (2019). <b>Key Characteristics:</b> • "Dark green sitka spruce dominated forests on		The Cairn Edward Uplands includes the area of granite Hills to the south-east of the Merrick- Corserine uplands, overlooking Loch Ken. The LLA 4: Cairn Edward Uplands lies largely within the Rugged Uplands with Forest LCT (181). Selected key characteristics:	Character Assessment (1998). No landscape sensitivity judgement provided for units in relation to small-medium typology but the report does state that: "There is unlikely to be a strong demand for smaller	co la de of U of ba
<ul> <li>LCT, updated to the Rugged Uplands with Forest LCT within the SNH National Landscape Character Assessment (2019).</li> <li>Key Characteristics:</li> <li>"Dark green sitka spruce dominated forests on lower slopes of rugged granite uplands, forest cover reflecting the large scale topographic changes beneath.</li> <li>Monotony of sitka spruce broken through use</li> </ul>		<ul> <li>The Cairn Edward Uplands includes the area of granite Hills to the south-east of the Merrick-Corserine uplands, overlooking Loch Ken. The LLA 4: Cairn Edward Uplands lies largely within the Rugged Uplands with Forest LCT (181).</li> <li>Selected key characteristics:</li> <li>"Rugged hills with extensive forest plantations covering all but the tops of higher hills; and</li> </ul>	Character Assessment (1998). No landscape sensitivity judgement provided for units in relation to small-medium typology but the report does state that: "There is unlikely to be a strong demand for smaller typologies within this very sparsely settled upland	Co la di oi Oi Di So
<ul> <li>LCT, updated to the Rugged Uplands with Forest LCT within the SNH National Landscape Character Assessment (2019).</li> <li>Key Characteristics:</li> <li>"Dark green sitka spruce dominated forests on lower slopes of rugged granite uplands, forest cover reflecting the large scale topographic changes beneath.</li> </ul>		<ul> <li>The Cairn Edward Uplands includes the area of granite Hills to the south-east of the Merrick-Corserine uplands, overlooking Loch Ken. The LLA 4: Cairn Edward Uplands lies largely within the Rugged Uplands with Forest LCT (181).</li> <li>Selected key characteristics:</li> <li>"Rugged hills with extensive forest plantations covering all but the tops of higher hills; and</li> </ul>	Character Assessment (1998). No landscape sensitivity judgement provided for units in relation to small-medium typology but the report does state that: "There is unlikely to be a strong demand for smaller typologies within this very sparsely settled upland area. Smaller typologies	co la do oi U oj
<ul> <li>LCT, updated to the Rugged Uplands with Forest LCT within the SNH National Landscape Character Assessment (2019).</li> <li>Key Characteristics:</li> <li>"Dark green sitka spruce dominated forests on lower slopes of rugged granite uplands, forest cover reflecting the large scale topographic changes beneath.</li> <li>Monotony of sitka spruce broken through use of larch, and more carefully designed areas of clearfell. Some deciduous planting at forest edges and along roads, particularly in forests</li> </ul>		<ul> <li>The Cairn Edward Uplands includes the area of granite Hills to the south-east of the Merrick-Corserine uplands, overlooking Loch Ken. The LLA 4: Cairn Edward Uplands lies largely within the Rugged Uplands with Forest LCT (181).</li> <li>Selected key characteristics:</li> <li>"Rugged hills with extensive forest plantations covering all but the tops of higher hills; and</li> </ul>	Character Assessment (1998). No landscape sensitivity judgement provided for units in relation to small-medium typology but the report does state that: "There is unlikely to be a strong demand for smaller typologies within this very sparsely settled upland area. Smaller typologies could relate to the reduced scale of occasional blocks	cu la d o U o b su su li l i r w
<ul> <li>LCT, updated to the Rugged Uplands with Forest LCT within the SNH National Landscape Character Assessment (2019).</li> <li>Key Characteristics:</li> <li>"Dark green sitka spruce dominated forests on lower slopes of rugged granite uplands, forest cover reflecting the large scale topographic changes beneath.</li> <li>Monotony of sitka spruce broken through use of larch, and more carefully designed areas of clearfell. Some deciduous planting at forest edges and along roads, particularly in forests which are well used by tourists.</li> </ul>		<ul> <li>The Cairn Edward Uplands includes the area of granite Hills to the south-east of the Merrick-Corserine uplands, overlooking Loch Ken. The LLA 4: Cairn Edward Uplands lies largely within the Rugged Uplands with Forest LCT (181).</li> <li>Selected key characteristics:</li> <li>"Rugged hills with extensive forest plantations covering all but the tops of higher hills; and</li> </ul>	Character Assessment (1998). No landscape sensitivity judgement provided for units in relation to small-medium typology but the report does state that: "There is unlikely to be a strong demand for smaller typologies within this very sparsely settled upland area. Smaller typologies could relate to the reduced scale of occasional blocks of pasture carved out of the forest or on lower hill	Cla e d o U o b s l i i i r w n
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*landscape pattern including dominance of the loch indicate a lower capacity for overhead line development."*  be medium increasing to high at transitional loch sides and within elevated drumlins. The LCT lies almost entirely within the Galloway Hills RSA and includes a number of promoted recreational routes. Overall, landscape value is therefore considered to be high.

Considering the judgements of susceptibility and value, overall sensitivity is judged to be **medium**.

"Very similar characteristics (in terms of large scale and varied underlying landform) to the Rugged Úplands LCT but with extensive coniferous forest landcover. At its eastern extents the dense coniferous forest of the Cairn Edward Unit offers opportunities for backclothing and screening vertical and linear development if long, linear visually intrusive corridors and wind throw, and the notable unforested rugged granite summits can be avoided. This LCT is judged to have *medium* capacity to accommodate overhead line development."

The characteristics of this landscape are judged to combine to result in a medium susceptibility to linear energy development, given the large scale of the landscape and land use largely limited to commercial forestry. Much of the LCU within the study area lies within the Galloway Hills RSA and includes a number of promoted recreational walking routes. Overall, landscape value is therefore considered to be medium.

Considering the judgements of susceptibility and value, overall sensitivity is judged to be **medium**.

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<ul> <li>LLA 12: Tongland Valley Section (visibility indicated by ZTV shown on Figures 7.9.4-5);</li> <li>Mex Characteristics:         <ul> <li>LLA 12: Tongland Valley Section (visibility indicated by ZTV shown on Figures 7.9.4-5);</li> <li>Battictive elongated mounds with smoothly convex outlines, creating an undukting landfarm;</li> <li>Smooth convex slopes of improved pasture, grazed by sheep and cattle;</li> <li>Leactive elongated mounds with porse;</li> <li>Leactive elongated mounds with porse;</li> <li>Leactive elongated mounds with proving pasture, grazed by sheep and cattle;</li> <li>Leactive elongated mounds with porse;</li> <li>Leactive function for the part of th</li></ul></li></ul>	LCT on the eastern side of the A713 before			landform and the pattern
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<ul> <li>Indiform;</li> <li>Smooth convex slopes of improved pasture, grazed by sheep and cattle;</li> <li>Localised rugged knols with gorse;</li> <li>Medium scale fields with porse;</li> <li>Medium scale fields with porse;</li> <li>Medium scale fields with porse;</li> <li>Small settlements and scattered farmsteads served by extensive network of minor roads.</li> <li>Landscape Sensitivity findings (in relation to tail structures, wind farms etc.):</li> <li>Lochans between hills; and</li> <li>Disused railway and routes through hills."</li> <li>Landscape Sensitivity findings (in relation to tail structures. Other elements of electricity infrastructure include Tongland Power Station and two small scale wind turbines at Slagnaw Farm Wind turbines.</li> <li>Wind turbines.</li> <li>Lath 2: Tongland Valley Section</li> <li>This LLA describes the narrowing of the glacial channel as it altered course to pass the igneous rocks of the Bengaim hills. The northern part of this LLA lies within the Drumlin Pastures LCT (156) including much of the norther part of the class of the Bengaim hills. The northern part of this LLA lies within the Drumlin Pastures LCT (156) including much of the northern part of the scale wind urbines at Slagnaw Farm</li> <li>Wind turbines.</li> <li>Uach Rea as flooder view with interlocking drumlin bays and islands; and</li> <li>Dive and hedge bounded undulating pasture fields, with woodlands and shelterbelts and distinctive tree clumps on drumlin index."</li> <li>LA 12: Tongland Valley Section</li> <li>This LLA describes the narrowing of the glacial channel as it altered course to pass the igneous rocks of the Bengaim hills. The northern part of this LLA lies within the Drumlin Pastures LCT (156) including much of the norther part of the Section with medicking drumlin bays and islands; and</li> <li>Dive and hedge bounded undulating pasture fields, with woodlands and shelterbelts and distinctive tree clumps on drumlin lied.</li> <li>Selected key characteristics:</li> <li>Drumlin lined valley with dur</li></ul>			LLA 6: Laurieston Foothills	medium sensitivity to the
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<ul> <li>Medium scale fields with prominent wall and hedgerow patterns accentuating topography; and</li> <li>Small settlements and scattered farmsteads served by extensive network of minor roads.</li> <li>Landscape Sensitivity findings (in relation to tall structures, wind farms etc.):</li> <li>The 2019 SNH Landscape Character Assessment does not specifically note information regarding other tail structures. Other elements of electricity infrastructures include Tongland Power Station and two small scale wind turbines at Slagnaw Farm Wind turbines.</li> <li>Lock Ass become the element of electricity infrastructures. Other elements of electricity infrastructures include Tongland Power Station and two small scale wind turbines at Slagnaw Farm Wind turbines.</li> <li>Lock Ken as a flooder view with interlocking drumlin bays and islands; and</li> <li>Lock Ken as a flooder view with interlocking drumlin bays and islands; and</li> <li>Lock Ken as a flooder view with interlocking drumlin bays and islands; and</li> <li>Dyke and hedge bounded undulating pasture fields, with woodlands and shelterbelts and distinctive tree clumps on drumlin tops."</li> <li>LLA 12: Tongland Valley Section</li> <li>This LLA describes the narrowing of the glacial channel as it altered course to pass the igneous rocks of the Bengain hilis. The northern part of this LLA lies within the Drumlin Pastures LCT (156) including much of the glacial channel as it altered course to pass the igneous rocks of the Bengain hilis. The northern part of the section of the view shall scale channel as it altered course to pass the igneous rocks of the Bengain hilis. The northern part of the section of the point of the point of the section of the point of the data channel as it altered to undulate and shelterbelts and distinctive tree clumps on drumlin tops."</li> <li>LLA 12: Tongland Valley Section</li> <li>This LLA describes the narrowing of the glacial channel as it altered course to pass the igneous rocks of</li></ul>				
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<ul> <li>Small settlements and scattered farmsteads served by extensive network of minor roads.</li> <li>Landscape Sensitivity findings (in relation to all structures, wind farms etc.):</li> <li>The 2019 SMH Landscape Character Assessment does not specifically note information regarding other tall structures. Other elements of electricity infrastructures. Other elements of electricity infrastructures. Other elements of electricity infrastructures. Other elements of electricity infrastructures and Salagnaw Farm</li> <li>Wind turbines.</li> <li><i>"Extensive drummin field across low lying land;"</i></li> <li><i>Lock Ren as flooded rive with interlocking drumin bays and islands; and</i></li> <li><i>Dyske and hedge bounded undulating pasture fields, with woodlands and shelterbelts and distinctive tree clumps on drumin tops,"</i></li> <li>LLA 12: Tongland Valley Section</li> <li>This LLA describes the narrowing of the glacial channel as it altered course to pass the igneous rocks of the Bengaim hills, and and to the east of Tongland.</li> <li>Dyke and hedge bounded undulating pasture fields, with woodlands and shelterbelts and distinctive tree clumps on drumin tops,"</li> <li>LLA 12: Tongland Valley Section</li> <li>This LLA describes the narrowing of the glacial channel as it altered course to pass the igneous rocks of the Bengaim hills. The northern part of this LLA lies within the Drumlin Pastures LCT (169) extending into the northern part of the denisual LCT (156) including much of the northern part of Kincubdrightshire and land to the east of Tongland.</li> <li>Selected key characteristics:</li> <li>Drumlin lined valley with dammed river north of Tongland;</li> <li>Good quality pasture and arable fields with hedges and dykes and clumps of trees as shellerbells;</li> <li>Industrial elements including Tongland Power Station with associated dam, fish ladder, and pylon lines, as well as a former car factory and an active quarry; and</li> </ul>	hedgerow patterns accentuating topography;		Extensive forest plantations;	
<ul> <li>served by extensive network of minor roads.</li> <li>Landscape Sensitivity findings (in relation to tall structures, wind frame etc.):</li> <li>The 2019 SNH Landscape Character Assessment does not specifically note information regarding other tall structures. Other elements of electricity infrastructure include Tongland Power Station and two small scale wind turbines at Slagnaw Farm</li> <li>Wind turbines.</li> <li>Lack Earlie and and the east of Tongland.</li> <li>Selected key characteristics:         <ul> <li>"Extensive drumlin field across low lying land;</li> <li>Loch Ken as a floode driver with interlocking drumlin bays and islands; and</li> <li>Dyke and hedge bounded undulating pasture fields, with woodlands and shelterbelts and distinctive tree clumps on drumlin tops."</li> </ul> </li> <li>LAL 12: Tongland Valley Section</li> <li>This LLA describes the narrowing of the glacial channel as it altered course to pass the igneous rocks of the Bengain hills. The northern part of this LLA lies within the Drumlin Pastures LCT (169) extending into the northern part of the station of the distinctive tree clumps on drumlin tops."</li> <li>LAL 12: Tongland Valley Section</li> <li>This LLA describes the narrowing of the glacial channel as it altered course to pass the igneous rocks of the Bengain hills. The northern part of the Panisula LCT (156) including much of the northern part of the Panisula LCT (156) including much of the northern part of the Panisula LCT (156) including much of the northern part of the Panisula LCT (156) including much of the northern part of the Panisula LCT (156) including much of the northern part of the Panisula LCT (156) including much of the northern part of the Panisula LCT (156) including much of the northern part of the Panisula LCT (156) including much of the northern part of the Panisula LCT (156) including much of the northern part of this LLA lies with indegrand.</li> <li>Selected</li></ul>			Lochans between hills; and	
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The 2019 SNH Landscape Character Assessment does not specifically note information regarding other tall structures. Other elements of electricity infrastructure include Tongland Power Station and two small scale wind turbines at Slagnaw Farm Wind turbines.			LLA 11: Castle Douglas Drumlin Pastures	
Wind turbines.       • "Extensive drumlin field across low lying land;         • Loch Ken as a flooded river with interlocking drumlin bays and islands; and         • Dyke and hedge bounded undulating pasture fields, with woodlands and shelterbelts and distinctive tree clumps on drumlin tops."         LLA 12: Tongland Valley Section         This LLA describes the narrowing of the glacial channel as it altered course to pass the igneous rocks of the Bengairn hills. The northern part of this LLA lies within the Drumlin Pastures LCT (169) extending into the northern part of the Peninsula LCT (156) including much of the northern part of Kirkcudbrightshire and land to the east of Tongland.         Selected key characteristics:         • Drumlin lined valley with dammed river north of Tongland;         • Good quality pasture and arable fields with hedges and dykes and clumps of trees as shelterbelts;         • Industrial elements including Tongland Power Station with associated dam, fish ladder, and pylon lines, as well as a former car factory and an active quarry; and	does not specifically note information regarding other tall structures. Other elements of electricity infrastructure include Tongland Power Station and		rocks of the Bengairn hills. The northern part of this LLA lies within the Drumlin Pastures LCT (169) extending into the northern part of the Peninsula LCT (156) including much of the northern part of Kirkcudbrightshire and land to the east of Tongland.	
<ul> <li>Loch Ken as a flooded river with interlocking drumlin bays and islands; and</li> <li>Dyke and hedge bounded undulating pasture fields, with woodlands and shelterbelts and distinctive tree clumps on drumlin tops."</li> <li>LLA 12: Tongland Valley Section         This LLA describes the narrowing of the glacial channel as it altered course to pass the igneous rocks of the Bengairn hills. The northern part of this LLA lies within the Drumlin Pastures LCT (156) extending into the northern part of the Peninsula LCT (156) including much of the northern part of Kirkcudbrightshire and land to the east of Tongland.     </li> <li>Selected key characteristics:         <ul> <li>Drumlin lined valley with dammed river north of Tongland;</li> <li>Good quality pasture and arable fields with hedges and dykes and clumps of trees as shelterbelts;</li> <li>Industrial elements including Tongland Power Station with associated dam, fish ladder, and pylon lines, as well as a former car factory and an active quarry; and</li> </ul> </li> </ul>	5			
<ul> <li>Dyke and hedge bounded undulating pasture fields, with woodlands and shelterbelts and distinctive tree clumps on drumlin tops."</li> <li>LLA 12: Tongland Valley Section         This LLA describes the narrowing of the glacial channel as it altered course to pass the igneous rocks of the Bengairn hills. The northern part of this LLA lies within the Drumlin Pastures LCT (169) extending into the northern part of the Peninsula LCT (156) including much of the northern part of Kirkcudbrightshire and land to the east of Tongland.     </li> <li>Selected key characteristics:         <ul> <li>Drumlin lined valley with dammed river north of Tongland;</li> <li>Good quality pasture and arable fields with hedges and dykes and clumps of trees as shelterbelts;</li> <li>Industrial elements including Tongland Power Station with associated dam, fish ladder, and pylon lines, as well as a former car factory and an active quarry; and</li> </ul> </li> </ul>				
distinctive tree clumps on drumlin tops."         LLA 12: Tongland Valley Section         This LLA describes the narrowing of the glacial channel as it altered course to pass the igneous rocks of the Bengairn hills. The northern part of this LLA lies within the Drumlin Pastures LCT (169) extending into the northern part of the Peninsula LCT (156) including much of the northern part of Kirkcudbrightshire and land to the east of Tongland.         Selected key characteristics:         Drumlin lined valley with dammed river north of Tongland;         Good quality pasture and arable fields with hedges and dykes and clumps of trees as shelterbelts;         Industrial elements including Tongland Power Station with associated dam, fish ladder, and pylon lines, as well as a former car factory and an active quarry; and				
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<ul> <li>Drumlin lined valley with dammed river north of Tongland;</li> <li>Good quality pasture and arable fields with hedges and dykes and clumps of trees as shelterbelts;</li> <li>Industrial elements including Tongland Power Station with associated dam, fish ladder, and pylon lines, as well as a former car factory and an active quarry; and</li> </ul>			rocks of the Bengairn hills. The northern part of this LLA lies within the Drumlin Pastures LCT (169) extending into the northern part of the Peninsula LCT (156) including much of the	
<ul> <li>Good quality pasture and arable fields with hedges and dykes and clumps of trees as shelterbelts;</li> <li>Industrial elements including Tongland Power Station with associated dam, fish ladder, and pylon lines, as well as a former car factory and an active quarry; and</li> </ul>			Selected key characteristics:	
shelterbelts; • Industrial elements including Tongland Power Station with associated dam, fish ladder, and pylon lines, as well as a former car factory and an active quarry; and			• Drumlin lined valley with dammed river north of Tongland;	
and pylon lines, as well as a former car factory and an active quarry; and				
Tidal haven south of Tongland Bridge.				
			• Tidal haven south of Tongland Bridge.	

"Distinctive and undulating landscape with smooth convex drumlins; pattern of improved pasture and copses of deciduous woodland; and settled nature indicate a **medium** capacity for overhead line development."

The characteristics of this landscape are judged to combine to result in a medium susceptibility to linear energy development, given the varied landform scale and presence of existing infrastructure including the existing R route, Tongland Power Station and existing transport corridors. Parts of the western side of the LCT lie within the Galloway Hills RSA and parts of the south-eastern side of the LCT lie within the Solway Coast RSA includes a number of promoted recreational routes. Overall, landscape value is therefore considered to be medium.

Considering the judgements of susceptibility and value, overall sensitivity is judged to be **medium**.

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# Landscape Character Types and Sensitivity

# Peninsula LCT (156)<sup>31</sup>

"Medium scale, sensitive coastal edges and policy landscapes, distribution of farmstead and cultural heritage features indicate a **lower** capacity for overhead line development."

Given the characteristics of this LCT, susceptibility is judged to be medium increasing to high at coastal areas and where the scale of the landscape is more intimate. The locally designated Solway Coast RSA covers western and southern parts of this LCT and includes a number of promoted routes which provide opportunities to appreciate the wider landscape. Overall, landscape value is therefore considered to be medium.

Considering the judgements of susceptibility and value, overall sensitivity to the type and scale of development proposed is judged to be **high**.

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**Appendix 7.5: Visual Baseline** 

# **Appendix 7.5** Visual Baseline

# Introduction

- A7.5.1 This appendix details the groups of visual receptors (people) identified within the agreed 5km radius Study Area (as shown of Figure 7.1) who will potentially experience changes in views and visual amenity as a result of the Kendoon to Tongland Reinforcement 132 kilovolt (kV) Reinforcement Project ('the KTR Project') and introduces the representative assessment viewpoints that have been used to assess effects on views and visual amenity from publicly accessible locations (including the assessment from selected settlements, the vicinity of residential properties and routes).
- A7.5.2 Potential visual receptors within the Study Area who may experience potential views of the KTR Project have been identified. Visual receptors have typically been defined within the following groups:
  - Residential receptors: including those within defined settlements, smaller scattered communities and more isolated individual residences.
  - Workers: visual receptors engaged in work within the Study Area where an appreciation of the wider landscape and views is not imperative to the activity being undertaken. As these receptors are generally judged to be of lower susceptibility to changes in the view and will experience views of the proposed development which are often shared by more receptors of greater susceptibility they will generally not be considered in great detail within the assessment.
  - **Recreational receptors:** including people informally recreating within the wider landscape of the Study Area, users of promoted paths, routes etc. and the network of adopted Core Paths in the area; people using waterways including Loch Ken and cyclists using the National Cycle Network (NCN) where appreciation of the wider landscape and views may be appreciated whilst undertaking the activity.
  - Tourists and visitors: at promoted attractions and assets within the Study Area where an appreciation of the wider landscape and views is an integral part of the activity or journey (e.g. from promoted scenic or tourist routes).
  - Road users: People travelling through the landscape of the Study Area by motor vehicle on Aroads, B-roads and the wider minor road network of unclassified roads, and from which an appreciation of the wider landscape and views is not an integral part of the journey. This group of receptors may however also include residents travelling to and from their place of residence.
- A7.5.3 The assessment of effects reported in **Chapter 7: Landscape and Visual Amenity** considered the extent and level of effects on views and visual amenity likely to be experienced by the above receptor groups across the Study Area as a result of the KTR Project. Representative assessment viewpoint locations have been identified and agreed with statutory consultees (as detailed in **Appendix 7.3**: Summary of Consultation & Viewpoint Selection). These represent as many of these different receptors as reasonably practicable and required for the purposes of a comprehensive assessment, and in some instances illustrate more specific or illustrative views (e.g. documented or promoted views or viewpoints).

# **Existing Conditions**

A7.5.4 The KTR Project traverses predominantly agricultural and forested areas of the Glenkens Valley and enclosing foothills east of the Galloway Hills, in the central region of Dumfries and Galloway. Within the vicinity of the KTR Project there are a number of local communities situated within the Glenkens Valley, including New Galloway, Kirkcudbright, St John's Town of Dalry, Mossdale, Glenlee, Kendoon, and

Laurieston. There are also several small clusters of properties, and some isolated, residential properties and farm buildings in the locality.

- A7.5.5 These communities, and individual properties are served by a number of 'A' classification roads, which include the A711, A712, A713 and A762, along with 'B' classification road which include the B795. The Study Area is also crossed by a number of unclassified local public roads.
- A7.5.6 The A75 trunk route is situated in close proximity to the southernmost extent of the Study Area. The locality is popular for leisure and tourist trips, focusing on outdoor activities, with promoted walking and cycling routes providing local and longer distance recreational opportunities.
- A7.5.7 Loch Ken, a freshwater loch located between New Galloway and Crossmichael is used recreationally for fishing, sailing, and water skiing, with visitor attractions at Glenlaggan Lodges and Loch Ken Marina, A railway viaduct formerly part of the Portpatrick Railway but now disused, crosses the southern part of the loch at Boat o' Rhone is now disused.
- A7.5.8 In addition, the Southern Upland Way (SUW) long distance footpath crosses the Study Area passing through St John's Town of Dalry, and there are also several off-road paths and tracks which are defined as part of the Dumfries and Galloway Core Path network<sup>1</sup> within the Study Area. These are utilised for activities such as mountain biking, and walking, whilst the Galloway Forest Park covers a proportion of the western extents of the Study Area, providing opportunities for visitors, tourists and recreational users. Off-road paths and tracks are found within this area and provide access to fishing and picnic locations.
- A7.5.9 There are a number of existing elements of energy infrastructure located within the study area including hydropower stations, electricity substations and existing overhead electricity transmission and distribution lines. The existing N Route extends southwards from near Polguhanity west of the A713 (Galloway Tourist Route) to the Kendoon substation located east of the Water of Ken in close proximity to the Kendoon hydropower station. The existing 132kV steel lattice tower overhead line (OHL) of the N Route passes through largely open agricultural landscape backed by conifer forest, crossing the A713 and Water of Ken to the south of Dundeugh eastwards into Kendoon substation. Along its route, the N Route OHL is visible from a number of individual properties and farmsteads and is evident in sequential views experienced from the A713.
- A7.5.10 The existing R Route runs broadly north to south between Kendoon substation in the north and Tongland substation in the south of the Study Area. The existing 132kV steel lattice tower OHL of the R Route passes through largely settled landscapes comprising both arable and pastoral farmland with some mixed woodland and blocks of conifer forest. Given the generally open nature of the landform and land use, the existing R Route is evident in the landscape from a number of locations, including the settlements of Kendoon, St John's Town of Daly, and New Galloway. The R Route passes close to and crosses a number of road routes including the A713 between Kendoon and north of Crossmichael. The existing R Route is seen in views from a number of recreational areas including the open waters of Loch Ken.

# **Key Visual Receptors**

- A7.5.11 Informed by desk based study and field survey, and with reference to the Bare Earth Zones of Theoretical Visibility (ZTVs), key visual receptors (people) who experience views of the existing N and R Routes and may experience views of the proposed KTR Project connections have been identified. These visual receptors have been divided in the classes noted in paragraph A7.5.2 above for the purposes of the assessment reported in **Chapter 7**, and include:
  - local residents in the settlements of Dundeugh, Glenlee, Balmaclellan, Mossdale, the hamlet of Kendoon, and the settlements of St John's Town of Dalry, New Galloway, Laurieston and Kirkcudbright;
  - people living within the Glenkens Valley, including residents of individual properties and farmsteads;
  - people living in and visiting the Galloway Forest Park, including residents and visitors to the individual properties and farmsteads and the promoted Raiders Road;
  - those travelling on roads within the Study Area, including the A712 (Galloway Red Kite Trail), A713 (Galloway Tourist Route), and A762 on the western side of Loch Ken;

<sup>&</sup>lt;sup>1</sup> https://info.dumgal.gov.uk/mapviewers/pathsmap.aspx

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- those travelling on, cycle paths and promoted walking routes, including the Southern Upland Way; and
- Recreational users, including hill walkers and people engaged in water-based activities on Loch Ken.
- A7.5.12 The viewpoint locations of visual receptors considered in the assessment of likely visual effects reported in Chapter 7 are identified and described below.

# Selection of Representative Viewpoints for Assessment

- A7.5.13 Viewpoints have been used to represent and assess the potential visual effects of the KTR Project. A number of viewpoints have been identified through desk study, field survey, public consultation and discussions with Dumfries and Galloway Council (D&GC), Scottish Natural Heritage (SNH) and Forestry and Land Scotland (FLS)<sup>2</sup>, as detailed within **Appendix 7.3**.
- A7.5.14 As defined by GLVIA3<sup>3</sup> (Para 6.19, Page 109) viewpoints selected for the assessment of visual effects can be broadly defined within three groups: (i) representative; (ii) specific; and (iii) illustrative. The selection of viewpoints for the assessment reported in Chapter 7 involved consideration of a number of factors, as detailed in **Appendix 7.3**.
- A7.5.15 A final list of 32 assessment viewpoints has been selected and agreed with statutory consultees and represent a wide range of publicly accessible locations from which the likely effects of the KTR Project on views and visual amenity have been assessed. The viewpoints are listed in Table A7.5.1 below and their locations within the Study Area are shown on Figure 7.10.1 to Figure 7.10.5, and are numbered north to south, and based on their proximity to the KTR Project. These are not an exhaustive list of locations from where the KTR Project may theoretically be visible (based on the Bare Earth ZTV shown on Figure 7.11.1 to Figure 7.11.5).

VP No.	Location	Grid Ref (NGR)	erence	Potential receptors	Elements of the KTR Project	Reason for Inclusion
1	Layby on A713 near Polquhanity	259332	589035	Road users, tourists and visitors, and nearby residential receptors.	<ul> <li>N Route;</li> <li>Polquhanity to- Glenlee via Kendoon (P-G via K); and</li> <li>Carsfad to- Kendoon (C-K).</li> </ul>	Represents views experienced by road users, including tourists and visitors travelling on the Galloway Tourist Route, and views experienced by residential receptors from nearby properties.
2	Dundeugh at access to Polmaddy	259871	588004	Road users, tourists and visitors, and nearby residential receptors.	<ul> <li>N Route;</li> <li>P-G via K; and</li> <li>C-K.</li> </ul>	Represents views experienced by road users and tourists and visitors accessing Polmaddy Settlement, recreational receptors from Core Path 164, Bardennoch Trail Pack Road, and views from residential receptors at properties within Dundeugh.

# **Table A7.5.1: Assessment Viewpoint Locations**

VP No.	Location	Grid Ref (NGR)	erence	Potential receptors	Elements of the KTR Project	Reason for Inclusion
3	Polmaddy settlement	259233	587841	Recreational receptors, tourists and visitors.	• P-G via K.	Represents views experienced by recreational receptors, tourists and visitors to Polmaddy and views experienced from Core Path 164, Bardennoch Trail Pack Road. (Also considered in <b>Chapter</b> <b>12: Cultural Heritage</b> , in relation to Polmaddy, medieval and post-medieval settlement (SM5391)).
4	Footbridge access to Kendoon	260335	587605	Recreational receptors, tourists and visitors, and residential receptors.	<ul> <li>N Route;</li> <li>R Route (north);</li> <li>P-G via K; and</li> <li>C-K.</li> </ul>	Represents views experienced by residential receptors accessing Kendoon via the public footpath and footbridge east of the A713.
5	B7000 west of Glenhoul Hill	261368	586894	Road users and nearby residential receptors.	<ul> <li>N Route;</li> <li>R Route (north);</li> <li>P-G via K; and</li> <li>C-K.</li> </ul>	Represents open views westwards across the Upper Glenkens Valley experienced by road users travelling on the B7000 and views experienced by residential receptors from nearby properties. (Also considered in <b>Chapter</b> <b>12</b> , in relation to Polharrow Burn Archaeological Sensitive Area (165)).
6	Layby on A713 near Knocknalling Wood	260503	584945	Road users and tourists and visitors.	<ul> <li>R Route (north); and</li> <li>P-G via K.</li> </ul>	Represents views experienced by road users and tourists and visitors travelling on the A713, which forms part of the Galloway Tourist Route.
7	Southern Upland Way near Waterside Hill	260843	582064	Recreational receptors.	<ul> <li>R Route (north and south);</li> <li>P-G via K;</li> <li>Earlstoun to-Glenlee (E-G);</li> <li>Glenlee to-Tongland (G-T); and</li> <li>BG route Deviation (BG Deviation).</li> </ul>	Representative of views experienced by recreational receptors on the Southern Upland Way long distance footpath.

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<sup>3</sup> The Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition

<sup>&</sup>lt;sup>2</sup> Forestry and Land Scotland was formed in 1st April 2019 to take forward the work previously undertaken by Forest Enterprise Scotland (FES) following the full devolution of forestry to Scotland.

VP No.	Location	Grid Ref (NGR)	erence	Potential receptors	Elements of the KTR Project	Reason for Inclusion
8	Southern Upland Way near St John's Town of Dalry	261797	581318	Recreational receptors and nearby residential receptors.	<ul> <li>P-G via K; and</li> <li>E-G.</li> </ul>	Representative of views experienced by recreational receptors on the Southern Upland Way long distance footpath, and views experienced by residential receptors across the Glenkens Valley from the settlement of St John's Town of Dalry.
9	Mulloch Hill	263140	580659	Recreational receptors.	<ul> <li>R Route (north and south);</li> <li>P-G via K;</li> <li>E-G;</li> <li>G-T; and</li> <li>BG Deviation.</li> </ul>	Representative of views experienced by recreational receptors at Mulloch Hill (170mAOD) south-east of St John's Town of Dalry, Core Path 224 Mulloch Hill, Dalry. Suggested by Dumfries and Galloway Council.
10	A762 north of Glenlee	261181	580510	Road users and recreational users of promoted routes along A762.	<ul> <li>R Route (north and south);</li> <li>P-G via K; and</li> <li>E-G.</li> </ul>	Representative of views experienced by road users on the A762.
11	Unclassified road (U3S) south-west of Glenlee	259631	579281	Road users and recreational users of National Byway Route.	<ul> <li>G-T; and</li> <li>BG Deviation.</li> </ul>	Represents views experienced by road users and recreational users (cyclists) of the National Byway following this unclassified road and views experienced by nearby residential receptors at properties at Bucks Linn. Requested by D&GC, and request supported by the Energy Consents Unit (ECU).
12	Core Path 516 south-west of Glenlee	260291	579239	Recreational receptors.	<ul><li>G-T; and</li><li>BG Deviation.</li></ul>	Represents views experienced by recreational receptors on Core Path 516, New Galloway West. Requested by D&GC and endorsed by the ECU.
13	A712 west of Balmaclellan	264653	578354	Road users and nearby residential receptors.	<ul> <li>R Route (south); and</li> <li>G-T.</li> </ul>	Representative of R Route removal and views experienced by transient receptors on the A712 and views experienced by residential receptors from nearby properties.
14	A712, The Queen's Way	262272	577456	Road users and tourists and visitors.	<ul> <li>R Route (south); and</li> <li>G-T.</li> </ul>	Represents views experienced by road users and tourists and visitors travelling on the A712 which crosses the Galloway Forest Park, forming part of the Robert the Bruce Trail and Galloway Kite Trail (extended summer trail). Requested by FLS.

VP No.	Location	Grid Ref (NGR)	erence	Potential receptors		ements of the KTR oject	Reason for Inclusion
15	A762 west of Loch Ken	265151	573211	Road users, tourists and visitors and recreational receptors.	•	R Route (south).	Representative of R Route removal and views experienced by transient receptors on the A712/Galloway Red Kite Trail.
16	Core path near Tannoch Flow	260870	574440	Recreational receptors.	•	G-T.	Represents views experienced by recreational receptors on Core Path 142. Requested by FLS.
17	The Otter Pool	259453	573573	Recreational receptors and tourists and visitors.	•	G-T.	Represents views experienced by recreational receptors and tourists and visitors visiting this location and views experienced from Core Path 143, Raiders Road. Requested by D&GC, and FLS, and request supported by the ECU.
18	Core Path 177 near Bennan Moss	264446	572539	Recreational receptors.	•	G-T.	Represents views experienced by recreational receptors on Core Path 177, Cairn Edward Hill within the Galloway Forest Park.
19	Promoted viewpoint near Parton/Airds House	268740	570842	Recreational receptors.	•	R Route (south).	Represents views experienced by recreational receptors on Core Path 192.
20	Raiders Road, north of Stroan Loch	264581	570656	Road users and tourists and visitors.	•	G-T.	Represents sequential views experienced by road users and tourists and visitors travelling on this promoted route through the Galloway Forest Park. Suggested by D&GC and endorsed by the ECU.
21	Mossdale	265948	570399	Residential receptors and recreational receptors.	•	G-T.	Represents views experienced by residential receptors from the small community of Mossdale and recreational receptors from Core Path 485 Mossdale to Gatehouse Station Railway. Location highlighted by local residents through routeing consultation.
22	Core Path 485 Mossdale to Gatehouse Station Railway Walk	262761	570049	Recreational receptors and nearby residential receptors.	•	G-T.	Represents views experienced by recreational receptors from Core Path 485 Mossdale to Gatehouse Station Railway Walk and the residential receptors at the nearby isolated property at Airie, northwards across Stroan Loch. Requested by FLS.

VP No.	Location	Grid Ref (NGR)	erence	Potential receptors	Elements of the KTR Project	Reason for Inclusion
23	Stroan Viaduct	264676	570000	Recreational receptors.	• G-T.	Representative of elevated views experienced by recreational receptors from Core Path 485, Mossdale to Gatehouse Station Railway, across Stroan Viaduct.
24	A762 east of Woodhall Loch	266956	568259	Road users, tourists and visitors, and nearby residential receptors.	• G-T.	Representative of views experienced by transient receptors (road users, tourists and visitors) on the A762/Galloway Red Kite Trail and views experienced by residential receptors.
25	A713 near Parton Mill Bridge	272155	568242	Road users, tourists and visitors, and nearby residential receptors.	• R Route (south).	Representative of R Route removal and views experienced by transient receptors (road users, tourists and visitors) on the A713 (Galloway Tourist Route, Galloway Red Kite Trail and Robert the Bruce Trail) and views experienced by residential receptors.
26	Kennick Burn picnic area	266101	564964	Recreational receptors and tourists and visitors.	• G-T.	Represents views experienced by recreational receptors and tourists and visitors from the Kennick Burn picnic area and Core Path 144, Retreat Wood located within the Galloway Forest Park.
27	B795 east of Laurieston	271279	564101	Road users, tourists and visitors and nearby residential receptors.	<ul> <li>R Route (south); and</li> <li>G-T.</li> </ul>	Representative of R Route removal and views experienced by transient receptors (road users, tourists and visitors) on the B795/Galloway Red Kite Trail and views experienced by residential receptors.
28	A762 south of Laurieston	267942	562824	Road users.	• G-T.	Represents sequential views experienced by road users travelling on the A762.
29	Barstobrick Hill (Neilson's Monument)	268782	560683	Recreational receptors.	<ul> <li>R Route (south); and</li> <li>G-T.</li> </ul>	Represents elevated panoramic views across the Lower Glenkens Valley experienced by recreational users from the local landmark and monument atop Barstobrick Hill, Core Path 170.
						(Also considered in <b>Chapter</b> <b>12</b> , in relation to Neilson's Monument, Barstobrick Hill (MDG3772)).
30	A75 at junction with unclassified road	270152	558386	Road users.	<ul><li>R Route; and</li><li>G-T.</li></ul>	Located on the busy A75 trunk road between Dumfries and Stranraer represents views experienced by road users.

Location Grid Reference Potential VP No. (NGR) receptors 31 Unclassified 269974 556606 Road users road (U43S) and nearby near residential Argrennan receptors. Mains 32 553802 A711 north of 269603 Road users Tongland and nearby substation residential receptors.

A7.5.16 The receptors (people) and existing views represented by each of the viewpoints outlined in **Table A7.5.1** above are presented in Error! Reference source not found. to Error! Reference source not found. below. Accompanying visualisations for each assessment viewpoint are contained in Volumes 5 - 6: Visualisations (Figure 7.21 to Figure 7.52) of the Environmental Impact Assessment (EIA) Report prepared in accordance with the methodology set out in Appendix 7.2: ZTV Mapping and Visualisation Methodology.

Table A7.5.2: Viewpoint 1: Layby on A713 near Polquhanity

Viewpoint 1: Layby on A713 near Polquhanity								
Grid Reference (NGR)	259332	589035	Figure Number	Figure 7.21.1-11				
Landscape Character Type	LCT 165 - Upp Dumfries & Ga (Upper Glenke (Landscape Ch (LCU))	Illoway ns Unit	Designated Landscape	Galloway Hills Regional Scenic Area (RSA)				
Direction of View to Proposed Connection(s)	South-east to north-west		Visibility and Distance to infrastructure (km)	<ul> <li>N Route - 0.1km; and</li> <li>P-G via K - 0.2km.</li> </ul>				

Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located in a layby on the A713 south of Polquhanity and west of the residential property Dalshangan. The viewpoint is representative of sequential views experienced by road users on the A713, which forms part of the promoted Galloway Tourist Route, and views similar to those experienced by residential receptors from nearby properties.

The foreground comprises an area of relatively flat pastoral farmland bound on the eastern roadside by a low stone wall topped with post and wire fence, and dense conifer forestry plantation to the west. Pastoral farmland extends into the middle distance delineated by low stone walls and bound to the east by pockets of deciduous woodland which partly screens views from the A713 and to the west by the presence of conifer forest. The residential property of Hawkrigg can be seen in views to the south backed by woodland beyond. Rolling elevated farmland with blocks of conifer plantation form the skyline with the distant summits of the Galloway Hills evident in views to south-west to west from the viewpoint.

The steel lattice towers of the existing N Route, steel lattice transmission towers of the Polguhanity to Dalmellington Route and further wood pole distribution lines are seen in successive close proximity to longer distance views looking south-east to north-west along the Dundeugh Valley, running in parallel across the farmland, largely backclothed against conifer forest and the partly wooded roadside of the A713. The existing electricity transmission infrastructure is partly backclothed. The existing Polguhanity to Dalmellington (SWS) connection is visible in successive views to the north.

The proposed P-G via K connection of the KTR Project will be seen in views looking south-east to north-west. The proposed C-K connection will be imperceptible due to the presence of intervening woodland cover to the north of the viewpoint.

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Residential receptors;
- Tourists and visitors; and

	ements of the KTR oject	Reason for Inclusion		
•	R Route; and G-T.	Represents views experienced by residential receptors from nearby properties.		
•	R Route (south); and G-T.	Represents views experienced by road users of the A711 and residential receptors at the nearby properties near Tongland substation.		

# Viewpoint 1: Layby on A713 near Polguhanity

Road Users.

# Sensitivity:

Road users of the A713, some of whom may be tourists and visitors by virtue of its promotion as a tourist route, are considered to be of medium susceptibility to changes in the view. Residential receptors are considered to be of high susceptibility to changes in the view.

Between Polguhanity and Crossmichael the A713 lies within the Galloway Hills RSA, and whilst tourists and visitors and residential receptors may attach a higher value to views, the viewpoint does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view available from this location is considered to be low.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be medium.

# Table A7.5.3: Viewpoint 2: Dundeugh at access to Polmaddy

Viewpoint 2: Dundeugh at access to Polmaddy									
Grid Reference (NGR)	259871	588004	Figure Number	Figure 7.22.1-8					
Landscape Character Type	LCT 165 - Upper Dale Dumfries & Galloway (Upper Glenkens Unit (LCU))		Designated Landscape	Galloway Hills RSA					
Direction of View to Proposed Connection(s)	South-east to	north-west	Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>N Route – 0.1km; and</li> <li>P-G via K – 0.4km.</li> </ul>					

### Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located at the access to Polmaddy, on the A713 near residential properties at Dundeugh. The viewpoint is representative of sequential views experienced by receptors on the A713, which forms part of the Galloway Tourist Route. Similar views are gained from eastern parts of Core Path 164 Bardennoch Trail Pack Road. The viewpoint also represents views gained by residential receptors from nearby properties.

The foreground comprises an area of relatively flat pastoral farmland bound on the eastern roadside by post and wire fencing and conifer plantation to the west. Rectilinear farmland extends into the middle distance delineated by low stone walls. Farmland extends to the middle distance and is backed by residences at Knockbrack House and Phail Barcis, with blocks of recently-felled forestry and elevated farmland beyond. Deciduous woodland and scrub vegetation partially screen the A713 which passes out of view in the middle distance. Rolling farmland with pockets of woodland encloses the view to the south, forming the skyline and background of the view and forestry forms the skyline to the west.

The steel lattice towers of the existing N Route, and further wood pole distribution lines are seen in successive close proximity to longer distance views looking north-west to south-east along the Dundeugh Valley, running in parallel across the farmland, largely against the skyline framed by the partly wooded roadside of the A713 and rolling landform to the west. The proposed P-G via K connection of the KTR Project will be seen in views looking south-east to north-west. The proposed C-K connection will be imperceptible due to the presence of intervening woodland cover to the north of the viewpoint.

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Residential receptors;
- Recreational receptors; and
- Road Users. -

### Sensitivity:

Road users of the A713, some of whom may be tourists by virtue of its promotion as a tourist route, are considered to be of medium susceptibility to changes in the view. Residential receptors and recreational receptors whose attention is focused on their surroundings are considered to be of high susceptibility to changes in the view.

Between Polguhanity and Crossmichael the A713 lies within the Galloway Hills RSA, and whilst recreational and residential receptors may attach a higher value to views, the viewpoint does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view available from this location is considered to be low.

# Viewpoint 2: Dundeugh at access to Polmaddy

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be **high**.

# Table A7.5.4: Viewpoint 3: Polmaddy settlement

/iewpoint 3: Polmaddy settlement						
Grid Reference (NGR)	259233	587841	Figure Number	Figure 7.23.1-5		
Landscape Character Type	LCT 176- Foothills with Forest (Rhinns of Kells Unit (LCU))		Designated Landscape	Galloway Hills RSA		
Direction of View to Proposed Connection(s)	ed		Visibility and Approximate Distance to elements of KTR Project (km)	• P-G via K – 0.3km.		
ocation, descri	ocation, description of existing view and anticipated view of the KTR Project, and potential receptors:					

This viewpoint is located at the picnic site immediately east of the Polmaddy historic settlement. The viewpoint is representative of views experienced by tourists and visitors to the remnants of the settlement and similar views experience recreational receptors from the southern part of Core Path 164 Bardennoch Trail Pack Road.

The foreground of the view comprises of descending landform and a stone wall delineating the southern edge of Polmaddy Burn, with mixed woodland seen on either side of the watercourse. The footbridge (forming part of Core Path 164) crossing Polmaddy Burn can be seen partly screened by vegetation in the middle distance backed by forestry which forms the skyline with more distant elevated farmland to the east. Successive views to the north and west feature elevated rolling landform and the remnants of the historic Polmaddy settlement with forestry beyond forming the background and skyline of views to the north. Distant views to the summits of the Galloway Hills can be seen in views to the west.

Existing wood pole distribution lines can be seen in longer-distance views framed by forestry to the east, and backclothed against rolling farmland in the Dundeugh Valley, however the existing N Route is not visible in views to the east from this location due to the presence of intervening landform and forestry. Outward views to the south are limited by elevated landform and coniferous forestry. The proposed P-G via K connection of the KTR Project will feature in views to the east, south-east from this location.

No other elements of existing electricity transmission infrastructure are visible from this location, however Figure 7.23.3 indicates theoretical visibility of operational Blackcraig wind farm visible on the skyline in the background of long-distance views looking east. However existing conifer forest screens views of this wind farm. The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint

include:

- Recreational receptors; and
- Tourists and visitors

### Sensitivity:

Recreational receptors, and tourists and visitors whose attention is focused on their surroundings are considered to be of high susceptibility to changes in the view.

The viewpoint is located within the Galloway Hills RSA, recreational receptors are likely to attach a higher value to views, and the viewpoint offers longer distance views west towards elevated parts of the Galloway Hills RSA. Therefore, the value of the view available from this location is considered to be medium. On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this

viewpoint is judged to be high.

# Table A7.5.5: Viewpoint 4: Footbridge access to Kendoon

Viewpoint 4: Footbridge access to Kendoon					
Grid Reference (NGR)	260335	587605	Figure Number	Figure 7.24.1-8	
Landscape Character Type	LCT 165 - Upper Dale Dumfries & Galloway		Designated Landscape	Galloway Hills RSA	

Viewpoint 4: Footbridge access to Kendoon				
	(Upper Glenkens Unit (LCU))			
Direction of View to Proposed Connection(s)	South to north-west	Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>N Route - 0.1km;</li> <li>R Route - 0.1km;</li> <li>P-G via K - 0.1km; and</li> <li>C-K - 0.1km.</li> </ul>	

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located at the public footpath and footbridge east of the A713 near Kendoon. The viewpoint is representative of views similar to those experienced by residential receptors and recreational users of the footpath accessing Kendoon via the public footpath and footbridge east of the A713.

The foreground comprises an area of ascending landform with rough grassland and occasional swathes of bracken and scrub. A low stone wall and deciduous mature trees enclose land between the footbridge and the east side of the A713. Elevated areas of rough grazing enclose views to the west and south-west and form the skyline of views in this direction. Blocks of coniferous forestry can be seen in distant views to the south beyond mixed woodland along the Water of Ken, forming the skyline and background of views to the south.

Existing electricity transmission infrastructure is prominent in views, where the steel lattice towers of the existing N Route and R Route connect into Kendoon substation and are seen against the skyline in westwards views from the viewpoint. Wooden pole distribution lines are visible in the foreground of the view, as they cross the enclosed pasture/rough grazing found to the east and west of the A713. The proposed P-G via K and C-K connections of the KTR Project will be seen in views looking south to north-west.

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Recreational receptors; and
- Tourists and visitors; and
- Residential receptors

# Sensitivity:

Residential receptors are considered to be of high susceptibility to changes in the view.

The viewpoint is located within the Galloway Hills RSA, and whilst residential receptors may attach a higher value to views, the viewpoint does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Existing electricity transmission infrastructure is prominent in available views. Therefore, the value of the view available from this location is considered to be low.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be **high**.

# Table A7.5.6: Viewpoint 5: B7000 west of Glenhoul Hill

Viewpoint 5: B7000 west of Glenhoul Hill				
Grid Reference (NGR)	261368	586894	Figure Number	Figure 7.25.1-7
Landscape Character Type	LCT 165 - Upper Dale Dumfries & Galloway (Upper Glenkens Unit (LCU))		Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	South to north-west		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>N Route - 1.2km;</li> <li>R Route - 1.1km;</li> <li>P-G via K - 1.1km; and</li> <li>C-K - 1.1km.</li> </ul>

Location, description of existing view and anticipated view of the KTR Project, and potential receptors: This viewpoint is located on the B7000 near access tracks for residential properties at Glenhoul Brae south-east of Kendoon. This viewpoint is elevated above the Dundeugh Valley and Carsfad Loch and looks across to the hills of Galloway Forest Park to the west. The viewpoint is representative of open views westwards across the Upper Glenkens Valley experienced by road users travelling on the B7000 and views similar to those experienced by residential receptors from nearby properties. This viewpoint is also considered as the Cultural Heritage Viewpoint 3.

# Viewpoint 5: B7000 west of Glenhoul Hill

The foreground of the view comprises rolling pastoral farmland enclosed by low stone walls with areas of mature woodland clustered around Carsfad Loch and adjoining watercourses. Residential properties and farmsteads can be seen along the valley floor from the north to south surrounded by shelterbelt vegetation. Blocks of forestry are seen to the north along the valley floor, across the Kells Foothills to the west and within the valley to the south. Forestry-lined hills are seen in longer distance views across the valley to the west, with distant summits to the north-west, west and south forming the skyline and background of the view.

From this elevated viewpoint steel lattice towers of the existing Route can be seen in successive middle-distance views looking north-west to south-west backed by elevated farmland. Steel lattice towers of the N Route can be seen in longer distance views to the north-west, appearing predominantly backclothed against forestry and the underlying farmland but intermittently skylined where the line passes north of Bardennoch Hill. The hydroelectric power station tower at Kendoon can be seen in longer distance views looking north-west, whilst the Blackcraig to Margree wood pole grid connection can be seen in longer distance views from north-west to north, partially screened by intervening forestry and woodland. The existing Polguhanity to Dalmellington (SWS) connection is visible in distant views to the north-west. From this location the proposed P-G via K and C-K connections of the KTR Project will be seen in successive views looking south to north-west along the valley.

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Residential receptors; and
- Road users.

### Sensitivity:

Road users of the B7000 are considered to be of low susceptibility to changes in the view, while residential receptors are considered to be of high susceptibility to changes in the view. The viewpoint is located within the Galloway Hills RSA and the offers longer distance views west towards elevated parts of the Galloway Hills RSA. The value of views from this location is considered to be high. On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be **high**.

# Table A7.5.7: Viewpoint 6: Layby on A713 near Knocknalling Wood

/iewpoint 6: Layby on A713 near Knocknalling Wood						
Grid Reference (NGR)	260503	584945	Figure Number	Figure 7.26.1-8		
Landscape Character Type	LCT 165 - Upper Dale Dumfries & Galloway (Glenkens Unit (LCU) LCT (9))		Designated Landscape	Galloway Hills RSA		
Direction of View to Proposed Connection(s)	South to north-west		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.1km; and</li> <li>P-G via K - 0.1km.</li> </ul>		

Location, description of existing view and anticipated view of the KTR Project, and potential receptors: This viewpoint is located on the layby of the A713 near Carsfad. The viewpoint is representative of sequential views experienced by road users travelling on the A713, which forms part of the Galloway Tourist Route. The foreground of the view comprises a narrow strip of pastoral farmland bound on the eastern roadside by a low stone wall topped with post and wire fencing and by Knocknalling Wood to the west. Two small stone farm structures can be seen to the north within the farm enclosure. Middle distance views comprise elevated farmland and mixed woodland, forming the skyline and much of the background of views in this direction. Longer-distance views are largely enclosed by rolling landform and woodland, with a glimpse of a distant summit to the south seen between tree canopies.

From this relatively low elevation steel lattice towers of the existing R Route (north) and a wooden pole distribution line are seen in successive close proximity to longer distance views looking north to south running parallel across a narrow strip of relatively flat pastoral farmland. The towers are backclothed by woodland and elevated farmland in views looking south, are partly skylined in views looking west and are fully skylined in views looking north as the route traces ascending landform. From this location the proposed P-G via K connection of the KTR Project will be seen in successive views looking south to north-west running parallel to the A713. The proposed C-K connection will be imperceptible due to the presence of intervening woodland cover to the north of the viewpoint.

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

# Viewpoint 6: Layby on A713 near Knocknalling Wood

- Tourists and visitors; and
- Road users.

### Sensitivity:

Road users of the A713, some of whom may be tourists and visitors by virtue of its promotion as a tourist route, are considered to be of medium susceptibility to changes in the view.

Between Polguhanity and Crossmichael the A713 lies within the Galloway Hills RSA, however the viewpoint does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view available from this location is considered to be low.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be **medium**.

# Table A7.5.8: Viewpoint 7: Southern Upland Way near Waterside Hill

Viewpoint 7: Southern Upland Way near Waterside Hill					
Grid Reference (NGR)	260843	582064	Figure Number	Figure 7.27.1-8	
Landscape Character Type	LCT 165 - Upper Dale Dumfries & Galloway (Upper Glenkens Unit (LCU))		Designated Landscape	Galloway Hills RSA	
Direction of View to Proposed Connection(s)	North to south		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.3km;</li> <li>P-G via K - 0.3km;</li> <li>E-G - 0.4km;</li> <li>G-T - 1.5km; and</li> <li>BG Deviation - 1.5km.</li> </ul>	

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located on the Southern Upland Way at the cairn near Waterside Hill. The viewpoint represents specific elevated panoramic views experienced by recreational receptors of the Southern Upland Way at this elevated point on the trail.

The foreground comprises areas of elevated farmland and rough grazing with a mix of low stone walls and post and wire fencing enclosing pastoral fields. The viewpoint looks over Earlstoun Loch to the north-east with pockets of managed mixed woodland along the western shore and a mix of managed woodland, forestry, and designed landscape along the eastern shore. Residential properties are seen scattered across the valley floor. Distant summits form the background and skyline of views to the north and north-east.

Steel lattice towers of the existing R Route and a wooden pole distribution line are seen in successive middledistance views looking north-east to south across pastoral farmland and rolling foothills. Wind turbines at Wether Hill wind farm can be seen along ridges in views to the north-east and turbines at Blackcraig Hill wind farm can be seen in views to the east. Wind turbines at Windy Standard wind farm can be seen framed by landform in distant views to the north. The hydroelectric power station tower at Kendoon is seen in long-distance views to the north. From this viewpoint the proposed P-G via K and E-G connections of the KTR Project will be seen in successive views from north to south, whilst the proposed G-T and BG Deviation connections will be visible in longer distance views to the south.

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint includes recreational users.

# Sensitivity:

Recreational receptors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

The viewpoint is located at the eastern boundary of the Galloway Hills RSA and affords longer-distance panoramic views north-west towards elevated parts of the Galloway Hills RSA. Therefore, the value of the view available from this location is considered to be high.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be high.

# Table A7.5.9: Viewpoint 8: Southern Upland Way near St John's Town of Dalry

Viewpoint 8: Southern Upland Way near St John's Town of Dalry					
Grid Reference (NGR)	261797	581318	Figure Number	Figure 7.28.1-4	
Landscape Character Type	LCT 165 - Upper Dale Dumfries & Galloway (Upper Glenkens Unit (LCU))		Designated Landscape	Galloway Hills RSA	
Direction of View to Proposed Connection(s)	South-west to north-west		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.7km;</li> <li>P-G via K - 0.7km; and</li> <li>E-G - 0.7km.</li> </ul>	

This viewpoint is located on the Southern Upland Way to the north-west of St John's Town of Dalry. The viewpoint is representative of views experienced by recreational receptors on the Southern Upland Way long distance footpath, and views similar to those experienced by residential receptors and tourists and visitors within the settlement of St John's Town of Dalry.

The foreground comprises an area of relatively flat grassland enclosed by rolling drumlin landform to the west, which forms the skyline and background of views to the west. Middle-distance views to the south include elevated pastoral farmland enclosed by low stone walls. Forested hills are seen in longer-distance views to the south-west and form the skyline of views in this direction.

From this relatively low elevation the steel towers of the existing R Route and a wooden pole distribution line can be seen in successive views clockwise from the south-west to north-west running in parallel and backclothed by rolling landform and woodland along the Ken Valley. From this location the proposed P-G via K and E-G connections of the KTR Project will be seen in successive views from the south-west to north-west. The G-T Connection and BG Deviation will be imperceptible from this location due to the presence of intervening woodland directly west of the viewpoint and east of the existing Glenlee Substation.

include:

- Residential receptors; and
- Recreational receptors.

# Sensitivity:

Recreational receptors whose attention is focussed on their surroundings and residential receptors are considered to be of high susceptibility to changes in the view.

The viewpoint is located within the Galloway Hills RSA, and whilst residential and recreational receptors may attach a higher value to views, the viewpoint does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view from this location is considered to be medium.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be medium.

# Table A7.5.10: Viewpoint 9: Mulloch Hill

Viewpoint 9: Mulloch Hill					
Grid Reference (NGR)	263140	580659	Figure Number	Figure 7.29.1-8	
Landscape Character Type	LCT 164 - Flooded Valley (Ken Valley Unit (LCU))		Designated Landscape	Galloway Hills RSA	
Direction of View to Proposed Connection(s)	West, south-west to north- west		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.6km;</li> <li>P-G via K - 2.4km;</li> <li>E-G - 2.4km;</li> <li>G-T - 2.5km; and</li> <li>BG Deviation - 2.5km.</li> </ul>	

Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint

# Viewpoint 9: Mulloch Hill

Location, description of existing view and anticipated view of the KTR Project, and potential receptors: This viewpoint is located on Core Path 224 Mulloch Hill, Dalry at the summit of Mulloch Hill (170mAOD) to the south-east of St John's Town of Dalry. The viewpoint represents elevated panoramic views experienced from this local hill summit accessed by recreational receptors on Core Path 224.

The foreground comprises drumlin hills with rough grazing pasture enclosed by low stone walls and post and wire fencing. Pasture becomes less rough downslope and extends across the valley floor amongst scattered farmsteads and residential properties. Deciduous and mixed woodland can be seen running along the Water of Ken and as shelterbelt clustered around residential properties. Blocks of conifer forestry are seen on the valley slopes. The forested hills of Galloway Forest Park are backed by Cairnsmore or Black Craig of Dee, forming the skyline and background of views to the west and north-west. Views to the south-west extend further along the valley floor to distant summits

From this elevated viewpoint, steel lattice towers of the existing R Route are seen in successive relatively longdistance views from the west to the south, where the OHL passes through elevated farmland on the western slopes of the valley. Other wooden pole distribution lines can be seen running parallel to the transmission line and along the valley floor, whilst telecommunications masts can be seen on the summits of White Hill and Benniquinea in views to the south-west. The hydroelectric power station at Glenlee is seen in views west and the hydroelectric power station at Earlstoun is seen in views to the north-west. The existing BG Route is seen beyond Genlee substation as it ascends the western and south-western flanks of Glenlee Hill, whilst the operational turbines of Blackcraig Wind Farm can be seen against the skyline in the background of long-distance successive views to the north-east. The proposed P-G via K, E-G, G-T and BG Deviation connections of the KTR Project will be seen in longer-distance successive views west, south-west to north-west.

Receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include recreational receptors.

# Sensitivity:

Recreational receptors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

The viewpoint is located at the eastern boundary of the Galloway Hills RSA and views are notable with the elevated summits of the Galloway Hills RSA seen in longer-distance panoramic views to the west and north-west. Therefore, the value of the view available from this location is considered to be high.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be high.

# Table A7.5.11: Viewpoint 10: A762 north of Glenlee

Viewpoint 10: A762 north of Glenlee					
Grid Reference (NGR)	261181	580510	Figure Number	Figure 7.30.1-5	
Landscape Character Type	LCT 165 - Upper Dale Dumfries & Galloway (Upper Glenkens Unit (LCU))		Designated Landscape	Galloway Hills RSA	
Direction of View to Proposed Connection(s)	South-west to north		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.1km;</li> <li>P-G via K - 0.4km; and</li> <li>E-G - 0.4km.</li> </ul>	

Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located on the A762 north of Glenlee. The viewpoint is representative of sequential views experienced by road users travelling on the A762. Similar views are experienced by recreational users (cyclists) travelling on the National Byway route.

The foreground comprises an area of relatively flat pastoral farmland bound by post and wire fencing to the eastern roadside, a block of coniferous forestry to the north-west and riparian woodland to the west and southwest along Coom Burn. Middle distance views include conifer forestry and mixed woodland, which form the skyline to the north-west. Beyond mixed forestry to the south-west, the summit of Glenlee Hill forms the skyline and background of the view. Glimpses of distant summits can be seen to the west and form the skyline and background of the view in this direction.

From this relatively low elevation, steel lattice towers of the existing R Route can be seen in successive middledistance views as the OHL approaches Glenlee Substation to the south-west of the viewpoint, passing through and appearing partly screened by forestry and woodland with some steel lattice towers skylined as they pass over the

# Viewpoint 10: A762 north of Glenlee

broad ridge of The Score. The Glenlee hydroelectric Power Station penstock can be seen to the south-west, partly screened by woodland. The proposed P-G via K, E-G connections will be seen in successive views looking west to north. The proposed G-T and BG Deviation connections will not be perceptible from this location due to the presence of intervening woodland cover to the south-west. The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint

include:

- Recreational receptors; and
- Road users.

# Sensitivity:

Road users of the A762 are considered to be of low susceptibility to changes in the view. Recreational receptors following the National Byway whose attention may be more focussed on their surroundings are considered to be of medium susceptibility to changes in the view.

The viewpoint is located within the Galloway Hills RSA but does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view afforded from this location is considered to be low.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be medium.

# Table A7.5.12: Viewpoint 11: Unclassified road (U3S) south-west of Glenlee

Viewpoint 11: Unclassified road (U3S) south-west of Glenlee					
Grid Reference (NGR)	259631	579281	Figure Number	Figure 7.31.1-5	
Landscape Character Type	LCT 176- Foothills with Forest (Rhinns of Kells Unit (LCU))		Designated Landscape	Galloway Hills RSA	
Direction of View to Proposed Connection(s)	North-east		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>G-T - 0.7km; and</li> <li>BG Deviation - 0.2km.</li> </ul>	

This viewpoint is located on the unclassified road U3S to the south-west of Glenlee. This viewpoint is representative of views similar to those gained by residential receptors from nearby properties at Bucks Linn, and of views experienced by road users travelling on the unclassified road between the A762 and Galloway Forest Park. Similar views are experienced by cyclists travelling on the National Byway route.

The foreground comprises rough grassland with bracken, backed by mature riparian vegetation. Elevated pastoral farmland with occasional scrub enclosed by low stone walls extends through the middle-distance of views. Elevated farmland forms the skyline and background of views to the north. Small pockets of forestry and woodland form part of the skyline to the north-east. Views to distant summits can be seen to the east and west between pockets of forestry and woodland along the incised landform of the watercourse.

From this viewpoint, steel lattice towers of the existing BG route and a wooden pole distribution line are seen in successive middle-distance views looking west to east passing through elevated pastoral farmland, occasionally skylined but otherwise backed by rolling landform. Turbines at Blackcraig Hill wind farm are seen in skylined in longer distance views to the north-east. The telecommunications mast near Shield Third Hill is seen in views to the north-west. The proposed BG Deviation and G-T connections will be seen in views to the east, north-east. The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Residential receptors; and
- Road users. -

### Sensitivity:

Residential receptors are considered to be of high susceptibility to changes in the view. The viewpoint is located within the Galloway Hills RSA, and whilst residential receptors may attach a higher value to views, the viewpoint does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view available from this location is considered to be low. On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be **medium**.

# Table A7.5.13: Viewpoint 12: Core Path 516 south-west of Glenlee

Viewpoint 12: Core Path 516 south-west of Glenlee				
Grid Reference (NGR)	260291	579239	Figure Number	Figure 7.32.1-9
Landscape Character Type	LCT 176- Foothills with Forest (Rhinns of Kells Unit (LCU))		Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	North-east to south		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>G-T – 0.1km; and</li> <li>BG Deviation – 0.5km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located on Core Path 516 New Galloway West to the south-west of Glenlee near Shiel Hill. The viewpoint is representative of views experienced by recreational receptors on the north-western portion of Core Path 516.

The foreground comprises rough grassland and grazing bound by a low stone wall to the west. Middle-distance views to the north-east include deciduous woodland along Craigshinnie Burn backed by elevated pastoral farmland. Blocks of coniferous forestry and pockets of mixed woodland are seen in longer-distance views along the Dundeugh Valley floor to the east. Views to distant summits form the background and skyline of the view to the north-east.

Steel lattice towers of the existing BG route are seen in successive middle-distance views running parallel from west to north-east passing through elevated pastoral farmland with occasional scrub. A wooden pole distribution line is also seen running perpendicular to the BG route from north to south, passing through rolling pastoral farmland. Turbines at the Blackcraig Hill wind farm are seen skylined along hills to the north-east and turbines at the Wether Hill Wind Farm are framed by landform in longer distance views further north. The proposed BG Deviation and G-T connections of the KTR Project will be seen in close proximity successive views to the northeast to south

The group of receptors potentially experiencing visual effects of the KTR Project at this viewpoint includes recreational receptors.

# Sensitivity:

Recreational receptors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

The viewpoint is located within the Galloway Hills RSA, and whilst recreational receptors may attach a higher value to views, the viewpoint does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view available from this location is considered to be low.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be medium.

Table A7.5.14:	Viewpoint :	13: A712	west of	Balmaclellan
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Viewpoint 13: A	712 west of Ba	almaclellan		
Grid Reference	264653	578354	Figure Number	Figure 7.33.1-3
Landscape Character Type	LCT 164 - Flooded Valley (Ken Valley Unit (LCU))		Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	West		Visibility and Approximate Distance to elements of KTR Project (km)	• R Route – 0.1km.

Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located on the A712 at gated access to farm tracks west of Balmaclellan. The viewpoint is representative of sequential views experienced by road users travelling on the A712 and views similar to those experienced by residential receptors from nearby properties at Balmaclellan.

# Viewpoint 13: A712 west of Balmaclellan

The foreground of the view to the west comprises tarmac, bound by scattered deciduous woodland and scrub backed by post and wire fencing. Rolling rectilinear farmland on either side of the A712 forms middle-distance of views, with views to distant summits of Galloway Forest Park forming the background and skyline of the view to the west

From this relatively low elevation existing steel lattice towers of R Route are seen in successive middle-distance views looking north-west to south-east skylined and running across pastoral farmland. Wooden pole distribution line is seen running perpendicular to the transmission line across pastoral farmland. The proposed G-T connection of the KTR Project will be seen in long distance views to the west, although towers will be heavily screened by the presence of intervening woodland and forestry and barely perceptible at this distance. The potential groups of receptors who are likely to experience visual effects of the KTR Project at this viewpoint include:

- Residential receptors; and

Road users. \_

# Sensitivity:

Road users of the A712 are considered to be of low susceptibility to changes in the view and residential receptors are considered to be of high susceptibility to changes in the view. The viewpoint is located within the Galloway Hills RSA, and whilst residential receptors may attach a higher value to views, the viewpoint does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view available from this location is considered to be low.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be **medium**.

# Table A7.5.15: Viewpoint 14: A712, The Queen's Way

Viewpoint 14: A	712, The Quee	en's Way		
Grid Reference (NGR)	262272	577456	Figure Number	Figure 7.34.1-6
Landscape Character Type	LCT 181 - Rugged Uplands with Forest (Cairn Edward Unit (LCU))		Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	West, south-west		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 1.9km; and</li> <li>G-T - 0.7km.</li> </ul>

This viewpoint is located on the A712 at the junction with Old Edinburgh Road to the west of New Galloway. This viewpoint is representative of sequential views experienced by road users and tourists and visitors travelling on the A712, which forms part of the Queen's Way, Robert the Bruce Trail and Galloway Kite Trail.

The foreground of the view comprises the tarmac bound on either side by woodland. Middle distance views are formed by forested hills to the south-west and elevated farmland with occasional scrub to the north-west, which form the background and skyline for much of the view looking west. Longer-distance views to the Cairnsmore of Dee can be glimpsed beyond intervening deciduous woodland to the west.

Two perpendicular existing wooden pole distribution lines are seen in successive views looking north to south-east through elevated farmland and cross the A712 to the east of the viewpoint. Turbines at Blackcraig Hill wind farm are skylined in views to the east. The proposed G-T connection will be seen to the west, south-west. Theoretical visibility of the existing R Route is indicated from this viewpoint; however, the presence of intervening woodland and the settlement of New Galloway screen views of towers at this distance.

No other elements of existing electricity transmission infrastructure are visible from this location.

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Tourists and visitors; and
- -Road users.

### Sensitivity:

Road users of the A712, some of whom may be tourists and visitors by virtue of its promotion as a tourist route. are considered to be of medium susceptibility to changes in the view.

# Viewpoint 14: A712, The Queen's Way

The viewpoint is located within the Galloway Hills RSA but does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view available from this location is considered to be low.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be **medium**.

# Table A7.5.16: Viewpoint 15: A762 west of Loch Ken

Viewpoint 15: A	762 west of Lo	och Ken		
Grid Reference (NGR)	265151	573211	Figure Number	Figure 7.35.1-4
Landscape Character Type	LCT 164 - Floc (Ken Valley Ur	,	Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	East		Visibility and Approximate Distance to elements of KTR Project (km)	• R Route – 1.5km.

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located on the A762 as it follows the west shore of Loch Ken near Lochside Point. The viewpoint is representative of sequential views experienced by road users travelling on the A762, which forms part of the Galloway Kite Trail.

Views west towards the G-T connection from this location are screened by intervening landform and mixed woodland immediately to the west of the road.

From this relatively low elevation, steel lattice towers of the existing R Route are seen in successive long-distance views looking east to south-east across Loch Ken, passing through rolling drumlin farmland on the east of the Glenkens Valley. Towers are often backclothed by forestry and landform but are occasionally skylined in views to the south-east. Blackcraig Hill Wind Farm is seen skylined in views to the north-east.

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Road users:
- \_ Recreational receptors; and
- Tourists and visitors. -

# Sensitivity:

Road users of the A762, some of whom may be tourists by virtue of its promotion as a tourist route, are considered to be of medium susceptibility to changes in the view.

The viewpoint is located within the Galloway Hills RSA, but viewpoint does not afford views across the wider area of the Galloway Hills RSA. Therefore, the value of the view available from this location is considered to be medium.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be **medium**.

# Table A7.5.17: Viewpoint 16: Core path near Tannoch Flow

Viewpoint 16: Core path near Tannoch Flow				
Grid Reference (NGR)	264446	572539	Figure Number	Figure 7.36.1-4
Landscape Character Type	LCT 181 - Rugged Uplands with Forest (Cairn Edward Unit (LCU))		Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	North, north-east		Visibility and Approximate Distance to elements of	• G-T – 0.3km.

Viewpoint 16: Core path near Tannoch Flow

KTR Project (km)

This viewpoint is located on Core Path 142 Raiders Road to Kenmuir Link near Tannoch Flow. This viewpoint is representative of elevated views experienced by recreational receptors of the western section of Core Path 142 in Galloway Forest Park.

From this location the G-T connection of the KTR Project will be seen in close-distance views to the north-east to south-east. Rough grassland backed by young forestry forms the foreground of the view. Middle-distance views to Cairn Edward Hill form the background and skyline of views to the south-east, with views to distant summits seen to the south.

No other elements of existing electricity transmission infrastructure are visible from this location. Receptors potentially experiencing visual effects of the KTR Project at this viewpoint includes recreational receptors.

### Sensitivity:

Recreational receptors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

The viewpoint is located within the Galloway Hills RSA and affords views to Cairn Edward Hill. However, views to the wider area of the RSA are largely screened by mature coniferous forestry. The value of the view available from this location is considered to be medium.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be medium.

# Table A7.5.18: Viewpoint 17: The Otter Pool

Viewpoint 17: The Otter Pool				
Grid Reference (NGR)	259453	573573	Figure Number	Figure 7.37.1-4
Landscape Character Type	LCT 181 - Rugged Uplands with Forest (Cairn Edward Unit (LCU))		Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	East		Visibility and Approximate Distance to elements of KTR Project (km)	• G-T – 1.9km.

This viewpoint is located at The Otter Pool, a promoted stopping place on the Raiders' Road tourist route, Core Path 143 Raiders' Road to Mossdale and the Galloway Kite Trail, on the north bank of the River Dee / Black Water of Dee in Galloway Forest Park. This view represents views experienced by recreational receptors and tourists and visitors at this location within the Galloway Forest Park and is representative of similar views experienced by recreational receptors on Core Path 143.

The foreground comprises the watercourse and mixed woodland including riverside strands of larch, backed by dense coniferous forestry that encloses views and forms much of the skyline to the east. Distant views of forested hills form the skyline and background to the view where there are breaks in forestry to the east along the watercourse

The proposed G-T connection of the KTR Project will be seen in views looking east. No other elements of existing electricity transmission infrastructure are visible from this location. The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Recreational receptors; and
- Tourists and visitors -

### Sensitivity:

Recreational receptors and tourists and visitors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

The viewpoint is located within the Galloway Hills RSA and amenities for recreational receptors and tourists and visitors are provided in this location. The value of the view available from this location is considered to be high.

The Kendoon to Tongland 132kV Reinforcement Project

Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

# Viewpoint 17: The Otter Pool

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be **high**.

# Table A7.5.19: Viewpoint 18: Core Path 177 near Bennan Moss

Viewpoint 18: C	ore Path 177 r	near Bennan M	oss	
Grid Reference (NGR)	264446	572539	Figure Number	Figure 7.38.1-6
Landscape Character Type	LCT 181 - Rugged Uplands with Forest (Cairn Edward Unit (LCU))		Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	West		Visibility and Approximate Distance to elements of KTR Project (km)	• G-T – 1.2km.

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located on Core Path 177 Cairn Edward Hill near Bennan Moss to the north-west of Mossdale. The viewpoint is representative of views experienced by recreational receptors from the middle section of Core Path 177 Cairn Edward Hill within the Galloway Forest Park.

The foreground of the view comprises gently rolling landform with young forestry and rough grassland. Middledistance views feature rolling forested landform with the summit of Cairn Edward Hill visible to the north-west. A block of recently felled forestry is seen across elevated landform to the west. The lack of forestry in this area has opened views towards more distant ridgelines and summits within the Galloway Hills, forming the background and skyline of views to the west and south-west.

The proposed G-T connection of the KTR Project will be seen in views to the west of the viewpoint.

No other elements of existing electricity transmission infrastructure are visible from this location.

The group of receptors potentially experiencing visual effects of the KTR Project at this viewpoint includes recreational receptors.

# Sensitivity:

Recreational receptors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

The viewpoint is located within the Galloway Hills RSA and currently affords some filtered views to elevated areas within the core area of the RSA, with wider views limited by the presence of coniferous woodland. The value of the view available from this location is considered to be medium.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be high.

# Table A7.5.20: Viewpoint 19: Promoted viewpoint near Parton/Airds House

Viewpoint 19: Promoted viewpoint near Parton/Airds House				
Grid Reference (NGR)	268740	570842	Figure Number	Figure 7.39.1-9
Landscape Character Type	LCT 164 - Floc (Ken Valley Ur	,	Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	East to north-west		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.9km; and</li> <li>G-T - 3.5km.</li> </ul>

Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

# Viewpoint 19: Promoted viewpoint near Parton/Airds House

This viewpoint is located at a promoted viewpoint at Airds House to the north-west of Parton. The viewpoint is representative of elevated views experienced by recreational receptors on Core Path 192 and the Galloway Red Kite Trail, given the viewpoint's promotion as part of the trail.

The foreground of the view comprises gently rolling pastoral fields enclosed by stone walls, with landform descending to the eastern shore of Loch Ken. Pockets of mixed woodland are seen in the middle distance backed by Loch Ken. Longer distance views comprise the wooded western shore of Loch Ken and the elevated summits of the Galloway Hills beyond.

Steel lattice towers of the existing R Route are seen in middle to longer distance successive views looking east to south-east, running along rolling drumlin pastures, backclothed by woodland and landform in views looking east but otherwise skylined in views looking south-east. Existing wood pole distribution lines can be seen in views east to south-east running in parallel to the R Route before passing behind landform to the south-east. Additional wood pole distribution line can be seen running through rolling pastoral fields in views looking north-west to south-west, backed by woodland. The proposed G-T connection of the KTR Project will be seen in long-distance successive views looking east to north-west but will be barely perceptible at this distance.

The group of receptors potentially experiencing visual effects of the KTR Project at this viewpoint includes recreational receptors.

# Sensitivity:

Recreational receptors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

The viewpoint is located within the Galloway Hills RSA and currently affords views to elevated areas within the wider RSA. The current value of the view available from this location is considered to be high. On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be **high**.

# Table A7.5.21: Viewpoint 20: Raiders' Road, north of Stroan Loch

Viewpoint 20: Raiders' Road, north of Stroan Loch				
Grid Reference (NGR)	264581	570656	Figure Number	Figure 7.40.1-7
Landscape Character Type	LCT 181 - Rugged Uplands with Forest (Cairn Edward Unit (LCU))		Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	South, south-east		Visibility and Approximate Distance to elements of KTR Project (km)	• G-T – 0.2km.
<b>Location, description of existing view and anticipated view of the KTR Project, and potential receptors:</b> This viewpoint is located on the north shore of Stroan Loch, adjacent to Raiders' Road and Core Path 143 Raiders' Road to Mossdale in Galloway Forest Park. The viewpoint is representative of views experienced by tourists and visitors to Stroan Loch, road users travelling through the Galloway Forest Park on Raiders' Road, which forms part of the Galloway Kite Trail, and similar views gained from the eastern part of Core Path 143.				

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The foreground comprises the loch, backed by Stroan Viaduct, coniferous forestry and mixed woodland. The forested summit of Bennan Hill forms the background and skyline of views to the south.

The proposed G-T connection will be seen in views south, south-east.

No other elements of existing electricity transmission infrastructure are visible from this location. The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Tourists and visitors; and
- Road users. -

# Sensitivity:

Road users of Raiders' Road, some of whom may be tourists and visitors by virtue of its promotion as a tourist route, are considered to be of medium susceptibility to changes in the view. The viewpoint is located within the Galloway Hills RSA and along key recreational routes passing through Galloway Forest Park. The value of the view available from this location is considered to be high. On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be high.

# Table A7.5.22: Viewpoint 21: Mossdale

Viewpoint 21: M	ossdale			
Grid Reference (NGR)	265948	570399	Figure Number	Figure 7.41.1-8
Landscape Character Type	LCT 169 - Drumlin Pastures (Deeside Unit (LCU))		Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	South-west to north-west		Visibility and Approximate Distance to elements of KTR Project (km)	• G-T – 0.9km.

Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located on Core Path 485 Mossdale to Gatehouse Station Railway Core Path and Mossdale Walk, a promoted walk from the Galloway Red Kite Trail, to the west of the A762 at Mossdale. The viewpoint is representative of sequential views experienced by recreational receptors on the eastern end of Core Path 485 and views similar to those gained by residential receptors from nearby properties.

The foreground comprises Core Path 485, backed by relatively flat rough grazing pasture enclosed by post and wire fencing. Mature trees, bracken and occasional scrub are seen lining the edge of the Core Path. Views open to rolling drumlin pastures in the middle-distance views, backed by forested foothills which form the background and skyline of views to the west and south.

From this relatively low elevation, existing wooden pole distribution line is seen in successive views looking east to south passing through flat rough grazing area and pockets of woodland. Wind turbines at Blackcraig Hill wind farm can be seen in longer distance views north-west beyond residential properties at Mossdale. The proposed G-T connection of the KTR Project will be seen in views looking south-west to north-west.

No other elements of existing electricity transmission infrastructure are visible from this location.

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Residential receptors; and
- Recreational receptors. -

# Sensitivity:

Recreational receptors, whose attention is focussed on their surroundings, and residential receptors are considered to be of high susceptibility to changes in the view.

The viewpoint is located within the Galloway Hills RSA, and whilst residential and recreational receptors may attach a higher value to views, the viewpoint does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view available from this location is considered to be medium.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be high.

# Table A7.5.23: Viewpoint 22: Core Path 485 Mossdale to Gatehouse Station Railway Walk

Viewpoint 22: Core Path 485 Mossdale to Gatehouse Station Railway Walk				
Grid Reference (NGR)	262761	570049	Figure Number	Figure 7.42.1-5
Landscape Character Type	LCT 176- Foothills with Forest (Fleet Unit (LCU))		Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	North-east to south, south- east		Visibility and Approximate Distance to elements of KTR Project (km)	• G-T – 1.7km.

# Viewpoint 22: Core Path 485 Mossdale to Gatehouse Station Railway Walk

This viewpoint is located on Core Path 485 Mossdale to Gatehouse Station Railway Walk. The viewpoint is representative of views experienced by recreational receptors on the Core Path and views similar to those experienced by residential receptors from the nearby isolated property at Airie.

From this viewpoint the G-T connection of the KTR Project will be seen in views to the north-east to east, partly screened by forestry and framed by vegetation along the Core Path. The foreground comprises relatively flat rough grassland with occasional scrub enclosed by coniferous forestry to the west and north. Coniferous forestry extends from the middle-distance to longer-distance views. Cairn Edward Hill forms the skyline and background to the north, with distant views of the Black Craig of Dee forming the skyline and background to the north-west.

No other elements of existing electricity transmission infrastructure are visible from this location.

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Residential receptors; and
- Recreational receptors. -

# Sensitivity:

Recreational receptors whose attention is focussed on their surroundings and residential receptors are considered to be of high susceptibility to changes in the view.

north towards summits within the RSA. However, views towards the proposed KTR Project are focussed to the north-east therefore the value of the view available from this location is considered to be medium.

viewpoint is judged to be **high**.

# Table A7.5.24: Viewpoint 23: Stroan Viaduct

Viewpoint 23: Si	troan Viaduct		
Grid Reference (NGR)	264676	570000	Figure N
Landscape Character Type	LCT 176- Foot Forest (Lauriston (LC	Designat Landscaj	
Direction of View to Proposed Connection(s)	North, north-w	vest to south	Visibility Approxim Distance elements KTR Proj (km)

# Location, description of existing view and anticipated

This viewpoint is located on Core Path 485 Mossdale to Gate Viaduct. The viewpoint is representative of elevated views e intersects the Galloway Kite Trail and crosses Stroan Viaduc

The foreground of views to the north to north-east comprise landform. The skyline to the north-east is formed of forestr and north-west are focussed on the summits of Cairn Edwar focussed along the River Dee and the wooded shores of the The proposed G-T connection of the KTR Project will be seen

south

No other elements of existing electricity transmission infrast The group of receptors potentially experiencing visual effect recreational receptors.

# Sensitivity:

Recreational receptors, whose attention is focussed on their susceptibility to changes in the view.

The viewpoint is located within the Galloway Hills RSA and a to the north and north-west. However, the proposed KTR Pr and therefore the value of views available in this direction is

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be high.

- The viewpoint is located within the Galloway Hills RSA and affords longer-distance views to the north-west and
- On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this

lumber	Figure 7.43.1-8				
ited ipe	Galloway Hills RSA				
y and mate e to :s of ject	• G-T – 0.5km.				
I view of the KTR Project, and potential receptors: ehouse Station Railway on the bridge at Stroan experienced from Core Path 485, where the path ct.					
ry within t	h backed by steeply ascending forested the middle-distance view. Views to the north d Black Craig of Dee. Views to the south are irse.				
n in succe	essive views looking north, north-west to				
tructure are visible from this location. ts of the KTR Project at this viewpoint includes					
r surround	lings are considered to be of high				
roject will	ews to elevated summits within the wider RSA feature in views looking north-east and south red to be medium.				

# Table A7.5.25: Viewpoint 24: A762 east of Woodhall Loch

Viewpoint 24: A762 east of Woodhall Loch				
Grid Reference (NGR)	266956	568259	Figure Number	Figure 7.44.1-5
Landscape Character Type	LCT 169 - Dru (Deeside Unit		Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	South-west to north-west		Visibility and Approximate Distance to elements of KTR Project (km)	• G-T – 2.4km.

Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located on the A762 north-east of Woodhall Loch. The viewpoint is representative of sequential views experienced by road users of the A762, which forms part of the Galloway Kite Trail, and views similar to those experienced by residential receptors from nearby properties.

The foreground comprises rolling rough grazing area bound by post and wire fencing on the eastern roadside. The grazing pasture descends to the eastern shore of Woodhall Loch. Middle-distance views are formed by mixed woodland on the western shore of the loch, backed by the forested summits of Craig Hill and Kennick Hill to the south-west, which form the background and skyline of views. Glimpses of distant summits can be seen in longdistance views to the north-west.

The proposed G-T connection will be seen in views looking south-west to north-west.

No other elements of existing electricity transmission infrastructure are visible from this location.

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Residential receptors;
- Tourists and visitors; and
- \_ Road users.

# Sensitivity:

Road users of the A762, some of whom may be tourists by virtue of its promotion as a tourist route, are considered to be of medium susceptibility to changes in the view. Residential receptors are considered to be of high susceptibility to changes in view.

The viewpoint is located within the Galloway Hills RSA, and whilst recreational and residential receptors may attach a higher value to views, the viewpoint does not afford views across the wider area of the Galloway Hills RSA. Therefore, the value of the view available from this location is considered to be medium.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be **medium**.

# Table A7.5.26: Viewpoint 25: A713 near Parton Mill Bridge

Viewpoint 25: A713 near Parton Mill Bridge				
Grid Reference (NGR)	272155	568242	Figure Number	Figure 7.45.1-4
Landscape Character Type	LCT 164 - Flooded Valley (Ken Valley Unit (LCU))		Designated Landscape	Galloway Hills RSA
Direction of View to Proposed Connection(s)	West		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.1km; and</li> <li>G-T - 4.5km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located on the A713 near Parton Mill Bridge. The viewpoint is representative of sequential views experienced by road users on the A713, which forms part of the Robert the Bruce Trail, Galloway Tourist Route and Galloway Kite Trail, and views similar to those experienced by residential receptors from nearby properties.

# Viewpoint 25: A713 near Parton Mill Bridge

From this viewpoint, views towards the G-T connection of the KTR Project will be imperceptible from this location due to distance and the presence of intervening landform and forestry to the west.

From this viewpoint, existing steel lattice towers of R Route are seen in relatively close-proximity successive views looking north to south-west across rolling pastoral farmland. Wooden pole distribution line can be seen running in parallel and congruent to the steel lattice transmission line. The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Residential receptors;
- Tourists and visitors; and
- Road users.

# Sensitivity:

Road users of the A713, some of whom may be tourists and visitors by virtue of its promotion as a tourist route, are considered to be of medium susceptibility to changes in the view. Residential receptors are considered to be of high susceptibility to changes in view.

The viewpoint is located within the Galloway Hills RSA and affords views to elevated summits within the RSA in views looking north-west. Therefore, the value of the view available from this location is considered to be high. On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this

viewpoint is judged to be high.

# Table A7.5.27: Viewpoint 26: Kennick Burn picnic area

Viewpoint 26: Kennick Burn picnic area				
Grid Reference (NGR)	266101	564964	Figure Number	Figure 7.46.1-5
Landscape Character Type	LCT 176- Foothills with Forest (Lauriston (LCU))		Designated Landscape	n/a
Direction of View to Proposed Connection(s)	South to north-west		Visibility and Approximate Distance to elements of KTR Project (km)	• G-T – 0.2km.

This viewpoint is located on Core Path 144 Retreat Wood, Laurieston at the Kennick Burn picnic area in Galloway Forest Park accessed from the C135 minor road directly to the north. The viewpoint is representative of specific views experienced by recreational, tourists and visitor receptors using the amenities offered at this stopping point on Core Path 144.

The foreground comprises a flat and open mowed grass area backed by rough grassland and bracken. Forestry is visible within middle-distance views and forms the skyline of views to the west and south-west.

An existing wooden pole distribution line is seen running from north to south backclothed by coniferous forestry to the west of the picnic area. The proposed G-T connection of the KTR Project will be seen in close proximity views to the south-west to north-west.

No other elements of existing electricity transmission infrastructure are visible from this location. The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint

include:

- Recreational receptors;
- Tourists and visitors

# Sensitivity:

Recreational receptors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

The viewpoint is located outside the Galloway Hills RSA and views do not display notable scenic quality. However, recreational amenities are offered at this location. Therefore, the value of the view available at this location is considered to be medium.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be high.

# Table A7.5.28: Viewpoint 27: B795 east of Laurieston

Viewpoint 27: B795 east of Laurieston				
Grid Reference (NGR)	271279	564101	Figure Number	Figure 7.47.1-7
Landscape Character Type	LCT 169 - Dru (Deeside Unit		Designated Landscape	n/a
Direction of View to Proposed Connection(s)	South-west		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.2km; and</li> <li>G-T - 2.2km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located on the B795 east of Laurieston near access tracks to the farm at Creochs. The viewpoint is representative of sequential views experienced by road users travelling on the B795, which forms part of the Galloway Red Kite Trail, and views similar to those experienced by residential receptors from nearby properties.

From this viewpoint the G-T connection of the KTR Project will be screened in views to the south-west by intervening features including landform, mixed woodland at Barend Wood and forestry at Bargatton Plantation and will be barely perceptible.

Steel lattice towers of the existing R Route are seen skylined in middle-distance successive views looking northwest to south-west running across pastoral farmland. Wood pole distribution line can be seen in closer proximity views to the north-west.

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Residential receptors;
- Tourists and visitors; and
- Road users.

# Sensitivity:

Road users of the B795, some of whom may be tourists and visitors by virtue of its promotion as a tourist route, are considered to be of medium susceptibility to changes in the view. Residential receptors are considered to be of high susceptibility to changes in view.

The viewpoint is located outside the Galloway Hills RSA and views do not display notable scenic quality. Therefore, the value of the view available at this location is considered to be low.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be **low**.

# Table A7.5.29: Viewpoint 28: A762 south of Laurieston

Viewpoint 28: A762 south of Laurieston				
Grid Reference (NGR)	267942	562824	Figure Number	Figure 7.48.1-8
Landscape Character Type	LCT 169 - Dru (Deeside Unit		Designated Landscape	n/a
Direction of View to Proposed Connection(s)	North-west to south-east		Visibility and Approximate Distance to elements of KTR Project (km)	• G-T – 0.1km.
Location, description of existing view and anticipated view of the KTR Project, and potential receptors:				

This viewpoint is located on the A762 to the south of Laurieston at access tracks to Edgarton. The viewpoint is representative of sequential views experienced by road users travelling on the A762.

# Viewpoint 28: A762 south of Laurieston

The foreground comprises tarmac, bound to the west and east by hedgerow and rough grassland backed by post and wire fencing. Gently rolling pastoral farmland extends through the middle distance and is backed by small blocks of forestry and pockets of woodland. Views to distant forested summits and the rocky summit of Meikle Dornel form the distant skyline of views to the north-east.

From this relatively low elevation, an existing wood pole distribution line can be seen in views to the south crossing the A762. To the north along the corridor of the A762, distant views of wind turbines at Blackcraig Hill wind farm are framed by landform and vegetation. The proposed G-T connection of the KTR Project will be seen in successive views looking north-west to south-east but will be barely perceptible at this distance.

No other elements of existing electricity transmission infrastructure are visible from this location. The group of receptors potentially experiencing visual effects of the KTR Project at this viewpoint includes road users.

### Sensitivity:

Road users of the A762 are considered to be of low susceptibility to changes in the view. The viewpoint is located outside the Galloway Hills RSA and views do not display notable scenic quality. Therefore, the value of the view available at this location is considered to be low. On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be low.

# Table A7.5.30: Viewpoint 29: Barstobrick Hill (Neilson's Monument)

/iewpoint 29: Barstobrick Hill (Neilson's Monument)				
Grid Reference (NGR)	268782	560683	Figure Number	Figure 7.49.1-12
Landscape Character Type	LCT 169 - Drumlin Pastures (Deeside Unit (LCU))		Designated Landscape	n/a
Direction of View to Proposed Connection(s)	North-west to south-east		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 1.8km;</li> <li>G-T - 0.9km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located at Neilson's Monument on Barstobrick Hill north of Ringford. The viewpoint represents the specific panoramic views experienced by recreational receptors from the local landmark and monument atop Barstobrick Hill on Core Path 170 Barstobrick. This viewpoint is also considered as Cultural Heritage Viewpoint 12.

The foreground of views to the north-east comprises the forestry on the slopes below the monument, with gently rolling pastoral farmland, pockets of woodland and farmsteads seen in middle-distance views. Landform becomes more varied and elevated in longer distance views with distant summits to the north-east forming the background of the view in this direction.

From this elevated viewpoint, existing steel lattice towers of R Route are seen in successive long-distance views from the north-east to south-east running across pastoral farmland and forestry. Turbines at Blackcraig Hill wind farm can be seen in long-distance views to the north. The telecommunications mast at Woodhead is seen in views further north-east. The proposed G-T connection of the KTR Project will be seen in successive long-distance views from north-west to south-east.

The group of receptors potentially experiencing visual effects of the KTR Project at this viewpoint includes recreational receptors.

# Sensitivity:

Recreational receptors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

The viewpoint is located outside the Galloway Hills RSA, however views display notable scenic quality and look towards elevated summits within the RSA. Therefore, the value of the view available at this location is considered to be medium

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be high.

# Table A7.5.31: Viewpoint 30: A75 at junction with the C45S Class III road

Viewpoint 30: A75 at junction with unclassified road				
Grid Reference (NGR)	270152	558386	Figure Number	Figure 7.50.1-6
Landscape Character Type	LCT 169 - Dru (Deeside Unit		Designated Landscape	n/a
Direction of View to Proposed Connection(s)	North to south		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.1km;</li> <li>G-T - 0.1km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located on the A75 trunk road at the junction with the C45S Class III road running north towards Upper Balannan. The viewpoint is representative of views experienced by road users of the A72.

The foreground of views comprises the road, bound by hedgerow to the north-east and post and wire fencing and scattered woodland to the south-east. Rolling pastoral farmland extends into middle-distance views to the east. with distant views to woodland seen between landform to the south-east and along the A75 to the north-east forming the skyline and background of the view.

From this viewpoint the steel lattice towers of the existing R Route are seen in successive views from the northeast to the south passing across the A75 and through pastoral farmland bound by post and wire fencing. A telecommunications mast near Culquha is seen in views to the west, backclothed by forestry and landform. The proposed G-T connection of the KTR Project will be seen in successive views looking north to south.

The group of receptors potentially experiencing visual effects of the KTR Project at this viewpoint includes road users.

# Sensitivity:

Road users of the A72 are considered to be of low susceptibility to changes in the view.

The viewpoint is located outside the Galloway Hills RSA and views do not display notable scenic quality. Therefore, the value of the view available at this location is considered to be low.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be low.

# Table A7.5.32: Viewpoint 31: Unclassified road (U43S) near Argrennan Mains

Viewpoint 31: Unclassified road (U43S) near Argrennan Mains				
Grid Reference (NGR)	269974	556606	Figure Number	Figure 7.51.1-7
Landscape Character Type	LCT 169 - Dru (Deeside Unit		Designated Landscape	n/a
Direction of View to Proposed Connection(s)	South-west		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.1km;</li> <li>G-T - 0.1km.</li> </ul>

Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This viewpoint is located on the unclassified road running north-west from the A711 near Argrennan Mains. This viewpoint is representative of views similar to those experienced by residential receptors from nearby properties.

The foreground comprises rolling rough grazing area bound by post and wire fencing on the north-east street side, with woodland to the south-east and north-west. The rough grazing area extends into middle-distance views and rolling landform forms the background and skyline of views to the south-west.

From this unclassified road, existing steel lattice towers of R Route are seen skylined in successive views from the north to south across an area of rough grazing. Wooden pole distribution line can be seen in views to the northwest and south near residential properties. The proposed G-T connection of the KTR Project will be seen to the south-west framed by vegetation and rolling landform.

# Viewpoint 31: Unclassified road (U43S) near Argrennan Mains

The group of receptors potentially experiencing visual effects of the KTR Project at this viewpoint includes residential receptors.

### Sensitivity:

Residential receptors are considered to be of high susceptibility to changes in the view. The viewpoint is located outside the Galloway Hills RSA and views do not display notable scenic quality. Therefore, the value of the view available at this location is considered to be low. On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be high.

# Table A7.5.33: Viewpoint 32: A711 north of Tongland substation

Viewpoint 32: A711 north of Tongland substation				
Grid Reference (NGR)	269603	553802	Figure Number	Figure 7.52.1-7
Landscape Character Type	LCT 169 - Drumlin Pastures (Deeside Unit (LCU))		Designated Landscape	Solway Coast RSA
Direction of View to Proposed Connection(s)	South-west to north-west		Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.1km;</li> <li>G-T - 0.1km.</li> </ul>

This viewpoint is located on the sidewalk adjacent to the A711 north of the Tongland substation. The viewpoint is representative of views experienced by road users of the A711, including tourist and visitor users following this section of the Scottish Castle Route, and views similar to those experienced by residential receptors from nearby properties.

The foreground comprises tarmac, bound by hedgerows and deciduous trees. Beyond the roadside vegetation, elevated farmland can be seen to the west with residential properties and pockets of woodland forming the skyline and background of views.

Existing electricity transmission infrastructure is prominent in available views, with existing steel lattice towers of R Route and a wooden pole distribution line seen skylined in close proximity to longer distance successive views north to south-west. The Tongland substation is visible in views to the south-west. Steel lattice towers of the existing 'S' route are seen skylined and crossing elevated landform in longer distance views to the south. The proposed G-T connection of the KTR Project will be seen in close proximity successive views looking south-west to north-west

The groups of receptors potentially experiencing significant visual effects of the KTR Project at this viewpoint include:

- Residential receptors; and
- -Road users;

### Sensitivity:

Road users of the A711 are considered to be of low susceptibility to changes in the view. Residential receptors are considered to be of high susceptibility to changes in view.

The viewpoint is located within the Solway Coast RSA; however, the viewpoint does not afford views across the wider area of the RSA or display notable scenic quality. Therefore, the value of the view available from this location is considered to be low.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors at this viewpoint is judged to be high.

# Settlements

- A7.5.17 Settlements are those defined as such within the Dumfries and Galloway Local Development Plan 2 2019 (LDP2)<sup>4</sup> adopted in October 2019. Further settlements/communities not defined as such in the LDP2 have also been considered where relevant, following comments received during consultation. These communities typically consist of clusters of residential properties with a geographical extent as defined on Ordnance Survey (OS) Mapping<sup>5</sup>.
- A7.5.18 Settlements located with the Study Area and considered for inclusion in the assessment are detailed in Error! Reference source not found. below. Settlements which were subject to further consideration as part of the assessment of visual effects reported in Chapter 7 comprise those located within the extents of theoretical visibility illustrated on Figure 7.11.1 to Figure 7.11.5.

Settlement	Elements of the KTR Project	Theoretical Visibility of the KTR Project (Bare Earth ZTV shown on Figure 7.11.1-5)
Settlements <sup>6</sup> define	d in the LDP2	
St John's Town of Dalry	<ul> <li>R Route;</li> <li>P-G via K;</li> <li>E-G;</li> <li>G-T; and</li> <li>BG Deviation.</li> </ul>	Yes – Located approximately 0.8km east of the E-G connection, 0.9km east of the P-G via K connection and 1.4km north-east of the G-T connection, visibility is indicated across the settlement. The existing R Route passes within approximately 0.5km south of the settlement. <b>Considered as part of the assessment reported in Chapter 7</b> .
New Galloway	<ul><li> R Route; and</li><li> G-T.</li></ul>	Yes – Located approximately 1.8km east of the G-T connection, visibility is indicated from northern and western parts of the settlement. The existing R Route passes within approximately 1km east of the settlement.
		Considered as part of the assessment reported in Chapter 7.
Crossmichael	<ul><li> R Route; and</li><li> G-T.</li></ul>	Yes – Located within approximately 6.4km of the G-T connection, visibility is indicated from much of the settlement. The existing R Route passes within approximately 1.0km north-west of the settlement. Considered as part of the assessment reported in Chapter 7.
Balmaclellan	<ul><li> R Route; and</li><li> G-T.</li></ul>	Yes – Located approximately 8.1km of the G-T connection, visibility is indicated from much of the settlement. The existing R Route passes within approximately 1.5km north-west of the settlement. Considered as part of the assessment reported in Chapter 7.
		Considered as part of the assessment reported in Chapter 7.
Laurieston	<ul><li> R Route; and</li><li> G-T.</li></ul>	Yes – Located approximately 1.6km north-east of the G-T connection, visibility is indicated across the settlement. Considered as part of the assessment reported in Chapter 7.
Twynholm	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Located approximately 2.9km west of the G-T connection visibility is indicated from much of the settlement. However, given intervening features including pockets of woodland east of the settlement, significant visual effects are considered unlikely to occur. The existing R Route is located within a similar distance to the settlement. Not considered further.
Kirkcudbright	R Route; and	Yes – Located approximately 1km south of the G-T connection, visibility is indicated across much of the northern extent of the

# **Table A7.5.34: Settlements**

<sup>6</sup> Appendix 1 Settlement Hierarchy of the Dumfries and Galloway LDP2 (2019) identifies a hierarchy of settlements ranging from large to small in the following order: Regional Capital, District Centres, Local Centres and Villages. Kirkcudbright is classified as a "District Centre". St John's

The Kendoon to Tongland 132kV Reinforcement Project

# Additional settlements / communities<sup>7</sup> identified during scoping and consultation

Dundeugh	• • •	N Route; R Route; P-G via K; and C-K.	Yes – Located the KTR Project indicated across this settlement the R Route is settlement. <b>Considered a</b>
Kendoon	• • •	N Route; R Route; P-G via K; and C-K.	Yes – the P-G the northern p with visibility i and R Route c <b>Considered a</b>
Glenlee	• • • •	R Route; P-G via K; E-G; G-T; BG Deviation.	Yes – the P-G Project pass in the existing GI settlement. Th of the settleme <b>Considered a</b>
Mossdale	•	R Route; and G-T.	Yes – Located Visibility is ind passes within a <b>Considered a</b>
Tongland	•	R Route; and G-T.	Yes – Located connection and extents of the A711 to the we of the existing features includ A711, significa the wider exte
			The existing R settlement as views from the and the existin
			Not considere

Town of Dalry, New Galloway, Crossmichael and Twynholm are classified as "Local Centres". Balmaclellan and Laurieston are classified as "Villages"

<sup>7</sup> Settlements / communities are undefined within the LDP2.

# Theoretical Visibility of the KTR Project (Bare Earth ZTV shown

settlement. However, given intervening features including buildings and woodland to the north, significant visual effects are considered unlikely to occur. The existing R Route is located a similar distance

approximately 0.4km east of the P-G via K connection of ct and 0.7km north of the C-K connection with visibility oss the settlement. The existing N Route passes through nt to the west of the A713, whilst the northern section of located within approximately 0.5km to the south of the

# as part of the assessment reported in Chapter 7.

via K and C-K connections of the KTR Project pass over part of the settlement and then pass to the south-west indicated across the settlement. The existing N Route cross over the northern part of the settlement.

# as part of the assessment reported in Chapter 7.

via K, E-G, G-T connections and BG Deviation of the KTR n close proximity to the settlement as they connect into Glenlee Substation with visibility indicated across the he existing R Route passes in close proximity to the west ent

# as part of the assessment reported in Chapter 7.

approximately 1.1km east of the G-T connection. licated across the settlement. The existing R Route approximately 2.5km east of the settlement.

# as part of the assessment reported in Chapter 7.

in close proximity (<0.5km) to the existing R Route d Tongland Substation, visibility indicated from the linear community which extents northwards along the est of the River Dee. However, given the limited visibility towers of R Route and the presence of intervening ding rising landform and woodland to the west of the ant visual effects are considered unlikely to occur from ents of the community.

Route is located within a similar distance to the the proposed G-T connection, and potential effects on e closest residential properties to the proposed towers ng substation are considered independently.

d further.

<sup>&</sup>lt;sup>4</sup> Dumfries and Galloway Council (2019) Local Development Plan 2 (LDP2)

 $<sup>^{5}</sup>$  Communities defined as such on OS 1:50k base mapping have been considered.

- A7.5.19 Based on the review of theoretical visibility of the KTR Project from the settlements / communities listed in **Table 7.5.34**, and the likelihood of significant effects of the KTR Project on the relevant receptors, selected settlements and communities in the Study Area have been considered in more detail in **Table A7.5.** to Error! Reference source not found. below.
- A7.5.20 Receptors (people) within the settlements and communities considered as part of the assessment reported in **Chapter 7** are assumed in most instances to be local residents at their residential properties who will regularly experience the views of the KTR Project. Residential receptors are considered to have a **high** susceptibility to changes in views and visual amenity.

# Table A7.5.35: St John's Town of Dalry

St John's Town of Dalry				
Representative or Nearby Viewpoint(s)	Viewpoint 8: Southern Upland Way near St John's Town of Dalry Viewpoint 9: Mulloch Hill			
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.9km;</li> <li>P-G via K - 0.9km;</li> <li>E-G - 0.9km;</li> <li>G-T - 1.5km; and</li> <li>BG Deviation - 1.5km</li> </ul>			

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

St John's Town of Dalry is a small nucleated town in Dumfries and Galloway located on the eastern side of the Water of Ken and accessed by the A702, A713 and B7000. The settlement has a strong visual relationship with the surrounding valley landscape. The Southern Upland Way and National Byway cycle route pass through the centre of the town.

The foreground of views from the settlement comprises rolling drumlin landform and the lower Kells Foothills along the Water of Ken. Longer distance views to the south and west feature rounded hills including Dunveoch Hill (258mAOD) and Glenlee Hill (271mAOD). Contrastingly views to the north and east are partly foreshortened by elevated landform including Mulloch Hill (170mAOD) on the south-eastern side of the settlement.

From parts of the settlement including the southern settlement edge existing electricity transmission infrastructure elements are visible in views looking south and west. The Glenlee substation and existing steel lattice towers of R Route are largely seen partly screened by vegetation and backclothed by landform, however from some parts of the settlement the existing number of steel lattice towers can be seen against the skyline on the eastern flank of Glenlee Hill. The proposed P-G via K, E-G, G-T and BG Deviation connections of the KTR Project will be seen in successive views from the north-west to south-west.

# Sensitivity:

Residential receptors within settlements/communities are judged to be of high susceptibility to changes in the view from their properties.

The settlement is located within the Galloway Hills RSA and views to elevated parts of the wider RSA are available from parts of the settlement, including residential properties which extend up the eastern slopes of the valley. Therefore, the value of the view is considered to be high.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors in this location is judged to be **high**.

# Table A7.5.26: New Galloway

New Galloway		
Representative or Nearby Viewpoint(s)	n/a	
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 1.2km; and</li> <li>G-T - 2.0km.</li> </ul>	

Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

# New Galloway

New Galloway is a small nucleated town in Dumfries and Galloway located on the western side of the Water of Ken and at the junction of the A762 and A712. The town is located on the edge of Galloway Forest Park, and acts as a gateway to The Queen's Way, a promoted route for road users. The Galloway Red Kite Trail passes through New Galloway. The Kenmure Castle ruins and New Galloway Golf Club are located on the south edge of the settlement.

The town sits at the western edge of the Kenmure Valley Floor, with open outward views looking east across the valley to undulating drumlin pastures. Longer distance views to the east feature rounded hills, including Barscobe Hill (257mAOD) and Troquhain Hill (369mAOD). Occasional glimpses of the tree-lined ridgelines of Peal Hill in New Galloway Forest Park are sometimes visible from A712 on the west edge of the settlement. Occasional glimpses of Cairn Edward Hill (325mAOD) can be seen from Old Edinburgh Road on the west edge of the settlement.

Existing electricity transmission infrastructure elements are not a predominant feature of the outward views from the settlement. Views of the existing steel lattice towers of R Route can be seen from dwellings on the north settlement edge along the A712 looking across the Water of Ken. The proposed G-T connection will be imperceptible from the settlement due to distance and the presence of intervening landform and woodland cover.

# Sensitivity:

Residential receptors within settlements/communities are judged to be of high susceptibility to changes in the view from their properties.

The settlement is located within the Galloway Hills RSA. While residential receptors are likely to attach a higher value to views, the settlement does not afford views across the wider RSA. Therefore, the value of the view is considered to be medium.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors in this location is judged to be **high**.

# Table A7.5.37: Crossmichael

Crossmichael	
Representative or Nearby Viewpoint(s)	n/a
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 1.5km;</li> <li>G-T - 6.4km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

Crossmichael is a small nucleated village in Dumfries and Galloway located on the south-eastern side of Loch Ken. The village is accessed by the A713, with the Galloway Kite Trail, Galloway Tourist Route and Robert the Bruce Trail passing through the village along the A713. Core Path 193 passes east from the centre of the village towards Culgruff Farm.

Existing views west from the settlement look across Loch Ken and the Ken Valley towards undulating drumlin pasture. Longer distance views of the Laurieston Foothills, including Kennick Hill (263mAOD), can be seen to the west and the distant summits of the Galloway Hills can be seen to the north-west from residential properties along the western edge of the settlement.

Existing steel lattice towers of R Route are seen in longer distance views looking north-west to west from Crossmichael, crossing Loch Ken to the north-west of the village and passing through the Ken Valley and drumlin pasture west of Loch Ken, backed by the Laurieston Foothills beyond. The proposed G-T connection will be seen in views west.

# Sensitivity:

Residential receptors within settlements/communities are judged to be of high susceptibility to changes in the view from their properties.

The settlement is located within the Galloway Hills RSA and views to elevated parts of the wider RSA area can be seen in longer distance views looking west across Loch Ken from residential properties and their curtilages. Therefore, the value of the view is considered to be high.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors in this location is judged to be **high**.

# Table A7.5.38: Balmaclellan

Balmaclellan			
Representative or Nearby Viewpoint(s)	N/A		
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 1.0km;</li> <li>G-T - 4.1km.</li> </ul>		

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

Balmaclellan is a small nucleated village located north-east of New Galloway in the upper slopes of the Kenmure Valley. The village is accessed by the A712. A promoted viewpoint and war memorial obelisk are located at the base of Auchreoch Hill directly east of the village, with views directed west towards the Galloway Hills.

Outward views west from the village are focussed from the north-west to south-west, looking across the Kenmure Valley towards the elevated summits of the Galloway Hills.

Existing steel lattice towers of the R Route are seen in glimpsed longer distance views, partly screened by intervening features including forestry and landform. The proposed G-T connection will be seen in views west.

# Sensitivity:

Residential receptors within settlements/communities are judged to be of high susceptibility to changes in the view from their properties.

The town sits partially within the Galloway Hills RSA and views to elevated parts of the wider RSA area can be seen in longer distance views looking north-west to south-west from residential properties and their curtilages.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors in this location is judged to be **high**.

# Table A7.5.39: Laurieston

Laurieston			
Representative or Nearby Viewpoint(s)	N/A		
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 2.8km;</li> <li>G-T - 1.7km.</li> </ul>		

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

Laurieston is a small nucleated village in Dumfries and Galloway located directly to the east of Laurieston Forest. The village is accessed by the A762 and B795. The Galloway Kite Trail passes through Laurieston on the A762 and turns east on the B795, with a Red Kite Feeding Station located to the east of the village along the B795. Core Paths 144 Retreat Wood Laurieston and 200 Kennick Burn Walk are immediately east of the village in the Laurieston Forest.

Outward views from the settlement are predominantly screened by intervening features including buildings, hedgerow trees and adjacent forestry, with the rolling landform of the Laurieston Foothills further enclosing many views to the west. Views to the east look across rolling drumlin pastures, with immediate views to Meikle Dornell (175mAOD) to the north-east.

Existing electricity transmission infrastructure elements are not a predominant feature of views from the Laurieston, and the existing R Route is largely imperceptible in views to the south-east, owing to distance and intervening landform and woodland cover. The proposed G-T connection will be perceptible in relatively long distance views to the south, south-west from this settlement.

# Sensitivity:

Residential receptors within settlements/communities are judged to be of high susceptibility to changes in the view from their properties.

Whilst Laurieston is located adjacent to the boundary of the Galloway Hills RSA, views are contained within the community and do not display notable scenic quality. Therefore, the value of the view is considered to be medium.

# Laurieston

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors in this location is judged to be **high**.

# Table A7.5.40: Dundeugh

Dundeugh	
Representative or Nearby Viewpoint(s)	Viewpoint 2: Dundeugh at a
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>N Route - 0.1km;</li> <li>R Route - 0.6km;</li> <li>P-G via K - 0.2km;</li> <li>C-K - 0.6km.</li> </ul>

Dundeugh is a small community in Dumfries and Galloway located on the eastern side of the Water of Deugh north-west of Kendoon. The community consists of two rows of wooden houses on the east side of the A713 and scattered residential properties to the west side of the A713. The Galloway Tourist Route passes on the A713 through Dundeugh. Core Path 164 Bardennoch Trail passes from the A713 west, crossing through the community and towards Polmaddy. Core Path 23 Dundeugh Hill passes 0.1km north-east of the community and ascends Dundeugh Hill (271m AOD).

Views from the settlement are focussed along the Dundeugh valley floor and A713 corridor, contained to the west by coniferous forestry and rolling foothills and to the east by the forested landform of Dundeugh Hill. Longer distance glimpsed views of distant ridgelines can be seen beyond intervening forestry to the south-east.

Steel lattice towers of the existing N Route and a wood pole distribution line can be seen skylined in closeproximity successive views looking north to south from Dundeugh, crossing the A713 on a north-west to southeast alignment into the substation at Kendoon. Primary views from residential properties on the southwestern edge of the community are orientated towards the A713 and existing N Route. Glimpses of the existing R Route can be seen in longer distance views south-east and south from the community, partly screened by intervening vegetation. The radio mast on Dundeugh Hill is seen skylined in views north-east of the community.

The C-K connection will be seen in longer-distance views south-east running parallel to the P-G via K connection.

# Sensitivity:

Residential receptors within settlements/communities are judged to be of high susceptibility to changes in the view from their properties.

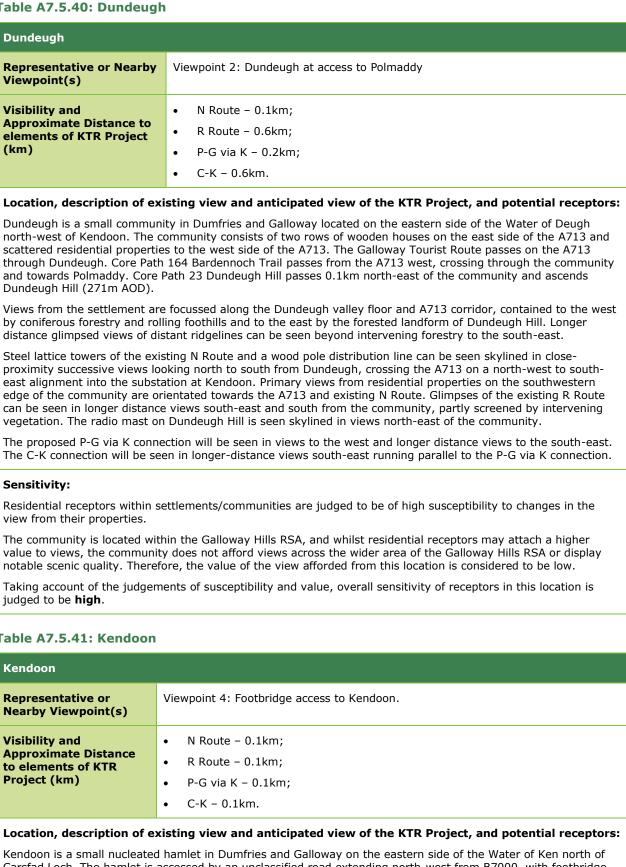
The community is located within the Galloway Hills RSA, and whilst residential receptors may attach a higher value to views, the community does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view afforded from this location is considered to be low.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors in this location is judged to be high.

# Table A7.5.41: Kendoon

Kendoon	
Representative or Nearby Viewpoint(s)	Viewpoint 4: Footbridge acces
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>N Route - 0.1km;</li> <li>R Route - 0.1km;</li> <li>P-G via K - 0.1km;</li> <li>C-K - 0.1km.</li> </ul>

Carsfad Loch. The hamlet is accessed by an unclassified road extending north-west from B7000, with footbridge



# Kendoon

access to the A713. The Galloway Tourist Route passes on the A713 approximately 400mto the west of the hamlet. Core Paths 23 Dundeugh Hill passes through the forestry immediately north of Kendoon and Core Path 199 Kendoon Youth Hostel to Butterhole Bridge passes approximately 1.2km to the north-east of the hamlet.

Views immediately to the south-east of the hamlet include the rounded peaks of Mackilston Hill (294mAOD) and Glenhoul Hill (240mAOD), with longer distance views along the valley floor including Barlaes Hill (248mAOD) and Ardoch Hill (217m AOD). Outward views looking west and south-west of Kendoon are of the forested hills of Galloway Forest Park. The hamlet sits south of Dundeugh Hill, with views towards the north largely contained by topography and adjacent forestry.

Existing electricity transmission infrastructure is visible in views from the settlement, with the existing N Route and R Route passing in and out of the north-west extents of the hamlet to the Kendoon substation. The proposed P-G via K and C-K connections will be seen in successive views looking north-west to south along the Dundeugh valley.

# Sensitivity:

Residential receptors within settlements/communities are judged to be of high susceptibility to changes in the view from their properties.

The settlement is located within the Galloway Hills RSA, and whilst residential receptors may attach a higher value to views, views across the wider area of the Galloway Hills RSA are not afforded from the settlement and do not display notable scenic quality, whilst the presence of existing transmission infrastructure (Kendoon Substation and existing OHL connections) form a key feature in existing views from much of the settlement. Overall, the value of the view afforded from this location is considered to be low.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors is judged to be high.

# Table A7.5.42: Glenlee

Glenlee			
Representative or Nearby Viewpoint(s)	N/A		
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.1km;</li> <li>P-G via K - 0.1km;</li> <li>E-G - 0.1km;</li> <li>BG Deviation - 0.1km;</li> <li>G-T - 0.1km.</li> </ul>		

Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

Glenlee is a small community in Dumfries and Galloway on the western side of the Water of Ken south-west of St John's Town of Dalry. The community is accessed by the A762. Core Path 30 Glenlee passes through the community along Coom Burn and connects to the Southern Upland Way approximately 1.1km to the north-east. Core Path 21 Dalry to New Galloway passes along the eastern shore of the Water of Ken approximately 500mto the southeast of the settlement. Core Path 516 New Galloway West passes approximately 1km to the south-west of the community. The National Byway cycle route passes through Glenlee on the U3S, U2S and A762.

Views out from the community are largely contained by the adjacent rolling landform of the Kells Foothills, Glenlee Hill (27mAOD) to the west and adjacent forestry. Intermittent longer distance views across the Kenmure Valley Floor to Barscobe Hill (257mAOD) to the east can be seen from higher elevations.

Existing electricity transmission infrastructure elements can be viewed from Glenlee and existing steel lattice towers are a predominant feature of secondary views from the community, as the existing R Route passes from the north-east and south-east to the Glenlee substation in the north-west of the settlement. The proposed P-G via K, E-G, G-T connections and BG Deviation will be seen in successive views looking north-east to south-west.

# Sensitivity:

Residential receptors within settlements/communities are judged to be of high susceptibility to changes in the view from their properties.

The community is located within the Galloway Hills RSA, and whilst residential receptors may attach a higher value to views, the community does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view afforded from this location is considered to be medium.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors in this location is judged to be **high**.

# Table A7.5.43: Mossdale

Mossdale	
Representative or Nearby Viewpoint(s)	Viewpoint 21: Mossdale
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route – 2.8km;</li> <li>G-T – 0.9km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

Mossdale is a small village located near the south-east edge of Galloway Forest Park and accessed by the A762. The village is at the east end of Raider's Road Forest Drive through Galloway Forest Park. Core Path 485 Mossdale to Gatehouse Station Railway Walk passes through the town, connecting to Core Paths 205 Mossdale Walk / Red Kite Trail, 143 Raiders Road and 177 Cairn Edward Hill within 1.5km to the west and north-west of the village.

Views out from the village to the north-east and east are open across the Upper Loch Ken Valley. Views to the south west are of drumlin pastures and the rolling hills of Laurieston Forest. To the north-west, the hills of Galloway Forest Park can be seen with Cairn Edward Hill (325mAOD) forming a prominent focal point in longerdistance views to the north-west.

The proposed G-T connection will appear in views west from the periphery of the settlement. Glimpses of the existing steel lattice towers of the R Route at Barend Hill can be seen in views looking east from the village peripheries.

### Sensitivity:

Residential receptors are judged to be of high susceptibility to changes in the view from their properties.

The community is located within the Galloway Hills RSA, and whilst residential receptors may attach a higher value to views, the community does not afford views across the wider area of the Galloway Hills RSA or display notable scenic quality. Therefore, the value of the view afforded from this location is considered to be medium.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors in this location is judged to be high.

# Routes

A7.5.21 The potential for visual effects of the KTR Project experienced by receptors travelling on roads, and recreational routes (long distance footpaths, Core Paths and cycle routes) located within the Study area are considered in Error! Reference source not found. below, as shown on Figure 7.10.1 to Figure 7.10.5. Routes which were subject to further consideration as part of the assessment of visual effects reported in **Chapter 7** have been limited to those within the extents of theoretical visibility illustrated on Figure 7.11.1 to Figure 7.11.5.

# Table A7.5.44: Routes

Routes	Elements of the KTR Project	Theoretical V shown on Fig
Roads, including Promot	ted Road Routes	;
A713 – between Carsphairn and Parton. Sections of road form part of the promoted Galloway Tourist Route, the Scottish Castle Route and Loch Ken and River Dee Galloway and Southern Ayrshire Biosphere Route.	<ul> <li>N Route;</li> <li>R Route;</li> <li>P-G via K;</li> <li>C-K;</li> <li>E-G; and</li> <li>G-T.</li> </ul>	Yes – Visibility K, C-K, E-G and the Study area settlements of C-K connection Allangibbon Bri <b>Considered as</b> and represente - Viewp - Viewp

# isibility of the KTR Project (Bare Earth ZTV ure 7.11.1-5)

of the existing N and R Route s and proposed P-G via nd G-T connections from the length of this road through a, from south-east of Bardennoch, through the St John's Town of Dalry to Parton. The P-G via K and ns run parallel to the A713 from Polquhanity to ridae.

as part of the assessment reported in Chapter 7, ed by the following viewpoints:

point 1: Layby on A713 near Polquhanity;

point 2: Dundeugh at access to Polmaddy;

Routes	Elements of the KTR Project	Theoretical Visibility of the KTR Project (Bare Earth ZTV shown on Figure 7.11.1-5)	Routes
		- Viewpoint 6: Layby on A713 near Knocknalling Wood; and	B729 – betw
		- Viewpoint 25: A713 near Parton Mill Bridge.	Carsphairn a Smittons.
A762 – between Allangibbon Bridge and Tongland. Sections of road form part of the promoted Scottish Castle Route, Loch Ken and River Dee Galloway and Southern Ayrshire Biosphere Route and National Byway cycle route.	<ul> <li>R Route;</li> <li>P-G via K;</li> <li>E-G;</li> <li>G-T; and</li> <li>BG Deviation.</li> </ul>	Yes – Visibility of the existing R Route is possible from Allangibbon Bridge to New Galloway, Kenmure to Lochside Point, Bennan to Ringford, and Glenald to Tongland. The P-G via K and E-G connections of the KTR Project run parallel to the west of the A762 from Allangibbon Bridge to Glenlee. The G-T connection crosses the A762 at Bargatton Wood and will be evident in views from sections of this route. The BG Deviation will be largely imperceptible from this route due to the presence of intervening woodland in the vicinity of Glenlee. <b>Considered as part of the assessment reported in Chapter 7</b> , and represented by the following viewpoints: Viewpoint 10: A762 north of Glenlee; Viewpoint 15: A762 west of Loch Ken; Viewpoint 24: A762 east of Woodhall Loch; and Viewpoint 28: A762 south of Laurieston.	B7000 – bet Bridge of Ke John's Town Sections of r part of the N Byway cycle B7075 – bet
A702 – between St John's Town of Dalry and Mill Hill. Road forms part of the National Byway cycle route.	<ul> <li>R Route;</li> <li>P-G via K;</li> <li>E-G;</li> <li>G-T; and</li> </ul>	Yes – Limited visibility between Gordonston Bridge and Trolane and Moss Roddock Loch and St John's Town of Dalry. Intervening features including buildings and roadside vegetation will screen and filter direct views looking west towards the KTR Project, and as a consequence significant visual effects are considered unlikely to occur.	at Bogue an Balmaclellan
	• BG Deviation.	Not considered further.	B795/Burns – between L
A712 – between Clatteringshaws Loch and Balmaclellan. Road forms part of the promoted Queens Way, Scottish Castle Route	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Visibility of G-T connection possible between Darsalloch Hill and New Galloway, where the proposed connection crosses the A712 south of Achie Hill. R Route evident in views from the road as it crosses perpendicular between Ken Bridge and Balmaclellan <b>Considered as part of the assessment reported in Chapter 7</b> , and represented by the following viewpoints:	and Glenloch Sections of r part of Gallo Trail.
and National Byway cycle route.		<ul> <li>Viewpoint 13: A712 west of Balmaclellan; and</li> <li>Viewpoint 14: A712, the Queen's Way.</li> </ul>	C51S – betw near Cuckoo Cottage and
A75 – between Moor Hill and Castle Douglas. Sections of road form part of the promoted South West Coastal Route 300, the Burns	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Visibility of the existing R Route and proposed G-T connection is evident from the junction with B736 at Kelton Mains to Carsons Hill, and where the connections cross the A75 north-east of Low Balannan. <b>Considered as part of the assessment reported in Chapter 7</b> and represented by Viewpoint 30: A75 at junction with unclassified	Lodge Sections of r part of the N Byway cycle U1S – betwe
Heritage Trail, the Scottish Castle Route and the Loch Ken and River Dee Galloway and Southern Ayrshire Biosphere Route.		road.	Polharrow Bı Forest Lodge
A711 – between Mute Hill and junction with A75.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Visibility between Tongland and Kirkcudbright. Intervening features including buildings and hedgerow trees are likely to screen much of route; however, glimpses of steel lattice towers may be seen crossing the Tongland Bridge.	U2S – betwe Drumbuie ar
		<b>Considered as part of the assessment reported in Chapter 7</b> and represented by Viewpoint 32: A711 north of Tongland substation.	Sections of r part of the N Byway cycle

Routes	Elements of the KTR Project	Theoretical Vis shown on Figu
B729 – between Carsphairn and Smittons.	<ul> <li>N Route; and</li> <li>P-G via K.</li> </ul>	Yes – Limited vi including conifer towards the KTF unlikely to occur Not considered
B7000 – between High Bridge of Ken and St John's Town of Dalry Sections of road form part of the National Byway cycle route.	<ul> <li>N Route;</li> <li>R Route;</li> <li>P-G via K;</li> <li>C-K;</li> <li>E-G;</li> <li>G-T; and</li> <li>BG Deviation.</li> </ul>	Yes – Visibility of much of this roa Dalry. However, and woodland a Blackwater Brid views experienco proposed P-G vi this route to van connections will the south-west <b>Considered as</b> and represented
B7075 – between A702 at Bogue and A712 near Balmaclellan.	<ul> <li>R Route;</li> <li>P-G via K;</li> <li>C-K;</li> <li>E-G; and</li> <li>G-T.</li> </ul>	Yes – Visibility f features includir adjacent to the considered unlik Not considered
B795/Burns Country Run – between Laurieston and Glenlochar. Sections of route form part of Galloway Kite Trail.	<ul><li>R Route;</li><li>G-T.</li></ul>	Yes – visibility f intervening feat of forestry to th visual effects as considered unlik Route will be ev <b>Considered wi</b> 27: B795 east of
C51S – between B7000 near Cuckoostone Cottage and Lochinvar Lodge Sections of road form part of the National Byway cycle route. U1S – between A713 at Polharrow Bridge and Forest Lodge.	<ul> <li>R Route;</li> <li>P-G via K; and</li> <li>C-K.</li> <li>R Route;</li> <li>P-G via K; and</li> </ul>	Yes – Visibility f Mackilston to th Given the limite extents of this r intervening woo considered unlik Not considered 1 Yes – Visibility f the A713. The P junction with th
	• C-K.	Given the proxin limited extent o minor road whe considered unlik Not considered
U2S – between Drumbuie and Glenlee. Sections of road form part of the National Byway cycle route.	<ul> <li>R Route;</li> <li>P-G via K;</li> <li>E-G;</li> <li>G-T; and</li> <li>BG Deviation.</li> </ul>	Yes – Visibility a intervening feat much of the rou within the asses Not considered

# Elements of Theoretical Visibility of the KTR Project (Bare Earth ZTV shown on Figure 7.11.1-5)

visibility near Knowehead. Intervening features ferous forestry at Dundeugh Hill will limit views west TR Project, and significant visual effects are considered cur.

# d further.

y of the existing N Route and R Route is possible from road between High Bridge of Ken and St John's Town of er, small blocks of forestry including Betty's Plantation, associated with Earlstoun Bridge, Millquarter, idge and Knowehead are likely to filter and screen nced from the southern part of the B7000. The via K, C-K and E-G connections will be evident from varying degrees. Whilst the G-T and BG Deviation vill be largely imperceptible in longer distance views to st from the southern extents of this route.

# as part of the assessment reported in Chapter 7 ed by Viewpoint 5: B7000 west of Glenhoul Hill.

 rom Trolane to Kocklae, however given intervening ding blocks of forestry and pockets of woodland e west of the road, significant visual effects are likely.

d further.

<sup>r</sup> from Laurieston to west of Glenlochar. Given atures including woodland adjacent to road and blocks the south-west at Bargatton and Drumlane, significant associated with the proposed G-T connection are likely to occur, however the removal of the existing R evident in views from this route.

**within the assessment** and represented by Viewpoint of Laurieston.

 $\prime$  from western part of route from the farmstead at the junction with the B7000.

ted extent of visibility indicated from the western s road where it meets the B7000, and the presence of oodland east of the B7000 significant visual effects are likely to occur.

d further.

/ from north of Strangfasket Hill to the junction with P-G via K connection crosses the road near the the A713 at Polharrow Bridge.

ximity of this road to the A713, and the relatively of visibility indicated at the eastern extents of this here it meets the A713 significant visual effects are likely to occur.

# d further.

v as the route passes through Glenlee, however atures including forestry and woodland will screen oute. However, views from this road are considered essment of views from the settlement of Glenlee.

d further.

Routes	Elements of the KTR Project	Theoretical Visibility of the KTR Project (Bare Earth ZTV shown on Figure 7.11.1-5)
U3S – between Glenlee and A712. Sections of road form part of the National Byway cycle route.	<ul> <li>G-T; and</li> <li>BG Deviation.</li> </ul>	Yes – Visibility from the north-eastern part of the road with the BG Deviation running roughly parallel and the G-T connection crossing the road north-west of Shiel Hill. Significant visual effects are considered unlikely to occur. Views from this road are not considered within the assessment, however similar views are represented by Viewpoint 11: Unclassified road (U3S) south-west of Glenlee. Not considered further.
U4S – between A712 at Nether Achie and A762 at New Galloway.	<ul><li>R Route;</li><li>G-T.</li></ul>	Yes – Visibility from the western part of the road between Mulloch and Nether Achie. The G-T connection passes 0.8km west of the road but is likely to be screened by intervening topography and coniferous woodland. Significant visual effects are considered unlikely to occur. Not considered further.
C13S – between Laurieston and north of Fell of Laghead.	• G-T.	Yes – Visibility from south-east of Bennan Hill to Laurieston. However, intervening features including coniferous forestry are likely to screen much of the route. The G-T connection crosses the road near the Kennick Burn picnic area in Laurieston Forest, at Viewpoint 26: Kennick Burn picnic area.
		<b>Considered as part of the assessment reported in Chapter 7</b> and represented by views from nearby Viewpoint 26: Kennick Burn picnic area.
U62S – between B795 and Balmaghie Church.	R Route; and	Yes – Visibility from the west part of the road near the junction with the B795, with the G-T connection passing within approximately 2.2km to the south-west at its closest point.
• G-T.	Given the proximity of this road to the B795 and limited likely visibility from a short section of the western extents of this road significant visual effects are considered unlikely to occur.	
		Not considered further.
U34S – between Barstobrick and Upper Balannan.	Barstobrick and Upper and	Yes – Visibility from Barstobrick to Upper Balannan with the G-T connection running parallel with the road approximately 0.4km to the north-east.
		<b>Considered as part of the assessment reported in Chapter 7</b> , and represented by the following viewpoints:
		- Viewpoint 27: B795 east of Laurieston; and
		- Viewpoint 30: A75 at junction with unclassified road.
C7S – between Glenlochar and A75; C45S – between Creochs and Balannan; U151S – between Glentoo Wood and C7S;	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Visibility of existing R Route and G-T connection from the network of minor roads between the B795 to the north and the junction with the A75 to the south. Intervening features including coniferous forestry, shelterbelts of deciduous woodland, rolling drumlin landform, and dense roadside hedgerows are likely to screen views of the G-T connection from large sections of these minor single track roads, however some opens views will be possible as the route approaches the A75 near Upper Balannan Farm.
C39S – between Boreland Cottage and Bridge of Dee.		<b>Considered as part of the assessment reported in Chapter 7</b> , and represented by the following viewpoints:
The C7S and C39S form		- Viewpoint 27: B795 east of Laurieston; and
part of the Loch Ken and River Dee Galloway and Southern Ayrshire Biosphere Route.		- Viewpoint 30: A75 at junction with unclassified road.
U29S – between U28S near Mark Cottage and A762.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Visibility from the majority of the road with the G-T connection running 1.7km east of road, however, due to distance from the proposed G-T connection and the presence of intervening roadside trees and vegetation, significant visual effects are considered unlikely to occur.

	Elements of the KTR Project	Theoretical V shown on Fig
		Not considered
U19S – between High Barcaple and Valleyfield.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Visibility T connection r distance from intervening ro are considered
		Not considered
U43S – between Argrennan Farm and the A711 at Park of Tongland.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Visibility proximity of t nearby reside unlikely to occ Not considere
		However, sim 31: Unclassifie
C2S – between Rhonehouse and the	<ul> <li>R Route; and</li> </ul>	Yes – Visibility 1.2km west of
A711 at Tongland.	• G-T.	<b>Considered</b> a from represensubstation.
Raiders' Road Forest Drive - between A712 and A762 (sharing the	• G-T.	Yes – Visibility likely to scree However, the
same route as Core Path No. 143 Raiders Road).		Considered a and represent
		- View - View
Cycle Routes		
NCN route 7 Lochs and Glens South (Carlisle to Glasgow).	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – visibility including build significant vis Not considere
Walking Routes		
	R Route;	Yes – visibility the settlemen
Southern Upland Way long distance footpath (Core Path No. 504 within D&G).	<ul> <li>P-G via K; and</li> <li>E-G.</li> </ul>	route passes f screened by in However, the this route at C
long distance footpath (Core Path No. 504	<ul> <li>P-G via K; and</li> </ul>	route passes i screened by in However, the
long distance footpath (Core Path No. 504	<ul> <li>P-G via K; and</li> </ul>	route passes is screened by in However, the this route at C Considered a and represent Waterside Hill

# /isibility of the KTR Project (Bare Earth ZTV gure 7.11.1-5)

# d further.

r from Low Barcaple to High Bridge of Tarff with the Grunning 1.9km east of the road, however, due to the proposed G-T connection and the presence of adside trees and vegetation, significant visual effects d unlikely to occur.

d further.

with the G-T connection passing within close he western end of no through road providing access to ntial properties. Significant visual effects considered cur.

d further.

ilar views are considered from representative Viewpoint ed road (U43S) near Argrennan Mains.

 $\prime$  of the G-T connection running roughly parallel 0.6 to f the road through Tongland.

as part of the assessment reported in Chapter 7 Itative by nearby Viewpoint 32: A711 north of Tongland

/ from this route, with intervening coniferous forestry n much of the visibility of the G-T connection. G-T connection crosses the road at Ross Hill.

as part of the assessment reported in Chapter 7, ed by the following viewpoints:

point 17: The Otter Pool; and

point 20: Raiders' Road, north of Stroan Loch.

v at Kirkcudbright. However, given intervening features dings and extensive areas of intervening woodland, ual effects are considered unlikely to occur.

d further.

at Culmark Hill, and from Ardoch Hill passing through t of St John's Town of Dalry to Drumbuie. Where the through St John's Town of Dalry visibility is likely to be ntervening features including buildings and vegetation. P-G via K and E-G connections of the KTR Project cross Craiggubble Wood.

as part of the assessment as reported in Chapter 7 ed by nearby Viewpoint 7: Southern Upland Way near and Viewpoint 8: Southern Upland Way near St John's

v from this route near Carse north of Twynholm. en the long-distance nature of views (beyond 4km) and ng by intervening features including localised landform n, significant visual effects are considered unlikely to is route.

d further.

Routes	Elements of the KTR Project	Theoretical Visibility of the KTR Project (Bare Earth ZTV shown on Figure 7.11.1-5)
Core Path No. 182 Cairnsmore of Carsphairn by Craig of Knockgray.	<ul> <li>N Route; and</li> <li>P-G via K.</li> </ul>	Yes – visibility from this route at Knockgray Burn. However, given intervening features including coniferous forestry to the south of the path, significant visual effects are considered unlikely.
KHOCKGI'dy.		Not considered further.
Core Path No. 164 Bardennoch Trail Pack Road.	<ul> <li>N Route; and</li> <li>P-G via K.</li> </ul>	Yes – Visibility south-west of Bardennoch Hill to Barlae Hill and between Polmaddy historic settlement and Dundeugh. While intervening coniferous forestry is likely to screen much of the KTR Project, the P-G via K connection crosses the path at access to Polmaddy.
		<b>Considered as part of the assessment reported in Chapter 7</b> , and represented by the following viewpoints:
		<ul> <li>Viewpoint 2: Dundeugh at access to Polmaddy;</li> </ul>
		- Viewpoint 3: Polmaddy Settlement.
Core Path No. 23 Dundeugh Hill.	<ul> <li>N Route;</li> <li>R Route;</li> <li>P-G via K;</li> </ul>	Yes – Visibility along the east, south, and south-west slopes of Dundeugh Hill. However, coniferous forestry is likely to screen much of the KTR Project. Significant visual effects are considered unlikely to occur. Not considered further.
	<ul> <li>C-K; and</li> <li>E-G.</li> </ul>	
Core Path No. 199 Kendoon Youth Hostel to Butterhole Bridge.	<ul> <li>N Route;</li> <li>R Route;</li> <li>P-G via K; and</li> <li>C-K.</li> </ul>	Yes – Visibility at Blackwater Bridge and Chapel Linn. However, given intervening riparian vegetation in these areas, significant visual effects are considered unlikely. Not considered further.
Core Path No. 24 Ardoch Hill.	<ul> <li>R Route;</li> <li>P-G via K;</li> <li>C-K; and</li> <li>E-G.</li> </ul>	Yes – Some limited visibility passing Ardoch Hill. However, given intervening features including the blocks of conifer forest along the eastern and western shores of Earlstoun Loch, significant effects are considered unlikely. Not considered further.
Core Path No. 154 Forrest Lodge/Thorney Hill.	<ul> <li>R Route; and</li> <li>P-G via K.</li> </ul>	Yes – Some limited visibility from Darnaw to Craigmaharb Quarry. However, given intervening coniferous forestry, significant effects are considered unlikely. Not considered further.
Core Path No. 15 Forrest Lodge to Loch Dungeon.	• P-G via K.	No – No visibility within 5km ZTV. Significant visual effects are considered unlikely to occur.
		Not considered further.
Core Path No. 30 Glenlee.	<ul> <li>R Route;</li> <li>P-G via K;</li> <li>E-G;</li> <li>G-T; and</li> </ul>	Yes – Visibility for entirety of route with the P-G via K and E-G connections running parallel to the north-west of the path and crossing the path at the Glenlee substation. The existing R Route is evident in views east from the route, whilst the proposed G-T connection will be largely imperceptible from this route due to the presence of intervening woodland surrounding Glenlee.
	• BG Deviation.	Views from this Core Path are <b>considered as part of the</b> <b>assessment reported in Chapter 7</b> from nearby representative Viewpoint 8: Southern Upland Way near St John's Town of Dalry and Viewpoint 10: A762 north of Glenlee.
Core Path No. 21 Dalry to New Galloway.	<ul><li>R Route;</li><li>P-G via K;</li></ul>	Yes – Visibility for much of the route from Holm of Dalry to Cubbox Isle, however intervening coniferous forestry and woodland is likely to screen much of the G-T connection from the low lying areas of the

Routes	Elements of the KTR Project	Theoretical Vi shown on Figi
	<ul> <li>E-G; and</li> <li>G-T.</li> </ul>	valley, therefor occur. However, simila Viewpoint 10: A <b>Considered w</b> Route (south) r
Core Path No. 224 to Mulloch Hill, Dalry.	<ul> <li>R Route;</li> <li>P-G via K;</li> <li>E-G;</li> <li>G-T; and</li> <li>BG Deviation.</li> </ul>	Yes – Visibility to Boat Knowe from the propo connections, ar occur. However, simila Viewpoint 9: M <b>Considered w</b> Route (south) r
Core Path No. 191 Craigshinnie Bridge to SUW.	• P-G via K.	Yes – Visibility however conife connection, and unlikely to occu Not considered
Core Path No. 197 to Holy Linn, Dalry.	• G-T.	Yes – Limited v Garple Burn / k unlikely to occu Not considered
Core Path No. 516 to New Galloway West.	<ul> <li>G-T; and</li> <li>BG Deviation</li> </ul>	Yes – Visibility T connection wi Views from this <b>assessment re</b> 12: Core Path 5
Core Path No. 172 Benniguinea.	• G-T.	Yes – Some lim coniferous fore Not considered
Core Path No. 142 Raiders Road to Kenmuir Link.	• G-T.	Yes – Visibility Tannoch Flow b Gairloch and Pu Views from this <b>assessment re</b> 16: Core Path r
Core Path No. 143 Raiders Road (sharing the same routes as Raiders' Road Forest Drive).	• G-T.	Yes – Visibility crossing path to coniferous fores Views from this <b>reported in Ch</b> Forest Drive roo Viewpoint 17: 1 of Stroan Loch.
Core Path No. 177 Cairn Edward Hill.	• G-T.	Yes – Visibility and Bennan Hil from sections o Project crosses visual effects n

# /isibility of the KTR Project (Bare Earth ZTV gure 7.11.1-5)

ore significant visual effects are considered unlikely to

ilar views are considered from nearby representative A762 north of Glenlee.

within assessment reported in Chapter 7, of R removal.

y along majority of route from St John's Town of Dalry e and Grannan Mill Bridge but at substantial distance osed P-G via K, E-G, G-T and BG Deviation and significant visual effects are considered unlikely to

ilar views are considered from nearby representative Mulloch Hill.

within assessment reported in Chapter 7, of R removal.

v at eastern end of path near Craigshinnie Bridge, erous forestry is likely to screen the P-G via K nd significant visual effects are therefore considered cur.

d further.

visibility, however, given intervening woodland at Kate's Wood significant visual effects are considered cur.

d further.

v of G-T connection and BG Deviation indicated, and Gwill run southwards in parallel with Core Path route.

is Core Path are **considered as part of the reported in Chapter 7** from representative Viewpoint 516 south-west of Glenlee.

mited visibility indicated, however given intervening estry significant visual effects are considered unlikely.

d further.

/ of G-T connection indicated as the path crosses broadly following the route of G-T between Upper Pultarson Burn.

is Core Path are **considered as part of the reported in Chapter 7** from representative Viewpoint near Tannoch Flow.

v indicated with the G-T connection of the KTR Project to the east of Ross Hill. However, intervening estry will screen much of the G-T connection.

is Core Path are **considered within the assessment Chapter 7** set out in relation to the Raiders' Road oute and similar views illustrated by representative The Otter Pool and Viewpoint 20: Raiders' Road, north n.

v indicated as path passes western shore of Loch Ken iill. Intervening coniferous forestry will screen views of the route; however, the G-T connection of the KTR s the path to the south-west of Airds Craig. Significant not considered likely to arise.

Routes	Elements of the KTR Project	Theoretical Visibility of the KTR Project (Bare Earth ZTV shown on Figure 7.11.1-5)	Routes	Elements of the KTR Project
		However, similar views are considered from nearby representative Viewpoint 18: Core Path 177 near Bennan Moss.	Core Path No. 208 Livingston Hill.	R Route;     and
Core Path No. 192 Parton Path.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Existing R Route crosses path passes close to path north-east of Boghall. Limited visibility of G-T connection from route between the A713 at Loch Ken Viaduct and Boghall. However, given intervening forestry at Airds of Kells, significant visual effects are considered unlikely to occur.		• G-T.
		However, similar views are considered from nearby representative Viewpoint 19: Promoted viewpoint near Parton /Airds House.	Core Path No. 28 Glengap and Laurieston	R Route;     and
Core Path No. 29 Glengunnock Wood.	R Route; and	Yes – Existing R Route crosses path from north-west to south-east passing over the high ground of Glengunnoch Hill. Visibility of G-T connection from western extents of path which offers elevated views	Forest.	• G-T.
	• G-T.	across the southern extents of Loch Ken, however at distances of over 5km significant visual effects are considered unlikely to arise.	Core Path No. 170 Barstobrick.	R Route;     and
		<b>Considered within assessment reported in Chapter 7</b> , of R Route (south) removal from representative Viewpoint 19: Promoted viewpoint near Parton/Airds House.		• G-T.
Core Path No. 141 Raiders Road East.	• G-T.	Yes- Very limited visibility, however intervening landform and forestry is likely to screen any visibility of towers from this path. Significant visual effects are considered unlikely to occur. Not considered further.	Core Path No. 207 Lairdmannoch.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>
Core Path No. 205 Mossdale Kite Walk, Red Kite Trail.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Visibility from some sections of the path as it crosses open ground west of Mossdale, however, coniferous woodland will screen the majority of outward views from the closest sections of the path to the east of the Raiders Road.	Core Path No. 18 Gatehouse to Glengap.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>
		<b>Considered as part of the assessment reported in Chapter 7</b> , and similar views illustrated by representative Viewpoint 21: Mossdale.	Core Path No. 152 Stick	R Route;
Core Path No. 485 Mossdale to Gatehouse Station Railway Walk.	• G-T.	Yes – Visibility of the G-T connection along section of path between Stroan Loch Viaduct and Loch Skerrow, however, extensive screening by coniferous woodland. Views from this Core Path are <b>considered</b> <b>as part of the assessment reported in Chapter 7</b> from representative Viewpoint 21: Mossdale, Viewpoint 22: Core Path 485 Mossdale to Gatehouse Station Railway Walk and Viewpoint 23: Stroan Viaduct.	Bridge Ringford.	<ul> <li>R Route, and</li> <li>G-T.</li> </ul>
Core Path No. 153 Airie near Mossdale.	• G-T.	Yes – Visibility of the G-T connection from section of path as it crosses open and elevated ground north-east of Bennan Hill.	Core Path No. 155 Threave Estate.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>
		Considered within assessment reported in Chapter 7.		
Core Path No. 168 Barney Water to Loch Skerrow.	• G-T.	Yes – Visibility from path, however, intervening features including coniferous forestry are likely to screen the G-T connection. Significant visual effects are considered unlikely to occur. Not considered further.	Core Path No. 573 Bridge of Dee to Rhonehouse.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>
Core Path No. 144 Retreat Wood,	• G-T.	Yes – Visibility from short sections of path south of Kennick Burn picnic area, however given the presence of intervening conifer		
Laurieston.		forestry significant visual effects are considered unlikely to occur. However, similar views are considered from nearby representative	Core Path No. 159 Twynholm.	R Route;     and
		Viewpoint 26: Kennick Burn picnic area.		• G-T.
Core Path No. 200 Kennick Burn Walk.	• G-T.	Yes – Visibility from Core Path, however, intervening features including dense coniferous forestry managed as permanent woodland cover (long-term retention) will screen views. Significant visual effects considered unlikely to occur.	Core Path No. 198 Irelandton.	R Route;     and
		Not considered further.		• G-T.

# ical Visibility of the KTR Project (Bare Earth ZTV on Figure 7.11.1-5)

isting R Route crosses path to south-east of Meikle Dornell. visibility of G-T as path passes to the north-west of urray, however, given long-distance nature of views and ng features including coniferous forestry, significant visual re considered unlikely to occur.

red within assessment reported in Chapter 7, of R buth) removal.

ibility, however given the presence of intervening forestry at on Forest, significant visual effects are considered unlikely to

idered further.

sibility near Neilson's Monument and Giant's Cave with few ng features providing screening of route.

red as part of the assessment reported in Chapter 7 resentative Viewpoint 29: Barstobrick Hill (Neilson's

nited visibility. However, given intervening landform and of woodland and forestry at Henryshill Plantation and ell Moor, significant visual effects are considered unlikely to

idered further.

me very limited visibility, however, path predominantly prough coniferous woodland which screens outward views ificant visual effects are considered unlikely to occur.

idered further.

me very limited visibility from south-western extent of ews will be limited to relatively long distance views to towers onnection crossing elevated ground to the east of Green Hill, ently screened and filtered by intervening roadside d cover and vegetation. Significant visual effects are ed unlikely to arise.

idered further.

me visibility. However, given the distance and the presence ening features including dense mixed woodland shelterbelts asteads are likely to screen any visibility of the G-T towers. Int visual effects are considered unlikely to occur.

idered further.

ry limited visibility with intervening features including d at nearby Wellington Wood, Long Plantation, Big Wood and ll which are likely to screen views of G-T towers from this nificant visual effects are considered unlikely.

idered further.

me limited visibility, however, roadside vegetation along orth-west of path likely to screen views from route, e significant visual effects are considered unlikely.

idered further.

nited visibility. However, given long-distance nature of views vening features including vegetation, significant visual re considered unlikely.

idered further.

Routes	Elements of the KTR Project	Theoretical Visibility of the KTR Project (Bare Earth ZTV shown on Figure 7.11.1-5)
Core Path No. 194 Cumstoun Mains.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Visibility as path crosses south-east slope of Sour Hill to Cumstoun Mains and between Riggin's Hill and Forest Hill to Hilltop. However, given intervening forestry at the Foresthill Plantation and broadleaf woodland at Cumstoun Wood, significant visual effects are considered unlikely to arise. Not considered further.
Core Path No. 156 Tongland.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Very limited visibility as path follows the A762 along the shore of the estuary where Tarff Water and The River Dee meet south, south-west of Tongland. Intervening woodland, vegetation and built form will limit visibility of towers and significant visual effects are considered unlikely to occur. Not considered further.
Core Path No. 572 High Boreland farm road.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Limited visibility of G-T connection towers with few intervening features likely to screen views across the valley. However, the towers will appear in the context of the existing Tongland substation, R Route and the adjacent Tongland Hydroelectric Power Station, and significant visual effects are considered unlikely to occur. Not considered further.
Core Path No. 13 Dee Walk to Tongland.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Visibility however, intervening features including riparian vegetation along River Dee and buildings associated with the settlement of Tongland likely to screen the route. Significant visual effects considered unlikely to occur. Not considered further.
Core Path No. 165 Barhill Woods.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Limited visibility indicated at Bar Hill. However, trail passes through mixed woodland with intervening buildings associated with the settlements of Kirkcudbright and Tongland likely to provide further screening of towers. Significant visual effects are considered unlikely to occur. Not considered further.
Core Path No. 151 St Marys Isle.	<ul> <li>R Route; and</li> <li>G-T.</li> </ul>	Yes – Some limited visibility. However, given the largely wooded shore at St Mary's Isle south of Kirkcudbright and intervening features including buildings and woodland north of the settlement of Kirkcudbright, significant visual effects are considered unlikely to occur. Not considered further.

# **Roads, including Promoted Road Routes**

A7.5.22 Based on the review of theoretical visibility of the KTR Project from the routes listed in **Table A7.5.44** above, and the likelihood of significant effects of the KTR Project on the relevant receptors, the selected roads and promoted road routes within in the study area (including roads, and promoted road routes) have been considered in more detail in Error! Reference source not found. **A7.5.45** to Error! Reference source not found.**54** below.

# Table A7.5.45: A713

A713	
Representative or	Viewpoint 1: Layby on A713 near Polquhanity;
Nearby Viewpoint(s)	Viewpoint 2: Dundeugh at access to Polmaddy;
	Viewpoint 6: Layby on A713 near Knocknalling Wood; and
	Viewpoint 25: A713 near Parton Mill Bridge.

A713	
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>N Route - &lt;0.1km;</li> <li>R Route - &lt;0.1km;</li> <li>P-G via K - &lt;0.1km;</li> <li>C-K - &lt;0.1km;</li> <li>E-G - 0.2km; and</li> <li>G-T - 3.1km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

The A713 is a major road running between Ayr and Galloway. The road runs through the majority of the Study area, from Carsphairn through the settlement of St John's Town of Dalry, passing out of the 5km Study area east of Parton. The A713 passes through a varied landscape including commercial conifer forestry, low lying and rolling farmland and water crossings.

This road is part of the 92 mile long Galloway Tourist Route, promoted by Visit Scotland, running from Gretna to Ayr. The promoted route follows the A713 through the Study area from Carsphairn to Parton. The Galloway Activity Centre is accessed via the A713, bringing recreational visitors to the road. The road is also part of the Scottish Castle Route, which includes 250 miles of road linking over a dozen castles in the south west of Scotland. The Scottish Castle Route follows the A713 through the Study area from Carsphairn to the junction with the A762 at Allangibbon Bridge. The Robert the Bruce Trail and Galloway Kite Trail follow the A713 through the Study area from the junction with the A712 at Ken Bridge to Parton. The Loch Ken and River Dee Galloway and Southern Ayrshire Biosphere Route follows the road from Allangibbon Bridge to Castle Douglas.

The northern-most portion of the road runs through the narrow Dundeugh Valley adjacent to Galloway Forest Park through Carsphairn to St John's Town of Dalry. Outward views vary along this part of the A713, being largely contained by coniferous forestry between Polquhanity and Kendoon, and more open where the road follows the western side of Carsfad Loch towards St John's Town of Dalry. Partial views to the water at Earlstoun Loch are seasonally visible through deciduous vegetation. The road crosses west to east along the south shore of Earlstoun Loch, passing through St John's Town of Dalry and turns south along the eastern shores of the Water of Ken and Loch Ken. Intermittent views towards the elevated summits of the Galloway Hills can be seen from this section of the A713, glimpsed between breaks in intervening vegetation lining the roadside.

Existing steel lattice towers of the N Route and R Route can be seen running roughly parallel to the western side of the road between Polquhanity and Allangibbon Bridge, crossing the A713 at Kendoon and Knocknalling. The existing R Route crosses the A713 south of Mulloch Hill and then runs roughly parallel to the eastern side of the road. The proposed P-G via K and C-K connections will be seen in close-distance views west from the road. Middle to longer distance views of the E-G and G-T connections of the proposed KTR Project will be seen from the A713 from St John's Town of Dalry to Parton.

The groups of receptors potentially experiencing significant visual effects of the KTR Project from this route include:

Road users; and

Tourists and visitors, following promoted sections of the route.

# Sensitivity:

Road users of the A713, some of whom may be tourists and visitors by virtue of the route's designation as a tourist route, are considered to be of medium susceptibility to changes in the view.

The A713 passes through the Galloway Hills RSA, with long-distance views of the elevated summits within the RSA afforded from sections of the road. Overall views from this road are considered to be of medium value.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route within the study area is judged to be **medium.** 

# Table A7.5.46: A762

A762	
Representative or Nearby Viewpoint(s)	Viewpoint 10: A762 north of Gle Viewpoint 15: A762 west of Loc
	Viewpoint 24: A762 east of Woo Viewpoint 28: A762 south of La
Visibility and Approximate Distance	• R Route – <0.1km;

enlee;

ch Ken;

odhall Loch; and

aurieston.

A762		
to elements of KTR	•	P-G via K – 0.2km;
Project (km)	•	E-G – 0.1km;
	•	G-T – <0.1km; and
	•	BG Deviation – 0.5km.

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

The A762 is a north-south road that runs through a majority of the study area between Allangibbon Bridge northwest of St John's Town of Dalry, passing the settlement of New Galloway and the community of Laurieston, and then crossing the A75 to end at Tongland. The road is part of the Scottish Castle Route, which includes 250 miles of road linking over a dozen castles in the south west of Scotland. The route follows the A762 within the Study area from the junction with the A713 at Allangibbon Bridge to the junction with the A712 at New Galloway. The Loch Ken and River Dee Galloway and Southern Ayrshire Biosphere Route follows the road from Allangibbon Bridge to the C50S minor road north of Laurieston. The Galloway Kite Trail follows the road from New Galloway to Laurieston. The National Byway cycle route follows the A762 from Allangibbon Bridge to Glenlee.

The northern extent of the road follows the west side of the Water of Ken and Loch Ken, where views are predominantly open to the east but enclosed to the west by a mix of rolling farmland and forestry. Glimpsed views to the summits of Galloway Hills can be seen to the north-west from sections of the A762 between Glenlee and New Galloway. As the road passes Loch Ken, views are focussed on the water through intermittent breaks in deciduous woodland cover. The A762 winds through the rugged terrain of the Laurieston foothills, where views are mostly of vegetation, before the road open onto drumlin pastures at Fellend to the north west of Ringford. The road then crosses the A75 into Tongland.

Existing steel lattice towers of R Route can be seen in close distance views from the A762, crossing the road at Coom Bridge to the north of Glenlee, and then running roughly parallel at a distance of 1km-5km to the east of the road. Turbines at Blackcraig Hill wind farm can be seen in views north and north-east from the A762. The proposed P-G via K and E-G connections will be seen in relatively close-distance views west. The proposed G-T connection will be seen in middle to long-distance views west from the road between Glenlee to Edgarton, where the route crosses the A762 on a north-west to south-east alignment. The BG Deviation connection will be largely imperceptible from this route due to the presence of intervening woodland in the vicinity of Glenlee.

The groups of receptors potentially experiencing significant visual effects of the KTR Project from this route include:

- Road users; and
- Tourists and visitors, following promoted sections of the route.

# Sensitivity:

Road users of the A762, some of whom may be tourists and visitors by virtue of its promotion as a tourist route, are considered to be of medium susceptibility to changes in the view.

The A762 passes through the Galloway Hills RSA, with scenic longer-distance views to the elevated summits of the RSA afforded from parts of the road. Overall views from the A762 are considered to be of medium value.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route in the Study area is judged to be medium.

# Table A7.5.47: A712

A712	
Representative or Nearby Viewpoint(s)	Viewpoint 13: A712 west of Balmaclellan; and Viewpoint 14: A712, The Queen's Way.
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - &lt;0.1km; and</li> <li>G-T - &lt;0.1km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

The A712 is one of two roads running from east to west around Loch Ken, connecting the A75 at Newton Stuart to the A75 at Crocketford. The road enters the study area to the east at Balmaclellan, passing through the settlement of New Galloway and exits the study area at Clatteringshaws Loch. The west portion of the A712 is promoted as The Oueen's Way and forms part of the Robert the Bruce Trail and Galloway Kite Trail. The A712 is also part of the Scottish Castle Route, which includes 250 miles of road linking over a dozen castles in the south west of Scotland. The promoted route follows the A712 within the study area from Clatteringshaws to the A762 at

# A712

to the junction with U3S.

Views are relatively enclosed along the west portion of the road through Galloway Forest Park due to intervening landform and forestry. Post and wire fencing and low stone walls line the road with rough grazing pastures seen beyond backed by forestry to the south and rolling landform to the north. Views become more open as the road approaches New Galloway and the Ken Valley, with elevated landform forming the skyline of views towards the east.

Steel lattice towers of the existing R Route can be seen in close-distance views crossing the A712 near the Ken Bridge to the north-east of New Galloway along the east shore of the Water of Ken. Turbines at Blackcraig Hill and Wether Hill wind farms can be seen in views to the east from the A712. The proposed G-T connection of the proposed KTR Project will be seen in relatively close-distance views crossing the road near Darsalloch on a north to south alignment.

The groups of receptors potentially experiencing significant visual effects of the KTR Project from this route include:

- Road users; and
- Tourists and visitors, following promoted sections of the route.

# Sensitivity:

Road users on the A712, some of whom may be tourists and visitors by virtue of its promotion as a tourist route, are considered to be of medium susceptibility to changes in the view.

The A712 is located within the Galloway Hills RSA, with views to the elevated summits of the RSA available from the road. Overall views from this route are considered to be of medium value.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route in the study area is judged to be **medium**.

# Table A7.5.48: A75

A75	
Representative or Nearby Viewpoint(s)	Viewpoint 30: A75 at junction v
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - &lt;0.1km; and</li> <li>G-T - &lt;0.1km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

The A75 is a Primary Trunk Road linking Stranraer with A74 at Gretna, continuing to the M6 Motorway. The road enters the Study area at Castle Douglas, passing the settlements of Bridge of Dee, Ringford and Twynholm, then exits the Study area at Moor Hill. The A75 is the primary route for crossing Loch Ken, usually travelled at speed, and is used by Heavy Goods Vehicles crossing the short sea route of the North Channel. The A75 is part of the Scottish Castle Route, which includes 250 miles of road linking over a dozen castles in the south west of Scotland. The promoted route follows the A75 within the Study area from the junction with the A711 to Kelton Mains. The Loch Ken and River Dee Galloway and Southern Ayrshire Biosphere Route follow the road from Kelton Mains to Bridge of Dee.

The road travels through a landscape of extensive low lying drumlin pastures, ascending to higher ground as the road approaches Twynholm. Outward views are usually screened by shelterbelt and hedgerows.

The existing R Route crosses the A75 at the junction with unclassified road U58 leading to Upper Balannan, with steel lattice towers seen in close-distance views from the road. The proposed G-T connection will be seen in relatively close-distance views, crossing the A75 near Upper Balannan on a north to south alignment.

The groups of receptors potentially experiencing significant visual effects of the KTR Project from this route include road users.

# Sensitivity:

While the A75 is promoted as part of a tourist route and road users may be tourists and visitors, receptors will be travelling at speed and their attention is not likely to be focused on the surrounding landscape through this section of the route as it crosses the Study area. Thus, road users of the A75 are considered to be of low susceptibility to changes in view.

# New Galloway. The National Byway cycle route follows the A712 within the study area from Clatteringshaws Loch

with unclassified road.

# A75

The route does not benefit from any designations in relation to the section passing through the Study area, and views do not display notable scenic quality. Therefore, the value of the views from the route is considered to be low.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route in the Study area is judged to be **low**.

# Table A7.5.49: A711

A711	
Representative or Nearby Viewpoint(s)	Viewpoint 32: A711 north of Tongland substation.
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - &lt;0.1km; and</li> <li>G-T - &lt;0.1km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

The A711 is a major road that enters the Study area at Mutehill and ends at the A75 to the north-east of Tongland. The South West Coastal Route 300 follows the A711 from Dalbeattie to Kirkcudbright, where it then turns west to follow the A755 and B727. This route is promoted by Visit South West Scotland for its interesting townscapes and scenic coastal landscapes. The A711 is also part of the Scottish Castle Route, which includes 250 miles of road linking over a dozen castles in the south-west of Scotland. The route follows the A711 through the Study area from Kirkcudbright, past the settlement of Tongland to the A75.

From the north portion of the road, outward views are often screened by prominent hedgerow patterns and woodland that accentuate the topography. The road passes the drumlin-lined Tongland Valley before passing the townscape and industrial landscapes of Tongland. Outward views from the south portion of the road are of the coastal peninsula and River Dee.

The existing S route crosses the A711 at Tongland substation, whilst R Route runs northwards, parallel to the road until the road 400-800mto the west. The proposed G-T connection will be seen in views west from the road from Argrennan Mains to Tongland.

The groups of receptors potentially experiencing significant visual effects of the KTR Project from this route include:

- Road users; and
- Tourists and visitors, following promoted sections of the route. -

# Sensitivity:

Road users on the A711, some of whom may be tourists and visitors by virtue of its promotion as a tourist route, are considered to be of medium susceptibility to changes in views.

The A711 is located within the Solway Coast RSA, and whilst tourists and visitors and recreational receptors may attach a higher value to views, the road does not afford views across the wider area of the Solway Coast RSA and views do not display notable scenic quality. Existing electricity transmission infrastructure is prominent in views. Therefore, the value of views afforded from the A711 is considered to be low.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route in the Study area is judged to be **low**.

# Table A7.5.50: B7000

B7000		
Representative or Nearby Viewpoint(s)	Viewpoint 5: B7000 west of Glenhoul Hill.	
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>N Route - 0.9km;</li> <li>R Route - 1.0km;</li> <li>P-G via K - 1.0km;</li> <li>C-K - 1.0km;</li> <li>E-G - 0.9km; and</li> </ul>	

### The Kendoon to Tongland 132kV Reinforcement Project

B7000
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• G-T - 1.9km.

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

The B7000 is a secondary road running south from B729 at the High Bridge of Ken to the A702 at St John's Town of Dalry, in the north-west portion of the Study area. The National Byway cycle route follows the B7000 from the junction with C51S west of Barlaes Hill to the A702 at St John's Town of Dalry.

Outward views from the road are open towards the hills of Galloway Forest Park, with closer-distance views of rolling valley pastures and Carsfad Loch. Small blocks of coniferous forestry and shelterbelts surround scattered dwellings. Hedgerows and scattered settlement become more frequent as the road approaches St John's Town of Dalry.

The existing N Route is evident in long distance views to the north-west largely screened or filtered by intervening woodland cover. The substation at Kendoon lies roughly 750mto the west of the B7000, and the existing R Route runs roughly parallel to the west of the road at a distance of 1-2km from Kendoon to St John's Town of Dalry with close-distance views of steel lattice towers afforded from the road. The proposed P-G via K, C-K and E-G connections will be seen in middle-distance views north-west to south-west from the B7000.

The proposed G-T and BG Deviation connections will be largely imperceptible in longer distance views to the south-west from the southern extents of this route.

The groups of receptors potentially experiencing significant visual effects of the KTR Project from this route include road users.

### Sensitivity:

Given the elevated location of this road, the scenic nature of views afforded across the Upper Glenkens Valley and elevated summits beyond and the use of the road to access residential properties, road users of the B7000 are considered to be of medium susceptibility as their attention is likely to be focused on the surrounding landscape.

The road is located within the Galloway Hills RSA and affords long-distance views west to the elevated summits within the wider RSA. Therefore, the value of views available from this road is considered to be high.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route in the Study area is judged to be **medium**.

# Table A7.5.51: B795

B795	
Representative or Nearby Viewpoint(s)	Viewpoint 27: B795 east of Lau
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - &lt;0.1km; and</li> <li>G-T - 1.4km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

The B795 is a rural B-road heading east from Laurieston to the A75 at Gerranton north-west of Castle Douglas. The road enters the Study area at Glenlochar and ends at Laurieston. The route forms a section of the promoted Galloway Red Kite Trail.

Landscape in this area comprises undulating drumlin pastures with long-distance views to the hills of Laurieston Forest. Occasional blocks of coniferous forestry and broadleaf woodland line the road.

Existing steel lattice towers of R Route can be seen in close-distance views crossing the B795 at Drumlane approximately at the road's midpoint between Glenlochar and Laurieston. The proposed G-T connection will be seen in middle-distance views south-west from the road.

The groups of receptors potentially experiencing significant visual effects of the KTR Project from this route include:

- Road users: and
- Tourists and visitors, following promoted sections of the route.

# Sensitivity:

Road users of the B795 are considered to be of medium susceptibility to changes in views, as receptors will generally be residents accessing scattered properties between Laurieston and Glenlochar.

The route does not benefit from any designations in relation to the section passing through the Study area, and views from the route do not display notable scenic quality, however the route forms part of the Galloway Red Kite

irieston

# B795

Trail from which receptors will be particularly focused on the opportunity for ornithology sightings. Therefore, the value of views from the B795 is considered to be low.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route in the Study area is judged to be low.

# Table A7.5.52: C13S

C13S	
Representative or Nearby Viewpoint(s)	Viewpoint 26: Kennick Burn picnic area
Visibility and Approximate Distance to elements of KTR Project (km)	• G-T - <0.1km.

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

The C13S is a rural minor road connecting Gatehouse of Fleet with Laurieston. The road passes through Laurieston Forest. The landscape in this area comprises forested foothills, with views from the road largely foreshortened by coniferous forestry.

The proposed G-T connection will be seen crossing the road on a north-south alignment near the Kennick Burn picnic area.

### Sensitivity:

Road users of the C13S are considered to be of medium susceptibility to changes in views, as receptors will generally be residents accessing scattered properties between Gatehouse of Fleet and Laurieston and tourist, visitor or recreational receptors accessing promoted locations within Laurieston Forest.

A short section of the road within the Study area is located in the Galloway Hills RSA, however due to the presence of dense woodland cover and intervening landform, long-distance views west and north to the elevated summits of the wider RSA are not afforded, and views do not display notable scenic quality. Therefore, the value of the views from the route is considered to be low.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route in the Study area is judged to be medium.

# Table A7.5.53: U34S

U34S	
Representative or Nearby Viewpoint(s)	n/a
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - 0.2km; and</li> <li>G-T - 0.4km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

The U34S is a rural minor road connecting Culcrae Farm to Upper Balannan. The road passes through rolling drumlin pastures, with field boundaries defined by low stone walls and post and wire fencing. A number of scattered farmsteads and residential properties are located along the road. Longer-distance views of Barstobrick Hill and Neilson's Monument are afforded in views looking north-west from the road.

Existing steel lattice towers of R Route can be seen in views east from the northern and southern extents of the road, however views in this direction are foreshortened by intervening landform adjacent to the section of the road between named properties Culcrae and Crumquhill.

The proposed G-T connection will be seen in views north-east to east from the road.

# Sensitivity:

Road users of the U34S are considered to be of medium susceptibility to changes in views, as receptors will generally be residents accessing isolated properties.

# U34S

The route does not benefit from any designations in relation to the section passing through the Study area, and views do not display notable scenic quality. Therefore, the value of the views from the route is considered to be low.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route in the Study area is judged to be low.

# Table A7.5.54: C7S, C45S, U34S, U151S and C39S

# C7S, C45S, U34S, U151S and C39S

Representative or	Viewpoint 27: B795 east of Lau
Nearby Viewpoint(s)	Viewpoint 30: A75 at junction v
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - &lt;0.1km; and</li> <li>G-T - &lt;0.1km.</li> </ul>

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

These routes form a network of minor roads connecting the B795 near Creochs to the A75 near Balannan. The landscape in this area comprises rolling drumlin pasture, with field boundaries comprising hedgerow and post and wire fencing. Occasional blocks of coniferous forestry and mixed woodland are seen along the southern extents of the roads, with denser forestry at Greenlane Plantation foreshortening longer-distance views west from the northern extents of the C7S and C39S. A number of residential properties and farmsteads are located along these roads.

Existing steel lattice towers of R Route can be seen in close to middle-distance views west, running roughly parallel to the C45S and crossing the road near Upper Balannan. The proposed G-T connection will be seen in views west.

# Sensitivity:

Road users of these roads are considered to be of medium susceptibility to changes in views, as receptors will generally be residents accessing scattered properties.

The route does not benefit from any designations in relation to the section passing through the Study area, and views do not display notable scenic quality. Therefore, the value of the views from the route is considered to be low

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route within the Study area is judged to be low.

# Table A7.5.55: Raider's Road Forest Drive

Raider's Road Forest Drive			
Representative or Nearby Viewpoint(s)	Viewpoint 17: The Otter Pool Viewpoint 20: Raiders' Road, no		
Visibility and Approximate Distance to elements of KTR Project (km)	• G-T – 0.2km.		

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

Raiders' Road Forest Drive is a ten mile (16km) promoted route that crosses through Galloway Forest Park from Clatteringshaws Loch to the Raiders Road Forest Drive access point at Bennan, near the western shore of Loch Ken. The Galloway Kite Trail follows the road, with stopping points offering visitor amenities at the Otter Pool and Stroan Loch. A number of Core Paths bisect the road and provide additional access through Galloway Forest Park. Outward views from the road are generally foreshortened by coniferous forestry, however longer distance views may be afforded from sections of the road near Stroan Loch and areas where forestry has been recently felled.

The proposed G-T connection will be seen in views north-east to east from the road. No other elements of existing electricity transmission infrastructure are visible from the road.

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with unclassified road

orth of Stroan Loch

# **Raider's Road Forest Drive**

# Sensitivity:

Road users of Raiders' Road Forest Drive are considered to be of higher susceptibility to changes in views, as receptors will generally be recreational receptors accessing Galloway Forest Park.

The road is located within the Galloway Hills RSA and, while outward views to the elevated summits of the RSA are largely obscured by intervening forestry, overall views from this route are considered to be of medium value.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route within the Study area is judged to be medium.

# **Walking Routes**

A7.5.23 Based on the review of theoretical visibility of the KTR Project form the walking routes listed in Table A7.5.44 and the likelihood of significant effects of the KTR Project on the relevant receptors, the Southern Upland Way has been considered in more detail, as described in Table A7.5.56 below.

### Table A7.5.56: Southern Upland Way

Southern Upland Way		
Representative or Nearby Viewpoint(s)	Viewpoint 7: Southern Upland Way near Waterside Hill Viewpoint 8: Southern Upland Way near St John's Town of Dalry	
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>R Route - &lt;0.1km;</li> <li>P-G via K - &lt;0.1km;</li> <li>E-G - &lt;0.1km; and</li> <li>G-T - 1.5km.</li> </ul>	

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

The Southern Upland Way is a long distance coast-to-coast trail in southern Scotland. The path crosses through the Study area from the car park near Snab Hill to Culmark Moss, passing through forested foothills before descending into the Dundeugh Valley, where the route passes through pastoral fields with occasional pockets of woodland. The path ascends Waterside Hill before crossing the Water of Ken into the settlement of St John's Town of Dalry. The path then ascends the upper slopes of the Dundeugh Valley, passing near Ardoch Hill into the foothills and Southern Uplands in the north-east of the Study area.

Longer distance views of the Galloway Hills are afforded from elevated locations along the path, including at Waterside Hill.

Existing steel lattice towers of R Route are seen in close to middle distance views, crossing the path on a northsouth alignment near Waterside Hill. The proposed P-G via K, E-G and G-T connections will be seen in sequential views from the path.

# Sensitivity:

Recreational receptors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

This core path passes through the Galloway Hills RSA and affords longer-distance panoramic views towards elevated parts of the Galloway Hills RSA. Therefore, the value of the view available from this location is considered to be high.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route within the Study area is judged to be **high.** 

# **Core Paths**

A7.5.24 Based on the review of theoretical visibility of the KTR Project from the Core Paths listed in Table A7.5.44 and the likelihood of significant effects of the KTR Project on the relevant receptors, certain Core Paths have been considered in more detail, as described in Table A7.5.57 to Table A7.5.59 below.

# Table A7.5.57: Core Path No. 164 Bardennoch Trail Pack Road

Core Path No. 164 Bardennoch Trail Pack Road			
Representative or Nearby Viewpoint(s)	Viewpoint 3: Polmaddy Settlem		
Visibility and Approximate Distance to elements of KTR Project (km)	<ul> <li>N Route - &lt;0.1km; and</li> <li>P-G via K - &lt;0.1km.</li> </ul>		

### Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This Core Path is located in the north-western part of the Study area, connecting Carsphairn with the summit of Bardennoch Hill (330mAOD) and continuing further south to Dundeugh. The path runs approximately parallel 1.2km west of the A713. Longer distance views of the Galloway Hills are afforded in views west from the northern extents of the route, before the path crosses into forestry near Barlae Hill where outward views are largely foreshortened. The path then passes the historic settlement of Polmaddy before ending at the A713 at Dundeugh.

Existing steel lattice towers of the N Route are seen in views looking east from the path between Polmaddy and Dundeugh. The proposed P-G via K connection will be seen in close-distance views east from the path, crossing the Core Path between Polmaddy and Dundeugh.

### Sensitivity:

Recreational receptors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

This Core Path passes through the Galloway Hills RSA and affords longer-distance panoramic views towards elevated parts of the Galloway Hills RSA. Therefore, the value of the view available from this location is considered to be high.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route within the Study area is judged to be high.

# Table A7.5.58: Core Path No. 205 Mossdale Kite Walk, Red Kite Trail

# Core Path No. 205 Mossdale Kite Walk, Red Kite Trail **Representative or** Viewpoint 21: Mossdale Nearby Viewpoint(s) Vi nd

Visibility and	•	R Route; and
Approximate Distance to elements of KTR Project (km)	•	G-T – 0.2km.
Project (kiii)		

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This relatively short Core Path is located to the west of Mossdale and connects the Red Kite Trail and Raiders' Road with Mossdale and the wider network of Core Paths in Galloway Forest Park. Longer distance views west from the path are generally foreshortened by coniferous forestry and woodland at Garels Wood. The foreground of views east comprises Mossdale Loch with Loch Ken seen beyond.

Steel lattice towers of the R Route are seen in longer distance views north-east to east, partly screened by landform and mixed woodland along the eastern shore of Loch Ken. The proposed G-T connection will be seen in close-distance views west of the path.

# Sensitivity:

Recreational receptors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

The road is located within the Galloway Hills RSA and, while outward views to the elevated summits of the RSA are largely obscured by intervening forestry, overall views from this route are considered to be of medium value.

Taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route within the Study area is judged to be medium.

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# Table A7.5.59: Core Path No. 153 Airie near Mossdale

Core Path No. 153 Airie near Mossdale		
Representative or Nearby Viewpoint(s)	n/a	
Visibility and Approximate Distance to elements of KTR Project (km)	• G-T - <0.1km	

# Location, description of existing view and anticipated view of the KTR Project, and potential receptors:

This Core Path is located along the eastern edge of Galloway Forest Park connecting the isolated residential property at Airie and Core Path 485 with Slogarie Bridge and the U8S minor road, providing access to the A762. The path crosses through the Laurieston Foothills, where open longer-distance views are afforded towards the Galloway Hills to the north-west and Galloway Forest Park and Stroan Loch to the north-east. Complex localised terrain and pockets of mixed woodland near Slogarie foreshorten longer distance views from the eastern extents of the path.

The proposed G-T connection will be seen in views north-east to south-east, crossing the path near Bennan Hill.

# Sensitivity:

Recreational receptors whose attention is focussed on their surroundings are considered to be of high susceptibility to changes in the view.

This core path passes through the Galloway Hills RSA and affords longer-distance panoramic views towards elevated parts of the Galloway Hills RSA. Therefore, the value of the view available from this location is considered to be high.

On balance, taking account of the judgements of susceptibility and value, overall sensitivity of receptors on this route within the Study area is judged to be **high**.

Appendix 7.5 Visual Baseline

# **Residential Properties**

- A7.5.25 The approach to the assessment of potential effects of the KTR Project on the views and visual amenity of the residential receptors at the residential properties is outlined in **Appendix 7.1: LVIA Assessment** Methodology.
- A7.5.26 All residential properties located within 500m of the KTR Project are shown on Figure 7.12.1 to Figure 7.12.27.
- A7.5.27 **Table A7.5.60** provides a summary of the number of residential properties located within 150m and between 150m>500m of the KTR Project. Overall, approximately 25% fewer properties (171 compared with 226) are located within 500m of the proposed KTR Project connections. Approximately 55% fewer properties are located within 150m of the proposed KTR Project connections (36 compared with 80). whilst approximately 13% fewer properties are located within 150m>500m (135 compared with 146) of the proposed KTR Project connections.

Table A7.5.60: Proximity of Residential Properties to Existing and Proposed Infrastructure

Proximity of Residential Properties to Existing and Proposed Infrastruc	ture										
Existing Infrastructure (N Route and R Route (north and south))											
Properties within 150mof existing infrastructure	80 residential properties										
Properties within between 150m>500mof existing infrastructure	146 residential properties										
Total	226 residential properties										
Proposed Infrastructure (P-G via K, C-K, E-G, BG Deviation and G-T)											
Properties within 150mof proposed infrastructure	36 residential properties										
Properties within 150mof proposed infrastructure Properties within between 150m>500mof proposed infrastructure	36 residential properties 135 residential properties										

- A7.5.28 Individual residential properties were mapped using OS AddressBase Plus® data, and a 150m radius 'trigger for consideration zone' applied to each property. The general location of properties, including for example multiple residences within converted agricultural buildings or similar, was verified in the field and the data set updated accordingly.
- A7.5.29 Table A7.5.61 below provides details of all residential properties located within 150m of the existing N Route and R Route (north and south) and the proposed KTR Project connections (P-G via K, C-K, E-G, BG Deviation and G-T)<sup>8</sup>, and considered in the assessment of visual effects. In addition, properties located beyond the 150m distance of the relevant part of the KTR Project (typically between 150-200m) were considered, and a number of these properties which afford potential open views towards the existing and/or proposed connections were included in the assessment reported in **Chapter 7**. The locations of these properties are shown on Figure 7.12.1 to Figure 7.12.27.
- A7.5.30 An assessment of potential changes in the view from each property has been undertaken, however where appropriate some properties may have been grouped, where similar views may be experienced from a number of properties located in particularly close proximity to one another.
- A7.5.31 As outlined in Landscape Institute Guidance (para 4.23)<sup>9</sup> residential receptors (people) are considered to be of high susceptibility to changes in views from their places of residence (property, curtilage, and access). An appreciation of the surrounding views is often material to the quality of life from residential properties; therefore, the value of these views is typically considered to be high. However, this may vary and is determined in relation to the availability and nature of existing views, including the presence of other existing transmission infrastructure (such as N Route and R Route (north and south)), or other infrastructure in views. Taking account of the susceptibility of receptors and the value of views from properties, the overall sensitivity of residential receptors is typically judged to be **high**.

<sup>9</sup> Residential Visual Amenity Assessment (RVAA) Technical Guidance Note 2/19 (February 2019) Landscape Institute

Appendix 7.5 Visual Baseline

<sup>&</sup>lt;sup>8</sup> Distances calculated from the centre line of the proposed overhead line connection, therefore distances to individual towers or wood poles may be greater than 150min some instances.

The Kendoon to Tongland 132kV Reinforcement Project

Reside	Residential Properties within approximately 150m of Existing or Proposed Infrastructure												
LUC Ref. No. <sup>10</sup>	Property Name	Grid Reference (NGR)		Within 150m of proposed KTR Project	Within 150m of existing N Route or R Route	Approx. Distance to nearest proposed KTR Project Connection (m) <sup>11</sup>	Nearest KTR Project Connection	Approx. Distance to N Route or R Route (m) <sup>11</sup>	Other KTR Project Connections within 150m	Part of the KTR Project considered in the context of the potential Visual Effects	Susceptibility of Receptor	Value of View	Overall Sensitivity
Р5	Dalshangan Wood, North	259505	588898	No	N Route	380m	P-G via K	119m	n/a	P-G via K, removal of N Route	High	High	High
P6	Dalshangan Lodge	259514	588871	No	N Route	384m	P-G via K	114m	n/a	P-G via K, removal of N Route	High	High	High
P7	Karnak	259577	588727	No	N Route	406m	P-G via K	100m	n/a	P-G via K, removal of N Route	High	High	High
P8	Hawkrigg	259716	588492	No	N Route	445m	P-G via K	113m	n/a	P-G via K, removal of N Route	High	High	High
Р9	Polmaddie Farm	259906	588076	No	N Route	462m	P-G via K	82m	n/a	P-G via K, removal of N Route	High	High	High
P10	Deughside	259775	588007	No	N Route	315m	P-G via K	66m	n/a	P-G via K, removal of N Route	High	High	High
P11	The Cabin	259742	588001	No	N Route	282m	P-G via K	98m	n/a	P-G via K, removal of N Route	High	High	High
P12	8, Dundeugh	259948	588003	No	N Route	463m	P-G via K	85m	n/a	P-G via K, removal of N Route	High	High	High
P13	7, Dundeugh	259940	588000	No	N Route	454m	P-G via K	76m	n/a	P-G via K, removal of N Route	High	High	High
P14	9, Dundeugh	259961	587995	No	N Route	469m	P-G via K	92m	n/a	P-G via K, removal of N Route	High	High	High
P15	10, Dundeugh	259966	587987	No	N Route	469m	P-G via K	93m	n/a	P-G via K, removal of N Route	High	High	High
P16	6, Dundeugh	259936	587980	No	N Route	440m	P-G via K	63m	n/a	P-G via K, removal of N Route	High	High	High
P17	5, Dundeugh	259940	587971	No	N Route	439m	P-G via K	62m	n/a	P-G via K, removal of N Route	High	High	High
P18	11, Dundeugh	259976	587965	No	N Route	466m	P-G via K	91m	n/a	P-G via K, removal of N Route	High	High	High
P19	12, Dundeugh	259981	587958	No	N Route	467m	P-G via K	92m	n/a	P-G via K, removal of N Route	High	High	High
P20	4, Dundeugh	259947	587949	No	N Route	433m	P-G via K	58m	n/a	P-G via K, removal of N Route	High	High	High
P21	3, Dundeugh	259951	587943	No	N Route	433m	P-G via K	59m	n/a	P-G via K, removal of N Route	High	High	High
P22	13, Dundeugh	259991	587937	No	N Route	464m	P-G via K	91m	n/a	P-G via K, removal of N Route	High	High	High
P23	14, Dundeugh	259994	587930	No	N Route	463m	P-G via K	91m	n/a	P-G via K, removal of N Route	High	High	High
P24	2, Dundeugh	259968	587925	No	N Route	438m	P-G via K	65m	n/a	P-G via K, removal of N Route	High	High	High
P25	1, Dundeugh	259971	587917	No	N Route	436m	P-G via K	64m	n/a	P-G via K, removal of N Route	High	High	High
P26	Knockback	259779	587798	No	No	221m	P-G via K	161m	n/a	P-G via K, removal of N Route	High	High	High
P27	Ridgeway, Dalry	259820	587701	No	No	183m	P-G via K	169m	n/a	P-G via K, removal of N Route	High	High	High
P28	Phail Barcris, Dalry	259908	587642	No	N Route	188m	P-G via K	118m	n/a	P-G via K, removal of N Route	High	High	High
P30	Benavean, Kendoon	260588		Yes	R Route (north)	54m	C-K	36m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P31	Stonebyres, Kendoon	260487	587623	Yes	R Route (north)	6m	C-K	5m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P32	Nairn, Kendoon	260538	587635	Yes	R Route (north)	13m	C-K	13m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P33	Struan, Kendoon	260530	587617	Yes	R Route (north)	24m	C-K	23m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P34	Birnam, Kendoon	260510	587596	Yes	R Route (north)	29m	C-K	29m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P35	Kinross, Kendoon	260512	587584	Yes	R Route (north)	40m	C-K	40m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High

# Table A7.5.61: Residential Properties within approximately 150m of Existing or Proposed Infrastructure

<sup>&</sup>lt;sup>10</sup> All residential properties within 500mof existing or proposed infrastructure numbered consecutively from north (Polquhanity) to south (Tongland) as shown on **Figure 7.12.1-27** 

<sup>&</sup>lt;sup>11</sup> Distance between property and the nearest component of the KTR Project

The Kendoon to Tongland 132kV Reinforcement Project

Resid	ential Properties within a	pproximat	tely 150m	of Existing	or Proposed Infrastr	ucture							
P36	Strathmore, Kendoon	260528	587563	Yes	R Route (north)	67m	C-K	66m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P37	Dunkeld, Kendoon	260543	587559	Yes	R Route (north)	79m	C-K	78m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P38	Brander, Kendoon	260569	587570	Yes	R Route (north)	84m	C-K	84m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P39	Katrine, Kendoon	260583	587581	Yes	R Route (north)	83m	C-K	83m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P40	Lochy, Kendoon	260591	587599	Yes	R Route (north)	75m	C-K	73m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P41	Clunie, Kendoon	260588	587618	Yes	R Route (north)	61m	C-K	56m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P42	Treig, Kendoon	260571	587637	Yes	R Route (north)	38m	C-K	30m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P43	Affric, Kendoon	260559	587642	Yes	R Route (north)	25m	C-K	19m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P44	Stroangassel Farm	260374	586749	Yes	R Route (north)	124m	C-K	106m	n/a	C-K, removal of R Route (north)	High	High	High
P45	Carsfad Cottage	260467	585456	Yes	R Route (north)	69m	C-K	66m	P-G via K	C-K, P-G via K, removal of R Route (north)	High	High	High
P46	Inverharrow	260503	584209	No	R Route (north)	236m	P-G via K	77m	n/a	Removal of R Route (north)	High	High	High
P53	Staffa	261392	581768	Yes	R Route (north)	136m	E-G	110m	n/a	E-G, removal of R Route (north)	High	High	High
P56	Waterside, Glenlee	261240	580996	No	No	194m	E-G	182m	n/a	P-G via K, E-G, removal of R Route (north)	High	High	High
P57	Carville	260709	580452	Yes	R Route (south)	50m	G-T	65m	B-G Deviation	G-T, BG Deviation, removal of R Route (north)	High	High	High
P58	Dunston	260720	580443	Yes	R Route (south)	62m	G-T	56m	P-G via K, E-G	G-T, P-G via K, E-G, removal of R Route (north)	High	High	High
P59	Tummel	260698	580434	Yes	R Route (south)	42m	G-T	80m	B-G	P-G via K, E-G, removal of R Route (north)	High	High	High
P60	Rannoch	260688	580425	Yes	R Route (north)	38m	G-T	83m	P-G via K, E- G, B-G Deviation	G-T, P-G via K, E-G, B-G Deviation, removal of R Route (north)	High	High	High
P61	Tarbert	260675	580364	Yes	R Route (north)	67m	G-T	134m	B-G Deviation	G-T, B-G Deviation, removal of R Route (north)	High	High	High
P62	Navaar	260668	580348	Yes	R Route (north)	72m	G-T	148m	B-G Deviation	G-T, B-G Deviation, removal of R Route (north)	High	High	High
P63	Maree	260668	580340	Yes	No	77m	G-T	155m	B-G Deviation	G-T, B-G Deviation, removal of R Route (north)	High	High	High
P64	Orrin	260662	580314	Yes	No	90m	G-T	180m	B-G Deviation	G-T, B-G Deviation, removal of R Route (north)	High	High	High
P65	Garry	260661	580305	Yes	No	95m	G-T	189m	B-G Deviation	G-T, B-G Deviation, removal of R Route (north)	High	High	High
P76	Glenlee Kennels	260709	579842	No	No	389m	G-T	618m	n/a	G-T	High	High	High
P77	Airie Cottage	261053	578546	No	No	250m	G-T	1832m	n/a	G-T	High	High	High
P79	Darsalloch	260788	577021	No	No	400m	G-T	3380m	n/a	G-T	High	High	High
P82	Boatknowe	262297	580172	No	R Route (south)	1499m	G-T	20m	n/a	Removal of R Route (south)	High	High	High
P83	Grennan Farm	263477	579866	No	R Route (south)	2685m	G-T	121m	n/a	Removal of R Route (south)	High	High	High
P84	Grennan Cottage	263524	579884	No	R Route (south)	2720m	G-T	95m	n/a	Removal of R Route (south)	High	High	High
P85	Dairy Cottage, Grennan Farm	263510	579847	No	R Route (south)	2722m	G-T	134m	n/a	Removal of R Route (south)	High	High	High
P86	Mallard Cottage	263814	579747	No	R Route (south)	3041m	G-T	3m	n/a	Removal of R Route (south)	High	High	High

Reside	ential Properties within a	pproximat	tely 150m	of Existing or	Proposed Infrastr	ructure							
P87	Plover Cottage	263727	579683	No	R Route (south)	2989m	G-T	103m	n/a	Removal of R Route (south)	High	High	High
P88	Curlew Cottage	263721	579674	No	R Route (south)	2987m	G-T	112m	n/a	Removal of R Route (south)	High	High	High
P89	Garplefoot	264100	579198	No	R Route (south)	3100m	G-T	35m	n/a	Removal of R Route (south)	High	High	High
P91	Old Gateside	264697	578492	No	No	3393m	G-T	284m	n/a	Removal of R Route (south)	High	High	High
P92	Craig View	264703	578460	No	No	3392m	G-T	276m	n/a	Removal of R Route (south)	High	High	High
P106	Killochy Farm	264956	576914	No	R Route (south)	3503m	G-T	141m	n/a	Removal of R Route (south)	High	High	High
P110	Midpark	265823	575581	No	No	4525m	G-T	270m	n/a	Removal of R Route (south)	High	High	High
P111	Roanbank	265937	575358	No	No	4398m	G-T	312m	n/a	Removal of R Route (south)	High	High	High
P112	Mosscroft	265804	575008	No	R Route (south)	4000m	G-T	75m	n/a	Removal of R Route (south)	High	High	High
P114	Ken Tor	266213	573791	No	R Route (south)	3230m	G-T	18m	n/a	Removal of R Route (south)	High	High	High
P115	Nether Ervie Farm	267358	572756	No	R Route (south)	3216m	G-T	78m	n/a	Removal of R Route (south)	High	High	High
P116	Nether Ervie Cottage	267370	572741	No	R Route (south)	3215m	G-T	83m	n/a	Removal of R Route (south)	High	High	High
P129	Barbershall	272160	569135	No	R Route (south)	7010m	G-T	77m	n/a	Removal of R Route (south)	High	High	High
P131	Cogarth Cottage	272284	568817	No	R Route (south)	7162m	G-T	126m	n/a	Removal of R Route (south)	High	High	High
P132	Cogarth	272288	568757	No	R Route (south)	7120m	G-T	128m	n/a	Removal of R Route (south)	High	High	High
P133	Waterside	272258	567749	No	No	6361m	G-T	239m	n/a	Removal of R Route (south)	High	High	High
P136	Auchenhay	271298	565772	No	R Route (south)	4321m	G-T	105m	n/a	Removal of R Route (south)	High	High	High
P138	Drumlane Cottage	270796	564217	No	No	2974m	G-T	243m	n/a	Removal of R Route (south)	High	High	High
P139	Drumlane House	270706	564140	No	No	2856m	G-T	322m	n/a	Removal of R Route (south)	High	High	High
P140	Drumlane Farm	270893	564107	No	R Route (south)	2984m	G-T	132m	n/a	Removal of R Route (south)	High	High	High
P141	Cot Cottage	266570	563353	No	No	432m	G-T	4317m	n/a	G-T	High	High	High
P142	Neuk Farm	270841	563217	No	R Route (south)	2320m	G-T	66m	n/a	Removal of R Route (south)	High	High	High
P143	Glentoo Cottage	270825	562093	No	R Route (south)	1447m	G-T	67m	n/a	Removal of R Route (south)	High	High	High
P143a	Bluebell Cottage	270893	562147	Yes	R Route (south)	1543m	G-T	128m	n/a	Removal of R Route (south)	High	High	High
P144	Glentoo Farm	270637	562015	No	R Route (south)	1254m	G-T	111m	n/a	Removal of R Route (south)	High	High	High
P167	Upper Balannan Farm	270169	559181	No	No	229m	G-T	162m	n/a	G-T, removal of R Route (south)	High	High	High
P170	North Cottage, Upper Balannan	270170	558980	No	R Route (south)	208m	G-T	127m	n/a	G-T, removal of R Route (south)	High	High	High
P171	Upper Balannan Cottages	270163	558962	No	R Route (south)	207m	G-T	131m	n/a	G-T, removal of R Route (south)	High	High	High
P172	South Cottage, Upper Balannan	270161	558960	No	R Route (south)	207m	G-T	133m	n/a	G-T, removal of R Route (south)	High	High	High
P173	Woodlands	269769	556712	Yes	R Route (south)	97m	G-T	143m	n/a	G-T, removal of R Route (south)	High	High	High
P174	Dalriada	270071	556640	No	No	213m	G-T	167m	n/a	G-T, removal of R Route (south)	High	High	High
P175	Dunaverty	270032	556635	No	R Route (south)	175m	G-T	129m	n/a	G-T, removal of R Route (south)	High	High	High
P176	The Upper Cottage	269959	556634	Yes	R Route (south)	104m	G-T	57m	n/a	G-T, removal of R Route (south)	High	High	High
P177	Dunroamin	270043	556628	No	R Route (south)	187m	G-T	141m	n/a	G-T, removal of R Route (south)	High	High	High
P178	Davaar	270062	556623	No	No	207m	G-T	161m	n/a	G-T, removal of R Route (south)	High	High	High
P179	Lower Cottage	270004	556620	Yes	R Route (south)	150m	G-T	104m	n/a	G-T, removal of R Route (south)	High	High	High
P180	Argrennan Mains Farm	270039	556548	No	No	197m	G-T	197m	n/a	G-T, removal of R Route (south)	High	High	High
P185	Carrick Lodge	269961	555573	No	No	279m	G-T	279m	n/a	G-T, removal of R Route (south)	High	High	High
P186	Cairnsmore Lodge	269950	555546	No	No	273m	G-T	273m	n/a	G-T, removal of R Route (south)	High	High	High
P187	Criffel Chalet	269932	555512	No	No	260m	G-T	260m	n/a	G-T, removal of R Route (south)	High	High	High
P188	Criffel Lodge	269933	555512	No	No	261m	G-T	261m	n/a	G-T, removal of R Route (south)	High	High	High

Reside	ntial Properties within a	pproximat	ely 150m	of Existing or	Proposed Infrastr	ucture							
P189	Hilldrop Lodge	269912	555475	No	No	247m	G-T	247m	n/a	G-T, removal of R Route (south)	High	High	High
P190	Bengairn Lodge	269910	555438	No	No	251m	G-T	251m	n/a	G-T, removal of R Route (south)	High	High	High
P195	High Clachan	269809	555076	No	No	2100m	G-T	210m	n/a	G-T, removal of R Route (south)	High	High	High
P199	Langbarns Cottage	269647	554011	No	No	155m	G-T	155m	n/a	G-T, removal of R Route (south)	High	High	High
P201	Kenmore	269752	553998	No	No	250m	G-T	250m	n/a	G-T, removal of R Route (south)	High	High	High
P207	Barhullion	269632	553982	Yes	No	132m	G-T	15m	n/a	G-T, removal of R Route (south)	High	High	High
P208	Meikleyett	269605	553982	Yes	R Route (south)	106m	G-T	128m	n/a	G-T, removal of R Route (south)	High	High	High
P216	Barwood	269636	553945	Yes	No	123m	G-T	159m	n/a	G-T, removal of R Route (south)	High	High	High
P220	Comhla	269623	553918	Yes	R Route (south)	105m	G-T	146m	n/a	G-T, removal of R Route (south)	High	High	High
P221	Meikleyett House	269595	553880	Yes	R Route (south)	79m	G-T	118m	n/a	G-T, removal of R Route (south)	High	High	High
P225	Langbarns	269439	553790	Yes	R Route (south)	64m	G-T	39m	n/a	G-T, removal of R Route (south)	High	High	High
P226	Weir House, Langbarns	269418	553735	Yes	R Route (south)	78m	G-T	60m	n/a	G-T, removal of R Route (south)	High	High	High
P236	Lynnbank, Culdoach Road	269632	553687	Yes	No	143m	G-T	153m	n/a	G-T, removal of R Route (south)	High	High	High

Reside	ential Properties situated bet	ween appro	oximately	150m>500m of E	Existing or Propos	sed Infrastructure							
LUC Ref. No. <sup>12</sup>	Property Name	Grid Ref (NGR)	erence	Approx. Distance to nearest proposed KTR Project Connection (m) <sup>13</sup>	Nearest KTR Project Connection	Approx. Distance to N Route or R Route (m) <sup>11</sup>	LUC Ref. No.	Property Name	Grid Ref (NGR)	erence	Approx. Distance to nearest proposed KTR Project Connection (m)	Nearest KTR Project Connection	Approx. Distance to Route or R Route (m)
P1	Polquhanity	259153	589748	355m	P-G via K	340m	P72	North Lodge, Glenlee	260908	580231	331m	G-T	199m
P2	Dalshangan Wood, South	259471	589435	378m	P-G via K	346m	P73	Glenlee Garden, Glenlee	260849	580188	314m	G-T	252m
Р3	Dalshangan	259617	589029	462m	P-G via K	279m	P74	Glenlee Park, Glenlee	261021	580120	489m	G-T	288m
P4	Dalshangan Cottage	259613	588982	468m	P-G via K	254m	P75	Stables Cottage, Glenlee	260962	580090	463m	G-T	328m
Р5	Dalshangan Wood, North	259505	588898	380m	P-G via K	119m	P78	Cairnraws	261937	577407	458m	G-T	2677m
P47	Barskeoch Mains	260816	583288	313m	P-G via K	26m	P80	South Lodge, Glenlee	261430	580040	870m	E-G	296m
P48	Milton Park	261584	582418	527m	E-G	487 m	P81	Kirkland Farm	262187	580698	1186m	E-G	480m
P49	1 Allangibbon Cottages	261585	582087	237m	E-G	249m	P90	Balmaclellan House	264785	578729	3543m	G-T	463m
P50	3 Allangibbon Cottages	261585	582084	23m	E-G	247m	P93	Dalarran	264185	578413	2878m	G-T	214m
P51	4 Allangibbon Cottages	261585	582080	232m	E-G	244m	P94	Dalarran Cottage	264122	578407	2816m	G-T	274m
P52	2 Allangibbon Cottages	261585	582076	313m	P-G via K	266m	P95	Dalarran House	264135	578352	2814m	G-T	285m
P54	Kenside Steading	261783	581610	475m	E-G	484m	P96	Dalarran Lodge	264147	578338	2823m	G-T	280m
P55	Riverside	261766	581581	482m	E-G	490m	P97	Dalarran Brae	264236	578315	2903m	G-T	209m
P66	Blackbank	260631	580177	155m	G-T	316m	P98	Hawthorn Dene	264186	578263	2843m	G-T	276m
P67	Mill House, Glenlee	260971	580264	363m	G-T	155m	P99	Black O' The E'E	264274	578274	2931m	G-T	191m
P68	Tower Cottage, Glenlee	260991	580259	383m	G-T	157m	P100	Black O The Eye	264274	578269	2929m	G-T	193m
P69	Chestnut Cottage, Glenlee	260970	580256	366m	G-T	163m	P101	Summerhill	265093	577828	3642m	G-T	366m
P70	Bell Cottage, Glenlee	260957	580245	361m	G-T	177m	P102	Cubbox Farm	264321	577602	2850m	G-T	430m
P71	Dairy Cottage, Glenlee	260974	580244	376m	G-T	175m	P103	Cubbox Bungalow	264321	577550	2846m	G-T	451m

 $<sup>^{12}</sup>$  All residential properties within 500mof existing or proposed infrastructure numbered consecutively from north (Polquhanity) to south (Tongland) as shown on **Figure 7.12.1-27**  $^{13}$  Distance between property and the nearest component of the KTR Project

The Kendoon to Tongland 132kV Reinforcement Project

Reside	ential Properties situated betw	een appro	oximately	150m>500m of E	existing or Propose	d Infrastructure							
P104	Mavis Grove	264377	577313	2896m	G-T	499m	P166	Barncrosh Cottage	270922	559249	367m	G-T	568m
P105	Killochy Cottages	264584	577215	3106m	G-T	352m	P168	Tom's House	270845	559121	349m	G-T	514m
P107	Barnwalls	265760	576230	4425m	G-T	406m	P181	Park of Tongland	270241	556026	481m	G-T	436m
P108	Craigend	264868	576229	3570m	G-T	446m	P182	Park of Tongland Dairy Cottage	270147	556011	391m	G-T	346m
P109	Kenview	265048	575534	3816m	G-T	483m	P183	Park of Tongland Cottages	270179	555664	479m	G-T	435m
P113	Shirmers	265659	574263	3324m	G-T	346m	P184	Park of Tongland Cottages	270175	555657	476m	G-T	432m
P117	2 Little Drumrash	267659	572165	3122m	G-T	391m	P185	Carrick Lodge	269961	555573	279m	G-T	235m
P118	1 Little Drumrash	267637	572161	3101m	G-T	407m	P191	Doon Cottage	270109	555334	464m	G-T	421m
P119	Craigmore	269681	571942	4842m	G-T	488m	P192	Parklea	270111	555322	468m	G-T	425m
P120	New Boghall	269069	571382	4082m	G-T	300m	P193	Low Clachan	270068	555111	460m	G-T	417m
P121	Old Boghall	269101	571382	4112m	G-T	285m	P194	Clachan Cottage	270026	555099	421m	G-T	378m
P122	Fominoch Cottage	269445	571275	4416m	G-T	208m	P196	Ellerslie	269780	554102	311m	G-T	300m
P123	Laundry Cottage, Barwhillanty	271705	570303	6519m	G-T	501m	P197	Pinehurst	269880	554065	393m	G-T	404m
P124	Parton House Gardens	271008	569753	5815m	G-T	386m	P198	Gordon Lea	269652	554035	168m	G-T	176m
P125	Courtyard Cottage, Parton House	271165	569636	5977m	G-T	344m	P199	Langbarns Cottage	269647	554011	155m	G-T	171m
P126	Stables Cottage	271139	569631	5951m	G-T	367m	P200	Lennox Cottage	269789	554008	289m	G-T	313m
P127	Tilly	272204	569724	7011m	G-T	496m	P201	Kenmore	269752	553998	250m	G-T	276m
P128	Peathill	272192	569689	7000m	G-T	464m	P202	Schiehallion	269691	553995	192m	G-T	215m
P130	Parton Mill	271861	569002	6731m	G-T	237m	P203	Shandon	269736	553993	234m	G-T	260m
P134	Livingston House	271470	567670	5767m	G-T	377m	P204	Rose Cottage	269794	553990	288m	G-T	318m
P135	Livingston Cottage	271351	567606	5639m	G-T	442m	P205	Riverside Cottage North	269904	553986	393m	G-T	428m
P145	Barnboard Mill Cottage	271143	561978	1612m	G-T	396m	P206	Dee View	269842	553982	332m	G-T	365m
P146	Barnboard Mill	271162	561971	1622m	G-T	416m	P207	Barhullion	269632	553982	132m	G-T	155m
P147	3 Dunjop Cottages	271017	560795	741m	G-T	411m	P208	Meikleyett	269605	553982	106m	G-T	128m
P148	2 Dunjop Cottages	271015	560787	735m	G-T	410m	P209	Morar	269724	553981	218m	GT	247m
P149	1 Dunjop Cottages	271010	560765	717 m	G-T	408m	P210	Riverside Cottage South	269903	553978	391m	GT	426m
P150	Dunjop Brae	271069	560734	741m	G-T	470m	P211	Tongland Hall	269663	553971	157m	GT	186m
P151	Dunjop Nursing Home	271064	560638	674m	G-T	477m	P212	New House	269763	553968	252m	GT	286m
P152	The Motte	271025	560499	555m	G-T	461m	P213	Glebe Cottage	269827	553959	313m	GT	350m
P153	Culcrae	269738	560537	394m	G-T	815m	P214	Monks Walk	269865	553955	350m	GT	388m
P154	Crumquhill Farm	269928	559622	650m	G-T	474m	P215	Fernilee	269703	553952	190m	GT	226m
P155	Crumquhill Cottage	269942	559418	596m	G-T	426m	P217	Clynelish	269691	553939	175m	GT	214m
P156	Dairy Cottage	270907	559341	331m	G-T	538m	P218	Riverside Mill	269883	553936	365m	GT	406m
P157	The Stable	270911	559284	346m	G-T	551m	P219	Turnstone	269679	553922	161m	GT	202m
P158	Corn Mill	270899	559280	335m	G-T	540m	P222	Mansewood Cottage	269709	553876	193m	GT	232m
P159	The Byre	270923	559262	364m	G-T	567m	P223	Fannich, Culdoach Road	269922	553862	406m	GT	445m
P160	The Bullpen	270921	559257	364m	G-T	566m	P224	Mansewood	269722	553860	208m	GT	245m
P161	Calf House	270894	559256	336m	G-T	539m	P227	8 Culdoach Road	269930	553718	432m	GT	452m
P162	The Granary	270903	559255	345m	G-T	548m	P228	7 Culdoach Road	269924	553710	427m	GT	446m
P163	The Barn	270904	559254	345m	G-T	549m	P229	6 Culdoach Road	269913	553701	418m	GT	435m
P164	The Loft	270921	559253	365m	G-T	566m	P230	5 Culdoach Road	269904	553697	409m	GT	426m
P165	The Bothy	270916	559252	365m	G-T	562m	P231	4 Culdoach Road	269895	553693	401m	GT	416m

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Reside	ential Properties situated betw	een appro	ximately	150m>500m of E	xisting or Propos	ed Infrastructure
P232	3 Culdoach Road	269884	553690	390m	GT	405m
P233	Barrachan, Culdoach Road	269865	553689	372m	GT	386m
P234	1 Culdoach Road	269864	553689	371m	GT	385m
P235	2 Culdoach Road	269868	553689	375m	GT	389m
P237	The Smithy, Culdoach Road	269838	553658	350m	GT	359m
P238	High Boreland Cottage, Culdoach Road	269825	553571	366m	GT	360m
P239	Rivermeade, Culdoach Road	269797	553540	356m	GT	343m
P240	Ashton	269377	553538	225m	GT	166m
P241	Rambler Cottage, Culdoach Road	269793	553533	357m	GT	343m
P242	Herons Way	269292	553484	319m	GT	263m
P243	Carseholm, Culdoach Road	269714	553471	339m	GT	308m
P244	Bridge Cottage	269173	553432	439m	GT	387m
P245	Dee Cottage	269218	553420	416m	GT	361m
P246	High Boreland	269774	553280	529m	GT	488m
P247	The Croft	270953	559293	384m	GT	591m
P248	Bengairn	270945	559266	384m	GT	588m
P249	Screel Cottage	270942	559251	385m	GT	587m
P250	The Farmhouse	270934	559203	396m	GT	588m
P251	The Dovecote	270936	559249	381m	GT	582m

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