

## 8 Landscape

### 8.1 Introduction

8.1.1 This chapter sets out the Landscape and Visual Impact Assessment (LVIA) of the proposed scheme which consists of junction improvements on the A90 at Laurencekirk, Aberdeenshire. The option being taken forward, from Stage 2, is Option 1A; a grade separated junction (dumb-bell layout) at the southern junction on the A90.

8.1.2 At Stage 3, the objective is to assess the landscape and visual effects of the preferred option; going forward to be referred to as the proposed scheme or proposed development. This will include refining the earlier LVIA and taking into account any changes since the Stage 2 LVIA.

8.1.3 The Stage 3 LVIA will identify, in more detail, the potential effects arising during construction and operation of the proposed scheme. It also describes proposed mitigation, over and above that which forms primary mitigation measures that have been developed through the iterative design process and the standard construction and operational management practices for avoiding and reducing environmental effects. These secondary mitigation measures are those that are not inherent within the final design proposals but are considered in relation to the assessment as a means to minimise or reduce any significant adverse effects of the proposed scheme, on landscape and visual receptors.

8.1.4 Landscape is defined by the European Landscape Convention as: *"...an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors."* (Ref 8.1).

8.1.5 Landscape receptors include:

- Designated landscapes (national and local level);
- Landscape character; and
- Landscape fabric i.e. physical features of landscape such as agricultural land, trees, hedges and walls.

8.1.6 Visual receptors i.e. people; categorised depending upon the activity they are involved in and include:

- Residents of private dwellings;
- People using footpaths, cycle paths or exercising their right to roam;
- People using local visitor attractions;
- Motorists using the local road network; and

- People at their place of work, including people who work in the landscape (e.g. farmers, activity groups, tour guides).
- 8.1.7 The proposed scheme has the potential to affect landscape and visual receptors in the following ways:
- Alteration or removal of physical features of landscape that alters landscape character and quality and/or alters views;
  - Introduction of new features and elements that alter landscape character and quality;
  - Changes to the composition and scenic quality of views experienced by visual receptors;
  - Introduces lighting into a currently 'dark' landscape; and/or
  - Traffic movement becomes more visible within the landscape and over a greater distance.
- 8.1.8 Landscape and visual assessments are related, but separate matters and as such are assessed separately in this LVIA using the methodology described in Section 8.3 Methodology.
- 8.1.9 The purpose of the LVIA chapter is to assess the potential effects of the proposed scheme on the landscape and visual receptors listed in Section 8.4 Baseline conditions, in an objective and systematic manner. It also describes how the LVIA has informed design of the scheme and how it has drawn upon other technical studies such as Cultural Heritage (Chapter 7) and Nature Conservation and Biodiversity (Chapter 10) to inform the assessment of effects.
- 8.1.10 This LVIA has been undertaken by Chartered Landscape Architects in accordance with current guidance. LA 107 Landscape and visual effects (Ref 8.2) and LA 104 Environmental assessment and monitoring (Ref 8.3) published by Highways England in September and July 2019 respectively. These documents supersede previous environmental assessment guidance published by Highways England, DMRB Volume 11, Part 5 Landscape Effects (Ref 8.4) and IAN 135/10 Landscape and visual effects assessment (Ref 8.5) which are now withdrawn. LA 107 guides the assessment of the baseline through to determining the magnitude of effect for landscape and visual receptors. LA 104 then guides the assessment to determining the significance of effect for both the landscape and visual receptors. Selection of visual receptors and presentation of field work for use in the assessment which has been turned into visualisations is guided by The Guidelines for Landscape and Visual Assessment (GLVIA3) (Ref 8.6) and Technical Guidance Note 06/19 (Ref 8.7).
- 8.1.11 The new guidelines have been published by Highways England to make them more concise and clearer to use allowing specialists less room for interpretation which will bring assessments into line with each other with well-defined consistent language used throughout. Sensitivities

have additional categories of very high and negligible allowing the assessment to define both landscape and viewer sensitivities in more detail which then go on to influence the magnitude of effects. The new guidelines do not advise on recommendations for creating a Zone of Theoretical Visibility (ZTV) plan therefore IAN 135/10 (Ref 8.5) is still used as a reference point.

## 8.2 Policy and Legislative Background

### European Landscape Convention

- 8.2.1 The UK Government is a signatory to the European Landscape Convention (ELC) which aspires to enhance and maintain the quality and condition of all landscapes not just those afforded policy protection by local or national designation. The ELC requires "...landscape to be integrated into regional and town planning policies and in cultural, environmental, agricultural, social and economic policies, as well as any other policies with possible direct or indirect impacts on landscape." (Ref 8.1)

### *Scotland's Third National Planning Framework (3)*

- 8.2.2 Scotland's Third National Planning Framework 3 (NPF3) (Ref 8.12) sets out the Scottish Government's strategy to deliver sustainable economic growth in Scotland through the planning system. As part of policy, it identifies the importance of the natural environment to the well-being and economic prospects of residents and visitors to Scotland. NPF3 identifies the following aspirations for landscape:

- "Landscape quality is found across Scotland and all landscapes support place making";
- "Closer to settlements landscapes have an important role to play in sustaining local distinctiveness and cultural identity, and in supporting health and well-being" and
- "We need to manage change on the urban edge and work to improve productivity and the quality of the landscape setting of our towns and cities".

- 8.2.3 NPF3 also identifies a number of key priorities for Scotland's transport network which aim to stimulate economic growth, improve connectivity of rural communities and make travel on the network safer.

### Transport Scotland: Fitting Landscapes

- 8.2.4 Fitting Landscapes (Ref 8.13) is the Scottish Government's policy statement addressing the landscape design and management of Scotland's transport corridors. It states that in addition to being designed and managed to meet their functional objectives as transport corridors it is important they are designed to "...fit with the landscape through which they pass – reflecting local distinctiveness, conserving and enhancing areas of high quality or, where appropriate, creating a positive contrast to the natural setting."

- 8.2.5 Fitting Landscapes also recognises the importance of transport corridors as one of the main ways by which many people experience the landscape and that “...it is vital that this experience is recognised, supported and enhanced by sensitive and appropriate design and management practices.”

#### **Scottish Planning Policy**

- 8.2.6 Scottish Planning Policy (SPP) (Ref 8.14) sets out how the Scottish Government expects the planning system to be delivered throughout Scotland by local planning authorities. Of the policy principles identified in SPP relating to the natural environment the following are of most relevance to the proposed scheme:
- “Facilitate positive change while maintaining and enhancing landscape character; and
  - “Protect and enhance ancient semi-natural woodland as an important and irreplaceable resource, together with other native or long-established woodlands, hedgerows and individual trees with high nature conservation or landscape value.”

#### **Scottish Natural Heritage’s Landscape Policy Framework**

- 8.2.7 Scottish Natural Heritage (SNH) advises the Scottish Government on the natural heritage including protection and management of designated areas and by statutory consultation on EIA development such as the proposed scheme. The Landscape Policy Framework at the time of writing this LVIA is currently being reviewed, however it sets out SNH’s remit for landscape and states that SNH works for the benefit of all Scotland’s landscapes by supporting the work of local authorities. The Landscape Policy Framework emphasises that all landscapes are important and the importance of design in managing change and ensuring sustainable long-term use of landscape.
- 8.2.8 Between 1994 and 1999, Scottish Natural Heritage commissioned, in partnership with others, a series of 30 regional Landscape Character Assessment (LCA) studies.
- 8.2.9 LCA analyses in detail the three main physical landscape components of:
- landform (e.g. hills, straths, glens) – such as, are hills rounded or angular?
  - land cover (e.g. rivers, lochs, woodland, farmland) – such as, what is the dominant type and pattern of woodland?
  - settlement (e.g. towns, villages, farmsteads) – such as, what is the pattern of settlement?
  - It then looks at how all these combine to form the landscapes we see and experience. Areas with similar patterns of components are mapped together as a particular Landscape Character Type (LCT). (Ref 8.15)

- 8.2.10 LCAs identify and map the landscape character of all of Scotland (mostly at a scale of 1:50,000). In 2019 the LCA boundaries and definitions were reviewed and updated to be called Landscape Character Types (LCT), however the spirit of landscape character assessments is unchanged and still has the same values and established language for identification of landscape types.
- 8.2.11 Each LCT typically covers a local authority area and provides the landscape foundation for natural heritage, planning policymaking and strategy development for environmental resources. The studies have been used widely in the development planning system and also provide valuable reference information for landscape assessment. LCTs pertinent to the proposed development site shall be discussed in section 8.4 Baseline Conditions.
- 8.2.12 LCTs are digitally mapped on the SNHs interactive web site. (Ref 8.16) LCTs applicable to the study area are:
- o 22 Broad Valley Lowlands – Aberdeenshire; and (Ref 8.9)
  - o 24 Coastal Farmed Ridges and Hills – Aberdeenshire (Ref 8.10).

#### **Aberdeen City and Shire Strategic Development Plan 2018**

- 8.2.13 Aberdeen to Laurencekirk is one of four Strategic Growth Areas identified. Improvements to the A90 have specifically been mentioned in the Strategic Development Plan: “The City Region Deal’s Strategic Transport Appraisal will consider the need for enhancements along the A90 to improve safety, reduce journey times and increase resilience and competitiveness through greater connectivity. Towards the southern end of this Strategic Growth Area, the Scottish Government has already committed to provide £24 million for the design and construction of a new grade-separated junction at Laurencekirk.” (Ref 8.17, para 3.40)

#### **Aberdeenshire Local Development Plan 2017**

- 8.2.14 Aberdeenshire Council adopted the Aberdeenshire Local Development Plan 2017 (LDP) on 17 April 2017 (Ref 8.18) which is derived from the Aberdeen City and Shire Strategic Development Plan. It sets out the land use strategy for the county of Aberdeenshire and the policies against which proposed development or consultations on development will be determined. The LDP is the tool for implementing strategies in the Aberdeen City and Shire Strategic Development Plan. It has identified that the junction to the south of Laurencekirk has not been resolved and is impacting development in surrounding villages. The policies listed below are those that are relevant to this LVIA.
- 8.2.15 E1 Natural Heritage is concerned with permissions being granted on sites where nature conservation has been identified. It states: “We will not allow new development where it may have an adverse effect on a nature conservation site designated for its biodiversity or geodiversity importance, except where the following circumstances apply.” It further states “For

nationally designated sites a thorough assessment must demonstrate that the objectives of designation and the overall integrity of the site will not be compromised, or that any significant adverse effects on the qualities for which the site has been designated are clearly outweighed by social, environmental or economic benefits of national importance. In all cases, any impacts must be suitably mitigated.” (Ref 8.18)

8.2.16 Policy PR1 Protecting important resources is applicable. The LDP states “We will not approve developments that have a negative effect on important environmental resources associated with the water environment, important mineral deposits, prime agricultural land, peat and other carbon rich soils, open space, and important trees and woodland. In all cases development which impacts on any of these features will only be permitted when public economic or social benefits clearly outweigh the value of the site to the local community, and there are no reasonable alternative sites.” Aberdeenshire Supplementary Guidance

8.2.17 Aberdeenshire Council have addressed a number of issues to offer additional guidance, including the Aberdeenshire Forestry and Woodland Strategy (Ref 8.23) which offers more detail to policies, i.e. Policy PR1 Protecting important resources. It has noted that Aberdeenshire Council have identified the proposed development area as being Ancient Woodland, however in reality this is not the case as there is no woodland within the proposed development site. Further ancient woodlands are potentially within the proposed Development site therefore this additional guidance is noted. At the time of assessment is not clear if a small part of Ancient Woodland will be affected by the proposed Development.

#### **Planning Advice: Landscaping Design Guidance**

8.2.18 Aberdeenshire Council publishes Planning Advice documents which have the status of Supplementary Guidance. Planning Advice: Number 13 2015 Landscaping Design Guidance (Ref 8.19) describes the process and principles that should be adopted in new development of all types. It states that a quality landscape scheme should:

- “Aid development to fit positively into its landscape setting;
- Promote and enhance biodiversity at an individual development site level;
- Enhance the overall appearance of new development of all types; and
- Add value to the development.”

#### **Planning Advice: Trees and Development**

8.2.19 Planning authorities have a duty to ensure that the amenity value of trees is not harmed where there is the potential for trees to be affected by development. Planning Advice: Number 11/2015 Trees and Development (Ref 8.20) sets out how developers should take into account existing

trees on development sites and the information that should be provided to inform decisions on planning applications where trees are present.

## 8.3 Methodology

### Introduction

8.3.1 This LVIA has been undertaken by Chartered Landscape Architects experienced in LVIA of transport infrastructure, in accordance with current good practice industry guidance (as set out in 8.1.10) and other sources of information including:

- Landscape Character Assessment: Guidance for Scotland and England (Ref 8.8);
- Landscape Character Assessments by Scottish Natural Heritage (Ref 8.9 & 8.10) and
- Aberdeenshire Council Local Landscape Designation Review (Ref 8.11);
- Ordnance Survey Mapping at 1:50,000, 1:25,000 and 1:10,000; and
- Aerial photography.

8.3.2 The purpose of LVIA is twofold:

- It provides an objective and systematic approach to the assessment and description of potential impacts of the proposed scheme on landscape and visual resources; and
- It informs design and mitigation of the proposed scheme through iterations of layout and design with the aim of avoiding or reducing potential impacts.

8.3.3 The LVIA has involved the following activities:

- A desk-based baseline study including review of the policy, guidance and information sources identified above and review of engineering design drawings;
- Preparation of a ZTV to identify landscape and visual receptors likely to be affected by the proposed scheme, identification of an appropriate study area and identification of key viewpoints to be used in the assessment and description of effects;
- Baseline assessment fieldwork to augment the desk-based baseline study, verify the study area and receptors to be assessed, undertake photography of the site, the surrounding area and key viewpoints;
- Undertake an assessment of the proposed scheme and set out any required mitigation measures; and
- Preparation of the LVIA Environmental Impact Assessment Report (EIAR) Chapter, drawings and visualisations.



8.3.4 LVIA is an iterative non-linear process. For it to be a successful design tool it involves iterations of survey, analysis and design to inform the overall design process at different stages of the proposed scheme design.

8.3.5 The Stage 3 LVIA will expand on the results of the Stage 2 assessment. To ensure consistency the same landscape and visual receptors will be assessed but will principally focus on those receptors which Stage 2 highlighted as having Significant Adverse Effects.

### **Defining the study area**

8.3.6 A key principle of current practice is that LVIA should be proportionate to the likely effects of the proposed development being assessed. The study area shown in **Figure 8.1** has been defined through an understanding of the scale and size of the proposed scheme, the geographical extent of potential effects and the analysis of potential effects, as identified at Stage 2 and confirmed at Stage 3.

8.3.7 The ZTV map shown in **Figure 8.2** indicates potential visibility of the proposed scheme (with screening) based on the height of the overbridge above the existing carriageway plus 4.5m which is the vehicle height recommended by DMRB (Ref 8.7) IAN 135/10 para 2.7 and is considered appropriate to use in this LVIA. These figures also show the study area which extends to 2km from the edge of the proposed scheme. Beyond 2km significant effects are unlikely to occur on landscape and visual receptors due to the relatively small scale, size and height of the proposed scheme within the surrounding landscape.

### **Determining the Baseline**

8.3.8 The desk-based baseline and ZTV analysis, at Stage 2, has been used to identify landscape and visual receptors likely to be affected by the proposed scheme. The desk-based study has included a review of publications including the landscape character assessment covering the study area.

8.3.9 Following desk studies, fieldwork was undertaken to provide additional site focussed baseline information identifying any differences compared to the published landscape character assessment. The baseline fieldwork also involved verifying which visual receptors should be included in the detailed assessment of effects, ground truthing of viewpoints, viewpoint photography and photography of the site and surrounding area.

8.3.10 The fieldwork was undertaken by a Chartered Landscape Architect in May 2019.

8.3.11 The supporting figures of the desk-based baseline and baseline fieldwork are shown in **Figure 8.3** and **Figure 8.4**.



## Assessment method

### Landscape assessment method

#### *Determining sensitivity of landscape receptors*

- 8.3.12 In accordance with LA 107 Landscape Assessment evaluates the nature of receptors likely to be affected (sensitivity), and the nature of effects likely to occur on the landscape (magnitude) to report on a project's likely significant effects.
- 8.3.13 The landscape sensitivity, Table 8-3, is a combination of the susceptibility of the landscape receptor to change from its baseline Table 8-1 and the value attached to the landscape Table 8-2. LA 107 does not prescribe specifically for assessing landscape value and landscape susceptibility, but only for landscape sensitivity.
- 8.3.14 Landscape sensitivity is concluded by amalgamating factors which are considered to be its importance, for example; value, rarity, quality / condition, degree to which it can be protected and its contribution to the landscape character.
- 8.3.15 The landscape's susceptibility to change considers the ability of the landscape receptor to absorb change to its baseline quality and character resulting from the proposed scheme. GLVIA3 advises that the assessment of susceptibility must be tailored to the specific project and should be considered as part of the assessment of effects.
- 8.3.16 Landscape value is determined by landscape character and landscape designations at local, regional, national and international level on the proposed development and study area.

**Table 8-1: Landscape susceptibility criteria**

Evaluation of susceptibility	Description of criterion
Very high	The landscape receptor has very limited or no ability to absorb change resulting from the proposed scheme without harming key qualities and characteristics of the baseline. The proposed scheme will potentially be out of scale with the landscape receptor and key features or elements. The proposed scheme will potentially change the composition and quality of key viewpoints important to an appreciation of landscape character or special qualities. Very few detracting or incongruous elements in the baseline.
High	The landscape receptor has limited ability to absorb change resulting from the proposed scheme without harming key qualities and characteristics of the baseline. Elements of the proposed scheme will potentially be out of scale with the landscape receptor and key features or elements within it. The proposed scheme will potentially affect key viewpoints important to an appreciation of landscape character or special qualities. Few detracting or incongruous elements in the baseline.

Evaluation of susceptibility	Description of criterion
Medium	<p>The landscape receptor can absorb change resulting from the proposed scheme without harming key qualities and characteristics of the baseline.</p> <p>The proposed scheme will potentially fit with the scale of the landscape receptor and key features or elements within it.</p> <p>The proposed scheme will result in a limited influence on key viewpoints important to an appreciation of landscape character or special qualities.</p> <p>Some detracting or incongruous elements in the baseline.</p>
Low	<p>The proposed scheme can be successfully integrated with the landscape receptor with very limited harm.</p> <p>The proposed scheme will not influence key viewpoints important to an appreciation of landscape character or special qualities.</p> <p>Detracting or incongruous elements are characteristic of the baseline.</p>
Negligible / None	<p>The proposed scheme can potentially be absorbed into the landscape without harm.</p> <p>Detracting or incongruous elements are a prominent key characteristic of the baseline.</p>

**Table 8-2: Landscape value criteria**

Evaluation of value	Description of criterion
High	<p>International and national landscape designations and parts of Landscape Character Areas (LCA) lying within such designated landscapes. The LCA contains inventory gardens and designed landscapes, conservation areas and a high number of listed buildings and scheduled monuments. The LCA may also contain National Nature Reserves (NNR), Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC) and Special Protection Areas (SPA) that contribute to landscape character.</p> <p>Contains nationally important landmark features that may include monuments, buildings or other structures.</p>
Medium	<p>Regional or local landscape designations and parts of LCA lying within such designated landscapes. The LCA contains regional or country parks, long distance trails (LDT) and national cycle routes (NCR). The LCA may also contain Local Nature Reserves (LNR), ancient, semi-ancient or natural woodland.</p> <p>Contains regionally or locally important landmark features that may include monuments, buildings or other structures.</p>
Low	<p>Landscape designations, regional and country parks, LDT and NCR are absent or restricted to small areas or limited locations within the LCA. Natural heritage designations have a limited influence on landscape character.</p> <p>Notable views from transport infrastructure.</p> <p>Landmark features are largely absent or have a limited influence on landscape character.</p>
Negligible	<p>The LCA contains a high proportion of dense urban development and industrial / commercial land uses. Transport infrastructure is a notable feature of the landscape although the quality of views from such infrastructure is low.</p>

**Table 8-3: Landscape sensitivity criteria**

Evaluation of sensitivity	Description of criterion
Very high	<p>Landscapes of very high international/national importance and rarity or value with no or very limited ability to accommodate change without substantial loss/gain (i.e. national parks, internationally acclaimed landscapes - UNESCO World Heritage Sites).</p> <p>For Example: The receptor is of very high quality as evidenced by intactness of features and elements across most of the baseline and a high degree of consistency in quality across the area covered by the receptor. Infrastructure and urban development are largely absent. The area is associated with historical events, people or with literature and the arts as evidenced by the prevalence of landmark memorials, statues, important buildings or visitor attractions. The proposed scheme has the potential to affect the balance of features and elements in the landscape resulting in very widespread change.</p>
High	<p>Landscapes of high national importance containing distinctive features/elements with limited ability to accommodate change without incurring substantial loss/gain (i.e. designated areas, areas of strong sense of place - registered parks and gardens, National Parks, Country Parks, National Scenic Areas).</p> <p>For Example: The receptor is of high quality across most of its area although it contains pockets of lower quality with some fragmentation of landscape pattern and deterioration of features and elements of the baseline. Weak influence of infrastructure and urban development. Some association with historical events, people or with literature and the arts as evidenced by landmark memorials, statues, important buildings or visitor attractions. The proposed scheme has the potential to affect the balance of features and elements in the landscape resulting in widespread change.</p>
Medium	<p>Landscapes of local or regional recognition of importance able to accommodate some change (i.e. features worthy of conservation, Special Landscape Areas, some sense of place or value through use/perception).</p> <p>For Example: The receptor is of medium quality across most of its area although it contains pockets of lower quality with some fragmentation of landscape pattern and deterioration of features and elements of the baseline. Some influence from infrastructure and urban development. Some notable landmark buildings, monuments or features that contribute to landscape quality. The proposed scheme has the potential to affect the balance of features and elements in a limited area.</p>
Low	<p>Local landscape areas or receptors of low to medium importance with ability to accommodate change (i.e. non-designated or designated areas of local recognition, Local Landscape Area or areas of little sense of place).</p> <p>For Example: The receptor is of low quality as evidenced by fragmentation of landscape pattern, deterioration of features and elements of the baseline across most of its area or is strongly influenced by infrastructure and urban development. Very few notable landmark buildings, monuments and features that contribute to landscape quality. The proposed scheme has the potential to affect the balance of features and elements in a very localised or limited area.</p>
Very Low	<p>Landscapes of very low importance and rarity able to accommodate change.</p> <p>For Example: The receptor is of very low quality and dominated by infrastructure and urban development. Absence of landmark buildings, monuments and features that contribute to landscape quality. The proposed scheme is unlikely to affect the balance of features and elements.</p>

**Magnitude of effects - Landscape receptors**

- 8.3.17 The magnitude of effect on landscape receptors is evaluated in terms of effects on the following, which are based on advice in LA 107 (Ref 8.2 paras 3.23);
  - o Size/scale;
  - o Geographical extent of influence; and
  - o Duration and reversibility.
  
- 8.3.18 LA 107 places a value judgement on the magnitude of effect i.e. adverse or beneficial effect the receptor will experience within a possible five categories, i.e. major, moderate, minor, negligible or no change. The assessment must remain objective with professional judgement evaluating the extent of change the receptor will experience.
  
- 8.3.19 The magnitude of effect on landscape receptors, arising from the proposed scheme, is assessed using the criteria in Table 8-4 for the construction and operation of the proposed development. The magnitude of effect on the landscape receptor is determined by the perceived integration of the proposed development into the receiving environment considering factors, such as:
  - o Integration with existing scenic features;
  - o Aesthetics of the proposed development – form, colour, texture and size;
  - o Extent to which identified key baseline features are likely to be affected by the proposed development;
  - o Geographic changes at national, regional and local level; and
  - o Duration of the changes – long, medium and short term.
  - o Where there may be a combination of factors which may not be evaluated into simplistic terms, but rather appear to fall within two predetermined categories the conclusion will use the category which gives the worst-case scenario.

**Table 8-4: Magnitude of effect – Landscape receptors**

Magnitude of effect		Description of criterion
Major	Adverse	Total loss or large-scale damage to existing landscape character or distinctive features or elements; and/or addition of new uncharacteristic, conspicuous features or elements (i.e. road infrastructure). Usually long-term permanent changes, or for medium term within a higher valued landscape Change will be permanent and irreversible or of long duration (greater than 15 years).
	Beneficial	Large scale improvement of landscape character to features and elements; and/or addition of new distinctive features or elements, or removal of conspicuous road infrastructure elements. Change will be permanent and irreversible or of long duration

Magnitude of effect		Description of criterion
Moderate	Adverse	Partial loss or noticeable damage to existing landscape character or distinctive features or elements; and/or addition of new uncharacteristic for the medium to long term, or noticeable features or elements within the landscape for the long term or permanent (i.e. road infrastructure). Change will be of medium duration (5-15 years).
	Beneficial	Partial or noticeable improvement of landscape character by restoration of existing features or elements; or addition of new characteristic features or elements or removal of noticeable features or elements. Change will be of medium duration
Minor	Adverse	Slight loss or damage to existing landscape character of one (maybe more) key features and elements of a lower valued landscape for the medium term; and/or addition of new uncharacteristic features and elements that do not dominate of a higher valued landscape. Change will be of short duration (1-5 years).
	Beneficial	Slight improvement of landscape character by the restoration of one (maybe more) key existing features and elements; and/or the addition of new characteristic features. Change will be of short duration
Negligible	Adverse	Very minor loss, damage or alteration to existing landscape character of one or more features and elements for the short to medium term or a higher valued landscape for the short-term Change will be of very short duration (less than 1 year).
	Beneficial	Very minor noticeable improvement of character by the restoration of one or more existing features and elements. Change will be of very short duration
No Change	-	No noticeable alteration or improvement, temporary or permanent, of landscape character of existing features and elements.

### Visual assessment method

#### *Determining sensitivity of visual receptors*

- 8.3.20 In accordance with LA 107 Landscape Assessment evaluates the nature of visual receptors likely to be affected (sensitivity), and the nature of effects likely to occur on the landscape (magnitude) to report on a project's likely significant effects. Assessment shall record judgements of the effect of change in views brought about by the project. Criteria identified in LA 107 has been used to assess the visual receptors identified.
- 8.3.21 Visual assessment shall record the degree of change in the composition of the view from that which would exist without the project to that which would result as a consequence of the project. The visual receptor baseline takes the following factors into consideration, as listed below:
- Accessibility to the public;
  - Number and sensitivity of viewers who can be affected;
  - Viewing direction, distance (i.e. short, medium or long-distance views) and elevation;

- o Nature of the viewing experience;
- o View type; and
- o Cumulative views in conjunction with other projects.

8.3.22 Visual sensitivity is a combination of the susceptibility of the visual receptor and the value attached to it which are very closely associated and depend on one another whilst directly inform the other, thus for the purpose of this assessment they shall be considered against criteria listed in Table 8-5: Visual sensitivity criteria.

8.3.23 The susceptibility of visual receptors to changes in views depend upon:

- o “The occupation or activity of people experiencing the view at particular locations; and
- o The extent to which their attention or interest may therefore be focussed on the views and the visual amenity they experience at particular locations.” (Ref 8.5, para. 6.32).

8.3.24 The value of a visual receptor may be identified from particular locations as valued and indicated to them in guidebooks, tourist maps or the provision of facilities for their enjoyment such as picnic sites, view indicators or interpretive material. Views may also be valued in attachment to cultural heritage assets or monuments in the landscape.

8.3.25 Value attached to views is informed, but not exclusively by, relation to heritage assets and value in published data in the public domain, such as signage or reference in literature. Table 8-5, below, lists the criteria used to assess sensitivity of visual receptors.

**Table 8-5: Visual sensitivity criteria**

Evaluation of sensitivity (susceptibility and value)	Description of criterion
Very High	1) Static views from and of major tourist attractions; 2) Views from and of very important national/international landscapes, cultural/historical sites (e.g. National Parks, UNESCO World Heritage sites); 3) Receptors engaged in specific activities for enjoyment of dark skies.
High	1) Views by users of nationally important Public Rights of Way / recreational trails (e.g. national trails, long distance footpaths); 2) Views by users of public open spaces for enjoyment of the countryside (e.g. country parks); 3) Static views from dense residential areas, longer transient views from designated public open space, recreational areas; 4) Views from and of rare designated landscapes of national importance.

Evaluation of sensitivity (susceptibility and value)	Description of criterion
Medium	1) Static views from less populated residential areas and other institutional buildings and their outdoor areas; 2) Views by outdoor workers; 3) Transient views from local/regional areas such as public open spaces, cemeteries, scenic roads, railways or waterways, users of local/regional designated tourist routes of moderate importance; 4) Views from and of landscapes of regional importance.
Low	1) Views by users of main roads or passengers in public transport on main arterial routes; 2) Views by indoor workers or those focused mainly on indoor activities such as schools; 3) Views by users of recreational/formal sports facilities where the landscape is secondary to enjoyment of the sport; 4) Views by users of local public open spaces of limited importance with limited variety or distinctiveness.
Negligible	1) Quick transient views such as from fast moving vehicles; 2) Views from industrial area, land awaiting re-development; 3) Views from landscapes of no importance with no variety or distinctiveness.

**Magnitude of effects - visual receptors**

8.3.26 The magnitude of effect to visual receptors, as set out in GLVIA3, is evaluated in terms of the following:

- "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 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 glimpses." (Ref 8.5, para. 6.39).

8.3.27 Following LA 107 there is value judgement i.e. beneficial or adverse in the assessment of magnitude of effects. As stated in Ref.8.2, para 3.42 Reporting on the magnitude of visual effects shall be informed by the following:

- scale of change;
- nature of change;
- duration of change;



- o distance;
- o screening;
- o direction and focus of the view;
- o year 1 (opening year) and year 15 (design year) including summer and winter;
- o removal of past mitigation or existing vegetation; and
- o whether the receptor is static or moving.

8.3.28 The following Table 8-6 identifies criteria used to judge the magnitude of visual effect. As each visual receptor has been identified with a series of considerations which are all pertinent to the individual viewpoint it is not appropriate to use the separation between the viewpoint location and the proposed development. However, it is noted that there is more likely to be a greater magnitude of visual effect the closer the proximity the viewpoint is to the proposed development. Table 8-6, below sets out the criteria used to evaluate the magnitude of effect on visual receptors.

**Table 8-6: Magnitude of effect – visual receptors**

Magnitude of effects	Description of criteria
Major	The project, or a part of it, would become the dominant feature or focal point of the view. Direct, uninterrupted views of all or a large proportion of the proposed scheme. The proposed scheme introduces a contrasting new feature or element into views across a wide area. Change will be permanent or of long duration (design year or greater more than 15 years).
Moderate	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor. The proposed scheme introduces a contrasting new feature or element into views across a limited area. Change will be of medium duration up to design year, but not beyond 15 years).
Minor	The project, or a part of it, would be perceptible but not alter the overall balance of features and elements that comprise the existing view. Angled, partial views of the proposed scheme. The proposed scheme achieves a degree of integration into the existing view. Change will be of short duration (opening year 1).
Negligible	Only a very small part of the project work or activity would be discernible or being at such a distance it would form a barely noticeable feature or element of the view. Angled, partial views of the proposed scheme across a limited area. The proposed scheme integrates into the existing view. Change will be of very short duration with no change at design year (year 1).
No Change	No part of the project work or activity would be discernible.

**Assessment of significance – landscape and visual**

- 8.3.29 LA 107 Landscape Assessment is only applicable to the point of determining the magnitude of change. The significance of effect is then derived under guidance from LA 104 Environmental assessment and monitoring (Ref 8.3).
- 8.3.30 In accordance with LA 104 the significance of effects of the proposed scheme upon the landscape is judged from a combination of sensitivity and magnitude of effects. Significance of possible effects range from very large to neutral.
- 8.3.31 Reporting the assessment shall state whether or not a project is likely to give rise to significant landscape effects and the significance of the effect (i.e. large or slight, adverse or beneficial, temporary or permanent). Where significant effects comprise of effects that are or remain as moderate, large or very large categories once design development has evolved necessary mitigation will be taken into account.
- 8.3.32 The assessment of the significance of environmental effects shall cover the following factors:
  - o the receptors/resources (natural and human) which would be affected and the pathways for such effects;
  - o the geographic importance, sensitivity or value of receptors/resources;
  - o the duration (long or short term); permanence (permanent or temporary) and changes in significance (increase or decrease);
  - o reversibility - e.g. is the change reversible or irreversible, permanent or temporary; and
  - o feasibility and mechanisms for delivering mitigating measures (Ref 8.3, para 3.9)
- 8.3.33 Professional judgement is used to evaluate the significance of effects on landscape and visual receptors. Significance of effect is judged from a combination of magnitude of effect and sensitivity of receptor. The relative importance of significance is judged on the scale set out in Table 8-7: Landscape and visual significance of effect.

**Table 8-7: Landscape and visual significance of effect**

		Magnitude of effect (change)				
		No Change	Negligible	Minor	Moderate	Major
Landscape or visual	Very High	Neutral	Slight	Moderate/ Large	Large/ Very Large	Very Large
	High	Neutral	Slight	Slight/ Moderate	Moderate/ Large	Large/ Very Large

		Magnitude of effect (change)				
		No Change	Negligible	Minor	Moderate	Major
	<b>Medium</b>	Neutral	Neutral/ Slight	Slight	Moderate	Moderate/ Large
	<b>Low</b>	Neutral	Neutral/ Slight	Neutral/ Slight	Slight	Slight/ Moderate
	<b>Negligible</b>	Neutral	Neutral	Neutral/ Slight	Neutral/ Slight	Slight

8.3.34 The assessment considers the ‘impact’, defined as the action being taken and the ‘effect’, defined as the change resulting from that action.

8.3.35 Effects to landscape receptors are likely to have greater significance where some or all, of the following criteria are met:

- o Substantial loss, alteration or irreversible negative adverse effects over a large area on features, elements or aesthetic and perceptual attributes that are essential to the character of highly valued or sensitive landscapes;
- o Loss or alteration of mature or diverse landscape elements, features, characteristics, aesthetic or perceptual qualities;
- o Changes to unique, rare, distinctive, particularly representative landscape character; and
- o Loss of lower-value elements, features, characteristics, aesthetic or perceptual qualities over a large area.

8.3.36 Effects can be judged to be not or less significant where they are reversible, negative effects of short duration or temporary duration, over a restricted area, on elements and/or aesthetic and perceptual aspects that contribute to but are not key characteristics of the character of landscapes.

8.3.37 Descriptions of significance evaluated by Table 8-7, in accordance with LA 104, are defined in Table 8-8, below.

**Table 8-8: Significance categories**

Significance category	Description of criteria
Very large	Effects at this level are material in the decision-making process.

Significance category	Description of criteria
Large	Effects at this level are likely to be material in the decision-making process.
Moderate	Effects at this level can be considered to be material decision-making factors.
Slight	Effects at this level are not material in the decision-making process.
Neutral	No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

8.3.38 Effects are less likely to be significant to landscape receptors where the following criteria are met:

- Loss or alteration of uniform, homogenous elements, features, characteristics or qualities;
- Changes to areas in poorer condition or of degraded character; and
- Changes to lower value landscapes.

8.3.39 Effects to visual receptors are more likely to be of a higher significance category in the following circumstances:

- “effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant;
- effects on people are recognised and important viewpoints or from recognised scenic routes are more likely to be significant;
- large-scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present in the view”. (Ref 8.5 para 6.44)

8.3.40 For each significance category identified there is the possibility of them being positive (beneficial) or negative (adverse) on both the landscape and visual receptors, as identified in Table 8-8. Where effects are assessed as adverse, they will be more likely to be important in the decision-making process and mitigation may be required. Where effects are assessed as beneficial the proposed scheme has the potential to enhance the landscape and visual baseline environment.

8.3.41 Table 8-9 identifies descriptors that are used to determine whether the proposed scheme results in positive or negative effects. Full explanations, based on site specific locations and specific impacts on receptors, will be included as part of the landscape and visual assessments.

**Table 8-9: Landscape and visual receptors significance of effects**

Significance of effects	Landscape	Visual
Very Large Beneficial (Positive) Effect	<p>The proposed development will greatly enhance the character (including quality and value) of landscape is greatly enhanced.</p> <p>A new high-quality feature and/or series of elements is created.</p> <p>Connectivity and permeability through the area is created or enhanced.</p>	<p>The proposed development will greatly enhance the view through creation of a new recognisable element for high sensitivity receptors.</p>
Large Beneficial (Positive) Effect	<p>The character (including quality and value) of landscape is enhanced.</p> <p>The restoration of characteristic features and elements lost as a result of changes from inappropriate management or development is enabled.</p> <p>Connectivity and permeability of the area is enhanced.</p>	<p>There is a major improvement in views from a visual receptor identified with very high or high sensitivity.</p>
Moderate Beneficial (Positive) Effect	<p>The character (including quality and value) of the landscape is improved.</p> <p>The restoration of characteristic features and elements partially lost or diminished as a result of changes from inappropriate management or development is enabled.</p> <p>Connectivity and permeability of the area is restored.</p>	<p>There is a discernible improvement to a view. There is a noticeable improvement to a view from a visual receptor with very high, high, medium or low sensitivity.</p>
Slight Beneficial (Positive) Effect	<p>The character (including quality and value) of landscape is complemented by the proposed scheme.</p> <p>Characteristic features and elements are maintained or enhanced.</p> <p>The proposed scheme contributes to connectivity and permeability of the area.</p>	<p>Limited improvement to a view from a receptor where there would be greater improvement to a view from a receptor. There are a few combinations of landscape or visual receptors to conclude in a slight significance, but the higher the sensitivity the lower the magnitude of effect.</p>
Neutral Effect	<p>The proposed scheme blends in with characteristic features and elements of the landscape with no discernible change to character (including quality and value) of landscape.</p> <p>Connectivity and permeability of the area is unaffected.</p>	<p>No discernible change in the view. Landscape or visual receptors with no change to the magnitude of effect or receptors with lower classes of sensitivity with those of lower magnitude of effects.</p>
Slight Adverse (Negative) Effect	<p>A noticeable difference to the character (including quality and value) of landscape is introduced.</p> <p>The proposed scheme is at variance with characteristic features and elements.</p> <p>There is some alteration to connectivity and permeability of the area.</p>	<p>Limited deterioration to a view. There are a few combinations of landscape or visual receptors to conclude in a slight significance, but the higher the sensitivity the lower the magnitude of effect.</p>
Moderate Adverse (Negative) Effect	<p>A noticeable difference to the character (including quality and value) of landscape is introduced.</p> <p>The proposed scheme is at variance with characteristic features and elements.</p> <p>There is some alteration to connectivity and permeability of the area</p>	<p>Limited deterioration to a view from a receptor.</p> <p>Limited deterioration to a view from a receptor with very high, high, medium or low sensitivity.</p>

Significance of effects	Landscape	Visual
Large Adverse (Negative) Effect	The proposed scheme is at considerable variance with the character (including quality and value) of landscape. The integrity of a range of characteristic features and elements is degraded or diminished Considerable reduction in connectivity and permeability of the area.	Substantial deterioration to a view from a highly sensitive receptor with a sensitivity of very high, high or medium and would constitute a substantial discordant element in views across a wide area.
Very Large Adverse (Negative) Effect	The proposed scheme is at complete variance with the character (including quality and value) of landscape The integrity of characteristic features and elements is lost. Connectivity through the area is impeded or it introduces a physical or visual barrier to permeability	Loss of views from a visual receptor identified as high and would constitute a dominant discordant feature in views across a wide area.

8.3.42 Where the assessment concludes that the effects will be moderate, large or very large adverse, the effects are considered to be significant and further mitigation, over and above those measures considered as part of the inherent design, may need to be considered.

**Viewpoint assessment**

8.3.43 The selection of viewpoints and photography is an important part of the LVIA. Viewpoints are provided for two reasons:

- o To show views of the site and surrounding area to provide background context to the LVIA; and
- o To show views from viewpoints representative of visual receptors likely to be affected by the proposed scheme.

8.3.44 Viewpoints are shown in **Figure 8.5**. These are fixed locations that are important to the overall assessment of effects on visual receptors. The viewpoints are typical of the scene experienced at locations where public access is freely available. While all selected visual receptors will be visited during the course of the LVIA, it is not necessary to include viewpoints from each individual receptor in order to provide a comprehensive understanding of the baseline.

**Consultation responses**

8.3.45 Consultation was undertaken with Scottish Natural Heritage (SNH) and Aberdeenshire Council as part of the Stage 2 assessment. SNH did not have any comments with regards to the potential landscape and visual impacts of any of the scheme options.

8.3.46 Aberdeenshire Council identified the need to assess the potential effects of lighting on visual amenity. At that stage a lighting scheme had not been designed. The potential effects of lighting have been undertaken, as part of this Stage 3 LVIA, on the proposed scheme.

## 8.4 Baseline Conditions

### Landscape

- 8.4.1 The study area, as defined in 8.3.6 and 8.3.7, is an area extending 2km beyond the proposed scheme. It encompasses the settlement of Laurencekirk and a number of farm steadings. The existing A90, A937 and Dundee to Aberdeen railway line dissect the study area in a roughly southwest to northeast orientation, with the B9120 and Fordoun Road being the principle south east to north-west routes.
- 8.4.2 Surrounding Laurencekirk and alongside the A90, the principle land uses consist of arable agricultural land and earthworks associated with the existing A90, A937 and associated minor roads.
- 8.4.3 The agricultural land is fairly level and open in character with field boundaries of post and wire fences allowing open views.
- 8.4.4 There are pockets of mixed woodland and tree groups around the farm steadings and in and around Laurencekirk. To the south of the A90, along Gaugers Burn, there are mature pine trees designated as Ancient Woodland. There is a line of mature beech trees from the southern side of the B9120 towards the south east of Laurencekirk. Denlethen Woodland approximately 130m north west is designated as Ancient Woodland.
- 8.4.5 The A90, A937 and B9120 are all lined with individual trees in sporadic groups that form fragmented lines of trees; set along field margins, within rough grassland and maintained grass verges.
- 8.4.6 There are young trees alongside the minor road that runs south west away from Laurencekirk town centre and a small area of ornamental amenity planting and grassland at the junction of the minor road and the A937 on the approach to Laurencekirk from the west.
- 8.4.7 The largest, and most significant area of trees, is the Community Woodland of Dunlethen Wood, owned and managed by Forestry and Land Scotland designated as Ancient woodland. This is an area approximately 62ha in size, comprising principally coniferous species with mixed, deciduous species on the periphery.
- 8.4.8 The site location is shown in **Figure 8.1** and the significant landscape assets are shown in **Figure 8.4**.

### Landscape designations

- 8.4.9 There are no designated landscapes of national, regional or local landscape importance within the 2km study area. The closest designated area of national importance in terms of landscape is the Cairngorms National Park which is located 18km to the north west of the proposed



development site. It is not considered further in this LVIA due to the distance from the proposed scheme.

- 8.4.10 The nearest Inventoried Garden and Designed Landscapes (GDL) are Arbuthnott House GDL which lies 8.1km to the northeast and Fasque House GDL which lies 6.8km to the northwest. Given the distance to the proposed scheme and its predominantly wooded landscape, Arbuthnott House GDL is not considered further in this LVIA. Fasque House GDL is also well wooded on its southern boundary and within the GDL and is therefore not considered further in this LVIA.
- 8.4.11 The nearest Special Landscape Area (SLA) is The Braes of the Mearns SLA which lies 4.3km to the northwest at its closest point. Given the distance to the proposed scheme from the SLA and the influence of the existing A90, The Braes of the Mearns SLA is not considered further in this LVIA.
- 8.4.12 There are no Conservation Areas within the LVIA study area.
- 8.4.13 There are Tree Preservation Orders within Laurencekirk that will be affected by the proposed scheme.

### **Landscape character**

#### ***Overview***

- 8.4.14 This section provides an overview of the landscape character of the site, study area and beyond. It provides context to the landscape of the site and allows judgements to be made on the relative importance of features and elements found there and sensitivity of the landscape to the proposed scheme.

#### ***Landscape character types***

- 8.4.15 At a regional level, as identified by SNH, the proposed development is located in the LCT 22 Broad Valley Lowlands – Aberdeenshire with the exception of less than 100m on the A937 south of the A90 by Mains of Newtown farm. This small area is located within LCT 24 Coastal Farmed Ridges and Hills – Aberdeenshire. As the landscape character is typical of LCT 22 Broad Valley Lowlands – Aberdeenshire for this assessment the proposed development shall be discussed as LCT 22 Broad Valley Lowlands – Aberdeenshire. Sensitivity of the character types is summarised in Table 8-10.
- 8.4.16 Typical features of LCT 22 Broad Valley Lowlands – Aberdeenshire are:
- A broad and generally gently undulating strath with some flatter basins.

- Steep scarp of the Mounth uplands rising steeply to the north-west and low rounded ridge of Garvock Hill provides a lesser degree of containment along the south-eastern boundary;
- Predominantly intensive agriculture with distinctive patchwork of large open fields divided by ditches and fences interspersed with small conifer woodlands;
- Landscape forms a major communications corridor accommodating the A90, the East Coast railway and transmission line; and
- Striking contrast of open, expansive strath and adjacent uplands.

**Table 8-10: Summary of Landscape susceptibility, value and sensitivity**

<b>Receptor: LCT 22 Broad Valley Lowlands – Aberdeenshire costal</b>	
<b>Landscape susceptibility of receptor to specific change</b>	<b>Landscape Susceptibility</b>
A90 is an established feature within this landscape. The introduction of the proposed development will fit within the large open scale here without dominating. Due to the topography the raised elements of the junction are likely to be visible within key views. Mitigation planting will accompany this proposal and in time this is likely to be a feature of the landscape.	Medium
<b>Value of receptor</b>	<b>Landscape Value</b>
The area is typical of the LCT characteristics with large open low lying agricultural fields. There are no landscape or conservation designations on the area. The low lying topography of the area emphasises the scale of the landscape even accentuating it with open visibility between features. Landmark features are largely absent or have a limited influence on landscape character.	Low
<b>Landscape sensitivity of receptor to specific change</b>	<b>Landscape Sensitivity</b>
This LCT has a medium susceptibility and a low value. Very few notable landmark buildings, monuments and features that contribute to landscape quality. The proposed scheme has the potential to affect the balance of features and elements in a very localised or limited area.	Low

8.4.17 Environmental consultants, LCU, have undertaken review of the local landscape areas (Ref 8.24) on behalf of Aberdeenshire Council in 2016. Areas have been identified as Local Landscape Designations, however they have been evaluated in terms of landscape character and shall be used as such in this LVIA assessment. The proposed development site lies within 35 Garvock and Glenbervie. The adjacent local landscape character area 36 Howe of the Mearns is located at its closest at approximately 100m to the west. The proposed scheme is located close to the boundary of these two LCTs as shown in **Figure 8.3**. The boundaries are not definitive, meaning that there is not an abrupt change in landscape character at the boundary. As the landscape is typical of 35 Garvock and Glenbervie for the purposes of this assessment the local landscape character shall be discussed as Garvock and Glenbervie.

8.4.18 Garvock and Glenberrie landscape character is typically described as:

- Dominated by an extensive area of open, rolling farmland encompassing Garvock Hill and also including the farmland around Glenberrie;
- Rolling farmland is common across Aberdeenshire, although incised valleys are locally distinctive e.g. Arbuthnott, Glenberrie;
- Large fields of arable land and pasture and red soils, presenting an array of colours. Some conifer plantation and scrubby woodland;
- Large scale, colourful landscape with open rolling ridges and visual diversity. Settlement, turbines and masts are visible; and
- Sweeping, rolling hills present distant views up and down the terrain and to the sea. From the east, views into the Mearns and across Strathfinella Hill and the Kincardine Plateau are dramatic, emphasising the scale of this area. Long distance views across the Howe of the Mearns and the Mounth.

8.4.19 It has further been assessed as having low uniqueness with rolling open farmland with more intimate wooded valleys. Medium scenic qualities in which the landscape contains some pleasing combinations of features and high views where the landscape offers the most visible views, as summarised in Table 8-11.

**Table 8-11: Summary of Landscape susceptibility, value and sensitivity**

<b>Receptor: 35 Garvock and Glenberrie</b>	
<b>Landscape susceptibility of receptor to specific change</b>	<b>Landscape Susceptibility</b>
<p>The proposed development site comprises the existing A90, agricultural fields bound by post and wire fences with occasional young tree planting along the road sides within the low-lying land between Garvock Hill and Glenberrie.</p> <p>Woodland lining Gaugers Burn is highly visible and offers screening between Garvock Hill and Glenberrie.</p> <p>The proposed scheme will potentially fit with the scale of the landscape receptor and key features or elements within it.</p>	Medium
<b>Value of receptor</b>	<b>Landscape Value</b>
<p>There are no local landscape or conservation designations to influence the landscape value.</p> <p>Landmark features are largely absent or have a limited influence on landscape character.</p>	Low
<b>Landscape sensitivity of receptor to specific change</b>	<b>Landscape Sensitivity</b>
<p>This LCT has a medium susceptibility and a low value. Very few notable landmark buildings, monuments and features that contribute to the landscape value. This is a local landscape area with receptors of low to medium importance with ability to accommodate change. The proposed scheme has the potential to affect the balance of features and elements in a very localised or limited area.</p>	Low

***Landscape Fabric***

- 8.4.20 The large fields, post and wire fences and low topography with a backdrop of distant hills gives a large-scale landscape with generally open views across it. A stand of Ancient Woodland, Gaugers Burn, cross the landscape in a north west to south east axis breaking up views from some locations. Laurencekirk is the main settlement in this part of Aberdeenshire. The A90 passes immediately to the east of the town before topography begins to rise to the east. The A90 acts as a barrier to movement, particularly non-motorised users (NMU), to the south east of Laurencekirk. To the west of the A90 the surrounding landscape is more accessible as there is a network of minor roads and NMU routes that allow permeability.
- 8.4.21 The A90 influences the landscape character and visual amenity by introducing a linear feature, noise and movement into the area. In addition to the A90, the Dundee to Aberdeen railway line passes through Laurencekirk although trains are of relatively low frequency. Other infrastructure includes two high voltage transmission lines that run parallel to one another to the east of Laurencekirk and Tullo Wind Farm, which is a noticeable feature on the skyline in views to the east from Laurencekirk and the A90.
- 8.4.22 The town of Laurencekirk is expanding, predominantly on its northern side where new houses are under construction. There are housing and commercial land allocations in the northeast of Laurencekirk on the north and south side of the A937. There is consent for mixed-use development on the southern edge of Laurencekirk between the A937 and the A90 (Planning Application Ref APP/2010/2823) that will have lapsed if construction work did not commence by late summer 2019.
- 8.4.23 Throughout the landscape of the study area there are occasional stone-built farmsteads, cottages and houses that give the area a settled rural character. Farmsteads often form the focal point in views due to the openness of the landscape and the fact that woodland and trees growing next to them accentuate their visibility and position in the landscape. Laurencekirk is typical of older settlements in the area in that its older residential and public buildings are constructed of red sandstone. There are listed buildings associated with rural farmsteads with those at Beattie Lodge and Johnston Lodge being the most relevant to the proposed scheme. The sensitivity of the landscape fabric is summarised in Table 8-12.

**Table 8-12: Summary of Landscape susceptibility, value and sensitivity**

<b>Receptor: Landscape fabric</b>	
<b>Landscape susceptibility of receptor to specific change</b>	<b>Landscape Susceptibility</b>
Open views of the landscape will from some key locations be altered affecting the landscape characteristics of the baseline. Removal of vegetation, in particular young trees will alter the medium to long term character of the landscape. As the A90 is an established feature the addition of a junction would not be out of place, it is however the associated height of the junction that will alter permanently the baseline characteristics. There will be some incongruous elements in the baseline.	Medium
<b>Value of receptor</b>	<b>Landscape Value</b>
There are no regional or local designations on the receptor. The local landscape designation (35 Garvock and Glenbervie) does not identify noteworthy landscape or cultural features. There are some core paths within the area, however Core path Route 3 is located within close proximity to the proposal. There are ancient woodlands within close proximity to the proposal.	Medium
<b>Landscape sensitivity of receptor to specific change</b>	<b>Landscape Sensitivity</b>
The receptor is of medium quality across most of its area although it contains pockets of lower quality with some fragmentation of landscape pattern and deterioration of features and elements of the baseline. There is influence from infrastructure.	Medium

8.4.24 The A90 is a substantial linear infrastructure feature in the landscape and exerts an influence on landscape and visual receptors in the surrounding area due to the noise and movement associated with it. Further away from the A90 and Laurencekirk to the north, the landscape is rural in character with an absence of significant infrastructure and with small settlements and scattered dwellings and farmsteads. Combined with the large-scale landscape and open views this gives a sense of isolation and remoteness that contributes to landscape character. The site is located to the south west of the town of Laurencekirk which is a gently undulating area of predominantly agricultural land use that lies between the Grampian Hills to the west and the Garvock Hills to the east. The northern side of the A90 is influenced by Laurencekirk whereas the southern side is influenced more by woodland and the rising topography of the Hill of Garvock. Landcover is predominantly arable with areas of pasture and pig rearing. Field size is predominantly large and rectilinear with smaller fields with irregular edges occurring alongside watercourses. There are large areas of plantation woodland to the southwest and west of Laurencekirk with smaller areas of plantation and deciduous woodland to the east of the A90 on the lower slopes of the Garvock Hills. Field boundaries consist predominantly of post and wire fences with some shelterbelts and rows of trees.

***Proposed Development Site***

8.4.25 Landscape at the proposed site is dominated by the A90 and ancillary development such as signage, vehicle restraint systems and earthworks. Vegetation growing alongside the A90 tends

to be linear belts of young trees planted into the verges of the road in addition to belts of trees and hedges perpendicular to the road mainly on the southern side of the existing road.

8.4.26 The land on which the proposed junction will be located consists of arable fields with occasional tree planting. The land is fairly level rising gently from 80m AOD in the north to 90m AOD in the south and east.

8.4.27 Currently there are no overbridges along this section of the A90. There is an underpass which provides access to Johnston Mains from Laurencekirk east of the proposed development. In addition, there are accesses onto the A90 serving Burnton, Burnhead and East Lodge that are not anticipated to be affected by the proposed development. The access to Johnston Lodge is likely to be affected by the proposed Development however, the extent of the effect can not be determined at the point of assessment. When more detailed plans are available this can be assessed fully.

8.4.28 There is currently no lighting associated with the A90, within the site area, although there are a few traffic monitoring cameras e.g. average speed cameras. There are street lights through Laurencekirk and these, along with house lights, create a night-time glow over the town. The sensitivity of the landscape at the site is summarised in Table 8-13.

**Table 8-13: Summary of Landscape susceptibility, value and sensitivity**

<b>Receptor: Proposed Development Site</b>	
<b>Landscape susceptibility of receptor to specific change</b>	<b>Landscape Susceptibility</b>
The receptor already consists of infrastructure carving through large agricultural fields with some young tree planting. The landscape has some potential to absorb the proposed development. There will be a loss of existing vegetation to accommodate the proposed development. Mitigation planting can compensate for the vegetation loss; however, it cannot compensate for the resulting smaller parcels of land. The size of the resultant fields will be out of scale with the surrounding landscape. The elevation of the proposed junction will also be out of scale with the surrounding topography.	High
<b>Value of receptor</b>	<b>Landscape Value</b>
The proposed Development land at the time of assessment is shown to affect Core path Route 3.. It is unclear from the proposals if the affected part of the Core Path will be extinguished or diverted.  Ancient Woodland along Gaugers Burn is anticipated to be affected by the proposed development. Again, it is not clear from the proposals the extent of the works at this location and how it may affect this Ancient Woodland.	High
<b>Landscape sensitivity of receptor to specific change</b>	<b>Landscape Sensitivity</b>

<b>Receptor: Proposed Development Site</b>	
<p>The receptor is of high quality across most of its area although it contains pockets of lower quality with some fragmentation of landscape pattern and deterioration of features and elements of the baseline.</p> <p>The proposed scheme has the potential to affect the balance of features and elements in the landscape resulting in widespread change.</p>	High

- 8.4.29 The following additional key characteristics were noted during baseline fieldwork:
- Tullo Wind Farm is a prominent feature on the skyline in views from Laurencekirk and the A90.
  - Mixed and deciduous woodland clumps and belts are a noticeable feature on the lower slopes of Garvock Hill.

**Visual baseline**

***Visual receptors and viewpoints***

8.4.30 This section describes the visual receptors likely to be affected by the proposed scheme and identifies their visual sensitivity following the methodology in section 8.2 Visual receptors are shown in **Figure 8.5** and Table 8-14 to Table 8-16 describe the baseline situation for each category of visual receptor, the distance and direction shown to the proposed development.

***Residents***

8.4.31 Residential receptors within the study area consist of two types: residents of single or clusters of rural dwellings and residents of dwellings in villages and towns. Where a group of dwellings occurs in a rural or urban area and the baseline view is similar for residents in a group then these are given the same reference number.

8.4.32 Table 8-14 to Table 8-16 set out the receptors that have been taken forward from Stage 2 for assessment. Receptors with no views or significantly restricted views, of the proposed scheme, both during construction and on completion, will not be taken forward for assessment within the Stage 3 LVIA. This is consistent with the guidance within GLVIA3 which indicates that the focus of assessment should be on any likely significant (and particularly adverse) effects.



**Table 8-14: Residential receptors: baseline description**

Receptor reference	Distance and direction to the Site	Description of receptor(s) and existing view
1	0.2km to the northeast	Approximately 18 properties at West Burnside and on the west side of Gardenston Street. The outlook in the direction of the scheme from these properties is partially restricted by vegetation and orientation. Views will be available from upper floors.

8.4.33 These receptors are assessed as Very High sensitivity.

8.4.34 In addition, there is a consented, but yet to be constructed, mixed use development to the west of Gaugers Burn and on the east side of the existing A937 alignment. The southern part of the development consists of a commercial area with extensive landscape buffer strip which will provide screening to residential properties. Residential properties in the west of the development will be orientated southeast to northwest and residents are likely to experience views of the proposed realignment of the A937 on the north side of the A90 which will take traffic further away from the development site. It is predicted that the proposed scheme will result in a change to views from properties in the consented development. However, effects are likely to be neutral overall and the receptor is not considered further in this LVIA.

***Recreation and visitor attractions***

8.4.35 Recreational receptors include users of National Cycle Routes, Core Paths (CP) and people at visitor attractions where an appreciation of the landscape and views is important to the asset or attraction. Within the study area National Cycle Route and other notable visitor attractions are absent. The LVIA therefore focusses upon the Core Paths identified in Table 8-15 and shown in **Figure 8.4**.

**Table 8-15: Recreational receptors: baseline description**

Receptor reference	Distance and direction to the Site	Description of receptor(s) and existing view
2	0.1km to the north	Core path Route 3 and minor road connecting the A937 (north of the A90) to the A90 There are open views over flat agricultural fields to the A90. There are occasional groups of trees beyond the A90.
3	0.55km to the northeast	Core Path at Beattie Lodge There are open views over flat agricultural fields to the A90. Views of the Site will be screened by existing vegetation lining Gaugers Burn.
4	0.8km to the south east	Core path Route 2 / Frain Drive at Johnston Mains Views of the Site will be screened by existing vegetation lining Gaugers Burn.

8.4.36 These receptors are assessed as being of High sensitivity.

#### ***Motorists and public transport users***

8.4.37 Private motorists and users of public transport share the same network or, in the case of railways, use a single network. As mentioned in Table 8-5 the sensitivity of private motorists to changes resulting from the proposed scheme depends on the category of road being used. Table 8-16 identifies roads and rail routes that are likely to be affected by the proposed scheme.

**Table 8-16: Motorists and public transport users: baseline description**

<b>Receptor reference</b>	<b>Distance and direction to the Site</b>	<b>Description of receptor(s) and existing view</b>
5 Oatyhill and A90	0km	Motorists using the A90 pass through the Site with views from the road being open in the south approaching the junction with the A937, becoming more enclosed towards the east.
6 A937 south of the A90	0km	Motorists using the A937 pass through the Site with open views of the Cairngorms National Park breaking the skyline viewing towards the north.
7 B9120	0km	Views of the Site viewing south west from the B9120 and the A90 junction are screened by intervening vegetation and topography.
8 Private access on the A90 west bound	0km	Private access on the A90 west bound viewing south west Views of the Site across open fields with Denlethen Wood breaking the skyline.

8.4.38 Motorists using the A90 and A937 are assessed as Low sensitivity while users of the B9120 and minor roads are assessed as Medium sensitivity, due to their more rural character. The Dundee to Aberdeen railway line has not been included within the assessment as it is predominantly in cutting as it passes the scheme and also passes at speed.

#### ***Community receptors***

8.4.39 People using community resources such as churches, cemeteries, schools, hospitals, community centres and playing fields are occupied primarily with the activities associated with that particular resource. They are unlikely to be focussed upon enjoyment of the landscape and views although there is the potential to affect enjoyment of the resource. The majority of community resources are located within the central part of the village: Laurencekirk Primary School, Mearns Academy and Community Campus, Laurencekirk Cemetery.

8.4.40 The two schools are assessed as Low sensitivity. Laurencekirk Cemetery is assessed as Medium sensitivity. As identified in Stage 2 there are no views of the proposed scheme from

any of these locations, due to existing vegetation and other development, they are not taken forward for assessment within the Stage 3 LVIA.

**Workers**

8.4.41 People at their place of work, whether they are outdoors or indoors, are occupied primarily with activities associated with their employment and therefore unlikely to be focussed upon enjoyment of the landscape and views. People at their place of work are therefore generally considered to be of Low sensitivity. Where business or work is based upon the landscape and environment, sensitivity is considered to be High. Given the location of the Site and the distribution of commercial and retail areas within Laurencekirk it is unlikely that people at their place of work will be significantly affected by the proposed scheme. They are therefore not considered further in this Stage 3 LVIA.

**Assessments and Viewpoints**

8.4.42 The eight locations selected for assessment cover residential, recreation and road receptors as summarised in Table 8-17.

**Table 8-17: Assessment locations and viewpoints used in the Stage 3 LVIA**

Assessment location	Name	Location and grid reference	Reason for inclusion in the LVIA	Evaluation of sensitivity
VP1	Properties at West Burnside & Gardenston Street.	Where these streets intersect with the A937 viewing south west  371130, 770753	Represents views from residential receptors on the south west side of Laurencekirk	Very High
VP2	Core path / Route 3 and minor road connecting the A937 (north of the A90) to the A90	Where the Core Path meets the minor road viewing south  370815, 770530	Represents views experienced by users of the footpath and road users.	High
VP3	Core path at Beattie Lodge	On Frain Drive opposite Beattie Lodge viewing south west  371597, 770780	Represents views experienced by residents and users of Core Path	High
VP4	Track leading to Johnston Mains Core path Route 2 / Frain Drive	On the farm access track just to the south of the Mains property viewing north west  372102, 770283	Represents residential, road and recreational with elevated views towards the scheme	High

Assessment location	Name	Location and grid reference	Reason for inclusion in the LVIA	Evaluation of sensitivity
VP5	Oatyhill/A90	Looking north east towards Laurencekirk along the A90 369993, 769895	Represents views experienced by motorists	Low
VP6	A937 south of the A90	Looking north from Mains of Newton. 370626, 769585	Represents views experienced by motorists and also view from main farm house	Low
VP7	B9120 on Kirkburn	Looking south west towards the scheme 372075, 771013	Represents road receptors when heading south on the A90, at the junction with the B9120	Medium
VP8	Private access on the A90 west bound	Looking south west towards overbridge at Gaugers Burn 371298, 770371	Represents views experienced by motorists	Low

8.4.43 Four viewpoints; 2, 5, 6 and 8, from the eight assessed have been determined to be taken forward to represent typical views from the north, south, east and west in photomontage panoramas which will demonstrate the visual assessment in section 8.5. The list of assessment locations and viewpoints is indicated in Table 8-17, The location of each is shown in **Figure 8.5** with panoramic images of the baseline view from each of the four selected viewpoints shown in **Figure 8.6** to **Figure 8.9**.

## 8.5 Impact Assessment

### Introduction

8.5.1 The main components of the proposed scheme have been set out in section 8.2 and Chapter 2.

### Construction impacts

8.5.2 This section sets out what elements of the proposed scheme have the potential to affect landscape and visual receptors during construction and how the elements may impact upon such receptors.

8.5.3 As will be discussed in Section 8.8 the primary means of mitigation during construction is to conserve and protect existing soil and vegetation through a construction management plan. However, as the proposed scheme will occupy land that is currently in agricultural use or forms

part of the landscape of the existing A90 corridor, existing landscape fabric will be altered, or elements will be permanently removed.

8.5.4 The alteration and loss of landscape fabric has the potential to alter the landscape character by changing land cover, the pattern of vegetation in the landscape and therefore the way in which the landscape is perceived.

8.5.5 The alteration and loss of landscape fabric also has the potential to result in impacts upon visual receptors by opening up views across the landscape or changing the composition and quality of views. Construction activities, task lighting, storage of materials and traffic management will temporarily be visible resulting in constantly changing views during construction.

#### ***Landscape assessment***

8.5.6 This section summarises the impacts and effects of construction on landscape receptors. Construction impacts are those occurring only during the construction phase of the proposed scheme. Namely:

- Removal of vegetation to allow construction of the roads (including temporary roads) and SUDs ponds to take place;
- Creation of construction compounds, storage areas, task lighting and temporary signage;
- Construction cranes and vehicles; and
- Traffic management and the resulting alteration to existing patterns of traffic movement.

8.5.7 The effects of removal of vegetation will be long term. Where areas of the construction corridor can be replanted it will take many years for new planting to establish and at least 15 years for any meaningful effects/screening. New structures such as the junction, bridges, link roads, lighting and signage will require the removal of the existing vegetation. However, the landscape proposals will incorporate trees, grassland and native scrub planting to mitigate loss and compensate for removal.

8.5.8 The other impacts listed will be temporary in nature and will not persist beyond the construction period. The LVIA has therefore focussed upon the effects of vegetation removal during construction.

#### ***Landscape character: assessment of effects***

8.5.9 Construction operations will result in direct impacts on the landscape character as a result of the alteration and removal of landscape fabric and the presence of construction activities.

8.5.10 In terms of construction effects on landscape character the majority of such effects will be temporary and of short duration. However, impacts within the construction corridor may persist into the operational stage prior to mitigation becoming established or as a result of permanent loss of vegetation.

8.5.11 As landscape character has been assessed in the base line at national and local level and then focused in on the receiving landscape and proposed development site the resulting impact assessments for these considerations are below in Table 8-18 to Table 8-21.

LCT 22 Broad Valley Lowlands – Aberdeenshire

**Table 8-18: Summary of Construction Impacts LCT 24 costal Farm Ridges and Hills**

Receptor: LCT 22 Broad Valley Lowlands – Aberdeenshire	
Landscape sensitivity	Low
Description of Impact	Removal of vegetation: groups of young trees and agricultural fields.
Permanent / Temporary	Temporary
Magnitude of Effect	At the national level the LCT will see a negligible magnitude of effect. The removal of unnoteworthy landscape features within this LCT at this geographical scale will be for a medium duration until planting establishes.
Positive / Negative	Negative
Significance	Neutral or Slight adverse
Potential Mitigation	Protection and retention of existing trees where possible. Replacement tree planting using species found in the surrounding landscape. Mitigation planting plan.

8.5.12 The significance has been assessed as neutral or slight at the national LCT level. The effects are over a limited area of the LCT and they are not key characteristics of this LCT. The proposed scheme at national level blends in with the existing landscape features with no discernible change to the character. As such, the effects are determined to be neutral rather than slight adverse.

35 Garvock and Glenbervie

**Table 8-19: Summary of Construction Impacts LCT 35 Garvock and Glenbervie**

Receptor: 35 Garvock and Glenbervie	
Landscape sensitivity	Low
Description of Impact	Removal of vegetation: groups of young trees and agricultural fields. Introduction of an elevated feature in the landscape up to 8.5m above surrounding field level.
Permanent / Temporary	Temporary
Magnitude of Effect	At the local level the LCT will see a minor magnitude of effect. There will be loss of minor features within this landscape. This will be of a medium duration until replacement planting establishes.
Positive / Negative	Negative

<b>Receptor: 35 Garvock and Glenbervie</b>	
Significance	Neutral or Slight adverse
Potential Mitigation	Protection and retention of existing trees where possible. Replacement tree planting using species found in the surrounding landscape. Mitigation planting plan

8.5.13 The significance has been assessed as neutral or slight at the local LCT level. The effects are over a proportionately larger area than at the national LCT level, however they are still limited within this LCT. The removal of vegetation here is not representative of key characteristics of the LCT and is not judged to be a determining factor in the decision-making process. The proposed scheme is at variance with characteristic features and elements. Overall the characteristics of the LCT are maintained and as such, the effects are determined to be slight adverse rather than neutral.

Landscape fabric: assessment of effects

8.5.14 The proposed scheme will result in the permanent loss of some arable farmland and loss of some trees and vegetation. However, the trees and other vegetation can easily be replaced or compensated. Although the existing are established, they have not attained great height or stature and are located sporadically along the road verges. In the main it will result in the loss of individual roadside trees, localised to the extent of the new junction.

**Table 8-20: Summary of Construction Impacts Landscape fabric**

<b>Receptor: Landscape fabric</b>	
Landscape sensitivity	Medium
Description of Impact	Removal of vegetation: groups of young trees and agricultural fields. Introduction of a grade separated junction elevated in the landscape up to 8.5m above surrounding fields level. Introduction of vertical features, overhead lighting columns and signage. Possible removal of part of Gaugers Burn, Ancient Woodland.
Permanent / Temporary	Temporary
Magnitude of Effect	At this level the landscape fabric will see be moderate magnitude of effect with a noticeable damage to the existing landscape with the loss of vegetation. Construction activities with soil storage / movement around the site will on a temporary basis will further affect the landscape character.
Positive / Negative	Negative
Significance	Moderate adverse
Potential Mitigation	Protection and retention of existing trees where possible. Replacement tree planting using species found in the surrounding landscape. Retention and reuse of top soil removed from the site. Mitigation planting plan using native species to the area in keeping with the landscape character with occasional groups of tree planting and grass verges. It would not be appropriate to have bands of woodland planting lining embankments in this landscape. Replanting of Ancient Woodland will not provide the same habitats of landscape characteristics for many years.



8.5.15 The significance has been assessed as moderate adverse. There is a greater significance over what is considered as the landscape fabric area than at national or regional LCTs. At this level one of the main elements of the landscape character is large low-lying agricultural fields creating homogenous elements as well as visual screening offered by trees at Gaugers Burn. The proposed development will change this with the permanent loss of the field pattern within this localised area. This effect can be considered to be material in decision making factors. The proposed scheme is at variance with characteristic features and elements.

Proposed development site: assessment of effects

**Table 8-21: Summary of Construction Impacts Proposed development site**

<b>Receptor: Proposed development site</b>	
Landscape sensitivity	High
Description of Impact	Removal of vegetation: groups of trees and agricultural fields. Introduction of a grade separated junction elevated in the landscape up to 8.5m above surrounding fields level. Introduction of vertical features, overhead lighting columns and signage. Excavation of SuDs ponds will affect the south eastern edge of core path Route 3. Potential removal of part of Gaugers Burn, Ancient Woodland.
Permanent / Temporary	Temporary
Magnitude of Effect	At this level the effect on the proposed development site will be a major magnitude of effect. The construction of the proposed development will become a dominant feature within the area. There will be uninterrupted views of the construction sites with no screening from vegetation in this low-lying landscape.
Positive / Negative	Negative
Significance	Moderate or large adverse
Potential Mitigation	Where possible grade out earthworks. Protection and retention of existing trees where possible. Replacement tree planting using species found in the surrounding landscape. Retention and reuse of top soil removed from the site. Protect pedestrians from the construction works with hoarding and where required diversion routes which is likely for core path Route 3. Mitigation planting plan using native species to the area in keeping with the landscape character with occasional groups of tree planting and grass verges. It would not be appropriate to have bands of woodland planting lining embankments in this landscape. Replanting of Ancient Woodland will not provide the same habitats of landscape characteristics for many years.

8.5.16 The significance has been assessed as moderate or large adverse. There is a greater significance on the proposed development site as the focus becomes more honed on individual features that compose this landscape. This assessment is at an intimate level where effects are likely to be material in decision making. There will be a substantial loss in the landscape characteristics here with the permanent breaking up of large field patterns, loss of vegetation, loss of part of an Ancient Woodland and diversion of part of a core path. The proposed scheme

is at considerable variance with the character (including quality and value) of landscape. Overall the characteristics of the proposed development site are large adverse.

**Visual assessment**

- 8.5.17 Disturbance to existing ground, removal of vegetation and task lighting will be the main impacts during construction with secondary impacts being the presence of construction activities and temporary signage within the construction corridor and adjacent areas. Removal of vegetation has the greatest potential to result in long term effects on visual receptors due to the removal, principally of trees, changing views. Task lighting is also likely to have effects on views due to the creation of more distinctly brighter areas across the landscape. Secondary effects will be temporary and of short duration and can be managed or mitigated, through considered siting and phasing. The LVIA therefore primarily assesses effects resulting from removal of vegetation and task lighting.
  
- 8.5.18 As mentioned above, construction of the proposed scheme has the potential to open up views or to change the composition of views resulting in a reduction in quality of visual amenity. Impacts are summarised in Table 8-22 to Table 8-29.

Residents

- 8.5.19 The majority of residential receptors will not experience views of the scheme as other properties and features obscure views. Only properties on the south west side of Laurencekirk are likely to experience more direct and clearer views and therefore more likely to experience significant effects during construction.

**Table 8-22: Summary of Construction Impacts Viewpoint 1 West Burnside & Gardenston Street**

<b>Receptor: Viewpoint 1 West Burnside &amp; Gardenston Street</b>	
Landscape sensitivity	Very High
Description of Impact	Residents of these properties on the west side of Gardenston Street will experience views of construction of the northern junction, realignment of the A937 and construction of the SUDs pond at the A937 tie-in. Vegetation loss on the minor road and A937 to the west of Gaugers Bridge will be discernible and construction plant and cranes will be noticeable, particularly around the SUDs pond, which will be in foreground views for a number of residents.
Permanent / Temporary	Temporary
Magnitude of Effect	There will be limited deterioration of the view from residential receptors. Due to the siting of the proposed development and the orientation of residential properties there will be angled, partial views of the scheme where the closest part of the development of the construction work will be perceptible to visual receptors here for a short duration. This will be a minor magnitude of effect.
Positive / Negative	Negative
Significance	Moderate or large adverse
Potential Mitigation	Where possible grade out earthworks to assist with integration into the existing landform. Screen planting where appropriate and in keeping with the landscape character.

8.5.20 The significance has been assessed as moderate or large adverse. The receptors have very high sensitivity to change in their views. There is substantial deterioration to a view from this receptor. Construction activity combined with the low-lying topography of the landscape will accentuate non characteristic discordant movements on site. The effects on this visual receptor at this level can be considered to be material in the decision-making process and are considered moderate rather than large adverse.

Recreational and Visitor Attractions

8.5.21 As discussed in the baseline this LVIA is concentrating on core paths being representative of the main visitor attraction to the area. The three locations identified have been assessed as below:

**Table 8-23: Summary of Construction Impacts Viewpoint 2 Core path Route 3 and minor road connecting the A937 (north of the A90) to the A90**

Receptor: Viewpoint 2 Core path Route 3 and minor road connecting the A937 (north of the A90) to the A90	
Landscape sensitivity	High
Description of Impact	There are open views over flat agricultural fields to the A90 from the core path. There will be direct views from the core path during construction of the proposed scheme and as a result of the realignment of the A937 as well as creation of a new junction with the minor road at the southern end of the core path. Construction activities will therefore be a prominent feature in some views and seen in passing. There are occasional groups of trees beyond the A90.
Permanent / Temporary	Temporary
Magnitude of Effect	The proposed scheme introduces contrasting new features of construction activity across a limited area. The proximity of this viewpoint to the proposed development site will accentuate the magnitude of effect for a short duration. This will be a minor magnitude of effect.
Positive / Negative	Negative
Significance	Slight or moderate adverse
Potential Mitigation	Where possible grade out earthworks to assist with integration into the existing landform. Screen planting where appropriate and in keeping with the landscape character.

8.5.22 The significance has been assessed as slight or moderate adverse. The receptor has high sensitivity to change in its views. Construction activity combined with the low-lying topography of the landscape and the proximity to the proposed works will accentuate the non-characteristic discordant movements on site. Therefore, the significance is considered to be moderate significance on this visual receptor where at this level the significance can be considered to be material in the decision-making factors in the process.

**Table 8-24: Summary of Construction Impacts Viewpoint 3 Core Path at Beattie Lodge**

<b>Receptor: Viewpoint 3 Core Path at Beattie Lodge</b>	
Landscape sensitivity	High
Description of Impact	This core path runs southeast from Laurencekirk along Frain Drive before turning northeast passing to the south of Cairn Wood and emerging onto Cairn Gardens which is a residential area to the north of Laurencekirk Cemetery. Users of the core path will experience partially screened views of the construction of the link road and realignment of the A937 to the west of Gaugers Burn. Cranes used during construction of the south junction overbridge may also be discernible for a short duration of time.
Permanent / Temporary	Temporary
Magnitude of Effect	The proposed scheme introduces contrasting new features of construction activity across a limited area. The proposal introduces a degree of integration into the existing view. This will be a minor magnitude of effect.
Positive / Negative	Negative
Significance	Slight or moderate adverse
Potential Mitigation	Where possible grade out earthworks to assist with integration into the existing landform. Screen planting where appropriate and in keeping with the landscape character.

8.5.23 The significance has been assessed as slight or moderate adverse. The receptor has high sensitivity to change in its views. Construction activity combined with the low-lying topography of the landscape and the proximity to the proposed works will accentuate the non-characteristic discordant movements on site. There is limited deterioration to a view. Existing vegetation along Gaugers Burn offers some screening therefore the significance is considered to be a slight adverse significance on this visual receptor where at this level the significance effects are not material in the decision-making process.

**Table 8-25: Summary of Construction Impacts Viewpoint 4 Track leading to Johnston Mains Core path Route 2 / Frain Drive**

<b>Receptor: Viewpoint 4 Track leading to Johnston Mains Core path Route 2 / Frain Drive</b>	
Landscape sensitivity	High
Description of Impact	Core path Route 2 / Frain Drive at Johnston Mains Views of the Site will be screened by existing vegetation lining Gaugers Burn. During the construction the core path will require a diversion during in key phases. There will be partial views of the construction activities screened by intervening topography and vegetation for a short time.
Permanent / Temporary	Temporary
Magnitude of Effect	The proposed scheme introduces contrasting new features of construction activity across a limited area. The proposal introduces a degree of integration into the existing view. This will be a minor magnitude of effect.
Positive / Negative	Negative
Significance	Slight or moderate adverse
Potential Mitigation	Where possible grade out earthworks to assist with integration into the existing landform. Screen planting where appropriate and in keeping with the landscape character.

8.5.24 The significance has been assessed as slight or moderate adverse. The receptor has high sensitivity to change in its views. Construction activity combined with the low-lying topography of the landscape and the proximity to the proposed works will accentuate the non-characteristic discordant movements on site. There is limited deterioration to a view. Existing vegetation along Gaugers Burn offers some screening therefore the significance is considered to be a slight adverse significance on this visual receptor where at this level the significance effects are not material in the decision-making process.

Motorists

8.5.25 Those using motorised forms of travel whether it be motorists or those using public transport experience the landscape in a different way to those as pedestrians and assessed in the baseline.

**Table 8-26: Summary of Construction Impacts Viewpoint 5 Oatyhill and A90**

<b>Receptor: Viewpoint 5 Oatyhill and A90</b>	
Landscape sensitivity	Low
Description of Impact	There will be considerable change to views experienced from the A90 during construction. Views of construction works of the on and off slips from the A90 to the proposed junction proposed junction a A90 and embankments required to allow the road to elevate to the junction will dominate the view.
Permanent / Temporary	Temporary
Magnitude of Effect	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor. The proposed scheme introduces a contrasting new feature or element into views across a limited area. This will be a moderate magnitude of effect.
Positive / Negative	Negative
Significance	Slight adverse
Potential Mitigation	Where possible grade out earthworks to assist with integration into the existing landform. Screen planting where appropriate and in keeping with the landscape character.

8.5.26 The significance has been assessed as slight adverse. The receptor has a low sensitivity to change in its views. There is a limited deterioration in views. Construction activity combined with the low-lying topography of the landscape and the proximity to the proposed works will accentuate the non-characteristic discordant movements on site, however the effects at this level are not material in the decision-making process.

**Table 8-27: Summary of Construction Impacts Viewpoint 6 A937 south of the A90**

<b>Receptor: Viewpoint 6 A937 south of the A90</b>	
Landscape sensitivity	Low
Description of Impact	There will be some change to the existing view. Views of the construction of the A937 realignment will be discernible. Uncharacteristic movement that construction traffic bring will be the most discordant feature within the landscape.
Permanent / Temporary	Temporary
Magnitude of Effect	The project, or a part of it, would be perceptible but not alter the overall balance of features and elements that comprise the existing view for a short duration. This will be a minor magnitude of effect.
Positive / Negative	Negative
Significance	Neutral or slight adverse
Potential Mitigation	Where possible grade out earthworks to assist with integration into the existing landform. Screen planting where appropriate and in keeping with the landscape character.

8.5.27 The significance has been assessed as neutral or slight adverse. The receptor has low sensitivity to change in its views. There is limited deterioration to views. It would be considered that due to the low-lying landscape here the proposed development will be more prominent than if there was more visual screening from intervening topography, therefore the significance of effect is considered slight adverse.

**Table 8-28: Summary of Construction Impacts Viewpoint 7 B9120 on Kirkburn**

<b>Receptor: Viewpoint 7 B9120 on Kirkburn</b>	
Landscape sensitivity	Medium
Description of Impact	View are screened by intervening topography and vegetation.
Permanent / Temporary	Temporary
Magnitude of Effect	No part of the proposed project would be discernible
Positive / Negative	No change
Significance	No change
Potential Mitigation	Not required

8.5.28 The significance has been assessed as no change as the proposed development site is not discernible from this location.



**Table 8-29: Summary of Construction Impacts Viewpoint 8 Private access on the A90 west bound**

<b>Receptor: Viewpoint 8 Private access on the A90 west bound</b>	
Landscape sensitivity	Low
Description of Impact	There will be some change to the existing view experienced from the A90 during construction. Views of construction works of the on and off slips from the A90 to the proposed junction proposed junction a A90 and embankments required to allow the road to elevate to the junction will be discernible in the view.
Permanent / Temporary	Temporary
Magnitude of Effect	The project, or a part of it, would be perceptible but not alter the overall balance of features and elements that comprise the existing view for a short duration. This will be a minor magnitude of effect.
Positive / Negative	Negative
Significance	Neutral or slight adverse
Potential Mitigation	Where possible grade out earthworks to assist with integration into the existing landform. Screen planting where appropriate and in keeping with the landscape character.

8.5.29 The significance has been assessed as neutral or slight adverse. The receptor has low sensitivity to change in its views. There is limited deterioration to views. It would be considered that due to the low-lying landscape here the proposed development will be more prominent than if there was more visual screening from intervening topography, therefore the significance of effect is considered slight adverse.

**Operational effects at Year 1 and Year 15**

8.5.30 The Stage 3 LVIA has focussed upon the effects of the proposed scheme during operation in Years 1 and 15. The assessment of effects at the opening year at Winter Year 1 of operation assumes that the proposed scheme and all ancillary development have been constructed and that traffic is using the scheme. It also assumes that mitigation planting and seeding has been undertaken and that such planting and seeding is yet to fully establish. The assessment is undertaken assuming Winter conditions when there are no leaves on deciduous vegetation and herbaceous vegetation and crops are less noticeable. It therefore represents the maximum impact of the proposed scheme.

8.5.31 The assessment of effects at Year 15 of operation assumes that mitigation planting and seeding is establishing and whilst not necessarily fully mature, is providing a good level of screening and positive visual impacts. The assessment assumes a relatively conservative growth rate for trees of 30cm per year; meaning that vegetation will have attained a minimum height of approximately 5m at Year 15. The assessment also assumes that, in the main, whips and shrubs will be planted with larger specimens used at selected locations to maximise the opportunity to reduce impacts.

## **Landscape effects**

### ***Landscape fabric***

- 8.5.32 At Year 1 of operation, vegetation removed, or landform altered within the construction corridor will have been restored to a condition similar to its pre-construction state, where possible. Replacement vegetation will be planted, or seeding will have taken place. Where cultivated agricultural land has been used this will have been returned to its original levels or will tie into surrounding levels. Within the operational corridor of the proposed scheme it will not be possible to return the landscape to its pre-construction state as it will be occupied by the road and ancillary development. Planting and seeding on embankments and cuttings will replace some of the vegetation removed and there may be opportunities to increase the number of trees and woodland in keeping with existing landscape character.
- 8.5.33 The proposed scheme will result in the removal of trees which will be replaced where operational requirements allow it. While it is likely that any trees lost can be replaced, mature trees cannot be replaced with similar sized specimens. At Year 1 mitigation will result in a limited reduction in impacts given the displacement of landscape fabric resulting from built elements of the proposed scheme.
- 8.5.34 At Year 15 vegetation will have become more established which will achieve a degree of integration with existing landscape fabric and will compensate for the vegetation removed during construction. The impacts on landscape fabric resulting from the presence of any existing and unaffected junctions or link roads will remain unchanged.

### ***Landscape character***

- 8.5.35 The assessment of effects on landscape fabric indicates that features of value will be removed or altered during construction with some of these being replaced with similar features during Year 1 which will be well established by Year 15.
- 8.5.36 The assessment of operational impacts and effects on landscape character takes into account the fact that the proposed scheme will be a new feature in the landscape exerting an influence on landscape character by introducing new structures and linear forms into the landscape and changing land use. Vehicles using the proposed scheme will be more visible in the surrounding landscape, due to the inclusion of the overbridge, and there will be new lighting introduced into the landscape, thereby affecting aesthetic aspects of landscape character over a wider area than just physical effects. The new embankments and earthworks will introduce landscape features of height in a predominantly low-lying landscape.
- 8.5.37 The proposed scheme involves a full diamond arrangement at the south junction with merge and diverge slip roads that run parallel to the existing A90. Although it minimises the overall footprint of the junction and creates a less intrusive design that fits the existing A90 corridor and

the low-lying topography, it still involves the introduction of an overbridge and column lightings, neither of which currently feature within the landscape.

8.5.38 These features will be considered at each landscape character level as appropriate in Table 8-30 to Table 8-33.

**Table 8-30: Summary of Operation Impacts LCT 22 Broad Valley Lowlands – Aberdeenshire**

Receptor: LCT 22 Broad Valley Lowlands – Aberdeenshire		
Landscape sensitivity: Low	Year 1	Year 15
Description of Impact	The direct impacts on the LCT 22 Broad Valley Lowlands are limited to a very small geographical area. The proposed scheme will result in the removal and alteration of features and elements that are common place in the LCT and can easily be replaced. The difference in summer and winter will not be discernible at year 1	At Year 15 mitigation planting will be well established and the impact on the LCT will be barely discernible. Due to the nature of the proposed planting there will be little difference to the landscape character in summer or winter.
Permanent / Temporary	Permanent	Permanent
Magnitude of Effect	At the national level the LCT will see a negligible magnitude of effect.	At the national level there will be no noticeable alteration to the features and elements in the landscape. No change to LCT
Positive / Negative	Negative	Neutral
Significance	Neutral or Slight adverse	No change

8.5.39 The significance of the operation phase for Year 1 has been assessed as neutral or slight at the national LCT level. The effects are over a limited area and are not discernible at this level of the LCT and they are not key characteristics of this LCT. Therefore, the significance of effect is assessed as neutral. The proposed scheme at national level blends in with the existing landscape features with no discernible change to the character. As such, the effects are determined to be neutral rather than slight adverse. The significance of the operation phase for Year 15 is assessed as no change.

**Table 8-31: Summary of Operation Impacts LCT 35 Garvock and Glenberrie**

Receptor: 35 Garvock and Glenberrie		
Landscape sensitivity: Low	Year 1	Year 15
Description of Impact	In terms of overall impacts on the local landscape character the direct impacts on the LCT Garvock and Glenberrie are limited to a larger area proportionately than the national LCT Broad Valley Lowlands. The proposed development at Year 1 will introduce new features into this part of the LCT. As these features are found elsewhere within the LCT it does not change the key characteristics. The proposed changes will be discernible at local LCT for the short duration but will not dominate. The alteration of field patterns in the local LCT will not be discernible. Due to the nature of the proposed planting there will be little difference to the landscape character in summer or winter.	At Year 15 mitigation planting will be well established and while this will provide a degree of landscape integration and softening of the earthworks it will not fully integrate impacts on landscape character within a very localised part this LCT. As landscape character evolves and time passes to Year 15 the proposed development will be absorbed into the existing landscape character. Due to the nature of the proposed planting there will be little difference to the landscape character in summer or winter.
Permanent / Temporary	Permanent	Permanent
Magnitude of Effect	At the local level the LCT will see a Minor magnitude of effect where there is a slight change to the LCT for a short duration.	At the local LCT level there will be the loss of very small features. Therefore, there it is assessed as negligible effect
Positive / Negative	Negative	Negative
Significance	Neutral or Slight adverse	Neutral or Slight adverse

8.5.40 The significance of the operation phase for Year 1 has been assessed as neutral or slight at the local LCT level. As such, the effects at Year 1 are determined to be slight where the effects at this level are not material in the decision-making process. Over time to Year 15 the proposed scheme, at a local level, will blend in with the existing landscape features and will be absorbed into the LCT where the effects are below the levels of perception, neutral effect.

**Table 8-32: Summary of Operation Impacts Landscape fabric**

Receptor: Landscape fabric		
Landscape sensitivity: Medium	Year 1	Year 15
Description of Impact	At Year 1 the completed construction tree planting will offer little screening or contribution to the landscape character due to the plants size at planting. The introduction of this elevated junction will be out of scale with the height of the surrounding landscape introducing a noticeable feature. Further new elements, such as lighting will be not be consistent with the existing character. While at this level the proposed planting will contribute more to the receiving environment than at local or national LCT level there will not be discernible difference between the contributions of summer or winter planting.	At Year 15 mitigation planting will be well established and while this will provide a degree of landscape integration and softening of the earthworks it will not fully integrate impacts on landscape character within a localised part this LCT. As the landscape character evolves with time passing to Year 15 the proposed development will be absorbed into the existing landscape character to an extent. In Year 15 the summer planting will contribute to the receiving environment considerably more than winter planting.
Permanent / Temporary	Permanent	Permanent
Magnitude of Effect	At the local level the LCT will see a moderate magnitude of effect where there is a partial loss to the existing landscape character.	Due to the nature of the proposed development and the existing landscape character the proposed development will have minor magnitude of effect
Positive / Negative	Negative	Negative
Significance	Moderate adverse	Slight adverse

8.5.41 The significance for Year 1 in the operation phase is moderate where the effects can be considered at this level to be material in decision-making. The significance of the operation phase for Year 15 have been assessed as slight in the receiving environment. The effects on the receiving environment are not considered material in the decision-making process.

**Table 8-33: Summary of Operation Impacts Proposed development site**

Receptor: Proposed development site		
Landscape sensitivity: Medium	Year 1	Year 15
Description of Impact	At Year 1 the completed construction tree planting will offer little screening or contribution to the landscape character due to their size at planting. The diversion of core route 3 will be established. Wildflower meadows at the SuDS ponds will still be establishing. The introduction of this elevated junction will be out of scale with the height of the surrounding landscape introducing a noticeable feature. New vertical features, lighting and signage, will be uncharacteristic and a noticeable feature. There will be a slight difference to the effects of summer and winter landscape where the proposal will feel more integrated into the receiving environment in summer. The loss of the large sized field at this level is apparent.	At Year 15 mitigation planting will be well established including the wildflower meadows at SuDS ponds and while this will provide a degree of landscape integration and softening of the earthworks it will not fully integrate impacts on landscape character within the receiving environment. Through time the proposal will become more integrated and the proposal will be an accepted feature of the landscape. This proposal is uncharacteristic of the receiving environment at approximately 8.5m above the surrounding field level with vertical elements rising above that. In Year 15 the summer planting will contribute to the receiving environment considerably more than winter planting.
Permanent / Temporary	Permanent	Permanent
Magnitude of Effect	At the local level the LCT will see a major magnitude of effect where there is a new uncharacteristic conspicuous feature that is permanent	Due to the nature of the proposed development and the existing landscape character the proposed development will have major magnitude of effect as the proposal is permanent.
Positive / Negative	Negative	Negative
Significance	Moderate or large adverse	Moderate or large adverse

8.5.42 The proposed development site is assessed as being moderate or large adverse. There is substantial loss over the area on the features and attributes that are essential to the character of this landscapes. As such the assessment concludes that the significance of effect is moderate adverse for both year 1 and year 15.

**Table 8-34: Summary of Operation Landscape Impacts**

Receptor	Landscape Sensitivity	Magnitude of Effect		Significance	
		Year 1	Year 15	Year 1	Year 15
LCT 22 Broad Valley Lowlands	Low	Negligible	No Change	Neutral	No Change
LCT 35 Garvock and Glenbervie	Low	Minor	Negligible	Slight adverse	Neutral
Landscape fabric	Medium	Moderate	Minor	Moderate adverse	Slight adverse
Proposed development site	Medium	Major	Major	Moderate adverse	Moderate adverse

**Visual effects**

- 8.5.43 Operational effects on visual receptors and viewpoints are assessed at Year 1 and Year 15 for the scheme. Year 1 of operation represents the maximum potential impact of the proposed scheme when mitigation planting is new and yet to establish. Summer time in Year 15 represents impacts of the proposed scheme when mitigation planting will be well established.
- 8.5.44 This section includes an assessment of the effects of the proposed scheme on visual receptors. The selected viewpoints show typical views within the study area and as such are representative of views for receptors i.e. views people will experience. The viewpoints are not intended to show every possible location from which views of the proposed scheme may be obtained but are provided to inform the overall assessment of effects.
- 8.5.45 As mentioned in paragraphs 8.2.10 and 8.5.37 the scope of the assessment focusses on those visual receptors that are most likely to be significantly and adversely affected by the proposed scheme.
- 8.5.46 During the operational phase traffic will be noticeable on the new overbridge. While such traffic will result in different impacts to those occurring during construction it is unlikely that any resulting effects will affect a greater number of receptors than those which the LVIA assessed during construction.
- 8.5.47 New road lighting, to the A937, is also considered as currently there is no lighting on the A90. The settlement of Laurencekirk will create a ‘glow’ of light, through the night, but the new lighting will further extend light across the landscape.
- 8.5.48 The main effects arising from the scheme are the realignment of the A937 and link roads, the creation of the SUDs ponds and the introduction of new vertical elements within the landscape i.e. lighting and signage.



Residents

Viewpoint 1 - West Burnside & Gardenston Street

8.5.49 Residents of properties on the west side of Gardenston Street will experience views of the northern junction overbridge and traffic using it in addition to embankments, lighting and traffic associated with the A937 realignment and the northbound on ramp. A number of residents on the west side of Gardenston Street, opposite the location of the SUDs pond will also have views of the pond, maintenance access track and planting.

**Table 8-35: Summary of Operation Impacts Viewpoint 1 West Burnside & Gardenston Street**

Receptor: Viewpoint 1 West Burnside & Gardenston Street		
Landscape sensitivity: Very High	Year 1	Year 15
Description of Impact	At Year 1 mitigation planting will not yet have established. While the overbridge, embankments and traffic will be visible they will form a new noticeable feature within the view.	At Year 15 mitigation planting will have become established. The proposal will be a perceptible element of the view. It will partly screen the overbridge and A937 lighting and assist in integrating embankments into the landscape. For those residents with views of the SUDs pond, the planting will have matured to create a feature within the landscape and screen long distant views of the countryside.
Permanent / Temporary	Permanent	Permanent
Magnitude of Effect	The proposal will have a major magnitude of effect for visual receptors at Year 1	The proposal will have a minor magnitude of effect for visual receptors the proposed scheme achieves a degree of integration into the existing view
Positive / Negative	Negative	Negative
Significance	Large or very large adverse	Moderate or large adverse

8.5.50 The proposed development site is assessed as being large or very large adverse in Year 1. It is considered that the scheme is at partial variance with the existing landscape character. As it is not considered at complete variance it is not considered to be very large adverse effect, but rather large adverse effect. The integrity of a range of characteristic features and elements is degraded or diminished. At Year 15 it is anticipated that the planting will have established around the SuDs pond and the proposal is considered to be a limited deterioration to the view from limited receptors.

Recreational and visitor attractions

Viewpoint 2 - Core path Route 3 and minor road connecting the A937

8.5.51 During operation, the north side of the junction including the A937 realignment, northbound on and off ramps, roundabout and overbridge will be in immediate foreground views. The loss of vegetation and new embankments will result in significant changes to views by restricting long views as a result of the embankments.

**Table 8-36: Summary of Operation Impacts Viewpoint 2 Core path Route 3 and minor road connecting the A937 (north of the A90) to the A90**

Receptor: Viewpoint 2 Core path Route 3 and minor road connecting the A937 (north of the A90) to the A90		
Landscape sensitivity: High	Year 1	Year 15
Description of Impact	At Year 1 the proposed scheme will be in immediate foreground views. The embankments, overbridge and lighting on the A937 will be particularly noticeable. Mitigation planting will not yet have become established	At Year 15 mitigation planting alongside the minor road and on the earthworks associated with the A937 realignment, northbound on and off ramps, lighting and the overbridge will achieve a degree of screening and integration which will lessen impacts of the overbridge and lighting, but views will remain affected by the embankments. The proposed scheme will remain as a noticeable focal point in views.
Permanent / Temporary	Permanent	Permanent
Magnitude of Effect	The proposal will have a Major magnitude of effect for visual receptors at Year 1	The magnitude of effect will reduce to Moderate
Positive / Negative	Negative	Negative
Significance	Large or very large negative	Moderate or large negative

8.5.52 The proposed development site is assessed as being large or very large adverse in Year 1. As the proposed development will dominate views the significance is determined to be a very large significance where there will be a loss of views from the visual receptor identified. There is predicted to be a substantial deterioration to views by Year 15 from this sensitive receptor as it will dominate the views. The passage of time will green up this now enclosed view screening any middle to long distant views available. At year 15 this is determined to be large adverse as there is substantial deterioration of the view from this highly sensitive receptor.

Viewpoint P3 - Core Path at Beattie Lodge

8.5.53 This core path runs southeast from Laurencekirk along Frain Drive before turning northeast passing to the north of Cairn Wood and emerging onto Cairn Gardens which is a residential area to the north of Laurencekirk Cemetery.

**Table 8-37: Summary of Operation Impacts Viewpoint 3 Core Path at Beattie Lodge**

Receptor: Viewpoint 3 Core Path at Beattie Lodge		
Landscape sensitivity: High	Year 1	Year 15
Description of Impact	At Year 1 there will be no, or only glimpsed views of the completed overbridge and lighting associated with the A937 due to the existing planting at Gaugers Burn. The new junction lighting is unlikely to be discernible over and above the glow of the street and settlement lighting of Laurencekirk.	At Year 15, proposed roadside planting will further integrate the scheme into the landscape and further reduce any potential perception of road lighting.
Permanent / Temporary	Permanent	Permanent
Magnitude of Effect	The proposal will have a Negligible magnitude of effect for visual receptors at Year 1	There will be no change to the magnitude of effect
Positive / Negative	Negative	Negative
Significance	Slight	Neutral

- 8.5.54 The proposed development site is assessed as being slight adverse in Year 1 where it is considered that there will be limited deterioration in the views for this highly sensitive receptor. As the proposed development becomes integrated into the view with time and mitigation planting established the significance will reduce to neutral where there will be no discernible view.

Viewpoint 4 Track leading to Johnston Mains Core path Route 2 / Frain Drive

**Table 8-38: Summary of Operation Impacts Viewpoint 4 Track leading to Johnston Mains Core path Route 2 / Frain Drive**

Receptor: Viewpoint 4 Track leading to Johnston Mains Core path Route 2 / Frain Drive		
Landscape sensitivity: High	Year 1	Year 15
Description of Impact	The proposed scheme will be discernible from more elevated parts of Frain Drive particularly the road lighting along the A937. However, they will be a relatively minor feature in views and seen in the context of the existing A90 and lighting 'glow' of Laurencekirk.	At Year 15, proposed roadside planting will further integrate the scheme into the landscape and further reduce any potential perception of road lighting.
Permanent / Temporary	Permanent	Permanent
Magnitude of Effect	The proposal will have a Negligible magnitude of effect for visual receptors at Year 1	There will be no change to the magnitude of effect
Positive / Negative	Negative	Negative
Significance	Slight	Neutral

8.5.55 The proposed development site is assessed as being slight adverse in Year 1 where it is considered that there will be limited deterioration in the views for this highly sensitive receptor. As the proposed development becomes integrated into the view with time and mitigation planting establishes the significance will reduce to neutral where there will be no discernible view.

Motorists

Viewpoint 5 Oatyhill and A90

8.5.56 The proposed scheme will result in a change to views experienced from the A90 during the operational phase, involving a single grade separated junction with overbridge, associated link roads and realignment of the A937 with road lighting.

8.5.57 The merge and diverge slip roads and overbridge will be the most noticeable elements to road users and will interrupt views across the open landscape from the A90. Proposed mitigation planting will be used to integrate the development into the landscape when viewed from surrounding areas and to enhance the environment of the road corridor for road users, compensating for the loss of existing trees.

**Table 8-39: Summary of Operation Impacts Viewpoint 5 Oatyhill and A90**

Receptor: Viewpoint 5 Oatyhill and A90		
Landscape sensitivity: Low	Year 1	Year 15
Description of Impact	At Year 1 mitigation planting will not yet have established and the embankments and overbridge will not be screened or softened vegetation. The scheme will be noticeable although seen in the context of the existing A90 and associated ancillary development.	At Year 15, the planting will be well established. Although the overbridge and lighting will be better integrated into the landscape, views of the open landscape will be permanently interrupted due to the overbridge.
Permanent / Temporary	Permanent	Permanent
Magnitude of Effect	The proposal will have a Moderate magnitude of effect for visual receptors at Year 1	The proposal will have a Minor magnitude of effect for visual receptors at Year 15
Positive / Negative	Negative	Negative
Significance	Slight	Neutral or Slight

8.5.58 The proposed development site is assessed as being slight adverse in Year 1 where it is considered that there will be limited deterioration in the views for this receptor. Although the proposed development will become more integrated into the view with time the view will be permanently changed therefore it is considered that the Year 15 significance will remain as slight adverse.

Viewpoint 6 A937 south of the A90

8.5.59 The proposed scheme will result in realignment of the A937 and include the overbridge as part of the new alignment, plus associated road lighting. Motorists will experience a change of view from the realigned sections, the overbridge and views of the realignment from the unaffected sections of road.

8.5.60 Realignment of the A937 will occur to the north and south of the A90. Northbound motorists using the A937, on the south side of the A90, will experience a change to views on approaching the entrance to Mains of Newton Farm. The new junction will elevate the A937 above the surrounding landscape affording motorists’ extensive views of the surrounding landscape. The new road lighting will affect views by introducing light into a landscape that is currently relatively dark. The light columns will be visible and from a distance the light spill will be evident. In close proximity to the lights, views across the landscape will be reduced.

**Table 8-40: Summary of Operation Impacts Viewpoint 6 A937 south of the A90**

Receptor: Viewpoint 6 A937 south of the A90		
Landscape sensitivity: Low	Year 1	Year 15
Description of Impact	The proposed scheme will alter the route of the A937 introducing a prominent new feature that will be visible from the road itself, both during the day and at night and which will elevate motorists above the surrounding landscape resulting in a change to the outlook experienced. However, the change will be experienced in passing and in context of the existing road corridor.	At Year 15, the planting will be well established. Although the overbridge and lighting will be better integrated into the landscape, views of the open landscape will be permanently interrupted due to the overbridge. Mitigation planting will assist in integrating the development into the landscape to a degree and compensate for the loss of existing trees.
Permanent / Temporary	Permanent	Permanent
Magnitude of Effect	The proposal will have a Moderate magnitude of effect for visual receptors at Year 1	The proposal will have a Minor magnitude of effect for visual receptors at Year 15
Positive / Negative	Negative	Negative
Significance	Slight	Neutral or Slight

8.5.61 The proposed development site is assessed as being slight adverse in Year 1 where it is considered that there will be limited deterioration in the views for this receptor. Although the proposed development will become more integrated into the view with time the view will be permanently changed therefore it is considered that the Year 15 significance will remain as slight adverse.

Viewpoint 7 B9120 on Kirkburn

8.5.62 As discussed in the baseline there are no views of the proposed development available from this viewpoint location.

**Table 8-41: Summary of Operation Impacts Viewpoint 7 B9120 on Kirkburn**

Receptor: Viewpoint 7 B9120 on Kirkburn		
Landscape sensitivity: Medium	Year 1	Year 15
Description of Impact	No views are available.	No views are available.
Permanent / Temporary	Not applicable	Not applicable
Magnitude of Effect	The proposal will have No Change	The proposal will have No Change
Positive / Negative	Not applicable	Not applicable
Significance	Neutral	Neutral

8.5.63 The proposed development site is assessed as having neutral effects as there is no visual change to the receptor.

Viewpoint 8 Private access on the A90 west bound

8.5.64 The existing direct access from Johnston Lodge to the A90 is proposed to be extinguished with a new track, to be shared with non-motorised users, is proposed to run parallel to the A90 connecting to an existing farm access leading to the A937. As the viewpoint has been taken from the A90 road side the alteration to the access arrangement is not considered here. The proposed scheme will result in a change to views experienced from the A90 during the operational phase, involving a single grade separated junction with overbridge, associated link roads and realignment of the A937 with road lighting.

8.5.65 The merge and diverge slip roads and overbridge will be the most noticeable elements to road users and will interrupt views across the open landscape from the A90. Proposed mitigation planting will be used to integrate the development into the landscape when viewed from surrounding areas and to enhance the environment of the road corridor for road users, compensating for the loss of existing trees.



**Table 8-42: Summary of Operation Impacts Viewpoint 8 Private access on the A90 west bound**

Receptor: Viewpoint 8 Private access on the A90 west bound		
Landscape sensitivity: Low	Year 1	Year 15
Description of Impact	At Year 1 mitigation planting will not yet have established and the embankments and overbridge will not be screened or softened by vegetation. The scheme will be noticeable although seen in the context of the existing A90 and associated ancillary development.	At Year 15, the planting will be well established. Although the overbridge and lighting will be better integrated into the landscape, views of the open landscape will be permanently interrupted due to the overbridge.
Permanent / Temporary	Permanent	Permanent
Magnitude of Effect	The proposal will have a Moderate magnitude of effect for visual receptors at Year 1	The proposal will have a Minor magnitude of effect for visual receptors at Year 15
Positive / Negative	Negative	Negative
Significance	Slight	Neutral or Slight

8.5.66 The proposed development site is assessed as being slight adverse in Year 1 where it is considered that there will be limited deterioration in the views for this receptor. Although the proposed development will become more integrated into the view with time the view will be permanently changed therefore it is considered that the Year 15 significance will remain as slight adverse.

Summary of Visual Effects

**Table 8-43: Summary of Operation Visual Impacts**

Receptor	Landscape Sensitivity	Magnitude of Effect		Significance	
		Year 1	Year 15	Year 1	Year 15
Viewpoint 1 West Burnside & Gardenston Street	Very high	Major	Minor	Large adverse	Moderate adverse
Viewpoint 2 Core path Route 3 and minor road connecting the A937 (north of the A90) to the A90	High	Major	Moderate	Very large adverse	Large adverse
Viewpoint 3 Core Path at Beattie Lodge	High	Negligible	No change	Slight adverse	Neutral
Viewpoint 4 Track leading to Johnston Mains Core path Route 2 / Frain Drive	High	Negligible	No change	Slight adverse	Neutral
Viewpoint 5 Oatyhill and A90	Low	Moderate	Minor	Slight adverse	Slight adverse
Viewpoint 6 A937 south of the A90	Low	Moderate	Minor	Slight adverse	Slight adverse
Viewpoint 7 B9120 on Kirkburn	Medium	No change	No change	Neutral	Neutral
Viewpoint 8 Private access on the A90 west bound	Low	Moderate	Minor	Slight adverse	Slight adverse

**8.6 Summary of Residual Effects**

**Landscape assessment**

- 8.6.1 This Stage 3 LVIA has assessed the impacts of the proposed scheme on the landscape receptors i.e. national landscape character type, local landscape character type, landscape fabric and the proposed development site both during construction and during operation.
- 8.6.2 Impacts as a result of the physical ‘footprint’ of the construction of the proposed scheme will result in direct and irreversible effects with neutral or slight effects occurring at national and local level. The construction significance of effect increases as the assessment focuses in on the landscape and the proposed development site to large adverse. This is typical for this type of development proposal where much of the proposals make use of the existing road network i.e. A90 and A937 corridors.
- 8.6.3 There will be permanent loss of agricultural land and existing young trees. The introduction of the new merge and diverge slip roads, overbridge, associated lighting and planting will result in

permanent changes to the landscape, but the impacts and effects will most be felt at the local level. Earthworks to the new embankments and associated with the SUDs ponds will tie-in as sensitively as is practical, given that a balance required to be struck between appropriate contouring and minimising land take to achieve this.

- 8.6.4 There will be indirect effects on the Coastal Farmed Ridges and Hills LCT as it bounds the site and the Broad Valley Lowlands LCT, on its eastern edge. Due to the proximity of the LCTs boundary there will be some visibility from the LCT 24 – Coastal Farmed Ridges and Hills. This proposal is not considered to affect LCT 24 as the majority of it is outside the LCT.
- 8.6.5 The operation significance similar to the operation phase is greater at local level decreasing as the scale each assessment considers increases. The significance is also greater at Year 1 diminishing in time to Year 15. This does however, still leave the proposed development site at Year 15 with a moderate adverse effect as there is a noticeable difference to the character (including quality and value) of landscape is introduced. Mitigation measures such as:
- planting native tree species in a sensitively laid out lay within grasslands to replicate the landscape character found locally;
  - SUDs ponds planted with species that are not only native and appropriate to the local landscape but also are tolerant of possible future climatic conditions; and
  - enhanced biodiversity and habitat through the selection of native species.

#### **Visual assessment**

- 8.6.6 This Stage 3 LVIA has assessed the effects of the proposed scheme on the visual receptors within the study area. The visual receptors include Residents, Recreational Routes, Road Users (vehicles, cyclists and pedestrians) and Community locations.

#### Residents

- 8.6.7 Although the settlement of Laurencekirk is situated within 0.5km from the proposed overbridge, the majority of the residents will have no or only glimpsed and oblique views of the new junction due to screening from existing trees and other built form, as determined from the Stage 2 report. Views from farm steadings, within the wider landscape, are generally screened by other large-scale farm buildings and surrounding tree groups.
- 8.6.8 All residential receptors are determined as having a sensitivity of Very High. This is because views are fixed and often considered to be important to the enjoyment of the property. As described above, the majority of residential receptors have no or limited views of the proposed scheme.

- 8.6.9 Only residents on the west side of Gardenston Street will directly experience views and in the main this will be residents immediately opposite the new SUDs pond at the tie-in on the A937. During construction, residents of these 18 properties on the west side of Gardenston Street will experience views of construction of the northern junction, realignment of the A937 and construction of the SUDs pond at the A937 tie-in. Vegetation loss on the minor road and A937 to the west of Gaugers Bridge will be discernible and construction plant and cranes will be noticeable, particularly around the SUDs pond, which will be in foreground views for a number of residents. The magnitude of effect will be Moderate but will be temporary and of short duration. The significance of effects will therefore be Moderate Adverse.
- 8.6.10 During operation residents of properties on the west and east side of Gardenston Street will experience views of the northern junction overbridge and traffic using it in addition to embankments, lighting and traffic associated with the A937 realignment. A number of residents on the west side of Gardenston Street, opposite the location of the SUDs pond will also have views of the pond, maintenance access track and new planting.
- 8.6.11 Ultimately, mitigation planting will partly screen the overbridge and A937 lighting and assist in integrating embankments into the landscape. For those residents with views of the SUDs pond, the planting will have matured to create a positive feature within the landscape and local views. However, the earth works required to shape the SUDs pond and planting will now screen long distant views previously available. The magnitude of effect will therefore be Minor with the resulting significance of effect being Moderate Adverse.

Recreation and visitor attractions

- 8.6.12 Users of Core Paths will experience similar changes to views as road users. In some views the new junction will be a major new element, particularly when approaching the junction, but for most users, key elements: overbridge, slip roads, lighting and embankments will be barely discernible or only be one feature as part of wider views.
- 8.6.13 All the Core Paths have been assessed as being of High Sensitivity. During construction there will be varying degrees of impacts ranging from construction activity being visible within views to temporary closures and/or diversions. The significance of effect will be Moderate Adverse for Core path Route 3 south east of Denlethen Wood, Slight Adverse for the Core Path at Beattie and for the Core path route 2 leading to Johnstone Mains. However, for all the effects will be temporary and of short duration.
- 8.6.14 During operation the effects are considered to be very large adverse at Year 1 diminishing to large adverse at Year 15 for the Route 3 south east of Denlethen Wood when users will have become accustomed to the anticipated realignment / extinguishment. Planting will reduce the visual effects of A937 realignment, northbound on and off ramps, lighting and the overbridge but they will remain noticeable features in views.

- 8.6.15 For the Core Path at Beattie Lodge and Core path Route 2 leading to Johnstone Mains the significance of effects reduces from slight adverse at year 1 to neutral at year 15 as the new junction will be a relatively minor feature in views and seen in the context of the existing A90 and lighting 'glow' of Laurencekirk.

Motorists and public transport users

- 8.6.16 The A90 and A937 roads are assessed as Low Sensitivity with the minor and more rural roads, such as the B9120, as Medium sensitivity. Road users, particularly those using the A90, A937 and the minor road west of Gaugers Burn will experience direct views of the new junction. However, changes to views and the new elements; merge and diverge slips, overbridge, lighting and signage will all be seen in the context of existing road infrastructure elements and seen in passing.
- 8.6.17 During construction users of the A90 and A937 will experience considerable changes to views, involving the construction of the single grade separated junction with associated link roads, overbridge and realignment of the A937 as well as work associated with the link road as far as Gaugers Burn. The main impacts will arise from construction activities and earthworks. Vegetation loss will be noticeable this is comprised of agricultural land and small occasional groups of trees along the route of both the A90 and A937.
- 8.6.18 The magnitude of effect is assessed as being minor or no visibility with the significance being assessed as slight adverse of neutral due to a lack of views. However, the effects will be temporary, of short duration and seen in passing in the context of other road infrastructure elements.
- 8.6.19 During operation the effects are the introduction of a single grade separated junction with overbridge, associated link roads and realignment of the A937 with road lighting, signage and planting featuring within views. The significance of effect for Year 1 is assessed as slight adverse remaining as this for Year 15.

Community receptors

- 8.6.20 The LVIA has demonstrated that there are no views either during construction or when the road is operational and therefore, there are no effects to the selected community locations.

## **8.7 Impacts on Policy and Legislation**

- 8.7.1 As stated in Stage 2 a detailed LVIA was required to assess the impacts and significance of effects on landscape and visual receptors. This Stage 3 document has set out the methodology, inherent mitigation and conclusions of the assessment.

8.7.2 A detailed landscape specification, to support the findings of the full Environmental Assessment, has been prepared to ensure appropriate measures are in place, in keeping with local landscape and visual character and offsets any loss or damage to landscape elements and features due to the implementation of the proposed scheme.

8.7.3 The policy and legislation requiring a detailed landscape mitigation and management plan are:

- o European Landscape Convention
- o Scotland’s Third National Planning Framework (3)
- o Transport Scotland: Fitting Landscapes
- o Scottish Planning Policy
- o Scottish Natural Heritage’s Landscape Policy Framework
- o Aberdeen City and Shire Strategic Development Plan
- o Aberdeenshire Local Development Plan
- o Aberdeenshire Council’s Planning Advice on Landscape Design Guidance
- o Aberdeenshire Council’s Planning Advice on Trees and Development

**Table 8-44: Summary of Impacts on Policies and Legislation**

Scale	Legislation / regulation	Summary of relevant policy	Impact / Mitigation	Achieves Objectives
National	European Landscape Convention	The ELC requires “...landscape to be integrated into regional and town planning policies and in cultural, environmental, agricultural, social and economic policies, as well as any other policies with possible direct or indirect impacts on landscape.”	The proposed scheme will require a detailed landscape planting plan and landscape specification to ensure appropriate measures are put in place that are in keeping with local landscape and visual character.	Yes
	Scotland’s Third National Planning Policy Framework (3) (NPPF3)	NPPF3 states “We need to manage change on the urban edge and work to improve productivity and the quality of the landscape setting of our towns and cities”.	The proposed scheme will require a detailed landscape planting plan and landscape specification to ensure appropriate measures are put in place that are in keeping with local landscape and visual character.	Yes

Scale	Legislation / regulation	Summary of relevant policy	Impact / Mitigation	Achieves Objectives
	Transport Scotland: fitting Landscapes	Fitting Landscapes states that it is important that transport corridors are designed to "...fit with the landscape through which they pass – reflecting local distinctiveness, conserving and enhancing areas of high quality or, where appropriate, creating a positive contrast to the natural setting."	The proposed scheme will require a detailed landscape planting plan and landscape specification to ensure appropriate measures are put in place that are in keeping with local landscape and visual character.	Yes
Regional	Aberdeen City and Shire Strategic Development Plan 2018	This junction on the A90 has been identified as a junction improvement. Ref 8.17 Para 3.40	Implementing the junction improvement demonstrates compliance with the Strategic Development Plan	Yes
		E1 Natural Heritage	No natural heritage has been identified on the proposed site.	Not relevant
Local	Aberdeenshire Local Development Plan 2017	Policy PR1 Protecting Important Resources	No important resources are identified on the proposed development site, however there is the proposal to implement SuDs ponds which will require a detailed planting plan and supporting landscape specification	Yes
	Aberdeenshire Council Landscape Design Guidance	Planning Advice: Number 13 2015 Landscaping Design Guidance states; "It states that a quality landscape scheme should: "Aid development to fit positively into its landscape setting"	The proposed scheme will require a detailed landscape planting plan and landscape specification to ensure appropriate measures are put in place that are in keeping with local landscape and visual character.	Yes
		Planning Advice: Number 11/2015 Trees and Development states that trees should be protected from damage	There are no trees being retained within the footprint of the proposed development. All trees to be retained along with a landscape specification stating methods of protection.	Yes

## 8.8 Mitigation

### Construction

- 8.8.1 Disturbance to existing ground and removal of existing vegetation are the two key impacts during construction. During construction the working corridor will be minimised to reduce the need to remove existing vegetation and minimise disturbance to existing ground and soil. As

the proposed development requires complete clearance of vegetation within the working area only trees or vegetation adjacent to the working area can be retained.

- 8.8.2 Existing soil is a valuable resource that has the potential to be damaged as a result of compaction by construction plant or by inappropriate removal and storage. A soil resource plan will therefore be prepared in accordance with good practice guidance such as the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Ref 8.20). The Manual of Contract Documents for Highway Works (Ref 8.21) will also inform the construction method to ensure sustainable use of existing landscape resources.
- 8.8.3 Removal of vegetation has the potential to open up views of the construction corridor to visual receptors in the surrounding area. However, as there is limited existing screening vegetation there will be some, but not many more views opened up. Views of plant, machinery and construction activity will occur where previously views in that direction may have been screened by vegetation and landform.
- 8.8.4 Additional impacts of construction have been taken into account as part of the LVIA and include:
- Creation of construction compounds and storage areas and erection of site offices and welfare buildings;
  - Movement of construction traffic and plant, including cranes, within the construction corridor and adjacent road network; and
  - Use of task lighting and signage.
- 8.8.5 Construction compounds will be sited and designed to minimise effects on vegetation and soil. Construction traffic and plant and the presence of task lighting and signage will be managed to minimise effects which will be of short duration.
- 8.8.6 Mitigation will include the following:
- Siting and design of construction compounds to minimise visual impact;
  - Use of hording to minimise visual impact of construction compounds and activities;
  - Pre-construction tree survey and method statement to minimise the amount of vegetation removed;
  - Use of cowls and directional units for task lighting; and
  - Siting and heights of storage materials to minimise visual impacts and in the case of topsoil, stored to minimise risks of degradation.
- 8.8.7 Construction activities will be temporary and of relatively short duration. However, the visual impacts of vegetation removal will persist into the operational phase of the proposed scheme.



## Operation

- 8.8.8 The primary means of mitigation is in the layout and design of the junctions and the alignment of link roads and SUDs ponds to ensure the best fit with existing contours and landscape features. LA 107 Landscape and Visual Effects (Ref 8.2, para 3.49), advises that the choice of options avoiding potential adverse effects and with good fit in the landscape is fundamental to reduction in effects. The Landscape design shall seek to:
- “Reflect the beauty of the natural, built and historic environment through which it passes.”
- 8.8.9 Avoid likely significant effects by taking account of the importance and sensitivity of the landscape resource, of views and the visual amenity, their susceptibility and value, to avoid likely significant effects. The existing landscape consists of agricultural fields lined with small occasional trees with occasional properties, and there is no statutory designations at national, regional or local level with no historic designations identified within the proposed development site. Therefore, it is not possible to reflect the built or historic environment and comply with LA 107.
- 8.8.10 A key feature of this landscape is being set within a low-lying area where intervenability between the Grampian Hills and Garvock Hills afforded easily when within this landscape from many local viewpoints. There is some screening offered locally by mature bands of trees lining Gaugers Burn breaking up generally east to west axis views. The nature of this proposal is not in keeping with the natural beauty, however the planting plan offers some mitigation with occasional clumps of trees in native species such as; *Betula pendula*, *Corylus avellana*, *Quercus robur* and *Sorbus aucuparia* to replicate and enhance the existing landscape character found here.
- 8.8.11 The four key policy aims of Fitting Landscapes have been taken into consideration as part of the proposed scheme layout to ensure it is integrated with the landscape through:
- Aim 1: high quality of design and place
  - Aim 2: enhancing and protecting natural heritage
  - Aim 3: using resources wisely
  - Aim 4: building in adaptability to change.
- 8.8.12 These four aims advocate integration of transport projects with their surroundings in ways that positively enhance biodiversity in addition to the creation of new landscapes and their effective management and maintenance. Compliance with the four aims are discussed below.

- 8.8.13 The proposed development has through design development and route option selection at stage 2 has developed a route selection that is the best 'fit' through the landscape. To upgrade the existing junction sympathetic alignment of the southern portion of the A937 is required. The new line of the section of the A937 north of the A90 separates a large agricultural field which is typical of the existing landscape character. For the majority of the proposed development has identified a high quality of design and place (Aim 1). The planting plan aims to enhance the natural environment in replicating the species native to the area. Top soil found on site should be stripped off, stored and reused on site in accordance with Construction Code of Practice for the Sustainable Use of Soils on Construction Sites.
- 8.8.14 The natural heritage will be enhanced and protected (Aim 2) by a sensitive planting plan that shall use native species arranged in a way to reflect the natural occurring landscape. Selection of appropriate species will ensure that the planting has the best chance of survival with the correct species chosen for the site location and conditions. As the receiving environment is low-lying arable fields with occasional groups of trees this has been reflected in the planting plan. Existing trees in the area are likely to be constrained by the prevailing openness which will allow a freedom of wind in the area and in turn will stunt trees. Native species will enhance the wider habitat network.
- 8.8.15 The planting plan through the design and species selection has identified a minimal maintenance regime with the use of occasional trees in grassland embankments. Embankments within the junction are identified to be planted with native scrub mix where there is shelter from open winds, and it will also enhance the wider habitat whilst creating visual interest that will not be a visual intrusion into the wider landscape views. This also fits into the existing landscape character and fits with Aim 3: use resource wisely.
- 8.8.16 The proposal has allowed for future change for climatic parameters with the inclusion of three SuDs ponds. Planting around these features is designed to tolerate periods of wet and drought.
- 8.8.17 Secondary mitigation includes the siting and design of ancillary development such as vehicle restraint systems, fences, signage and lighting and involves the reuse or alteration of existing landscape features and the selection of materials for any new landscape features. Secondary landscape mitigation measures become necessary when primary measures alone are not enough to avoid or reduce impacts on the surrounding landscape. Secondary measures include:
- On and offsite planting;
  - Mounding and earth shaping;
  - Careful consideration of the form and finish of structures;
  - The alignment and appearance of roadside ditches and fences;

- The appearance of other features such as signs and gantries; and
  - Design of SUDs ponds to ensure permanent area of standing water.
- 8.8.18 Mitigation planting will include the following characteristics:
- Species selected with local provenance;
  - Local native tree and shrub species along the A90 consistent with the existing species locally;
  - Mixture of native trees and shrub planting with seasonal interest;
  - Appropriate species to complement the SUDs ponds, provide biodiversity and habitats as well as be tolerant of climatic conditions, such as drought or periods of waterlogging; and
  - Inclusion of colour and interest where the topography and climate will allow and where it will not interfere with the visual amenity.
- 8.8.19 It is important to recognise that mitigation should be in keeping with existing landscape character while also taking account of impacts on visual receptors. It is therefore inappropriate to plant trees along the entire length of link roads and realignments of the A937 as this could emphasise these elements as new linear features in the landscape and have the potential to prevent views across open areas of the landscape.
- 8.8.20 With regard to visual impact this LVIA is concerned primarily with secondary mitigation and in particular the effectiveness of mitigation planting in reducing visibility of the proposed scheme during operation whilst integrating it into the existing landscape.
- 8.8.21 During operation the road structure, embankments, bridges, and other ancillary development will be visible in the landscape. Movement of traffic on the proposed scheme will also be noticeable.
- 8.8.22 Mitigation planting will be used to restore parts of the construction corridor that do not form part of the operational road corridor. Mitigation planting will occur within the operational road corridor on sections of embankment, such as those at the proposed overbridges, the on and off ramps and link roads to reduce overall impacts of the earthworks and integrate the scheme into the surrounding landscape. Mitigation will also be used selectively to reduce or avoid impacts on residential properties where it is assessed that such impacts will be significant.
- 8.8.23 Mitigation planting will seek to avoid emphasising the proposed scheme as a new feature visible in the landscape and will take into account the need to preserve key views across the open landscape or to important features such as woodland. The assessment of construction and operational impacts described in Section 8.5 takes into account the identified mitigation.

## 8.9 Limitations

- 8.9.1 At the time of assessment, it is unclear the exact methods of construction and location of compounds. In further detailed design the effects will become clear for part of the Ancient Woodland at Gaugers Burn, the entrance of Johnston Main and Core path 3.
- 8.9.2 As indicated, the proposed scheme will require a detailed landscape mitigation and supporting landscape specification to ensure that measures are in keeping with local landscape and visual character. The measures will ensure that adverse impacts such as emphasising the linear character of link roads or preventing views across the open landscape do not occur.
- 8.9.3 Detailed mitigation includes measures to address impacts on users of recreational routes and core paths as a result of severance of such routes, as well as including measures to address potential visual impacts of lighting.

## 8.10 Summary

- 8.10.1 There is the potential for a number of visual receptors to be affected, given the close proximity to the settlement of Laurencekirk and the relatively flat and open character of the landscape. The LVIA has demonstrated that there are some visual receptors with views of the proposed scheme. In the main the receptors who will experience the greatest changes to views are those with static views in close proximity. The introduction of lighting into this low-lying landscape which will sit at a greater height than the junction combined with the loss of some of Gaugers Burn Ancient Woodland have enhanced the effect this proposed development will have on the landscape and visual receptors here.
- 8.10.2 Core path / Route 3 will have the greatest effect after 15 years due to a combination of the proposed works within the view here and the proximity to the proposed development. A further consideration that the end of the core path will require diversion or realignment is also a factor in concluding this as a large adverse effect after 15 years.
- 8.10.3 The properties to the West Burnside & Gardenston Street will experience moderate adverse effects after 15 years. The remaining receptors, both landscape and visual are considered as not significant.
- 8.10.4 Road users will experience changes in the context of the existing road network and infrastructure and will be seen in passing.
- 8.10.5 There are a few significant residual effects that cannot be omitted with the proposed planting due to the nature of the proposal and characteristics of this low-lying area sparse of screening vegetation. The LVIA concludes that the proposed scheme, given the scale and nature, can be

integrated into the landscape, however its implementation will be a change to the landscape and visual characteristics of the area.