Strathspey Railway Extension

SCOPING REPORT

REQUEST FOR SCOPING OPINION

THE TRANSPORT AND WORKS (SCOTLAND) ACT 2007

(APPLICATIONS AND OBJECTIONS PROCEDURE RULES 2007/570)

Quality Management

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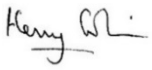
Prepared by	Janet Burns			
Signature				
Checked by	Henry Collin			
Signature				
Authorised by	Andrew Ramand			
Signature				
Project number	10146			

Strathspey Railway Extension

Strathspey Railway Trust

Aviemore Station
Dalfaber Road
Aviemore
PH22 1PY

Energised Environments Limited

7 Dundas Street
Edinburgh
EH3 6QG
Registration Number: SC450178

Content

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1 Introduction

1.1 Background and Context

1.1.1 The Strathspey Railway Trust (hereafter referred to as "the Applicant") intends to apply to the Scottish Ministers for a Transport and Works (Scotland) Act Order (TAWS Order) to build and operate an extension to the existing Strathspey Railway. The Application will be submitted to the Transport and Works Scotland Unit (TAWS Unit) within the Scottish Government. The Order will cover both the Strathspey Railway extension (to Grantown on Spey) and a realignment of the A95 trunk road where it crosses the railway line. It will also seek deemed planning permission in principle for a new station in Grantown and deemed planning permission for any other aspects of the development not covered by permitted development rights. Initial consultation with the TAWS unit, Transport Scotland and the Strathspey Railway Trust have identified that the application will require an Environmental Impact Assessment (EIA) to be undertaken and an Environmental Statement (ES) submitted with the application for the TAWS Order.

1.1.2 Schedule 1 of the Transport and Works (Scotland) Act 2007 (Applications and Objections Procedures) Rules 2007 requires that regard is given to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest. It also requires that reasonable mitigation of effects on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.

1.1.3 The application will be supported by an Environmental Statement (ES) to meet the requirements of the Transport and Works (Scotland) Act 2007. This document forms the Scoping Report for the EIA of the Proposed Development, to be submitted to TAWS Unit.

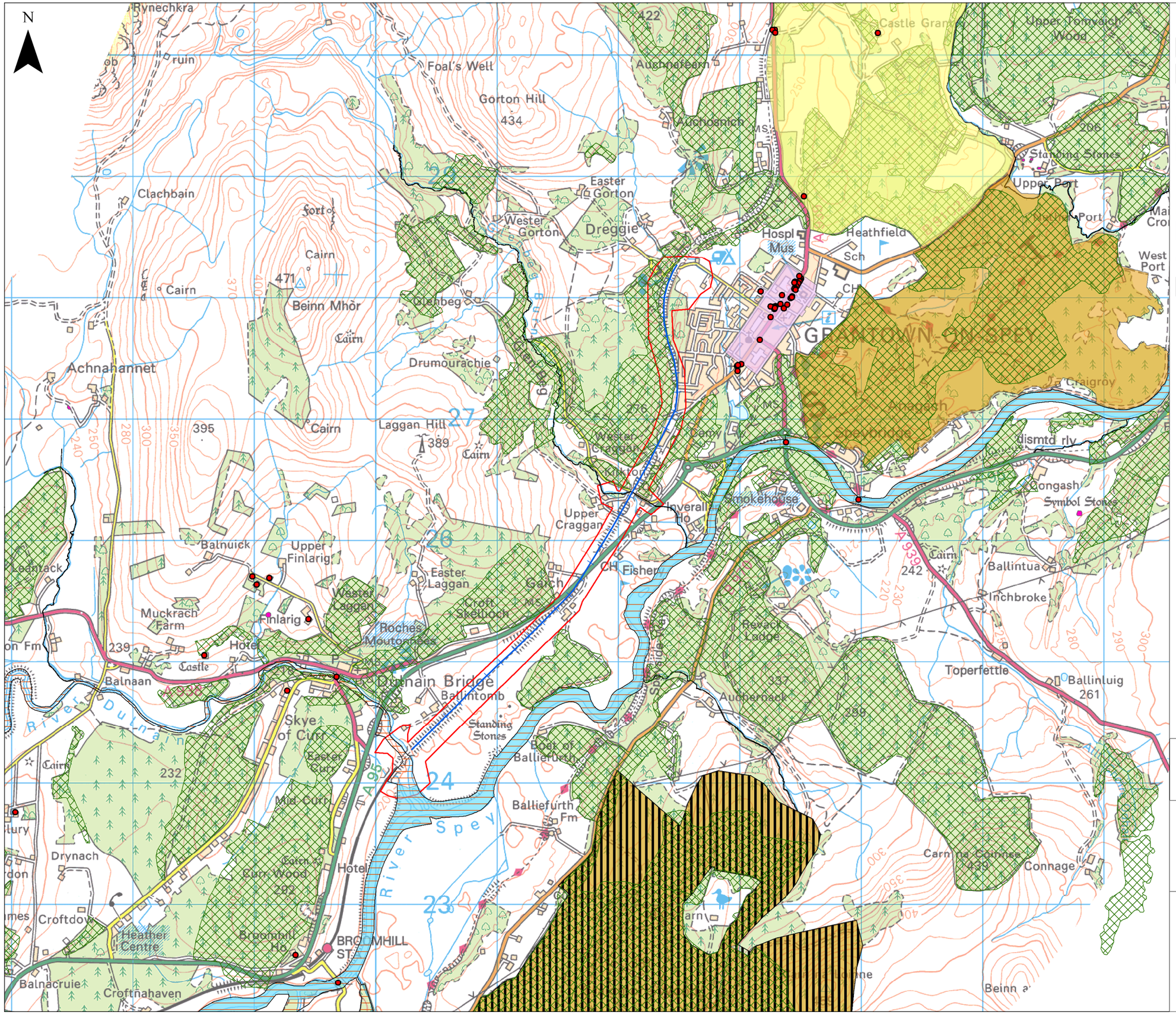
1.1.4 The Proposed Development would comprise a 4.8km extension to the Strathspey Railway from an existing bridge over the River Dulnain and following the historical route of the former railway, to Grantown on Spey. A railway station and associated car parking will be included at Grantown. Significant road realignment work (including a new underpass under the road) will also be required to the A95 where it is crossed by the line of the railway, to accommodate the railway, which is included within this scheme. Figure 1.1 and 1.2 shows the proposed route of the railway extension, high level environmental constraints and an outline of the road works.

1.2 The Applicant

1.2.1 The Strathspey Railway Company was established in 1971 and the Strathspey Railway Association (a voluntary supporting organisation) was formed the following year. In 1972, the Company agreed to purchase the line from Aviemore to Grantown from British Rail. The Station at Boat of Garten was still standing and the track between Aviemore and Boat of Garten, but the remainder of the line to Grantown had been lifted and the bridge over the River Dulnain removed.

1.2.2 After much renovation and restoration, the Company began running trains from Aviemore, "Speyside Station", to Boat of Garten in 1978. The Company had no access to the main-line British Rail Station at Aviemore until 1998 when the privatised "Railtrack PLC" consented to lease station buildings, Platform 3 and the nearby car park. In 2002, the line from Boat of Garten to Broomhill was re-opened with a new station, built at Broomhill.

1.2.3 The current phase is known as the 'Rails to Grantown', where the objective is to reach Grantown on Spey, a key milestone of this project was achieved in 2014, when the Strathspey Railway, erected a bridge and laid the track crossing the River Dulnain (less than one mile from the current terminus at Broomhill). The Proposed Development now is the final stage in this phase.



Key

- Study Area
- Proposed New Track

Ecological Designations

- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- Special Site of Scientific Interest (SSSI)
- Ancient Woodland
- RSPB Reserve

Cultural Heritage

- Listed Buildings
- Gardens and Designed Landscapes
- Conservation Area
- Scheduled Monument

0 0.25 0.5 1 km

Scale 1:30,000 @ A3

Strathspey Railway Extension
Environmental Scoping Report

Figure 1.1

Site Location and Environmental Constraints

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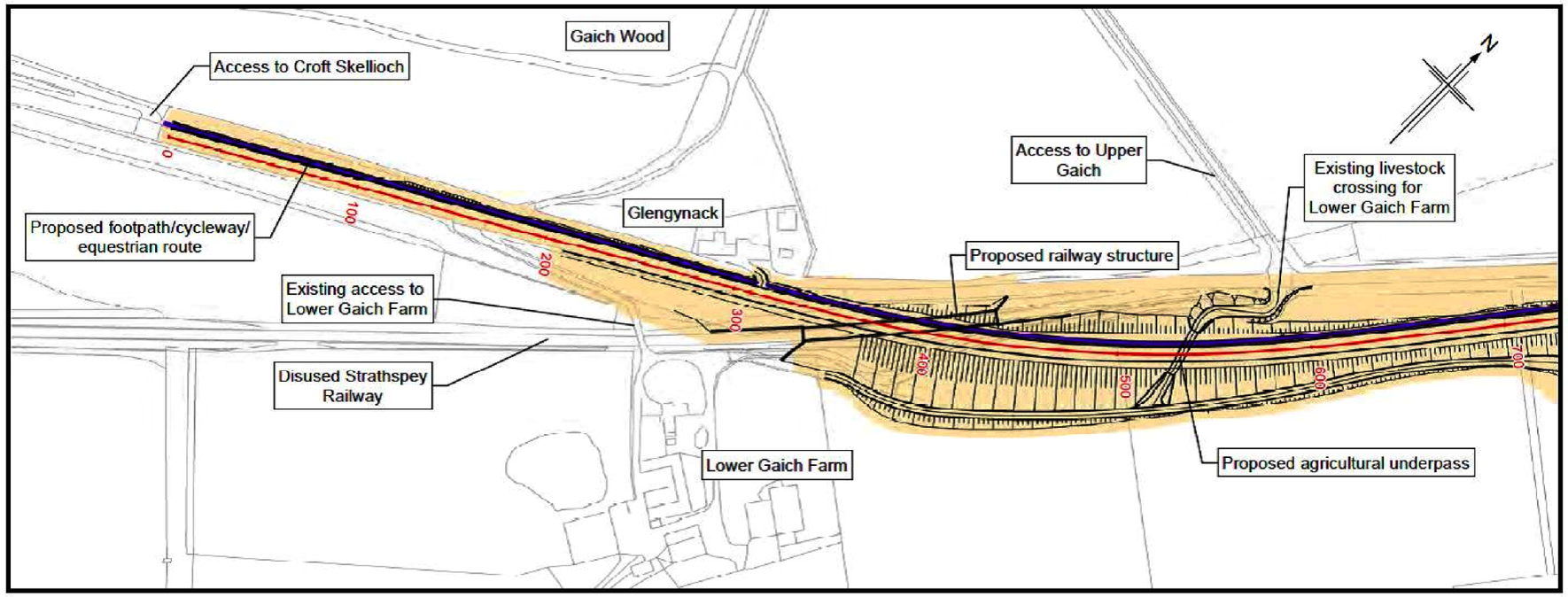

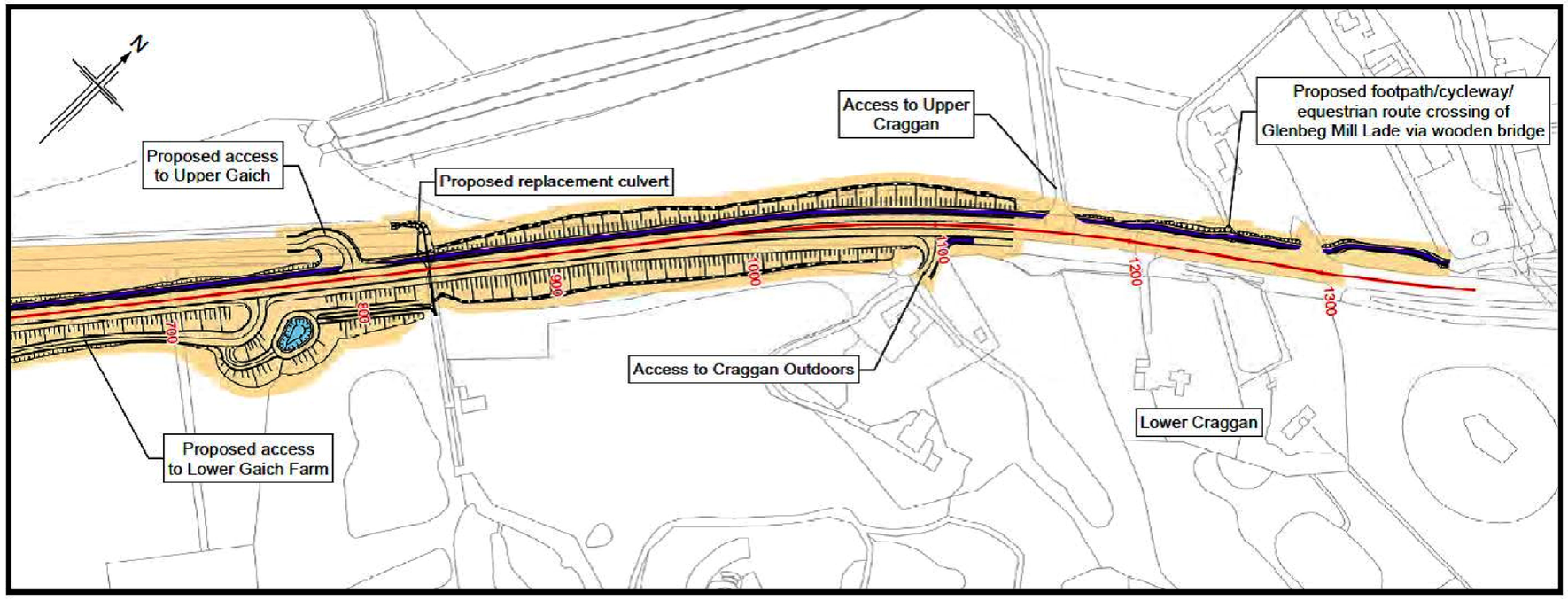

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Strathspey Railway Extension
Environmental Scoping Report

Figure 1.2
Potential Road / Rail Interface
(subject to further design alterations by Transport Scotland)

1.3 Environmental Impact Assessment

1.3.1 The requirement for EIA for a proposal of this type is set out in The Transport and Works (Scotland) Act 2007 (Applications and Objections Procedure) Rules 2007, which state that before consent is granted for certain types of development an EIA must be undertaken. The requirements set out the types of development which must always be subject to an EIA (as detailed within the EIA Directive (2011/92/EU)) (Annex I development) and other developments which may require EIA if they are above certain thresholds and are likely to give rise to significant environmental impacts (Annex II development).

1.3.2 The Proposed Development falls within Annex II of the EIA Directive, the construction of a railway that is not contained in Annex I (Annex I covers long distance railways). The Proposed Development has the potential to have significant environmental effects because of factors such as the characteristics of the Proposed Development, size, location and the nature of the effects as set out in Schedule 1 EIA Directive. Therefore, the Proposed Development qualifies as an "EIA Development" and the Applicant independently proposes that it should be subject to an EIA.

1.3.3 EIA is an iterative process which identifies the potential environmental effects that in turn inform the eventual design of the proposal. It seeks to avoid, reduce, offset and minimise any adverse environmental effects through design development and mitigation. It takes into account the effects arising during the construction, operation and decommissioning phases. Consultation is an important part of the EIA process and assists in the identification of potential effects and mitigation measures.

1.4 The Purpose of the Scoping Report

1.4.1 The applicant wishes to seek a scoping opinion from the Scottish Ministers under the provisions of Regulation 6 of the Transport and Works (Scotland) Act 2007 (Applications and Objections Procedures) Rules 2007[1]. This document is the Scoping Report, which contains the necessary information as detailed within Regulation 6 of the Rules.

1.4.2 This Scoping Report considers the potential environmental issues relating to the proposal and discusses which issues are likely to be significant, drawing on preliminary assessment of the proposals, exiting desk and field based survey information, previous environmental assessments of relevance[2], and information about the proposed development. It then outlines how the EIA will deal with each of the issues raised, providing the scope for further desk based study and site surveys as required.

1.4.3 Part 6 (4) of the Rules provides for potential applicants to ask the Scottish Ministers to state in writing the information that ought to be provided within the ES. The 'Scoping Opinion' only to be given by the Scottish Ministers after consultation with the following bodies:

- The Highland Council;
- Cairngorm National Park Authority;
- Scottish Environment Protection Agency;
- Scottish Natural Heritage; and

[1] The Rules set out the details which regulate the procedures that need to be followed by the applicant when making an application as well as providing a mechanism by which other parties may make an objection.

[2] This includes reference to a draft Environmental Statement (ES) prepared for Transport Scotland in 2011 for proposed road improvements to the A95 between Gaich and Craggan including a new underpass which would cross the line of the Strathspey Railway. The ES was not formally published as the road improvements are now being incorporated into the Proposed Development for the railway extension, however Transport Scotland has agreed that the draft ES can be used to inform the preparation of the EIA for the Strathspey Railway Extension.

- Any other body promoting environmental protection which Scottish Ministers consider likely to have an interest in the application.

1.4.4 This Scoping Report:

- Contains plans sufficient to identify the land affected by the works in question and describes the existing site and its context;
- Includes a brief description of the nature and purpose of the proposed works and identifies key organisations to be consulted in the EIA process;
- Includes a brief description of the possible effects on the environment of the works and sets out a proposed format of the ES;
- provides high level baseline information; and
- describes key issues and the proposed assessment methodologies for various technical assessments to be covered in the EIA.

1.4.5 This Scoping Report will be issued to the TAWS Unit who will then consult with statutory consultees and any other interested relevant parties in preparing a Scoping Opinion.

1.5 The Environmental Statement

1.5.1 The structure of the ES will follow the requirements of EIA Directive (2011/92/EU) and other relevant good practice guidance. The ES will comprise three main parts:

- a non-technical summary (NTS);
- the main ES text and accompanying figures; and
- the ES technical appendices.

1.5.2 The first part of the main ES text will comprise:

- an introduction;
- a description of the site selection and design iteration process;
- a description of the Proposed Development;
- an overview of the approach to assessment of environmental effects; and
- a description of the site and its context.

1.5.3 The remainder of the document will present an assessment of a range of environmental topics, the baseline environmental conditions, potential, residual and cumulative environmental effects, a schedule of environmental commitments (mitigation measures) and a set of EIA summary tables.

1.6 Cumulative Effects

1.6.1 The EIA Regulations state that cumulative effects should be considered as a part of the EIA. It will therefore be important to consider the cumulative effects of the Proposed Development with other developments in the area, including those that are currently operational, consented and in planning. The cumulative assessment will also consider the cumulative effects of different elements of the Proposed Development on environmental media and sensitive receptors, and in particular the cumulative effects of different effects upon individual and groups of receptors.

1.6.2 At the time of writing, it is not known if there are any significant planning applications that should be considered within the cumulative assessment. However, consultation with Cairngorms National Park

Authority (CNPA) will be undertaken to identify any sites which may be relevant for the cumulative assessment.

1.6.3 A more detailed review will be undertaken of the cumulative sites within the area during the EIA stage, and if appropriate a plan will be produced showing the locations of Proposed Developments that are operational, under construction, consented, or at application stage.

2 The Proposed Development

2.1 Site Description

2.1.1 The railway, including the proposed 4.8km extension, is located within the Highland Council local authority area and within the Cairngorms National Park Planning Authority area.

2.1.2 The original railway line was opened in 1863 connecting Perth to Inverness, via Aviemore, Grantown on Spey and Forres. Following the opening of a direct line from Aviemore to Inverness, use of the Grantown on Spey line declined and it was eventually fully closed in 1968. The Strathspey Railway Company has restored rail services between Aviemore and Broomhill, but only reinstated line from Boat of Garten to Broomhill. The Strathspey Railway Company is now proposing to re-instate the line further north to Grantown on Spey, crossing the A95. The A95 currently crosses the line of the historical solum of the Strathspey Railway line, and new infrastructure works will be required at this location to allow for the railway to cross (under) the trunk road.

2.1.3 Scattered dwellings and farms are situated along the main road arteries in the study area and are mainly situated in elevated positions oriented to take advantage of the views across the strath. Grantown on Spey is contained by both the surrounding upland topography to the north and west and the extensive woodland plantations surrounding the town. Outdoor receptors in the area include numerous formal and informal footpaths, an outdoor centre (Craggan Outdoors) including a golf course and fishery, and the River Spey. The Speyside Way is of particular significance as a popular walking route. Photo 1 shows the existing track over the River Dulnain.

Photo 2 shows the historical solum route across agricultural land (situated to the north of the A95 and Craggan Golf Couse)

2.2 Proposed Development Description

2.2.1 It is proposed to lay 4.8 km of new rail track between the existing railway bridge over the River Dulnain and the location of a new station building at Grantown on Spey (as shown in Figure 1.1). The new tracks would follow the original track alignment.

2.2.2 It is proposed to construct the new station building, with associated vehicular access and car parking on the southern corner of Seafield Avenue and Gortons Road, adjacent to the former track bed (shown below in Plate 1 and 2). The Grantown on Spey Caravan Park is located immediately to the north and east of the proposed station.

2.2.3 The reinstated track will pass underneath the A95 trunk road at Gaich, via an underpass. The A95 is the main trunk road between Aviemore and Keith, passing to the south of Grantown on Spey before connecting to the A96 which leads to Elgin and Inverness in the north and Huntly, Inverurie and Aberdeen in the south. Enabling works associated with allowing access underneath the A95 including an embanked section of the trunk road will alter the vertical alignment of the road, whilst allowing the railway to pass underneath it.

2.2.4 It is projected that railway passenger numbers will increase from 58,000 in 2013 to 100,000 in the year before the extension is opened[3], with the extension adding an additional 30,000 visitors per year.

2.2.5 The parameters of the design will be established for the EIA such that an appropriate level of assessment for the scheme may be undertaken based on a representative design envelope for the proposals. The design will demonstrate an understanding of the character of the site and its context, the importance of this to Grantown on Spey, how the land form will influence layout and visibility of the station and approach and how it fits in with the town. The parameters of the Proposed Development will be explicitly identified in the ES. The final design will be 'frozen' at an appropriate

[3] Extension of Strathspey Steam Railway to Grantown: Economic Impact Assessment Final Report to Highlands & Islands Enterprise

time in order to enable the ES to describe fully the Proposed Development for which consent will be sought, and to appropriately assess its environmental effects.

Plate 1: Showing an illustration of what the Proposed Station at Grantown might look like (Illustrations provided by Strathspey Railway Charitable Trust.)

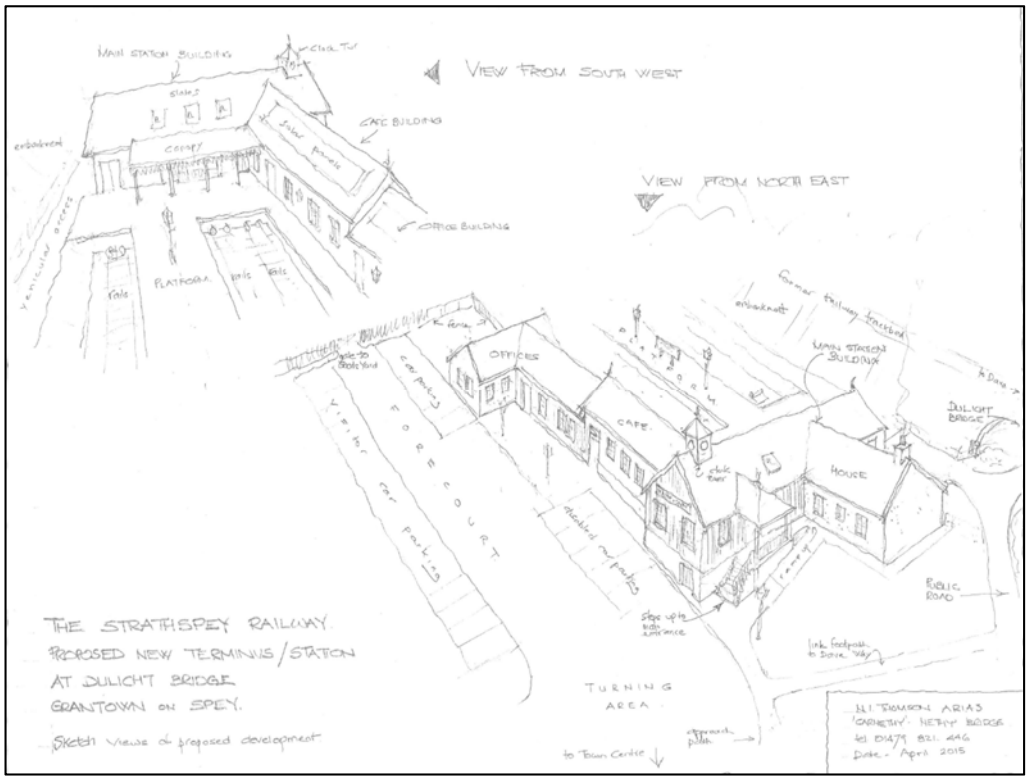
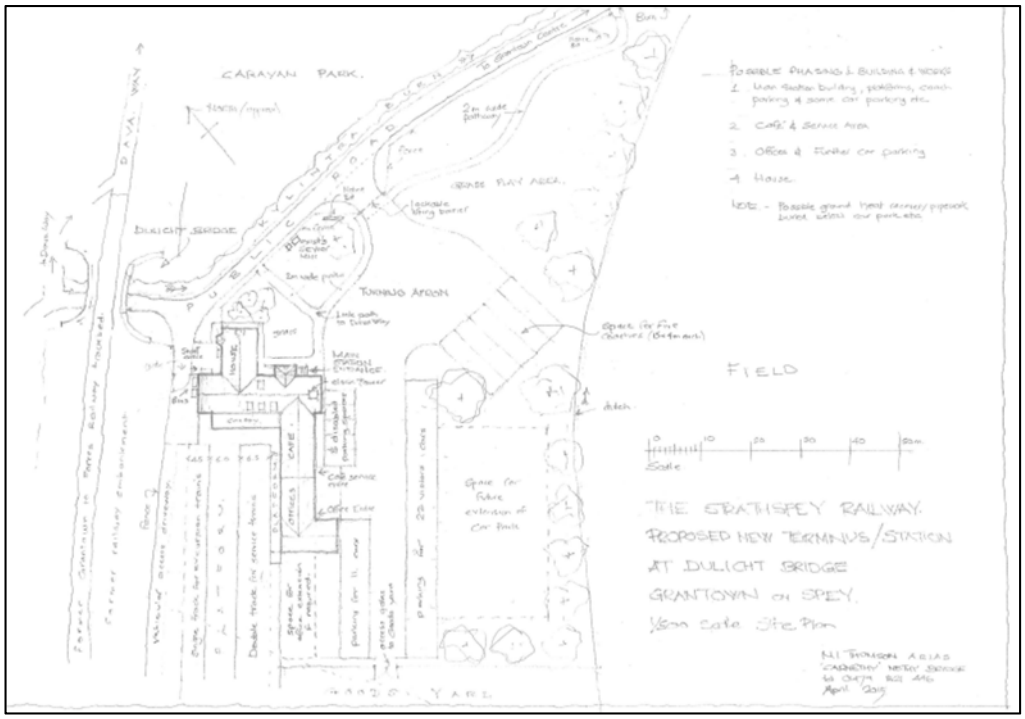


Plate 2: Shows illustrations of the proposed new terminus at Grantown on Spey (Illustrations provided by the Strathspey Railway Charitable Trust)



3 Planning Policy Context

3.1 Introduction

3.1.1 The Scottish Ministers will be the consenting authority for this application, with the Cairngorms National Park Authority (CNPA) as a statutory consultee during the process. The proposed development lies within the administrative planning area of the CNPA.

3.1.2 A high-level overview of the relevant national and local planning policy documents that will form the basis against which the EIA will be assessed in the context of Schedule 1 of the Transport and Works (Scotland) Act 2007 (Applications and Objections Procedures) Rules 2007 are listed below.

3.1.3 The project area lies entirely within the administrative planning area of the Cairngorms National Park Authority. The relevant Development Plan for this area is:

- Cairngorms National Park, Local Development Plan (2015).

3.1.4 National Planning Policy and advice are material considerations in the determination of planning applications. In relation to the current proposal the following are of relevance.

- National Planning Framework for Scotland 3 (2014); and
- Scottish Planning Policy (2014).

3.1.5 A range of Planning Advice Notes (PAN) are relevant, including:

- PAN 1/2013 Environmental Impact Assessment;
- PAN 1/2011 Planning and Noise;
- PAN 2/2011 Planning and Archaeology;
- PAN 51 Planning, Environmental Protection and Regulation (Revised 2006);
- PAN 60 Planning for Natural Heritage (August 2000);
- PAN 61 Planning and Sustainable Urban Drainage System (July 2001);
- PAN 65 Planning and Open Space (May 2008);
- PAN 68 Design Statements (August 2003);
- PAN 69 Planning and Building Standards Advice on Flooding (August 2004); and
- PAN 75 Planning for Transport.

3.1.6 The ES will include a summary of the up-to-date planning policy at the time of submission and a broad commentary on the extent to which the development accords with key development plan policy.

4 Land Use

4.1 Introduction

4.1.1 This section considers the effects of the Proposed Development on existing and future land uses. Land uses considered include agricultural, sporting, forestry, residential, commercial, community and development land.

4.2 Baseline Description

4.2.1 The railway route will follow the historical solum from the crossing at the River Dulnain to Grantown on Spey, crossing the A95. The A95 currently accommodates the historical solum of the Strathspey Railway line near Gaich, and significant works will be required at this location to allow for the railway to cross to the northwest side of the road (see Section 2.2).

4.2.2 The railway track bed is a narrow strip of land which comprises primarily improved grassland, poor semi-improved grassland and bare ground with steep banks often present immediately adjacent to the track and stone bridges crossing roads and water courses. The northern portion of the dismantled railway (extending from the proposed new station to Strathspey Industrial Estate) is currently being utilised as a public woodland trail to Beachen Wood and much of the remaining track is disused land which bisects farm land, however, there are small sections present which appear to be utilised for grazing livestock or for farm access. In addition, a section approximately 350 m in length along west edge of a working industrial estate.

Photo 3 shows historical solum through agricultural land.

4.2.3 The area of land proposed to accommodate the new station is a field currently utilised for grazing horses comprising well-grazed poor semi-improved grassland mosaicked with areas of marshy grassland. A mature tree line and Kylintra Burn bisects the field in a north-east to south-west direction (as shown on Photo 4 below).

Photo 4 shows the area of the proposed station location

4.2.4 A large majority of the surrounding habitat present within the Study Area comprises woodland of mixed age and species and arable or grazing farmland, however, a number of farming, industrial and residential properties were identified immediately adjacent or within close proximity to the Site, particularly within the northern section of the track.

4.2.5 Other outdoor receptors in the area include numerous formal and informal footpaths, an outdoor centre (Craggan Outdoors) including a golf course and fishery, and the River Spey. The Speyside Way, which is to the east of the River Spey (at its closest point 700m away) is of particular significance as a popular walking route.

4.3 Proposed Scope of the Assessment

4.3.1 Impacts on land use resulting from the construction and operation of the proposed development will be identified during the EIA. The key objectives of the assessment will be to:

- define existing land use along the railway and road re-alignment corridor;
- identify key potentially sensitive receptors, such as residential properties and community facilities;
- quantify the extent of land take; and
- identify planned developments in close vicinity of the proposal.

4.3.2 The identification of baseline conditions will involve:

- desk-based research of information sources in relation to current land uses; including Ordnance Surveys (OS) maps, and published Macaulay Land Use Research Institute (MLURI) Land Capability for Agricultural (Land Capability Assessment) data;
- review of planning application information on both CNPA and The Highland Council websites; and
- a Site visit.

4.4 Potential Impacts and Mitigation

4.4.1 The Proposed Development could potentially impact on the scope and scale of agricultural-based land management activities and the productive capacity of the land within the study area. The assessment

will consider the effects of permanent loss of agricultural land and associated severance of farm units on agricultural activity.

4.4.2 There will be permanent land take as a result of the scheme, land take will be kept to a minimum, where possible. The land use effects of the permanent land take will be assessed in relation to the current baseline uses of the railway corridor and station area.

4.4.3 There is likely to be disruption to core paths at the edge of Grantown on Spey and other recreational activities during construction and possibly operation, however mitigation measures will be incorporated where possible during the design phase.

5 Noise and Vibration

5.1 Introduction

5.1.1 This section considers the noise and vibration effects of the Proposed Development upon the nearby residential receptors which may be affected by those effects. The original ES produced for the A95 works has identified no significant traffic noise impact on the residential locations in the vicinity of the route, and as there are proposed to be no changes to this element of the project it is not proposed to undertake any additional detailed assessment of this element.

5.1.2 The construction of both the new road alignment and the railway both have the potential to generate noise impacts at nearby residential properties, although as a result of the new infrastructure work for the A95 crossing, it is likely that this is the location where the majority of construction noise impacts might be expected to occur.

5.1.3 It is clear that the operation of a railway in this area can be expected to result in some impact, and as a result the assessment of that operation must be defined as far as possible and any potential mitigation developed and assessed for it potential to reduce noise levels.

5.2 Baseline Description

5.2.1 The majority of the Proposed Development is, by its nature, linear and narrow, the two key areas of the project, in relation to noise, being located in the vicinity of Gaich, where the A95 will cross over the reconstructed railway line, and the proposed terminus of the line at Grantown on Spey, to the south of Seafield Avenue opposite the Grantown on Spey Caravan Park.

5.2.2 The A95 location itself has a single noise source; that being the A95, although other sources can be attributed to agricultural activity. In this vicinity there are isolated properties, and an assessment of the potential impacts will be undertaken at the closest of these.

5.2.3 As the line approaches Grantown on Spey, it will pass the former station site which is now an industrial estate, running close to other isolated properties, before running to the rear of Strathspey Drive on the existing alignment before diverging from the original trackbed to the site of the terminus station south of Seafield Avenue.

5.2.4 The following receptor locations have been identified to be employed for the noise assessment:

- Ballintomb Farm;
- Gaich Farm;
- Craggan House;
- Craggan Mill Restaurant;
- Craggan Farm;
- Kirkton;

- Strathspey Drive
- Revoan Drive; and
- Grantown Caravan Park.

5.2.5 Initial consultation with the Local Authority has identified that no assessment of the baseline noise levels will be required (see below).

5.3 Relevant Guidance and Legislation

5.3.1 The following legislation and key guidance documents have been referenced and used for this assessment.

PAN 1/2011 Planning and Noise

5.3.2 Published in March 2011, and consequentially replaces PAN56 and Circular 10/1999. Its aim is to advise on the role of the planning system to control and limit the adverse effects of noise.

5.3.3 Paragraph 2 of the Introduction to the document makes the emphasis of the document clear:

"The PAN promotes the principles of good acoustic design and a sensitive approach to the location of new development. It promotes the appropriate location of new potentially noisy development, and a pragmatic approach to the location of new development within the vicinity of existing noise generating uses, to ensure that quality of life is not unreasonably affected and that new development continues to support sustainable economic growth."

5.3.4 The document then goes on to explain how development control and development management might be employed to achieve these aims, as well as large-scale master planning.

5.3.5 When it comes to the assessment of the potential for sites to be developed however, the accompanying Technical Advice Note 'Assessment of Noise' is of more relevance, as it explains the methods to be employed to assess the potential impacts.

5.3.6 In this regard, for Noise Sensitive Development, such as the residential development that is the subject of this noise assessment, the Technical Advice Note (TAN) states that the assessment should provide a full understanding of the existing acoustic environment together with the nature of the development, together with the process that should be followed in order to assess the impacts. In this instance the methodology is to identify the noise sensitive receptors, assign levels of sensitivity, (as residential receptors the sensitivity of the development is classed as high), undertake a quantitative assessment, which will consider existing noise levels against an appropriate noise target, classify the magnitude of those impacts, undertaken a qualitative assessment and assign descriptors to the impacts based upon perception, and consider the overall level of significance.

The Noise Insulation (Railways & Other Guided Transport Systems) Regulations 1996

5.3.7 The Regulations provides a duty to install noise insulation for dwellings badly affected by noise from the operation of a new or additional railway line or guided transport system, and powers to carry out similar works for properties affected by altered existing rail systems.

5.3.8 In this instance the noise from a new or altered railway line would need to give rise to a noise level at the affected residential property of 68dB $L_{Aeq,16hour}$ with an increase of at least 1dB over and above the pre-existing noise levels before an offer of Noise Insulation measures can be made.

5.3.9 It is important to note however that these Regulations have never been empowered in Scotland, but in the absence of any other relevant guidance in place in the country these levels, as discussed at the Parliamentary Hearing for the Borders Railway (Private Bill), and as a result it is considered to be the most relevant guidance level by which to assess operational railway noise.

Calculation of Railway Noise

5.3.10 The standard method for predicting the noise level from trains is given in the 'Calculation of Railway Noise' 1995 (CRN). The index used to characterise train noise in CRN is the $L_{Aeq,16\text{-}hour}$. This level can be calculated by considering the number, type, speed of trains over a given time period. The methodology also provides a method to take account of the track type and other features of the railway line.

Environmental Protection Act 1990

5.3.11 Part III, Section 79, of the Environmental Protection Act 1990 (EPA 1990) defines what activities may constitute a Statutory Nuisance, and what activities are specifically exempt. The Section imposes a duty on local authorities to periodically survey environmental noise levels and to investigate noise complaints. The Act requires local authorities to serve notice when noise nuisance exists. Under these statutory nuisance provisions, the operators of a site or facility could be required to adopt best practicable means to abate noise nuisance at any time once operations have commenced. It is, therefore, essential that potential nuisance effects are properly considered, so as to ensure that the operators are seen to adopt best practice, and that any potential requirements for mitigation are considered.

5.3.12 From a review of the provisions of Section 79, it is clear that noise from power generation or transmission facilities can be considered a Statutory Nuisance; only noise from traffic, military activities and demonstrations are considered to be exempt.

BS 5228-1: 2009 & A1:2014 Code of practice for noise and vibration control on construction and open sites - Part 1 (Noise)

5.3.13 This code of practice provides guidance and recommendations on methods for the measurement of construction noise and assessing its impact on those exposed to it. It also makes reference to the legislative background to noise control on construction sites, and gives recommendations for basic methods of noise control.

5.3.14 Suitable methods are provided for the calculation of noise from construction activities, including basic information regarding noise levels from a range of construction equipment.

5.3.15 The standard provides guidance for the identification of the significance of noise levels from surface construction activity. Significance can be considered in relation to fixed limits for noise and vibration, or alternatively in considering the potential change in the ambient noise level with the construction noise.

5.3.16 A significance criterion is developed from noise measurements of existing ambient noise levels at the nearest sensitive receptors to the site. Sensitive receptors are considered to be residential housing; hotels and hostels; buildings in religious use; buildings in educational use and buildings in health and/or community use.

5.3.17 Measurements of the ambient noise level at the sensitive receptors are the basis of the significance criteria. The measured ambient noise level is rounded to the nearest 5dB(A). BS5228-1 provides a range of significance criteria depending on the measured noise level, as presented in Table 4.1.

Table 4.1: Threshold of Significant Effect from Construction Works at Dwellings

Assessment Category and Threshold Value Period (L_{Aeq})	**Threshold Value, in decibels (dB)**		
	Category A [A)]	**Category B [B)]**	**Category C [C)]**
Night-time (2300-0700)	45	50	55

Assessment Category and Threshold Value Period (L_{Aeq})	Threshold Value, in decibels (dB)		
	Category A [A)]	Category B [B)]	Category C [C)]
Evenings and Weekends	55	60	65
Daytime (0700-1900) and Saturdays (0700-1300)	65	70	75
[A)] Category A: Threshold values to use when ambient noise levels rounded to the nearest 5 dB are less than these values.			
[B)] Category B: Threshold values to use when ambient noise levels rounded to the nearest 5 dB are the same as category A values.			
[C)] Category C: Threshold values to use when ambient noise levels rounded to the nearest 5 dB are higher than category A values.			

5.3.18 Where the ambient noise level is greater than category C levels the ambient noise level shall be used as the significance criterion threshold.

5.3.19 The predictions of 'total noise' from construction, including the ambient noise level, are compared to the criteria. If the total noise level exceeds the appropriate category threshold value, then a significant effect is deemed to occur.

BS 5228-2: 2009 Code of practice for noise and vibration control on construction and open sites - Part 2 (Vibration)

5.3.20 BS 5228 2009, Part 2: Vibration provides guidance in relation to the effects of construction vibration upon the surroundings. Vibration, even of a very low magnitude, can be perceptible to people. Vibration nuisance is frequently associated with the assumption that, if vibration can be felt, then damage is inevitable. However, considerably greater levels of vibration are required to cause damage to buildings and structures. In any neighbourhood, some individuals will be more sensitive to vibration than others.

5.3.21 Guidance on human response and guide values for the cosmetic damage of buildings is provided in BS5228:2009-2, and reproduced in Tables 4.2 and Table 4.3

Table 4.2: Guidance on effects of vibration levels (Human Response)

Vibration Level	Effect
0.14 mm/s	Vibration might be just perceptible in the most sensitive situations for most vibration frequencies associated with construction. At lower frequencies, people are less sensitive to vibration.
0.3 mm/s	Vibration might just be perceptible in residential environments.
1.0 mm/s	It is likely that vibration of this level in residential environments will cause complaint, but can be tolerated if prior warning and explanation has been given to residents.
10 mm/s	Vibration is likely to be intolerable for any more than a very brief exposure of this level.

Table 4.3: Transient vibration guide values for cosmetic damage to buildings

Type of Building	Peak component of particle velocity in frequency range of predominant pulse	
	4Hz to 15Hz	15Hz and above
Reinforced or Framed structures Industrial and heavy commercial buildings	50 mm/s at 4Hz and above	50mm/s at 4Hz and above
Unreinforced or light framed buildings Residential or light commercial buildings	15 mm/s at 4Hz increasing to 20mm/s at 15 Hz	20 mm/s at 15Hz increasing to 50mm/s at 40Hz and above

World Health Organisation 'Guidelines for Community Noise', 1999

5.3.22 World Health Organisation (WHO) guidance states that, in a dwelling, the critical effects of noise are on sleep, annoyance and speech interference. To avoid sleep disturbance, the current indoor guideline values for bedrooms are 30 dB $L_{Aeq,T}$ for continuous noise and 45 dB L_{Amax} for a single sound event.

5.3.23 To protect the majority of people from being seriously annoyed during the daytime, the sound pressure level on balconies, terraces and outdoor living areas should not exceed 55 dB $L_{Aeq,T}$ for a steady continuous noise. To protect the majority of people from being moderately annoyed during the daytime, the outdoor sound pressure level should not exceed 50 dB $L_{Aeq,T}$.

5.3.24 At night, sound pressure levels at the outside facades of the living space should not exceed 40dB $L_{Aeq, 8\text{-hour}}$ so that people may sleep with bedroom windows open.

British Standard 7445-1

5.3.25 This document, entitled *'Description and measurement of environmental noise Part 1 Guide to quantities and procedures'* and published in 2003 sets out the methods to be employed in the measurement of environmental noise.

5.3.26 It highlights the Standards that should be applied to noise measurement equipment to be used during the surveys, the type of location to be used for environmental measurements and the necessity to record the environmental conditions under which measurements are taken.

5.3.27 It highlights the data to be recorded during a survey, and the methodology for that survey given varying measurement requirements. The survey work undertaken for this project has fully considered the advice given in this Standard.

Other Guidance

5.3.28 1963 Wilson Report, first suggested a figure of 75dB LAeq as an acceptable level of noise from construction or demolition sites when measured at the external façade of an occupied building over the normal working day.

5.3.29 The Department of Environment Advisory Leaflet 72 'Noise control on building sites' reiterated the guidance suggested by Wilson. It set daytime limits (7.00am to 7.00pm) of 75dB(A) for urban areas near to main roads or in heavy industrial areas and 70dB(A) for rural, urban, and suburban area away from main traffic routes.

Consultation with Local Authority Environmental Health Officer.

5.3.30 Discussions were held with Robert Murdoch, Environmental Health Officer for Highland Council in the area in relation to the methodology to be applied to the assess the of the works and the acceptable noise limits that should apply.

5.3.31 This consultation indicated that a desk top study would be acceptable, and that in terms of operational noise, a noise limit of 68dB $L_{Aeq,16h}$ as required under the Noise Insulation (Railways and other Guided Transport Systems) Regulations would be considered to be the limit of acceptability at nearby residential locations.

5.3.32 Construction noise levels should not exceed 70dB LAeq wherever possible, as put forward by Department of Environment Advisory Leaflet 72 'Noise control on building sites'.

5.3.33 For information the Environmental Health Officer provided Highland Council Guidance in relation to construction and maintenance works on Highways. This is repeated in full below:

'Suggested General Noise and Vibration Levels during Operations on Trunk Roads

A. Noise Control

5.3.34 Noise arising from the operations shall not exceed the levels in Table 1.

Table 1

Days	*Times*	*Maximum Noise Levels*	
		$L_{Aeq\ (1\ hour)}$	$L_{pA\ (max)}$
Mondays to Saturdays	*0700 to 1900 hours*	*75 dB (A)*	*-*
	1900 to 2200 hours	*65 dB (A)*	*-*
	2200 to 0700 hours	*40 dB (A)*	*50 dB (A)*
Sundays & Public Holidays	*0000 to 2400 hours*	*40 dB (A)*	*50 dB (A)*

Notes:-

(1) The $L_{Aeq(1\ hour)}$ is the equivalent continuous A-weighted sound pressure level arising from work operations measured (on Fast Weighting) or calculated over any continuous period of 60 minutes.

(2) The $L_{pA(max)}$ is the maximum A-weighted sound pressure level (on Fast weighting) arising from work operations during the time period.

(3) The $L_{Aeq(1\ hour)}$ and $L_{pA(max)}$ are measured or calculated at one meter from the façade of the nearest or most affected noise-sensitive premises.

(4) Noise-sensitive premises shall include dwellings, offices, schools, hospitals and similar establishments.

B. Vibration Control

5.3.35 The peak particle velocity generated by the operations shall not exceed 5mm/second measured at the building nearest to the operations. This applies to all operations other than blasting. In the case of blasting, the peak particle velocity shall not exceed 10mm/second at the building nearest to where the blasting is being undertaken.'

5.3.36 The Council has informally indicated that a baseline survey would not be required at this stage given the proposed intensity of the railway operations.

5.4 Proposed Scope of Assessment

5.4.1 The Noise and Vibration assessment will consider the construction and operational impacts of the railway, and the construction noise impacts of the amended road layout.

5.5 Potential Impacts

Construction Impacts and Effects

5.5.1 The construction phase has the potential to generate increases in road traffic noise which may have a negative impact on the level of noise from construction vehicles on the existing road network. This will be mitigated as far as possible by using existing busy links such as the A95 wherever possible, where the percentage change in levels will be less significant.

5.5.2 There is also likely to be a negative effect on residential properties located close to the line of the railway from the activities associated with the construction of the proposed railway, potentially including weekend working, as this is the period of time when some of the construction works are likely to take place on a preserved railway (due to a likely volunteer workforce).

Operational Impacts

5.5.3 The operational phase of the proposals are likely to impact residents adjacent to the new railway in areas where there is currently none from passenger train movements, in particular the existing receptors at isolated properties along the route and on housing in the vicinity of Strathspey Drive on the western edge of Grantown on Spey, and near the Grantown on Spey Caravan Park, where there will be an increase in noise levels as a result of the operation of a railway station and from train movements on the newly opened section of railway between Broomhill and Grantown on Spey.

5.5.4 The operational road traffic noise impacts in the area are expected to be negligible, although there may be some increases in the vicinity of the Grantown on Spey Caravan and Camp Site and approach roads to the station as a result of the operation of the new railway station. Elsewhere vehicle movements would be limited to maintenance activities (assumed to be periodical visits) and the railway work force.

5.6 Potential Mitigation

Construction

5.6.1 Throughout the construction of the road and the railway there is the potential for construction noise impacts; for the development of the road these will be controlled through the careful selection of plant and equipment, and undertaking works during daylight hours during the week. In addition, it is likely that the Local Authority will request that the successful contractor for the works undertake a detailed construction noise assessment and measure noise and vibration levels during the works. At this stage this is not possible to undertake in any specific detail, but where high calculated noise levels are predicted, mitigation may take the form of erection of localised barriers.

5.6.2 For the construction of the railway, works are likely to proceed in a slower fashion, as they are likely to be undertaken predominantly by a volunteer workforce. In this instance residents will be kept informed of any developments and progress by the Strathspey Railway Trust, and the quietest possible methods of construction will be employed to minimise the impacts; as many activities may involve very little in the way of mechanised plant however, the scope for mitigation is likely to be limited.

Operation

5.6.3 The original ES produced for the A95 works has identified no significant traffic noise impact on the residential locations in the vicinity of the route, and as there are proposed to be no changes to this element of the project it is not proposed to undertake any additional detailed assessment. Some additional road traffic assessment may be required in relation to changes in traffic flows on Seafield Road, but it is not expected that any significant impacts will be identified. A review of the original ES will also be undertaken to ensure no additional residential development has been constructed since the previous assessment was undertaken.

5.6.4 With regards to the operation of the Railway, best efforts will be employed to run trains in as quiet a manner as possible, including ensuring that locomotives are not required to work close to their capabilities, and ensuring that carriage wheelsets are maintained in good order with no wheel flats. Given the scale of the railway operations however, with a maximum of perhaps 5 return trips per day (10 train movements), the impacts are likely to be limited and mitigation is not likely to be necessary. If required however, localised solid lineside boundary fencing could be employed to reduce the potential impacts.

5.7 Summary

5.7.1 The Proposed Development has the potential to generate noise impacts during the construction phase, both through increases in road traffic noise and from activities associated with the construction of the railway and road infrastructure.

5.7.2 Operational phase effects as a result of the road traffic noise on the A95 receptors are expected to be negligible, although there may be some increase on the local road network surrounding the proposed station. The operational effects of the railway are likely to impact residents adjacent to the line, due to the introduction of a new noise source from the train movements.

6 Air Quality

6.1 Introduction

6.1.1 This chapter outlines the baseline conditions for local air quality, identifies the potential effects that may arise due to the Proposed Development, and identifies those issues requiring further assessment.

6.1.2 Potential effects of the Proposed Development may occur during the construction phase, due to the generation and dispersal of dust and airborne particulate matter, emissions from plant on site and emissions from construction traffic.

6.1.3 It is projected that railway passenger numbers will increase from 58,000 in 2013 to 100,000 in the year before the extension is opened[4], with the extension adding an additional 30,000 visitors per year. Therefore, air quality effects during the operational phase may arise due to exhaust emissions associated with increased visitor car and coach traffic in the vicinity of the proposed new station, and emissions from trains using the new line. Regional impacts may arise due to carbon emissions during the operational phase due to emissions from visitor traffic and trains. These issues have been considered by this Scoping Report as set out below.

[4] Extension of Strathspey Steam Railway to Grantown: Economic Impact Assessment Final Report to Highlands & Islands Enterprise

6.2 Baseline Description

6.2.1 Locations that may be sensitive to changes in air quality typically include residential properties or designated ecological sites, whilst amenity locations and residential property are sensitive to dust soiling associated with construction activities.

6.2.2 The Proposed Development is not within an Air Quality Management Area (AQMA) and the Highland Council has not recorded pollutant concentrations in excess of the National and European annual mean objectives near to the Proposed Development for key local air pollutants, or on roads that may be affected by changes in traffic flow. Therefore, air quality is not considered to be an existing concern near the proposed route or station terminal development site.

6.2.3 The Proposed Development is within the Cairngorms National Park, which is not designated as a sensitive ecological site with regard to air quality, but may be perceived to be potentially sensitive to changes in emissions and the effects of dust soiling. The proposed location of the terminal station in Grantown on Spey is adjacent to a caravan site, and approximately 500m to the west of residential properties, as well as indoor and outdoor recreation facilities.

6.2.4 The proposed route of the railway, along the dismantled line, runs parallel to properties on the west side of Grantown on Spey, past the Woodlands Industrial Estate and Strathspey Drive and there is a small number of isolated residential properties in the vicinity of the railway route between Broomhill and Grantown on Spey.

6.2.5 The River Spey Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) is located parallel to the route (see Section 8.2), approximately 1.5 km to the southeast of the new terminal station in Grantown on Spey, and within 500m of the road crossing of the A95.

6.3 Relevant Guidance and Legislation

6.3.1 The following legislation is of relevance to the local air quality assessment:

- The UK Air Quality Strategy (AQS) for England, Scotland, Wales and Northern Ireland (Defra, 2007) identifies nine ambient air pollutants that have the potential to cause harm to human health. These pollutants are associated with local air quality problems, with the exception of ozone, which is instead considered to be a regional problem.
- Defra (2009), Local Air Quality Management Technical Guidance LAQM.TG(09).
- The Air Quality Standards (Scotland) Regulations 2010 set objectives for the seven pollutants that are associated with local air quality. These objectives are intended to reduce the health effects of the pollutants to negligible levels.
- IAQM (2014) Guidance on the assessment of dust from demolition and construction, best practice guidance to determine potential local air quality and dust impacts due to construction activities.
- Environmental Protection UK (EPUK) (2010) Development Control: Planning for Air Quality, best practice guidance to determine local air quality potential impacts due to the operational phase of Proposed Developments.
- Highways Agency (2007) DMRB (Design Manual for Roads and Bridges) Volume 11, Section 3, Part 1, HA 207/07

6.4 Proposed Scope of Assessment

Construction Impacts and Effects

6.4.1 A construction phase assessment will be undertaken to determine the likely impacts from dust and construction vehicle exhaust emissions. The assessment methodology will be consistent with the guidance published by the Institute of Air Quality Management.

6.4.2 There is a potential for changes in road traffic movements during railway construction, and also due to the work on the A95 road crossing and the potential for these changes to have local air quality effects will be considered.

6.4.3 Where any significant construction phase impacts are identified, appropriate mitigation options would be proposed to reduce the potential for significant residual effects.

Operational Impacts

6.4.4 The operational phase effects of emissions to air from changes in road traffic flows associated with the development proposals have been considered in accordance with the EPUK (2010) guidance for planning and development control, which considers the effects of increased traffic flows associated with the Proposed Development, and also the criteria defined in the DMRB (HA, 2007). Based on the assessment undertaken to date it is not predicted there will be significant air quality effects from traffic changes. This will be confirmed in the EIA drawing on the findings of the transport appraisal (see Section 11).

6.4.5 The increased visitor road journeys and train movements on the new railway line will also lead to increased carbon emissions. However, this is a regional pollutant and is not likely to lead to a significant impact, so it will be screened out from further assessment subject to the conclusions of the transport appraisal.

6.4.6 The potential impacts due to emissions from the heritage steam or diesel trains have been screened in accordance with the criteria defined in LAQM.TG(09). They are not considered to be significant and have been screened out from further assessment, as discussed below.

6.5 Potential Impacts

Construction Impacts and Effects

6.5.1 The proposed scheme may affect local air quality during the construction phase due to emissions of dust, and exhaust emissions from construction equipment and construction vehicles.

6.5.2 The site is within the Cairngorms National Park, which is considered to be potentially sensitive to dust-soiling. Also, parts of the rail route and the terminal at Grantown on Spey are adjacent to industrial, residential and amenity sites. The River Spey SAC and SSSI is also within 1.5km of the new terminal station and 500m of the road crossing of the A95. Based on the sensitivity of the nearest receptors and the anticipated scale and extent of construction activities, there is a risk of dust effects.

6.5.3 Whilst dust emissions should be controllable through good practice, any air quality effects during construction should be properly appraised and appropriate mitigation controls identified.

Operational Impacts

6.5.4 The emissions from road traffic impacts associated with the new car park and visitors associated with railway will be scoped with reference to the IAQM assessment criteria defied in Development Control: Planning for Air Quality (EPUK, 2010 Update).

6.5.5 It is projected that passenger numbers will increase from 58,000 in 2013 to 100,000 in the year before the extension is opened[5], with the extension adding an additional 30,000 visitors per year. This would be equivalent to an average number of total visitor journeys of 1181, based on an assumption that each visitor equated to two car journeys (to and from). However, since the majority of journeys will be multi-occupant (car/bus/coach), it is not anticipated that the proposed scheme will lead to any significant road traffic impacts that would entail further air quality assessment with respect to either human or sensitive ecological receptors. However, the need to include traffic flow impacts in the EIA will be confirmed in the transport appraisal (see Section 11).

6.5.6 The predicted emissions from trains on the new section of railway have been assessed with reference to the criteria defined in LAQM.TG(09) Box B.2. The number of train journeys will be a maximum of 5-6 return services per day (i.e. 10-11 journeys) during the peak seasons, with services operating approximately 220 days per year.

6.5.7 There may be locations where there is the potential for exposure of individuals for periods of 15-minutes or more near the station terminal. These conditions are not considered to be sufficient to exceed the guidance in LAQM.TG(09), and so the emissions to air from trains are not predicted to be significant and it is proposed they are not assessed further.

6.6 Potential Mitigation

Construction

6.6.1 Appropriate mitigation controls will be implemented in accordance with the guidance published by Institute of Air Quality Management (IAQM, 2012). Typically dust emissions can be adequately controlled through appropriate site-specific mitigation measures, such as wheel washing and damping down dust during dry weather.

Operation

6.6.2 The traffic impacts during the operational phase were not predicted to be significant, and so specific mitigation controls have not been recommended.

6.6.3 The locations and durations where trains are stationary should be managed, if possible, to avoid public exposure to their emissions.

6.7 Summary

6.7.1 The Proposed Development is not within an Air Quality Management Area, and air quality is not considered to be an existing concern.

6.7.2 The Proposed Development may affect local air quality during the construction phase due to emissions of dust, exhaust emissions from construction plant and vehicles. Therefore, a construction phase assessment will be undertaken in accordance with the guidance published by the Institute of Air Quality Management, and used to determine mitigation controls to effectively minimise potential impacts to within acceptable levels.

6.7.3 Operational phase effects due to increased traffic flows are not expected to exceed the assessment criteria defined by the guidance published by Environmental Protection UK for impacts due to either the increased road traffic or emissions from the railway. Therefore, an assessment of air quality impacts has been scoped out from further assessment.

[5] Extension of Strathspey Steam Railway to Grantown: Economic Impact Assessment Final Report to Highlands & Islands Enterprise

7 Landscape and Visual

7.1 Introduction

7.1.1 Landscape and visual impact assessment (LVIA) considers effects on:

- landscape character and resources, including effects on the aesthetic values of the landscape, caused by changes in the elements, characteristics, character and qualities of the landscape; and
- visual amenity, including effects upon potential viewers and viewing groups caused by change in the appearance of the landscape as a result of the development.

7.1.2 Landscape character and resources are considered to be of importance in their own right and are valued for their intrinsic qualities regardless of whether they are seen by people. Impacts on visual amenity as perceived by people are clearly distinguished from, although closely linked to, impacts on landscape character and resources. Landscape and visual assessments are therefore separate, although linked, processes.

7.2 Project Description

7.2.1 The main aspects of the proposed development which will be assessed as part of the LVIA include:

- a proposed new railway line (and ancillary infrastructure), routing along the historic railway solum from Broomhill to Grantown-on-Spey;
- a new railway underpass, crossing below the A95 near Gaich. The works associated with providing access underneath the A95 would include an embanked section of the trunk road. This will result in alterations to the vertical alignment of the road to allow the railway to pass underneath it; and
- a new railway station at the north western edge of Grantown-on-Spey.

7.3 Baseline Description

7.3.1 The Strathspey Railway currently runs between Aviemore and Broomhill. The proposed development would introduce approximately 4.8km of new rail track between the existing railway bridge over the River Dulnain near Broomhill, and the location of a new station building proposed at Grantown on Spey. The new tracks would follow the historical track alignment, where possible, which would reduce the landscape and visual impact.

7.3.2 The proposed railway aligns with the old railway solum across the River Spey floodplain, running at approximately 200m AOD, to where it crosses the A95 to the west of the Craggan Golf Club. The line continues north east, through an existing cutting as it routes towards Grantown-on-Spey. The track runs to the west of the settlement before passing through a large existing cutting, as it curves to the north and connects to the proposed new station in the north west area of the town.

7.3.3 The disused railway runs through predominantly level topography. To the north west of the solum, following its crossing of the A95, the landscape rises steeply to Laggan Hill and Beachan Wood which extend to a high point at Beinn Mhor (471m AOD). To the east and south east, the landscape is flatter, forming part of the River Spey floodplain. Across the river, approximately 1.5km from the railway line, the landscape begins to rise again towards Carn na Loinne (459m AOD) which forms the foothills of the Hills of Cromdale (722m AOD).

7.3.4 The line of the proposed railway runs through three Landscape Character Areas, as defined by the Cairngorms National Park Landscape Toolkit[6] (CNPLT). The character areas which would be directly affected by the proposals are:

Strathspey: Boat of Garten to Craggan LCA:

- An open landscape, dominated by the broad valley, river and its extensive floodplain. Farms and dwellings are sited on knolls and terraces above large improved fields that occupy the floodplain, which were created in the 18th/19th century.
- The flat, open landscape provides extensive views to the backdrop of the Cairngorms mountain range. The River Spey is a wide watercourse, and forms a key focus within the open farmland. Flood banks emphasise the path of the river, which has a meandering form. Riparian trees border the river in parts, while pine woodland is found upon the rounded foothills at either side of the river. In places the river is fringed with riparian trees and managed pine woodlands cover the gently rounded hills at either side of the valley.
- The LCA has a sensitivity of medium for infrastructural development which includes wind turbines, flood alleviation measures and hydro projects, as described by the CNPLT. It is considered that this LCA would also be of medium sensitivity to rail infrastructure as it is currently influenced by non-residential infrastructure such as roads, tracks, settlements, rural development and the historic route of the railway line. The LCA is not considered to have a strong sense of naturalness or remoteness.
- The A95 underpass proposed to facilitate the route of the railway solum is also located within this LCA.

Strathspey: Craggan – Grantown-on-Spey LCA:

- the gateway to the Lower Spey and the Main Spey Valley. The landform is irregular, the lower slopes of the hills forming the edges of the valley floor, which is beginning to narrow at this point. The River Spey meanders through the LCA, and its banks are vegetated with broadleaved woodland.
- settlement is scattered and open land is divided into improved fields which are used for grass and crops. A number of glens, and roads within them, converge within the LCA boundary, and several recreational and industrial developments are present in the area, taking advantage of the presence of the junctions of various roads, set within extensive coniferous and broadleaved woodland, which provides a setting for these activities.
- the CNPLT identifies the sensitivity of this LCA to infrastructural development as low-medium. This is due to the existing infrastructure in the area and the influence of man such as farming practices, settlements and recreational and industrial development which are present.

7.3.5 The CNPLT identifies the areas that the proposed route passes through as having medium/ high level of infrastructure within it. This is not residential development but includes roads, rail, tracks, visitor infrastructure, pylons and other rural development. All areas which the railway line would pass through are described as having a low sense of remoteness. This means that the perceived naturalness and seclusion of each area is low, due to the presence of infrastructure such as roads, farms and industrial buildings, settlements and residential dwellings. They are active landscapes, frequented by people residents, workers and visitors.

7.3.6 A number of LCAs adjacent to the proposed railway line could be indirectly affected by the proposals. Effects on their setting would be assessed as part of the LVIA.

[6] http://cairngorms.co.uk/landscape-toolkit/ (retrieved 28.07.2015)

Landscape Designations

7.3.7 Two Wild Land Areas[7] (WLAs) are located within 20km of the proposed development site (see Figure 7.1). These are:

- **Cairngorms:** Located approximately 13km south east of the southernmost point of the proposed development; and
- **Monadhliath:** Located approximately 18km south west of the southernmost point of the proposed development.

7.3.8 It is not anticipated that these areas would be affected by the proposed development. Initial ZTVs using 50m Digital Terrain Modelling (DTM) indicates that there would be small areas of theoretical visibility in the north west of the Cairngorm WLA however due to the presence of woodland in the intervening landscape, and the increased distance from the southernmost part of the railway line it is considered that there would be very little (if any) actual visibility of the proposed development and that any effects would not be significant. There is no theoretical visibility of the proposed development from the Monadhliath WLA. Due to these factors, it is not proposed to examine WLAs as part of the landscape and visual impact assessment.

7.3.9 The development sites within the Cairngorms National Park. The park has an area of over 452,000 hectares (ha) and is the largest Park in the UK. It is comprised of large mountain ranges, ancient forests, vast moorlands, fields and villages, rivers and lochs. The special qualities[8] for which it is designated for list its imposing mountains which rise above the surrounding moorland, forest and straths. It is also noted as being a vast landscape, of a large scale with a strong presence of contrasting landscapes, from inhabited strath to remote uninhabited uplands. Its landscape is both cultural and natural. The moorland of the NSA is extensive and links together the farmland, woodland and mountain tops. Steep glens and broad straths are home to a mosaic of rivers and lochs. There is a long history of forestry, parkland and policy woodlands within the area of the NSA, amongst extensive tracts of natural vegetation. The areas of land at higher elevation provide wide panoramic and framed views, across a landscape of many colours and textures. At night, it has dark skies, little affected by urban lighting. It has a rich cultural landscape, while also having a great sense of wildness and space at its centre[9].

7.3.10 The Cairngorms Mountains National Scenic Area (NSA) is located approximately 10km south of the southernmost point of the proposed development, and is completely within the National Park boundary. At over 67,000ha in size, the NSA designation covers the highest peaks of the Cairngorm mountains, and reaches down to the lower lying landscape which surrounds Aviemore (see Figure 7.1. The special qualities of the NSA are not separately defined, and mirror those listed for the Cairngorms National Park.

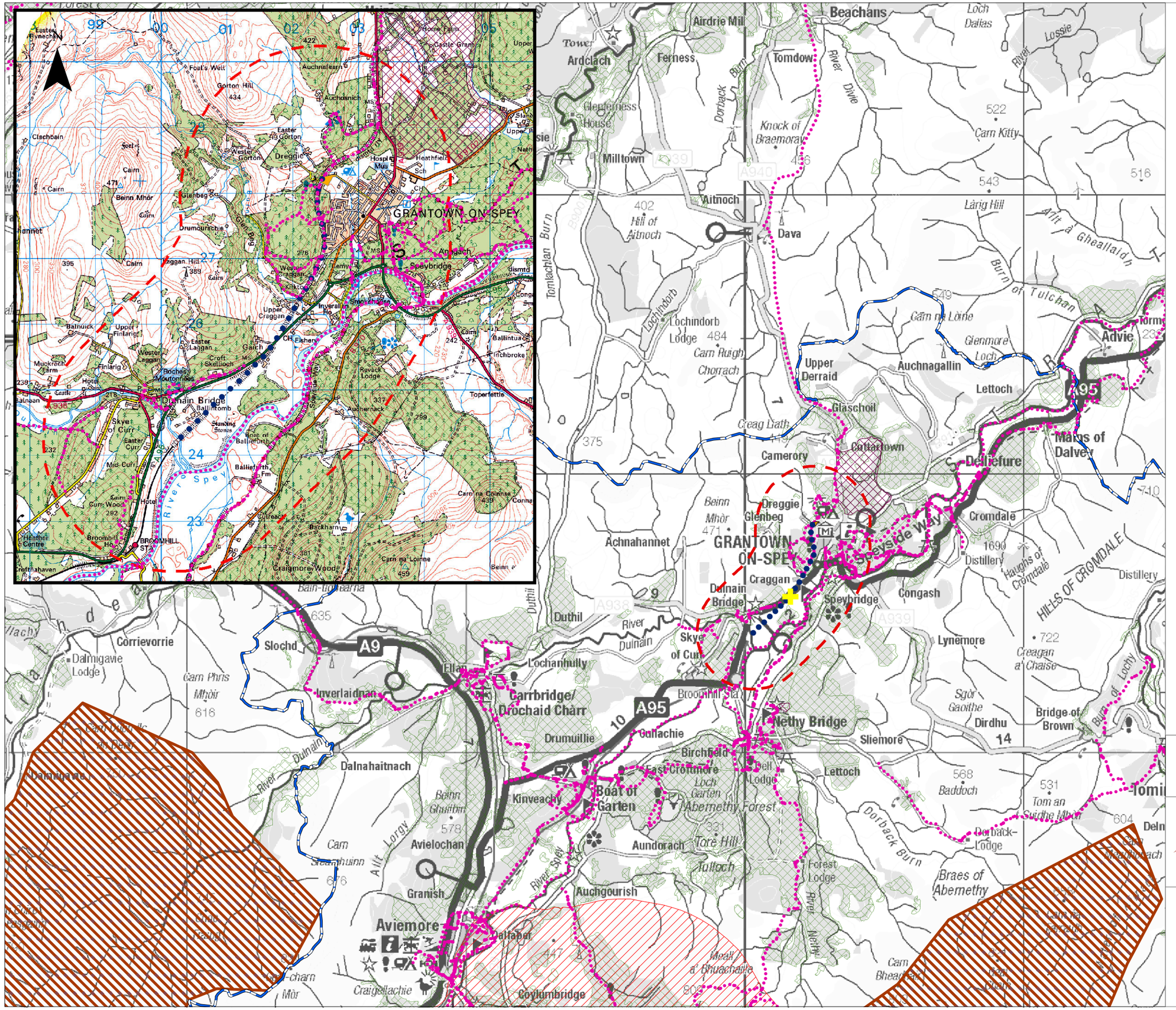
7.3.11 There are a number of core paths and footpaths within the study area, a number of which utilise the old railway solum around Grantown, to Beachen Woods that will be directly affected as a result of the extension:

- LBS134;
- LBS6;

[7] Wild land areas are the most extensive areas of high wildness. They are identified as nationally important in Scottish Planning Policy, but are not a statutory designation

[8] SNH defines Special Qualities as "The characteristics that, individually or combined, give rise to an area's outstanding scenery'

[9] Scottish Natural Heritage and Cairngorms National Park Authority (2010). The special landscape qualities of the Cairngorms National Park. *Scottish Natural Heritage Commissioned Report, No. 375 (iBids and Project No 648).*Information retrieved from http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=9152 (13 August 2015)



Legend

- Proposed LVIA Study Area (2km)
- Proposed New Track
- Proposed New Railway Station
- Cairngorm National Park Boundary
- National Scenic Area
- Wildland
- Garden and Designed Landscape
- Ancient Woodland
- Corepath/ Long Distance Route

Strathspey Railway Extension
Scoping Report

Figure 7.1

Landscape Designations

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- LBS10; and
- LBS8.

7.3.12 The Speyside Way is a key tourist route, located to the east of the River Spey and on the opposite side of the river to the proposed works. The walkway routes from Buckie on the Moray coastline and follows the course of the River Spey to Aviemore. The whole path runs through a variety of landscapes, from the coastline of Spey Bay, up through woodland and pastures of the lower Spey, with views of moorland which transitions to mountains. The Speyside Way connects to the Moray Coast Trail at Buckie, and the Dava Way at Grantown-on-Spey. From Aviemore, the route also links to Fort William via the East Highland Way[10] which is a long distance walk through the Scottish highlands. At its closest point, the Speyside Way comes within 700m of the new railway alignment, and would allow views of the development across the River Spey. The Rive Spey is also a key recreational receptor, and is used for a number of activities such as fishing and canoeing. As such, views from the river will be considered.

7.3.13 The Craggan Golf Club is located on the western flood plain of the River Spey, approximately 1.5km south of Grantown-on-Spey and separated from the proposed development by the A95. The clubhouse is surrounded by coniferous planting, and mixed woodland encloses part of the course, however to the south the greens are open with views to the surrounding landscape.

7.3.14 Castle Grant Garden and Designed Landscape (GDL) is the closest GDL to the proposed development. It sits approximately 1km to the north of the proposed railway station at Grantown-on-Spey and is bordered to the west by the A939. The Alltan Fhithich burn forms its eastern boundary. It is a designed landscape with informal parkland, and contains features which survive from previous formal landscape design. It is included on the inventory as the landscape makes an important scenic contribution in Strathspey, and has a well-documented history of landscape development from earlier 18th century formal design to the existing informal 19th century parkland design.

7.3.15 Aultmore GDL sits approximately 3km to the south of the southernmost point of the proposed railway line, situated 1.5km north-east of Nethy Bridge in the valley of the Allt Mor River. Aultmore GDL is noted as being an outstanding example of an early 20th century architectural scheme comprising a country house and both formal and wild gardens designed in the Traditionalist style.

7.3.16 There are no further GDLs within 15km of the proposed development site. Potential effects on Castle Grant GDL and Aultmore GDL will be assessed as part of the detailed LVIA.

7.4 Relevant Guidance and Legislation

7.4.1 The scoping study has been, and the full LVIA will be, informed by data gathered from the following sources:

- Guidelines for Landscape and Visual Impact Assessment (GLVIA), Third Edition, IEMA & Landscape Institute;
- Cairngorms National Park, Local Development Plan (2015);
- Cairngorms National Park Landscape Toolkit;
- Georeferenced information from CNPA and SNH;
- consultation with statutory bodies;
- discussions with the applicant;
- Ordnance Survey (OS) Explorer Maps; and
- site visits.

[10] The East Highland Way is an unofficial long distance route. It is not promoted by SNH or the Cairngorms National Park Authority.

7.5 Proposed Scope of Assessment

7.5.1 As the railway line would be sited low on the landscape, and would follow (insofar as possible) a previous railway solum, it is considered that the visual impact and influence would be confined to a relatively limited area, but with some effects upon views from elevated locations in the surrounding landscape.

7.5.2 A bare-ground Zone of Theoretical Visibility (ZTV) map has been produced using a 50m digital terrain model (DTM). The map shows three ZTV overlays, each representing the three main elements of the scheme. The ZTV has been modelled at heights of 1m for the railway line, 7m for the road realignment, and 5m for the proposed railway building (see Figure 7.2). This map indicates that, in the absence of vegetation, the proposals would have extensive visibility in the immediate area. The ZTV for the railway line and the A95 realignment indicates that the floodplain to the east, and the site facing slopes to the east and west would potentially have wide visibility of these aspects of the development. In reality, visibility of the works would be confined to a substantially more limited area than the ZTVs show, as vegetation cover (particularly in summer), existing landscape features such as buildings, and local topography which is not modelled in the 5m DTM data would provide more screening than is indicated in this figure.

7.5.3 The study area proposed for the landscape and visual impact assessment covers a 2km area on either side of the proposed railway line. The assessment will examine the effects resulting from the railway lines, as well as any necessary earthworks or structures, and associated infrastructure which may be required, such as reinforcement or retaining structures, steps, signal boxes, signage, and lighting. It will consider effects during construction and operation, when the effects of its use by trains will also be considered.

7.5.4 The works required to facilitate the construction of an underpass at the A95 would be visually more intrusive as the road would be raised above the railway, introducing embankments and large engineered structures into an area which is currently flat. Roadside furniture such as safety fencing, rails, signage and lighting would also give rise to effects that will be assessed. The potential additional visibility of vehicles in the landscape will also be addressed.

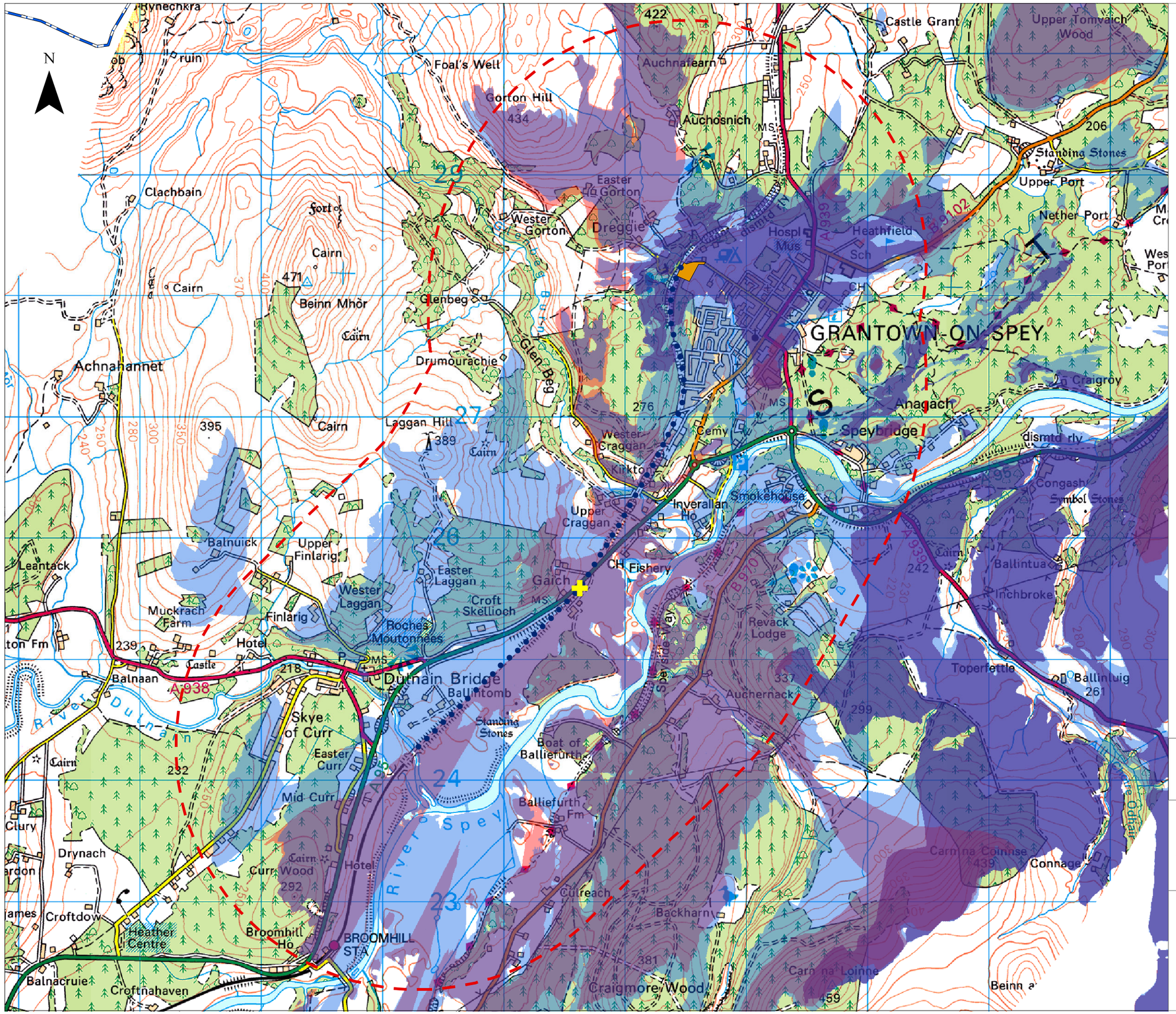
7.6 Potential Effects

7.6.1 The proposed railway and new railway station have the potential to cause impacts on the character of the landscape of the immediate area and on the visual amenity of receptors within the vicinity of the site, and at more elevated and sensitive locations at greater distances.

7.6.2 The proposed development would displace an area of predominantly flat floodplain used for pasture, already historically altered by rail infrastructure, and would introduce a 4.8km long linear feature, a new underpass, a new building and ancillary infrastructure into a landscape which is of scenic value (within a National Park) but has been disturbed in places by man-made features and infrastructure, such as the A95, quarrying, forestry, farming and flood management. The A95 road realignment and elevation would also displace pasture land within the floodplain, and would affect an area of scrub woodland, which surrounds a water feature to the south of the Craggan golf course.

7.6.3 There will be several potentially significant changes to features of the landscape, however, since the route in general follows the solum of the previous railway, these will be more limited than would be expected from the introduction of a new railway. There will be some adverse effects long the length of the route caused by new cuttings or embankments, the need for communication masts and other vertical rail infrastructure and the re-introduction of trains to this part of the countryside. Lighting and train noise will also affect the landscape character to a degree.

7.6.4 Various measures to reduce potential impacts are possible, including mitigation by design which would include following the route of the previous railway line, to reduce the amount of new cutting



Legend

- Proposed LVIA Study Area (2km)
- Proposed New Track
- Proposed New Railway Station
- highest road point

Zone of Theoretical Visibility

- Railway line/ apparatus visible only
- Railway Underpass visible only
- Railway Station visible only
- Railway Underpass and Railway line/ apparatus visible
- Railway Station and Railway line/ apparatus visible
- All infrastructure theoretically visible

Notes:

1. A 5m DTM model was used to produce the ZTV
2. The railway line has been modelled at 1m
3. A spot height of 7m has been used to model the road bridge/ rail underpass
4. The railway station has been modelled at 5m to the eaves of the building

0 1.5 km

Scale 1:30,000 @ A3

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Strathspey Railway Extension
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Figure 7.2

Zone of Theoretical Visibility

10146 - 001 - 02/02/15 AR

and land disturbance; and the development of a landscape plan aimed at helping to integrate the line into the wider environment. A new railway station is proposed on the edge of an existing settlement, with the aim of keeping areas of built development together. The relationship of the station with Grantown-on-Spey and its wider environs will be a key consideration of the design. It would be architecturally designed to ensure that the station building sympathetically responds to the context of the surrounding environment, both built and natural. It is anticipated that this new station could form an attractive new feature in the landscape.

7.6.5 The main landscape and visual impacts will result from the construction of the new railway underpass below the A95 at Gaich (i.e. the construction of embankments and a large engineered structure, with associated railings, lighting, signage etc), and the construction of the new station building. The A95 would require realignment and elevation, which would introduce new earth embankments, beginning at Craggan Outdoors to the east, and rising to height of 3.5m at the point where the road crosses the railway line, to the south of the residential property at Upper Gaich. The realignment would affect approximately a 1km stretch of the existing A95, and an area of land to the south of the current alignment. It would bring the road closer to the golf course, and closer to the residential property at Lower Gaich. A new access road to Lower Gaich would also be constructed, and an agricultural underpass to provide livestock access underneath the A-road. The A95 would re-join the current alignment at a location approximately 200m west of the residential property, at Glengynack (see Figure 1.2).

7.6.6 In addition to these impacts which focus on the long term, there is also the potential for short and medium term impacts during construction and decommissioning, and during the restoration period, as well as impacts arising from operation and use of the railway by trains and people (including associated car parking areas, lighting, ticket machines etc).

Permanent Impacts

Landscape Impacts

7.6.7 Effects on the landscape are likely to arise from:

- introduction of a long linear feature into a rural area, as well as lighting, signage, signal boxes, ticket booths, reinforcement or retaining features, access ramps and steps, etc;
- realignment and elevation of the A95, and new access road to Lower Gaich;
- the presence of landscaped embankments and other earthworks;
- permanent loss of landscape features such as individual trees and woodland, farmland, farm and property access tracks as a result of displacement by new features;
- introduction of the movement and noise of trains into the landscape;
- alteration of the pattern of field boundaries; and
- extension of the urban edge through the development of a new railway station and associated car parking, lighting, signage and landscaping.

Visual Impacts

7.6.8 Effects on views are likely to arise from:

- the presence of long new embankments and engineering infrastructure, resulting from the raising and realignment of the A95, which could intrude into people's views, such the view from properties at Lower and Upper Gaich;
- rail related structures that stand out in the landscape, such communications masts, railings, lighting and other vertical or visible rail infrastructure; and
- the increased visual presence of the railway and station building in addition to the existing built-up area, such that development forms a larger part of the view.

Construction Impacts

7.6.9 During construction, there would be short term landscape and visual impacts arising from the presence of plant and activities on the site. These could include:

Landscape Impacts

7.6.10 Effects will result from the presence of:

- felling and vegetation clearance that leads to a change in views and the potential for opening up of new views;
- laydown areas and temporary stock fencing;
- creation of haul roads along the route of the railway line and the new alignment of the A95;
- road works and upgrade/ extension of access track working corridors;
- disturbance and earthworks associated with the realignment of the A95 and the introduction of a large railway underpass below the realigned A95;
- machinery and material storage; plant and vehicle movements;
- in-situ concrete works including falsework, shuttering and reinforcement for buried foundations;
- excavations for foundations and trenches;
- tall cranes used in the construction of the line and associated infrastructure;
- and construction site lighting (if construction is in winter months).

7.6.11 There may be localised landscape impacts from the presence of construction compounds and temporary spoil heaps. Overall, however, the impacts on the landscape during the construction period would be similar to the permanent impacts, although generally of slightly greater significance because of the presence of these construction compounds and spoil heaps, together with large machinery moving about. The landscape impacts would also be somewhat greater immediately after construction, before the scars of new cuttings and embankments bled back into the landscape, after the implementation of landscape restoration and planting works.

7.6.12 Changes to the landscape are also likely to be more noticed by local residents or regular passers-by during the construction period as they will be intensive and carried out over a short time scale. On the other hand, construction impacts may be considered to be less significant due to their temporary, short term nature.

Visual Impacts

7.6.13 Visual impacts will arise because of:

- vegetation removal and site clearance;
- the installation of a large construction compound;
- the movement and activity of large construction machinery, usually with flashing hazard lights;
- views of cranes, if used;
- the construction/excavation of new embankments and cuttings, particularly noticeable because of the speed of the changes over a short time-scale, and the extent of bare earth visible;
- the presence of temporary spoil heaps and disposal areas;
- temporary traffic management and any local public right of way diversions; and
- floodlighting of areas for evening and morning working, during the winter.

7.7 Potential Mitigation

Mitigation by Design

7.7.1 The following is proposed:

- the railway line would follow (as far as practicable) the line of this historic railway line to avoid further intrusion into the landscape;
- the railway station and associated infrastructure (i.e. car parking) would be designed to respond to the surrounding character of the wider area, and to 'fit' with the existing vernacular of the settlement of Grantown-on-Spey. Hard landscaping and planting would be introduced to help integrate the building into its environment; and
- development of a landscape framework strategy and planting plan is proposed to help integrate the railway and the road realignment into the landscape, and to reduce the visual impact over the long term.

Construction

7.7.2 Mitigation measures will include:

- the railway line would be developed in linear sections, as separate phases of work, to keep all construction activity in one place and to reduce the visual impact on residents and road users during the construction phase;
- materials and machinery would be stored tidily during the works. Tall machinery would not be left in place for longer than required for construction purposes, in order to minimise its impact in views;
- the construction area of the site would be fenced. Construction vehicles would only be allowed to use designated routes;
- roads providing access to the site would be maintained free of dust and mud;
- the contractor's facilities and the laydown areas would be located to cause as little visual intrusion as possible; and
- on completion of construction, all remaining construction materials would be removed from the site. Any remaining spoil heaps would be graded to match existing contours.

Restoration

7.7.3 The following mitigation is proposed:

- Where temporarily used for construction purposes, all land would be restored to its pre-construction state. Plant materials of local provenance, saved turves and the topsoil and peaty soils containing the existing seedbank would be re-used, with further seeding and planting being proposed if required in any areas which are not to be returned to agricultural use.

7.8 Approach to the LVIA

7.8.1 The key steps in the LVIA methodology will be as follows:

- policy and designations relevant to the assessment of landscape and visual impacts will be identified;
- a study area to a distance out to 2km along the route would be adopted for the LVIA in response to the nature of the proposed development and the character of the surrounding landscape;
- the zone of theoretical visibility (ZTV) of the route of the railway will be produced, modelled at a height agreed with CNPA and SNH, to understand the influence of the development;
- the landscape within the study area and within the project site itself will be described and their sensitivity assessed, based upon the susceptibility of the landscape to the change and the value attached to the landscape receptor or the view;
- viewpoints across the ZTV will be selected as representative of the range of views and types of viewer likely to be affected by the project, agreed with CNPA and SNH, and the sensitivity of each view established, based on a determination of their value and their susceptibility to change;
- photographs will be taken at each viewpoint location (in accordance with established SNH guidance) and annotated to indicate the line and extent of the proposed development.

Photomontage images of the development from selected viewpoints (agreed with the National Park Authority) will prepared;

- the magnitude of change in the landscape (both in terms of direct changes to landscape features and changes to character of surrounding landscapes) and in views will be predicted in relation to the size and scale of the proposed development , the geographical extent the development would cover and the duration and reversibility of the anticipated effects;
- the level of significance of impact on the landscape and viewpoints will be evaluated; and
- a cumulative assessment will be undertaken to predict the impact of the proposed development with other proposed infrastructural or large scale developments (if any) on landscape resources and visual receptors.

7.8.2 Alongside the assessment of impacts, options for mitigation of predicted impacts of the development will be considered and practical measures agreed with the relevant consultees. Mitigation measures (see above) will be incorporated into the design, and the assessment will report the residual effects of the scheme, taking into account the embedded mitigation developed during this process.

8 Ecology and Nature Conservation

8.1 Introduction

8.1.1 This section sets out the proposed approach to the assessment of potential effects of the Proposed Development on ecological interests, during construction, operation and decommissioning. Following the general approach to the Environmental Impact Assessment (EIA) the ecological assessment will be carried out in line with relevant legislation and best practice guidance.

8.1.2 This section:

- describes the key ecological issues associated with construction and operation of the Proposed Development;
- presents the proposed survey methods that will be used to generate ecological baseline information; and
- outlines the proposed approach to the ecological impact assessments (as part of the wider Environmental Impact Assessment (EIA)).

8.2 Baseline Description

8.2.1 The Site is an area of dismantled railway approximately 4.8 km in length, extending from the River Dulnain to Grantown on Spey. The Proposed Development also includes an area encompassing a proposed railway crossing of the A95 trunk road between Gaich and Craggan.

8.2.2 The railway track bed is a narrow strip of land which comprises primarily improved grassland, poor semi-improved grassland and bare ground with steep banks often present immediately adjacent to the track and stone bridges crossing roads and water courses. The northern portion of the dismantled railway (extending from the proposed new station to Speyside Industrial Estate) is currently being utilised as a public woodland trail through Beachen Wood and much of the remaining track is disused land which bisects farm land, however, there are small sections present which appear to be utilised for grazing livestock or for farm access.

Photo 5 shows track bed to the west of Grantown.

8.2.3 The area of land proposed to accommodate the new station is a field currently utilised for grazing horses comprising well-grazed poor semi-improved grassland mosaicked with areas of marshy grassland where the ground is notably wetter. A mature tree line and Kylintra Burn bisect the field in a north-east to south-west direction as shown within Photo 4.

8.2.4 A large majority of the surrounding habitat present within the Study Area comprises woodland of mixed age and species and arable or grazing farmland, however, a number of farming, industrial and residential properties were identified immediately adjacent or within close proximity to the railway corridor, particularly within the northern section of the track.

8.2.5 Four statutory sites of international importance were identified within a 10 km search area. The SAC/SSSI River Spey is the closest designation to the Site as the railway passes over the River Dulnain, a designated tributary water course of the River Spey via an existing railway bridge. The River Spey and its tributaries are designated for supporting sea lamprey (*Petromyzon marinus*), Atlantic salmon (*Salmo salar*), otter (*Lutra lutra*) and freshwater pearl mussel (*Margaritifera margaritifera*). Within 1km south-east of the Site is the Anagach Woods SPA which is designated for supporting breeding capercaillie (*Tetrao urogallus*), as does Craigmore Wood SPA located approximately 1.3km south-east of the Site. Lastly is Abernethy Forest and the Cairngorms which are designated as a SSSI, SAC and SPA for supporting a breeding crested tit (*Lophophanes cristatus*), Scottish crossbill (*Loxia scotia*), capercaillie, osprey (*Pandion haliaetus*) and an array of upland and woodland habitats. These designations are situated approximately 3.8 km south-west of the Site.

8.2.6 Twenty-two areas of ancient / long-established woodland (listed within the Ancient Woodland Inventory) were identified within 2 km of the Site boundary, with 14 woodlands identified within 1 km of the Site.

8.2.7 An Extended Phase 1 habitat survey of the railway line and surrounding land (as shown on Figure 8.1 a-e) has been completed of the Proposed Development and has identified semi natural broadleaved woodland, broadleaved plantation woodland, semi natural coniferous woodland mixed semi natural and plantation woodland, semi improved acid grassland, marshy grassland and poor semi improved grassland. In addition, although no evidence was identified, the Site is considered to provide suitable habitat for badgers (*Meles meles*), bats (*Chiroptera spp*.), red squirrel (*Sciurus vulgaris)*, pine marten (*Martes martes*) and wildcat (*Felis silvestris)*.

N

TN1 TN2 TN3 TN4 TN5 TN6 TN7 TN8 TN9 TN10 TN11 TN12 TN13 TN14 TN15 TN16 TN17 TN18 TN19 TN20 TN21 TN22 TN23

Quarry Cottage
Dulicht
Bridge
Cairn
GRANTOWN-ON-SPEY
Beachen Wood
Wester Craggan
Ford
Dismantled Railway
Kylintra Burn
B9102
Kylintra Wood
Cemetery
Sewage Works
Spey Bridge
Industrial Estate
Free Church Wood
Ladies Garden Wood
Curling Ponds
Hotel
PO
Sch
Liby
Military Road
A939
A95
SMOKE
MS
290
270
276
240
219
221
216
217
215
213
212
208
202
210
199

KEY

New Station
Proposed New Track
Study Area (100 m)
Target Notes

Habitats

Code

A1.1.1
A1.1.2
A1.2.1
A1.2.2
A1.3.1
A1.3.2
A2.2
A3.1
A4.2
B1.2
B4
B5
B6
G2.2
J1.1

0 0.25 km

Scale 1:7,687 @ A3

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Extended Phase 1 Habitat Survey

Figure 8.1a

Phase 1 Habitats (New Station Location)

10146-001 - 24/07/15 - NM

N

Dulicht

GRANTOWN
-ON-SPEY

Beachen Wood

TN10

TN9

TN11

TN12

TN13

TN14

TN15

TN16

TN17

270

212

B9102

Kylintra Burn

KEY

Target Notes

New Station

Proposed New Track

Study Area (100 m)

Habitats

Code

A1.1.1

A1.1.2

A1.2.1

A1.2.2

A1.3.1

A1.3.2

A2.2

A3.1

A4.2

B1.2

B4

B5

B6

G2.2

J1.1

Scale 1:4,000 @ A3

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Strathspey Railway Extension
Extended Phase 1 Habitat Survey

Figure 8.1 b

Phase 1 Habitats (North Track)

10146-001 - 24/07/15 - NM

KEY

Proposed New Track

Study Area (100 m)

Target Notes

Habitats

Code

A1.1.1

A1.1.2

A1.2.1

A1.2.2

A1.3.1

A1.3.2

A2.2

A3.1

A4.2

B1.2

B4

B5

B6

G2.2

J1.1

Scale 1:4,000 @ A3

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Strathspey Railway Extension
Extended Phase 1 Habitat Survey

Figure 8.1 c

Phase 1 Habitats (Centre Track)

10146-001 - 24/07/15 - NM

N

KEY

Proposed New Track

Study Area (100 m)

Target Notes

Habitats

Code

A1.1.1

A1.1.2

A1.2.1

A1.2.2

A1.3.1

A1.3.2

A2.2

A3.1

A4.2

B1.2

B4

B5

B6

G2.2

J1.1

0 0.25 km

Scale 1:7,029 @ A3

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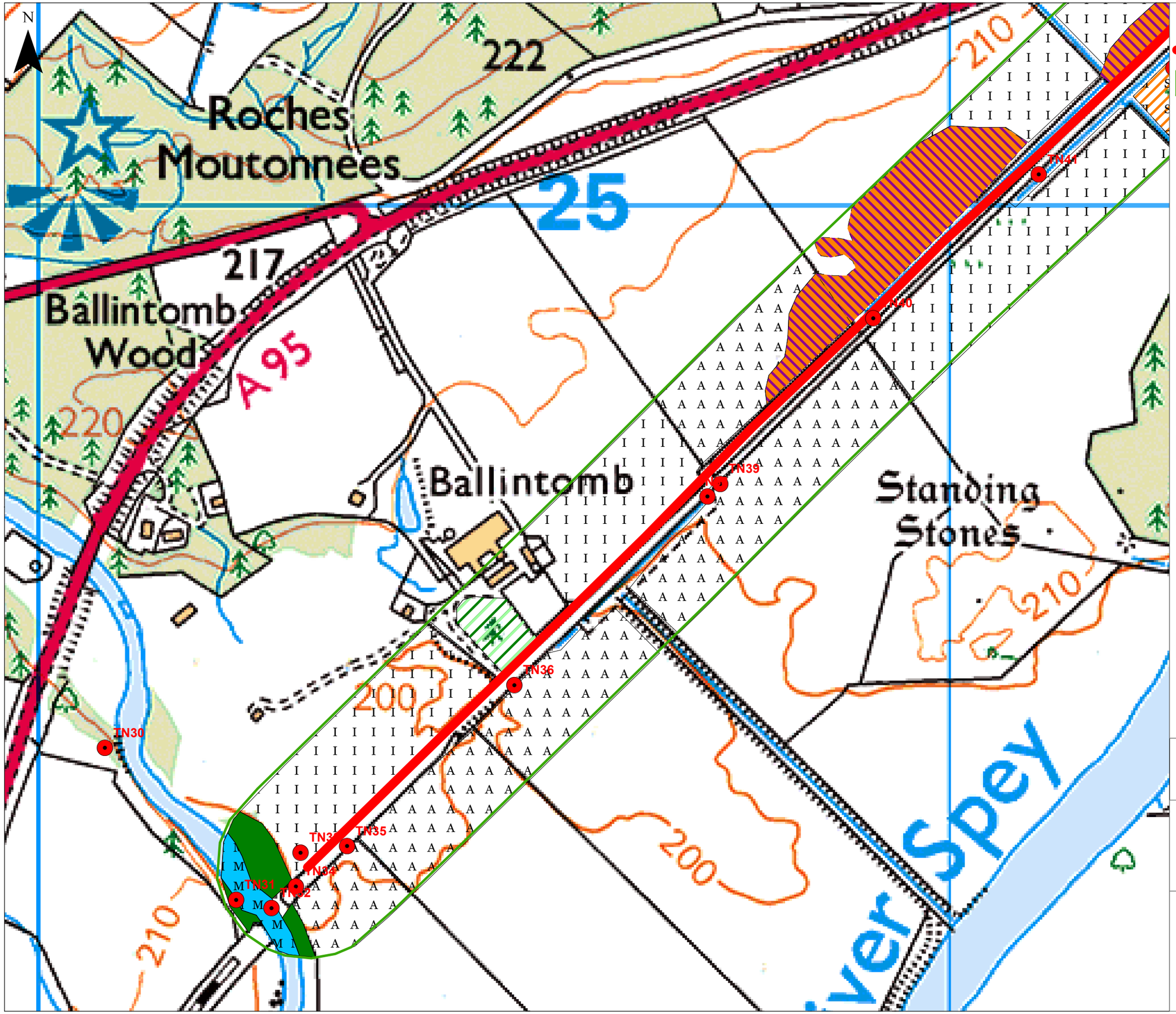
Strathspey Railway Extension
Extended Phase 1 Habitat Survey

Figure 8.1 d

Phase 1 Habitats (South Track)

10146-001 - 24/07/15 - NM



KEY

- Proposed New Track
- Study Area (100 m)
- Target Notes

Habitats

Code

- A1.1.1
- A1.1.2
- A1.2.1
- A1.2.2
- A1.3.1
- A1.3.2
- A2.2
- A3.1
- A4.2
- B1.2
- B4
- B5
- B6
- G2.2
- J1.1

Scale 1:4,000 @ A3

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Strathspey Railway Extension
Extended Phase 1 Habitat Survey

Figure 8.1 e

Phase 1 Habitats (End Track)

10146-001 - 24/07/15 - NM

8.2.8 The draft Environmental Statement (Jacobs, 2011, unpublished) for the A95 Gaich to Craggan road improvement scheme identified the presence of woodland, heath and bog, farmland and scrub.

8.3 Relevant Guidance and Legislation

8.3.1 Full consideration will be given to all relevant nature conservation legislation and guidance when carrying out this assessment, these include:

- The Conservation of Natural Habitats and Wild Flora and Fauna (the Habitats Directive) 1992 (92/43/3EEC);
- The Conservation of Wild Birds (the Birds Directive) 1979 (79/409/EEC);
- The Ramsar Convention 1975;
- The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) 1982;
- The Conservation of Habitats and Species (Amendment) Regulations 2011;
- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- Nature Conservation (Scotland) Act (NCSA) 2004;
- Protection of Badgers Act (PBA) 1992;
- The UK Biodiversity Action Plan (UK BAP);
- Scottish Planning Policy (2014); and
- Planning Advice Note (PAN) 60 Planning for Natural Heritage.

Policy Framework

8.3.2 The current local plan covering the Proposed Development area is the Cairngorms National Park Local Development Plan 2015. This plan sets out detailed policies and specific proposals relevant to development and use of land for the Cairngorms National Park which the Site is situated.

8.3.3 In respect to the above, regard has been made to the following policies,:

- Policy 2: Supporting Economic Growth;
- Policy 4: Natural Heritage; and,
- Policy 8: Sports and Recreation

8.3.4 Full details of the policies listed can be found within the Cairngorms National Park website.

8.4 Proposed Scope of Assessment

8.4.1 The assessment of ecological effects will utilise existing desktop data, and the findings of the Extended Phase 1 Habitat survey (Energised Environments, 2015). The Extended Phase 1 habitat survey was undertaken in July 2015 and identified the following dedicated species survey requirements:

Ancient Woodland Areas

8.4.2 A National Vegetation Classification (NVC) survey will be carried out specifically in areas where the proposed development passes through areas of woodland listed on the Ancient Woodland Inventory (AWI), taking cognisance of Rodwell (2001), Rodwell (1995) and Rodwell (1992). The survey will additionally seek to identify any Groundwater Dependant Terrestrial Ecosystems (GWDTE). These

surveys will be undertaken within areas of suitable habitat within the proposed development and where appropriate an area extending 30m from the boundary (as shown on Figure 8.2).

8.4.3 In the event that the NVC survey identifies the potential requirement for additional specialist surveys, the scope of these will be discussed with CNPA.

Protected Species Surveys

Badger

8.4.4 Badger surveys will be undertaken in line with methods described in 'Surveying for Badgers' by The Mammal Society, Occasional Publication No. 9 (Harris *et al.,* 1989), as summarised below:

- All hedgerows, field boundaries, watercourses, paths and other linear features will be walked to locate badger field signs including but not limited to badger setts, badger paths, evidence of foraging and dung pits. In addition, all areas of woodland and scrub will be systematically searched for evidence of badger activity.
- Where applicable, badger paths will be identified through the observation of field signs including prints, badger hairs on barbed wire or vegetation, dung pits and scratching posts.
- The interiors of fields will be surveyed in addition to their boundaries, where they exhibit evidence of badger foraging or where badger paths pass through them.
- Other areas offering the potential to support badger setts, identified during survey and from OS maps, will be actively searched, where practicable.

Otter

8.4.5 All watercourses and water features that area crossed by or within 30m of the development will be surveyed for signs of otter. Surveys will conducted from within the channel where possible, along the riverbank and on ground within 10 m of watercourses and will focus on identifying the presence of otter signs, which included spraint (droppings) and footprints. Resting sites, for example, holts, couches and hovers, will be identified following 'Ecology of the European Otter: Conserving Natura 2000 Rivers Ecology Series No.10' (Chanin, 2003), in addition to potential signs of otter activity including runs or other well-used access points to watercourses (slides), feeding remains e.g. fish carcasses and sightings, including otter road accident causalities.

Water Vole

8.4.6 Surveys for water vole following methods detailed in the 'Water Vole Conservation Handbook' (Strachan & Moorhouse, 2006) will be undertaken on those parts of the water courses crossed by the development which are suitable for the species. Surveys focus on suitable riparian and/or terrestrial habitats and sought out the following field signs:

- burrows with entrances surrounded by grazed 'lawns';
- runs through vegetation;
- feeding stations (characterised by neatly chopped pieces of grass, sedge, or rush up to 10 cm long); and
- latrines.

8.4.7 Surveys will be undertaken within all suitable areas of the proposed development and an area extending 30m from the boundary.

KEY

- New Station
- Proposed New Track
- Ancient Woodland
- AWIStudyArea

0 0.25 km

Scale 1:6,215 @ A3

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Figure 8.2

Ancient Woodland Inventory (AWI) Buffer

10146-001 - 01/09/15

Bats

8.4.8 The following survey methods are proposed, which were developed according to best practice standards taking cognisance of the document 'Bat Survey - Good Practice Guidelines' (Hundt, 2012).

8.4.9 The phase 1 habitat survey identified trees and structures with the potential to support roosting bats as such a habitat suitability survey will be carried out at these locations to identify the level of survey effort required. Following consultation with the CNPA surveys will be undertaken in suitable areas of the proposed development and an area extending 30m from the boundary.

Wildcats

8.4.10 Camera traps will be deployed in areas of suitable habitats within the proposed development and an area extending 200m from the boundary (Figure 8.3) taking cognisance of methods in Cresswell *et al*., 2012.

Pine Marten

8.4.11 Camera traps will be deployed in areas of suitable habitats within the proposed development and an area extending 30m from the boundary (Figure 8.3) taking cognisance of methods in Cresswell *et al*., 2012.

Red Squirrel

8.4.12 A survey of areas of suitable habitats within the proposed development and an area extending 30m from the boundary (Figure 8.3) will be surveyed for the presence of red squirrel; drey searches. Surveys will follow methods outlined in Gurnell et al., 2009.

Birds

8.4.13 Consultation with the RSPB, local raptor group and CNPA will be undertaken to obtain data pertaining to the presence of notable bird species (i.e Schedule 1 and Annex 1 species) within 200m of the proposed development.

Assessment

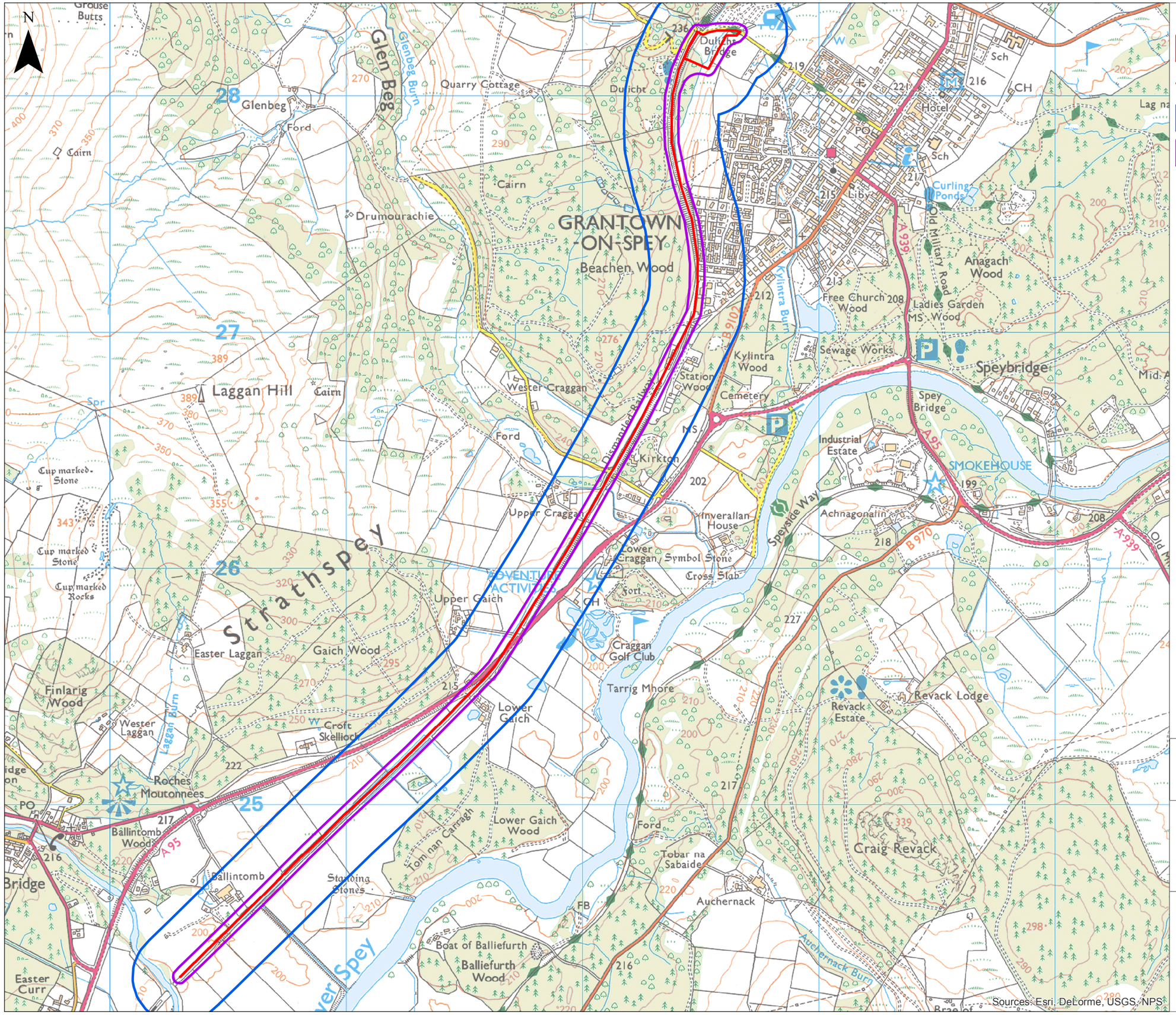
8.4.14 In accordance with the CIEEM (2006) guidance, the Ecology and Nature Conservation chapter for the ES will present a description of the habitats and fauna baseline for the Proposed Development site and wider ecological study area up to 250 m from the boundary of the site (the zone of influence). The findings of the survey work will be analysed and presented (where appropriate) in a technical report providing baseline conditions of the site. Activities during the construction and operational phases and their potential significance on valuable or vulnerable ecological features, such as protected species, will be identified and direct and indirect effects will be described with consideration of the above guidelines and the geographical scale at which they are significant. Potential cumulative ecological effects will also be assessed up to 20 km from the site boundary. The assessment will additionally present mitigation measures, as required, and assess any residual effects.

8.5 Potential Impacts

Construction Impacts and Effects

8.5.1 The key ecology and nature conservation issues to be considered with respect to the Proposed Development during construction are likely to include the following:

- direct mortality of fauna during construction and operation;
- habitat loss through land-take;
- fragmentation of existing habitats;



- disturbance during construction; and
- pollution via road drainage and runoff during all development phases.

8.5.2 Additionally, for species relying on aquatic resources potentially affected by watercourse crossings and surface water runoff, the following potential significant effects are also considered:

- point source and diffuse pollution;
- increased sediment loading;
- decreased habitat complexity;
- habitat fragmentation; and
- changes to discharge regime.

Operational Impacts

8.5.3 The key ecology and nature conservation issues to be considered with respect to the Proposed Development during operation are likely to include the following:

- direct mortality of fauna during construction and operation;
- behavioural changes of fauna during operation;
- habitat loss through land-take;
- fragmentation of existing habitats; and
- pollution via road drainage and runoff during all development phases.

8.5.4 Additionally, for species relying on aquatic resources potentially affected by watercourse crossing and surface water runoff, the following potential effects are also considered:

- point source and diffuse pollution;
- increased sediment loading;
- decreased habitat complexity;
- habitat fragmentation; and
- changes to discharge regime.

8.6 Potential Mitigation

Construction and Operation

8.6.1 If it is found that mitigation is necessary to reduce any adverse ecological effects then an integrated mitigation and enhancement package will be proposed which will address ecological effects and which reflects local objectives in terms of biodiversity and the enhancement of environmental character. During the Proposed Development design and EIA process, mitigation measures will follow the recognised hierarchy of avoidance, reduction, enhancement, and compensation.

9 Archaeology and Cultural Heritage

9.1 Introduction

9.1.1 The cultural heritage assessment will consider the potential for direct effects of the development on heritage arising from the Proposed Development and for effects upon the settings of key heritage

assets within the wider landscape. The assessment will also identify measures that should be taken to mitigate any identified significant adverse effects.

9.1.2 Cultural heritage assets relevant in the context of the Proposed Development include:

- Scheduled Monuments and other archaeological features.
- Listed Buildings and other buildings of historic or architectural importance.
- Conservation Areas and other important historic townscapes.
- Inventory of Gardens and Designed Landscapes.
- Inventory of Historic Battlefields and other important historic landscapes.

9.1.3 The Proposed Development area includes:

- The line of the former railway between a bridge over the River Dulnain and a new station complex at Seafield Avenue, Grantown on Spey.
- A section of the A95 trunk road, where it crosses the railway near Craggan, for which an Environmental Impact Assessment (EIA) was carried out in 2011[11].

9.2 Baseline Description

9.2.1 The Proposed Development route follows the line of a disused railway and there may well be remains of trackside furniture and fittings from that earlier use surviving along its course.

9.2.2 The earthwork remains of Ballintomb farmstead (MHG26849) lie alongside the existing disused railway, to the north and close to the modern farm. The remains of Ballintomb township (MHG26848) are recorded as lying to the southwest of the railway, to the west of modern Ballintomb Farm. The proposed restored rail line would also pass the site of the former Grantown on Spey station (west) (MHG23766) now the site of small industrial units.

9.2.3 The closest listed buildings to any part of the proposed works lie within the urban centre of Grantown on Spey; most of those lie within Grantown on Spey Conservation Area. The closest of these, category B listed Inverallan Church (Ref: 34062) is 550m east of the proposed new station.

9.2.4 The only scheduled monuments close to the route of the proposed development site between Broomhill and Grantown on Spey are:

- Finlarig Chapel and Enclosure 300m W of (Index No 2707), 2km to the northwest of the railway line; and,
- Castle Roy (Index No 952), 2.5km south of the Dulnain Bridge.

9.2.5 There are no Inventory status Historic Battlefields within 2 km of the proposed development. The nearest Gardens and Designed Landscapes is Castle Grant north of Grantown and 950m to the northeast of the proposed new station at its closest point. The nearest Historic Battlefield is at Cromdale 3km to the east of Grantown and 4km from the proposed new station.

9.3 Relevant Guidance and Legislation

9.3.1 Legislation concerning the protection and conservation of cultural heritage assets, relevant in the context of the Proposed Development, includes:

- Ancient Monuments and Archaeological Areas Act 1979.
- Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997.
- Town and Country Planning (General Development Procedure) (Scotland) Order 1992.

[11] Jacobs (2011) A95 Gaich to Craggan Stage 3 Environmental Statement

9.3.2 Relevant planning policy and guidance concerning cultural heritage matters includes:

- The National Planning Framework for Scotland (NPF3) (Scottish Government 2014).
- Scottish Planning Policy (SPP) (Scottish Government 2014).
- Scottish Historic Environment Policy (SHEP) (Historic Scotland 2011).
- Our Place in Time. The Historic Environment Strategy for Scotland (Scottish Government 2014).
- Planning Advice Note 2/2011 (PAN 2) (Scottish Government 2011).
- Highland-wide Local Development Plan (The Highland Council 2012).
- Managing Change in the Historic Environment: Setting (Historic Scotland, 2010).
- Highland Historic Environment Strategy, Interim Supplementary Planning Guidance (Adopted June 2012).

9.3.3 The collection of baseline information will be conducted in accordance with the Chartered Institute for Archaeologists' '*Code of Conduct*' (CIfA 2014) and '*Standard and Guidance for Historic Environment Desk-Based Assessment*' (CIfA 2012), and '*The Highland Council Standards for Archaeological Work*' (The Highland Council 2012).

9.4 Proposed Scope of Assessment

9.4.1 The effects of the Proposed Development on cultural heritage assets will be assessed on the basis of their type (direct physical effects, effects on setting, cumulative effects), nature (beneficial, neutral or adverse), and longevity (reversible, short-term or long-term; irreversible, permanent). The assessment will take into account the sensitivity of the assets affected and the magnitude of the predicted impact. The assessment of sensitivity of cultural heritage assets reflects the relative weight which statute and policy attach to them, principally as published in Scottish Planning Policy (SPP) and Scottish Historic Environment Policy.

9.4.2 The study area for identification of possible direct effects on cultural heritage will be as follows:

- A 50m wide corridor centred on the route of the proposed new track alignment.
- The proposed new station area and a 50m area around it.

9.4.3 A desk-based assessment will be conducted for a 50m wide corridor centred on the route of the railway and the area of the proposed new station complex, to identify all known cultural heritage assets, designated or otherwise along the route of the line that could potentially be affected by the proposed restoration works, and to inform an assessment of the archaeological potential of the route and the new station site. Sources to be consulted for the collation of data will include:

- The Highland Council Historic Environment Record (HER).
- The National Monuments Record of Scotland (RCAHMS).
- Ordnance Survey maps (principally 1st and 2nd Edition), and other published historic maps held in the Map Library of the National Library of Scotland.
- Vertical and oblique aerial photographs held by RCAHMS.
- Published bibliographic sources, including historical descriptions of the area (Statistical Accounts, Parish Records).
- The Scottish Palaeoecological Archive Database (Coles et al., 1998).
- The Historic Land-use Assessment Data (HLAMap) for Scotland (RCAHMS, 2011).

9.4.4 The results of the desk-based assessment will be augmented by a RCAHMS Level 1 reconnaissance field survey (Royal Commission on the Ancient and Historical Monuments of Scotland Corporate Plan 2004-9, Survey and Recording) of the railway line and at the site of the proposed new station, carried out in order to:

- Locate and record the character, extent and current condition of all visible cultural heritage sites, monuments and landscape features that could be affected by the Proposed Development.

This will include both sites and features identified during the desk-based assessment and any previously unrecognised and encountered during the survey.

- Identify areas with the potential to contain unrecorded, buried archaeological remains, taking into account factors such as topography, geomorphology and ground conditions.
- Inform the assessment of the possible effects of the Proposed Development on those features.

9.4.5 Intrusive field evaluation will not be undertaken as part of the baseline survey.

9.4.6 The relevant findings of the cultural heritage assessment for the 2011 road upgrade EIA will be updated where necessary and incorporated into the Environmental Statement for the project.

9.4.7 Mitigation measures, designed to prevent, reduce or offset significant adverse effects will be identified where applicable.

9.5 Potential Impacts

Construction Impacts and Effects

9.5.1 Construction of the proposed railway and station complex has the potential to disturb, damage or destroy features or buried remains of cultural heritage interest. Other construction activities, such as vehicle movements, soil and overburden storage and landscaping also have the potential to cause direct permanent and irreversible effects on the cultural heritage.

Operational Impacts

9.5.2 Operation of the proposed railway and station complex has the potential to affect cultural heritage assets within the wider landscape through changes occurring within their baseline setting. However, taking into account the nature of the Proposed Development it is unlikely that there will be any significant impacts on heritage assets in the wider historic landscape.

9.5.3 None of the individual buildings at Grantown on Spey or the Conservation Area will have their settings affected by the proposed works and it is proposed therefore to Scope Out impacts on their settings.

9.5.4 Neither of the two scheduled monuments in proximity to the route of the railway would have their settings adversely affected by the Proposed Development (which lies at least 1km from both sites) and it is proposed therefore to Scope Out impacts on their settings.

9.5.5 There are no Inventory status Gardens and Designed Landscapes or Historic Battlefields that would have their settings adversely affected by the Proposed Development and it is proposed therefore to Scope Out impacts on their settings.

9.5.6 Based on the distribution of the heritage assets with statutory protection, and those with non-statutory designations, within 2 km of the Proposed Development, it is considered that effects on settings of heritage assets can be scoped out of the assessment.

9.6 Potential Mitigation

Construction

9.6.1 Mitigation measures designed to prevent, reduce or offset any potential direct adverse effects will be identified. Where artefacts of historic interest in relation to the railway's previous use are identified they may be incorporated into the Proposed Development, avoided through design and preserved in situ unaffected by the Proposed Development, or recorded prior to their removal.

9.6.2 It is possible that buried archaeological remains could be present at the site of the proposed new station complex, which is a greenfield site that appears to have been largely undisturbed since the mid 19th century. Consultation will be undertaken with the Highland Council Historic Environment

Team to determine the need for and scope of a potential mitigation strategy. Potential mitigation may include a programme of archaeological works designed to identify, characterise and record buried archaeological remains. In the event of any discoveries, further mitigation through recording and publication of the results of any excavations may be required in line with the requirements of Planning Policy.

Operation

9.6.3 It is expected that there will be no adverse impacts on the settings of heritage assets in the wider landscape from the Proposed Development. Therefore, there will be no requirement for any mitigation in respect of preserving the settings of heritage assets.

10 Hydrology, Hydrogeology and Geology

10.1 Introduction

10.1.1 This section considers the potential for significant effects on surface water, groundwater, the potential risk of flooding, and the drainage requirements which may result from the Proposed Development. This section also considers the potential effects associated with the ground conditions, including any contamination associated with historic land uses, geological resources, and the ground stability of the site and the surrounding area.

10.2 Baseline Description

10.2.1 The SEPA website flood map, available at http://map.sepa.org.uk/floodmap/map.htm accessed on 28 July 2015 shows that the Site lies almost entirely within an area at very low risk of fluvial flooding (less than 0.1% annual exceedance probability), with the exception of where it crosses the Glenbeg Burn (approximately 1km south of Grantown on Spey). Additionally the site is mostly at very low risk of surface water flooding with the exception of small areas of surface water to the west of Grantown. The site is shown to be at low risk of groundwater flooding.

10.2.2 The Proposed Development is located within the River Spey SAC catchment area, and will cross the existing bridge at Glenbeg Burn which is a tributary of the River Spey.

10.2.3 The station area is predominantly in use as agricultural land and would not currently be expected to generate a large volume of surface water run-off.

10.2.4 The existing site hydrology will need to be assessed however it is likely that surface water run-off from the site currently discharges predominantly by a combination of infiltration into the underlying soils (including through former railway drainage channels) and evapotranspiration. The remaining surface water run-off may flow overland to small land drainage features.

10.2.5 Further details of the historical and predicted flooding within the site and surrounding area would be assessed following data gathering from the sources listed below.

- The Highland Council Strategic Flood Risk Assessment.
- Consultation with CNPA, Scottish Water and SEPA.

10.3 Relevant Guidance and Legislation

10.3.1 Legislation concerning flood risk and surface water management includes:

- Control of Pollution Act 1974;
- Environment Act 1995;

- Flood Prevention and Land Drainage (Scotland) Act 1997;
- The Water Environment and Water Services (Scotland) Act 2003;
- Flood Risk Management Act 2009.

10.3.2 Relevant planning policy and guidance concerning flood risk and surface water management includes:

- Scottish Planning Policy (SPP7 Planning and Flooding);
- SEPA Regulatory Process (Regulatory Method 8);
- Planning Advice Notes (PAN 61 Planning and Sustainable Urban Drainage Systems; PAN 69 Planning and Building Standards Advice on Flooding);
- Sewers for Scotland 2nd Edition;
- Various CIRIA publications.

10.4 Proposed Scope of Assessment

Desk-Based Assessment

10.4.1 A desk-based assessment will be carried out in order to establish the catchment characteristics and baseline geological and hydrogeological conditions beneath the site.

10.4.2 The desk-based review of baseline information will comprise:

- determination of site geology and hydrogeology from maps published by the BGS, mine abandonment plans and site investigation reports (where available);
- review of existing sources of data relating to the water regime, including SEPA water quality and flood risk data, Institute of Hydrology hydrometric statistics, discharge consents, abstraction licenses and identification of other water users;
- identifying and gathering information on any geologically important sites, in consultation with SNH, the Local Authority and local interest groups;
- a review of risk to potential Private Water Supplies;
- consideration of the findings of site investigation reports (where available), historical site uses, industrial land use and permits, areas of determined or potential Contaminated Land, soil type and permeability, and contamination status of the site and surrounding area, in order to determine the existing groundwater quality and regime; and
- review of the development proposals and reports from other technical studies being undertaken for the planning application, including ecology surveys, the drainage strategy and flood risk assessment.
- Consultation will be carried out with key organisations including SEPA and The Highland Council.

10.4.3 A high level Flood Risk Assessment will be undertaken in accordance with the SPP7 and the Flood Risk Management (Scotland) Act 2009. The Flood Risk Assessment will examine the risk of flooding at the site from fluvial and other sources such as overland flow routes, groundwater and sewers.

10.5 Potential Impacts

10.5.1 The Proposed Development comprises the construction of impermeable roofs and paved surfaces (new roads and car parking) on land which is currently in greenfield use. The potential for infiltration

and evapotranspiration, following construction of the development, will be significantly reduced and therefore a larger volume of surface water run-off is anticipated. Additionally the rate of runoff from the paved surfaces into the drainage system will result in a higher rate of flow of surface water run-off compared to the existing greenfield situation. The existing site hydrology will be assessed and the greenfield rate of runoff estimated. Runoff from the development will be assessed against the greenfield rate of flow.

10.5.2 Significant earth works will be required as a result of the A95 road alterations which will require an embankment to be constructed to increase the elevation of the road alignment to allow the railway to pass underneath.

10.5.3 Management of surface water runoff will need to be considered to ensure that discharge rates to the natural surface water network are regulated to a level appropriate to the receiving system.

10.5.4 The quality of any discharge will need to be given consideration to ensure that the receiving water network is not adversely affected by runoff from the proposals.

10.5.5 The assessment will consider the risk of pollution of watercourses during construction of the Proposed Development.

10.5.6 Following construction, there is unlikely to be any intrusive works or significant contamination as a result of the scheme, therefore we propose to scope this element out of the assessment.

10.6 Potential Mitigation

10.6.1 The ES will provide an outline of suitable measures to remove suspended solids from surface water runoff arising during the construction phase.

10.6.2 The risk of surface water flooding and the potential impacts on water quality, within the receiving watercourse, will be mitigated by the implementation of a sustainable drainage (SUDS) scheme as part of the drainage strategy. The ES will present an assessment of residual effects on hydrology, geology and water quality taking account of committed mitigation for the construction and design of the proposals.

11 Transport and Accessibility

11.1 Introduction

11.1.1 This section considers potential issues associated with transport and traffic as a result of the construction and operation of the Proposed Development.

11.1.2 A Transportation Assessment (TA) will be completed as part of the EIA and a summary of this will be presented within the ES. The TA will focus on identifying the potential increase in traffic on the surrounding road network, associated impacts and potential mitigation measures.

11.2 Baseline Description

11.2.1 The project is being considered for two phases (construction and operation) and will feature site access points at two principal locations, namely at the A95 crossing where a new road underpass is to be installed and within Grantown on Spey to allow access to the railhead and station area.

11.2.2 Access to the A95 underpass site will be taken directly from the A95. Access for the station area will be taken from the High Street (A939) / Seafield Avenue (U2821) access junction and from a new access point on Seafield Avenue. Once the access routes have been confirmed the following baseline data would be collected:

- Observed traffic flows;
- Observed traffic speeds; and
- Accident data.

11.2.3 Wherever possible, historic traffic flow data will be used. It is currently estimated that at least two new traffic count sites on Seafield Avenue and the High Street will be required.

11.3 Relevant Guidance and Legislation

11.3.1 The assessment will be undertaken in accordance with the following guidance:

- Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Road Traffic;
- Scottish Planning Policy (SPP);
- Transport Scotland: "Transport Assessment Guidance";
- Design Manual for Roads and Bridges, Volume 2, Section 2, Part 5 Assessment and Management of Environmental Effects;
- HiTRANS: "Regional Transport Strategy"; and
- The Highland Council: "Roads and Transport Guidelines for New Developments."

11.4 Potential Impacts

Common Assessment Technique

11.4.1 The transport chapter will be prepared in line with the details provided by the Strathspey Railway Charitable Trust and will be produced with reference to Transport Scotland's report "Transport Assessment Guidance". A Transport Assessment (TA) would be produced and then summarised into chapter format. The TA can be appended to the ES.

11.4.2 The TA will consider the construction and operational elements of both the new road underpass (and associated works) as well as the extension from the A95 underpass through to Grantown.

11.4.3 The transport assessment will include:

- a summary of relevant transport policy;
- a summary of the methodology adopted for the assessment;
- a description of the existing and future baseline conditions;
- an estimate of road traffic trip generation associated with the reconstruction and operation of the railway;
- an assessment of the impacts that are likely to occur;
- identification of appropriate mitigation measures(if any); and
- a summary of the Framework Traffic Management Plan for the construction and operational stages.

11.4.4 In accordance with the Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Road Traffic, an assessment should be undertaken;

- Rule 1: On road links where traffic flows are predicted to increase by more than 30 % (or where the number of heavy goods vehicles is predicted to increase by more than 30 %); and

- Rule 2: Traffic flows are predicted by 10 % or more in any other specifically sensitive areas.

11.4.5 Where the predicted growth in traffic flow is below the thresholds, the IEMA guidelines suggest the significance of the effects can be stated to be negligible and further detailed assessment is not warranted.

11.4.6 The perception of change in traffic is dependent on a wide range of factors including volume, speed and composition of traffic (i.e. percentage of HGVs). The assessment of environmental effects of traffic requires a number of stages, namely:

- determination of existing and forecast traffic levels and characteristics;
- determining the time period suitable for assessment;
- determining the year of assessment; and
- identifying the geographical boundaries of assessment.

11.4.7 Once the environmental effects and the road links to be included within the analysis have been identified, the next stage of the assessment is to quantify the magnitude of the environmental impact and to identify the level of significance that such changes will make. This requires the definition of both baseline conditions and estimation of conditions for the appropriate year of assessment. Each receptor will have a different value and level of sensitivity to change. Quantification of environmental effects is easier for some receptors than others. Traffic noise has been extensively researched and methods of measurement developed. Other effects such as severance are more subjective as there are no current proven or reliable techniques for study. Table 11.1 provides descriptions of receptor sensitivity based on DMRB guidelines HA 205/08 ‘Assessment and Magnitude of Environmental Effects’.

Table 11.1 Receptor Sensitivity

Sensitivity	Description
High	Typically receptors with high importance and rarity on an international and national scale and with limited potential for substitution. To include large rural settlements containing a high number of community and public services and facilities, areas with traffic control signals, waiting and loading restrictions, traffic calming measures and minor rural roads not constructed to accommodate frequent use by HGV traffic.
Medium	Typically receptors with high or medium importance and rarity on a regional scale and with limited potential for substitution. To include intermediate sized rural settlements containing some community or public facilities and services, areas with some traffic calming or traffic management measures and local A or B class roads, capable of regular use by HGV traffic.
Low	Typically receptors with low or medium importance and rarity on a local scale (on-site or neighbouring the site). To include small rural settlements with few community or public facilities or services, areas with little or no traffic calming or traffic management measures and trunk or A-class roads, constructed to accommodate significant HGV composition.
Negligible	Typically receptors with little importance and rarity. To include very small settlements and roads with no adjacent settlements including new strategic trunk roads or motorways that would be little effected by additional traffic and suitable for abnormal loads.

11.4.8 The IEMA guidelines identify general thresholds for traffic flow increases of 10 % and 30 %. The guidelines also suggest that 30 %, 60 % and 90 % changes in traffic levels should be considered as "slight, moderate and substantial" impacts respectively. It is generally considered that traffic flow increases of less than 10 % are 'not significant', given that daily variation in background traffic flow may vary by this amount. Based on these rules and perceptions, the magnitude of the impact is classified using the criteria in Table 11.2.

Table 11.2 Magnitude of Impact Criteria

Major	Moderate	Minor	Negligible
>90 % increase in traffic	60 % - 90 % increase in traffic	30 % - 60 % increase in traffic	0 % - 30 % increase in traffic

11.4.9 The DMRB guidelines also make reference to the need to take account of the difference between permanent and temporary effects. Permanent impacts will be more significant than temporary impacts as temporary impacts may only occur during a single phase of the project construction. All transport and access effects will be temporary and occur only during the construction and decommissioning phases.

11.4.10 Having estimated the number of trips associated with each phase of the development, the potential impact on the study area road network in terms of percentage impact will be determined.

11.4.11 Other potential impacts that will be considered include;

- Accidents and Safety;
- Driver Delay;
- Pedestrian Amenity; and
- Pedestrian Delay.

Construction Impacts and Effects

11.4.12 It is likely that the main transport impacts will be associated with the movement of HGVs travelling to and from the site during the construction phase of the A95 underpass elements of the project and for station development works.

11.4.13 Construction traffic flows would be estimated from material requirements discussed with the client and from Transport Scotland (for the A95 underpass works).

11.4.14 A National Road Traffic Forecast (NRTF) high growth factor will be applied to the surveyed traffic flows to growth observed traffic to the agreed Base future year for assessment. Applying a high-growth factor will provide a robust assessment as it represents a higher than average level of traffic growth.

11.4.15 Having estimated the number of trips associated with the construction and operational phases, the potential impact on the study area road network in terms of percentage increase will be determined.

11.4.16 From these calculations and using the Institute of Environmental Assessment (IEA) guidelines, the severity of impact on the affected communities / receptors will be determined.

11.4.17 The TA will outline the impact and severity of the proposed traffic on receptors and will propose mitigation works where necessary.

Operational Impacts

11.4.18 Operational impacts will be assessed using the same basic methodology as the construction phase. The main change will be the estimation of vehicle generation and non-motorised users created as a result of passenger traffic for the railway.

11.4.19 It is not proposed to undertake a junction capacity assessment of the High Street / Seafield Avenue junction as part of the study.

11.5 Potential Mitigation

Construction

11.5.1 Potential mitigation measures would include, but not necessarily restricted to the following:

- A “Considerate Constructors Plan” to ensure that the impact of dust, noise and vibration was minimised;
- A framework Construction Traffic Management Plan;
- Vehicle routing agreements; and
- Wheel wash facilities.

Operation

11.5.2 By its very nature, a railway benefits from being a sustainable travel system. Measures to mitigate the impact of the operational phases of the project would include:

- A Visitor Travel Plan;
- The provision of bus / coach parking and drop off facilities at the new station;
- The provision of dropped kerbs and tactile paving at the station access; and
- The provision of cycle stands at the station.

12 Socio-economics, Tourism and Recreation

12.1 Introduction

12.1.1 The potential for both adverse and positive local impacts will be evaluated in the environmental assessment process. This will involve identification of the existing socio-economic baseline conditions in the surrounding area, and consideration of potential direct or indirect impacts on employment, recreation and tourism and the local population in terms of community benefit.

12.2 Baseline Description

12.2.1 The site is located within the Badenoch and Strathspey Ward (Ward 21) in The Highland Council administrative area. Within this ward the site is in Dulnain Bridge Community Council and Grantown on Spey Community Council areas. The site is also located within the Cairngorms National Park, who will be a key stakeholder within the consultation process.

12.2.2 The 2011 Census Data for the Ward 21 and the Council Area generally will form the Baseline for the assessment, with consideration being given to more up to date data where available.

12.2.3 Information from Visit Scotland will be utilised in considering the impact on tourism, and information from The Highland Council and Cairngorms National Park Authority (Core Path Mapping, Public Open Space Audit etc) will be utilised in considering the impact on recreation.

12.3 Relevant Guidance and Legislation

12.3.1 In preparing this Chapter, regard will be given to the following national and local planning policy and guidance;

- Circular 3/2011 Town and Country Planning (Environmental Impact Assessment Scotland) Regulations 2011;
- National Planning Framework 3;
- Scottish Planning Policy (2014); and
- Cairngorms National Park Local Development Plan 2015.

12.3.2 Other statistics, guidance and advice that will inform this Chapter will include;

- 2011 Census General Register Office for Scotland;
- The Highland Council information; and
- Strathspey Railway Economic Appraisal and Business Case.

12.4 Recreation

12.4.1 There are a number of core paths and footpaths within the study area, a number of which utilise the old railway solum around Grantown that will be directly affected as a result of the extension:

- LBS134;
- LBS6;
- LBS10; and
- LBS8.

12.4.2 There will also be a number of existing footpaths that will be directly or indirectly affected within Grantown, through increased patronage or route alterations.

12.5 Summary of the Economic Impact Assessment

12.5.1 A study was undertaken 'Extension of Strathspey Steam Railway to Grantown: Economic Impact Assessment' by Reference Economic Consultants (November 2014). The objectives of the research were to assess the economic impact of the railway's current operations and the extension of the railway to Grantown.

12.5.2 The railway currently supports around 21 FTE (Full-time Equivalent) jobs. This is forecast to increase to around 25 FTE if the Strathspey Railway achieve their forecast of 100,000 passengers in the year immediately before the extension opens. Once the extension opens and if the forecast is achieved of 130,000 passengers then the impact is forecast to increase to 44 FTE jobs.

12.5.3 At each stage most of the impact comes from the off-site spend of Strathspey railway passengers. Its impact increases from 13.9 FTE (current) to a forecast 26.4 FTE (once the extension opens). This is in a context where tourism is a key component of the study area economy, and within each of the Aviemore, Grantown and Boat of Garten areas.

12.5.4 The current total net spend in the local area is just under £1.4 million. This is forecast to rise to over £1.8 million in the year immediately before the extension, and then to more than £3.1 million once the extension opens.

12.5.5 The net impact of the extension to Grantown would be around 19 FTE jobs and £1.25 million of expenditure in the area economy. The extension would generate additional visitor activity. It would further enhance the area's stock of attractions, complementing its strong outdoor-based offering.

12.5.6 The extension's impact has a number of sources. However, most of it comes from the offsite spend by the railway's passengers. There are also relatively significant contributions from on-site impacts and the operation of the Steam Boiler Repair and Training Centre.

12.6 Potential Impacts

12.6.1 The potential impacts of the Proposed Development therefore may include:

- The generation of employment and business opportunities during construction and operational phases of the development;
- Impacts on sporting and leisure activity, and on local tourism and recreational amenity;
- Indirect and direct economic benefits and dis-benefits from the Proposed Development; and
- Cumulative impacts upon tourism, employment opportunities, or local amenity.

12.7 Potential Mitigation

12.7.1 The potential for adverse and beneficial local effects will be evaluated in the environmental assessment process. This will involve identification of the existing socio-economic baseline conditions in the surrounding area, and consideration of potential direct or indirect effects on employment, recreation and tourism, and the local population in terms of community benefit.

12.7.2 Where necessary mitigation will be identified in respect of any identified impacts of the Proposed Development whether that be short term mitigation, or longer term mitigation will be dependent on the outcome of the assessment. This will include consideration of opportunities to mitigate potential severance of core paths and other recreational facilities which may be directly affected by the proposed re-opening of the railway.

13 Summary of Environmental Issues

13.1 Introduction

13.1.1 Table 13.1 provides a summary of the environmental issues that have been considered within this Scoping Report. Where a technical study has been scoped out of the EIA, a summary of this has been explained within section 13.2 to 13 5 below.

Table 13.1 Potential Environmental Issues

Issue	**Construction**		**Operation**	
	Significant effect unlikely	Significant effect possible	Significant effect unlikely	Significant effect possible
Planning	✓+		✓+	
Land Use		✓-		✓+/-
Noise and Vibration		✓-		✓+/-
Landscape and Visual		✓-		✓+/-
Traffic and Transport		✓-		✓+/-
Waste Management		✓-		✓+/-
Archaeology and Cultural Heritage		✓-	✓	
Air Quality and Dust		✓-	✓	
Ecology		✓-		✓+/-
Water Resources		✓-		✓+/-
Ground Quality and Contamination		✓-	✓	

+ positive impact

- negative impact

13.2 Operational Air Quality

13.2.1 Operational Air Quality has been scoped out of this assessment as traffic impacts during the operational phase are not predicted to be significant along the altered sections of the A95 trunk road, on the approaches to the new station, or from emissions from railway operations.

13.3 Operational Cultural Heritage (Setting Effects)

13.3.1 Operational cultural heritage will be scoped out of assessment as there is not likely to be significant impacts on the setting of heritage assets near the railway or in the wider historic landscape.

13.4 Operational Road Traffic Noise along the A95

13.4.1 Operational Road Traffic Noise along the A95 has been scoped out of the assessment, the scheme is unlikely to result in significant changes to the traffic along this stretch of the A95 and therefore

impacts to residential properties along the A95 are not expected to change. Some additional road traffic assessment may be required in relation to changes in traffic flows on Seafield Road, but it is not expected that any significant impacts will be identified, this therefore has not been scoped out.

13.5 Operational Ground Conditions and Contamination

13.5.1 Once the Proposed Development has been constructed, there is unlikely to be any intrusive works or significant contamination as a result of the scheme, therefore we propose to scope out this element from the assessment.

14 Consultation

14.1 Public consultation

14.1.1 The Applicant has undertaken significant consultation regarding the "Rails to Grantown" to identify if there is a support to extend the railway to Grantown. Various public meetings have been held to gauge whether there is public support for the scheme, the overall view is that Grantown needs the economic boost of a major visitor attraction, this one also provides another public transport option.

14.1.2 The Applicant is fully committed to engaging with local communities and ensuring that they are informed throughout the EIA process. The Applicant endeavours to undertake consultation using various methods, including meetings with key stakeholders and near site neighbours, leaflets/newsletters and public exhibitions.

14.2 Statutory and Non-Statutory Consultees

14.2.1 It is understood that on submission of this EIA Scoping Report to the Scottish Government TAWS Unit, the report will be circulated to statutory EIA consultees to seek views on the proposed scope and approach to the EIA and the feedback received will be collated by the TAWS Unit to prepare a formal Scoping Opinion. These consultees are understood to include:

- The Highland Council;
- The Cairngorms National Park Authority;
- Scottish Environment Protection Agency (SEPA);
- Scottish Natural Heritage (SNH);
- Historic Scotland; and
- Grantown on Spey Community Council and Dulnain Bridge Community Council.

14.2.2 As a part of this EIA Scoping exercise, the Applicant is inviting inputs from both statutory and non-statutory consultees to inform the Proposed Development and the environmental assessment. Consultees are invited to comment on the content of the EIA Scoping Report and whether the report has missed any potential effects associated with the Proposed Development.

14.2.3 All responses should be addressed to:

TAWS Unit
The Scottish Government
2 F Victoria Quay
Edinburgh
EH6 6QQ
Or by email taws@scotland.gsi.gov.uk

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Registered Address:

7 Dundas Street

Edinburgh

EH3 6QG

+44 (0) 131 557 8325