

# **Environmental Impact Assessment (EIA)**

## **Report**

### ***LT383 Alyth to Tealing Overhead Line (OHL)***

### ***400kV Upgrade***

***November 2024***



## VOLUME 2: CHAPTER 10 – CULTURAL HERITAGE

<b>10.</b>	<b>Cultural Heritage</b>	<b>10-1</b>
10.1	Introduction	10-1
10.2	Assessment Methodology and Significance Criteria	10-4
10.3	Baseline Conditions	10-8
10.4	Issues Scoped Out	10-15
10.5	Assessment of Effects, Mitigation and Residual Effects	10-15
10.6	Summary	10-32

### Figures (Volume 3 of this EIA Report)

- Figure 10.1: Heritage Assets within the 250m Study Area adopted for the baseline study

### Appendices (Volume 4 of this EIA Report)

- Appendix 10.1: Gazetteers of Designated and Non-Designated Assets
- Appendix 10.2: Site Photographs

## 10. CULTURAL HERITAGE

### 10.1 Introduction

10.1.1 This EIA Report chapter will assess the potential effects of the Proposed Development on cultural heritage.

10.1.2 Cultural heritage in this context refers to the above and below-ground archaeological resource, built heritage, the historic landscape, and any other elements which may contribute to the historical and cultural heritage of the area. The aim of this chapter is to provide:

- a summary of the baseline conditions of the Proposed Development as well as an associated Study Area;
- an assessment of the direct and indirect risks posed by the Proposed Development on cultural heritage; and
- recommendations for additional mitigation measures as required.

10.1.3 The term the 'Proposed Development Site' or simply the 'site' refers to the entire area within the Limits of Deviation (LOD) as shown in Figure 3.1 (Volume 3). The Study Area adopted for the baseline study comprises the LOD and a buffer of 250 m either side of it.

10.1.4 Details regarding what the Proposed Development consists of can be found in Chapter 3: Project Description (Volume 2), however, the key elements assessed are works to upgrade existing tower foundations, as well as works required to provide access to the towers. This latter work includes the creation of temporary access tracks, upgrading existing access tracks, and installation of trackway panels, as well as construction of bell mouths and culvert upgrades / construction of new culverts.

10.1.5 The report draws on the following technical figures and appendices:

- Figure 10.1: Heritage Assets within 250 m (Volume 3);
- Appendix 10.1: Gazetteers (Volume 4); and
- Appendix 10.2: Site Photos (Volume 4).

10.1.6 External sources used to inform the baseline and assessment are referenced appropriately.

#### **Legislation**

10.1.7 The assessment was conducted within the context of the legislative and planning framework designed to protect and conserve heritage resources. There are several statutory instruments and policies governing the approach to cultural heritage. The main pieces of legislation are:

- Town and Country Planning (Scotland) Act 1997 (as amended)<sup>1</sup>;
- The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 (as amended by the Town and Country Planning (Historic Environment Scotland) Amendment Regulations 2015)<sup>2</sup>;
- Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997<sup>3</sup>;
- Ancient Monuments and Archaeological Areas Act 1979<sup>4</sup>; and

---

<sup>1</sup> Scottish Government (1997) *Town and Country Planning Act*, Edinburgh: Scottish Government.

<sup>2</sup> Scottish Government (2013) *The Town and Country Planning (Development Management Procedure) (Scotland) Regulations*, Edinburgh: Scottish Government.

<sup>3</sup> Scottish Government (1997) *Planning (Listed Buildings and Conservation Areas) (Scotland) Act*, Edinburgh: Scottish Government.

<sup>4</sup> UK Government (1979) *Ancient Monuments and Archaeological Areas Act*, Edinburgh: HMSO.

- Historic Environment Scotland Act 20<sup>5</sup>.

### ***National Planning Policy***

10.1.8 The principal elements of national policy and guidance comprise:

- National Planning Framework 4 (“NPF4”)<sup>6</sup>;
- Historic Environment Policy for Scotland (“HEPS”)<sup>7</sup>;
- Our Past, Our Future - The Strategy for Scotland’s Historic environment<sup>8</sup>;
- Planning Advice Note (“PAN”) 2/2011 – Planning and Archaeology<sup>9</sup>;
- PAN 71 – Conservation Area Management<sup>10</sup>; and
- the Historic Environment Scotland (HES) ‘Managing Change in the Historic Environment’ series of guidance notes (particularly *Managing Change in the Historic Environment: Setting*<sup>11</sup>).

10.1.9 NPF4 sets out the national spatial strategy for Scotland and sets out spatial principles, regional priorities, national developments and national planning policy. It forms part of the Development Plan alongside the relevant local development plan (“LDP”). The Proposed Development is defined through NPF4 as a National Development, under Annex B, Category 3 ‘Strategic Renewable Electricity Generation and Transmission Infrastructure’. Policy 7 of NPF 4 relates to cultural heritage and key elements of the policy include ‘point h’ which relates to scheduled monuments and states:

*“h) Development proposals affecting scheduled monuments will only be supported where:*

- *direct impacts on the scheduled monument are avoided;*
- *significant adverse impacts on the integrity of the setting of a scheduled monument are avoided; or*
- *exceptional circumstances have been demonstrated to justify the impact on a scheduled monument and its setting and impacts on the monument or its setting have been minimised.”*

10.1.10 Impacts on non-designated assets are covered by ‘points n and o’:

*“n) Enabling development for historic environment assets or places that would otherwise be unacceptable in planning terms, will only be supported when it has been demonstrated that the enabling development proposed is:*

- *essential to secure the future of an historic environment asset or place which is at risk of serious deterioration or loss; and*
- *the minimum necessary to secure the restoration, adaptation and long-term future of the historic environment asset or place.*

*The beneficial outcomes for the historic environment asset or place should be secured early in the phasing of the development, and will be ensured through the use of conditions and/or legal agreements.*

*o) Non-designated historic environment assets, places and their setting should be protected and preserved in situ wherever feasible. Where there is potential for non-designated buried archaeological remains to exist*

---

<sup>5</sup> Historic Environment Scotland (2014) *Historic Environment Scotland Act*, Edinburgh: HMSO.

<sup>6</sup> Scottish Government (2023) *National Planning Framework 4*, Edinburgh: Scottish Government.

<sup>7</sup> Historic Scotland (2019) *Historic Environment Policy for Scotland*, Edinburgh: Historic Environment Scotland.

<sup>8</sup> Historic Environment Scotland (2023) *Our Past, Our Future: The Strategy for Scotland’s Historic Environment*, Edinburgh: Historic Environment Scotland.

<sup>9</sup> Scottish Government (2011) *Planning Advice Note 2/11 – Planning and Archaeology*, Edinburgh: Scottish Government.

<sup>10</sup> Scottish Government (2004) *Planning Advice Note 71 – Conservation Area Management*, Edinburgh: Scottish Government.

<sup>11</sup> Historic Environment Scotland (2016) *Managing Change in the Historic Environment*, Edinburgh: Historic Environment Scotland.

*below a site, developers will provide an evaluation of the archaeological resource at an early stage so that planning authorities can assess impacts. Historic buildings may also have archaeological significance which is not understood and may require assessment.*

*Where impacts cannot be avoided they should be minimised. Where it has been demonstrated that avoidance or retention is not possible, excavation, recording, analysis, archiving, publication and activities to provide public benefit may be required through the use of conditions or legal/planning obligations.*

*When new archaeological discoveries are made during the course of development works, they must be reported to the planning authority to enable agreement on appropriate inspection, recording and mitigation measures.”*

10.1.11 Policy 11 relates to energy and as such is also relevant to the Proposed Development. ‘Point e’ relates to impacts resulting from renewable developments and states:

*“e) In addition, project design and mitigation will demonstrate how the following impacts are addressed:*

- ii – significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/ or appropriate design mitigation has been applied, they will generally be considered to be acceptable; ... [and]*
- vii – impacts on historic environment”*

10.1.12 ‘Our Past, Our Future’ released in June 2023<sup>12</sup>, represents the updated Historic Environment Scotland strategy. The three main priorities identified in this document are:

- Priority 1: Delivering the transition to net zero;
- Priority 2: Empowering resilient and inclusive communities and places; and
- Priority 3: Building a wellbeing economy.

### **Local Planning Policy**

10.1.13 The Perth and Kinross Local Development Plan was adopted in 2019<sup>13</sup>. The following policies within the local development plan are relevant to this chapter:

- Policy 26: Scheduled Monuments and Archaeology;
- Policy 27: Listed Buildings;
- Policy 28: Conservation Areas;
- Policy 29: Gardens and Designed Landscapes; and
- Policy 31: Other Historic Environment Assets.

10.1.14 The Angus Local Development Plan was adopted in 2016<sup>14</sup>. The plan is currently under review and the next Local Development Plan (Angus Plan) will be prepared under the new legislative requirements of the Planning (Scotland) Act 2019, and likely to be adopted in 2029. The following policies within the local development plan are relevant to this chapter:

- Policy PV8 – Built and Cultural Heritage.

---

<sup>12</sup> Historic Environment Scotland (2023) *Our Past, Our Future: The Strategy for Scotland’s Historic Environment*, Edinburgh: Historic Environment Scotland.

<sup>13</sup> Perth and Kinross Council (2019) Perth and Kinross Local Development Plan.

<sup>14</sup> Angus Council (2016) Angus Local Development Plan

### Guidance

10.1.15 The assessment has been undertaken following guidance published by Scottish Natural Heritage (SNH) and Historic Environment Scotland in the in the EIA Handbook<sup>15</sup>, as well as the Chartered Institute for Archaeologists (ClfA) Standards and Guidance for Historic Environment Desk-Based Assessment<sup>16</sup>.

## 10.2 Assessment Methodology and Significance Criteria

### Scope of the Assessment

10.2.1 As part of this assessment, a search of relevant data has been undertaken with material collected for a Study Area of 250 m from the LOD (see Figure 10.1 (Volume 3)). These sources include:

- PastMap<sup>17</sup>;
- HES website<sup>18</sup>;
- Historic mapping on the National Library of Scotland website<sup>19</sup>;
- Aberdeenshire Historic Environment Record (HER) data<sup>20</sup>;
- Perth and Kinross HER; and
- Other available online sources.

10.2.2 All assets are listed in the gazetteers provided in Appendix 10.1 (Volume 4); these are also shown on Figure 10.1 (Volume 3). Assets are referred to in the text by their HES number, with the SM prefix signifying scheduled monuments, while the LB prefix signifies a listed building. Non-designated assets from the Canmore database<sup>21</sup> have no prefix, while assets from the Aberdeenshire Council HER all start 'NO', and those from the Perth and Kinross HER have a MPK prefix. Assets recorded as part of the walkover survey and documentary research has the prefix 'AECOM'.

### Appraisal of Impacts

10.2.3 While the Proposed Development was deemed not to require a full EIA, the methodology stated in the original Scoping Report<sup>22</sup> has been followed when defining the level of potential impact in the 'Assessment section of the current report.

10.2.4 The impact assessment will consider any impacts to the value (significance) of an asset, either physically or through changes to its setting.

10.2.5 The value (sensitivity) of a heritage asset is determined by professional judgement, guided but not limited to any designated status the asset may hold. The value of an asset is also judged upon a number of different factors including the special characteristics the assets might hold which can include evidential, historical, aesthetic, communal, archaeological, artistic and architectural interests. This value of a heritage asset is assessed primarily in accordance with the guidance set out in NPF4 and the Historic Environment Policy for Scotland (HEPS)<sup>23</sup>.

<sup>15</sup> Scottish Natural Heritage & Historic Environment Scotland (2018) *environmental Impact Assessment Handbook*, Edinburgh: SNH & HES.

<sup>16</sup> Chartered Institute for Archaeologists (2020). Standard and guidance for historic environment desk-based assessment. (online) Available at: [https://www.archaeologists.net/sites/default/files/ClfAS%26GDBA\\_4.pdf](https://www.archaeologists.net/sites/default/files/ClfAS%26GDBA_4.pdf) [Accessed: July 2024]

<sup>17</sup> PastMap (online) Available at: <https://www.pastmap.org.uk/> [Accessed: July 2024]

<sup>18</sup> Historic Environment Scotland. (online) Available at: [www.historicenvironment.scot](http://www.historicenvironment.scot) [Accessed: July 2024]

<sup>19</sup> National Library of Scotland (2024) Map Images (online) Available at: <https://maps.nls.uk/> [Accessed: July 2024]

<sup>20</sup> Highland Council (2024) Highland Council Historic Environment Record. (online) Available at: <https://her.highland.gov.uk/> [Accessed: July 2024]

<sup>21</sup> Historic Environment Scotland (2024) CANMORE Database (online) Available at: <https://canmore.org.uk/> [Accessed: July 2024]

<sup>22</sup> AECOM (2023) *SSE Transmission Environmental Impact Assessment Scoping Report*, unpublished report for SSE.

<sup>23</sup> Historic Scotland (2019) *Historic Environment Policy for Scotland*, Edinburgh: Historic Environment Scotland.

The value (sensitivity) is defined by the sum of its heritage interests. Taking these criteria into account, each identified heritage asset can be assigned a level of value (sensitivity) in accordance with a five-point scale as set out in Table 10-1: Heritage Value (Sensitivity) Criteria.

**Table 10-1: Heritage Value (Sensitivity) Criteria**

Value	Examples
<b>Very High</b>	<ul style="list-style-type: none"> <li>• World Heritage Sites (WHS);</li> <li>• assets of acknowledged international importance; and</li> <li>• historic landscapes of international sensitivity, whether designated or not.</li> </ul>
<b>High</b>	<ul style="list-style-type: none"> <li>• Scheduled Monuments;</li> <li>• non-designated sites/ features of schedulable quality and national importance;</li> <li>• Category A Listed Buildings;</li> <li>• gardens and landscape on the Inventory of Designed Landscapes of outstanding archaeological, architectural or historic interest; and</li> <li>• registered Battlefields.</li> </ul>
<b>Medium</b>	<ul style="list-style-type: none"> <li>• sites/ features that contribute to regional research objectives;</li> <li>• Category B and C Listed Buildings;</li> <li>• locally listed or non-designated buildings that can be shown to have special interest in their fabric or historical association;</li> <li>• conservation areas;</li> <li>• historic townscapes or built-up areas with historic integrity in their buildings, or built settings; and</li> <li>• non-designated historic landscapes of regional sensitivity.</li> </ul>
<b>Low</b>	<ul style="list-style-type: none"> <li>• non-designated sites/features of local importance;</li> <li>• non-designated buildings of modest quality in their fabric or historical association; and</li> <li>• historic landscapes whose sensitivity is limited by poor preservation and/ or poor survival of contextual associations or with specific and substantial importance to local interest groups.</li> </ul>
<b>Negligible</b>	<ul style="list-style-type: none"> <li>• assets with very little or no surviving archaeological interest;</li> <li>• buildings of no architectural or historical note; buildings of an intrusive character; and</li> <li>• landscapes with little or no significant historical interest.</li> </ul>

10.2.6 Having identified the value (sensitivity) of the heritage asset, the next stage in the appraisal will be to identify the level and degree of impact to an asset arising from the Proposed Development. Impacts may arise during construction or operation and can be temporary or permanent. Impacts can occur to the physical fabric of the asset or affect its setting.

10.2.7 When professional judgement is considered, some sites may not fit into the specified category in this table. Each heritage asset will be assessed on an individual basis and take account of regional variations and their individual qualities.

10.2.8 The level and degree of impact (magnitude of impact) will be assigned with reference to a four-point scale as set out in Table 10-2: Magnitude of Change Criteria. In respect of cultural heritage, an assessment of the level and magnitude of impact is made in consideration of any design mitigation already considered in the design of the Proposed Development (embedded mitigation). Where no change to the significance of the asset is caused, this will be stated, and the assessment will not be taken further.

**Table 10-2: Magnitude of Change Criteria**

Magnitude of Change	Examples
<b>High</b>	Total removal or alteration of an asset, such that the physical resource and/ or the key components of its setting are totally altered resulting in complete change to an asset's setting and loss of heritage value of the asset.
<b>Medium</b>	Partial alteration of an asset, such that the heritage value of the resource and/ or the key components of its setting are clearly modified.
<b>Low</b>	Minor alteration of an asset, such that the components of its setting are noticeably different, but the physical characteristics are not affected and the impact does not result in a noticeable loss of heritage value.
<b>Negligible</b>	Slight changes to historic elements that hardly affect the setting of an asset and do not result in any loss of value.

10.2.9 An assessment of the level of significant effect, having taken into consideration any embedded mitigation, will be determined by cross-referencing between the significance (heritage value) of the asset (Table 10-1: Heritage Value (Sensitivity) Criteria) and the magnitude of impact (Table 10-2: Magnitude of Change Criteria, Table 10-3) can be negligible, minor, moderate or major and neutral, adverse or beneficial.

**Table 10-3: Assessment of Significance**

Value	Magnitude of Impact				
	High	Medium	Low	Negligible	No Change
<b>Very High</b>	<b>Major</b>	<b>Major</b>	<b>Moderate</b>	Minor	Neutral
<b>High</b>	<b>Major</b>	<b>Moderate</b>	<b>Moderate</b>	Minor	Neutral
<b>Medium</b>	<b>Moderate</b>	<b>Moderate</b>	Minor	Negligible	Neutral
<b>Low</b>	<b>Moderate</b>	Minor	Negligible	Negligible	Neutral
<b>Negligible</b>	Minor	Negligible	Negligible	Negligible	Neutral

10.2.10 Effects of major or moderate significance are considered to be significant.



10.2.11 An assessment of the predicted significance of effect will be made both prior to and following the implementation of mitigation measures to identify the residual effects. This first highlights where mitigation may be appropriate, and then demonstrates the effectiveness of that mitigation, providing a framework for the assessment of the significance of effect which takes mitigation measures into consideration

10.2.12 All archaeological work will be undertaken in line with guidance published by the ClfA<sup>24</sup>.

### **Consultation**

10.2.13 Initial consultation was undertaken with the Aberdeenshire Council Senior Historic Environment Officer (ACSHEO), who also provide heritage curatorial services for the Angus region, by email on the May 2024 when details of the project were shared. The ACSHEO agreed that significant impacts on the setting of assets was unlikely due to the scheme not involving alterations to the height of the towers, and that the most likely impacts would be physical impacts resulting from the construction of access tracks and laydown areas/compounds, as well as any planting or ecological mitigation that might be required. As such, the potential for impacts on the permanent setting changes during operation to designated and non-designated heritage assets has been scoped out.

10.2.14 Further consultation was undertaken with the ACSHEO in June 2024 when an Historic Environment Records (HER) data search was undertaken, and the overall LOD and Study Area were shared. The ACSHEO agreed that the potential for impacts was still largely limited to physical impacts resulting from ground works. It was noted that mitigation in the form of archaeological monitoring would likely be necessary in areas where stripping would be required in areas of previously recorded heritage assets or of high archaeological potential.

10.2.15 Initial consultation with the Perth and Kinross Heritage Trust (PKHT) was undertaken by email in June 2024 when HER data was ordered for the Proposed Development. This was followed by a meeting held on Teams on the 31<sup>st</sup> July when full details of the Proposed Development were discussed. The PKHT noted that due to the high potential for previously unrecorded archaeological remains to survive in most areas, archaeological monitoring would likely be required in areas where stripping was likely to occur. They also noted that, where possible, historic landscape features such as walls and dykes should be avoided. If this was not possible, walls should be removed carefully and reinstated after construction. Where features could not be reinstated due to the need for a permanent access, the ends of features such as walls should be 'made good' to avoid risk of damage to the feature through erosion. Finally, the PKHT also agreed that due to there being no alterations to the Towers or the appearance of the OHL, impacts on setting could be scoped out.

10.2.16 This was followed by a scoping response in writing on the 12<sup>th</sup> August 2024 which confirmed the telephone discussions, and also noted that a pre and post-condition survey would be required in any areas where non-invasive tracks were being used in archaeologically sensitive areas such as near scheduled monuments. PKHT also recommended appointing an Archaeological Clerk of Works to manage impacts on unknown archaeological remains and protect known archaeology along the LOD.

10.2.17 Historic Environment Scotland (HES) provided a scoping response in writing on the 26<sup>th</sup> August 2024 in which they noted the potential for impacts on the scheduled Cardean Roman Camp (SM4337), and the need for Scheduled Monument Consent for any works within the scheduled area. They are noted that the temporary protection measures such as Heras Fencing should be used to protect the scheduled monument from accidental damage, and that other mitigation measures should include toolbox talks to ensure employee awareness. HES also recommended ground protection to avoid accidental damage within the scheduled area.

---

<sup>24</sup> Chartered Institute for Archaeologists (2020) *Standard and Guidance for Historic Environment Desk-Based Assessment*, Reading: ClfA.

10.2.18 HES acknowledged that the lack of alterations to the OHL would allow impacts on setting to be scoped out, but noted that tree loss in the area of Drumkilbo Garden and Designed Landscape (GDL00142) could result in impacts on its character and setting. Finally, they requested that access plans be provided as part of the assessment so it could be determined if tracks would result in impacts on designated assets, detailed information as to which Towers would require foundation works, and information about where reprofiling would be required.

10.2.19 HES also noted that temporary protection measures, such as Heras Fencing should, be used to protect the scheduled monument from accidental damage, and that other mitigation measures should include toolbox talks to ensure employee awareness. HES also recommended ground protection to avoid accidental damage within the scheduled area.

### ***Assumptions and Limitations***

10.2.20 The current assessment examines possible physical impacts resulting from the Proposed Development during the construction and operational phases. Due to the nature of the Proposed Development, impacts are likely to arise from works to upgrade the foundations of the existing Towers, as well as works to construct one new Tower, and install the access tracks and associated bell mouths required to reach the Towers during construction.

10.2.21 Access track works which currently have the potential to result in ground disturbance fall into three categories which are as follows:

- upgrade to existing track/road: surface upgrade required to existing road or track, and track may also need widening. Changes to be permanent. Track width – 4-7 m. Depth of disturbance – 0.15-0.8 m;
- new temporary stone road: New temporary road where no road currently exists, or in areas where a footpath or bridleway on mapping no longer survives. In each case the road will be reinstated to its previous state after construction. Track width – 4-7 m. Depth of disturbance – 0.15-0.8 m; and
- trackway panels: Trackway panels to be laid directly onto the ground. This might require some limited cut and fill in areas where the ground is uneven. Track width – 4-7 m. Depth of disturbance – 0.15-0.8 m.

10.2.22 At the time of writing, it is not certain which towers will need a foundation upgrade, and as a result it is not clear which access tracks will be needed. If towers do not need upgrades to their foundations and works will be limited to reconductoring and restringing, then the access tracks associated with the Towers may not be required. However, due to the limited design information the assessment has used a worst-case scenario and assumed that all towers will need upgraded foundations and all proposed access tracks will be required to the maximum width (i.e. 7 m) and the maximum depth (0.8 m).

10.2.23 Works to reinforce tower foundations will also result in physical impacts. Current design information suggests that an area at least 2.5 m by 2.5 m was excavated to construct the existing tower legs, and this might need to be enlarged to 5.2 m by 5.2 m per leg, with a total works area around each foundation being up to 77 m by 77 m. As a result, this work would have the potential to impact on a limited area of previously disturbed ground if foundation works are required.

## **10.3 Baseline Conditions**

10.3.1 This chapter examines the potential impacts and effects on sites of archaeological and cultural heritage interest resulting from the construction and operational phases of the Proposed Development. A detailed baseline of information for the 250 m Study Area was obtained as part of the assessment,

### ***Land use and Topography***

- 10.3.2 The existing Alyth to Tealing OHL runs for approximately 16 km from the new Alyth Substation near Haughend Farm in the north (centred of NGR NO 29002 46979), to area northwest of Prieston Farm in the south (centred on NGR NO 38800 38975). The route can be broken into three distinct landscapes as it runs from north to south.
- 10.3.3 The northern section of the OHL, covering some 4.6 km, runs across the open valley of Strathmore, crossing the River Isla and Dean Water, before it starts to rise onto the higher ground of the Sidlaw Hills near Kirkinch. The landscape of this northern section is dominated by rich agricultural land, most of which is used for arable farming, with numerous farmsteads and small settlements scattered throughout the area.
- 10.3.4 From the minor road to the south of Kirkinch the OHL starts to rise as it crosses the Sidlaw Hills, and for the next 6.5 km it passes over the higher ground until it starts to drop near Auchterhouse Park. At its highest point the OHL stands at approximately 300 m above sea level as it passes to the east of Kinpurney Hill, and continues at this rough altitude as it heads southeast towards Auchterhouse Hill and Auchterhouse Park.
- 10.3.5 This upland landscape, formed from the relatively narrow east-west band of hills of the 'Sidlaw range', is dominated by commercial woodland and rough grazing. Permanent settlement on the higher ground is limited, with most farmsteads and villages focused on the lower lying land to the north and south of the hills.
- 10.3.6 At Auchterhouse Park the OHL moves into its final landscape, as it starts to drop from the higher ground of the Sidlaw Hills and runs east along the lower slopes of the hills until it reaches Prieston Farm. This final section covers some 3.4 km and passes through a landscape of rough grazing and woodland on the lower slopes of the Sidlaw Hills, before moving into mixed arable and pasture across the lower lying lands north of Dundee. As with the first section of the OHL, this is again a landscape containing numerous dispersed farms, as well as small settlements.

### ***Designated Assets***

- 10.3.7 There are 15 designated assets within the Study Area comprising of six scheduled monuments, eight listed buildings and one Garden and Designed Landscape. There is one scheduled monument which is located within the LOD, this being Cardean Roman Camp and prehistoric barrow (SM4337) which has two towers (Towers 643 and 644) on its western boundary. The camp is of 3<sup>rd</sup> century AD date and features visible as cropmarks comprise a sub-rectangular earthwork, enclosing an area of c.54 ha. At the north-western end of the camp is a ring ditch, probably representing a prehistoric barrow. It has an internal diameter of 20 m and is visible on the ground as the ploughed remains of a mound which stands up to 1 m high.
- 10.3.8 There are three further prehistoric scheduled monuments within the Study Area. The first of these is an enclosure 500 m west of Haughend (SM7263), comprising a rectilinear ditched enclosure, measuring about 110 m north-west to south-east by about 56 m, with a ditch about 1.5 m wide. The enclosure is located to the 35 m north-west of the LOD near Alyth. Approximately 232 m north-west of the LOD is a Neolithic or Bronze Age scheduled burial mound 1800 m south of West Nevay (SM SM4697). The mound is circular and measures 5 m in diameter and 0.4 m high, surrounded by a shallow ditch about 2 m across. The mound is unusual in being slightly dished on top, although this may represent early excavations or 'robbing' of the feature. The final prehistoric scheduled monument is Kinpurney Hill fort (SM3219) which is a probable Iron Age site located approximately 33 m west of the LOD. It comprises a single rampart and ditch enclosing a sub- oval area of 6.6 ha on the summit of Kinpurney Hill with a single entrance to the west. The rampart stands up to 2m high maximum, but is generally much lower, and the ditch is visible as a narrow terrace. A roofless tower, built in 1774 and used as an observatory, stands within the fort interior.

- 10.3.9 In addition to the Roman Cardean Camp, a 1<sup>st</sup> century AD Roman Fort to the north-west of Cardean Mill (SM2306), is located approximately 115 m west of the LOD at the northern end of the Site. The fort is visible as cropmarks on aerial photographs, consisting of all four sides of the fort, with two attached annexes to the south-east and south-west, and a Roman road entering the fort from the north-east. Around the perimeter is a defensive system of one turf-built bank, 6.1 m wide, and four substantial ditches. A series of buildings and thoroughfares are also clearly visible in the fort's interior.
- 10.3.10 One medieval scheduled monument comprises Nevay church and burial ground at Kirkinch (SM3002). The church is located approximately 43 m east of the LOD. The church and burial ground are medieval in origin, although much of the extant structure dates to the later 16<sup>th</sup> century. The church is rectangular in form, built of coursed rubble mostly of red and grey sandstone. A round-headed door and small round-arched window in the west gable may be of medieval date, perhaps relocated to their present positions. The church walls are also designated as a Category B listed building (LB4640).
- 10.3.11 The majority of the listed buildings identified within the Study Area date to the post-medieval period and consist of one Category A listed building, four Category B listed buildings, and three category C listed buildings, of which one Category C listed building falls within the LOD. The listed building within the LOD is a farmstead (LB18314), as are the majority of listed buildings within the Study Area. Other farmsteads include the Category A listed South Balluderon Farmstead and associated outbuildings (LB17458), and the Category C listed Drumkilbo Home Farm (LB18314). Other listed buildings in the Study Area include the old smithy in Balkello (LB17448), the walls associated with Nevay Old Kirkyard (LB4640), and Drumkilbo House and its walled and formal garden (LB18335) which are located within the Drumkilbo Garden and Designed Landscape (GDL00142). The Category B Sidlaw Hospital, Auchterhouse (LB5685) is also within the Study Area, this being the only listed building dating to the modern period. The hospital building (now flats) was built in 1901 and consists of a two-storey building in a rectangular-plan of 19-bays, harled with ashlar dressings and a slate roof.

#### ***Non-designated Assets***

- 10.3.12 A total of 77 non-designated assets were recorded within 250 m of the LOD on Canmore, the Perth and Kinross HER, and the Aberdeenshire HER, and through a review of historic mapping (see Appendix 10.1 (Volume 4) Figure 10.1 (Volume 3)). The majority of these assets date to the post-medieval period and relate to agricultural activities in the landscape through which the LOD passes, although a limited number are related to settlement activity and development in a limited number of small settlements that lie close to the LOD.
- 10.3.13 Previously recorded heritage assets in the 250 m Study Area are discussed by period below.

#### ***Prehistoric and Roman (40,000BC to AD400)***<sup>25</sup>

- 10.3.14 Assets recorded in the Study Area represents human activity from the prehistoric period onwards, with some of the earliest activity recorded near the southern end of the OHL on the lower slopes of the Sidlaw Hills. These remains include scheduled standing stones (e.g. SM2868 and SM6145), as well as stray find including a flint arrowhead (NO33NE0016) and a reused cup marked stone (CANMORE 31858). Potential burial remains have also been recorded including a scheduled cairn (SM6562), and antiquarian accounts of cists (NO33NE0004).
- 10.3.15 Evidence of prehistoric activity has also been recorded on the north side of the Sidlaw Hills in Strathmore, with assets including prehistoric activity identified under the later Roman fort (SM337), and documentary accounts of

---

<sup>25</sup> Due to the varied nature of the Scottish landscape, and the resulting variations in settlement/land use, there is no agreed chronology at a national level. As such, the dates that have been assigned to the various periods for the baseline study are those set out in the Regional Archaeological Research Framework for North East Scotland which was produced as part of the Scottish Archaeological Research Framework (ScARF) (Regional | The Scottish Archaeological Research Framework (scarf.scot))

possible burials (NO24NW0007). The exploitation of the lower lands by the prehistoric population is not surprising as the rivers that run across the landscape would have provided water a source of fish, while the lower lying valleys would have represented good farming land as the population transitioned from the transient life of the hunter gatherer, to the more sedentary life of the farmer in the Neolithic period.

10.3.16 The upland landscape of the Sidlaw Hills also appears to have been exploited during the prehistoric period, with scheduled cairns recorded to the east of the OHL (SM4764 and SM4697), while the later unfinished Iron Age hillfort on Kinpurney Hill (SM3219) lies on high ground to the west of the OHL near Towers 659 to 661.

10.3.17 Roman activity is also well represented in the study areas with two Roman sites at the northern end of the Project. The early-3<sup>rd</sup> century Cardean Roman Camp is located under the northern section of the OHL (SM4337), while the late-1<sup>st</sup> century Cardean Roman Fort lies approximately 50 m to the west (SM2306). Possible remains have also been noted in the wider landscape, with excavations of a cropmark features at South West Fullarton Farm, some 1.2 km southwest of the OHL and Tower 649 providing material dating to the Flavian period<sup>26</sup>.

#### *Early-Medieval (AD400 to AD900)*

10.3.18 There are no assets dating to the early medieval period within the Study Area, although evidence for activity during this period has been recorded in the wider landscape. During the early medieval period the Study Area, as well as the Perth and Kinross, Angus, and Aberdeenshire areas, fell within the Kingdom of the Picts, and while clear archaeological evidence for early medieval settlement activity is limited, a number of Pictish carved stones have been recorded in the Strathmore area, with a large concentration from the Meikle<sup>27</sup>. It has also been suggested that Meikle, approximately 1.2 km west of the OHL near Tower 646, was the site of a monastery in the 9<sup>th</sup> century.

10.3.19 Placename evidence has also suggested early medieval settlement activity within this area during this period, with Pictish placename elements including *aber*, *pren*, and *lanerc*, recorded throughout Strathmore, as well as to the south of the Sidlaw Hills<sup>28</sup>. This evidence would suggest that the focus of settlement was on the lower lying areas at the northern and southern end of the Study Area, with the narrow ridge of the Sidlaw Hills showing less evidence of permanent settlement activity during the early medieval period.

#### *Medieval (AD900 to AD1600)*

10.3.20 While evidence for activity dating to the medieval period is limited within the Study Area, a number of assets have been recorded that would suggest the settlement continued to develop throughout this period. Assets dating to the medieval period include the scheduled Nevay Church at Kirkinch (SM3002), while a castle is recorded at Drumkilbo from at least the 14<sup>th</sup> century (GDL00142).

10.3.21 Other evidence includes ridge and furrow cultivation (313485 and NO34SW0018). While much of this form of arable cultivation is likely to date to the post-medieval period, the location of some areas of cultivation in upland marginal landscapes would suggest a medieval date, with the uplands exploited during periods of more favourable climate, with examples including the land on the southern side of Kilpurney Hill (NO34SW0018).

10.3.22 Documentary sources would suggest that most of the settlements that survive into the contemporary landscape were in existence during the medieval period, with examples such as Alyth recorded from the 11<sup>th</sup> century,

---

<sup>26</sup> Strong, P. (1985) 'Investigations of Plough Truncated Features at South-West Fullarton Farm, Meikle, Perthshire, in *Proceedings of the Society of Antiquaries of Scotland*, Volume 115: Pages 211-221.

<sup>27</sup> Small, A. (1999) 'The Dark Ages' in Omand, D. (ed.) *The Perthshire Book*, Edinburgh: Birlinn Limited.

<sup>28</sup> Nicolaisen, W. F. H. (2001) *Scottish Place-Names – Their Study and Significance: New Edition*, Edinburgh: Birlinn Limited.

Newtyle from 16<sup>th</sup> century<sup>29</sup>, and Tealing documented from at least the 13<sup>th</sup> century<sup>30</sup>. There is no evidence of significant shrinkage or abandonment of settlements in the Study Area from the medieval period onwards, and as such the lowland agricultural landscape through which the OHL currently passes was likely agricultural land (either arable or pasture) during the medieval period.

10.3.23 Evidence of medieval activity on the higher ground of the Sidlaw Hills, which run through the central area of the Study Area, is currently limited to the ridge and furrow cultivation mentioned above (NO34SW0018). The presence of better agricultural land to the north and south of the hills potentially resulted in the higher ground being used for pastoral activities, some of which may have been seasonal. However, in general, the evidence for the Study Area would suggest that settlement activity during the medieval period was focused on the lower land to the north and south of the Sidlaw Hills.

*Post-Medieval (AD1600 to AD1900)*

10.3.24 The post-medieval period represents the most visible period in terms of previously recorded heritage assets, with nine designated assets and 51 non-designated assets recorded within the Study Area. The majority of these are associated with the continued development of the agricultural landscape as existing OHL, and therefore the LOD and the associated Study Area, avoids most settlements. Assets associated with the settlements in the Study Area include the Glebe of Nevay in Kirkinch (NO34SW0060). However, as the existing OHL avoids most settlements it is unsurprising that the majority of assets recorded in the Study Area are linked to agriculture and include a large number of farmsteads such as Prieston (NO33NE0111), Newlandhead (NO33NE0113), Scotston (NO34SW0062), and Henderston (NO34SW0061) south of the Sidlaw Hills, as well as West Nevay (NO34SW0046) to the north.

10.3.25 Historic cartographic sources of the area dating from the 17<sup>th</sup> century are largely limited to County level surveys of limited detail, however, most depict a settlement pattern similar to that which survives into the modern period with many of the large contemporary hamlets and villages in the Study Area and the surrounding landscape visible. For example, the Blaeu survey of 1662-65 shows *Migle* (Meigle), *Drumkilbo* (Drumkilbo), *Kirk of Mtre* (Kirkinch), and *Nevoy* (Kirton of Nevay), north of the Sidlaw Hills, and *Auchterhous* (Auchterhouse), *Balbeuchle* (Balbeuchley), *Praistoun* (Prieston), and *Telen* (Tealing) to the south<sup>31</sup>. While the scale of this survey means the detail is limited, the plan does appear to suggest that areas of the low lying land at the northern end of the Study Area near the rivers were partially wetlands with an area around Meigle noted as '*Migle Moss*'.

10.3.26 The Moll survey published in 1745 shows a similar survey, with many of the same settlements depicted including *Migle* (Meigle), *Nevoy* (Kirton of Nevay), *Auchterhous* (Auchterhouse), *Balbeuchle* (Balbeuchley), *Praistoun* (Prieston), and *Telen* (Tealing) all shown<sup>32</sup>.

10.3.27 The first detailed survey of the area is the Roy survey of undertaken between 1747 and 1752. This again shows the majority of the settlements noted above on the earlier surveys as well as a number of the farmsteads that can be identified within present day landscape of the Study Area. These include Templetown (Templeton), Kinpurney, Fullerton (Fullarton), and Hallyards to the north of the Sidlaw Hills, and *Balmuth* (Balnuith) to the south<sup>33</sup>. A number of unnamed farmsteads are also depicted, however their topographic location, as well as their relationship to named settlements, would suggest they represent modern day Henderston (NO34SW0061) and Scotston (NO34SW0062) which are located on the southern slopes of the Sidlaw Hills near Towers 664 to 668. Both of these farmsteads, which are unnamed by Roy, are depicted with areas of arable cultivation, and these would

<sup>29</sup> Smith, R. (2001) *The Making of Scotland*, Edinburgh: Canongate Books Limited.

<sup>30</sup> Johnston, J. B. (1972) *Place-Names of Scotland*, Wakefield: S. R. Publishers Limited.

<sup>31</sup> Viewed at [View map: Blaeu, Joan, 1596-1673 ; Edward, Robert, approximately 1616-1696, Angusia Provincia Scotiæ Sive The Shire of Angus - Blaeu Atlas Maior, 1662 \(nls.uk\)](#) [Accessed: July 2024]

<sup>32</sup> Viewed at [View map: Moll, Herman, d. 1732, The Shire of Angus or Forfar - Maps by Herman Moll \(nls.uk\)](#)

<sup>33</sup> Viewed at [Georeferenced Maps - Map images - National Library of Scotland \(nls.uk\)](#)[Accessed: July 2024]

appear to correlate with ridge and furrow cultivation recorded on aerial photographs near Henderston (NO34SW0030 and NO34SW0013) and near Scotston (NO34SW0031).

- 10.3.28 The survey also provides more information regarding land use, and while it shows large areas of the Study Area being used for arable agriculture, is also noted areas of possible parkland or woodland near Drumkilbo and Meikle/ Fullarton, as well as areas of wetland and marsh near some of the watercourses. These latter wetlands include a large area named *Mireside of Fullerton* which corresponds to the area where the Study Area passes between the A94 in the north and the C16 in the south (i.e. Towers 646 to 653). Finally, the Roy Survey shows the uplands area of the Sidlaw Hills as being free from settlement activity or development, suggesting that activity in this area was limited to grazing/pastoral activities, while arable activities were focused on the lower ground and the southern slopes of the hills.
- 10.3.29 This view of the Study Area appears to continue into the late 18<sup>th</sup> century, with the reports on the various parishes covered by the Study Area in the First Statistical Account of Scotland noting fine agricultural land alongside wetlands and mosses in the lower areas. The report for Combined Parishes of Essie and Nevey, to the north of the Sidlaw Hills, notes good agricultural land producing some of the earliest crops in the area, but also notes a large area of Moss in the western area near Meikle<sup>34</sup>. It also records that much of this area was enclosed in the 1770s, with the hedges used providing better protection for crops against wind, and that liestock are largely limited to horses used in arable agriculture with sheep '*entirely banished*'.
- 10.3.30 The account for the Parish of Tealing, at the southern end of the Study Area, also records good soils, although notes they are often a little heavier and wetter<sup>35</sup>. It also goes on to describe a method of using a form of ridge and furrow as a form of irrigation or water control, a feature that might be visible in the archaeological record where later largescale deep ploughing has not fully levelled fields. As with Essie and Nevey to the north, the account notes that sheep are now absent from the parish with livestock (cattle and horses) largely kept to assist with ploughing.
- 10.3.31 The dominance of arable agriculture in the lowlands of the Study Area is juxtaposed with the upland areas, of which parts fell within the Parish of Glammiss. The account notes that there are some 1,190 cattle and 700-800 sheep within the parish, very much pointing to the uplands being dominated by pastoral activities<sup>36</sup>.
- 10.3.32 By the time the Second Statistical Account was completed in the 1840s, the situation had changed in the lowland areas at the north end of the Study Area, with the account for the Combined Parishes of Essie and Nevey noting the areas of Moss and waste that had existed in places had all been drained and improved, this increasing the arable land available<sup>37</sup>. It also noted that most farmhouses in the Parish had been built or rebuilt in the first half of the 19<sup>th</sup> century, and that sheep had been reintroduced to improve some areas of pasture as well as manure the arable areas over winter.
- 10.3.33 A similar account of agricultural improvement is noted for the Parish of Tealing at the southern end of the Study Area, with the Second Statistical Account noting many new and improved farm buildings<sup>38</sup>. It also noted improved drainage so that the 'ridge and furrow' form of irrigation common in the Parish in the late 18<sup>th</sup> century had been replaced by drainage dykes and culverts which had improved the quality of the arable land. It is, however, perhaps

---

<sup>34</sup>Playfair, (1795) 'United Parishes of Essie and Nevey' in Sinclair, J. (ed.) *The Statistical account of Scotland Volume 16: Forfar*, Edinburgh: William Creech.

<sup>35</sup>Gellatly, J. (1792) 'Parish of Tealing' in Sinclair, J. (ed.) *The Statistical account of Scotland Volume 4: Forfar*, Edinburgh: William Creech.

<sup>36</sup>Lyon, J. (1792) 'Appendix for Glammiss' in Sinclair, J. (ed.) *The Statistical account of Scotland Volume 3*, Edinburgh: William Creech

<sup>37</sup>Flowerdew, J. (1845) 'Parishes of Eassie and Nevey' in *The New Statistical Account of Scotland, Volume 11: Forfar and Kincardine*, Edinburgh: William Blackwood and Sons.

<sup>38</sup>Mellis, D. B. (1845) 'Parish of Tealing' in *The New Statistical Account of Scotland, Volume 11: Forfar and Kincardine*, Edinburgh: William Blackwood and Sons.

interesting to note that livestock such as sheep had not been reintroduced in a significant way as had been noted for Essie and Nevey at the northern end of the Study Area.

10.3.34 The mid-19<sup>th</sup> century also provides the first detailed mapping of the Study Area, with the First Edition Ordnance Survey plans of the Study Area published in 1865. These depict a landscape that can be largely traced in the contemporary field systems and settlement pattern, with most farmsteads within the Study Area surviving today and only minor alterations to fields. Noticeable changes between the First Edition mapping and the contemporary landscape include the loss of the hamlet of Myreside (AECOM001) which appeared to consist of at least five cottages and a large number of wells in the area of Tower 653, as well as a farmstead named as Funnyneuk (AECOM003) near Tower 676, and an unnamed farmstead or group of cottages near West Nevey (NO34SW0045).

10.3.35 Other assets dating to the post-medieval period within the Study Area are linked to quarrying, with a number of former quarries on the slopes of the Sidlaw Hills (NO34SW0037; NO34SW0039; NO34NW0043), suggesting an extraction industry.

#### *Modern (AD1900 to Present)*

10.3.36 Only a single asset dating to the modern period was recorded within the Study Area, this being the former Sidlaw Hospital which contains both Category B listed elements (LB6585) and non-designated features (NO33NW0101).

10.3.37 While only a limited number of assets have been recorded, the cartographic and documentary sources suggest that the landscape of the Study Area changed very little in the modern period, with the field systems depicted in the Ordnance Survey mapping of the 19<sup>th</sup> century still very visible in the contemporary landscape. The largest changes have been in the settlements, many of which have grown during the 20<sup>th</sup> century. These include Kirkinch and Kirkton of Auchterhouse within the Study Area, as well as Newtyle, Meigle, and Kirkton in the wider surrounding landscape. Most of the farmsteads recorded in the 19<sup>th</sup> century remain in use into the modern period either are farms or private dwellings, with only a limited number abandoned in the 20<sup>th</sup> century including Nevey Park Cottages (NO34SW0045), Myreside (AECOM001), Edderty (AECOM002), and Funnyneuk (AECOM003).

10.3.38 Many of the quarries (i.e. NO34SW0037; NO34SW0039; NO34NW0043) noted on the southern side of the Sidlaw Hills also appear to have fallen out of use by the later 20<sup>th</sup> century, with the landscape through which the LOD passes dominated by arable agriculture in the low-lying areas, and rough grazing in the uplands.

#### *Site Visits*

10.3.39 An initial site reconnaissance visit of the LT 383 Alyth to Tealing OHL, as well as the neighbouring LT384 Tealing to Westfield OHL, was undertaken between the 12<sup>th</sup> and 15<sup>th</sup> March 2023 (see Appendix 10.2 (Volume 4) for general views of the Study Area). The purpose of this visit was to view the existing OHL in the landscape, and look for situations where moving towers, or increasing the height of towers, may result in significant impacts on heritage assets. All site visits were undertaken from public footpaths or roads, with no access to private land. Weather conditions varied from clear skies, to overcast with low cloud and snow showers, but in general the conditions allowed good views of the existing OHL in the landscape.

10.3.40 This was followed by a site visit to examine the proposed access track works which form the basis of the assessment once it was established that the movement or increase in height of towers would not be required. This survey noted that a number of trackways recorded on the Ordnance Survey mapping of the area where 'Upgrades to Existing Road Track' had been proposed do not survive as roads or bridleways, but are little more than minor footpaths meaning that upgrading to a temporary stone track will involve disturbance (i.e. Appendix 10.2 (Volume 4), Photograph 14). It was, however, noted that in many cases extensive trackways used to service the arable land exist in a number of areas and as a result widening or upgrades in these areas should be minimal



(i.e. Appendix 10.2 (Volume 4) Photographs 11 and 18). It was also noted that the flat open fields in the lower lying areas should also be suitable for the use of trackway without the need to strip to create level ground for the 'Trackway Panels' (i.e. Appendix 10.2 (Volume 4) Photographs 4, 8, and 10).

## 10.4 Issues Scoped Out

10.4.1 The operational phase of the Proposed Development will result in no change to the height or appearance of the Towers or the OHL. Furthermore, vehicle movements will be controlled during construction, and lighting will be minimal. As a result, significant impacts through change to the setting of designated and non-designated heritage assets at both the Construction and Operational Phases are not predicted and therefore an assessment of impacts through change to setting has been scoped out with the agreement of stakeholders. Due to the large LOD adopted to accommodate access tracks, a number of designated assets have been identified within the LOD. These include two scheduled monuments (SM4337), one listed building (LB18314), and a single Garden and Designed Landscape (GDL00142). The Applicant has committed to avoiding all listed buildings thereby removing the potential for physical impacts. As such, the assessment of physical impacts on listed buildings has been scoped out. Impacts on both the scheduled monument (SM4337), and the Garden and Designed Landscape (DGL00142) will, however, be assessed below.

## 10.5 Assessment of Effects, Mitigation and Residual Effects

### *Mitigation by Design*

10.5.1 The Applicant has committed to not removing, demolishing, or having any physical impacts on the listed building within the LOD (LB18314). As a result, physical impacts on this designed asset have been scoped out. Where possible, all access tracks have been designed to avoid previously recorded heritage assets, thereby avoiding the potential for physical impacts.

### *Construction Phase*

10.5.2 The construction phase has the potential to result in the following impacts:

- Permanent physical impacts on previously recorded heritage assets due to the construction of access tracks and foundation works to existing towers; and
- Permanent physical impacts on previously unrecorded heritage assets due to construction of access tracks and foundation works to existing towers.

10.5.3 The results of the desk-based assessment demonstrate that the landscape through which the LOD passes has been exploited and occupied from the prehistoric period onwards, and a number of heritage assets have been recorded within the LOD.

10.5.4 A total of 40 assets have been recorded within the LOD, the majority of which are not located near any proposed works such as tower foundation upgrades or access track works. They largely comprise features such as extant buildings which will not be impacted or find spot evidence that has been removed from its location, however, they also include assets which have been previously identified from sources such as antiquarian accounts and have been plotted within the wider parish, but their exact location is not known or records that have been excavated and as such no longer survive (see Table 10-4). As a result, physical impacts on these assets have not been assessed further.

**Table 10-4: Assets within the LOD but located away from areas of works, and therefore not at risk of physical impacts.**

Asset ID	Description/ Site Name	Period	X Coordinate	Y Coordinate
31857	Balcalk. Cist(S) (Prehistoric), Food Vessel (Bronze Age), Knife (Stone)(Prehistoric), Necklace (Jet)(Prehistoric), Pin (Bronze)(Prehistoric)	Prehistoric	339000	739000
31872	Balcalk. Findspot, Axehead (Bronze)	Prehistoric	339000	739000
NO33NE0016; 31873	Balcalk. Findspot, Arrowhead (Flint)	Prehistoric	339000	739000
NO33NW0009;31910	Sidlaw Hospital. Cup Marked Stone (Prehistoric)	Prehistoric	334440	739280
NO34SW0011; 32157	Henderston. Building (Post Medieval)	Post-Medieval	332900	741400
NO33NE0057; 158508	North Balluderon. Building (Period Unassigned). Recorded As Woodside.	Post-Medieval	338360	738830
NO34SW0061; 216679	Henderston. Farmhouse (Period Unassigned), Farmstead (Period Unassigned)	Post-Medieval	332950	740640
NO33NW0065; 216680	Couston. Farmhouse (Period Unassigned), Farmstead (Period Unassigned)	Post-Medieval	332140	740010
373688	Haughend. Ditch(S) (Period Unassigned), Drain (Period Unassigned), Pit (Period Unassigned)	Post-Medieval	328916	746925
370111	Alyth Substation. Ditch (Period	Prehistoric	32880	747000

Asset ID	Description/ Site Name	Period	X Coordinate	Y Coordinate
	Unknown), Pit(S) (Period unknown)			
MPK12753	Unenclosed Settlement, Haughend	Prehistoric	328750	747050
NO34SW0046	West Nevay. Farmstead still in use which is shown on the OS maps from the 1st edition map onwards. On the 1st edition map it is depicted as a group of seven buildings. The central building is the steading, which is a heavily modified quadrangular courtyard building,	Post-Medieval	332759	743727
NO34SW0033	Scotston. A line of quarry pits recorded on Scotston Hill.	Post-Medieval	334585	740302
NO34SW0038	Scotston Hill. Remains of two quarries which are shown in use on the 1st edition OS map but on the 2nd edition OS map are marked as disused.	Post-Medieval	333464	740438
NO33NW0075	Greenford, Bonnyton Road, Auchterhouse. Farmstead, in use, depicted from the 1st edition OS map onwards. Shown as a very long L-plan steading (open to the south-east), with a further rectangular steading to the south	Post-Medieval	334143	739153

Asset ID	Description/ Site Name	Period	X Coordinate	Y Coordinate
	on the 1st edition OS map.			
NO34SW0038	SCOTSTON HILL. Remains of two quarries which are shown in use on the 1st edition OS map but on the 2nd edition OS map are marked as disused.	Post-Medieval	333412	740520
NO33NE0056	WOODSIDE. Remains of a croft and cottage still in use. On the 1st edition OS map (circa 1867) it is shown as comprising two rectangular buildings, a pond and a triangular enclosure. By the 2nd edition map (circa 1888) only one of the buildings is shown.	Post-Medieval	338456	738853
NO34SW0047	West Nevay. Two cottages still in use which are shown on the OS maps from the 1st edition map onwards. They are depicted as rectangular with small outbuildings and attached enclosures. By the 2nd edition map there is a larger outbuilding to the east.	Post-Medieval	332673	743477
NO33NE0113	Newlandhead. Farmstead depicted on historic OS maps.	Post-Medieval	337456	738421

Asset ID	Description/ Site Name	Period	X Coordinate	Y Coordinate
NO33NE0055	Prieston. Building, probably a cottage, which is shown on historic OS maps. On the 1st edition map it has an outshot on the east gable. By the 2nd edition map there are outshots to each gable.	Post-Medieval	338882	738916
NO34SW0041	Nevay Park. Four boundary stones depicted on the 2nd edition OS maps, three annotated 'B.S.', the other just as 'stone'. Only the westernmost stones is shown on current OS maps, so unclear whether the others survive.	Post-Medieval	332741	741760
NO33NE0059	Auchterhouse Hill. Five boundary stones depicted on historic OS maps on the boundary between Auchterless and Tealing parishes. The 1st edition shows four stones. On the 2nd edition that at NO 3595 3945 is shown as a milestone and a fifth stone is also depicted.	Post-Medieval	336048	739094
NO33NE0054	Balkemback Cottages. Cottages still in use which are shown on the OS map from the 2nd edition onwards. They are depicted as	Post-Medieval	338745	738304

Asset ID	Description/ Site Name	Period	X Coordinate	Y Coordinate
	having extensions to the north and are within a rectangular garden enclosure.			
NO24NW0007; 32136	Crian's Gref. Cairn (Period unknown)	Prehistoric	330000	745000
AECOM002	Farmstead of Edderty recorded on the First Edition Ordnance Survey mapping of the area. Now appears to be occupied by a sheep stell or similar.	Post-Medieval	331988	741105

10.5.5 The remaining 15 assets recorded within the LOD fall within, or close to proposed works which may involve ground disturbance such as the construction of access tracks or upgrading the foundations of existing Towers (

10.5.6 Table 10-5). As a result, these have been taken forward to assessment.

**Table 10-5: Previously recorded assets within the LOD and within proposed work areas taken forward to assessment.**

Asset ID	Description / Site Name	Period	X Coordinate	Y Coordinate
SM4337	Cardean Roman Camp (Scheduled Monument)	Roman	329868	746220
GDL00142	Drumkilbo Garden and Designed Landscape	Post-Medieval	330341	74419
AECOM003	Farmstead of Funnyneauk recorded on the 1 <sup>st</sup> edition Ordnance Survey mapping of the area. Depicted on the Second Edition Ordnance Survey mapping, but no longer visible.	Post-Medieval	335887	739025

Asset ID	Description / Site Name	Period	X Coordinate	Y Coordinate
NO33NW0043	Scotston. Remains of quarries. A line of quarries is shown on the OS map from the 1st edition onwards. By the 2 <sup>nd</sup> edition they are shown as disused.	Post-Medieval	333985	739972
NO34SW0039	Scotston. Remains of a gravel pit which is shown on the OS maps from the 2 <sup>nd</sup> edition map as disused.	Post-Medieval	333472	740103
NO34SW0037	Scotston Hill. Remains of a quarry which is shown in use on the 1 <sup>st</sup> edition OS map, but on the 2 <sup>nd</sup> edition OS map is shown as disused.	Post-Medieval	333476	740193
NO34SW0031; 216665	Scotston. Rig and Furrow (Medieval) - (Post Medieval)	Post-Medieval	333390	740300
NO34SW0030	Henderston. Remains of an area of broad rig and furrow cultivation. It was recorded by AAS in 2001 in low light. The rig is sited on the south-west facing slopes of Henderston Hill.	Medieval; Post-Medieval	332658	741099
NO34SW0013	Henderston. Rig and Furrow.	Medieval; Post-Medieval	332780	741332
NO34SW0045	Nevay Park. Site of two cottages which are shown on the 1 <sup>st</sup> edition OS map, but not on the 2 <sup>nd</sup> edition.	Post-Medieval	332773	743213

Asset ID	Description / Site Name	Period	X Coordinate	Y Coordinate
	They are depicted as small rectangular buildings within enclosures. The northern enclosure is larger and contains an outbuilding.			
NO34SW0022; 88856	Gateside Of Nevay. Enclosure (Period Unknown)	Prehistoric	331910	743250
AECOM001	Farmstead of Myreside recorded on the 1 <sup>st</sup> Edition Ordnance Survey mapping of the area. Associated with at least four wells, which are assumed to have been sunk during the draining of the moss in the late 18 <sup>th</sup> and early 19 <sup>th</sup> centuries. Much reduced by the time of the 2 <sup>nd</sup> Edition Ordnance Survey mapping of the area, and now fully removed with not traces surviving.	Post-Medieval	331396	743560
MPK20338	Cropmarks, Meigle.	Prehistoric	329419	744505
MPK4873	Haughend. Enclosure. Neolithic-Medieval. Part of asset falls within SM7263	Prehistoric; Medieval	328719	746807
NO33NE0004; 31875	Balkello. Cist(S) (Period Unknown)	Prehistoric	335650	739000

#### *Cardean Roman Camp (SM4337)*

10.5.7 The scheduled monument of Cardean Roman Camp (SM4337) is well documented through historic mapping, aerial photography, and various episodes of archaeological excavation. Investigations of the site have revealed



remains representing pre and post Roman activity, although the scheduled area is based on aerial photography as intrusive investigations have been limited. The site has archaeological and historical interest due to the information it contains linked to the development of the Roman camp, as well as land use before and after the Roman phases. And due to its scheduled status, it is considered to be of high value (sensitivity).

- 10.5.8 The work proposed in the area of the scheduled monument is limited to upgrading the foundations of Tower 643 which is located on the western limits of the scheduled area, upgrading an existing road that runs through the western half of the asset and provides access to Wester Cardean Farm, and the installation of temporary Trackway Panels in the southwest corner of the asset, as well as access works to Tower 644 which is located slightly outside of the Scheduled Area. The upgrade to the existing track will be via a bespoke design to avoid physical impacts, and this will be agreed as part of the detailed design and as part of the Scheduled Monument Consent process. The works to upgrade the existing access track will not extend outside of the current access track and as such will be limited to previously disturbed ground, while the installation of tracking in the southwest corner of the asset will involve minimal ground disturbance due to the level nature of the arable field. Works to the foundations of Tower 643 should also be limited generally to an area disturbed by previous works. As a result, the magnitude of change is considered to be low. On assets of high value, this would result in a **moderate adverse** significance of effect. This is considered significant in EIA terms.

*Drumkilbo Garden and Designed Landscape (GDL00142)*

- 10.5.9 Drumkilbo Garden and Designed Landscape (GDL00142) is located on the south side of Strathmore, to the east of the settlement of Meigle. A compact designed landscape, covering 6.5 ha, the designated area consists of inner formal gardens surrounded by a woodland shelter belt that includes the main avenue that provides access to the house from the main A94 road which lies to the north. The woodland, which consists mainly of deciduous trees including oak and beech, was largely planted in the 1800s. However, some conifers were planted in the late 19<sup>th</sup> century along the avenue that leads from the A94. The designed landscape has historical, aesthetic and communal interest and is an example of formal garden design in the late-19<sup>th</sup> and early 20<sup>th</sup> century. As a designated Garden and Designed Landscape it is considered to be of high value (sensitivity).

- 10.5.10 The works proposed in the area of the Garden and Designed Landscape are limited to reducing the crowns of some deciduous trees to maintain a suitable clearance between the trees and the OHL between Towers 646 and 647. This reduction in crown size will be limited to the very northwest corner of the designated landscape near the point at which the avenue meets the A94, and in line with existing tree management within the estate as well as agreements associated with wayleaves for the Operational OHL. Any tree loss in this area has the potential to result in a visual impact on the north end of the avenue, which forms the main approach to the house, however, as the tree loss is expected to consist of reduction of crowns with no felling, the magnitude of change is considered to be negligible. On assets of high value, this would result in a **minor adverse** significance of effect. This is not considered significant in EIA terms.

*Funnyneauk Farmstead (AECOM003)*

- 10.5.11 The former farmstead of Funnyneauk is first recorded on the First Edition Ordnance Survey mapping of the area, which depicts a building and associated enclosure (AECOM003). The complex is also depicted on the Second Edition Ordnance Survey map published in the early 20<sup>th</sup> century, however all traces of the building have now been removed, although some of the wider field system/enclosure walls survive. Any traces of the farmstead that survive as buried features, as well as the associated enclosure walls, would have some archaeological and historical interest from the information they could provide linked to the population living in the area during the post-medieval period. The asset is considered to be of low value (sensitivity) due to the poor survival.

- 10.5.12 The works proposed in the area of the former farmstead and associated complex will consist of construction of a 'New Temporary Stone Track' to access the Tower 676. These works may require the temporary removal of a

section of dry-stone wall that forms part of the enclosure system associated with the former farm, but will avoid the former farmstead area. As a result, the magnitude of change is considered to be low. On an asset of low value, this would result in a **negligible significance** of effect. This is not significant in EIA terms.

*Scotston Quarries (NO34SW0037; NO34SW0039; NO34NW0043)*

10.5.13A number of former quarries have been recorded on historic mapping on the southern side of the Sidlaw Hills near Scotston (NO34SW0037; NO34SW0039; NO34NW0043). These are all recorded on mapping from the mid-19<sup>th</sup> century onwards, and are assumed to be post-medieval with later modern workings. They have some limited historic interest due to the information they may provide relating to post-medieval and modern quarrying/extraction industries. However, as they are a feature that is common across this area, as well the wider Scottish landscape, they are considered to be of low value (sensitivity).

10.5.14The works proposed in the areas of these quarries are limited to minor upgrades of existing tracks, and would result in impacts on a very small area of the quarry sites. As a result, the magnitude of change is considered to be negligible. On assets of low value, this would result in a **negligible significance** of effect. This is not significant in EIA terms.

*Ridge and Furrow Cultivation (NO34SW0030; NO34SW0031; NO34SW0013)*

10.5.15Three areas of ridge and furrow have been recorded on the southern slopes of the Sidlaw Hills near the farmsteads of Scotston (NO34SW0031) and Henderston (NO34SW0030 and NO34SW0013). The remains survive as earthworks in various states of preservation, and while this form of feature can date to the medieval period, their association with post-medieval farmsteads would suggest they date to the post-medieval period. The earthworks have some archaeological and historical interest from the information they could provide linked to agricultural practices in the uplands, and are considered to be of low value (sensitivity).

10.5.16The works proposed in the areas of ridge and furrow largely avoid the earthworks, with the proposed works on the edge of the earthwork remains. NO34SW0030 falls within the limits of the works to upgrade Tower 663, and NO34SW0013 falls within the southern option for EPZ works associated with Tower 662. The 'Upgrade to Existing Road Track' to reach Tower 666 is also proposed near the Scotston remains (NO34SW0031). Any stripping for track upgrades or the construction of new temporary tracks and EPZ works has the potential to result in the loss of part of the earthworks, although this loss will be on a small area of what are quite extensive areas. As a result, the magnitude of change is considered to be low. On assets of low value, this would result in a **negligible significance** of effect. This is not significant in EIA terms.

*Nevay Park Cottages (NO34SW0045)*

10.5.17The site of two cottages are recorded on the First Edition Ordnance Survey mapping on the northeast side of Kinpurney Hill near Nevay Park farm, but appear to have been demolished by the time of the Second Edition mapping (NO34SW0045). No clear traces of the structures were recorded during the walkover survey, and both buildings are assumed to have been demolished, although any traces that might survive would have some archaeological and historical interest from the information they could provide about the population living in the area during the post-medieval period. The asset is considered to be of negligible value (sensitivity) as no visible remains survive, and better examples exist in the Study Area as well as the wider landscape.

10.5.18The works proposed in the areas of the former cottages consist of upgrading an existing track to Tower 657. The existing track follows the line of an older track that passed the cottages and as such is assumed to avoid any buried remains that might survive. Furthermore, the track specification in this area will be a Bespoke Track which will not remove any trees, and any widening will be into the agricultural field and away from the former buildings. Any physical impacts on buried remains that might survive are assumed to be limited to a small proportion of the

former cottages, and as a result the magnitude of change is considered to be low. On an asset of negligible value, this would result in a **negligible significance** of effect. This is not significant in EIA terms.

*Gateside of Nevay Enclosure (NO34SW0022)*

10.5.19A possible enclosure has been recorded as a cropmark on aerial photographs in the field immediately to the east of Tower 655 (NO34SW0022). While undated, the feature is assumed to be prehistoric based on its form, and the presence of other similar features dated to the prehistoric period in the wider landscape. The asset may have archaeological and historical interest from the information it could contain linked to its purpose as well as the population living in the area when the feature was constructed/ in use. The asset is considered to be of medium value (sensitivity).

10.5.20 The works proposed in the area of the cropmark are limited to the upgrade of the foundations for Tower 655, as well as the construction of a 'New Temporary Stone Road'. All of these works appear to fall outside of the enclosure, however, the full extent of the feature is not fully understood and associated elements may extend into adjacent areas, including the area of the proposed works. Any physical impacts on buried remains that might survive are, however, likely to be limited to a small area and as a result the magnitude of change is considered to be low. On an asset of medium value, this would result in a **minor significance** of effect. This is not significant in EIA terms.

*Myreside Farmstead (AECOM001)*

10.5.21 The former farmstead of Myreside is first recorded on the First Edition Ordnance Survey mapping of the area, which depicts a number of structures as well as at least four wells (AECOM001). The complex had greatly reduced in size by the time of the Second Edition Ordnance Survey map published in the early 20<sup>th</sup> century, and all traces of the buildings and wells have now been completely removed. It is also assumed that buried remains associated with the buildings have been removed as no traces are visible on aerial photographs of the area. Any traces that might survive as buried features would have some archaeological and historical interest from the information they could provide linked to the population living in the area during the post-medieval period. The asset is considered to be of negligible value (sensitivity) as no remains appear to survive, and better examples exist in the Study Area as well as the wider landscape.

10.5.22 The works proposed in the area of the former farmstead and associated complex are limited to the upgrade of the foundations for Tower 653, as well as installation of Trackway Panels to access the tower. All of these works are within an arable field, with no traces of the former farmstead visible. Any physical impacts on buried remains that might survive are assumed to be limited to a small element of the former farm complex, and as a result the magnitude of change is considered to be low. On an asset of negligible value, this would result in a **negligible significance** of effect. This is not significant in EIA terms.

*Meigle Cropmark Site (MPK20338)*

10.5.23 An extensive prehistoric site including features assumed to represent a multi-period site including round houses, trackways, and field systems has been recorded through aerial photography to the east of the settlement of Meigle, and west of Tower 648 (MPK20338). The asset is assumed to have archaeological and historical interest from the information it could contain linked to its purpose and chronology, as well as the population living in the area when the features were in use. The asset is considered to be of medium value (sensitivity).

10.5.24 The works proposed in the area of the cropmark are limited to the upgrade of the foundations for Tower 648, as well as a short section of trackway to provide access to the tower. All of these works appear to fall outside of the complex, however, the full extent of the feature is not fully understood and associated elements may extend into adjacent areas including the area of the proposed works. Any physical impacts on buried remains that might

survive are, however, likely to be limited to a small area, with the trackway works assumed to be limited to ground disturbed by modern ploughing. As a result, the magnitude of change is considered to be negligible. On an asset of medium value, this would result in a **negligible significance** of effect. This is not significant in EIA terms.

*Haughend Enclosure (MPK4873)*

10.5.25 A possible enclosure and other associated features have been recorded as cropmarks on aerial photographs in the field immediately to the southwest of Tower 640 (MPK4873). While undated, the features are assumed to be prehistoric and possibly medieval based on their form, and the presence of other similar features dated to the prehistoric period in the wider landscape. The asset may have archaeological and historical interest from the information it could contain linked to its purpose as well as the population living in the area when the feature was constructed/ in use. The asset is considered to be of medium value (sensitivity).

10.5.26 The works proposed in the area of the cropmark are limited to the upgrade of the foundations for Tower 640, as well as the installation of Trackway Panels to access the tower, and EPZ works. All of these works appear to fall outside of the enclosures and the main areas of cropmarks, however, the full extent of the feature is not fully understood and associated elements may extend into adjacent areas, including the area of the proposed works. Any physical impacts on buried remains that might survive are, however, likely to be limited to a very small area and as a result the magnitude of change is considered to be low. On an asset of medium value, this would result in a **minor significance** of effect. This is not significant in EIA terms.

*Balkello Cists (NO33NE0004)*

10.5.27 The site of a possible cairn or burial has been recorded within the LOD on historic mapping. A possible cist burial or stone coffin is recorded on the First Edition Ordnance Survey map dated 1861 on the south side of the Sidlaw Hills near Balkello (NO33NE0004), however, no traces were recorded on later mapping, and no traces of the features were recorded as part of the walkover survey.

10.5.28 Any traces of these features that do survive would have archaeological and historic interest due to the information they could provide relating to past burial practices, and would be considered to be of medium value (Sensitivity).

10.5.29 The works proposed in the area of the previously recorded burials are limited to the construction of a New Temporary Stone Road to access Towers 671 to 679, and the construction of the access would have the potential to result in physical impacts on any remains that might survive, and potentially completely remove all remains, if they are found to survive. This would result in a high magnitude of change, which on an asset of medium value would result in a **moderate significance** of effect. This is significant in EIA terms.

***Mitigation***

10.5.30 In areas where heritage assets have been previously recorded and where stripping is required, mitigation is assumed to consist of archaeological monitoring during the stripping of access tracks to allow any buried features that might survive to be recorded prior to construction. Based on the current findings, no areas of strip, map, and record are proposed due to the limited intrusive works in areas of previously recorded archaeology.

10.5.31 Based on the current design all scheduled monuments will be avoided, with the exception of Cardean Roman Site (SM4337). Where works are required within scheduled monuments, Scheduled Monument Consent will need to be obtained which will include site specific mitigation. As such mitigation will be agreed as part of the SMC application.

10.5.32 In areas where historic landscape features such as drystone walls and stone dykes cannot be avoided, any elements removed during construction should be rebuilt in the same form once construction is complete. In areas

where this cannot take place due to a permanent access being required, the ends of walls/ dykes should be 'made good' during the construction phase to avoid the feature deteriorating through erosion.

10.5.33 All mitigation works will be agreed with the relevant Local Authority Archaeological Advisor, and HES in the case of designated assets, once full details of the construction works have been agreed and prior to works commencing.

10.5.34 The following table (Table 10.6) provides a 'Summary of Cultural Heritage Mitigation Measures' which will be used to inform the commitments in the contract documents.

**Table 10-66 Summary of Cultural Heritage Mitigation Measures**

Mitigation Item	Location	Timing of Measure	Description	Mitigation Purpose / Objective	Specific Consultation or Approval Required	Potential Monitoring Requirements
CH-1	Throughout Proposed Development	Construction	Archaeological monitoring to be undertaken during construction and ground works (i.e. works including, but not limited to, stripping for access tracks, bell-mouths, and tower foundation upgrades) in areas where archaeological remains have been recorded.	Identify, excavate, and record previously recorded archaeological features.	Works to be agreed pre-construction with the relevant Local Planning Authority Archaeological Advisor and approved via a Written Scheme of Investigations (WSI).	Expected that day-to day works on site will be under the supervision of an Archaeological Clerk of Works (ACOW). Periodic site monitoring visits from Local Planning Authority Archaeological Advisor likely during construction. To be agreed as part of the WSI.
CH-2	Throughout Proposed Development	Construction	Archaeological monitoring to be undertaken during construction and ground works (i.e. works including, but not limited to, stripping for access tracks, bell-mouths, and tower foundation upgrades) in areas in close proximity to previously recorded archaeological remains, or where the archaeological potential is considered to be higher due to aspects such as limited ground disturbance.	Identify, excavate, and record previously unrecorded archaeological features, as well as above ground features such as drystone walls.	Works to be agreed pre-construction with the relevant Local Planning Authority Archaeological Advisor and approved via a WSI.	Expected that day-to day works on site will be under the supervision of an ACOW. Periodic site monitoring visits from Local Planning Authority Archaeological Advisor likely during construction. To be agreed as part of the WSI.
CH-3	Based on current design access tracks to Towers:	Construction	New temporary access to be restricted in width to avoid removal of historic landscape features such as dry-stone walls.	Limit large scale widening of existing tracks and new temporary access tracks to avoid loss of historic	Works to be agreed pre-construction with the relevant Local Planning Authority Archaeological	Expected that day-to-day works on site will be under the supervision of an ACOW. Periodic site monitoring visits from Local Planning Authority Archaeological Advisor likely during

Mitigation Item	Location	Timing of Measure	Description	Mitigation Purpose / Objective	Specific Consultation or Approval Required	Potential Monitoring Requirements
	Temporary Access Tracks to Towers 668-679.			landscape features/elements.	Advisor and approved via a WSI.	construction. To be agreed as part of the WSI.
CH-4	All scheduled monuments where the Proposed Development will result in works within the same field including Cardean Roman Fort (SM4337).	Construction	<p>Temporary fencing to be installed around scheduled monuments to avoid accidental damage where construction works are undertaken in the same field as a scheduled monument. Training should be provided to construction team, including regular toolbox talks, to make them aware of the limits of the scheduled monument, as well as the legal protection associated with the site.</p> <p>Ground protection should be used to avoid impacts, and temporary barriers (such as Heras Fencing) should be provided to prevent accidental damage.</p>	Avoid accidental physical impacts on scheduled monuments.	Works to be agreed pre-construction with the HES as well as relevant Local Planning Authority Archaeological Advisor, and approved via Scheduled Monument Consent, with supporting documents likely to include a WSI. This is likely to include agreeing buffers.	Expected that day-to-day works on site will be under the supervision of an ACOW. Periodic site monitoring visits may be required by HES and the Local Planning Authority Archaeological Advisor during construction. To be agreed as part of the WSI.
CH-5	Throughout Proposed Scheme	Construction	Any sections of historic landscape features removed (i.e. dry-stone walls, boundary dykes etc) to be reinstated/restored once construction has been completed. In areas where the need for a permanent access means reinstatement/restoration is not possible, exposed ends of walls and similar features should be 'made good' by a qualified	Avoid/minimise impacts on historic landscape features such as dry-stone walls and boundary dykes.	Works to be agreed pre-construction with the relevant Local Planning Authority Archaeological Advisor and approved via a WSI.	Expected that day-to-day works on site will be under the supervision of an ACOW. Periodic site monitoring visits from Local Planning Authority Archaeological Advisor likely during construction. To be agreed as part of the WSI.

Mitigation Item	Location	Timing of Measure	Description	Mitigation Purpose / Objective	Specific Consultation or Approval Required	Potential Monitoring Requirements
			individual to avoid further loss of the features through erosion.			
CH-6	All scheduled monuments where the Development will result in works within the same field including Cardean Roman Fort (SM4337).	Construction	Scheduled Monument Consent required.	Legal requirement for working within scheduled areas.	All works to be agreed pre-construction with the HES as well as relevant Local Planning Authority Archaeological Advisor, and approved via Scheduled Monument Consent, with supporting documents likely to include a WSI. This is likely to include agreeing buffers.	Expected that day-to-day works on site will be under the supervision of an of ACOW. Periodic site monitoring visits may be required by HES and the Local Planning Authority Archaeological Advisor during construction. To be agreed as part of the WSI.
CH-7	Throughout Proposed Scheme	Construction	Pre and post- condition surveys to be undertaken in fields where construction works are being undertaken.	Avoid/ minimise impacts on previously recorded heritage assets that are not expected to be disturbed (i.e. construction works not expected to break ground).	Works to be agreed pre-construction with the relevant Local Planning Authority Archaeological Advisor and approved via a WSI.	Expected that day-to-day works on site will be under the supervision of an ACOW. Periodic site monitoring visits from Local Planning Authority Archaeological Advisor likely during construction. To be agreed as part of the WSI.



*Residual Effects*

10.5.35 Table 10.7 provides a summary of pre-mitigation summary of construction impacts, mitigation measures, and residual effects that have been described within this chapter. Significant effects typically comprise effects that are moderate or above.

**Table 10-7: Potential Cultural Construction Impacts and Residual Effects**

Asset ID / Description	Scale of Effect	Mitigation Item	Residual Effect
SM4337 Cardean Roman Camp (Scheduled Monument)	Moderate	CH-1; CH4; CH6	Minor
GDL00142. Drumkilbo Garden and Designed Landscape	Minor	CH-1	Minor
AECOM003. Farmstead of Funnyneauk.	Negligible	CH-1	Negligible
NO33NW0043. Scotston. Remains of quarries.	Negligible	CH-1	Negligible
NO34SW0039. Scotston. Remains of a gravel pit.	Negligible	CH-1	Negligible
NO34SW0037. Scotston Hill. Remains of a quarry.	Negligible	CH-1	Negligible
NO34SW0031 Scotston. Rig And Furrow.	Negligible	CH-1	Negligible
NO34SW0030. Henderston. Remains of an area of broad rig and furrow cultivation.	Negligible	CH-1	Negligible
NO34SW0013 Henderston. Remains of an area of broad rig and furrow cultivation.	Negligible	CH-1	Negligible
NO34SW0045. Nevay Park Cottages.	Negligible	CH-1	Negligible
NO34SW0022; 88856. Gateside Of Nevay. Enclosure.	Minor	CH-1	Minor
AECOM001. Farmstead of Myreside.	Negligible	CH-1	Negligible
MPK20338. Cropmarks, Meigle.	Negligible	CH-1	Negligible
MPK4873 Haughend. Enclosure	Minor	CH-1	Minor
NO33NE0004; 31875. Balkello. Cist(S).	Moderate	CH-1	Minor

### ***Operational Phase***

10.5.36 Due to the nature of the Proposed Development, all impacts are limited to physical impacts during the construction phase, with no impacts through change to the setting of heritage assets during the operational phase. As such, there are no impacts predicted during the operational phase and no requirement for mitigation.

### ***Cumulative Effects***

10.5.37 Due to the nature of the development, all impacts are limited to physical impacts during the construction phase, with no impacts through change to the setting of heritage assets during the operational phase. None of the schemes assessed as part of the Cumulative Assessment will result in physical impacts on assets assessed as part of the current assessment, and as such, no cumulative impacts are predicted.

## **10.6 Summary**

10.6.1 The current assessment examined previously recorded assets within a 250 m study area of the LOD, with data collected from the HES (both designated assets and non-designated assets on Canmore), the Perth and Kinross HER, and the Aberdeenshire HER. This data was supplemented by a review of historic mapping, documentary sources, and a walkover survey.

10.6.2 The results of the baseline study identified that the Study Area has been exploited from the prehistoric period onwards, although the LOD which largely follow the existing OHL avoid most settlements and instead pass through the agricultural landscape.

10.6.3 Permanent impacts on the setting of assets have been scoped out as the Proposed Development will not alter the towers, and therefore will not result in any change to setting.

10.6.4 Most previously recorded assets will also be avoided by works associated with the reconductoring, such as the installation of temporary trackways or the upgrade of existing tracks, and as such mitigation in most areas is limited to archaeological monitoring where trackways are being stripped to record elements of previously recorded features that might extend into the work areas, or previously recorded assets.

10.6.5 Any works within Cardean Roman Camps scheduled monument (SM4337) will require SMC. While intrusive works are expected to be limited, it is expected that any stripping will require archaeological monitoring.

10.6.6 While a significant effect has been assessed on the Balkello Cairns (NO33NE0004), this is based on the adoption of a worst-case scenario which assumes that remains might survive. Mitigation, currently assumed to consist of archaeological monitoring, would allow for the recording of any remains that might survive and result in a minor residual effect. It should, however, be noted that all traces of the features are assumed to have been already removed.

10.6.7 A full programme of mitigation will be agreed with HES (for Cardean scheduled monument), and the relevant Local Planning Authority Archaeological Advisor prior to works commencing and will be covered by a Written Scheme of Investigation.