

8 Cultural Heritage and Archaeology

8.1 Introduction

- 8.1.1 This chapter of the EIAR assesses the likely significant effects of the Proposed Development on cultural heritage and archaeology. Cultural heritage and archaeology 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.
- 8.1.2 The term the 'Proposed Development' refers to the proposed works which includes a number of components. These are as follows:
- Construction of the new Kincardine North Substation, including upgrades to Hawkhill Road (referred to as KINN);
 - Upgrade and modification of the XL Route, ZCN Route, and ZCS Route (referred to as 'Overhead Line Works'); and
 - Removal of 11kv wood pole lines to be replaced with 11kv underground cables (referred to as 'Scottish Power Distribution Works').
- 8.1.3 A full description of all works is provided in Chapter 4.
- 8.1.4 Due to the nature of the Proposed Development, all components have their own 'Application Boundary'. These are all covered by a single EIA Boundary, referred to in this chapter as the 'Site' and this is shown in Figure 4.1. Due to the nature of the Proposed Development, works that have the potential to result in permanent impacts to Cultural Heritage and Archaeology, both as a result of physical impacts and permanent changes to setting, are limited to works within the KINN Site Boundary (including the new substation and new OHL Towers), and as a result the KINN Site Boundary has been used for the baseline.

8.2 Legislation, Policy and Guidance

Legislation

- 8.2.1 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:
- The Electricity Act 1989¹
 - Town and Country Planning (Scotland) Act 1997²;
 - The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013³;
 - Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997⁴;

¹ UK Government (1989) The Electricity Act 1989, UK Government

² Scottish Government (1997) *Town and Country Planning Act*, Edinburgh: Scottish Government.

³ Scottish Government (2013) *The Town and Country Planning (Development Management Procedure) (Scotland) Regulations*, Edinburgh: Scottish Government.

⁴ Scottish Government (1997) *Planning (Listed Buildings and Conservation Areas) (Scotland) Act*, Edinburgh: Scottish Government.

- Ancient Monuments and Archaeological Areas Act 1979⁵; and
- Historic Environment Scotland Act 2014⁶.

Planning Policy

National Planning Policy

8.2.2 The principal elements of national policy and guidance comprise:

- NPF4⁷;
- Historic Environment Policy for Scotland (“HEPS”)⁸;
- Our Past, Our Future - The Strategy for Scotland’s Historic environment⁹; and
- The Historic Environment Scotland (HES) ‘Managing Change in the Historic Environment’ series of guidance notes (particularly *Managing Change in the Historic Environment: Setting*¹⁰).

8.2.3 NPF4 represents the latest national planning policy document relevant to the Proposed Development. Policy 7 relates to cultural heritage and key elements of the policy include ‘point c’ and ‘point h’ which relate to listed buildings and scheduled monuments respectively and state:

“c) Development proposals affecting the setting of a listed building should preserve its character, and its special architectural or historic interest.”

“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.”*

8.2.4 Impacts on non-designated historic environment assets are covered by ‘point o’:

“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 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,

⁵ UK Government (1979) *Ancient Monuments and Archaeological Areas Act*, Edinburgh: HMSO.

⁶ Historic Environment Scotland (2014) *Historic Environment Scotland Act*, Edinburgh: HMSO.

⁷ Scottish Government (2023) *National Planning Framework 4*, Edinburgh: Scottish Government.

⁸ Historic Scotland (2019) *Historic Environment Policy for Scotland*, Edinburgh: Historic Environment Scotland.

⁹ Historic Environment Scotland (2023) *Our Past, Our Future: The Strategy for Scotland’s Historic Environment*, Edinburgh: Historic Environment Scotland.

¹⁰ Historic Environment Scotland (2016) *Managing Change in the Historic Environment*, Edinburgh: Historic Environment Scotland.

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.”

- 8.2.5 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”.*

- 8.2.6 ‘Our Past, Our Future’ was released by HES in June 2023¹¹. 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

- 8.2.7 Both the local plans for Fife and Clackmannanshire Councils are currently being updated in light of the adoption of NPF4, however, until the new plans have been developed and adopted the existing plans remain relevant.
- 8.2.8 Policy 14 of the Fife Plan, adopted in 2017, covers the ‘Built and Historic Environment’¹². This notes that all developments will have to take into consideration the care and protection of the historic environment, whether assets are designated or non-designated, and states that a suitable assessment should be undertaken. This is supported by Appendix C of the Supplementary Guidance which covers the Historic Environment¹³.
- 8.2.9 Policies relevant to the Proposed Development from the Clackmannanshire Local Development Plan, adopted in 2015, consist of EA19 which protects scheduled monuments (both physically as well as their setting), EA20 which protects non-designated historic environment assets, EA22 which covers listed buildings, and EA23 which protects Conservation Areas¹⁴.

¹¹ Historic Environment Scotland (2023) *Our Past, Our Future: The Strategy for Scotland’s Historic Environment*, Edinburgh: Historic Environment Scotland.

¹² Fife Council (2017) *Fife Local Development Plan (FIFEplan)*, [Online] available from [Keystone Stakeholder Engagement](#).

¹³ Fife Council (2017) *Making Fife’s Places, Supplementary Guidance: Appendix C – Historic Environment* [Online] available from [Making-Fifes-Places-Supplementary-Guidance-Appendices-A-F.pdf](#).

¹⁴ Clackmannanshire Council (2015) *Clackmannanshire Local Development Plan*, Clackmannanshire Council

Guidance

- 8.2.10 The assessment has been undertaken following the Chartered Institute for Archaeologists (CIfA) Standards and Guidance for Historic Environment Desk-Based Assessment¹⁵.

8.3 Consultation

- 8.3.1 Separate Scoping Opinions were sought for the Proposed Development, firstly for the new substation from Fife Council and Clackmannanshire Council, and secondly for the overhead line works from the Scottish Ministers. The following section summarises the feedback from scoping as well as other targeted consultation activities undertaken prior to the submission of the consent applications.
- 8.3.2 HES provided its scoping advice for the new substation and overhead line works in June 2024 and July 2024 respectively. Their advice acknowledged that the substation and overhead line works formed separate applications, and also acknowledged that a separate battery storage development had been approved for land to the west of the Proposed Development. While HES confirmed that the substation would not result in physical impacts on designated assets, they did raise the potential for impacts on the setting of designated assets and, in particular, the possibility of impacts on the setting of the former Kennetpans Distillery (SM5012) and Tulliallan Castle (SM736), both of which are scheduled monuments, as well as Tulliallan Garden and Designed Landscape (GDL00379). In relation to the overhead line works, HES similarly highlighted the requirement to consider impacts on both Tulliallan Castle (SM736) and Tulliallan Garden and Designed Landscape (GDL00379).
- 8.3.3 A scoping response was received from the Fife Council Archaeological Advisor (FCAA) in relation to KINN, in June 2024, which confirmed no previous heritage assets had been recorded within the proposed site of the new substation. It also noted that any assessment should assess the potential for buried archaeological remains to exist within the Site. The FCAA also noted that the assessment should include a strategy for testing the presence/absence of buried archaeological remains within the Site, as well as develop a strategy to mitigate any potential physical impacts on previously unrecorded archaeological deposits. Finally, it noted the need to undertake an assessment to examine the potential for permanent impacts on the setting of heritage assets in the surrounding area, including Tulliallan Castle (SM736), Tulliallan Garden and Designed Landscape (GDL00379) and Kennetpans Distillery (SM5012).
- 8.3.4 A scoping response was received from the Fife Council Built Heritage Advisor (FCBHA) in relation to KINN which advised that the substation would be unlikely to have a material impact on any heritage assets. The response highlighted the potential for setting impacts on heritage assets but noted that there are already impacts by infrastructure, including the existing overhead lines. The response highlighted designated heritage assets to be considered, including listed buildings (Kilbagie House (LB1955) and Kilbagie Mill House (LB1957)), as well as non-designated historic environment assets comprising farmhouses, steadings and cottages to the west of the site.
- 8.3.5 Further consultation was undertaken with the FCAA in relation to KINN on the 22nd January 2025, via Teams, when a project update was provided. This included changes to the application boundary and the proposed works, as well as a brief overview of the review of the baseline data

¹⁵ Chartered Institute for Archaeologists (2020). Standard and guidance for historic environment desk-based assessment. [Online] available from: https://www.archaeologists.net/sites/default/files/CIfAS%26GDBA_4.pdf

collection. The FCAA provided additional information regarding the archaeological potential of the Site based on a recent archaeological evaluation, undertaken for a development immediately to the west of the Proposed Development, which did not identify any archaeological remains¹⁶. Due to the low archaeological potential of the Site, it was agreed that archaeological evaluation trenching would be required post-determination for the associated substation, and the results of this would determine what, if any, mitigation would be required.

- 8.3.6 The very western limits of the Site fall within Clackmannanshire and, as a result, consultation was undertaken with the Stirling Council Archaeologist who represents Clackmannanshire Council in relation to the access to KINN proposed from the A876. This was undertaken in January 2025 with an HER data search undertaken. The consultation confirmed that elements of the Site that fall within Clackmannanshire will not require mitigation, as the area has been previously disturbed by the construction of the A876, removing all archaeological remains. As such, physical impacts are not predicted in the parts of the Site that fall within the Clackmannanshire Council area.
- 8.3.7 The original impact assessment, submitted for the substation development, concluded that there would be no significant impacts on the setting of designated assets and a response from HES, dated 9th January 2026, has confirmed that they agree with the findings of the assessment. Responses to the application from FCAA, dated January 2026, have also agreed with the findings of the original assessment for the substation.

8.4 Methods

Study Area

- 8.4.1 As part of this assessment, a search of relevant data has been undertaken with material collected for a Study Area of 1km from the KINN Site to inform the baseline. The Study Area was based on the KINN Site, as impacts on cultural heritage (both physical and through changes to setting) are only predicted from the KINN works, and overhead line works in the immediate surrounding area. This distance was deemed suitable, based on the mixed land use in the area, as well as the Site being located in an area of reclaimed land and the extent of visibility of the Proposed Development. The works to potentially reconductor XL route are not considered as they would not impact cultural heritage (either physical impacts or through changes to setting).
- 8.4.2 The sources consulted included:
- PastMap¹⁷;
 - Historic Environment Scotland (HES) website, including TROVE¹⁸;
 - Historic mapping on the National Library of Scotland website¹⁹;
 - Clackmannanshire Historic Environment Record (HER) (managed by Stirling Council); and
 - Other available online sources.

¹⁶ GUARD Archaeology (2023) *Kincardine BESS, Kincardine Grid Services Complex, Fife, Data Structure Report – Project 6340*, unpublished report for Prospect Archaeology.

¹⁷ PastMap [Online] available from: <https://www.pastmap.org.uk/>

¹⁸ Historic Environment Scotland. [Online] available from: www.historicenvironment.scot

¹⁹ National Library of Scotland [Online] available from: <https://maps.nls.uk/>

- 8.4.3 At the time of writing the County of Fife, in which the Site is located, does not have a publicly available HER, and as such the NRHE was accessed for information relating to previously recorded non-designated historic environment assets within the Fife Council area. The Clackmannanshire Council HER was consulted for the section of the Study Area that falls within Clackmannanshire.
- 8.4.4 A wider Study Area of 2km was adopted to assess the potential impacts on the setting of designated assets.
- 8.4.5 All assets are listed in the gazetteers provided in Appendix 8.1 – Gazetteer, these are also shown on Figures 8.1 and 8.2. 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 historic environment assets from the NRHE database have no prefix, while assets recorded as part of the walkover survey and documentary research have the prefix ‘AECOM’.

Assessment Methodology

- 8.4.6 The impact assessment considers any impacts to the value (significance) of an asset, either physically or through changes to its setting that may affect the asset’s heritage value (significance).
- 8.4.7 The heritage value (significance) 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. The value of a heritage asset is assessed primarily in accordance with the guidance set out in NPF4 and the Historic Environment Policy for Scotland (HESP)²⁰. The value (significance) 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 (significance) in accordance with a five-point scale as set out in Table 8.1.

Table 8.1 Heritage Value (significance) Criteria

Value	Examples
Very High	- World Heritage Sites (WHS); - Assets of acknowledged international importance; and - Historic landscapes of international sensitivity, whether designated or not.
High	- Scheduled Monuments; - Non-designated historic environment assets/features of schedulable quality and national importance; - Category A Listed Buildings; - Gardens and landscapes on the Inventory of Designed Landscapes of outstanding archaeological, architectural or historic interest; and - Registered Battlefields.

²⁰ Historic Scotland (2019) *Historic Environment Policy for Scotland*, Edinburgh: Historic Environment Scotland.

Value	Examples
Medium	- Sites/features that contribute to regional research objectives; - Category B and C Listed Buildings; - Locally listed or non-designated buildings that can be shown to have special interest in their fabric or historical association; - Conservation areas; - Historic townscapes or built-up areas with historic integrity in their buildings, or built settings; and - Non-designated historic landscapes of regional sensitivity.
Low	- Non-designated historic environment /features of local importance; - Non-designated buildings of modest quality in their fabric or historical association; and - 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.
Negligible	- Assets with very little or no surviving archaeological interest; - Buildings of no architectural or historical note; buildings of an intrusive character; and - Landscapes with little or no significant historical interest.

- 8.4.8 Having identified the heritage value (significance) 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.
- 8.4.9 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.
- 8.4.10 The level and degree of impact (magnitude of impact) will be assigned with reference to a four-point scale as set out in Table 8.2. In respect of cultural heritage, an assessment of the level and magnitude of impact is made in consideration of any scheme design mitigation (embedded mitigation). Where no change to the significance of the asset is caused, this will be stated and the asset will not be taken further into the impact assessment because significant effects are unlikely.

Table 8.2 Magnitude of Impact Criteria

Magnitude of change	Examples
High	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 the loss of the heritage value of the asset.

Magnitude of change	Examples
Medium	Partial alteration of an asset, such that the heritage value of the resource and/or the key components of its setting are clearly modified.
Low	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.
Negligible	Slight changes to historic elements that hardly affect the setting of an asset and do not result in any loss of value.

- 8.4.11 An assessment of the level of significance of effect, having taken into consideration any embedded mitigation, will be determined by cross-referencing between the heritage value (significance) of the asset (Table 8.1) and the magnitude of impact (Table 8.2). The resultant level of effect (Table 8.3) can be negligible, minor, moderate or major and neutral, adverse or beneficial.

Table 8.3 Assessment of Significance

Magnitude	Sensitivity or Value of Receptors				
	Very High	High	Medium	Low	Negligible
High	Major	Major	Moderate	Moderate	Minor
Medium	Major	Moderate	Moderate	Minor	Negligible
Low	Moderate	Moderate	Minor	Negligible	Negligible
Negligible	Minor	Minor	Negligible	Negligible	Negligible

- 8.4.12 Effects of major or moderate significance are considered to be significant in EIA terms.
- 8.4.13 An assessment of the likely significance of effect will be made both prior to and following the implementation of specific 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 likely significance of effect which takes specific mitigation measures into consideration.

Limitations and Assumptions

- 8.4.14 At the time of writing the County of Fife, in which the Site is located, does not have a publicly available HER, and as such the NRHE was accessed for information relating to previously recorded non-designated historic environment assets within the Fife Council area.
- 8.4.15 No intrusive investigations have been undertaken within the Site, and as such the archaeological potential is based on a review of publicly data, such as previously recorded assets, as well as historic mapping.

8.5 Baseline

- 8.5.1 Baseline data was collected for the KINN Site and a 1km Study Area, in order to assess the archaeological potential of the Site, as well as examine the potential for impacts, both physical and through changes to the setting of assets that may affect their heritage value (significance).
- 8.5.2 A single baseline has been prepared to cover all aspects of the Proposed Development, allowing the history and development of the Study Area, as well as the archaeological potential, to be examined in a holistic way.

Land Use and Topography

- 8.5.3 The Site, which is centred on NGR NS 92497 89395, is located approximately 1km north of the River Forth, and 1.2km northwest of the settlement of Kincardine (Figure 8.1). The vast majority of the Site is within the County of Fife, with only limited areas (i.e. the tie-in to the existing A876 road) falling within the County of Clackmannanshire. It is bordered to the north by the Kilbagie complex, a former distillery site now used as a haulage yard, while woodland borders the Site to the south. The majority of the western boundary of the Site borders land with approval for a BESS Site, with a spur providing a link from the Site to the A876. An operational railway forms the Site's eastern boundary.
- 8.5.4 The solid geology consists of sedimentary rock cycles of the Middle and Lower Scottish Coal Measures Formation laid down during the Carboniferous period, while the drift geology is largely raised tidal flats/alluvium (silts and clays) formed during the Holocene²¹. A rapid review of historic borehole data suggests that this alluvium is between 5m and 15m thick before bottoming onto the carboniferous solid geology²².
- 8.5.5 The majority of the Site is located between 5m and 10m above Ordnance Datum (aOD), and is currently used for arable agriculture. The exception is the western limits of the Site which are occupied by the existing A876 and a balancing pond, and the southern element of the Site which is occupied by the existing Hawkhill Road.

Designated Assets

- 8.5.6 There are no designated assets within the Site, however, a total of 112 designated assets were identified within the 1km Study Area consisting of two scheduled monuments, 109 listed buildings, and a single Garden and Designed Landscape.
- 8.5.7 The scheduled monuments include Tulliallan Castle, located in an area of woodland approximately 100m south of the Site (SM736), with the second scheduled monument being elements of the Kennetpans Distillery site located approximately 800m southwest of the Site on the banks of the River Forth (SM5012).
- 8.5.8 The listed buildings include one Category A listed building, 41 Category B listed buildings, and 67 Category C listed buildings. The vast majority of the listed buildings are located in the town of Kincardine, to the southeast of the Site, which is also a Conservation Area. These are largely post-medieval buildings associated with the development of the town, and include commercial properties, churches, and residential buildings.
- 8.5.9 The single Category A listed building is Tulliallan Castle, situated to the north of Kincardine (LB16585) and this building is within the Tulliallan Garden and Designed Landscape

²¹ BGS Viewer: [BGS Geology Viewer \(BETA\)](#), accessed 5th August 2024

²² BGS GeoIndex: [GeoIndex - British Geological Survey](#), accessed 14th January 2025

(GDL00379). Tulliallan Castle is now the Police Training Centre and, as a result, the main building as well as the surrounding parkland has undergone significant changes, including the construction of new buildings, sports facilities and supporting infrastructure. However, the parkland does still retain a number of Category B listed buildings, including the walled garden (LB49037), a doocot (also referred to as dovecot) (LB17143), and the former lodge (LB16587).

- 8.5.10 The remaining listed buildings are located throughout the Study Area and include a group of four cottages, grouped under a single asset number (LB1954), to the southwest of the Site at Kennetpans. These are Category C listed and were associated with the former Kennetpans Distillery which is itself scheduled. A further two listed buildings are located to the north of the Site at Kilbagie. These consist of the Category B listed Kilbagie House (LB1955) and the Category B listed Kilbagie Mill (LB1957); both were associated with the former Kilbagie Distillery Complex, are now abandoned and in a poor state of repair.

Non-Designated Historic Environment Assets

- 8.5.11 A total of 182 non-designated historic environment assets were recorded within 1km of the Site on Canmore and the Clackmannanshire Historic Environment Record managed by Stirlingshire Council (see Appendix 8.1: Gazetteers and Figure 8.1: Known Heritage Assets), with a further three assets recorded as part of the desk-based assessment. The majority of these assets date to the post-medieval period and are located in the settlements or relate to agricultural activities in the landscape through which the Site passes. A limited number are related to settlement activity and development in the few small settlements that lie close to the site.

- 8.5.12 Previously recorded heritage assets in the 1km Study Area are discussed by period below.

Prehistoric and Roman (40,000BC to AD400)²³

- 8.5.13 Previously recorded assets in the Study Area represent human activity from the prehistoric period onwards, although assets dating to the prehistoric period are limited with only seven non-designated historic environment assets identified. These include two areas of possible burial mounds/cists (74782; 48113), as well as settlement activity dating to the Neolithic and Bronze Age (347834; 5510.01), and potential shell middens (3316.01; 3316.02; 3316.03). The Study Area on the north side of the River Forth covers a landscape rich in natural resources including the river, as well as woodland and fertile soils which have been exploited from at least the Mesolithic period, although most of the prehistoric evidence is on the slightly higher ground to the east and north of the Site. This includes the discovery of Neolithic and Bronze Age settlement activity on the higher ground to the north which was identified during the construction of the A876 (347834). The Site is focused on lower lying land which was likely unusable for parts of the prehistoric period due to higher sea levels / river levels in the area.
- 8.5.14 Evidence suggests that the Site was within the course of the River Forth during the Neolithic and Bronze Age and only became inter-tidal in the later Bronze Age, finally becoming fully useable in the Iron Age, when the river started to largely resemble its current form / course. As such, prehistoric activity would have been largely limited to the higher ground to the north and east, with the possibility of activity within the Site limited to the later prehistoric periods,

²³ 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)

although no remains have been encountered. However, some evidence of seasonal exploitation has been recorded, with possible Mesolithic/Neolithic shell middens recorded to the west of the Site (3316.01; 3316.02).

- 8.5.15 There is also no previously recorded evidence of Roman activity within the Study Area. While the landscape of the Study Area did fall within the extents of Roman rule during periods of time, such as the advance north when the Gask Ridge forts were established, the main focus of Roman occupation was along the line of the Antonine Wall, situated approximately 10km to the south.

Early-Medieval (AD400 to AD900)

- 8.5.16 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 Fife, Perth and Kinross and the wider 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 Fife²⁴.
- 8.5.17 Placename evidence has also suggested early medieval settlement activity within the area during this period, and Pictish placename elements including *carden*, *aber*, and *pren*, are recorded throughout Fife, with examples in the Study Area including Kincardine to the southeast of the Site²⁵. Documentary sources also recorded a ferry operating in the area of Alloa, some 3km to the northwest of the Study Area, as early as the 10th century²⁶, while Clackmannan is also thought to have been well established by the early medieval period.
- 8.5.18 This evidence would suggest that the Study Area and its surroundings were relatively well settled during this period, with the River Forth representing a key communications link, although the Site does not appear to have been subject to settlement and was potentially agricultural land associated with the settlement of Kincardine.

Medieval (AD900 to AD1600)

- 8.5.19 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 that settlement continued to develop throughout this period. Assets dating to the medieval period include the scheduled Tulliallan Castle to the south of the Site (SM736), and two non-designated historic environment assets. These are both linked to possible churches and comprise Kilbagie Chapel to the north of the Site (1332), and Chapel Hill in Kincardine to the south (48120). While traces of the latter site have been recorded through excavation, the site of Kilbagie Chapel is noted by FCAA as an error and is a misinterpretation of the place name²⁷.
- 8.5.20 It would appear that the main focus of settlement during the medieval period was to the southeast of the Site around Tulliallan Castle and Kincardine, with the castle recorded from at least the early 14th century²⁸, and the Kincardine placename suggesting an early medieval origin. Documentary evidence would also suggest that salt production in the southern limits of the Study Area, along the shore of the River Forth, was well established by the later medieval

²⁴ Proudfoot, E. (2000) 'The Picts and the Early Medieval Period' in Omand, D. (ed.) *The Fife Book*, Edinburgh: Birlinn.

²⁵ Nicolaisen, W. F. H. (2001) *Scottish Place-Names – Their Study and Significance: New Edition*, Edinburgh: Birlinn Limited.

²⁶ Smith, R. (2001) *The Making of Scotland*, Edinburgh: Canongate Books Limited

²⁷ FCAA, pers. comm. 23rd January 2025.

²⁸ Smith, R. (2001) *The Making of Scotland*, Edinburgh: Canongate Books Limited.

period, with salt pans recorded from Kennet Pans east towards Kincardine and Culross²⁹. The almost industrial scale of the salt production industry in the 16th century was supported through the discovery of coal in the area, with a number of mines opened to provide coal to fuel the salt pans. However, the Site was probably too far away from the River Forth to have been used for salt production and it is assumed it remained as agricultural land.

Post-Medieval (AD1600 to AD1900)

- 8.5.21 The post-medieval period represents the most visible period in terms of previously recorded heritage assets, with 111 designated assets and 153 non-designated historic environment assets recorded within the Study Area. The majority of these are associated with the continued development and expansion of the settlements that are located on the outer limits of the Study Area, including the town of Kincardine to the southeast, and the village of Kennet which developed in the later post-medieval period to the northwest.
- 8.5.22 Historic cartographic sources of the area, dating from the 17th century, are largely limited to County level surveys of limited detail, however, a number of these show features that can be traced in the modern landscape. For example, the Blaeu Survey, of 1662-65, shows Tullyallan Castle (SM736) and Kennets³⁰, while the Adair Survey, published in 1681, shows Kennet Pans, *Kincardin*, *Tyllyallan K* and *Tyllyallan*. The latter site is assumed to represent Tulliallan Castle, while '*Tyllyallan K*' would appear to relate to the former church on Castle Hill (48120)³¹.
- 8.5.23 The first detailed survey of the area is the Roy Survey, undertaken between 1747 and 1752, and this shows the Site as being used for arable agriculture, with Tulliallan Castle (SM736) to the south surrounded by woodland which encloses a small area of parkland. The survey also shows Kincardine as a settlement of some size, as well as a number of small settlements or farmsteads that can be traced in the contemporary landscape. These include Craigton to the west and Kennet Pans to the southwest. Other sites noted include *Garblet Place* (48314) which now lies under the north end of the A876, and *Westcarse* which appears to be under the modern power station to the south.
- 8.5.24 The Roy Survey also shows an area of intertidal mud flats to the south of Tulliallan Castle, named *Tullyallan Pans*, suggesting salt production may have been taking place during this period. Documentary sources from the late 18th century state that in the late 17th and early 18th century there were over 35 salt pans in the Parish of Tulliallan, however, the vast majority of these were noted to have been in ruins by 1794, with many having had their foundations removed³². The same account also notes the importance of coal in the parish during the early 18th century, with coal being used in the salt pans and also exported as far as Dundee by river and sea, although the main colliery is reported to have fallen out of use by 1794³³. Later mid-19th century mapping of the area shows an 'old shaft' within the Site (AECOM003), and it is possible that this is associated with the 17th and early 18th century mining that took place in the area.

²⁹ Brown, R. L. (2000) 'From the War of Independence to the Union of the Crowns' in Omand, D. (ed.) *The Fife Book*, Edinburgh:

³⁰ Viewed at [View map: Pont, Timothy, 1560?-1614? : Blaeu, Joan, 1596-1673, Sterlinensis Praefectura - Blaeu Atlas Maior, 1662 \(nls.uk\)](#) accessed 15th August 2024

³¹ Viewed at [View map: Adair, John, ca. 1650-1722, A Mapp of Clackmanan Shire. A map of Clackmannanshire. - Maps by John Adair \(nls.uk\)](#) accessed 15th August 2024.

³² Simson, D. (1794) 'The Parish of Tulliallan' in Sinclair, J. (ed.) *The Statistical account of Scotland Volume 11*, Edinburgh: William Creech

³³ *Ibid.*

- 8.5.25 While the mid- to late 18th century marked the end of mining and salt production in the area, distilling was becoming a major industry. The first distillery in the Study Area was opened at Kennet Pans in the early 1770s (SM5012) and this was followed by a second distillery opened at Kilbagie, to the north of the Site, in the late 1770s (48118). The two distilleries reached their peak of production in the 1880s during which time they were connected by a canal and subsequently a waggon way, and much of the arable land around the distilleries was used for growing grain/barley during this time³⁴. The use of the land surrounding the two distilleries for growing grain/barley for whisky production would suggest that the land within the Site was used for arable purposes during this period.
- 8.5.26 By the time of the Stobie Survey, published in 1783, Tulliallan Castle (SM736) appears to be depicted as a ruin with a woodland belt to the north, while a number of farmsteads and other features that still survive in the Study Area have been established and are depicted³⁵. These include Broomknows (AECOM001) and Dalguamie (AECOM002) to the east, as well as Kilbagie (LB1955) and Garlet (48314) to the north. The scale of the survey means that the Site is not shown in great detail, but it appears to remain undeveloped and is assumed to be agricultural land, and while the distillery is not named as such, it is assumed that 'Kilbagie' to the north represents the distillery.
- 8.5.27 In 1788 the Stein family, who owned a number of distilleries including Kennet Pans and Kilbagie, were declared bankrupt and both distilleries were closed. By 1795 they had reopened and while they continued to grow in the first half of the 19th century, they were to close by the 1860s when the Kilbagie Distillery was converted to a chemical manure plant. The Second Statistical Account of 1845 notes that the agricultural land within the Parish of Tulliallan had been much improved in the early 19th century, and it is assumed that the Site remained in use as arable during this period³⁶.
- 8.5.28 During the first half of the 19th century the main focus of settlement development remained Kincardine to the southeast. Tulliallan Castle (SM736) was also completely abandoned, with a 'new' Tulliallan Castle built to the east (LB16585) with associated designed landscape (GDL00379).
- 8.5.29 The first detailed mapping of the Site dates to 1866 when the Ordnance Survey published the First Edition survey of the area. This depicts the Site as fields, with some of the boundaries recorded still visible in the contemporary landscape³⁷. This situation remains the same on later mapping, with the development of the former distillery site at Kilbagie focused to land outside of the Site to the north, and the land of the Site used for agricultural purposes.

Modern (AD1900 to Present)

- 8.5.30 Only a limited number of assets dating to the modern period have been recorded in the Study Area, and these are largely focused around Kincardine and are linked to the development of the settlement. Other assets dating to the modern period include a grouping of features to the south of the Site which represent the former Kincardine Power Station. These include coal stores (267766), coal hoppers (68086), the turbine hall (276991), and firefighting pumphouse

³⁴ Ramage, H. (n.d.) *Kennetpans Distillery: The Site and the Wider Landscape*, Unpublished Thesis for a MSc, Stirling University

³⁵ Viewed at [View map: Stobie, James, fl. 1775-1804, The counties of Perth and Clackmannan. - Counties of Scotland, 1580-1928](#) accessed 18th March 2025.

³⁶ Monilaws, GH. H. (1845) 'The Parish of Tulliallan' inannon (ed.) *The New Statistical Account of Scotland Volume 10*, Edinburgh: William Blackwood and Sons.

³⁷ First Edition Ordnance Survey Map, viewed at [View map: Ordnance Survey, OS six-inch to the mile, 1st ed., Perthshire, Sheet CXL - Ordnance Survey Six-inch 1st edition, Scotland, 1843-1882 \(nls.uk\)](#), accessed 19th August 2024

(277534), as well as other associated features (277533; 277095; 277101; 277102; 277103; 259537; 123074). The power station went into operation in 1958 and was closed in 1997 with most structures demolished, however, the area has been partially redeveloped with a substation now covering part of the former power station.

- 8.5.31 The landscape of the Site remained in agricultural use throughout the 20th century, and this remains the primary land use.

Site Visit and Setting Assessment

- 8.5.32 A site reconnaissance visit was undertaken on the 1st July 2024 when the area around the Site was visited to assess the potential for impacts through change to the setting of assets. The visit found that views of the Proposed Development were very limited from the south, east, and north due to topography and extensive mature tree cover and woodland, as well as new infrastructure.
- 8.5.33 The most extensive views into the Site were from the west where the land is more open and flat, although these were partially blocked from the southwest due to the new flyover that carries a minor road over the new A876 bypass.
- 8.5.34 The most prominent features in the Site were the existing towers carrying the operational OHL, and these towers were very visible from the west, although well screened from the east and the A977 area.
- 8.5.35 While the Site was not visited due to access issues, views into the Site found it to be used for arable agriculture with no evidence of previously unrecorded heritage assets.
- 8.5.36 A second site visit was undertaken on the 22nd September 2024, when Kennet Pans Distillery (SM5012) and Tulliallan Garden and Designed Landscape (GDL00379) were visited, once further design information was available. This visit confirmed that there were no views of the Proposed Development from most areas of Tulliallan Garden and Designed Landscape (GDL00379), with the existing woodland, topography, and late 20th century buildings, that form part of the police training college, providing screening. The open central areas of the designed landscape may have some limited views towards the Site, although these are not thought to be extensive, as only the very tops of the existing overhead line towers are visible, and these are considerably taller than the Proposed Development.
- 8.5.37 There were also no views from Tulliallan Castle (SM736) due to the woodland planting that surrounds the castle, although there were some limited views from Kennet Pans Distillery (SM5012).

Previous Archaeological Investigations

- 8.5.38 There have been no previous archaeological investigations within the Site, although a phase of evaluation trenching was undertaken on land immediately to the west of the Site as part of an approved BESS site. This did not identify any archaeological remains and noted a low potential for previously unrecorded archaeological remains due to the area having been mudflats/intertidal for a significant period.
- 8.5.39 Other previous archaeological works in the Study Area have included investigations associated with the construction of the A876, which runs to the west of the Site³⁸. These works identified

³⁸ Jones, E. (2006) 'Upper Forth Crossing, Clackmannanshire (Clackmannan Parish), Excavation', in *Discovery and Excavation in Scotland*, Volume 7, Pages 46-47.

evidence of Neolithic and Bronze Age settlement (347834), at Meadowend Farm, to the north of the Site, in a slightly elevated position, as well as later remains dating to the medieval and post-medieval periods around the former Garlet House site (48314).

Archaeological Potential

- 8.5.40 While evidence for human activity has been recorded within the Study Area from the prehistoric period onwards, the low-lying area covered by the Site was largely a marine environment and intertidal area. While changing sea-levels eventually saw the landscape of the Site become a terrestrial area, the land remained wet and boggy with activity focused on the higher ground. As a result, the potential for previously unrecorded assets dating to the prehistoric period is considered to be low.
- 8.5.41 Previously recorded assets dating to the early medieval and medieval periods are also limited within the Study Area.

Future Baseline in the Absence of the Proposed Development

- 8.5.42 The future baseline relates to known or foreseeable changes to the baseline, including in response to climate change against which the Proposed Development is assessed.
- 8.5.43 The baseline is not anticipated to change in the absence of the Proposed Development. Any change to archaeological remains, historic buildings and structures and historic landscape features would be limited to the existing and ongoing degradation of their fabric over time through processes such as erosion, desiccation, corrosion or decay.

Issues Scoped Out of Further Assessment

- 8.5.44 Based on the design, the following potential impacts have been scoped out of further assessment:
- Physical impacts resulting from all components on designated assets; and
 - Physical impacts resulting from all components on previously recorded heritage assets.
- 8.5.45 In addition to the above, potential impacts arising from the Hawkhill Road Access Improvements, that form part of KINN, as well as the Scottish Power Distribution (SPD) Works have also been scoped out. This is because there is no potential for likely significant effects, as a result physical impacts due to previous ground disturbance, as well as limited potential for impacts resulting from changes to the setting of assets, due to the low-lying nature of these works.

8.6 Embedded Mitigation

- 8.6.1 Due to the nature of the Proposed Development, no suitable embedded mitigation has been proposed for potential heritage impacts.

8.7 Assessment of Effects

- 8.7.1 The assessment of likely significant effects resulting from the Proposed Development has been divided into the Construction and Operational phases. These are discussed below, with impacts from the Substation and the OHL works considered together.

Construction

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

- Permanent physical impacts on previously unrecorded heritage assets due to construction of the new substation;
- Permanent physical impacts on previously unrecorded heritage assets due to construction of access tracks or other infrastructure;
- Permanent physical impacts on previously unrecorded heritage assets due to construction of temporary construction compounds or other works areas;
- Permanent physical impacts on previously unrecorded heritage assets due to construction of the new towers;
- Permanent physical impacts on previously unrecorded heritage assets due to the decommissioning of the existing towers; and
- Permanent physical impacts on previously unrecorded heritage assets from temporary works associated with the OHL upgrade, such as hardstanding for scaffolding.

Physical Impacts

- 8.7.3 The results of the assessment have demonstrated that the majority of the Site was an intertidal area for most of the prehistoric period. It was subsequently used for agricultural activity rather than settlement. No previously recorded heritage assets have been noted within the Site and the archaeological potential is considered to be low. As a result, no physical impacts are predicted.

Setting Impacts

- 8.7.4 Aspects of the construction phase, such as temporary masts, additional lighting and machinery, as well as the appearance of temporary scaffolding for watercourse, road, and rail crossings, are not expected to result in a significant effect on the setting of heritage assets. This is largely a result of existing screening from tree cover and topography, as well as the distance between the assets and the Site. Furthermore, the existing power infrastructure (including existing Towers and OHLs) and main roads that exist in the area means that the additional temporary lighting and machinery will not significantly alter the baseline conditions.

Operation

- 8.7.5 Due to the nature of the Proposed Development, operational impacts are expected to be limited to permanent impacts through changes to the setting of heritage assets. The proposed new substation, as well as the new towers, represent the key elements of above ground infrastructure and, as a result, have the greatest potential to result in changes to the setting of designated assets.
- 8.7.6 A review of the baseline data within 2km of the Site identified a number of designated assets, however, many of these assets are screened from the Proposed Development as a result of topography, as well as existing screening from the existing built environment and extensive tree cover. This includes the assets located in the settlements of Kincardine to the southeast and Kennet to the northwest, as well as more isolated assets in the surrounding landscape. Furthermore, the introduction of the new towers into a landscape dominated by power infrastructure, as well as industrial units to the north on the former Kilbagie Mill/Distillery site, and the A876 to the west, would not introduce a dominant change to the existing character of the area.

8.7.7 The scoping response from HES for KINN confirmed that significant impacts on the setting of Tulliallan Garden and Designed Landscape (GDL00379) were unlikely, as a result of existing screening from the built environment, woodland, and topography. The visual appearance of the reconfiguration of the OHL would also be screened from Tulliallan Garden and Designed Landscape. This is due to the towers that are subject to change being located in the area of the substation. This limited change to the appearance of the OHL has been confirmed by the ZTV produced for the LVIA chapter (**Chapter 7, Figure 7.1**), which demonstrates that overhead line infrastructure would remain dominant, with minor changes resulting from the removal of some towers in the substation area. As such, the OHL would not become more visible or dominant in the landscape.

8.7.8 Designated assets, where there is the potential for impacts through changes to setting that may affect the heritage value (significance) of the asset and require further assessment, are Tulliallan Castle scheduled monument (SM736), Tulliallan Garden and Designed Landscape (GDL00379), and Kennetpans Distillery (SM5012), and these are therefore discussed in more detail below.

Tulliallan Castle (SM736)

8.7.9 The ruin of Tulliallan Castle scheduled monument (SM736) is located approximately 265m to the south of the Site and 400m south of the nearest new tower, with an extensive belt of mature woodland screening the asset from the Proposed Development. Originally constructed on a low rock outcrop in the 13th or 14th century, but subject to later remodelling, the hall-house is also associated with a moat. Historic mapping shows that a dense band of woodland has existed to the north of the asset from at least the early 17th century, when the Blaeu Survey depicts woodland north of the castle³⁹. As this survey is based on the Pont Survey, undertaken in the late 16th century, it is likely that the woodland has always formed something of a screen to the north, with key views, and functional focus of the castle, being to the south and towards the Firth of Forth. The main entrance to the castle is also located on the south side of the building. As a scheduled monument the asset is considered to be of high value.

8.7.10 The Proposed Development will not be visible from the asset due to extensive mature woodland to the north of the castle. Furthermore, while there may have been some views to the north from the castle, the key views appear to have been to the south and towards the Firth of Forth, and therefore away from the Proposed Development. The immediate setting is also defined as the area within the surrounding moat, and there will be no impacts on this element of the asset. As such, the magnitude of change is considered to be negligible. On an asset of high value this will result in a minor adverse significance of effect, which is not significant.

Kennetpans Distillery (SM5012)

8.7.11 The site of the former Kennetpans Distillery is located approximately 1km to the southwest of the Proposed Development, on the north shore of the Firth of Forth. Comprising the former distillery, as well as a quay on the riverside, and an earth mound that may have been formed by ballast from ships, the complex represents an example of a site linked to the early development of industrial scale whisky production in Scotland. As a scheduled monument it is considered to be of high value.

³⁹ Viewed at [View map: Pont, Timothy, 1560?-1614?; Blaeu, Joan, 1596-1673, Sterlinensis praefectura, \[vulgo\], Sterlin-Shyr - Blaeu Atlas of Scotland, 1654](#), accessed 4th February 2026.

- 8.7.12 While there is the potential for some views of the Proposed Development to the northeast of the former distillery, these will be limited due to the distance between the asset and the Substation and new towers. Furthermore, the setting of the asset is very much its relationship to the river, which provided easy access for the transportation of whisky out of the distillery, as well as the movement of supplies into the distillery. A canalised watercourse and a tramway linked the Kennetpans complex to the Kilbagie Distillery to the northeast, located to the north of the Proposed Development. However, both of these links have been interrupted by the introduction of the A876 road, while the remains of the Kilbagie Distillery are no longer visible from Kennetpans due to later development around the site. Furthermore, the new Towers will not greatly alter the current Tower and wire-scape visible in views to the northeast. As a result, the magnitude of change is considered to be negligible. On an asset of high value this will result in a minor significance of effect, which is not significant.

Tulliallan Garden and Designed Landscape (GDL00379)

- 8.7.13 Tulliallan Garden and Designed Landscape (GDL00379) is located to the east of the Proposed Development, and north of Kincardine and the Firth of Forth. The Category A listed Tulliallan Castle (LB16585) is located at the southern end of the Garden and Designed Landscape, however, impacts through change to the setting of this asset have been scoped out, due to the distance between the building and the Proposed Development, as well as the modern extension, added to form the Scottish Police College, which blocks views towards the Proposed Development. As a result, this assessment focusses on the Garden and Designed Landscape only.
- 8.7.14 There is limited information regarding the early history of the designed landscape, although the First Edition Ordnance Survey mapping of the area appears to show the extent of the grounds which are largely the same as those that survive today. The estate changed hands a number of times in the late 19th and early 20th century, and in the 1950s a large section of the designed landscape was purchased by the Scottish Home Department to form a Police Training College, with alterations since the purchase including the creation of sports pitches, large areas of car parking, and driver training areas, as well as the aforementioned extensions to the main house. These alterations also included the removal of some areas of formal garden, as well as the reuse of the walled garden as a carpark. However, retained mature woodland on the southern border of the gardens provides it with a more intimate feel, and also limits views to the west (towards the Proposed Development). As a designated asset, containing and providing the setting for, a Category A listed building, it is considered to be of high value.
- 8.7.15 The Site is located approximately 250m from the western limits of the asset, with the area of the proposed Tower changes over 500m from the parkland and the Substation 480m to the northwest. Key views highlighted in the HES designation are towards the higher ground of the Ochil Hills to the north, although these views are largely limited to the northern elements of the designed landscape where the more open nature of the parkland enables outward views. These views are also partially interrupted by two existing OHLs, and these lines would not change in this area as a result of the Proposed Development.
- 8.7.16 Views towards the Proposed Development are extremely limited, as a result of mature woodland that forms the western boundary of the parkland, as well as mature woodland that partially lines the A977. Mature woodland also lines the main railway line running north-south between the asset and the Proposed Development, further limiting views to the Proposed Development. Finally, as noted above, key views from the parkland are limited to the Ochil Hills

to the north and the Proposed Development will not interrupt these. As a result, the magnitude of change is considered to be negligible. On an asset of high value this will result in a minor significance of effect, which is not significant.

8.8 Additional Mitigation

- 8.8.1 While the archaeological potential of the Site is considered to be low, a mitigation strategy would be required, based on a phase of evaluation trenching to be undertaken prior to the commencement of construction of the KINN Scheme. This will be focused on the area of ground works, once the design has been finalised, with the trenching sample to be agreed with the Fife Council and assumed to be approximately a 3% sample.
- 8.8.2 Further mitigation, if required, would be based on the results of the evaluation trenching and will be agreed with the Fife Council. This may include, but not be limited to, archaeological monitoring, archaeological excavation, recording, and publication. It is anticipated that submission and implementation of a mitigation strategy (including the preparation of a Written Scheme of Investigation) will be included as a condition of any planning permission.
- 8.8.3 Archaeological evaluation trenching is not proposed for the minor works around new towers or any areas of stripping required for temporary scaffolding due to the area affected. These areas, however, would be subject to archaeological monitoring during stripping. All mitigation work will be agreed with the Fife Council and Clackmannanshire Council Archaeological Advisors.
- 8.8.4 While no significant effects resulting from the Operational Phase have been identified, careful design of the Substation, as well as landscaping and planting, could further reduce impacts.

8.9 Residual Effects

Construction Phase

- 8.9.1 No physical impacts on heritage assets have been identified as part of this assessment. Standard mitigation measures would mitigate for any physical impacts on previously unrecorded buried archaeological remains that might be identified as part of the evaluation works. As such, no significant residual effects are predicted.
- 8.9.2 Any impacts resulting from changes to the setting of heritage assets during the construction phase will be temporary and reversible. As such, no significant residual effects are predicted.

Operational Phase

- 8.9.3 As there would be no physical impacts relating to the Operational Phase, no significant residual effects are predicted.
- 8.9.4 Similarly, no significant changes to setting, that would affect the heritage value (significance) of designated assets, have been identified as part of the assessment of the operational phase of the Proposed Development. Mitigation, such as planting, is not appropriate for the overhead line works, due to the height of the new towers, although landscaping and planting may further reduce the landscape and visual impacts of the Substation. However, the significance of effect will remain **minor adverse** which is not significant in EIA terms.

8.10 Combined Effects

- 8.10.1 For the purpose of the assessment, the potential for effects arising from physical impacts, as well as impacts resulting from changes to the setting of an asset, were limited to the Substation

and Overhead Line Works. As a result, these were assessed in combination and it was concluded that there would be no physical impacts. This was due to there being no previously recorded assets identified within the Site and the archaeological potential being assessed as low, due to the land being a reclaimed wetland area.

- 8.10.2 The assessment of impacts arising from changes to the setting of assets also concluded that the residual significance of effect would be minor adverse, when considering the Substation and Overhead Line Works together.
- 8.10.3 As the SPD Works was scoped out of the assessment, no further Combined Effects are predicted.

8.11 Monitoring

- 8.11.1 Significant effects are not predicted and impacts will be limited to any previously unrecorded assets that are identified during construction. As such, archaeological monitoring of any mitigation works might be required during construction. This work would be agreed with the Fife Council Archaeological Advisor in advance of construction.
- 8.11.2 Archaeological mitigation works and monitoring are not expected to be required within the part of the Proposed Development that falls under the jurisdiction of Clackmannanshire Council. This is due to previous ground disturbance in this area removing the possibility of the survival of archaeological remains. The exception will be any stripping required for scaffolding used for road or watercourse crossings where archaeological monitoring during stripping might be required. Any works would need to be agreed with the Archaeological Advisor for Clackmannanshire.

8.12 Cumulative Assessment

- 8.12.1 A cumulative assessment was undertaken based on a review of nearby proposed developments (see Chapter 2 for a full listed of schemes considered). As the Proposed Development will not result in significant physical impacts on heritage assets, there is no potential for a cumulative impacts in this regard. As such, the cumulative assessment was limited to the potential for cumulative impacts through changes to the settings of designated assets within the 2km study area.
- 8.12.2 The assessment concluded that there would be no cumulative impact through changes to the settings of designated assets. This is largely a result of the cumulative developments being linked to power and infrastructure and therefore of a similar nature to the current landscape character, as well as aspects such as existing screening which would limit views. Furthermore, this assessment, and the assessments for the consented schemes, concluded that they would not result in significant impacts on the settings of designated assets.

8.13 Summary and Conclusions

- 8.13.1 This chapter provides an assessment of the effects on the cultural heritage resource that are likely to arise from construction and operation of the Proposed Development. The assessment of existing baseline conditions identified 112 designated assets and 182 non-designated assets within the Study Area. These were compiled from HES datasets, as well as the Clackmannanshire Historic Environment Record, with a further three assets identified through a review of historic mapping.

- 8.13.2 A review of this data, as well as other sources such as written accounts, historic mapping and previous borehole logs, concluded that the Proposed Development was an intertidal area for much of the prehistoric period, with most evidence for human activity limited to the slightly higher ground. In later periods the land within the Site was largely used for agriculture and, as such, the archaeological potential is considered to be low.
- 8.13.3 While the components of the Proposed Development have the potential to result in physical impacts, these are limited to the construction of the new Substation. This is due to the other components either being located in areas that have been previously disturbed, or because the works associated with the other components involves limited / no ground disturbance. When considering the Substation, the lack of previously recorded assets, as well as the low archaeological potential, means that the potential for physical impacts is considered to be low.
- 8.13.4 The potential for change to the setting of designated assets was also assessed. This focused on the new Substation and Overhead Line Works in the vicinity of KINN as these represent the components that have the potential to alter the setting of designated assets. This concluded that existing screening from topography, mature woodland and the built environment, as well as the Proposed Development being located in a landscape dominated by infrastructure and industry, would remove the potential for significant effects arising from changes to the setting of designated assets.
- 8.13.5 Negligible impacts were identified in relation to changes to the setting of Tulliallan Castle scheduled monument (SM736), Tulliallan Garden and Designed Landscape (GDL00379) and Kennetpans Distillery (SM5012). On assets of high value, these result in minor adverse effects, which are not significant.
- 8.13.6 While the archaeological potential of the Proposed Development is considered to be low, a phase of archaeological evaluation trenching will be required once the full extent of the works for the new substation have been defined. The trenching sample would be agreed with the Fife Council and Clackmannanshire Council Archaeological Advisors but is assumed to be approximately a 3% sample.
- 8.13.7 Additional archaeological mitigation works, if required, will be based on the results of the archaeological evaluation trial trenching and will be agreed with the Fife Council Archaeological Advisor.