Scottish & Southern Electricity Networks

TRANSMISSION

Scottish Hydro Electric Transmission plc

Beauly-Denny Overhead Line Diversion

Environmental Appraisal

Technical Appendices

Appendix 10A.2 – Fanellan Hub 400 kV Substation and Converter Station, Archaeological Project Design for Archaeological Evaluation and Mitigation

July 2025

Scottish and Southern Electricity Networks

FANELLAN HUB 400KV SUBSTATION AND CONVERTER STATION

Archaeological Project Design for Archaeological Evaluation and Mitigation

70112533-311
MAY 2025

PUBLIC

Scottish and Southern Electricity Networks

FANELLAN HUB 400KV SUBSTATION AND CONVERTER STATION

Archaeological Project Design for Archaeological Evaluation and Mitigation

ARCHAEOLOGICAL PROJECT DESIGN (V1) PUBLIC

PROJECT NO. 70112533

OUR REF. NO. 70112533-311

DATE: MAY 2025

QUALITY CONTROL

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Date	November 2024	January 2025	May 2025
Prepared by	Matt Amy	Joshua Walls	Joshua Walls
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Signature			
Project number	70112533	70112533	70112533
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EXTERNAL REVIEW

Review	Version 1	Version 2	Version 3
Client	SSEN Transmission	SSEN Transmission	SSEN Transmission
Review date	January 2025	Not issued	May 2025
Name	Claire Goddard	N/A	Claire Goddard / Kenneth Reid
Highland Council Historic Environment Team	-	-	Kirsty Cameron
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STATEMENT OF LIABILITY

The findings and opinions expressed are based on the conditions encountered and/or the information reasonably available at the date of issue of this document (or other date e.g. date of inspection) and shall be applicable only to the circumstances envisaged herein.

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1 NON-TECHNICAL SUMMARY

WSP has been commissioned by Scottish and Southern Electricity Networks Transmission (SSEN Transmission) ('the Client') to produce an Archaeological Project Design (APD) for a programme of archaeological evaluation and mitigation at the proposed Fanellan Hub, south-west of Beauly, the Scottish Highlands ("the Site") (National Grid Reference NH 48244 43025; Figure 1). The scheme comprises a new 400kV substation and converter station, with associated drainage ponds, access infrastructure, and landscaping.

The archaeological works comprise an archaeological evaluation and mitigation excavations, and are required as part of the mitigation strategy set out within the Environmental Impact Assessment Report, Chapter 11 Cultural Heritage. The aims of the archaeological works are to clarify the presence, nature, date and extent of any archaeological remains that might be present within the areas of unknown archaeological potential within the Site, and to preserve by record the surviving portions of known heritage assets within the Site, and those discovered during the trial trenching.

The archaeological evaluation will be completed by excavating approximately 564 trial trenches measuring 50 m by 1.8 m across the Site whilst the mitigation excavations are required at nine specific areas where archaeological features were recorded in previous works.

This Archaeological Project Design sets out the scope and methodology for the archaeological evaluation and mitigation, including the fieldwork methods, approach to sampling, progress reporting, post-excavation reporting, archiving and dissemination.

2 INTRODUCTION

2.1 PROJECT BACKGROUND

2.1.1. WSP has been commissioned by Scottish and Southern Electricity Networks Transmission (SSEN Transmission) ('the Client') to produce an Archaeological Project Design (APD) for a programme of archaeological evaluation and mitigation at the proposed Fanellan Hub, south-west of Beauly, Highland ("the Site") (National Grid Reference NH 48244 43025; Figure 1). The scheme comprises a new 400kV substation and converter station, with associated drainage ponds, access infrastructure, and landscaping.

2.1.2. The archaeological works are required as part of the mitigation strategy set out within the Environmental Impact Assessment (EIA) Report Chapter 11 Cultural Heritage (SSEN 2024). The EIA Report highlighted impacts on known heritage assets comprising sub-surface prehistoric remains, and committed to reducing these impacts through Preservation by Record. The EIA Report also highlighted the high potential for currently unknown archaeological remains to be present within the Site, and recommended an archaeological evaluation through trial trenching to ascertain the presence or absence of further archaeological remains.

2.1.3. This APD sets out the scope and methodology for the archaeological evaluation and mitigation, including the fieldwork methods, approach to sampling, progress reporting, post-excavation reporting, archiving and dissemination.

2.1.4. The work is anticipated to be carried out prior to construction activities and is therefore not subject to Construction (Design and Management) Regulations (CDM 2015).

2.2 CONSULTATION

2.2.1. WSP consulted with the Highland Council Historic Environment Team (HCHET) in September 2024 in relation to the proposals. The archaeological mitigation and evaluation strategies are based on the agreed approach.

2.3 PROJECT ROLES

2.3.1. The *'Consultant'* (WSP Cultural Heritage and Archaeology Team) is responsible for production of the APD, and for monitoring and assurance of the archaeological fieldwork contractor. WSP is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA), with experience in designing and managing mitigation strategies. All of our work complies with the CIfA Code of Conduct (2022) and relevant standards and guidance. The team will liaise directly with HCHET.

2.3.2. '*HCHET'* are the statutory consultee with regards to the historic environment for Highland Council.

2.3.3. The '*archaeological fieldwork subcontractor'* is responsible for carrying out the fieldwork, post-excavation reporting, deposition of the archive and dissemination.

2.3.4. The 'Principal Contractor' will be Siemens BAM, and they will be responsible for procurement of the archaeological fieldwork contractor

2.3.5. '*The client'* is SSEN Transmission.

3 HISTORIC ENVIRONMENT BASELINE SUMMARY

3.1 SITE LOCATION

3.1.1. The Site is located on land at Fanellan, south-west of Beauly, the Scottish Highlands (National Grid Reference NH 48244 43025; Figure 1). The Site is bounded by Ruttle Wood commercial forestry to the north and north west, with the local road linking farmsteads to Culburnie and the A831 to the south and south east. The total area of the Site is 222.83ha, while the area of development is approximately 81.9ha.

3.2 TOPOGRAPHY

3.2.1. The majority of the Site generally slopes from north-west to south-east between 144 m Above Ordnance Datum (AOD) and 115 m AOD. The most northerly portion of the Site is at a lower datum on the floodplains of the River Beauly and is flatter, being between 35 m AOD and 45 m AOD.

3.3 GEOLOGY

3.3.1. The British Geological Survey (2024) records the bedrock geology underlying the proposed development as Ousdale Arkose Formation, a part of the Sarclet Group which stretches across the Northeast Highlands, once laid down by braided rivers. This sedimentary bedrock is red feldspar-rich conglomerate formed between 419.2 and 393.3 million years ago during the Devonian period. The distinctive red sandstone of the Sarclet parent group were quarried locally across the Northeast Highlands and used for many of the 19th and early century buildings that make up the Conservation Area of Beauly.

3.3.2. The superficial deposits within the proposed development area are predominantly Till, Devensian - Diamicton. This is a sedimentary superficial deposit of sand and gravel deposited by glacial erosion and deposition between 116 and 11.8 thousand years ago during the Quaternary period. The sediments may include material of late glacial to early Holocene date. These sands and gravel are free-draining and less susceptible to flooding, providing a suitable location for early settlements.

3.4 ARCHAEOLOGICAL BASELINE

3.4.1. The following archaeological baseline is drawn from the Cultural Heritage Background included as Appendix 11.1 of the EIA Report (SSEN 2024). The study area for the assessment was 1km surrounding the proposed development.

PREHISTORIC PERIOD (12,000 BCE – 400 CE)

3.4.2. The gently sloping fields around the Site and the River Beauly create areas of low-lying free draining sands and gravels that are ideal soil environments for people to cultivate. Settlement evidence from the Neolithic is scarce due to the semi-transient nature of activity and is typically evidenced by pit clusters and find spots. There is the potential that the features identified during GI works, including pits, linear features, and post-holes, may be indicative of structures from this period. These remains indicate potential human activity, on the elevated ground of the Site.

3.4.3. Ruttle Wood cairn (Canmore ID 116606), the surrounding cairns in Ruttle Wood, and Culburnie Ring Cairn and stone circle (SM2425) are potential ring cairns. The cluster of burial cairns in Ruttle Wood are situated on heather-covered mounds and preserved within the woodland.

3.4.4. Pits and cup-marked stones were identified in Balblair Wood, approximately 400 m to the north-east of the Site. Balblair Wood contains dozens of individual heritage assets which are thought to be dated from the Bronze Age period. The groupings of burial cairns, earthworks, enclosures, and roundhouses suggests an area of significant settlement, where the populations of the Neolithic and Bronze Age took advantage of the soil environment and proximity to the River Beauly.

3.4.5. No definitively dated Iron Age heritage assets are known within the Site or Study Area, though Fanellan, structure (Canmore 34620) is thought to be an Iron Age roundhouse. The nearest Iron Age feature is Corff House, fort (SM3195), located approximately 2 km to the east, and has been identified as an Iron Age promontory fort, primarily for its location atop a hill, surrounded by a pair of ditches enclosing the summit and a medial rampart. No additional structures or earthworks survive, but it is suggested that occupation of this defensible position continued through the medieval period. Other hills in the landscape, such as Dun Mor, have identified Iron Age hillforts, suggesting that the wider area of Beauly Firth was an area of human activity in the Iron Age.

MEDIEVAL PERIOD (CE 400 – 1560)

3.4.6. Initially, the populations of the area to the west of Inverness were of Convinth Parish. Following 1226, the Kiltarlity Parish Church (SM5570) was built and formed the Kiltarlity parish. The current building is no longer in use and exists as ruins, within which a Category B listed post-medieval cemetery (LB8081) is still in use. There is no direct evidence for the settlement or community that was served by the church within historical or archaeological records but there is the supposed grave of Tarrail, who allegedly founded the original church. The grave is said to be half a mile to the east of the church.

3.4.7. Based on the known archaeological record of the area, the Site is thought to occupy the fringes of a medieval town and likely exploited agriculturally.

POST-MEDIEVAL PERIOD (CE 1560 – 1900)

3.4.8. Beauly is linked to several Scottish Clans, notably the Lovat Frasers, Chisholms, and Mackenzies. Some names of heritage assets in the wider area were influenced by these clans, such as Lovat Bridge (LB8083), a Category A listed building constructed as a part of the northern Scottish road-building programme from 1811 to 1814, located approximately 2.2km to the east of the Site.

3.4.9. The Old Kilmorack Parish Church (LB7122) was built during Protestant Reformation.

3.4.10. It was common for churches, priories, and burial grounds to be constructed on past ecclesiastical sites. The Kilmorack Old Burial Ground (LB7123) likely contains the remains of St Maroc's Chapel (Canmore ID 12384 – located outside of the study area) that was replaced by Kilmorack Old Parish Church and Burial Ground (LB7122) just across the A831. The residence for the Kilmorack Church was the Kilmorack Steading and Manse (LB7124), built for Reverend John Fraser of the Church of Scotland.

3.4.11. Early mapping of the area from the mid-18th century Roy's Military Survey of Scotland shows the presence of Kiltarlity Cottages (Canmore ID 116604) and two farmsteads within the Site, labelled Techmen. By the first edition Ordnance Survey (OS) in the mid-19th century, there were only a single farmstead remaining (now labelled Fanellan). The other remained only as one roofed building, mill pond, well and sluice. Kiltarlity cottages were still upstanding and were labelled to have a sundial. From the 2nd and 3rd editions OS mapping, no noticeable change occurred and the single roofed building, mill pond and sluice remained through the majority of the 20th century. Aerial

imagery indicates that the mill pond and sluice are removed by 2009, though the small cottage survives.

3.4.12. Beyond the presence of the farmstead and millpond, activity within the Site remained agricultural from at least the mid-18th century. The boundary of Ruttle Wood was retained and the land boundaries within the Site remained. At some point during the 20th century, Fanellan farmstead was converted into an SSE power distribution site.

MODERN (1900 CE – PRESENT)

3.4.13. There are no heritage assets within the Site or Study Area dating to the modern period. The closest heritage asset to the Site that dates to the modern period is the non-designated Kilmorack Power Station and Dam (Canmore ID 171639). It is located 200m north of the Site, across the River Beauly. A review of OS mapping suggest the Site likely remained in agricultural use throughout this period, with the notable exception of the conversion of Fanellan farmstead to an SSE power distribution.

3.5 PREVIOUS ARCHAEOLOGICAL WORK

3.5.1. There have been two archaeological investigations undertaken within the Site:

- Watching brief and excavation by Northlight Heritage in 2011.The remains of a circular structure comprising an outer ditch, an inner ring of postholes, and associated features including a central hearth and two pits containing a large amount of burnt bone, were identified. The work was conducted within the extents of a tower compound (BF7) as part of the Beauly to Denny 400kV overhead line development programme. All archaeological features uncovered were fully excavated and recorded during consecutive watching brief and excavation phases within the development area. Finds of pottery, lithics and environmental samples were recovered from the site (Northlight Heritage, 2014).
- Watching brief by AOC in 2023 to monitor the ground investigations associated with the site selection of Beauly 400kV Substation and Western Isles HVDC Converter. The watching brief was of 88 test-pits measuring 2.5 m by 1 m, and identified a number of features including pits, linear features, and possible post-holes (AOC 2023).
- Watching brief by GUARD Archaeology in 2025 to monitor a second phase of ground investigations for areas no covered during the initial ground investigation works. The watching brief was of 66 test-pits measuring 3 m by 1.8 m, and identified a number of potential archaeological features including postholes and pits (GUARD 2025).

3.6 ARCHAEOLOGICAL POTENTIAL

3.6.1. The Site has a high potential to contain archaeological remains from the prehistoric and post-medieval period. This is due to the presence of heritage assets dating from these periods within the Site, which includes the prehistoric cairn, sub-surface remains, and post-medieval buildings. There is a low potential for medieval remains to be present within the Site. Any medieval remains located within the Site are anticipated to relate to agricultural activities.

3.6.2. Modern development in the form of an electrical overhead line and the construction of the SSE power distribution Site over the old Fanellan farmstead will have truncated any archaeological remains at the affected areas. Archaeological remains, if present, may survive below plough depth where there has been no modern development.

4 AIMS AND OBJECTIVES

4.1 AIMS

4.1.1. The aim of the archaeological evaluation is to determine the presence, nature, date, and extent of any archaeological remains that might be present within the areas of unknown archaeological potential within the Site. This is for the purposes of informing an appropriate mitigation strategy for any further significant archaeological remains. If the trial trenching reveals little of archaeological significance, then no further work may be necessary.

4.1.2. The aim of the archaeological mitigation is to preserve by record the surviving portions of known archaeological features within nine specific areas of the Site (Areas A-I, Figure 3); carry out a programme of post-excavation assessment; and disseminate the results. These areas were determined by demarcating a 10m buffer (in all directions) surrounding archaeological features recorded during previous archaeological investigations for an overhead line pylon in the area (Area A) and the ground investigation works for this project (Areas B-I).

4.2 OBJECTIVES

4.2.1. The specific objectives of archaeological evaluation are:

- To establish the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within the trial trenching areas;
- To establish the location, character, extent, quality, preservation, and date of archaeological remains that may be present within the accessible areas; and
- To assess the significance of any archaeological remains in a local, regional, national, or international context as appropriate.

4.2.2. The specific objectives of the archaeological mitigation excavations are:

- to ascertain the extent and character of those archaeological deposits associated with the previous evaluation results;
- to determine the extent, condition, nature, character, date, and significance of any hitherto previously unrecorded archaeological remains encountered;
- to establish the nature of the activity of any hitherto previously unrecorded archaeological remains;
- to recover any environmental or ecofactual evidence from archaeological features and to ascertain the potential for any such preservation;
- to identify any artefacts relating to the occupation or use of any hitherto previously unrecorded archaeological remains; and,
- to provide further information on the archaeology of the Highlands through any archaeological remains encountered.

5 METHODOLOGY

5.1 INTRODUCTION

5.1.1. As stated previously, the total area of the Site is 222 ha, while the area of development, including temporary works areas and compounds is approximately 90 ha. It has been assumed that only the area of development, and temporary works areas requiring topsoil stripping, will require archaeological works, with the remaining areas within the Site being used for non-construction purposes, such as Biodiversity Net Gain activities, with minimal disturbance to topsoil and no disturbance to the underlying geological horizons. All temporary works areas are currently assumed to require topsoil stripping but this will be confirmed by the Principal Contractor when assessing each area.

5.1.2. The fieldwork methodology will conform to best professional practice as summarised in the appropriate CIfA *Standard for archaeological field evaluation (2023a)* and *Standard for archaeological excavation (2023b).*

5.2 ARCHAEOLOGICAL EVALUATION METHODOLOGY

5.2.1. The area of development was reviewed for non-archaeological constraints, with the following areas recommended for omission from the archaeological evaluation:

- existing roads, buildings, and areas of hard standing;
- a 15m buffer around existing utilities, excluding the Beauly to Denny 400kV OHL;
- ecological constraints, such as badger setts (30m buffer);
- areas of mature woodland and thick vegetation; and
- areas of steep topography – slopes greater than 25 degrees.

5.2.2. Following consultation with HCHET, the percentage sample of trial trenches was agreed at 6% of the available area of development (85.6 ha). This provides a requirement to evaluate 51,360 m^2 of the available areas. The watching brief on the ground investigation test-pits conducted to date accounts for 576 m^2. Therefore, the archaeological evaluation will comprise the excavation of approximately 564 trial trenches measuring 50 m by 1.8 m, set out across the Site to target areas of unknown archaeological potential (see Figure 2). Trial trenches have been positioned based on topographic advantage, professional judgement, and available space. The archaeological fieldwork subcontractor will be provided with the shapefiles of the trench locations upon award of the contract for the works. The locations of all trenches shall be set out by the archaeological fieldwork subcontractor through instrument survey using a Global Navigation Satellite System (GNSS) or EDM, and the trench areas surveyed using a Cable Avoidance Tool (CAT).

5.2.3. In the event that physical obstacles, previously unknown utilities, or other factors prevent the excavation of a trench, the archaeological fieldwork subcontractor shall advise the Consultant immediately. The archaeological fieldwork contractor may propose changes to the archaeological trench layout, but where it is deemed necessary for a trial trench to be removed from the planned investigations, this change will require approval from the Consultant, who will liaise with HCHET.

MECHANICAL EXCAVATION

5.2.4. All mechanical excavation will be conducted under the direct and continuous supervision of a qualified and experienced archaeologist. Topsoil, subsoil, and any other overburden shall be

removed using a tracked 360º mechanical excavator fitted with a toothless ditching bucket. Hard surfaces, if present, shall be broken up by use of jackhammers or peckers if required. All such mechanical excavation shall be conducted with a minimum of one experienced archaeologist per mechanical excavator.

5.2.5. Topsoil will be segregated from any intermediate or subsoil deposits in separate spoil heaps, restricted to 2 m in height, and stored at least 1m from the edge of the trench. Mechanical excavation shall cease at the top of the underlying geology or the first archaeologically significant horizon, whichever is encountered first, or when the absence of any such horizon has been adequately demonstrated. Further use of mechanical excavation to better define, or fully expose an archaeological feature, or to remove part of an archaeological horizon, shall only be undertaken upon approval by the Consultant, and where the works are required to fulfil the objectives of the trial trenching programme.

5.2.6. Access to excavations within unstable ground or 1 m below existing ground levels will be restricted by the archaeological fieldwork subcontractor to prevent entry by site staff or other parties able to access the Site. Localised stepping of trench edges will be undertaken to allow safe inspection and investigation of deep deposits, sufficient to fulfil the objectives of the trial trenching. Trenches may be machine-excavated to depths greater than 1 m and inspected and recorded from the existing ground surface where no archaeological features are present.

5.2.7. Where topsoil and overburden deposits are encountered at depths greater than 2 m (e.g., areas of deep peat), and/or there is no option for stepping due to the instability of the trench sides, trenching shall be restricted to three test pits at either end of the proposed trench outline, and one in the centre. Test-pits will be of a sufficient size that will allow for safety and assessment of the archaeological potential of the area. Test pits will be numbered in relation to the current trench numbers: e.g., test pits along Trench 20 would be numbered 20.1, 20.2, and 20.3. The test pits will aim to investigate deep depositional sequences. Any such test pits will not be entered by site staff and will be backfilled immediately after excavation and recording.

HAND EXCAVATION

5.2.8. Where potential archaeological features are identified by trial trenching, a sufficient quantity will be excavated by hand to fulfil the objectives of the trial trenching. The quantity excavated will depend on the types of features present, the quantity of features within the area, and the presence or absence of artefactual material. The number of features to be investigated will be determined by the archaeological fieldwork subcontractor, in agreement with the Consultant and HCHET, with a minimum of 1 in 3 of all features identified within a trench investigated through excavation in this phase. The remaining features, and complex features not suited to excavation within the constraints of the trial trenches, will be recorded within archaeological mitigation phase of the archaeological investigations. This would typically apply to areas of complex, intercutting features such as structures with in-situ floor surfaces, kilns and other features that benefit from open area investigation and suffer when excavated during trial trench excavations.

5.2.9. The excavations of features within the trial trenches will determine their depth and form and will attempt to recover any potential artefactual and/ or environmental evidence suitable for dating. Discrete features such as pits or post holes, will be half-sectioned. Larger discrete features will be quarter-sectioned if this is deemed sufficient by the archaeological fieldwork subcontractor, and in agreement with the Consultant and HCHET, to fulfil the objectives of the trial trenching. Linear

features will have a minimum 1m wide slot, or up to 10% of the feature excavated, with all feature relationships defined and investigated to attempt a determination of the stratigraphic relationship. No features will be wholly excavated.

5.2.10. Spoil from the excavation of archaeological or other features during evaluation shall be stored with the subsoil spoil heap prior to backfilling. Backfilling of deposits will take place in reverse order of removal (i.e., subsoil then topsoil).

TRIAL TRENCH RECORDING

5.2.11. Upon immediate completion of mechanical excavation, all trenches will be recorded through sketch plans within the pro forma trench records and recording of the stratigraphic sequence of each trench will be conducted, noting depths of deposits at a minimum of three locations along its length. Each trench will be photographed at 10m intervals along its length, from both ends of the trench, to provide visibility of the subsoil for inclusion with the archive. Trench photography shall be conducted using a digital camera with minimum resolution of eight megapixels, or on a tablet computer.

5.2.12. The stratigraphy of each trench shall be fully recorded through instrument survey of at least one long section of each trench, and the basal extents of the trench and all archaeological features (including field drains, furrows, and other less significant features) will be located through instrument survey using a Global Navigation Satellite System (GNSS) or EDM. A representative 1m sample section of each trench will also be cleaned, photographed, and sketched to scale, with all written information entered onto pro-forma trench record sheets.

5.3 ARCHAEOLOGICAL MITIGATION METHODOLOGY

5.3.1. The nine areas of archaeological mitigation are as follows:

Mitigation Area	Area (m2)	Rationale
A	1,480m^2	To mitigate the impact on the remains of a circular structure (A18) comprising an outer ditch, an inner ring of postholes, and associated features including a central hearth and two pits containing a large amount of burnt bone that were identified during the work conducted within the extents of a tower compound (BF7) as part of the Beauly to Denny 400kV overhead line development programme (Northlight Heritage, 2024). The circumference of the ring ditch has been extrapolated from the portion excavated during these investigations and the mitigation area extended 10m from the maximum anticipated dimensions (Figure 4).
B	400m^2	To mitigate the impact on possible posthole (A20) recorded during the ground investigation in support of the proposed development. The mitigation area extends 10 m from the posthole location (Figure 3).
C	400m^2	To mitigate the impact on two possible pits/postholes (A19) recorded during the ground investigation in support of the proposed development. The mitigation area extends 10 m from the pits/posthole location (Figure 3).
D	400m^2	To mitigate the impact on a possible pit (A22) recorded during the ground investigation in support of the proposed development. The mitigation area extends 10 m from the pit location (Figure 3).

E	400m^2	To mitigate the impact on a possible posthole (A21) recorded during the ground investigation in support of the proposed development. The mitigation area extends 10 m from the posthole location (Figure 3).
F	400m^2	To mitigate the impact on a possible pit (241003) recorded during the ground investigation in support of the proposed development. The mitigation area extends 10 m from the pit location (Figure 3).
G	400m^2	To mitigate the impact on a possible posthole (290003) recorded during the ground investigation in support of the proposed development. The mitigation area extends 10 m from the pit location (Figure 3).
H	400m^2	To mitigate the impact on a possible posthole (292003) recorded during the ground investigation in support of the proposed development. The mitigation area extends 10 m from the posthole location (Figure 3).
I	400m^2	To mitigate the impact on a possible pit (FO201005) recorded during the ground investigation in support of the proposed development. The mitigation area extends 10 m from the pit location (Figure 3).

ARCHAEOLOGICAL STRIP AND MAP

5.3.2. All mechanical excavation will be conducted under the direct and continuous supervision of a qualified and experienced archaeologist. Topsoil, subsoil, and any other overburden shall be removed using a tracked 360º mechanical excavator fitted with a toothless ditching bucket. All such mechanical excavation shall be conducted with a minimum of one experienced archaeologist per mechanical excavator. Where underground or overhead utilities are located within the strip and map areas, the archaeological fieldwork subcontractor will take all necessary precautions to accurately locate them prior to topsoil stripping. This will include consultation with the relevant utility providers alongside provision of height restricted excavators for overhead cables, and test-pitting by hand to locate any underground pipes or cables. No topsoil stripping will take place within 1m of underground utilities, once they are accurately located, or greater distances if required by the relevant utility providers.

5.3.3. Topsoil will be segregated from any intermediate or subsoil deposits in separate spoil heaps, restricted to 2m in height, and stored at a safe distance from the edge of the strip and map area. Mechanical excavation shall cease at the top of the underlying geological deposits or the first archaeologically significant horizon, whichever is encountered first.

5.3.4. Care will be taken for the machining not to have an impact any archaeological remains buried at shallow depths. No machinery (or vehicles) will cross stripped areas until they have been given the ‘all-clear’ by the on-site archaeologist, especially in wet weather conditions, as rutting and compaction by plant and vehicles may have an impact on archaeological remains. All earthmoving and other vehicles will avoid travelling on the freshly stripped subsoil and areas of archaeological investigation. Care should be taken not to damage archaeological deposits through excessive use of mechanical excavation.

5.3.5. Any areas containing significant concentrations of features, and sufficient areas around isolated features, will be cleaned by hand to allow for quantification of the features present. If vulnerable features are revealed (such as graves and/or cremations) special consideration shall be taken, and

materials such as Terram or other geotextile membrane may be used to protect remains until recording and/or removal can take place.

5.3.6. Where significant archaeological features are noted at the edge of the strip and map area, the archaeological fieldwork subcontractor shall contact the Consultant. If it is agreed with HCHET that it is appropriate to extend the strip beyond the original area, a proposal for a variation to the works will be produced.

5.3.7. Upon the cessation of stripping and hand cleaning of all or part of a strip and map area, a plan of all visible features shall be prepared by instrument survey and tied into the Ordnance Survey National Grid. The survey data shall be used to produce an illustration of the features present along with annotations providing a preliminary archaeological interpretation. This illustration shall be submitted to the Consultant along with an addendum to this WSI, written by the archaeological fieldwork subcontractor, for approval by the Consultant, the Client, and HCHET, detailing the methodology proposed for the excavations of the archaeological remains, and appropriate research questions posed in relation to the excavations.

HAND EXCAVATION

5.3.8. The excavations of features will determine their depth and form and will attempt to recover any potential artefactual and/ or environmental evidence. Spoil from the excavation of archaeological or other features shall be stored with the subsoil spoil heap.

5.3.9. The following general principles will be adhered to for the excavation of archaeological features:

- All archaeological deposits will be fully removed after suitable recording to ensure they do not cover any other archaeological features;
- All pits will have 50% excavated through half sections or two quarter sections, depending on their size, for recording purposes. A representative sample of the sterile pit features within the excavation area will be fully excavated, and any pits containing significant artefacts will be fully excavated;
- All structural features including post holes, ring ditches, ring grooves or roundhouse gullies will be fully excavated;
- All hearths will be fully excavated stratigraphically;
- All burials or burial monuments will be fully excavated stratigraphically, with full sampling of deposits containing human remains;
- At least 20% of all linear features will be excavated that relate to settlement activities, or form an enclosure, with no individual section being less than 1m wide;
- At least 10% of linear features will be excavated that relate to agricultural activities, with no individual section being less than 1m wide;
- 100% of linear features will be excavated that relate to funerary activities; and
- All intersections between features and all terminals of linear features will be investigated.

5.4 RECORDING METHODOLOGY

5.4.1. All features and deposits shall be fully recorded according to the CIfA Standard (Chartered institute for archaeology 2023a) and Universal guidance (2023b)for archaeological field evaluation .Standard archaeological recording methods comprise a written/digital record (both description and interpretation with annotated sketches where appropriate), instrument survey, supplementary scaled drawings both in plan and in section, photographic record, and retrieval of archaeological finds and

samples. All contexts, small finds and environmental samples will be given unique reference numbers.

WRITTEN/DIGITAL RECORDING

5.4.2. All written or digital records will be created on pro forma record sheets giving details of location, composition, shape, dimensions, relationships, finds, samples, cross-references to other elements of the record and other relevant contexts, etc.

INSTRUMENT SURVEY AND DRAWINGS

5.4.3. All features and deposits shall be recorded through instrument survey using a Global Navigation Satellite System (GNSS) or EDM, tied into the Ordnance Survey National Grid. All features and deposits shall be recorded through measured drawing on drafting film, consisting of at least one plan, at 1:20 scale, and at least one section drawing, at 1:10 scale. During or immediately after the completion of hand excavation, the overall Site survey shall be updated to show all features identified and all excavated sections. All hand-drawn plans and sections shall show at least two reference points which shall be tied-in by instrument survey and whose coordinates shall be marked on the drawing. All hand-drawn plans and sections shall show spot-heights related to the Ordnance Survey Datum and accurate to two decimal places.

PHOTOGRAPHIC RECORDING

5.4.4. All excavated features and deposits shall be recorded digitally, using a high-resolution digital camera with a minimum resolution of 24 megapixels. Photographs taken for recording purposes are to include a scale and, where appropriate, an information board recording the relevant context number(s) and a northing arrow.

5.4.5. Additional illustrative photographs, aerial surveys, video diaries, and other digital recording that will enable better public engagement shall be taken when deemed appropriate by the archaeological fieldwork subcontractor, and in agreement with the Consultant, the Client and HCHET. The release of any additional recording for public engagement purposes will only be conducted upon the agreement and instruction of the Consultant, HCHET, and the Client.

ADDITIONAL RECORDING

5.4.6. Complex features such as cairns, kilns, burials, burnt mounds, etc., discovered during the archaeological works, will be recorded using the most appropriate method as set out in the addendums to the APD, and in agreement with the Consultant and HCHET, including combinations of hand drawing, laser scanning, photogrammetry, photographic rectification etc.

ENVIRONMENTAL SAMPLING

5.4.7. Deposits identified as archaeologically significant will be sampled for environmental material, scientific dating, the recovery of palaeoenvironmental evidence, and artefacts. Before, during and after the completion of site works, the archaeological fieldwork subcontractor shall obtain specialist advice on the selection of deposits to be sampled, the nature of the samples to be collected and the methods of processing/ assessment to be applied. Deposits shall be selected for sampling in line with the following guidelines:

- basal/ primary fills of at least 50% of all cut features;

- all deposits in 50% of all positive features i.e., anthropogenic soil deposits not contained within a cut feature;
- all buried soils/ old ground surfaces;
- at least 25% of all other anthropogenic soil deposits (secondary fills etc.), including all deposits containing any visible charcoal or other carbonised material and all deposits considered to be of particular interest on the basis of artefactual content or other characteristics, or which are considered to be of key interest in the interpretation of the site for any reason.
- Samples shall not be taken from the intersection of features.

5.4.8. Subject to variations agreed with the Consultant and HCHET, samples to be collected shall include:

- a bulk sample of 30 litres (or, if the volume of the deposit is less than 30 litres, the whole deposit), from all sampled deposits;
- a soil monolith shall be collected, using a Kubiena tin or similar equipment, through all buried soils/old ground surfaces. This monolith shall include the whole relevant soil profile as advised by the relevant specialist, including part of the overlying and underlying deposits;
- where deposits of particular potential interest are identified, and on the advice of the relevant specialist, additional special samples shall be collected. These could include additional monoliths, or other small samples for other special analyses, such as magnetic susceptibility, phosphates, and loss on ignition, other geochemical analyses, pollen identification or other as appropriate. Where waterlogged deposits are identified, more intensive bulk sampling shall be undertaken subject to the agreement of the Consultant and HCHET, and on the advice of the relevant specialist.

5.4.9. Between 50% and 100% of bulk samples shall be selected for processing on the advice of the Consultant and HCHET.

5.4.10. Samples shall be processed and assessed under the supervision of the archaeological contractor's paleoenvironmental specialist in line with the CIfA Standard and guidance for the collection, documentation, conservation, and research of archaeological materials (2020a), and in line with the following guidelines:

- bulk samples selected for processing shall be wet sieved/floated and washed over a mesh size of 500µm for the recovery of palaeobotanical and other organic remains, and re-floated to maximise recovery;
- non-organic residues shall be washed through a nest of sieves of 10mm, 5mm, 2mm and 1mm mesh to maximise finds recovery;
- both organic and non-organic residues shall be dried under controlled conditions;
- the dried inorganic fractions shall be sorted for small finds or any non-buoyant palaeoenvironmental remains, and scanned with a magnet to pick up ferrous debris such as hammer-scale;
- the dried organic fractions shall be sorted under a light microscope to identify the range of species or other material on a presence/absence basis, the degree of preservation of the bio-archaeological material and the rough proportions of different categories of material present;
- in the event that waterlogged deposits are identified and sampled, further processing shall be undertaken as appropriate and agreed, including paraffin flotation to recover insect remains. Any such remains shall be scanned to identify and assess their potential;
- selection of other types of sample for processing (such as monoliths and other special samples) and the methods to be used for processing and assessment shall be undertaken on

the advice of the relevant specialist and shall be agreed with the Consultant and HCHET before implementation.

ARCHAEOLOGICAL FINDS

5.4.11. All recovery, retention, and treatment of finds and samples will be carried out mindful of the overall purpose of the exercise, i.e. to evaluate for further decision making, as expressed in CIfA (2023a-b). To this end, all artefactual and ecofactual material will be reviewed on Site for its capability to inform the archaeological monitoring and recording report.

5.4.12. Identified archaeological finds and artefacts will be carefully recovered by hand and bagged or boxed according to the type of artefact (i.e. pottery, ceramic building material/CBM, bone, worked flint, metal) and the archaeological context from which they came, with a label indicating the site code, find type and context reference number. Particularly notable artefacts will be recorded as a 'registered' find and recorded three dimensionally with Ordnance Datum levels.

5.4.13. Initial conservation and storage will be in a proper manner and to standards set out in *First Aid for Finds* (Leigh *et al* 1998) and the CIfA 'Standard and Guidance for the collection, documentation, conservation and research of archaeological materials' (CIfA 2014a). If necessary, an appropriately qualified and experienced archaeological conservator will be appointed to advise and assist in the lifting of fragile finds of significance and or value, and to arrange for the X-raying and investigative conservation of objects as may be necessary.

5.4.14. Certain classes of bulk material, i.e. post-medieval pottery and building material, may be discarded if there is a considerable quantity (more than a single standard archive box of c. 0.016m²), after recording with a representative sample.

5.4.15. All pottery, bone and worked flint will be washed and then marked in accordance with the project archive repository guidelines. Most building material and burnt flint (not including significant diagnostic material) will be identified, counted, weighed, and discarded. Samples of this material will be retained as appropriate. The finds identification and specialist work will be undertaken by relevant finds specialists to assess the date range of the assemblage with particular reference to region-specific type series for identification and dating, where available. This evidence will be used to characterise the site, and to establish the potential for all categories of find, should further archaeological work be necessary. Records of artefact assemblages will clearly state how they were recovered, sub-sampled and processed. Consideration will be given for donation of appropriate artefacts to type series reference collections.

5.4.16. All finds of gold and silver, or other objects definable as 'treasure' under the Treasure Trove in Scotland A Code of Practice July 2014 (as revised to 13 January 2016), will be removed to a safe place and reported to the Treasure Trove Unit according to the procedures of the Treasure Trove in Scotland A Code of Practice July 2014 (as revised to 13 January 2016). Where removal cannot be affected on the same working day as the discovery suitable security measures will be taken to protect the finds from theft.

5.4.17. Details of the archaeological contractor's facilities for artefact storage, conservation and assessment will be provided, including arrangements for immediate conservation of artefacts, where required.

HUMAN REMAINS

5.4.18. In the event of human remains being discovered, their presence will be reported to the Consultant, who in turn shall contact the Client and HCHET. The archaeological fieldwork subcontractor will then

inform Police Scotland of the discovery and arrange for any necessary Site visits to be made. After confirmation from the procurator fiscal that they are satisfied the remains are historical in origin, they shall be left in situ, covered, and protected. Where this is not feasible or practicable, the excavation and removal of the human remains shall only be undertaken following the approval of HCHET and in conformance with the methodology set out within the archaeological mitigation methodology set out below. Any excavation of human remains shall be carried out in accordance with the guidance provided by IAI Technical Paper for Archaeologists: The Treatment of Human Remains) and CIfA Technical Paper No. 7 Guidelines to the Standards for Recording Human Remains (Mckinley & Brickley 2004).

5.5 REINSTATEMENT REQUIREMENTS

ARCHAEOLOGICAL EVALUATION TRIAL TRENCHES

5.5.1. Prior to backfilling of trial trenches, all trench records and photographs should be completed by the archaeological fieldwork subcontractor and be available for review by the Consultant and HCHET is requested. No backfilling of trenches containing archaeological features shall be undertaken without the verbal or written instruction of the Consultant. Trenches with no archaeological features can be backfilled once the recording requirements set out above have been met.

5.5.2. Where trenches are backfilled without recording requirements having been met, or where archaeological features have been discovered and the trench was not approved for backfilling by the Consultant, the archaeological contractor may be required to re-open the trench, if deemed necessary, with all costs incurred for re-opening the responsibility of the archaeological fieldwork subcontractor.

5.5.3. Before reinstatement, any archaeological features will be covered with a geotextile, and any standing water shall be removed from trenches using appropriate means, and in accordance with any environmental considerations. The materials removed from the trial trenches shall be replaced in reverse order of removal and suitably compacted by the mechanical excavator prior to placement of the next layer, in order to restore the ground surface to as close as possible to the original landform. Topsoil and stored turves shall be replaced in the area from which they were removed. The soil shall be graded to a smooth, even profile, free from local mounds and depressions.

5.5.4. The archaeological fieldwork subcontractor will attempt to minimise the number of vehicle and plant movements on soft surfaces, particularly in wet conditions, and shall make every effort to minimise damage and disturbance. Where significant damage does occur, the mechanical excavator will be required to reinstate the damaged areas and grade them to a smooth, even profile free from local mounds and depressions.

5.5.5. Any field drains disturbed or damaged within the trial trenches shall have their positions, depths or pipe diameters, types of construction, direction of flow and alignment of drain noted, with a copy of these records given to the Consultant. These drains will be reinstated or repaired, and the replacement pipes shall be of the same internal diameter as the sections of drain which they replace.

5.5.6. Any land drains disturbed or damaged that are blocked or otherwise defective should still be recorded, and the Consultant notified of its condition, with recommendations for repair options if thought necessary.

ARCHAEOLOGICAL STRIP AND MAP STRIP AND MAP AREAS

5.5.7. Backfilling of the archaeological mitigation excavation areas, or construction within these areas, will only take place upon agreement with the Consultant and HCHET that all the objectives of this WSI and any WSI addendums have been achieved. No backfilling shall be undertaken without the written instruction of the Consultant, following approval by HCHET.

5.5.8. Before reinstatement, any standing water shall be removed from excavated areas using appropriate means, and in accordance with any environmental requirements. The soils removed shall be replaced in reverse order of removal and suitably compacted prior to placement of the next layer, in order to restore the ground surface to as close as possible to the original landform. Topsoil and stored turves shall be replaced in the area from which they were removed. The soil shall be graded to a smooth, even profile, free from local mounds and depressions.

5.5.9. The archaeological fieldwork subcontractor will attempt to minimise the number of vehicle and plant movements on soft surfaces, particularly in wet conditions, and shall make every effort to minimise damage and disturbance. Where significant damage does occur, the mechanical excavator will be required to reinstate the damaged areas and grade them to a smooth, even profile free from local mounds and depressions.

6 REPORTING, DISSEMINATION & ARCHIVING

6.1 REPORTING

6.1.1. A fully illustrated archaeological evaluation and excavation report will be made available to the client and HCHET within 10 weeks of the completion of fieldwork. In accordance with the Highland Council Reporting Standards for Archaeological Work (2023), CIfA *Standard for archaeological field evaluation* (CIfA 2023a), and CIfA Standard for archaeological excavation (CIfA 2023b), this will include as a minimum, the following:

- *Non-technical summary*. One-page summary outlining project background and circumstance, the principal reason for the work and when it was undertaken and by whom, its objectives, main results, and where appropriate, recommendations.
- *Introduction*. This will set out the circumstances of the project, including background and the reason for the work and will include the aims and specific research objectives reflected or reiterated in this APD.
- *Archaeological and historical background*. A brief summary with the Site description (including size, geology and topography, location) and background. In most cases this will be derived from the previous assessment and recent HER data.
- *Fieldwork methodology*. The methods used. This will include the detail of any variation to the agreed APD and the reasons for such.
- *Results*. This will present a series of summary objective statements, organised clearly in relation to the methods used, and describing both structural data and associated finds and/or environmental data recovered. Descriptive material will be clearly separated from interpretative statements. Technical terminology (including dating or period references) will be explained.
- *Discussion and Conclusions.* Summary and interpretation the results and their likely significance. Other elements might include a confidence rating on the results and limitations (e.g. weather or problems of access). Recommendations on further work may also be included.
- *Discussion of Impact and Recommendations.* The report will make recommendations for further work where appropriate. This may include further phases of fieldwork, mitigation or an outline of post-excavation work required to bring the project to completion. The report must make explicit that any further phases of work agreed with HET must be carried out to in order to complete the requirements of a planning condition. The report will set out the means by which the developer and/or their consulting archaeological adviser/contractor intends to fulfil their obligations with regard to public benefit as required under section 7 of NPF4.
- *References and bibliography.* A list of all sources used. The final destination of the archive (records and finds) will be noted in the report along with the Site code assigned by the relevant project archive repository.
- *Appendices*. Essential technical and supporting detail, including for example lists of artefacts and contexts or details of measurements, gazetteers etc. Pottery reports will be expected to refer to the appropriate type series for Roman, medieval, and post-medieval pottery.
- *Illustrations and Photographs*. Location plan, plans and sections at appropriate scales showing location and position of trenches dug and features located and selective photography. Section drawing will include heights Ordnance Datum (OD); plans should include OD spot heights for all principal strata and features.

6.2 POST-EXCAVATION RESEARCH DESIGN

6.2.1. A Post-Excavation Research Design will also be produced, that will set out the updated research objectives for further analysis and this may include amendments or additions to the original research aims.

6.2.2. The Consultant will review and technically assure all documents before they are issued. The reports will form part of the project archive.

6.3 PUBLICATION AND DISSEMINATION

6.3.1. Should significant archaeological remains be encountered, the results of the investigation will need to be published and disseminated at a level that is appropriate to the significance of the remains recorded.

6.3.2. The HER will be provided with a digital copy of the report in an appropriate ISO 32000 compliant format (such as .PDF) on the understanding that it will be made available as a public document after an appropriate period (not exceeding 6 months from the completion of fieldwork); a further digital copy is to be sent to the client.

6.3.3. Further publication may range from, a ‘grey literature’ archaeological report, to a short journal article in local and period-based archaeological journals as appropriate (in the event that the archaeological monitoring and recording resulted in further excavation), and/or digital publication.

6.3.4. In all cases a short summary of the results of the work will be submitted to the HER, via a standard OASIS archaeological report form.

6.4 ARCHIVING

6.4.1. The Site archive will contain all the data collected during the fieldwork, including records and finds, and all reports. The archaeological fieldwork subcontractor will ensure that the archive is quantified, ordered, indexed and internally consistent, and adequate resources will be provided to ensure that all records are checked. Archive consolidation will be undertaken immediately following the conclusion of fieldwork, and all archiving shall follow CIfA standards and guidance (CIfA 2020b).

6.4.2. The arrangement for the final disposal of any artefacts discovered during the archaeological work, will be deposited in keeping with Scottish legal requirements as set out within Scottish Government guidance. All assemblages recovered from archaeological works must be reported to the Scottish Archaeological Finds Allocation Panel through its secretariat, the Treasure Trove Unit.

6.4.3. The site archive will be deposited with Historic Environment Scotland within 6 months of issuing the evaluation report or final publication, whichever comes last.

7 PROGRAMME, STAFFING AND ATTENDANCES

7.1 INITIAL TIMETABLE AND STAFFING

7.1.1. The groundworks and associated archaeological monitoring and recording are anticipated to start in early 2025, with a duration of approximately 12 weeks, assuming favourable weather and ground conditions. HCHET will be updated with the exact date within one week of commencement.

7.1.2. The archaeological fieldwork subcontractor will provide a programme for the archaeological monitoring to the Consultant, which will include detailing of staffing requirements.

7.1.3. If significant archaeological remains are revealed which cannot be satisfactorily investigated and recorded in the period initially defined, there should be sufficient flexibility within the construction programme and resources to enable the remains in question to be investigated to the satisfaction of the Consultant, in consultation with HCHET.

7.2 PROJECT TEAM

7.2.1. The work will be undertaken by an archaeological fieldwork subcontractor that is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA) and approved by the Consultant.

7.2.2. CVs of the key members of staff will be made available upon request.

7.3 PROGRESS REPORTS

7.3.1. The Consultant will provide the Client and HCHET, with a weekly summary progress memo (1–2 pages). This will:

- Summarise the work undertaken during the week and the key findings.
- Report on Site attendance, where appropriate.
- Confirm that the work will be completed to programme and identify any potential issues to programme.
- Identify any health and safety issues (including near miss).

8 HEALTH AND SAFETY

8.1 INTRODUCTION

8.1.1. The work will not be carried out during construction activities and is therefore not subject to Construction (Design and Management) regulations (CDM 2015). However, there will be a Principal Contractor in control of the Site, and they will take overall responsibility for health and safety on Site.

8.1.2. Health and Safety will take priority over all other requirements. A conditional aspect of all archaeological work is both safe access to the area of work and a safe working environment. The project will be carried out in accordance with safe working practices.

8.1.3. The following sections outline the health and safety aspects of the Site work along with known constraints and maybe subject to change following consultation with the client, landowner, and the archaeological fieldwork subcontractor.

8.2 RISK ASSESSMENT AND METHODOLOGY STATEMENT (RAMS)

8.2.1. The archaeological fieldwork subcontractor will produce a site-specific Risk Assessment and Methodology Statement (RAMS) to cover the onsite fieldwork and will supply a copy of the company's Health and Safety Policy. These will be reviewed by the Consultant to ensure that the policy and measures are appropriate.

8.2.2. WSP UK Ltd is one of the largest engineering and environmental consultancies in the UK. Health and Safety is a priority and to this end we will ensure that the archaeological fieldwork subcontractor RAMS are in line with our cross-disciplinary industry standards:

- Clear, concise, and site-specific. Bespoke to the site, and without generic text for hazards that do not apply or mitigation that is not applicable;
- Tabulation of site-specific hazards, risk grading and mitigation measures;
- Site manager contact details provided, along with a deputy.
- Emergency action plan, with an address and route map to the closest Accident and Emergency.

8.2.3. The archaeological fieldwork subcontractor RAMS will be reviewed by an appropriately qualified and experienced member of staff (e.g. Project Manager), and must include the requirements of the Principal Contractor.

8.2.4. The RAMS will have been read, understood, and signed by all staff attending the site before any fieldwork commences.

8.3 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.3.1. Staff present on site will be required to wear the appropriate Personal Protective Equipment (PPE), as identified in the RAMS. As a minimum this will be protective shoes, high-visibility vest, gloves, protective glasses, and safety helmet. The requirement for any additional PPE will be identified in the RAMS.

8.4 WELFARE

8.4.1. The Principal Contractor will be responsible for providing and positioning suitable welfare facilities on site, including toilet facilities and clean water for washing. The Client will provide suitable access for these facilities.

8.5 SITE SECURITY

8.5.1. The Principal Contractor will be responsible for ensuring that the site welfare is secure with the use of Heras fencing, or such required to secure any areas during the archaeological fieldwork. As the land parcels that constitute the Site are securely fenced off from the public it is not deemed necessary for further security measures.

8.6 ACCESS

8.6.1. Site access from the relevant landowners will be arranged by the Client or their representative before site works commence. The Consultant and archaeological fieldwork subcontractor shall be notified if access arrangements change prior to or during the archaeological evaluation and excavation programme.

8.7 NON-ARCHAEOLOGICAL CONSTRAINTS

8.7.1. The Client will ensure that all information on services and utilities is provided to the archaeological fieldwork subcontractor and that provision is made for a UXO Engineer and Ground Contamination specialist to be present should this be necessary. It is the responsibility of the archaeological fieldwork subcontractor to verify the information provided by the Client.

8.7.2. All known utilities have been incorporated into the archaeological project design. Appropriate exclusion zones ('buffers') from these hazards have been determined using industry standard stand-off areas (Figure 2). These exclusion zones will be avoided by pedestrians and plant, and no excavation will take place within these under any circumstances. Any contingency deployed must only be undertaken after a thorough review of all constraints. Updated utility mapping has been provided by the Client prior to the development of the Trench Plan. A standard 15m stand-off zone ('buffer') has been applied to either side of all underground and overhead utilities, and trenches have been designed to avoid these areas, with the exception of the non-restricted areas under the 400kV Beauly to Denny OHL.

8.7.3. The proximity of the archaeological features within the Site make it necessary to evaluate and excavate under the OHL. Where the diversion works for this OHL are not completed prior to the archaeological works, the Client will be required to provide the necessary permissions to conduct these works, and appropriate measures shall be in put in place to reduce the potential for plant contacting the OHL. Figure 2: Trench Locations highlights areas under the existing OHL where works are able to take place due to the height of the line. The areas marked as light blue zones have no plant restrictions, and excavation and associated works can proceed without limitations. Red zones, where the clearance is insufficient, no plant and machinery is allowed, and archaeological works will need to be postponed until the OHL diversion has been completed. All works in and around the OHL will be conducted in compliance with HSE Guidance Note GS6: Avoiding danger from overhead power lines (HSE 2013). To maintain safety and regulatory compliance, risk assessments and method statements will be developed, ensuring all works under or near the OHL are managed with appropriate controls and precautions.

8.7.4. Any contingency trenches deployed must avoid these exclusion zones. Any plant crossing of these utilities should be kept to a minimum and subject to a point of work risk assessment when undertaken.

8.7.5. Each trench footprint will be scanned with a CAT and Genny by a suitably trained and competent person from the archaeological fieldwork subcontractor team prior to mechanical excavation to identify the presence of any previously unrecorded services.

8.7.6. If unforeseen engineering or health and safety issues should arise, or if extensive, significant deposits are found to survive in the area which cannot be satisfactorily excavated and recorded in the period defined by the archaeological fieldwork contractor, there should be sufficient flexibility within the programme and resources to enable the deposits in question to be excavated and recorded to the satisfaction of the Consultant and HCHET.

8.8 MONITORING VISITS

8.8.1. Where required, attendance on Site for monitoring of the archaeological fieldwork subcontractor by the Consultant will be carried out in accordance with WSP's Health and Safety protocols and RAMS.

9 MONITORING AND ASSURANCE

9.1 ON SITE FIELDWORK

9.1.1. The archaeological fieldwork subcontractor will ensure that the work is carried out in accordance with this APD, professional standards and the requirements of HCHET.

9.1.2. Any key decisions (such as excavation strategy or work scope changes) that are made on Site shall be noted and communicated by the archaeological fieldwork subcontractor to the Consultant. Should they be required, visits by HCHET will be arranged so that they are satisfied that the works are being conducted to proper professional standards.

9.2 POST-EXCAVATION DELIVERABLES

9.2.1. The archaeological fieldwork subcontractor will assure the deliverables conform to the format and scope set out within this APD, and that the reporting is accurate and clear and with sound conclusions, and that it has been produced to professional standards and the requirements of HCHET and CIfA. This will be the case whether the agreed deliverables take the form of an archaeological report for the HER, journal article or monograph.

9.2.2. The Consultant will liaise with the archaeological fieldwork subcontractor to ensure that the work is carried out to an agreed delivery programme.

Appendix A

REFERENCES

PUBLISHED AND DOCUMENTARY SOURCES

Archaeological Archive Forum, 2011, *Archaeological Archives: a guide to best practice in creation, compilation transfer and curation*

AOC Archaeology, 2023 Beauly Area 400 kV Substation GI Monitoring, Fanellan, Beauly. Archaeological Watching Brief Data Structure Report

CIfA [Chartered Institute for Archaeologists], 2022, *Code of Conduct*

CIfA [Chartered Institute for Archaeologists], 2014, *Standard and guidance for the collection, documentation, conservation, and research of archaeological materials*

CIfA [Chartered Institute for Archaeologists] Technical Paper No. 7 Guidelines to the Standards for Recording Human Remains, Brickley and Mckinley, 2004

CIfA [Chartered Institute for Archaeologists], 2014a (updated 2020), *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*, Reading

CIfA [Chartered Institute for Archaeologists], Dec 2014b, *Standards and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment*, Reading.

CIfA, 2023a, *Standard for archaeological field evaluation*, Reading

CIfA, 2023b, *Standard for archaeological excavation*, Reading

GUARD, 2025, *Fanellan 400 kV Substation and Converter Station, Fanellan, Beauly: Archaeological Monitoring and Recording*

Health and Safety Executive, 2013, *Guidance Note GS6: Avoiding danger from overhead lines*

Historic Environment Scotland, 2006, *The Treatment of Human Remains in Archaeology, Historic Environment Scotland Operational Policy Paper 5*Leigh D, Watkinson and Neal V 1998, *First Aid for Finds: Practical Guide for Archaeologists*

Highland Council Reporting Standards for Archaeological Work, 2023

Museum of London, 1994, *Archaeological Site Manual*

Museums and Galleries Commission, 1992, *Standards in the Museum Care of Archaeological Collections*.

Health and Safety Executive (HSE), 2015, The Construction (Design and Management) Regulations 2015 Northlight Heritage, 2014, *Data Structure Report, Beauly to Denny 400kV Overhead Transmission Line, Tower BF7.*

Society of Museum Archaeologists, 1995, *Towards an Accessible Archive. The Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland, Scotland, and Wales*.

Standing Conference of Archaeological Unit Managers, 1991 revised 1997 *Health and Safety in Field Archaeology, Manual*

United Kingdom Institute for Conservation, 1990, *Guidance for Archaeological Conservation Practice*

SSEN, 2024, *Fanellan Substation and Converter Station Environmental Impact Assessment Report Volume 2: Chapter 11 Archaeology and Cultural Heritage*

OTHER SOURCES

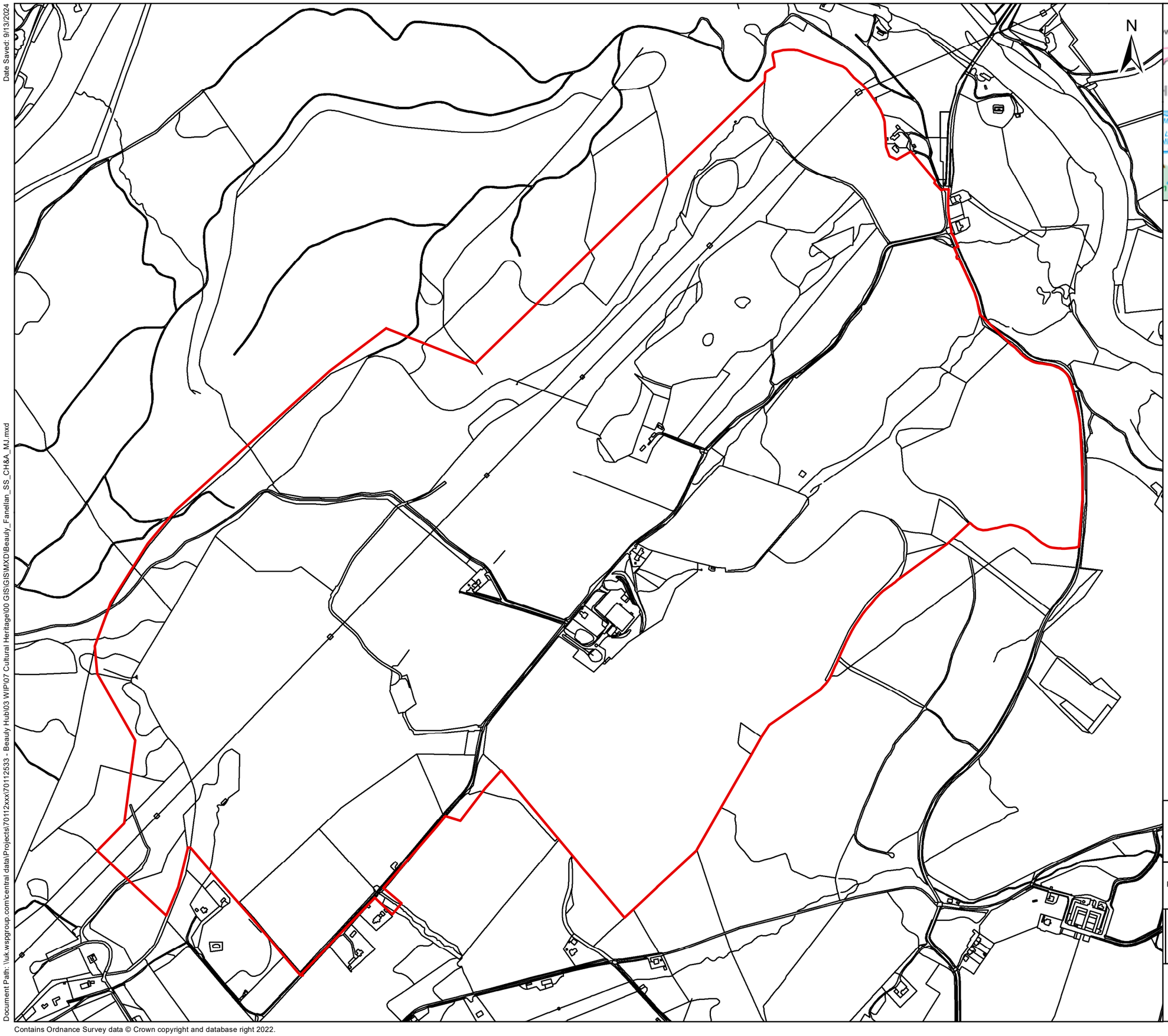
British Geological Survey

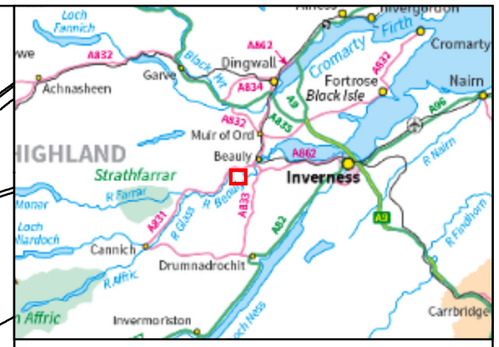
Historic Environment Scotland Designation Data

Appendix B

FIGURES

Date Saved: 9/13/2024





Legend

Fanellan Site Boundary

Service Layer Credits: Contains OS data © Crown Copyright and database right 2022

0 0.5km

Client: Scottish & Southern Electricity Networks TRANSMISSION

Project: Fanellan Substation and Convertor Station

Title: Figure 1: Site Location

Date: 9/13/2024 Scale: 1,000,000 @ A3

Drawn: MJ Checked: KP Approved: HM

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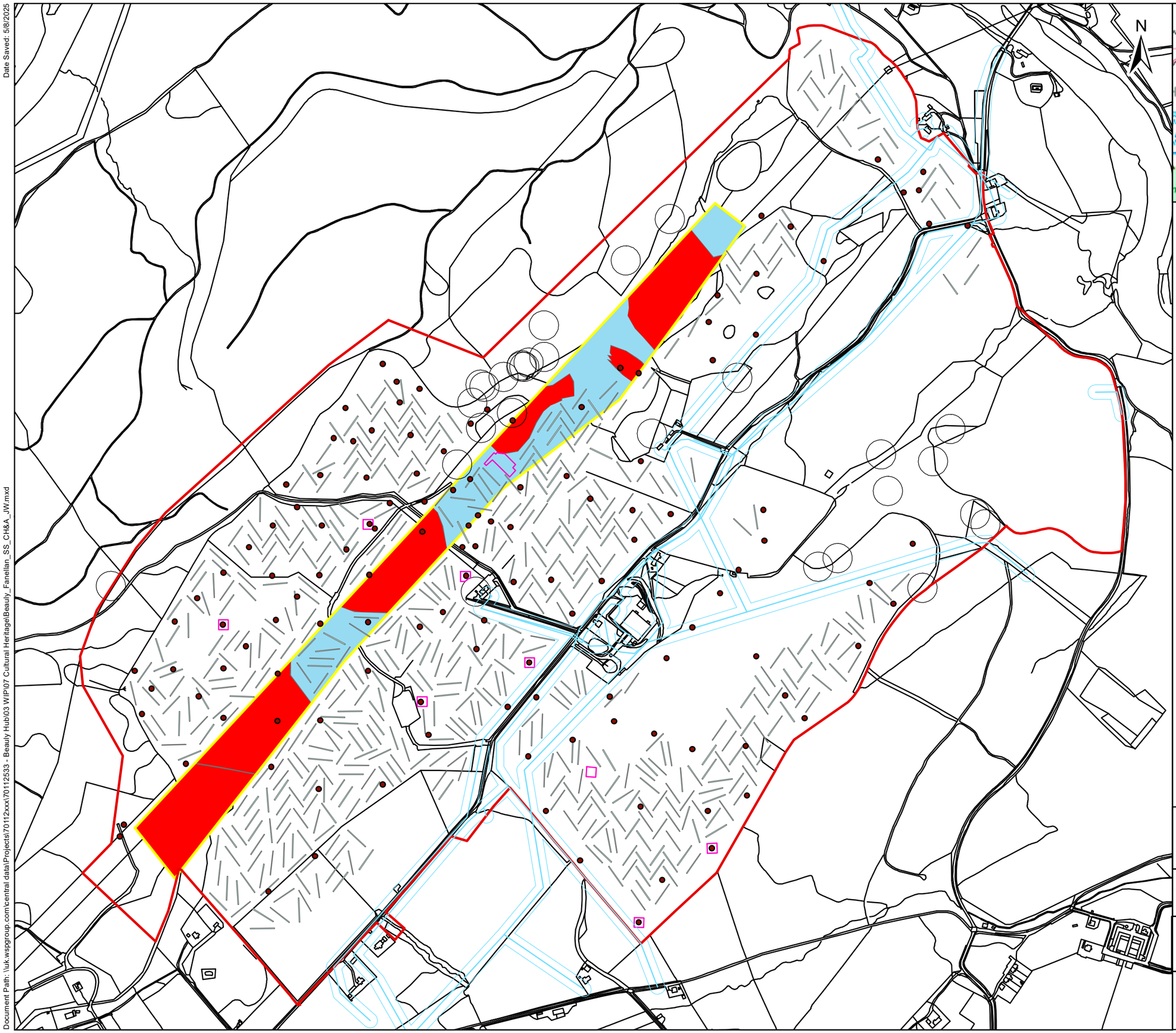

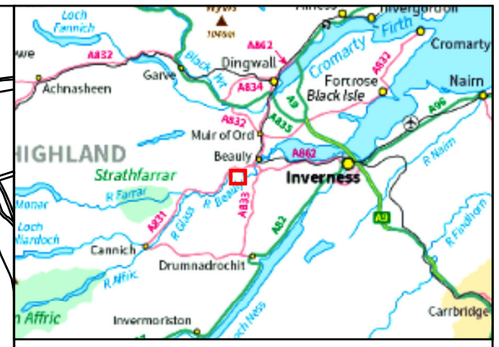

Legend

- Fanellan Site Boundary
- Ecology Buffer
- OHL Buffer Zone
- Restricted Area
- No Restrictions
- GI Test-Pit
- Trial trenches
- Mitigation Area

0 100 200 300Meters

Client: Scottish & Southern Electricity Networks TRANSMISSION

Project: Fanellan Substation and Convertor Station

Title: Figure 2: Trench Locations

Date: 5/8/2025 Scale: 7,500 @ A3

Drawn: JW Checked: KP Approved: HM

Date Saved: 5/8/2025

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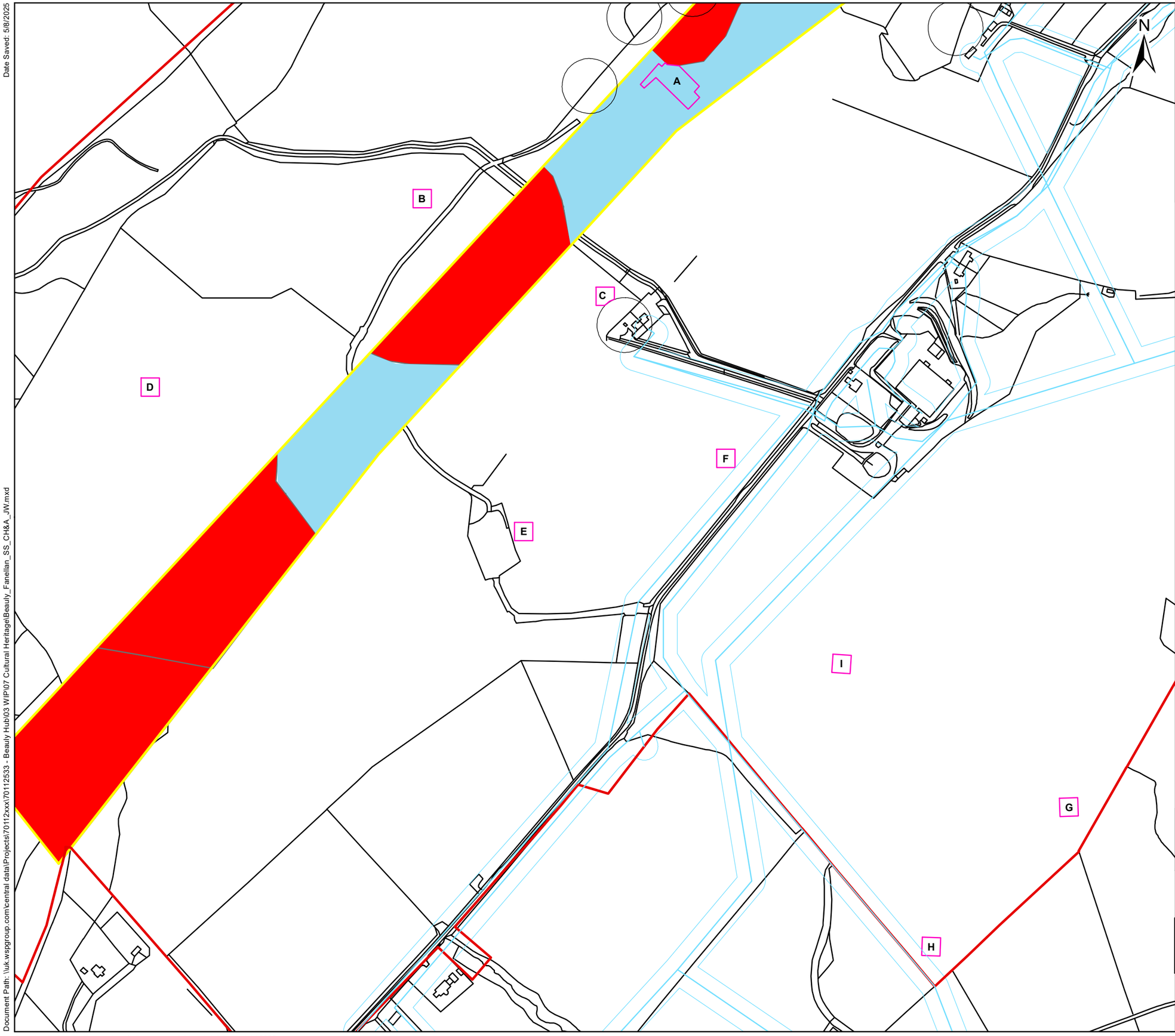
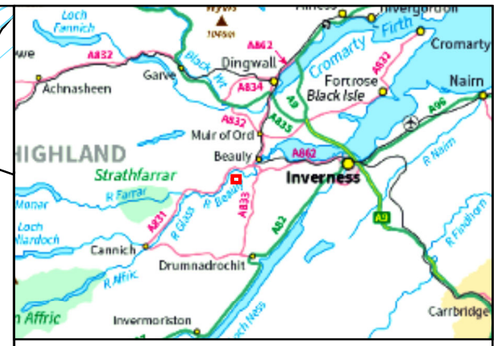
Date Saved: 5/8/2025





Legend

- Fanellan Site Boundary
- Ecology Buffer
- OHL Buffer Zone
- Restricted Area
- No Restrictions
- Mitigation Area

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0 100Meters

Client: Scottish & Southern Electricity Networks TRANSMISSION

Project: Fanellan Substation and Convertor Station

Title: Figure 3: Mitigation Area Locations

Date: 5/8/2025 Scale: 4,000 @ A3

Drawn: JW Checked: KP Approved: HM

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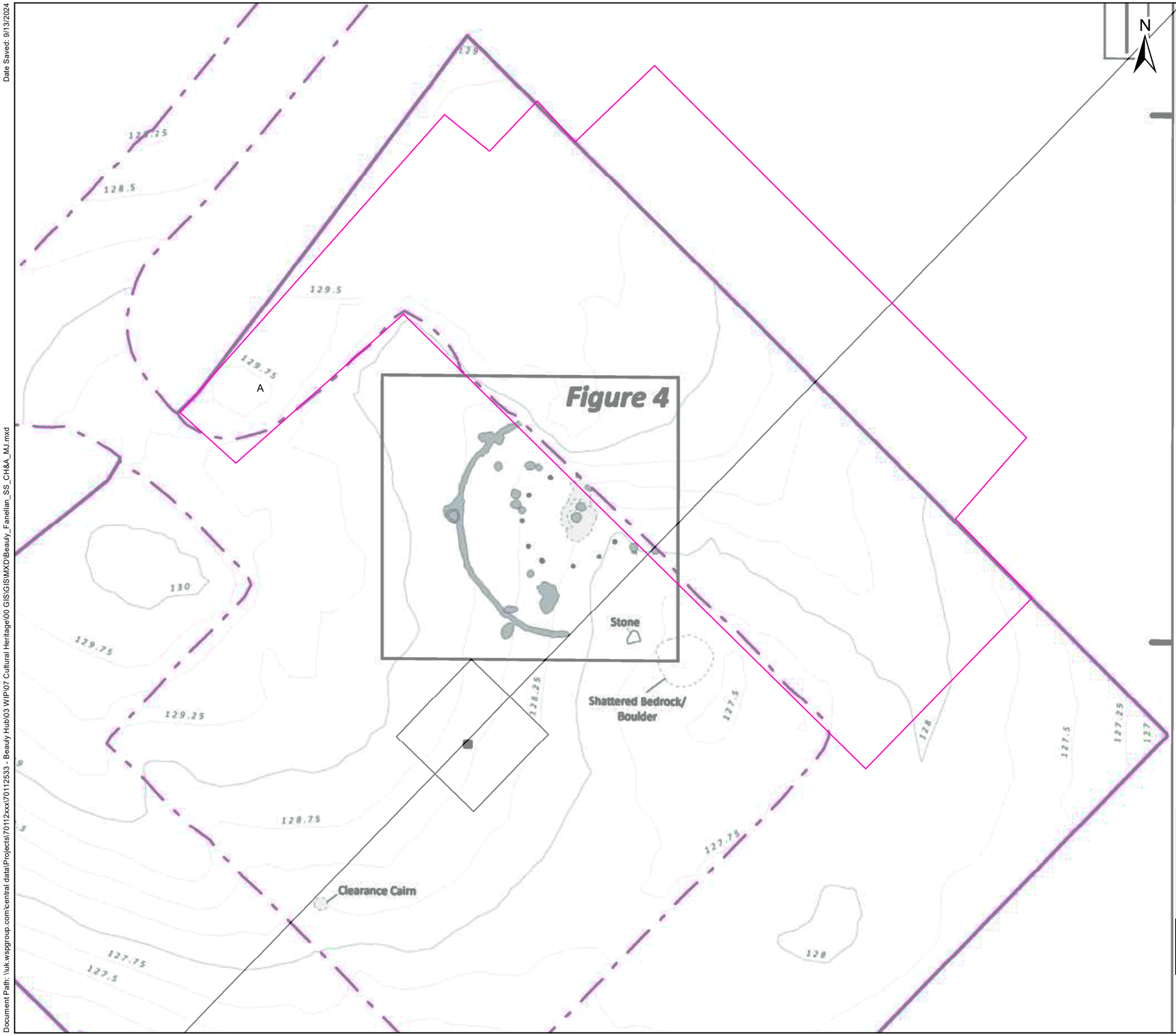

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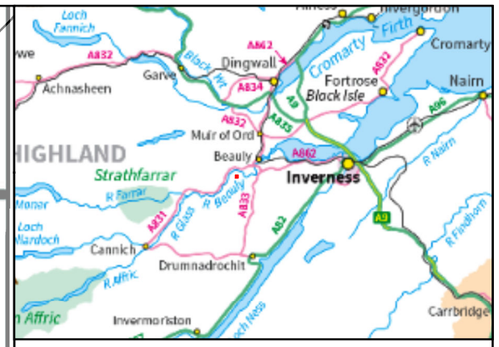

Legend

Mitigation Area

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0 150m

Client: Scottish & Southern Electricity Networks TRANSMISSION

Project: Fanellan Substation and Convertor Station

Title: Figure 4: Mitigation Area A Over Previous Investigation (Northlight Heritage, 2024)

Date: 9/13/2024 Scale: 278 @ A3

Drawn: MJ Checked: KP Approved: HM

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