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**Earlsburn North Wind Farm Grid
Connection, Stirling
Cultural Heritage Assessment
Report Number 3008**

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Figure 1: Cultural Heritage Constraints

1 EXECUTIVE SUMMARY

A total of fifty-six assets of cultural heritage interest have been identified within the study area. One asset is of regional importance (11), twenty-three assets are considered to be of local heritage importance. The remainder of the heritage assets are of lesser heritage importance. One heritage asset, a platform (54), is considered to be of unknown heritage importance as its baseline condition could not be fully established.

Potential direct impacts are predicted for thirty-six of these assets, of which four (5, 6, 30 and 31) are considered to be moderately significant. A direct impact of unknown significance has been predicted for site 54.

Mitigation measures have been proposed to offset the predicted direct impacts. All archaeological mitigation works presented below would be included in one or more Written Schemes of Investigation (WSIs) produced for the approval of the Stirling Council prior to the commencement of construction works. Mitigation measures include:

- site avoidance (where possible) through route design and micro-siting;
- demarcation of assets in close proximity to the grid connection route and construction work area;
- targeted archaeological monitoring of construction work (depending upon the construction methods to be used) and archaeological recording of assets which cannot be avoided;
- reinstatement of disturbed sections of site 50 (19th century field boundaries); and,
- provision of construction guidelines to be incorporated into toolbox talks for on-site contractors.

Sites to be avoided (and demarcated where necessary) include:

- along the grid connection route, sites 5, 6, 7b-c, 15a-c, 25, 30a-b, 33-35a, 43, 45, 49, 52-54 and 56;
- along route option A, sites 20, and 31;
- along route option B: none;
- along route option C, site 37.

Should it prove that any of these sites could not be avoided, further mitigation would be required to offset the direct impacts predicted.

Targeted archaeological monitoring/recording where the grid connection route or route options A-C cross over, or near to:

- along the grid connection route, sites 13, 15, 21, 30, 42, , 47, 48, 54, and area of rig and furrow (44) bordered by the turf bank 42;
- along route option A, sites 27, 31, and 32a;
- along route option B, sites 10d, 42, and area of rig and furrow (44) bordered by the turf bank 42;
- along route option C, sites 54 and 55.

Following the implementation of mitigation measures, no significant residual direct effects are predicted to arise:

- Residual impacts of minor significance are predicted for fourteen sites along the grid connection route (2, 13b, 15, 17, 21, 23, 24a, 35b, 42, 44, 47, 48, 50 and 55).
- Residual impacts of no more than minor significance are predicted for six sites along route option A (2, 27, 32a, 36, 44, 50).
- Residual impacts of no more than negligible significance are predicted for four sites along route option B (10d, 42, 44, 50).
- Residual impacts of no more than negligible significance are predicted for two sites along route option C (13b and 24b).

The assessment indicates that there are no cultural heritage grounds upon which to reject any of the route options following the implementation of the proposed mitigation measures. However, there is less potential for disturbing hitherto unknown archaeology where the routes re-use existing tracks (the main grid connection route through the forestry, and route option C).

2 INTRODUCTION

This report presents the results of a desk-based assessment and walk-over field survey that identified the cultural heritage interests within a study corridor centred along the route options for a proposed underground grid connection cable, between Earlsburn North wind farm and Kepculloch substation, Stirling. The report also considers the likely effects of the construction and operation of the proposed development on the cultural heritage interests identified by the study and presents mitigation proposals to avoid or offset, identified direct effects. The study has been carried out by CFA Archaeology Ltd (CFA) in accordance with the Institute for Archaeologist's Code of Conduct (IfA 2012a) and Standard and Guidance for Archaeological Desk-based Assessment (IfA 2012b), using information provided by the Stirling Council Archaeology Officer.

The specific objectives of the cultural heritage study were to:

- Identify the cultural heritage baseline;
- Consider the proposed development route options in terms of their archaeological and historic environment potential;
- Assess the effects of the construction and operation of the proposals on the baseline cultural heritage resource, within the context of relevant legislation and planning policy;
- Propose measures, where appropriate, to mitigate any predicted significant adverse effects, and assess residual effects taking this into account.

The proposed works include the installation of an underground grid connection cable using a combination of open-cut trench and mole-plough.

Figures 1a-g depict the proposed route options together with 500m wide study corridors centred around the proposed route options for the identification of cultural heritage sites through desk-based assessment, and 100m survey corridors used for field survey. The locations of cultural heritage sites and features identified by the study within the 500m study corridors are also shown, a gazetteer of which is contained in Appendix 1, together with an assessment of the relative importance of each.

3 POTENTIAL IMPACTS

Potential impacts may include the following:

- Ground-disturbing activities that occur during construction and cable laying operations, which may damage, and possibly obliterate, cultural heritage remains;
- Above-ground disturbance, such as that caused by vehicle movement and placing of machine plant, that may produce irreversible physical impacts upon archaeological remains; and
- Temporary construction effects on the setting of cultural heritage features present in the vicinity of the proposed development. The proposed development in operation would be entirely underground, and so operational effects on the setting of cultural heritage features would not arise and are not considered in this report.

4 PLANNING AND LEGISLATIVE BACKGROUND

4.1 National Planning Policy and Guidance

National planning policy and guidance on cultural heritage matters comprises Scottish Historic Environment Policy (SHEP) (Historic Scotland 2011), Scottish Planning Policy (SPP) (Scottish Government 2010), and Planning Advice Note 2/2011 (PAN 2) (Scottish Government 2011).

Scottish Historic Environment Policy

Scotland's historic environment contributes to the Scottish Government's strategic objectives and to the target of improving the state of Scotland's historic buildings, monuments and environment, and is identified as a national indicator and target under the National Performance Framework. SHEP sets out Scottish Minister's policies for the historic environment, and provides policy direction for Historic Scotland and a framework that informs the day-to-day work of a range of organisations that have a role and interest in managing Scotland's historic environment. Through the implementation of SHEP, Scottish Ministers wish to achieve three outcomes for Scotland's historic environment.

- That the historic environment is cared for, protect and enhanced for the benefit of our own and future generations;
- To secure greater economic benefits from the historic environment; and
- That the people of Scotland and visitors to our country value, understand and enjoy the historic environment.

Scottish Planning Policy (SPP)

The Scottish Planning Policy (SPP) is a statement of the Scottish Government policy on land use planning and states that the historic environment is a key part of Scotland cultural heritage and requires that planning authorities ensure that development plans provide a framework for the protection, conservation and enhancement of the historic environment its setting (para 112).

Historic environment resources (hereafter heritage assets) include statutory and non-statutory designations, as defined in SPP.

Assets with statutory designations and relevant in the context of this assessment include:

- Listed Buildings (SPP para 113)

Assets with non-statutory designations relevant in the context of the proposed development site are:

- Archaeology (SPP para 123); and
- Other Historic Environment Interests (SPP para 124).

Planning Advice Note 2/2011 (PAN 2)

The Planning Advice Note 2/2011 (PAN 2), together with SHEP and SPP, sets out the Scottish Ministers policies for planning and the historic environment. The PAN is intended to inform the

day-to-day work of a range of local authority advisory services and other organisations that have a role in the handling of archaeological matters within the planning process.

PAN2/2011 advises that, in determining planning application, planning authorities should take into account the relative importance of archaeological sites (para 5). It also notes that in determining planning applications that may impact on archaeological features or their setting, planning authorities may on occasion have to balance the benefits of development against the importance of archaeological features (para 6). The desirability of preserving a monument (whether scheduled or not) is a material consideration and the objective should be to assure the protection and enhancement of monuments by preservation in situ, in an appropriate setting. When preservation in situ is not possible, recording and / or excavation followed by analysis and publication of the results may be an acceptable alternative (para 14).

4.2 Sites with Statutory Designations

Listed Buildings

Under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 (1997 Act), the Scottish Ministers are required to compile a list of buildings of special architectural or historic interest. Such buildings are classified into Categories A, B and C, in decreasing order of importance. Planning authorities and the Scottish Ministers are required to have special regard for the desirability of preserving Listed Buildings and their settings, and any features of special architectural or historic importance they possess.

4.3 Sites with Non-Statutory Designations

Archaeology

Archaeological sites and monuments are an important, finite and non-renewable resource and should be protected and preserved in situ wherever feasible. The presence and potential presence of archaeological assets should be considered by planning authorities when allocating sites in the development plan and when making decisions on planning applications. Where preservation in-situ is not possible planning authorities should, through the use of conditions or a legal agreement, ensure that developers undertake appropriate excavation, recording, analysis, publication and archiving before and/or during development. If archaeological discoveries are made during any development, a professional archaeologist should be given access to inspect and record them (SPP para 123).

Other Historic Environment Interests

There is a range of other non-designated archaeological sites, monuments and areas of historic interest, including other (non-designated) battlefields, historic landscapes, other (non-inventory) gardens and designed landscapes, woodlands and historic routes such as drove roads that do not have statutory protection. Sites without statutory protection are curated by the local planning authority, and SPP (para 124) and PAN 2/2011 provide national planning policy guidance and advice on the treatment of such resources.

SPP requires that planning authorities ensure that development plans provide a framework for the protection, conservation and enhancement of the historic environment to allow the assessment of the impact of a development on the historic environment and its setting (para 112).

4.4 Regional and Local Planning Policy Guidance

Regional and Local planning policy guidance is provided in the Clackmannanshire and Stirling Structure Plan 2002 and the Stirling Council Local Plan (1999).

The Structure Plan and the Local Plan are due to be replaced by the Stirling Local Development Plan (LDP). A proposed LDP has been published (October 2012), and the proposed plan is due to be adopted in 2014.

Clackmannanshire and Stirling Structure Plan (2002)

Under *Policy ENV6: The Historic and Built Environment*, the Councils will seek to ensure that cultural heritage resources are recognised, recorded, protected and enhanced as appropriate, and that new development respects and contributes to the character and quality of the area. More particularly, and of relevance to this study:

- There will be a strong presumption against demolition of protected buildings of character and against development or works which would adversely affect the special architectural or historic interest of a Listed building or its setting.
- Development which would destroy or adversely affect Scheduled Monuments, or other important archaeological sites or landscapes and their settings will not be permitted. In exceptional cases where developments may be approved which affect the heritage resource, developer funding will be legally tied to securing the appropriate level of advance investigation, excavation, recording and publication.

Stirling Council Local Plan (1999)

Under *POL.E45*, the Council states that development which adversely affects the character or the setting of a Listed Building will not be permitted unless strong justification is produced in support of the application.

Under *Policy POL.E47*, the Council states that there will be a presumption against any development proposal which would have an adverse impact on:

- a scheduled ancient monument or its setting; or
- un-scheduled remains and their settings which have been identified as particularly worthy of preservation.

Under *Policy POL.E48*, the Council states that when considering development proposals which would adversely affect features of archaeological importance, the Council must be satisfied that the benefits of the proposed development will outweigh the disturbance of the archaeological interest. Approval of any such proposal, where preservation of the archaeological interest is not possible, will be conditional upon satisfactory provision being made by the developer for the appropriate level of archaeological investigation, including publication of the results.

Under *Policy POL.E49*, the Council states that where there is an indication that archaeological remains may exist within a development proposal but their extent and significance is unclear, the Council will require the prospective developer to arrange for an evaluation prior to the determination of the application in order to establish the importance of the site, its sensitivity to

development and the most appropriate means for preserving or recording surviving archaeological features.

Under Policy *POL.E50*, the Council states that where the presence of archaeological interest becomes apparent once a development has commenced, adequate opportunity must be afforded by the developer for an archaeological investigation. It is desirable that, where possible, important archaeological remains are preserved in situ.

Proposed Stirling Local Development Plan (LDP) October 2012

Under *Primary Policy 7: Historic Environment*, the Council states that the historic environment contributes in a unique way to the character of the Stirling area. It is important in forming the identity of places and providing a cultural, educational, social, and economic resource. The historic environment and, where appropriate, the settings of its component features, will therefore be safeguarded, preserved and enhanced. Developments and other proposals that would have a negative impact on these assets will not normally be supported. The historic environment will be managed, and relevant development proposals assessed, in line with statutory requirements, government policy, and the following: -

- Historic Scotland's Managing Change and Inform documents (as an interim measure, pending production where necessary of more detailed Supplementary Guidance specific to the context of the Stirling Plan area);
- Current local Planning guidance on the historic environment;
- The Council's Sites & Monuments Record; and,
- The potential for sites or structures to harbour undiscovered heritage assets including archaeology.

Under *Policy 7.1: Archaeology & Historic Building Recording (designated & undesignated buildings/sites)* (and Policy 27 of the same title) the Council states that where there is the possibility that archaeological remains may exist within a development site, but their extent and significance is unclear, the prospective developer should arrange for an evaluation prior to the determination of any planning application in order to establish the importance of the site, its sensitivity to development and the most appropriate means for preserving or recording surviving archaeological features. Approval of any proposal directly affecting historic environment features will be conditional upon satisfactory provision being made by the developer for the appropriate level of archaeological and / or standing building investigation and recording, assessment, analysis, publication and archiving.

Under *Policy 29: Development affecting Listed Buildings*, the Council states that the layout, design, materials, scale, siting and use of any development shall be appropriate to the character of the entire Listed building and its setting. Where this is not proposed, development will be refused. There is a presumption against demolition or other works that adversely affect the special interest of a building or its setting.

5. METHODOLOGY

5.1 Consultation

A consultation letter was sent to Stirling Council's Archaeology Officer (05/04/13), to introduce the project, to provide details of the proposed approach to appraisal and to obtain opinion on the likely effects on historic environment interests of the proposed works.

A reply was received from the Stirling Council Archaeology Officer (17/04/13), who accepted the proposed approach to the study and raised no specific cultural heritage issues.

5.2 Data Collection

A desk-based study and reconnaissance walk-over field survey were undertaken in order to identify cultural heritage constraints and to assess the archaeological potential of the proposed development route options.

No intrusive archaeological investigations have been carried out as part of this appraisal.

Desk-based Study

Up-to-date information was obtained from appropriate source on the locations of cultural heritage assets with statutory protection and non-statutory designations within the proposed development site:

- Details of the locations and extents of Scheduled Monuments, Listed Buildings, Gardens and Designed Landscapes, Historic Battlefields and Conservation Areas were downloaded in GIS from the Historic Scotland Data Warehouse (Historic Scotland 2013).
- Information on known cultural heritage assets within the study corridor was obtained from the Stirling and Clackmannanshire Council Sites and Monuments Record (SMR) (March 2013).
- Additional information on the character and condition of known archaeological sites and features within the study corridor was obtained from the Royal Commission on the Ancient and Historical Monuments of Scotland database (RCAHMS 2013a).
- Ordnance Survey maps (including 1st and 2nd Edition maps and subsequent map editions until 1951) and other published historic maps held in the Map Library of the National Library of Scotland and National Archives. Appropriate local archives and other documentary sources were examined to provide information on sites and features of potential cultural heritage interest and on historic land-use development.
- An assessment was made of vertical aerial photographs held by the RCAHMS (Sorties from 1947, 1956, 1966 and 1967 were examined) and modern satellite imagery (GoogleTM).
- Historic Land-Use Assessment Data for Scotland (HLAMap) (RCAHMS 2013b) was consulted for information on the historic land use character of the study corridor.

- The Scottish Palaeoecological Archive Database (SPAD) (Coles et al 1998), which records the distribution of known palaeoenvironmental sites across Scotland, was consulted for information on such sites within or adjacent to the proposed development route options.

A list of all sources consulted during the assessment is provided in Section 8.

Reconnaissance Field Survey

A walk-over reconnaissance field survey was undertaken along the proposed route options in order to:

- Assess the baseline condition of the known heritage assets, identified through the desk-based assessment;
- Identify any further sites or features of cultural heritage interest not detected from the desk-based study; and,
- Identify areas with the potential to contain currently un-recorded buried archaeological remains.

The positions of identified assets (and where appropriate, their extents) were logged using a Flint S852 Handheld GNSS with Penmap Mobile Geodata Software, accurate to +/- 1m. The baseline condition of identified assets was recorded on pro-forma monument recording sheets and by digital photography.

The weather conditions were fair and did not impede the survey, although visibility during survey was hampered by light snow cover (up to 0.15m) over much of the survey area, and heavier snow cover in the higher ground in the Fintry Hills, (0.15m-0.4m deep). Ground conditions included improved and unimproved pasture and bog, heather and rough grassland. Known sites, were easily detectable on the ground, (although the poor preservation of the rig and furrow made identification of this more difficult on the ground). However the heavier snow cover on the higher ground in the Fintry Hills may have covered small/poorly preserved features of low relief such as low field banks and clearance cairns, preventing their identification during the survey.

5.3 Impact Assessment Methodology

Assessment of Impacts

The types of impacts of the proposed development on cultural heritage interests have been assessed in the following categories:

- Direct, where there may be a physical impact on an asset caused by the construction of the proposed development. Direct effects tend to have permanent and irreversible adverse effects upon cultural heritage remains.
- Indirect, where construction works temporarily affect the setting of cultural heritage features present in the vicinity. The proposed development in operation would be entirely underground, and so operational effects on the setting of cultural heritage features would not arise and are not considered in this report.

Effects have been assessed in terms of their magnitude (Table 2), permanence (permanent / temporary), reversibility, and nature (adverse / neutral / beneficial).

- Beneficial effects are those that contribute to the value of an asset through enhancement of desirable characteristics or the introduction of new, positive attributes;
- Neutral effects occur where the development can be accommodated comfortably by the receiving environment while neither contributing to nor detracting from the value of the asset;
- Adverse effects are those that detract from the value of a receptor through a reduction in or disruption of valuable characterising components or patterns, or the introduction of new inappropriate characteristics. The significance of a direct impact depends upon the sensitivity of the cultural heritage asset (Table 1), combined with the magnitude of the predicted impact (Table 2).

Importance of Cultural Heritage Assets

Cultural heritage assets represent a non-renewable resource that are often fragile and suffer from constant attrition, from both natural and human causes. The assessment of importance of archaeological and heritage assets reflects the relative weight given to them in SHEP and SPP. Table 1 summarises the relative importance of key types of cultural heritage asset.

Table 1: Importance of Cultural Heritage Assets

Importance	Site types
National / International	Sites of national or international importance, including: <ul style="list-style-type: none"> • Scheduled Monuments, and sites proposed for scheduling; • Category A Listed Buildings; • Inventory Garden and Designed Landscapes; • Outstanding Conservation Areas (where designations persist); • Inventory Historic Battlefields.
Regional	Sites of regional importance, including: <ul style="list-style-type: none"> • Archaeological sites and areas of distinctive regional importance; • Category B Listed Buildings; • Conservation Areas; • Non-Inventory Gardens and Designed Landscapes.
Local	Sites of local importance, including: <ul style="list-style-type: none"> • Archaeological sites and areas of local importance; • Category C Listed Buildings; • Unlisted buildings and townscapes of some historic or architectural interest.
Lesser	Sites of little or no importance: <ul style="list-style-type: none"> • Artefact find-spots; • Unlisted buildings of little historic or architectural interest; • Poorly preserved examples of particular types of feature.
Unknown	Where there is insufficient baseline information to determine more reliably the relative importance of the identified feature.

Criteria for Assessing Magnitude of Impacts

Criteria for assessing the magnitude of an impact, which measures the degree of change to the baseline condition of the heritage asset that could result from the construction of one or more elements of the proposed grid connection cable, are presented in Table 2.

Table 2: Magnitude of Impacts

Magnitude	Definition
High	A fundamental material change to the baseline condition of the asset, leading to total loss or major alteration of its character or setting.
Medium	A material, partial loss or alteration of character or setting.
Low	A slight, detectable, alteration of the baseline condition or setting of the asset.
Imperceptible	A barely distinguishable change from baseline conditions.

Criteria for Assessing Significance of Effects

The importance of the asset defined in Table 1 and the magnitude of the predicted impact (Table 2) are used to inform the professional judgement of the likely significance of the effect. Table 3 summarises the criteria for assessing the significance of an effect.

Table 3: Significance of Effects

Magnitude of Impact ▼	Importance of Asset ►				
	International/National	Regional	Local	Lesser	Unknown
High	Major	Major	Moderate	Minor	Unknown
Medium	Major	Moderate	Minor	Negligible	Unknown
Low	Moderate	Minor	Negligible	Negligible	Unknown
Imperceptible	Minor	Negligible	Negligible	Negligible	Unknown

6. BASELINE CONDITIONS AND ANALYSIS OF IMPORTANCE

6.1 General

Fifty-six heritage assets, including areas of relict rig and furrow remains, have been identified within the 500m study corridors. The locations and extents of these assets are shown on Figures 1a-h, and Appendix 1 provides detailed gazetteer information on their character and baseline condition, together with an assessment of the relative heritage importance of each. Only those sites within the 100m survey corridors have been described in detail in the following text.

Numbers in brackets refer to site numbers provided on Figures 1a-h and in Appendix 1.

6.2 Cultural heritage assets within the 500m study corridors

There are no Scheduled Monuments within the study corridors, and no part of the proposed grid connection route options would intersect with a Conservation Area, Inventory Historic Battlefield or Inventory Garden and Designed Landscape.

There is one Listed Building within the study corridors, Mains of Glinn (11), a restored mid-18th century laird's house, formerly owned by the Buchanan Family, and situated on the old Fintry to Kippen Road.

The Stirling Council SMR and/or RCAHMS Database hold records for 14 sites (1-13, 21) within the 500m study corridors, including the crop-mark of a possible Roman temporary camp (4), an 18th century small laird's house (11), three farmsteads (10, 13, 21), boundary stones (5, 6), three 19th century limekilns (7 and 9), cultivation remains (1, 2), a tryst site at Balgair (8), and an alleged battle site at Ballochleam (12).

Examination of historic maps (and modern Ordnance Survey maps) led to the identification of 15 additional sites, including four farmsteads (14, 15, 19 and 21), a large quarry (20) and several 19th century field boundaries (50), and provided additional information on the historic land use development of the area.

Areas of relict rig and furrow cultivation (44) and possible former fields (26 and 27) are visible on vertical aerial photographs dating from 1946 to 1967 and on modern photographic imagery (GoogleTM).

Bibliographic references (OSA 1791-99; NSA 1835-45) provided background and historical information.

The SPAD provided no relevant information specific to the proposed development corridor options.

In addition to those assets identified through desk-based assessment, field survey, conducted within narrower, 100m survey corridors, identified 23 previously unrecorded sites (25, 29-34, 36-37, 39-41, 43, 45-47, 49, 51-56), and provided further information on the baseline condition of the sites/features identified through the desk-based work and present within the corridors.

6.3 Character of Cultural Heritage

The cultural heritage sites and features identified within the study area are associated primarily with medieval or later settlement and agrarian activity. There is one record for a possible Roman temporary camp identified from aerial photographs (4, now within commercial forestry), and a battlefield (the battle of Ballochleam, 12).

The HLA Map indicates that the study area consists largely of rough moorland and rough grazing, with two areas of medieval/post-medieval drained rough grazing shown on the Buchlyvie Moor and around the Hill of Balgair. Rectilinear fields of 18th-19th century date are shown around Kepculloch Farm (14), to the south of Easter Glinns, and to the north-west of Balafark farm (19), together with unenclosed improved pasture and amalgamated fields around Balafark farm (19). One area of medieval/post-medieval settlement and agriculture is shown to the east of Mains of Glinns (11)/south of Easter Glinns, the northern extent of which is bordered by turf banks recorded as site 48 (Figure 1). Park Wood (28) is shown as managed woodland of 18th-20th century date, and 20th century stands of 19th commercial forestry plantation are shown corresponding to those on the current Ordnance Survey map (2001).

6.4 Cultural Heritage within the 100m survey corridors

Farmsteads

Three farmsteads (13, 15 and 21), comprising roofed buildings and associated enclosures, are shown on the Ordnance Survey 1st Edition map (1865). One of the farmsteads (Park, 15), is shown to the south of an enclosed area of woodland, annotated as 'Park Wood' (28). The HLA Map shows the current Park Wood as being managed woodland of 18th-20th century date, which corresponds to the cartographic evidence. Both the farmsteads of Backside (13) and Park (15) are annotated as such on Grassom's map of (1817), the latter being shown to the south of an area of mixed woodland corresponding to that shown on the later 1st Edition map (28). A farmstead associated with an area of cultivation is annotated as 'Dalhillochs' (21) on Roy's map (1747-55), and as 'Dalhillochs' on Grassom's (1817) and Thomson's map (1820), indicating that the study area was settled and farmed from at least the late 18th century. By the time of the Ordnance Survey 2nd Edition map (1899), all three farmsteads were out of use: Park (15) is not shown, but an area of quarrying (possibly surviving as 15e) and a small square building are shown to the south-west of the former farmstead, together with the enclosed area of woodland (28); Backside had been replaced with a square sheepfold (13d); and Dalhillochs (21) is shown as unroofed, and continued to be depicted as such on the 3rd Edition map (1923) (although the farmstead is not shown on the 2001 Ordnance Survey map).

Today, the turf-covered footings of two long rectangular buildings (15a), upstanding to 0.5m in places, and fragments of two enclosures (15b-c) and a section of boundary wall (15d) are visible forming the remains of Park farmstead. The enclosed area of woodland (28) comprises an area of mature deciduous trees, surrounded by tree-lined turf bank on its southern and western sides. Documentary sources (OSA, 1791-99) suggest that several woodland plantations were formed in the parish of Balfon as part of a series of land improvements. The HLA Map records the woodland as being managed woodland of 18th-20th century date. It is likely that Park Wood (28) was managed 18th century woodland plantation, forming part of the land improvements noted in documentary sources.

There are no visible surviving upstanding remains of Backside Farmstead (13a-c), although snow during the survey may have covered any poorly surviving remains of 13b and 13c. The well-preserved remains of a drystone walled sheepfold (13d) shown on the Ordnance Survey 2nd Edition map (1899), together with a more recent (and larger) wooden fenced sheepfold attached to its northern side, now overlie the location of the former farmstead (13a-c), although it is likely that some of the earlier farmstead building (13a) has been incorporated into the fabric of the later sheepfold (13d).

The only surviving remains of Dalhillochs (21) within the survey corridor are a level area of ground terraced into the slope on which the main farm building (21a) and garden enclosure (21b) would have stood, a trackway and associated turf bank (21c), the fragmentary remains of a turf bank enclosure (21d) and a small section of low drystone wall representing the partial footings of a small building (21e).

The former farmsteads of Backside (13a-c) is considered to be of lesser heritage importance; the sheepfold (13d), shown on the Ordnance Survey 2nd Edition map (1899), and overlying the location of the former Backside farmstead (13a-c) is considered to be of local heritage importance. The remains of Park (15) farmstead, and the associated woodland enclosure (28), and Dalhillochs farmstead (21) are considered to be of local heritage importance.

Shieling Huts/Bothies

Field survey identified two possible turf-built shieling huts or bothies (30a and 31) in areas of rough pasture. One (30a) survives as a heather-covered circular turf bank measuring 5m in diameter and upstanding to 0.5m high. A short section of heather bank is visible immediately to the south of the structure (30b). The other structure (31) is less well-defined, but is visible as a wide sub-circular turf bank measuring 6m across and up to 0.5m high. The structures may relate to the upland pasturing of cattle, practices generally associated with pre-19th century modes of animal husbandry, and are considered to be of local heritage importance.

Possible structures

What may be the very poorly preserved remains of two or three possible structures (51) are visible immediately to the south of an old field system (48), located on gently sloping ground. The possible structures survive as an oval turf platform, 12m by 4m, an L-shaped section of bank, attached to a small circular turf structure, and a second section of turf bank. The features may be the remains of a small farmstead associated with the field system (48), and also lie within an area of medieval/post-medieval settlement and agriculture noted on the HLA Map (Figure 1g). However, the remains are poorly defined and much denuded, upstanding to only 0.2m-0.3m high, and are considered to be of local heritage importance.

Enclosures

The current (2001) Ordnance Survey map depicts a dashed line forming the three sides of a rectangular enclosure (38). Field survey found the enclosure to be defined by poorly preserved turf banks, upstanding (on average) to 0.2m high. The enclosure is not shown on early Ordnance survey mapping, but its eastern side is formed by a mid-19th century field boundary (part of site 50) and so is likely to be of 19th century date, and/or was a short-lived feature that did not merit mapping on early Ordnance Survey maps.. Due to its poor preservation, the enclosure is considered to be of lesser heritage importance.

The remains of second enclosure (46) were found within a field of semi-improved pasture, defined by a tree-lined L-shaped turf bank forming the south-eastern and north-eastern sides of the enclosure. The former enclosure is not shown on any Ordnance Survey mapping and likely pre-dates the Ordnance Survey 1st Edition map (1865). The enclosure is considered to be of lesser heritage importance.

Sheep-dip and Enclosure

A small oval drystone structure (43a), constructed of small-medium sub-angular stones with a central hollow, was identified in semi-improved pasture on the southern bank of a burn. The feature may be the remains of an old sheep-dip, and is associated with denuded L-shaped section of drystone wall visible on the opposite bank of the burn (43b), and possibly originally forming an enclosure. The possible sheep-dip and enclosure are considered to be of local heritage importance.

Field Systems; Field Banks; Rig and Furrow

The Ordnance Survey 1st Edition map (1856) shows a series of rectilinear fields, the remnants of which are depicted on the 2001 Edition of the Ordnance Survey map, and are still visible today, defined on the ground by tumbled drystone walls, and the remains of turf and stone banks, many of which are lined with relict beech or hawthorn trees (50). Elsewhere, these 19th century field boundaries have been replaced by modern post and wire fences. One of these 19th century field boundaries (42), is no longer depicted on the current Ordnance Survey map (2001), but survives as a tree-lined turf bank, slightly revetted into the slope at its northern end. Documentary sources (OSA, 1791-99) suggest that enclosure of land was being undertaken by the end of the 18th century, using stone dykes or thorn (hawthorn) hedges. The surviving stone and turf field boundaries (50, 42) shown on the Ordnance Survey 1st Edition map (1865) are considered to be of lesser heritage importance.

One boundary bank (42) borders an area of straight rig and furrow (44) (Figure 1e), upstanding to 0.2m high and measuring 4m crest to crest, with two different alignments of rig visible on the ground. Faint traces of other similar areas of relict straight rig and furrow cultivation (also site 44, and 2) are visible elsewhere across the study area, visible on aerial photographs from 1946 and 1966, on modern satellite imagery (GoogleTM), and on the ground as much denuded rigs, upstanding to between 0.1m-0.2m high. The straight, narrow rig is most likely to be of post-medieval date and is considered to be of lesser heritage importance.

A series of turf banks (48), the most substantial of which (aligned east-west), is depicted on the 2001 Edition of the Ordnance Survey map, form the remains of a field system, visible running across an area of rough pasture on the on the west side of Boquan Burn. The banks are on average upstanding to 0.4m high, but are up to 0.75m high in places, and border an area of medieval/post-medieval settlement and agriculture shown on the HLAMap (Figure 1g). The banks are not shown on early Ordnance Survey mapping; indeed, a former field boundary (part of site 50) shown on the Ordnance Survey 1st Edition map overlies one of the turf banks, which therefore likely pre-date the mid-19th century, and are potentially of pre-improvement date. The field system (48) is considered to be of local heritage importance.

Several other sections of denuded drystone wall and turf bank (32, 34, 37, 41, 45, 47, 49, 52, 53, 55 and 56) were also identified running across the study area, largely in areas of semi-improved or rough pasture and moorland. None of these are shown on the Ordnance Survey 1st Edition map (1865) and therefore likely form fragmentary remains of earlier, possibly pre-improvement field

systems (or late 18th/early 19th century early forms of improvement land enclosure). These fragmentary remains of older field boundaries are considered to be of lesser heritage importance.

Two large oval areas of improved pasture are visible on modern satellite imagery (10d and 27), possibly forming old pre-improvement fields. No banks or other upstanding features were found delineating these oval areas of land, and they are visible on the ground only as areas of slightly more improved pasture. These possible former fields are considered to be of lesser heritage importance.

Extraction

The limekilns are shown on the Ordnance Survey 1st Edition map (7a) together with an access track (7c). An area of quarrying is shown to the east of the lime kilns (7b) on the Ordnance Survey 2nd Edition map (1899), annotated as ‘Old Quarry’, and is the only feature still depicted on the Ordnance Survey 3rd Edition map (1923), indicating the kilns and quarrying had fallen out of use by then. The kilns (7a) survive as two well-preserved turf covered conjoined kin bowls built into the edge of a burn valley; small linear quarry cuts and pits and associated spoil tips exist to the west of the kilns, together with a quarried bedrock face at the location shown on the Ordnance Survey 2nd Edition map (1899). The trackway is still visible, defined as a slight turf-covered terrace into the slope. Documentary sources (OSA, 1791-99; NSA, 1835-45) suggest that limestone was worked in the area, and that large amounts of lime were placed on the fields for improving the ground, an ongoing process occurring throughout the late 18th and early 19th centuries. The limekilns and associated quarry and track are considered to be of local heritage importance.

A large area of quarrying (20a) is shown on the Ordnance Survey 1st Edition map (1865), and is probably associated with another lime kiln (9). The quarrying is shown as extended in size on the Ordnance Survey 3rd Edition map (1923), and survives today as a well-defined deep linear cut, with turf-covered spoil heaps and small quarry scoops running along the northern edge. A section of drystone wall and small truncated possible drystone walled structure (20b) are visible on the south side of the quarry, together with a grassy holloway (20c) leading south-eastwards from the quarry entrance to two large spoil heaps (20d). The quarry may relate to the production of lime (similar to site 7), and therefore likely forms the remnants of a component part of the wider socio-economic processes of land improvement occurring during the 18th and 19th centuries. The quarry is therefore considered to be of local heritage importance.

A small quarry scoop (36) was identified adjacent to a public road, and may be associated with former local quarrying for the road. The quarry scoop is considered to be of lesser heritage importance.

A large quarry, and associated with a short section of mortared wall (40), was found along the edge of a trackway (24a), in commercial forestry. The quarry was partially water-filled and the wall appears to be a barrier preventing vehicles from coming off the raised trackway (24a) and into the water. The quarry and wall are likely to be of modern date, possibly associated with the upgrading of the trackway (24a) for forestry use, and are considered to be of lesser heritage importance.

Trackways

Three trackways (24a-c) are shown on the Ordnance Survey 1st Edition map (1865) and subsequent Editions, providing access from the main public road (now the A811) to the

farmsteads in the hinterland, and three limekilns (7 and 9). One of them (24b) is also shown on Grassom's map (1817) leading to Backside farm (13), and continuing further south-eastwards.

Two of these trackways are still in use today (24a as commercial forestry access and 24b as farmer/deer-stalker access), and are well preserved trackways surviving as holloways/terraces or low linear platforms with partially metalled surfaces. Trackway 24c, which is shown on the Ordnance Survey 1st Edition map as extending northwards from Backside Farm (13), is only just visible as a slight terrace following a ridgeline. A fourth trackway (35) is shown on the Ordnance Survey 1st Edition map (1865) leading from the public road near Kepculloch Toll, to Park farm (15). Field survey found a curvilinear linear grass-covered platform, upstanding to 0.6m in places, and carried over the Ballochneck Burn by a single-span arched bridge with modern concrete capping. These trackways are all considered to be of local heritage importance.

Field survey also indentified a fifth section of trackway (25), visible as a low grassy linear platform, running through an area of improved pasture, and denuded by cattle trampling. This trackway is considered to be of lesser heritage importance.

Boundary Marker Stones

The Ordnance Survey 1st Edition map (1865) annotates three boundary marker stones (5, 6 and 22), two of which (5 and 6) mark an undefined county boundary (Stirlingshire/Perthshire) and parish boundary (probably Balfron and Kippen), and the third (22) marks an undefined parish boundary (probably Balfron and Kippen). Two of these stones (the Carlin Stone (5) and the Wife with the Bratty Plaid (6)) are still annotated on the current Ordnance Survey (2001) map, and are both visible today along a modern fenceline on a forest ride, as upright unworked stones, although only the Wife with the Bratty Plaid (6) exists as a substantial marker stone (measuring up to 0.7m in height and width). Both surviving stones are considered to be of local importance. The third boundary stone (Knockingalloch, 22) is depicted until the 3rd Edition map (1923), thereafter only the placename 'Knockingalloch' is annotated. No visible trace of a stone at this location now survives and the site is considered to be of lesser heritage importance.

Miscellaneous

Cropmark enclosure

The SMR records that a possible enclosure is visible as a crop-mark (3) on aerial photographs as a small dark mark. Field survey did not find any trace of a feature at the location of the recorded site; the area was covered with heather at the time of survey and the location of the possible enclosure has been truncated by drainage. The feature is considered to be of lesser heritage importance.

Tryst Ground

The SMR holds a record for a 'tryst ground' (8) but provides no further information. The recorded location of the site could not be accessed due to dense forestry plantation. Tryst grounds were areas of land in the lowlands of Scotland, where cattle from the Highland glens were brought by drovers to be sold to buyers from across the country, one of the most famous tryst grounds being the Falkirk Trysts (Scott, 2005). The Ordnance Survey 1st Edition map (1865-66) annotates '*Balgair Market (for cattle)*' to the north of the study area (and the recorded location of the tryst ground in the SMR), and it is likely that the 'Balgair Market' may have also been a tryst ground. Reference is made to a market at Balgair in the Farmer's Magazine of 1837, where it is

included in reference to a description of the Falkirk Trysts that took place that year (The Farmer's Magazine (1837)). The tryst ground is considered to be of local heritage importance.

Fords

The Ordnance Survey 1st (1865) and 2nd (1899) Edition maps annotate two fords (17 and 23), crossing an unnamed burn and the Boquan Burn respectively, and associated with a trackways 24a and 24b. The locations of the fords are characterised by gently sloping ground and a shallow stretch of burn, which in the case of site 23 has been heavily eroded by water (which has realigned the burn at this location since the 19th century) and by cattle crossing. The fords are considered to be of lesser heritage importance.

Spoil Heap/Bund

A grass-covered bund (29) was identified adjacent to a modern trackway leading to an area of forestry plantation. The bund is possible the remains of stock-pilled track surfacing material and is considered to be of lesser heritage importance.

Bridge

The remains of a crude bridge (33), originally crossing an unnamed burn and leading to a tractor shed, were identified within a field of semi-improved pasture. The bridge is formed from several wooden beams laid horizontally along the ground surface. The bridge is considered to be of lesser heritage importance.

Pond

A small oval pond (39) was found within heather moorland, cut into an east-facing slope. The pond may have been used for cattle or sheep watering and is considered to be of lesser heritage importance.

Platform

A possible platform (54) was found on a south-facing slope forming the upper valley sides of the Boquan Burn. The possible platform is approximately 8m-10m across with a slight lip on the downslope side. It is possible that the feature is the remains of a later prehistoric hut circle platform, but the feature is very poorly defined and was under snow at the time of field survey. The possible platform is therefore considered to be of unknown heritage importance.

6.5 Historic Landscape Character

Although no known prehistoric sites have been recorded within the study area, a range of prehistoric sites have been recorded within the surrounding landscape. These include several Scheduled Bronze Age burial cairns located along the edges of the ridgeline forming the Fintry and Gargannock Hills, to the south of the study area (e.g Stronend cairns (Index Numbers 7005 and 7030); Todholes cairns (Index Numbers 2492 and 4491); Carleathern Cairn (Index Number 7010)). Knochraich cup-marked standing stone (Index number 2696) lies on the lower ground at the foot of the Fintry Hills to the south-west of the study area, and additional cup and ring marked stones have been recorded elsewhere (for example at Leckie and Ballindalloch (SMR numbers. 665.02 and 4855)). In addition, the SMR holds two records of possible barrows (at Killearn and Kippen, SMR numbers 548.01 and 662.01), and a cist at Bucklyvie (SMR number 570.01). Later

prehistoric settlement is also evident, with several forts, brochs and duns recorded in the wider area (such as the Scheduled broch and fort at Knock-O-Ronald (Index Number 3099) to the north-east of the study area; and Craigton Dun (Index number 2556) to the south-west of the study area). Such remains attest to an extensively settled prehistoric landscape, of which a reasonable amount survives today within areas of upland moorland at higher elevations (for example the burial cairns) and lower-lying agricultural land in the river valleys (for example the Iron-Age brochs).

The scheduled Peel of Gartfarran (Index number 1753), a moated medieval homestead, together with the scheduled medieval or (earlier) earthworks present at Arngibbon (Index number 2578) and Kierknowe of Arnmore (Index number 2577), both to the north of the study area, and the castles of Fintry (to the south, Index number 7085) and Gartatan (to the north-west, Index number 7084), attest to the continuing settlement and land-use of the surrounding landscape along the river valleys into the medieval period.

Numerous 19th century farmsteads (for example those at Provanston (SMR number 3328), Spitalhill (SMR number 3330), and Tomaglass (SMR number 4857)), and other buildings, such as former mills (for example Endrick Water Mill (SMR number 45400) and Bucklyvie corn Mill (SMR number 2754)) are recorded in the wider landscape, along the lower-lying ground of the river and burn valleys. Some farmsteads, for example those at Cringate (SMR number 5428) and Holemouth (SMR number 3444) are depicted on Roy's map (1747-55), and were not shown on later cartographic sources (e.g Holemouth). These farmsteads, together with other settlements, such as Harvieston deserted village (Index number 3394, to the south-east of the study area), and shieling huts (such as that in the Boquan burn valley (4979)), attest to the pre-improvement settlement and land-use of the area.

The Old and New Statistical Accounts describe the gradual improvement of the land in the parishes surrounding the study area, in the form of land enclosure, drainage, the formation of stands of mixed woodland, the working of lime into the ground, and the practice of crop-rotation, to improve soil quality for the growing of crops. Such changes in land-use from the medieval period onwards are reflected in both the current land-use of the study area (largely now upland semi-improved pasture), and those elements of the historic landscape that still survive, namely in the form of relict remains of rig and furrow, Park Wood (28), enclosed field systems of likely pre-improvement (and late 18th to 19th century) date, and possible shieling huts. Together with the evidence for prehistoric activity within the wider landscape, this indicates that the area does retain many historic landscape character elements of considerable time depth.

6.6 Assessment of Archaeological Potential of the Proposed Development Route Options

The proposed grid connection route is situated in an area of mixed improved/semi-improved pasture, and upland moorland pasture, together with areas of modern conifer plantation, that lies to north of the village of Balfron, and south of Kippen and Bucklyvie, in Stirling. The route rises from 95m above OD (at Kepculloch) to over 320m above OD at its eastern terminus on the north-west facing slopes of Ling Hill. Current, and former land-use, has been largely for agricultural purposes, ranging from subsistence cultivation of crops, to animal pasturing, the latter of which is the predominant agricultural land-use today.

Taking into consideration the number and distribution of heritage assets identified within the study corridor, and the available evidence of historic and current land-use, in both the study area and in the wider landscape, the potential for as yet undetected, buried remains of archaeological deposits to survive at one or more locations within the farmland area along the proposed

development route options is assessed as being medium. In the case of the areas of modern conifer plantation, where forestry management techniques such as ploughing may have already disturbed buried archaeology, the potential for any archaeological remains to survive is assessed as being low.

7 IMPACTS AND MITIGATION

7.1 Direct Impacts

Potential Direct Impacts

Potential impacts have been assessed with reference to the grid connection route (and route options A-C) shown on Figures 1a-g, and have assumed that features present within c. 10m of the proposed route options could be disturbed by the proposed construction works. Table 4 summarises the potential direct impacts that may arise from the construction of the grid connection options, and an assessment of the significance of the direct impacts. Mitigation measures (where appropriate) to offset the predicted impacts are also presented, and residual effects taking into account mitigation are assessed. The identified effects are predicted in each case to be permanent, irreversible and adverse.

Grid connection route: without mitigation, direct impacts of moderate significance have been predicted for three sites – two boundary stones (5, 6) and a putative shieling hut (30). An unknown, but potentially significant effect has been identified where a platform of uncertain, but potentially prehistoric, origin (54) is intersected. Direct impacts of minor significance have been predicted for (15a, 33-35b, 43, 45, 48, 52, 53, and 56). Direct impacts of negligible significance have been predicted for sites 2, 13b, 15b and d, 17, 21c-d, 23, 24a, 42, 44, 47, 49, 50 and 55.

Route option A: without mitigation, a direct impact of moderate significance has been predicted for one site, a putative shieling hut (31). Direct impacts of minor significance have been predicted for sites 32a and 36. Direct impacts of negligible significance have been predicted for sites 2, 20, 27, 44 and 50.

Route option B: without mitigation, direct impacts of negligible significance have been predicted for sites 10d, 42, 44 and 50.

Route option C: without mitigation, a direct impact of minor significance has been predicted for one site (34). Direct impacts of negligible significance have been predicted for sites 13b, 24b, 37 and 55).

Mitigation

Archaeological mitigation works presented below would be included in one or more Written Schemes of Investigation (WSIs) produced for the approval of the Stirling Council prior to the commencement of construction works. Provision would be made for the excavation and recording of any archaeological remains identified as a result of any mitigation works that could not be preserved in situ. This provision would include the consequent production of written reports on the findings of the archaeological work conducted, with post-excavation analyses, publication and archiving of the results of the work where appropriate.

The grid connection route and route options (A-C), and associated construction works locations, (including access routes), would be micro-sited away from identified archaeological features to avoid direct impacts (where feasible). These sites would be demarcated, where necessary, to a strategy to be agreed with the Stirling Council Archaeology Officer. Should it prove that any of these sites could not be avoided, further mitigation would be required to offset the direct impacts predicted. Sites to be avoided are:

- along the grid connection route: 5, 6, 7b-c, 15a-c, 25, 30a-b, 33-35a, 43, 45, 49, 52-54 and 56;
- along route option A: 20, and 31;
- along route option B: none;
- along route option C: 37.

Archaeological watching briefs and recording would be conducted to a strategy agreed in advance with Stirling Council. The exact locations to be covered by this work would be dictated by the method used to install the grid connection cable, but are likely to include the points where the grid connection route, or route option, crosses over, or near to:

- along the grid connection route: the former Backside farmstead (13), Park farmstead (15); Dalhillocks farmstead (21); a possible shieling hut or bothy (30); a turf bank (42) and area of rig and furrow (44) bordered by the turf bank (42); a section of turf bank (47); and, a pre-improvement field system (48); and a platform (54).
- along route option A: an area of improved ground (27); a possible shieling hut or bothy (31); a section of turf bank (32a).
- along route option B: an area of improved ground (10d); a turf bank (42) and area of rig and furrow (44) bordered by the turf bank (42).
- along route option C: a platform (54), and a section of turf bank (55).

Several sections of 19th century field boundary (50) would be intersected by the proposed grid connection route and route options A and B. The disturbance to these sections of these field boundaries will be kept to a minimum and the disturbed sections will be reinstated following construction to retain the landscape character of the study area.

Formal arrangements would be put in place for any unforeseen archaeological discoveries made by the construction contractor to be reported to a retained professional archaeological organisation. This would require any unexpected discoveries in areas not subject to archaeological monitoring (e.g. building remains, human remains artefacts etc) to be assessed and dealt with appropriately, and would make clear the legal responsibilities placed upon those who make unexpected discoveries of archaeological significance. These arrangements would be explained in toolbox talks presented by the retained archaeological organisation.

Residual Impacts

The proposed programme of mitigation through preservation in situ of avoidable remains and recording where direct impacts are unavoidable will be sufficient to avoid (through preservation in situ) or offset (through excavation and publication) the predicted direct impacts on heritage assets.

Archaeological remains are a finite and non-renewable resource, and offset mitigation is a compensatory measure, at the lower end of the scale of mitigation options set out in Planning Advice Note 58 (PAN 58). The completion of the programme of archaeological offset mitigation works as set out above would compensate for the loss of the archaeological resource that would occur as a result of the construction of the proposed grid connection, but would not reduce the magnitude, and therefore the significance, of the predicted direct impacts.

Following the implementation of mitigation measures, no significant residual direct effects are predicted to arise.

Overall, residual impacts of minor significance are predicted for fourteen sites along the grid connection route (2, 13b, 15, 17, 21, 23, 24a, 35b, 42, 44, 47, 48, 50 and 55).

Residual impacts of no more than minor significance are predicted for six sites along route option A (2, 27, 32a, 36, 44, 50). Residual impacts of no more than negligible significance are predicted for four sites along route option B (10d, 42, 44, 50). Residual impacts are predicted of no more than negligible significance are predicted for two sites along route option C (13b and 24b).

Table 4: Potential Direct Impacts, Mitigation and Residual Effects

Site no./type Heritage importance	Potential Direct Impact	Magnitude of Impact	Significance of effect	Mitigation	Residual Effect
2: rig and furrow Lesser importance	Crossed by grid connection route and route option A.	Imperceptible: Rig and furrow largely poorly preserved and barely visible. Only small percentage of area would be crossed by route.	Negligible	None	Negligible
5: boundary stone Local importance	Lies in close proximity to grid connection route. Accidental damage arising from construction activities.	High: Boundary stone would be removed	Moderate	Avoidance of site; demarcation during period of construction works.	None
6: boundary stone Local importance	Crossed by grid connection route.	High: Boundary stone would be removed	Moderate	Avoidance of site; demarcation during period of construction works.	None
7: Lime kilns, quarry and trackway Local importance	Northern extent of quarry (7b) and northern terminus of trackway (7c) crossed by grid connection route	Low: Only small percentage of quarry and trackway would be disturbed	Negligible	Avoidance. Construction and construction traffic would keep to trackway.	None
10d: area of improved ground Lesser importance	South-eastern edge of area crossed by grid connection route option B.	Imperceptible: Only small percentage of ground would be disturbed	Negligible	Watching brief in area.	Negligible
13b: enclosure associated with former farmstead 13 Lesser importance	Potential impact on any surviving remains of enclosure 13b where crossed by grid connection route and route option C	Medium/None: It is not known of any remains of the enclosure survive. Two sections of the enclosure have potential to be disturbed.	Negligible / None	Watching brief in area where enclosure would be disturbed.	Negligible / None
15: Park farmstead Local	Elements of farmstead (15b and 15d) crossed by grid connection route. Other elements (15a) lie	Low: fragmentary remains of surviving enclosure 15b would be disturbed; 15d does not survive where crossed by grid	Negligible	Watching Brief in area of farmstead.	Negligible

importance	in close proximity to grid connection route. Accidental damage arising from construction activities.	connection route, and has been replaced by a post and wire fence. Medium: Potential for farm building footings to be accidentally disturbed through construction work.	Minor	Avoidance of farm building remains (15a); demarcation during period of construction works	None
17: ford Lesser importance	Lies in close proximity to grid connection route. Accidental damage arising from construction activities.	Imperceptible: Location of ford crossing would be disturbed, but no structural remains associated with ford.	Negligible	None: no upstanding structural remains associated with ford.	Negligible
20: quarry Local importance	Lies in close proximity to grid connection route option A. Accidental damage arising from construction activities.	Low: Potential for small part at western end of quarry to be affected	Negligible	Avoidance of site; demarcation during period of construction works.	None
21: Dalhillochs farmstead Local importance	Elements of surviving farmstead (21c and 21d) crossed by grid connection route.	Low: Both the trackway/bank (21c) and the enclosure (21d) would only be crossed at one section.	Negligible	Archaeological recording of sections of bank to be disturbed. Watching brief in area of farmstead.	Negligible
23: ford Lesser importance	Lies in close proximity to grid connection route. Accidental damage arising from construction activities	Imperceptible: Location of ford crossing would be disturbed, but ford crossing already heavily disturbed through erosion	Negligible	None: no upstanding structural remains associated with ford.	Negligible
24a/24b: trackways Local importance	Grid connection route follows parts of route of 24a, grid connection route option C follows parts of 24b.	Low: Large sections of both trackway 24a and b would be disturbed. However, trackways are surfaced and in use as forestry (24a) and farm (24b) tracks	Negligible	None.	Negligible
25: trackway Lesser importance	Lies in close proximity to grid connection route. Accidental damage arising from construction activities.	Low: Potential for small part of trackway to be disturbed.	Negligible	Avoidance of site; demarcation during period of construction works.	None
27: area of improved ground Lesser importance	Southern edge of area bordered by grid route option A.	Imperceptible: Only small percentage of ground would be disturbed	Negligible	Watching brief in area.	Negligible
30: possible shieling	30b Crossed by grid connection route.	High: potential for both sites to be removed	Moderate	Avoidance of site; demarcation during period	None

hut/bothy and turf bank Local importance	30a Lies in close proximity to grid connection route. Accidental damage arising from construction activities.			of construction works. Watching Brief in vicinity of site.	
31: possible shieling hut/bothy Local importance	Crossed by grid connection route option A.	High: Site would be removed	Moderate	Avoidance of site; demarcation during period of construction works. Watching Brief in vicinity of site.	None
32a: turf banks Lesser importance	32a Crossed by grid connection route option A.	High: Site would be substantially disturbed.	Minor	Archaeological recording of bank.	Minor
33: bridge Lesser importance	Lies in close proximity to grid connection route. Accidental damage arising from construction activities	High: Site has potential to be removed.	Minor	Avoidance of site; demarcation during period of construction works.	None
34: bank Lesser importance	Lies in close proximity to grid connection route and route option C. Accidental damage arising from construction activities	High: Potential for site to be removed.	Minor	Avoidance of site; demarcation during period of construction works.	None
35: trackway and bridge Local importance	Trackway (35b) crossed by grid connection route. Bridge (35a) Lies in close proximity to grid connection route. Accidental damage arising from construction activities.	Medium: Potential for parts of site to be removed/truncated	Minor	No mitigation proposed for 35b, site is of minimal interest. Avoidance of site 35a; demarcation during period of construction works.	Minor None
36: quarry Lesser importance	Crossed by grid connection route option A.	High: Site would be removed	Minor	None – site is of minimal interest.	Minor
37: field bank Lesser importance	Lies in close proximity to grid connection route option C. Accidental damage arising from construction activities.	Low: Only small part of bank would be disturbed	Negligible	Avoidance of site; demarcation during period of construction works.	None

42: field boundary associated with rig and furrow Lesser importance	Crossed by grid connection route and route option B.	Low: Only small part of bank would be disturbed	Negligible	Archaeological recording of bank sections to be disturbed during watching brief.	Negligible
43: possible sheep dip and enclosure Local importance	Lies in close proximity to grid connection route. Accidental damage arising from construction activities	Medium: Site could be disturbed	Minor	Avoidance of site; demarcation during period of construction works.	None
44: rig and furrow Lesser importance	Crossed by grid connection route and route options A and B.	Low: Rig and furrow largely poorly preserved and barely visible (other than section near site 42). Only small percentage of area crossed by route.	Negligible	Archaeological recording of remains of rig and furrow bordered by site 42 during watching brief.	Negligible
45: turf bank Lesser importance	Lies in close proximity to grid connection route. Accidental damage arising from construction activities.	High: Site could be removed	Minor	Avoidance of site; demarcation during period of construction works.	None
47: turf banks Lesser importance	Crossed by grid connection route at two sections.	Medium: Part of the banks would be disturbed	Negligible	Archaeological recording of sections of bank to be disturbed.	Negligible
48: field system Local importance	Elements of field system crossed by grid connection route.	Medium: Five sections of smaller turf banks forming parts of field system would be disturbed.	Minor	Archaeological recording of sections of bank to be disturbed. Watching brief in area.	Minor
49: turf bank Lesser importance	Lies in close proximity to grid connection route. Accidental damage arising from construction activities.	Low: Only small part of bank would be disturbed	Negligible	Avoidance of site; demarcation during period of construction works.	None
50: OS 1 st edition field boundaries	Surviving drystone wall/bank boundaries crossed by grid connection route and route options A and B.	Low: Only small sections of each field wall/bank would be disturbed	Negligible	Reinstatement of field boundaries to retain landscape character.	Negligible

Lesser importance					
52: field wall Lesser importance	Lies in close proximity to grid connection route. Accidental damage arising from construction activities	High: Potential for all of field wall to be disturbed	Minor	Avoidance of site; demarcation during period of construction works.	None
53: field wall lesser importance	Lies in close proximity to grid connection route. Accidental damage arising from construction activities	Low: Only small part of wall would be disturbed	Negligible	Avoidance of site; demarcation during period of construction works.	None
54: possible platform Unknown importance	Crossed by grid connection route.	High: Site would be removed	Unknown, but potentially significant	Avoidance of site; demarcation during period of construction works . Watching brief in area.	None
55: field bank Lesser importance	Crossed by grid connection route and lies in close proximity to route option C.	Low: Only small part of bank would be disturbed	Negligible	Archaeological recording of sections of bank to be disturbed.	Negligible
56: field bank Lesser importance	Crossed by grid connection route.	High: Large section of bank would be disturbed	Minor	Avoidance of site; demarcation during period of construction works.	None

7.2 Indirect Impacts

Indirect impacts may arise where the proposed development construction works temporarily affect the setting of cultural heritage features present in their vicinity. However, such effects are not considered individually in this report due to their temporary nature and the underground nature of the grid connection as built. Overall temporary indirect effects of the proposals on the setting of heritage assets are likely to be of no more than low magnitude and negligible significance; no residual effects are anticipated once development construction works are completed and the ground has been reinstated.

8. CONCLUSION

A desk-based assessment and reconnaissance walk-over survey have been carried out for a study area centred on a grid connection route connecting Earlsburn North wind farm with Kepculloch substation.

This work has identified fifty-six assets of cultural heritage interest within the study area. One site is of regional importance (11), twenty-three sites are considered to be of local heritage importance. The remainder of the heritage assets are of lesser heritage importance. Once heritage asset, a platform (54), is considered to be of unknown heritage importance as its baseline condition could not be fully established.

There are a large number of records for archaeological sites and features in the wider landscape around the study area, including several prehistoric sites, together with records for medieval or later settlement and land-use. The study area has largely been used for agricultural purposes and has seen little development (aside from land improvement via drainage and enclosure) other than the formation of areas of modern commercial plantation. Given this, and the land-take required for the grid connection, it is considered that the probability of encountering as yet undetected buried remains of archaeological significance is medium. There is a lower potential for finding surviving archaeological remains in the areas of commercial forestry plantation.

Potential direct impacts are predicted for thirty-six assets identified within the study area, of which four (5, 6, 30 and 31) are considered to be moderately significant. A direct impact of unknown significance has been predicted for site 54, (a possible platform), as its full baseline condition can not be ascertained at this time.

Mitigation measures have been proposed to offset or remove the predicted direct impacts on the assets identified. These measures include avoidance (where possible) through route design and micro-siting, and temporary demarcation of assets in close proximity to the grid connection route and construction working area; targeted archaeological monitoring of construction work (depending upon the construction methods to be used); archaeological recording of assets which cannot be avoided; and, provision of construction guidelines to be incorporated into toolbox talks for on-site contractors.

Recommended mitigation measures include site avoidance (and demarcation where necessary) for sites:

- along the grid connection route: 5, 6, 7b-c, 15a-c, 25, 30a-b, 33-35a, 43, 45, 49, 52-54 and 56;
- along route option A: 20, and 31;
- along route option B: none;
- along route option C: 37.

Targeted archaeological monitoring/recording where the grid connection route/route options A-C cross over, or near to:

- along the grid connection route, sites 13, 15, 21, 30, 42, , 47, 48, 54, and area of rig and furrow (44) bordered by the turf bank 42 ;
- along route option A, sites 27, 31, and 32a;
- along route option B, sites, 10d, 42, and area of rig and furrow (44) bordered by the turf bank 42;

- along route option C, sites 54 and 55.

Following the implementation of mitigation measures, no significant residual direct effects are predicted to arise:

- Residual impacts of minor significance are predicted for fourteen sites along the grid connection route (2, 13b, 15, 17, 21, 23, 24a, 35b, 42, 44, 47, 48, 50 and 55).
- Residual impacts of no more than minor significance are predicted for six sites along route option A (2, 27, 32a, 36, 44, 50).
- Residual impacts of no more than negligible significance are predicted for four sites along route option B (10d, 42, 44, 50).
- Residual impacts of no more than negligible significance are predicted for two sites along route option C (13b and 24b).

The grid connection route passes largely through undisturbed, unimproved and improved ground (including upland moorland), but also includes a section running through commercial forestry, and follows an existing trackway (24a) through a large part of the forestry. Route option B passes through undisturbed, improved and semi-improved ground. Route option C passes through undisturbed upland moorland, but largely follows an existing track (24b).

The assessment indicates that there are no cultural heritage grounds upon which to reject any of the route options following the implementation of the proposed mitigation measures. However, there is a lower potential for disturbing hitherto unknown archaeology where the routes re-use existing tracks (the main grid connection route through the forestry, and route option C).

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Ordnance Survey 2nd Edition map (1899) *Stirlingshire Sheet XV.SW*, six inches to one mile

Ordnance Survey 2nd Edition map (1899) *Stirlingshire Sheet XV.SE*, six inches to one mile

Ordnance Survey 2nd Edition map (1899) *Stirlingshire Sheet XVI.SW*, six inches to one mile

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Ordnance Survey 3rd Edition map (1923 (surveyed 1914)) *Stirlingshire Sheet nXVI*, six inches to one mile

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9.4 Aerial photographs

Sortie	Date	Frame Run	Scale	Library Ref
106g/uk/0093	15.05.46	3073-75, 4075-91	1:9,000	B0072
58/1955	14.03.56	0047, 0053, 0067	1:10,000	B0422
OS66-098	30.05.66	040-054, 081, 102-116	1:7,500	OS66-098
OS67-311	21.08.67	120, 127	1:7,500	OS67-311

APPENDIX 1: Cultural heritage assets within the study area

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
1	Ballindalloch Muir Cultivation Remains	5943	256300	691250	SMR	N	The SMR records that a possible area of rig and furrow cultivation remains, spread over an area measuring c.200m east to west by 150m north to south. is visible on aerial photographs. The pattern of the cultivation suggests that these are lazy beds, of possible early date. The site now lies within an area of forestry plantation.	Lesser
2	Ballindalloch Muir Rig Cultivation	5947	257250	691600	SMR; Aerial photographs; Field Survey	Y	The SMR records that a very expansive area of rig and furrow, c.1km wide, is visible on aerial photographs. A possible area of rig and furrow cultivation is visible on modern photographic imagery (Google™). There is no cultivation depicted in this area on Roy's map (1747-55). Field survey found the traces of the rig and furrow, measuring 0.1m high and 4m crest to crest, and oriented north-west to south-east. The cultivation remains were very poorly preserved and heavily covered with tall reeds.	Lesser
3	Ballindalloch Muir Enclosure	5946	257450	691500	SMR; Field Survey	Y	The SMR records that a possible small, rectangular enclosure is visible on aerial photographs. Field survey did not identify any features matching the description given in the SMR; the area was heather covered with a drainage ditch and bank running across the previously recorded location of the enclosure.	Lesser
4	Ballindalloch Muir Camp	5942.02	258660	691290	SMR	N	The SMR records a possible linear enclosure, with 80m-100m long sides and oriented north-east to south-west, visible on aerial photography (58/RAF/1955 0054). The size of the enclosure suggests that it may be the remains of a Roman marching camp or similarly proportioned feature. This site does not appear to be included in Jones' gazetteer of known, probable or possible Roman camps in Scotland (Jones, 2011).	Local

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							The site now lies in an area of forestry plantation.	
5	Carlin Stone	3928	259553	691277	SMR	Y	<p>The SMR records the presence of this stone but does not provide any further details.</p> <p>A boundary stone, annotated 'Carlin Stone', is depicted on the Ordnance Survey 1st (1865-6) Edition map along an undefined county (Perthshire/Stirlingshire) and parish boundary. The stone is also depicted on the Ordnance Survey, 2nd (1899) and 3rd (1923) Edition maps, but is not shown on the 2001 Ordnance Survey map.</p> <p>Field survey found a small irregularly shaped stone lying in heather beside a modern fence line. The stone measures 0.5m by 0.3m by 0.4m high and appears to be un-worked.</p>	Local
6	Wife With The Bratty Plaid	2899	260027	691384	SMR; Historic maps; Field Survey	Y	<p>The SMR records the presence of a possible boundary stone which lies adjacent to a march fence.</p> <p>A boundary stone, annotated 'Wife with the Bratty Plaid', is depicted on the Ordnance Survey 1st (1865-6) Edition map along an undefined county (Perthshire/Stirlingshire) and parish boundary. The stone is also depicted on the Ordnance Survey 2nd (1899) and 3rd (1923) Edition maps, but is not depicted on the 2001 Ordnance Survey map.</p> <p>Field survey identified a large irregular-shaped moss-covered stone lying in heather beside a modern fence line. The stone appears to be unworked and measures 0.7m by 0.4m by 0.7m high. It has an old metal fencepost inserted into its northern side and has a deliberately cut groove allowing the metal fence wire to cross its northern face.</p>	Local
7	Balgair Muir Lime Kiln	3340	260637	690881	SMR; Historic	Y	The SMR records that two limekilns and access tracks are marked on the Ordnance Survey 1st Edition map (25	Local

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
					maps; Aerial Photograph; Field Survey		<p>inch map) (1863). Old quarries are marked a little way to the east.</p> <p>The Ordnance Survey 1st Edition map (1865-6) depicts two limekilns (7a) and a short section of trackway (7c) running to the north-east of the kilns and joining a main trackway (24a). The Ordnance Survey 2nd Edition map (1899) depicts both limekilns (7a), but not the track, and shows a small area of quarrying (7b), annotated 'Old Quarry', just to the east of the limekilns. Only the quarry (7b) is still depicted on the Ordnance survey 3rd Edition map (1923).</p> <p>Field survey found the well preserved remains of two kilns (7a), an extensive area of quarrying (7b); and a trackway (7c), located in a narrow burn valley:</p> <p>7a: two conjoined kilns, measuring 16m by 8m by 2.5m-3m high overall, with kiln bowls measuring 5m across. Stone facing is visible in places, but the kilns are largely turf-covered. An additional, horseshoe-shaped bank, 2m across by 1.2m high, extends from the eastern end of the kilns, defining an area 5m in diameter.</p> <p>7b: a quarried bedrock face extending to the ENE of the kilns (7a), along the burn valley, approximately 20m wide by 3m high. Further quarrying is visible to the west and north-west of the kilns as a series of turf-covered linear cuts and sub-circular pits, together with small bunds and tip lines.</p> <p>7c: a grassy slight terrace into the burn valley side, measuring 2.5m wide by 0.2m deep, represents a length of the former trackway.</p>	
8	Hill Of Balgair Tryst Ground	3332	261000	691000	SMR	N	The SMR holds a record for a 'tryst ground', but provides no further details. Field survey did not identify this site; the location of the site now lies within dense	Local

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							<p>forestry plantation and could not be accessed.</p> <p>Tryst grounds were areas of land in the lowlands of Scotland, where cattle from the Highland glens was brought by drovers to be sold to buyers from across the country, one of the most famous tryst grounds being the Falkirk Trysts (Scott, 2005).</p> <p>The Ordnance Survey 1st Edition map (1865-6) annotates '<i>Balgair Market (for cattle)</i>' to the north of the location recorded in the SMR (and outside the study area). It is likely that the SMR record is referring to the cattle market annotated on the Ordnance Survey 1st Edition map (1865-66).</p> <p>Reference is made to a market at Balgair, in the Farmer's Magazine of 1837, where it is included in reference to a description of the Falkirk Trysts that took place that year (The Farmer's Magazine (1837)).</p>	
9	Hill Of Balgair Lime Kiln	2905	261395	691122	SMR; Historic maps	N	<p>The SMR records that a limekiln is marked on the Ordnance Survey 1st Edition map (25 inch) (1864) as an 'old limekiln'.</p> <p>The limekiln is shown just west of an area of possible quarrying (20) on the Ordnance Survey 1st Edition map (1865-6). The limekiln is depicted on the Ordnance Survey 2nd (1899) and 3rd (1923) Edition maps and annotated as 'Old Limekilns'.</p>	Local
10	Johnkingston Farmstead	3333/ NS69S W 40	261776	690968	SMR; Historic maps; Aerial Photograph; Field Survey	Y	<p>The SMR and RCHAMS database record that a farmstead, annotated 'Johnkingston', and comprising two buildings (10a), a well (10b) and an enclosure (10c), is depicted on the Ordnance Survey 1st Edition (25-inch) (1864). One roofless building and an enclosure are still marked on 2001 Ordnance Survey map.</p> <p>The Ordnance Survey 2nd Edition map (1899) depicts</p>	Local (Lesser for 10d)

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							<p>the buildings (10a) as unroofed, the enclosure (10c) is still shown but the well (10b) is no longer depicted. A similar layout is shown on the Ordnance Survey 3rd Edition map (1923).</p> <p>The turf-covered footings of two buildings (10a) together with part of an enclosure (10c) and a large sub-oval-shaped area of improved ground (10d) to the south-west are visible on aerial photographs from 1946 and modern aerial photographic imagery (GoogleTM).</p> <p>The farmstead (10a-c) lies outside the field survey area; the possible field (10d) was found to be defined by an area of improved pasture. No rig and furrow cultivation was visible at the time of survey.</p>	
11	Mains Of Glinn Laird's House	Category B Listed (HB No. 4203); 5023/ NS69S W 34	263370	691028	SMR; RCAHMS ; Historic maps	N	<p>The Statutory List of Listed Buildings records Mains of Linn as a well restored smaller laird's house dating to 1743, with a sophisticated design given its size and relatively early date and rather remote location on the old Kippen-Fintry road. The List records that the house was described by the RCAHMS in 1957 as 'roofless and falling into total ruin'. The attached (later) outbuildings which were formerly grouped about the house to form a three-sided courtyard were by this time 'completely ruinous'. In the 18th century the lands of Glins belonged to the Buchanan family and the initials 'M B' over the main entrance are thought to be those of Moses Buchanan, 2nd son of John Buchanan of Carbeth (M C would probably be the initials of his wife). Plans executed by the RCHAMS show a symmetrical double-pile arrangement with a central semicircular-plan staircase leading off a lobby just inside the main entrance. The RCHAMS describe a moulded stone fireplace in the room to the east of the entrance lobby and a corner fireplace in the room to the south of that; and on the first floor stone fireplaces with 'sunk-</p>	Regional

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							<p>wrought' lintels with rounded angles; one of which, in the larger of the two rooms at the east, had a continuous bead-moulding around its arris. In about 1970 the house was restored in association with the National Trust for Scotland. This included almost completely rebuilding the single storey addition to the west.</p> <p>The SMR and RCAHMS database record a well restored mid-18th century laird's house. Its design is fairly sophisticated given its size and relatively early date (and rather remote location on the old Kippen-Fintry road). It was described by the RCAHMS in 1957 as ruinous.</p> <p>A farmstead (or building), annotated 'The Glens', is depicted on Roy's map (1747-55) together with two enclosures and an area of cultivation to the north. The same farmstead is annotated, 'The Glins' on Grassom's map (1817) and Thomson's map (1820).</p> <p>The Ordnance Survey 1st Edition map (1865-6) depicts a U-shaped building and associated garden, all set within a larger tree-lined enclosure and with an avenue approaching from the north-west. A rectangular roofed building and two adjoined enclosures are depicted to the west of the U-shaped building, and a large tree-lined field is shown to the north-east. The Ordnance Survey 2nd (1899) and 3rd (1923) Edition maps depict a similar layout to that shown on the 1st Edition (1865-6), and this layout is largely unchanged on the 2001 Ordnance Survey map.</p>	
12	Ballochleam Battle Site (possible)	654.04, 654.01-654.03 / NS69SE 10	265300	691200	SMR; RCAHMS ; Historic maps	N	The SMR and RCAHMS database note that the Ordnance Survey Name Book (1860) records that 'a great quantity of different kinds of bones, pieces of brass armour and spearheads' were found near Ballochleam, which name is said to mean "Hollow of the Dead". Chrystal (1903) records that a battle, fought	Local

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							<p>near the Ballochleam farmstead, between Graham of Boquhan and Leckie of Keckie, was still commemorated in ballad in 1793.</p> <p>The Ordnance Survey 1st (1865-6), 2nd (1899) and 3rd (1923) Edition maps show the location of the finds, annotated as as 'Bones, Armour, Spears and Bones found here'.</p>	
13	Backside Farmstead	3376/ NS68NE 10	266690	689480	SMR; RCAHMS ; Historic Maps; Aerial Photographs; Field Survey	Y	<p>The SMR and RCAHMS database record that a farmstead, annotated 'Backside (Ruin)', is depicted on the Ordnance Survey 1st Edition map (1865). The farmstead comprises three unroofed buildings (13a), one of which is an L-shaped long building, and two enclosures, is depicted on the Ordnance Survey 1st Edition map (1865). A subdivided enclosure annotated as a Sheepfold is shown on the 1979 Edition of the Ordnance Survey 1:10000 map.</p> <p>The farmstead is annotated on Grassom's map (1817) shown adjacent to a road or trackway (possibly 24b).</p> <p>The Ordnance Survey 1st Edition map (1865-6) depicts one enclosure attached to the buildings, forming part of the farmstead (13a, 266664 689487), with a larger sub-square enclosure (13b, 266641 689520) attached to the buildings to the north. A section of old boundary wall or head dyke (13c, 266656 689570) is shown to the east.</p> <p>The Ordnance Survey 2nd Edition map (1899) does not depict any remains of the farmstead, but shows a small square enclosure (13d, 266672 689492) with a single compartment in a similar location to the former farm buildings (13a). The same enclosure, annotated 'sheepfold', is depicted on the Ordnance Survey 3rd (1923) and 4th (1951) Edition maps, which show the compartment within the enclosure has been sub-divided</p>	Lesser (13a-c) Local (13d)

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							<p>and walls added to the north-west and south-east corners.</p> <p>The sheepfold depicted on the Ordnance Survey 2nd (1899) and 3rd (1923) Edition maps is visible on modern photographic imagery (Google™), together with an additional larger enclosure/sheepfold to the north. Field survey found no remains of the farmstead 13a or the enclosure 13b (possibly only poorly preserved under snow cover) and head dyke 13c. The small square sheepfold (13d) survives as a well-preserved drystone walled enclosure measuring 23m by 21m with a compartment measuring 21m by 8m on the interior western side, defined by walls 0.8m-0.4m wide by 0.3m-1.3m high, and still in use as a sheepfold and storage area for shooting. The larger enclosure visible on modern photographic imagery attached to the north of sheepfold 13d, is defined by a series of wooden fences.</p>	
14	Keppculloch Farmstead		254083	691755	Historic Maps	Y	<p>A farmstead, annotated as 'Keppenculloch', is depicted on Roy's map (1747-55). The same farmstead is shown on Grassom's map (1817) and Thomson's map (1820), annotated as 'Keppculloch'.</p> <p>A farmstead annotated 'Keppculloch' is shown on the Ordnance Survey 1st Edition map, comprising three roofed buildings, two garden enclosures, and one larger enclosure, set within a sub-rectangular enclosed area. A similar layout is shown on the Ordnance Survey 2nd (1899) and 3rd (1923) Edition maps. A farm is shown on the 2001 Ordnance Survey map in the same location, but the building layout is different, suggesting the 19th century buildings have been replaced with modern farm buildings.</p>	Local
15	Park		255008	691208	Historic	Y	A farmstead, annotated as 'Park', is depicted to the	Local

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
	Farmstead				Maps; Aerial photographs; Field Survey		<p>south of an area of woodland (28) on Grassom's map (1817) and Thomson's map (1820)..</p> <p>The same farmstead is shown on the Ordnance Survey 1st Edition map (1865) comprising two roofed buildings (15a), two enclosures (15b and 15c), and two sections of field boundary (15d). The Ordnance Survey 2nd (1899) and 3rd (1923) Edition maps do not depict the farmstead, but show a small unroofed building or enclosure in the same location, together with an 'Old Quarry' shown to the south of the former farmstead location.</p> <p>The turf-covered footings of two buildings (15a), with five compartments and three compartments respectively, are visible on aerial photographs from 1946 and on modern photographic imagery (GoogleTM), together with two other possible structures, and the faint outlines of two enclosures (15b) and (15c). The crop-mark of an old field boundary shown on the Ordnance Survey 1st Edition map (1865-6) is also visible running south-eastwards from the farmstead.</p> <p>Field survey found the turf-covered footings of two farm buildings (15a) and the fragmentary remains of enclosures (15b –c) and one section of boundary wall (15d), all located on a plateau in semi-improved pasture. A small area of quarrying was also identified (15e) to the south-west of the farmstead.</p> <p>15a: (254987 691231) two buildings were identified. The first is aligned north-west to south-east, measuring 32m by 7m, and defined by tumbled walls 1.5m-2m wide by 0.3m-0.5m high that enclose four compartments and a cross-passage. The second, aligned north-east to south-west, measures 30m by 7m, and is defined by tumbled walls measuring 1.5m wide by 0.4m</p>	

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							<p>high that enclose three compartments.</p> <p>15b: (255000 691186) a section of wall representing the north-east corner of the former enclosure, 12m long by 1.7m by 0.3m-0.5m high, and a low turf bank, 1.5m wide by 0.2m high representing the southern edge of the south-east corner of the former enclosure.</p> <p>15c: (254987 691231) a low turf bank, 1m wide by 0.2m high representing the remains of the eastern, north-west to south-east aligned edge of the former enclosure.</p> <p>15d: (254856 691283) the remains of a turf-covered tumbled drystone wall measuring 1m-1.5m wide by 0.3m-0.4m high on its south-western side, and truncated by a trackway on its north-western end. Only the western section of field boundary wall visible on the Ordnance Survey 1st Edition map (1865) survives; that to the east has been replaced by a modern post and wire fence.</p> <p>15e: (255129 691300) a semi-circular quarry cut into bedrock, measuring approximately 5m across by 1.2m deep.</p>	
16	Bead Muck Placename		259713	691783	Historic maps; Field Survey	Y	<p>The Ordnance Survey 1st Edition Map (1865) annotates the placename 'Bead Muck', adjacent to a burn.</p> <p>Field survey found a collection of old farm machinery and other abandoned farm material at the location of the placename, but did not identify any other remains.</p>	Lesser
17	Ford		260386	691361	Historic maps; Field Survey	Y	<p>The Ordnance Survey 1st (1865-6) and 2nd (1899) Edition maps depict a ford, adjacent to a trackway (24a).</p> <p>Field survey found no trace of any built structures at the location of the ford, but a slight dip in ground level was observed at the ford's location, where the trackway 24a</p>	Lesser

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							met a burn.	
18	Sheepfold; Enclosure		261055	690742	Historic maps; Aerial Photographs	N	<p>The Ordnance Survey 1st Edition Map (1865) depicts a sheepfold (18a, 261179 690788) comprising three compartments, with a large sub-oval enclosure (or field) attached to its south-west side (18b, 261055 690742).</p> <p>Only the enclosure (or field) (18b) is depicted on the Ordnance Survey 2nd Edition map (1899), while only the northern edge of the same enclosure is shown on the Ordnance Survey 3rd Edition map (1923).</p> <p>The enclosure (or field) defined by a turf bank is visible on aerial photographs from 1946 and on modern photographic imagery (Google™). Rig and furrow remains are visible within the enclosure (18b), suggesting that it was formerly a field, likely of pre-improvement date, and pre-dating the sheepfold (18a).</p>	Local
19	Balafark Farmstead		261346	690764	Historic maps; Aerial Photographs	N	<p>A farmstead and area of cultivation shown to the south is depicted on Roy's map (1747-55) and annotated as 'Ballyfark'. A farmstead, now annotated 'Balaferk', is depicted in a similar location on Grassom's map (1817) and Thomson's map (1820).</p> <p>A farmstead, annotated 'Balafark', is shown on the Ordnance Survey 1st Edition map (1865-6), comprising an L-shaped building with a garden enclosure to the south-east and a small enclosure attached to the north-west side. Two sections of track leading to the farmstead from the public road are also shown. A similar layout is depicted on the Ordnance Survey 2nd (1899) and 3rd (1923) Edition maps, with two additional buildings shown to the north and an additional enclosure. The L-shaped building appears to still be depicted on the 2001 Ordnance Survey map together with the farm access roads, with additional modern farm buildings shown to the north of the L-</p>	Local

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							shaped building.	
20	Quarry		261234 261287 261281	691083 691014 691025	Historic maps; Aerial Photographs; Field Survey	Y	<p>An area of possible quarrying is depicted on the Ordnance Survey 1st Edition map (1865-6). The Ordnance Survey 2nd Edition map (1899) annotates the area as 'Old Quarry'. The Ordnance Survey 3rd Edition map (1923) depicts an extension to the quarry to the north-east.</p> <p>A grassed over area of quarrying is visible on aerial photographs from 1946 and on modern photographic imagery (GoogleTM).</p> <p>Field survey found an extensive area of quarrying (20a), a length of drystone walling (possible structure) (20b) and a section of holloway (20c) leading from the south of the quarry to two spoil heaps (20d):</p> <p>20a: (261234 691083) a well-preserved linear limestone quarry, 3m deep; with additional small quarry pits and spoil heaps (measuring 1m-2m high), spread along the northern edge of the quarry.</p> <p>20b: (261252 691051,) a poorly preserved drystone wall, 18m by 0.4m wide by 0.2m high, orientated north-west to south-east, and defining the edge of a holloway (20c). The remains of a possible drystone walled, sub-rectangular, structure, 6m by 2m, are visible at the northern end of the wall where it meets the quarry edge.</p> <p>20c: (261265 691036) a grassy holloway measuring 3m wide by 0.4m deep, extending from the southern edge of the quarry for 10m.</p> <p>20d: (261297 691005) two turf-covered spoil heaps to the south-east of a large area of quarrying (20a). The spoil heaps are highest at their downslope edges (to the south-east) suggesting tipping of quarried spoil from the north-west (the direction of the quarry). One spoil heap</p>	Local

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							is a tear drop-shaped bund measuring 21m by 7m by 0.3m-1.75m high; the second is oval-shaped measuring 20m by 7m-10m by 0.5m-2m high.	
21	Dalhilloch Farmstead	NS69S W 5 0	262404	690497	Historic maps; Aerial Photographs; Field Survey	Y	<p>A farmstead, annotated 'Dalhillochs', is depicted on Roy's map (1747-55) on the southern side of a burn, with an area of cultivation shown to the west and south. A second, unnamed farmstead is shown to the south-west of 'Dalhillochs', on the southern side of a second burn, together with an area of cultivation.</p> <p>Two farmsteads, both annotated as 'Dalhillock' are shown on Grassom's map (1817) these are probably the same farmstead, annotated as 'Dallhillochs' and the unnamed farmstead shown on Roy's map. Two farmsteads in similar locations to those shown on Grassom's map are also depicted on Thomson's map (1820) one of the farmsteads annotated as 'Dalhillock', and the second, to the north, unnamed. Only one farmstead, annotated 'Dalhillock' is shown on Ainslie's map (1821).</p> <p>A farmstead annotated 'Dalhillock' is shown on the Ordnance Survey 1st Edition map (1865-6), comprising a U-shaped building (21a) with a garden enclosure to the north-west (21b), and a small rectangular building (21e) , a trackway and associated wall (21c) to the north-east, set within a larger enclosure (21d). The Ordnance Survey 2nd (1899) and 3rd (1923) Edition maps show two unroofed buildings (21a), the garden enclosure (21b) and the trackway and associated boundary wall/bank (21c), but not the larger enclosure/boundary wall (21d). The farmstead is no longer depicted on the current Ordnance Survey map.</p> <p>The trackway and wall (21c) and a possible turf bank forming enclosure (21d) are visible on modern</p>	Local

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							<p>photographic imagery (Google™).</p> <p>Field survey found no trace of the farmstead buildings (21a, 262440 690482) and associated enclosure (21b, 262423 690500), although a level area of ground, measuring approximately 20m by 30m, was identified at the previous location of farmstead (the area is now used for cattle feeding). A trackway and associated boundary bank (21c), a fragmentary enclosure (21d) and the partial footings of a small building (21e) were indentified:</p> <p>21c: (262348 690588) a slight grassy holloway, 2m wide, and still in use as a farmer's track, with a large turf-covered bank on its western edge measuring 2m wide by 0.5m high.</p> <p>21d: (262392 690508) an intermittent denuded turf bank lined with hawthorn trees in places and best preserved on its north-eastern side where it measures 1m-1.5m wide by 0.4m high.</p> <p>21e: (262486 690503) a small section of drystone wall, measuring 15m by 0.8m wide by 0.2m-0.3m high.</p>	
22	Knockingalloch Boundary Stone		258750	690942	Historic maps; Field Survey	Y	<p>A boundary stone, annotated 'Knockingalloch', is depicted on the Ordnance Survey 1st (1865-6), marking an undefined parish boundary. The stone is shown on the Ordnance Survey 2nd (1899) and 3rd (1923) Edition maps, but is not depicted on the 2001 Ordnance Survey map although the placename 'Knockingalloch' is still annotated.</p> <p>Field survey did not find any remains relating to the boundary stone within a heather-covered forest ride.</p>	Lesser
23	Ford		265148	691078	Historic maps; Field	Y	<p>The Ordnance Survey 1st (1865-6) and 2nd (1899) Edition Maps depict a ford crossing the Boquan Burn.</p> <p>Field survey found no trace of any built structure at the</p>	Lesser

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
					Survey		ford, but at recorded location of the ford, a shallow crossing point over the burn was found, now used by cattle to cross the burn. The shallow crossing point has been heavily eroded by cattle trample and water movement, and the course of the burn has realigned since the 19 th century.	
24	Trackways		n/a	n/a	Historic maps; Aerial Photographs; Field Survey	Y	<p>Three sections of trackway (24a-c), linking farmsteads to public roads are shown on the Ordnance Survey 1st Edition map (1865-6) and on subsequent Editions. One of the trackways (24b) is possibly shown on Grassom's map (1817) and Thomson's map (1820). The trackways are visible on modern photographic imagery (GoogleTM) as grass covered curvilinear features.</p> <p>Field survey found trackways (24a-b) in good condition and still in use; the third trackway (24c) was less well preserved and snow-covered at the time of survey:</p> <p>24a: (259705 691820 to 261303 690903 and 260541 691578 to 260385 691370) a wide grassy holloway at the southern end measuring 5-9m wide by 0.3m-0.5m deep; where the trackway enters the forestry, it becomes a well-defined raised platform measuring 5m wide by 0.4m high, with a compacted gravel surface visible in places.</p> <p>24b: (265441 691602 to 266735 689229) a partly grass-covered holloway/platform measuring 3.5m-4m wide, partly surfaced with gravel, broken brick and cobbles in places.</p> <p>24c: (266603 689934 to 266673 689405) a short section of terrace measuring 2m wide running along a ridgeline to the north-east of sheepfold (13d).</p>	Local
25	Trackway		254273 254344	691285 691193	Field Survey	Y	Field survey identified a trackway, visible as a slightly raised platform, measuring 3m-4m wide by 0.3m high, running through an area of semi-improved pasture on a	Lesser

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							north-west to south-east orientation.	
26	Field (possible)		261564	691108	Aerial photographs	N	The possible remains of an irregular shaped field, defined by an area of improved ground, is visible on modern photographic imagery (Google TM), to the north of 'Johnkingston' farmstead (10).	Lesser
27	Field; (possible)		258813	691584	Aerial photographs; Field Survey	Y	A large sub-oval field (27) is visible on modern photographic imagery (Google TM). An sub-oval area of semi-improved pasture was identified defined by a drainage ditch (or burn) on its southern edge.	Lesser
28	Park Wood Plantation bank/wall		255061	691448	Historic Maps; Field Survey	Y	Grassom's map (1817) and Thomson's map (1820) depict an area of woodland to the north of 'Park' farmstead (15). A large irregular-shaped enclosure is visible on the Ordnance Survey 1 st Edition map (1865) and on subsequent Editions, bounding an area of mixed woodland annotated as 'Park Wood'. Field survey found a section of turf-covered, tree-lined bank, measuring 50m by 3.5m by 0.5m high, and forming the south-western edge of the the enclosure (within the survey area)Elsewhere, the(the south-western corner and south-eastern corners, within the survey area) the enclosure comprises of a bank measuring 1.5m by 0.4m.	Local
29	Bund		256407 256407	691556 691557	Field Survey	Y	Field survey identified a crescentic, turf-covered spoil heap/bund, located on the edge of a modern track leading in to a forestry plantation. The bund measures 10m by 8m by 1.5m high and is probably of recent origin.	Lesser
30	Shieling Hut (possible) ; Bank		258504 258506	690877 690859	Field Survey	Y	Field survey identified a sub-circular structure, possibly a shieling hut (30a, 258506 690874) located on a slight knoll. The structure measures 5m in diameter and is	Local

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							defined by a turf bank, measuring 1.2m-1.5m wide by 0.3m-0.5m high. A section of denuded turf bank (30b, 258509 690865 to 258502 690853), measuring 13m long by 1.5m by 0.4m high, is visible to the south of the structure.	
31	Shieling Hut (possible)		258114	691422	Field Survey	Y	Field survey identified a sub-circular structure, possibly a shieling hut located near a plateau. The structure measures 6m in diameter and is defined by a turf bank, measuring 1.5m wide by 0.3m-0.5m high, with a possible entrance to the south.	Local
32	Turf Banks		n/a	n/a	Field Survey	Y	Field survey identified two banks, running roughly parallel (32a-b), along a plateau, bordering an area of grassland. 32a: (258087 691414 to 258009 691414) a denuded and reed covered bank measuring 78m long by 1m-1.5m wide by 0.2m-0.4m high, and orientated ENE-WSW 32b: (258012 691466 to 257948 691429) a substantial bank measuring 165m long by 3.5m wide by 0.6m high, and orientated east-west, with a ditch on its northern side, 1m wide by 0.2m deep. The bank continues into forestry and may be associated with drainage.	Lesser
33	Bridge		256952	691561	Field Survey	Y	Field survey identified the remains of a crude bridge on the western side of an unnamed burn. The bridge comprises a series of wooden planks (possibly old sleepers), laid over the ground, and covering an area 12m long by 2.5m wide by 0.2m high. The bridge leads to a modern metal shed with a curved roof containing three old tractors.	Lesser
34	Bank (possible)		265275	690737	Field Survey	Y	Field survey identified the very poorly preserved remains of a possible bank, measuring 22m long 1m by 0.1m high, and orientated NNW-SSE, in an area of rough pasture.	Lesser

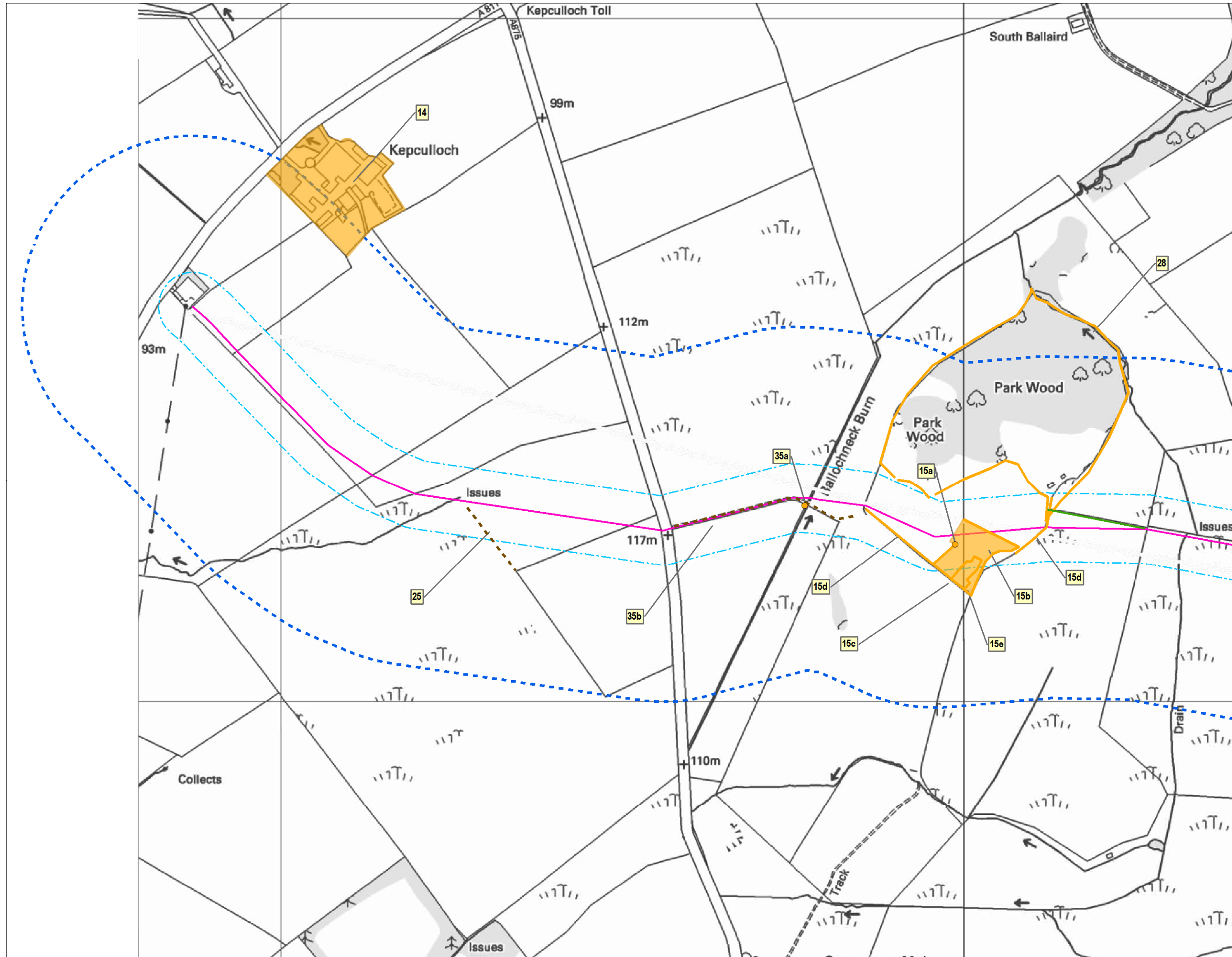
Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
35	Bridge; Track		254577 254843	691248 691273	Historic Maps; Field Survey	Y	<p>A possible trackway is shown on the Ordnance Survey 1st Edition map (1865), running from the public road to Park farm (15).</p> <p>Field survey identified a single span arched bridge (35a, 254767 691287) measuring 4m long by 3m wide by 1.8-2m high, with concrete capping on the surface of the bridge. The bridge carries a trackway (35b) over the Ballochneck Burn. The trackway is visible as a platform, measuring 3m-5m wide by 0.3m-0.6m high, with an old cast iron gate post holding a farm gate where the track crosses the bridge.</p>	Local
36	Quarry scoop		261321	690961	Field Survey	Y	Field survey identified a turf covered quarry scoop adjacent to the public road, measuring 6m by 5m by 0.75m deep, with a slight bank on the outer edge, 1m by 0.1m-0.2m high. The quarry scoop is likely to be associated with the construction of the public road.	Lesser
37	Field Bank		265808 265788	689743 689714	Field Survey	Y	Field survey identified a denuded turf bank running through an area of rough pasture moorland and petering out at its south-west end. The bank measures 36m long by 1m-1.5m wide by 0.3-0.5m high, and is orientated north-east to south-west	Lesser
38	Enclosure		258859	691594	Historic Maps; Field Survey	Y	<p>A rectangular enclosure is shown on the 2001 Ordnance Survey map.</p> <p>Field survey found the northern, western and southern sides of the enclosure to comprise a low, poorly defined turf bank 1m wide by 0.2m-0.3m high. The eastern side was formed by a drystone field wall, 1m-1.2m wide by 0.5m high. The banks define an area measuring 80m by 49m.</p>	Lesser
39	Pond (possible)		259854	691364	Field Survey	Y	Field survey identified an oval water-filled possible pond, or possible quarry, cut into a gentle west-facing slope. The feature measures 15m by 5m by at least	Lesser

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							0.5m-1m deep.	
40	Wall; Quarry		260583	691007	Field Survey	Y	Field survey identified a section of drystone wall, 6m by 0.8m by 0.5m high, on a raised section of ground bordering trackway (24a). A large, water-filled sub-oval quarry lies immediately to the north of the wall, measuring approximately 20m by 15m, by 2-3m deep.	Lesser
41	Field boundary		261678 261688	690835 690811	Field Survey	Y	Field survey identified a denuded section of drystone wall, 10m by 1m by 0.3m-0.4m high, running down slope to the south of an area of improved pasture (10d). A second, shorter section of wall is visible to the south, measuring 2.5m long.	Lesser
42	Field bank;		262039	690753	Historic Maps; Aerial Photographs; Field Survey	Y	Field survey found a tree-lined bank (42a), measuring 1m-1.2m wide by 0.5m-1m high (denuded to 0.2m high in places), and revetted in places into the base of a south-east facing slope. The bank is shown as a field boundary on the Ordnance Survey 1 st Edition map (1865), but is no longer depicted on the 2001 Ordnance Survey map. The bank borders the north-western edge of an area of rig and furrow cultivation (part of site 44), visible as denuded, slumped straight rig measuring 4m crest to crest and upstanding to 0.1m-0.2m high. Two alignments of rig are visible; one aligned north-east to south-west, the other north-west to south-east, and separated by a possible bank running parallel with the field bank. The north-eastern and south-eastern and south-western edges of the field are bordered by drystone walled field boundaries shown on the 2001 Ordnance Survey map (50).	Lesser
43	Sheep dip (possible); Enclosure (possible)		261686	690756	Field Survey	Y	Field survey identified a small, oval drystone walled structure (43a, 261667 690757) adjacent to a burn, measuring 5.5m by 1.5m and with walls measuring 0.6m wide by 0.3m high. A small section of drystone wall extends from the southern edge of the structure, measuring 4m by 1m by 0.2m-0.3m high. The structure	Local

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							<p>may be the remains of an old sheep dip.</p> <p>The remains of an L-shaped section of denuded wall (43b, 261683 690754), 0.8m-1m wide by 0.2m-0.3m high, possibly forming the remains of an old enclosure, were also identified on the opposite (north-eastern) side of the burn, defining an area approximately 14m across.</p>	
44	Rig and Furrow		261664	690757	Aerial Photographs; Field Survey	Y	<p>Several areas of possible rig and furrow cultivation are visible on aerial photographs from 1946 and 1966, and modern photographic imagery (GoogleTM).</p> <p>Field survey found that many of the areas of land with possible rig and furrow recorded, were covered in reeds and grass at the time of survey; however, faint traces of probably denuded and poorly preserved straight rig, measuring on average 4m crest to crest, and 0.1m-0.2m high were visible over much of the recorded rig and furrow extents. Two areas (to the south of Balafark (19), and to the north and north-east of Mains of Glinns (11), may relate to areas of cultivation depicted on Roy (1747-55).</p>	Lesser
45	Field Bank		262715 262706	690643 690635	Field Survey	Y	Field survey identified a section of turf bank, measuring 12m by 1m by 0.2m high, orientated ENE-WSW and attached to a field boundary shown on the 2001 Ordnance Survey map. The bank is likely to be part of a former field system.	Lesser
46	Enclosure		262695	690685	Field Survey	Y	Field survey identified an L-shaped section of tree-lined turf bank, measuring 1.2m-1.5m wide by 0.3m-0.5m high, and defining an area (25m by 20m). The bank forms a slight revetment into the slope, enclosing a raised, level area.	Lesser
47	Field Banks		262806	690668	Field Survey	Y	Field survey identified a series of turf banks, measuring 0.8-1m by 0.2-0.3m high, orientated ENE-WSW, and NNW-SSE, running down slope to an unnamed burn.	Lesser

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
48	Field Banks/Field System		264596 265136	691092 691125	Maps; Field Survey	Y	Field survey identified several sections of turf bank, measuring 1m-2m wide by 0.2m-0.4m high, located along the upper slopes of the Pow Burn valley and forming the remains of a former field system. The banks forming the field system are best preserved on the main east to west alignment, where one bank is upstanding to 0.75m high and is depicted on the current (2001) Ordnance Survey map.	Local
49	Field Bank		263891 264025	690923 690969	Field Survey	Y	Field survey identified an L-shaped section of denuded turf bank, measuring 162m long by 1m-1.5m wide by 0.2m-0.3m high, and orientated predominantly ENE-WSW, located along the upper slopes of the Pow Burn valley.	Lesser
50	Field boundaries		262189 266579	690838 689543	Historic Maps; Maps; Field Survey	Y	<p>Several field boundaries are depicted on the Ordnance Survey 1st Edition map (1865) and subsequent Editions, enclosing areas of land and forming sub-rectangular fields. Field boundaries following the same alignments are shown on the 2001 map, depicted as either a solid, or a dashed line.</p> <p>Field survey identified the majority of these field boundaries as either tumbled drystone walls, measuring between 0.6m-1m wide by 0.2m-0.1m high, or turf-covered banks, occasionally lined with trees, and measuring 0.5m-2m wide by 0.5m-1m high. In one location, one of these field boundaries was found to overlie a section of older turf field bank (49).</p>	Lesser
51	Structures (possible)		694906	691010	Field Survey	Y	Field survey identified the poorly preserved remains of two or possibly three structures, located on gently sloping ground to the south of an old field boundary (48). The remains are visible as: an oval turf platform, 12m by 4m by 0.3m high; an L-shaped section of bank, 4m by 1m by 0.2m high, with a stone at the terminal end, a circular turf structure, 2m in diameter, at the southern end; and a turf bank, 7m by 1.5m by 0.2m	Local

Site	Site Name / Type	SMR/ RCAH MS No.	Easting	Northing	Source	Field Survey (Y/N)	Description	Sensitivity
							high.	
52	Field wall		265219 265227	690953 690943	Field Survey	Y	Field survey identified a poorly preserved turf covered drystone wall, measuring 15m by 1m by 0.2m high, orientated north to south, running down slope from a steep knoll.	Lesser
53	Field wall		265403 265432	690352 690329	Field Survey	Y	Field survey identified a poorly preserved drystone wall, measuring 30m by 0.6m-0.8m wide and by 0.2m-0.5m high, orientated north-west to south-east, and running down slope, visible largely as a single course of large quarried boulders.	Lesser
54	Platform		265519 265515	689960 689951	Field Survey	Y	Field survey identified a possible heather-covered, circular platform located on a west-facing terrace of the Boquan Burn valley. The feature measures 8m-10m across by 0.2m high, with a possible slight bank on the down slope edge.	Unknown
55	Field Bank		265914 266022	689838 689777	Field Survey	Y	Field survey identified a substantial turf bank running down slope and truncated by trackway (24b). The bank measures 125m long by 1.5m wide by 0.5m-0.8m high, and is orientated north-west to south-east.	Lesser
56	Field Bank		266118 266082	689799 689843	Field Survey	Y	Field survey identified a denuded turf bank running along the edge of a ridge and petering out at its north-west end. The bank measures 57m long by 1m-1.5m wide by 0.3-0.5m high, and is orientated north-west to south-east.	Lesser

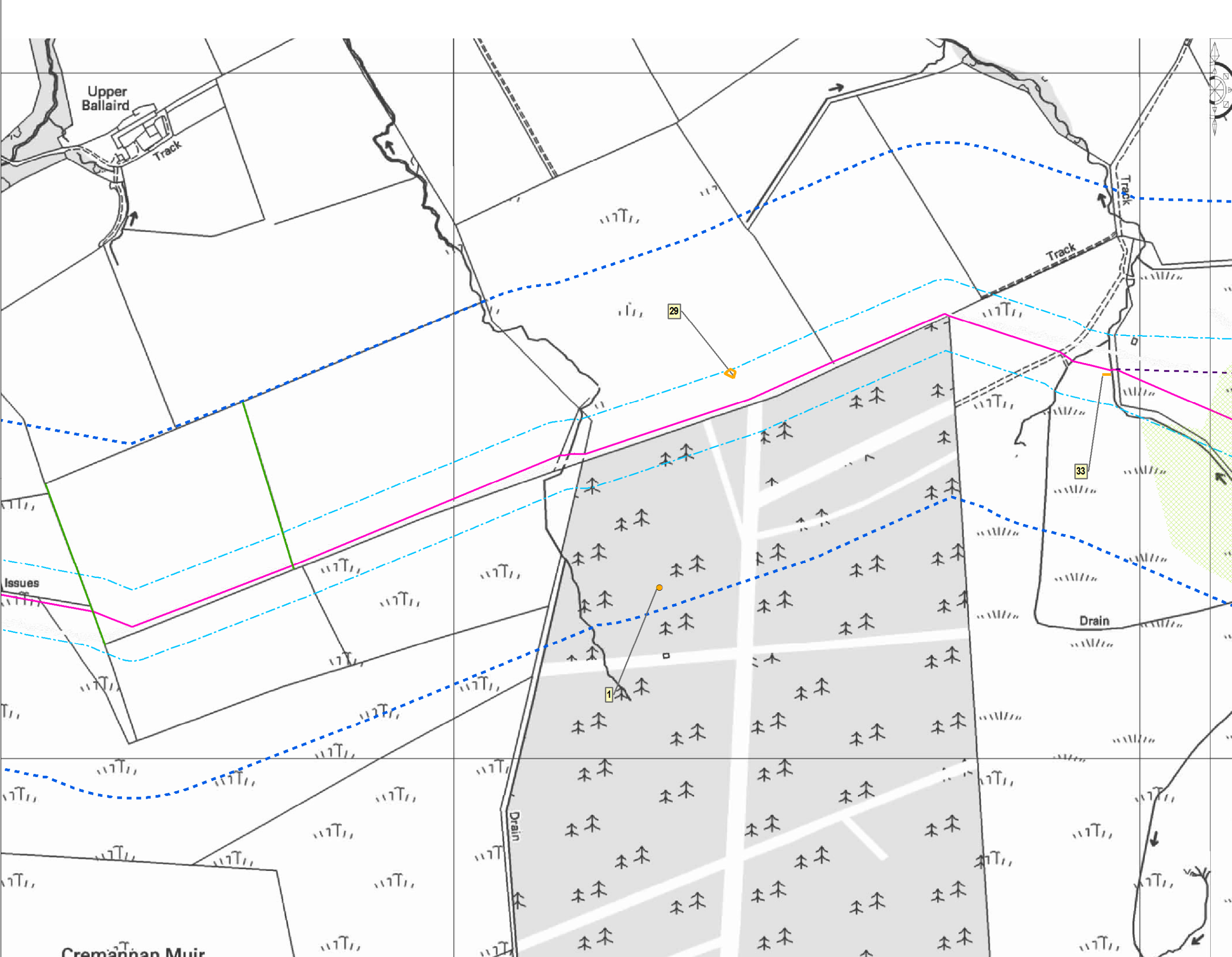


- Key**
- Proposed 33kV Cable Route
 - Alternate 33kV Cable Route A
 - Alternate 33kV Cable Route B
 - Alternate 33kV Cable Route C
 - 250m Buffer
 - 50m Buffer
 - Listed Building Category B
 - Cultural Heritage Site (point)
 - Cultural Heritage Site (line)
 - Trackway
 - Cultural Heritage Site (area)
 - Rig and Furrow (site 44)
 - Improved Pasture
 - OS 1st Edition field boundaries surviving as drystone walls or field banks and shown on current OS map (site 50)
 - HLA Medieval/Post-medieval settlement and agriculture

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Fig. No	1a	Revision
Title	Cultural Heritage: Constraints	
Project	Earlsburn North Grid Connection	
Scale at A3	1:5,000	
Client	ASH - on behalf of SSE	

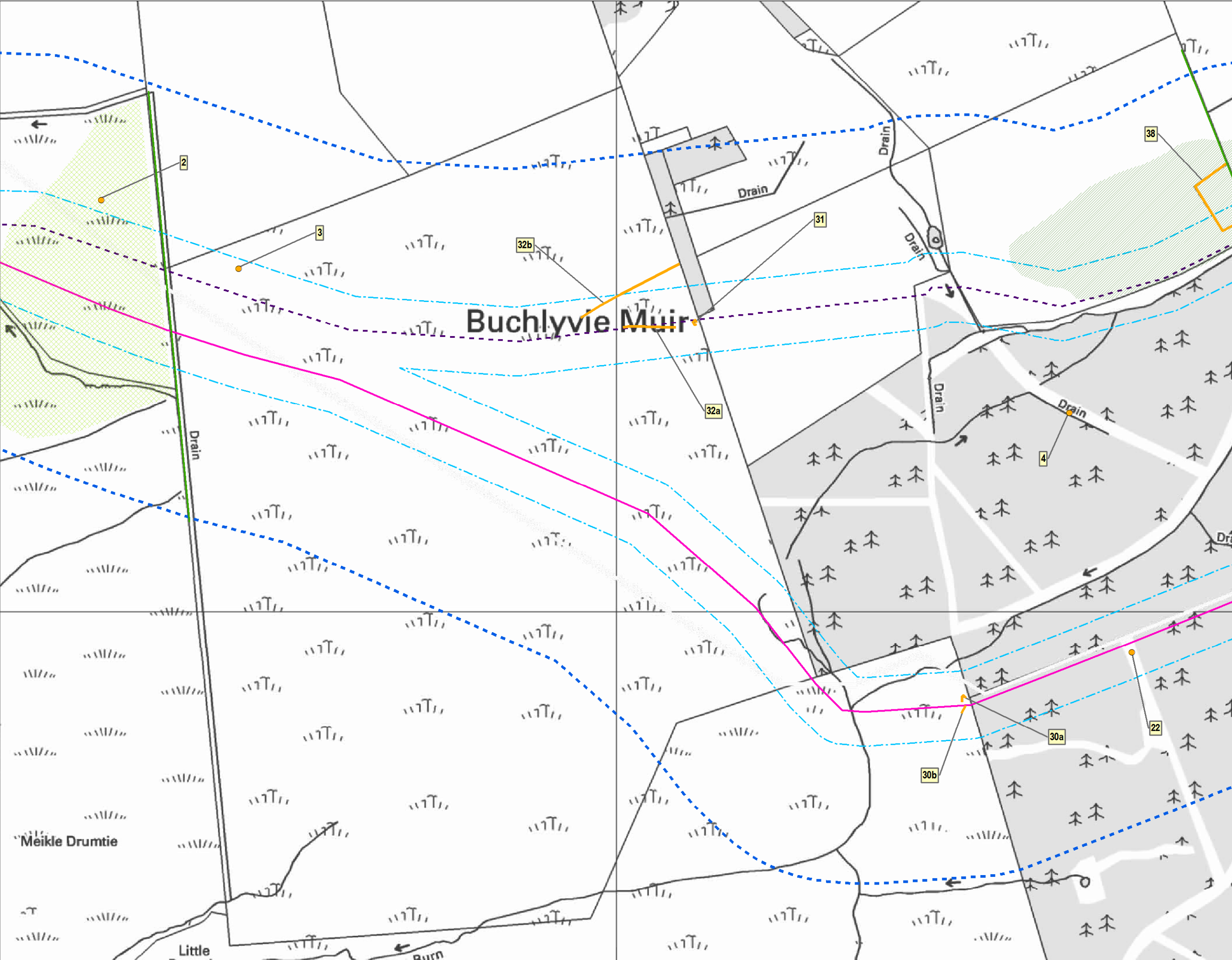




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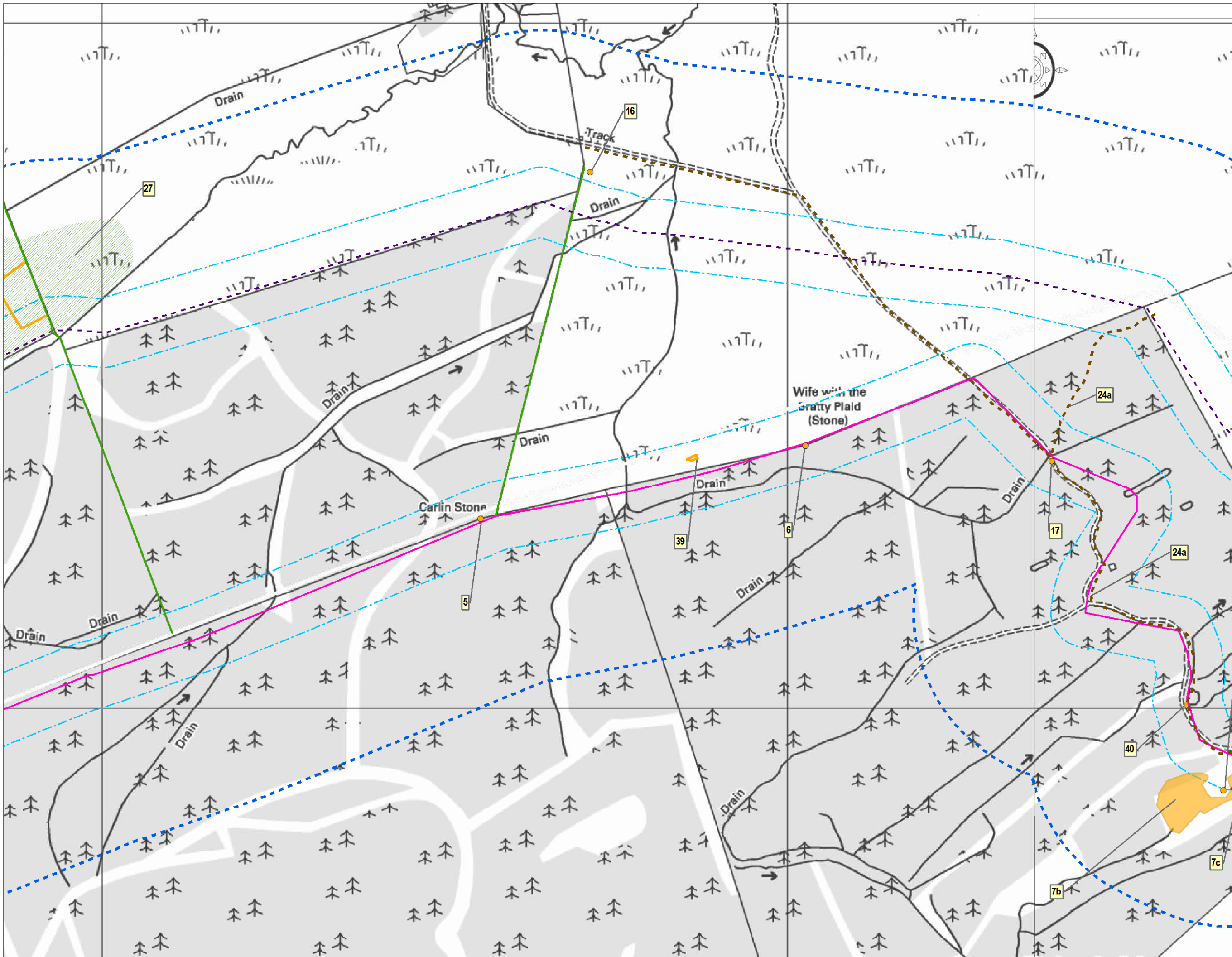
Fig. No	1b	Revision
Title	Cultural Heritage: Constraints	
Project	Earlsburn North Grid Connection	
Scale at A3	1:5,000	
Client	ASH - on behalf of SSE	
Drawn by:	Checked by:	Report No:
SW	HG	



- Key
- Proposed 33kV Cable Route
 - Alternate 33kV Cable Route A
 - Alternate 33kV Cable Route B
 - Alternate 33kV Cable Route C
 - 250m Buffer
 - 50m Buffer
 - Listed Building Category B
 - Cultural Heritage Site (point)
 - Cultural Heritage Site (line)
 - Trackway
 - Cultural Heritage Site (area)
 - Rig and Furrow (site 44)
 - Improved Pasture
 - OS 1st Edition field boundaries surviving as drystone walls or field banks and shown on current OS map (site 50)
 - HLA Medieval/Post-medieval settlement and agriculture

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Fig. No	1c	Revision
Title	Cultural Heritage: Constraints	
Project	Earlsburn North Grid Connection	
Scale at A3	1:5,000	
Client	ASH - on behalf of SSE	
Drawn by:	Checked by:	Report No:
SW	HG	

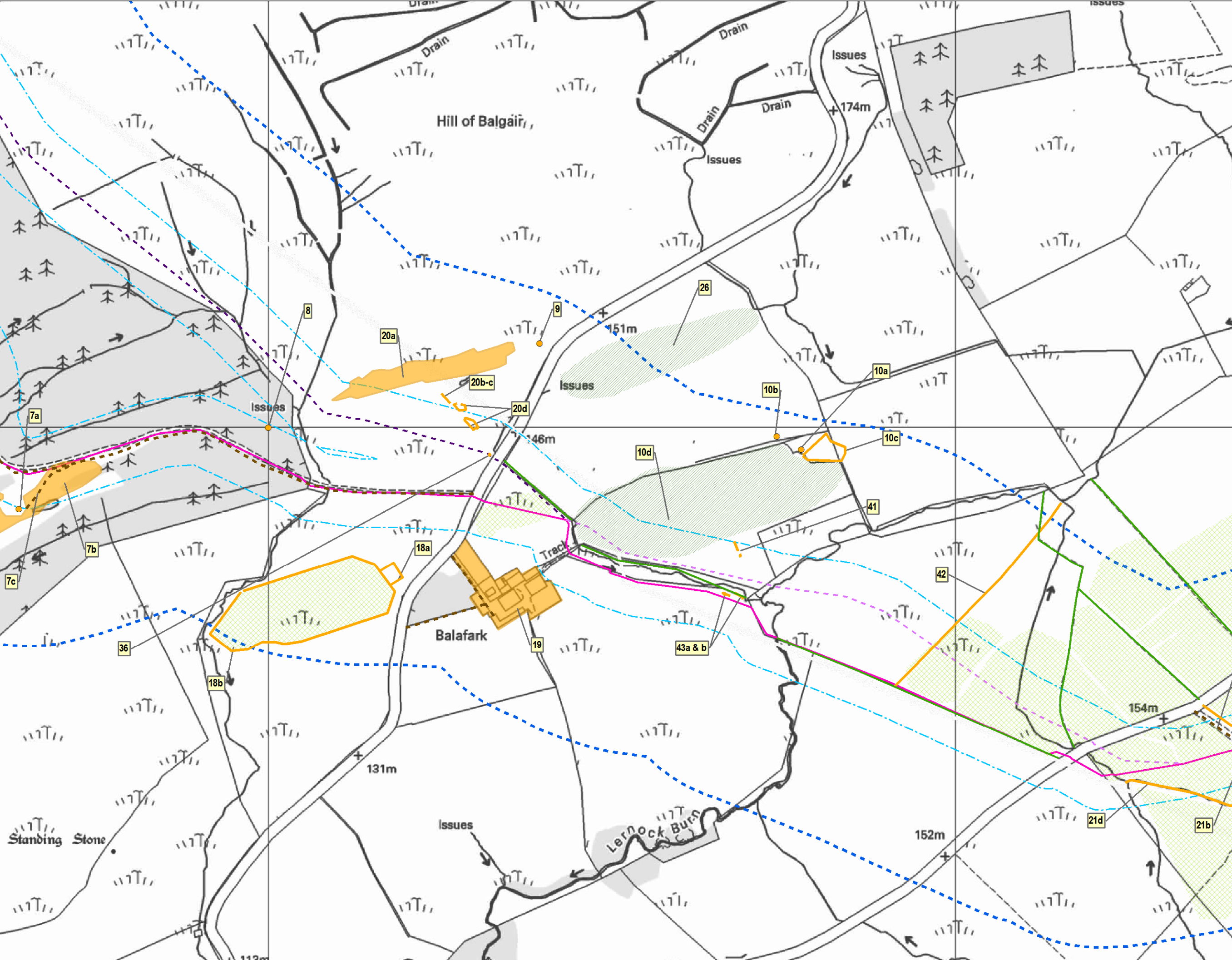


Key

- Proposed 33kV Cable Route
- Alternate 33kV Cable Route A
- Alternate 33kV Cable Route B
- Alternate 33kV Cable Route C
- 250m Buffer
- 50m Buffer
- Listed Building Category B
- Cultural Heritage Site (point)
- Cultural Heritage Site (line)
- Trackway
- Cultural Heritage Site (area)
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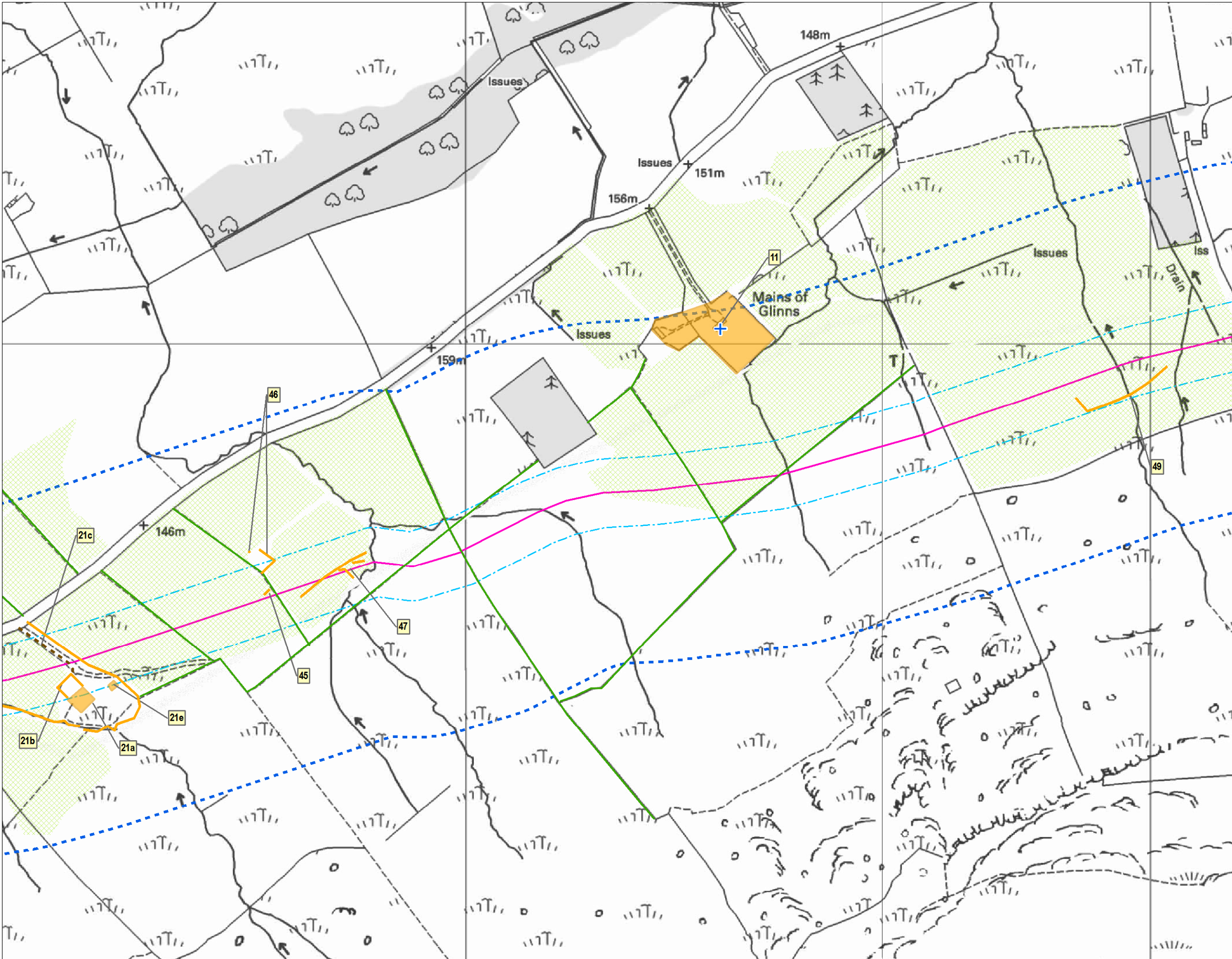
Fig. No	1d	Revision
Title	Cultural Heritage: Constraints	
Project	Earlsburn North Grid Connection	
Scale at A3	1:5,000	
Client	ASH - on behalf of SSE	



- Key**
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Fig. No	1e	Revision
Title	Cultural Heritage: Constraints	
Project	Earlsburn North Grid Connection	
Scale at A3	1:5,000	
Client	ASH - on behalf of SSE	
Drawn by:	SW	Checked by: HG
Report No:		



- Key
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Fig. No	Revision
1f	

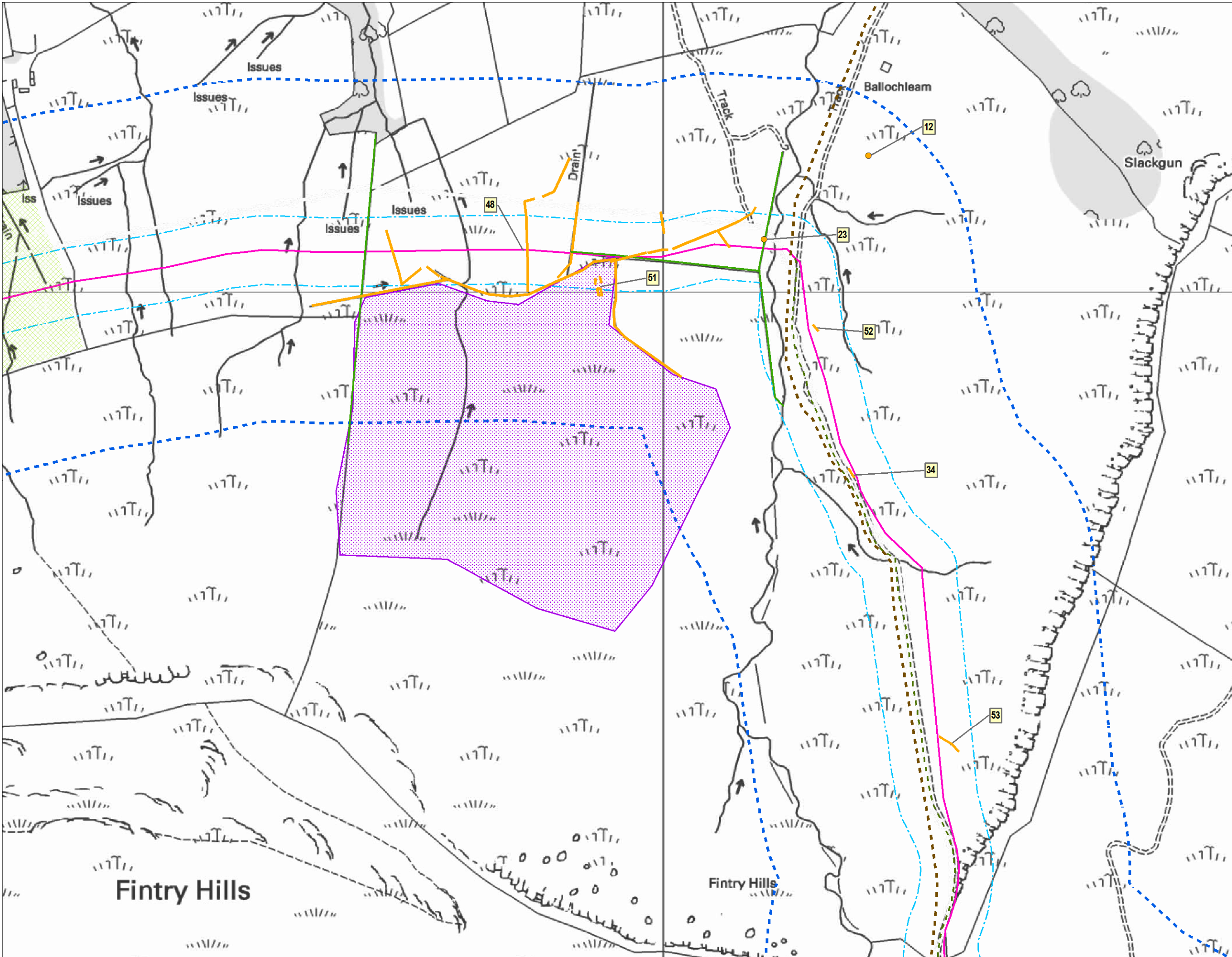
Title
Cultural Heritage: Constraints

Project
Earlsburn North
Grid Connection

Scale at A3
1:5,000

Client
ASH - on behalf of SSE

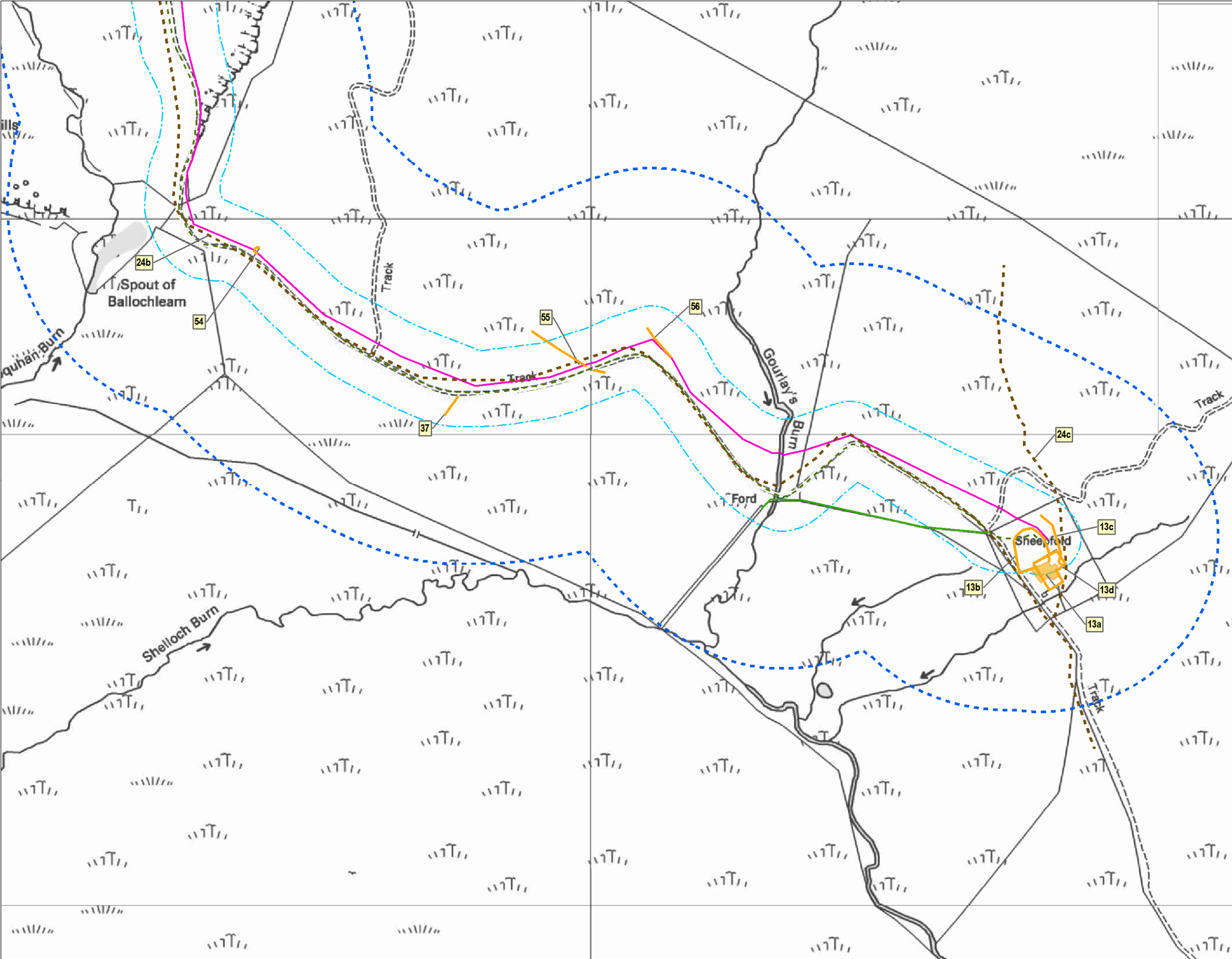
Drawn by: SW
Checked by: HG
Report No:



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Fig. No	1g	Revision
Title	Cultural Heritage: Constraints	
Project	Earlsburn North Grid Connection	
Scale at A3	1:5,000	
Client	ASH - on behalf of SSE	
Drawn by:	Checked by:	Report No:
SW	HG	



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Fig. No	1h	Revision
Title		
Cultural Heritage: Constraints		
Project		
Earlsburn North Grid Connection		
Scale at A3		
1:5,000		
Client		
ASH - on behalf of SSE		
Drawn by:	Checked by:	Report No:
SW	HG	