



Chapter 11

Archaeology and cultural heritage

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Chapter 11

Archaeology and cultural heritage

11.1 Executive summary

1. This EIA report has assessed the direct impacts from the construction of the proposed Development and the indirect impact upon heritage assets from its operation within their setting. The assessment has been compiled with reference to all relevant planning policy and guidance documents of Historic Environment Scotland and the Chartered Institute for Archaeologists. SPR has consulted with the statutory consultees in order to agree the assessment methodology and to identify specific assets of particular concern. A baseline and targeted walk over survey was undertaken to assess direct impacts on all heritage assets within the Site.
2. Indirect impacts upon a heritage asset have been assessed for assets of regional or national importance within 5 km of the proposed turbines; selected heritage assets of national importance within 5 km to 10 km from the proposed turbines where a change to the landscape included in long-distance views from the asset has the potential to impact upon the asset's setting; and heritage assets of national and regional importance within 1 km of the solar arrays. In addition, Dun Skeig, duns and fort (SM2491) beyond 1 km from the solar areas was assessed for indirect impacts upon its setting from the solar arrays. A visit to heritage assets outside the Site was made where it was beneficial to assessing indirect impacts upon their setting.
3. There are no predicted direct impacts upon known heritage assets by the proposed Development. A baseline study, incorporating data from land within 2 km of the Site, was compiled in order to predict the potential for direct impacts from the proposed Development upon unknown heritage assets. The potential for direct impacts upon unknown heritage assets of prehistoric periods was assessed as low to moderate, with moderate potential in proximity to two sites of standing stones. The potential for unknown assets of the Roman and medieval periods is considered low. The potential for unknown remains of the post-medieval period is considered high, particularly with reference to agricultural settlement and associated enclosures along the Larachmòr Burn to the east of the Site.
4. Following analysis of the terrain to identify assets where there would be no intervisibility with the proposed Development, and where no key view of the heritage asset include the proposed Development, the EIA report has assessed indirect impacts: upon 12 scheduled monuments and one Category A listed building of national importance; and seven Category B listed buildings and 17 Historic Environment Record sites of regional importance. No significant effects are expected from the operation of the proposed Development. Some slight to very slight effects are predicted on nine heritage assets, including: Dun Skeig, duns and fort, (SM2491), Dun Mor fort (SLR No 116) and Bar na Cour, galleried dun, (SLR No 117); and slight effects upon Neolithic cup marked stones (SLR Nos 119, 121, 122, 127 and 130).
5. It is proposed that information boards be installed presenting narratives and visualisations of the archaeological and standing remains of the post-medieval agricultural landscape found along the Larachmòr Burn, as part of the proposed Development. This would be completed in order to further enhance the appreciation and understating of these locally important sites and stimulate interest in the historic landscapes of Kintyre.

11.2 Introduction

6. The cultural heritage of an area comprises archaeological sites, historic buildings, Gardens and Designed Landscapes (GDLs), Historic Battlefields and other historic environment features (heritage assets). It also includes features or places which have the capacity to provide information about past human activity, or which have cultural significance due to associations with literary or artistic work, folklore or historic events. The setting of an asset within the wider landscape may contribute to the understanding and appreciations of the asset, and thereby the experience of it and its cultural heritage significance.

7. This Chapter assesses the potential effects of the construction and operation of the proposed Development on heritage assets within the Site and surrounding area. A full description of the proposed Development is given in **Chapter 3 Proposed Development**. The assessment has included consideration of all known designated and non-designated cultural heritage assets within the Site, all regionally and nationally significant heritage assets within 5 km of the wind turbines and 1 km of the solar arrays, and all heritage assets of national significance within 10 km of the wind turbines (**Figure 11.1 and 11.2**).
8. This assessment has been based on a range of data, including known heritage assets recorded by regional and national bodies, readily available secondary works and the results of a walk over survey of the Site.
9. The historic development of the Site and study areas is discussed in the context of the wider region in order to predict the direct impact on any known or potential unknown archaeological remains within the Site and indirect impacts on assets within the Site and study areas. Measures necessary to safeguard or record any assets potentially affected by the proposed Development are suggested.
10. For the purposes of this assessment the historic environment is considered to consist of a variety of historic assets. The historic environment resource includes the following types of designated assets:
 - World Heritage Sites (WHS);
 - Scheduled Monuments (SMs);
 - Listed Buildings (LB);
 - Historic Battlefields;
 - Conservation areas; and
 - Gardens and Designed Landscapes (GDLs).
11. These designations are of national importance, with the caveats that only category A listed buildings are considered to be of national importance and Conservation Areas maybe of national or regional importance. Category B listed buildings are considered of regional importance, and Category C listed buildings of local importance.
12. In addition, the following non-designated assets are also included in the assessment:
 - nationally/regionally recorded archaeological sites and finds; and
 - other buildings and structures of historic or architectural importance.
13. This assessment has been undertaken by SLR Consulting Ltd, which is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA).

11.3 Approach to assessment and methods

11.3.1 Legislation, policy and guidance

14. The principal relevant legislation comprises:
 - The Ancient Monuments and Archaeological Areas Act 1979;
 - The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997; and
 - The Historic Environment (Amendment) (Scotland) Act 2011.
15. The Scottish Government and Historic Environment Scotland (HES) have issued a number of statements of policy with respect to dealing with the historic environment in the planning system:
 - Statutory Instrument No 101 The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017;
 - Historic Environment Circular 1 May 2016a;
 - Historic Environment Policy for Scotland May 2019a; and

- Planning Advice Note 2/2011: Planning and archaeology.

16. Three relevant pieces of guidance have been published by HES, in conjunction with Scottish National Heritage (SNH), and by the professional archaeological body the Chartered Institute for Archaeologists. These publications are:

- Historic Environment Scotland guidance on Managing Change in the Historic Environment: Setting 2016b;
- Scottish National Heritage and Historic Environment Scotland Environmental Impact Assessment Handbook: Guidance for competent authorities, consultation bodies, and others involved in the Environmental Impact Assessment Process in Scotland 2018; and
- Chartered Institute for Archaeologists Standard and Guidance for Historic Environment Desk Based Assessment 2014.

11.3.2 Study areas

17. This assessment employs the following study areas for the proposed Development:

- Inner Study Area:** land within the boundary of the proposed Development;
- Outer Study Area:** land within 5 km of the proposed locations of the wind turbines; and
- Solar Areas Study Area:** land within 1 km of the solar areas.

18. Data of the historic environment of the Inner Study Area and land within 1 km of it is presented to generate enough cultural heritage data to inform a predictive model of the probability for potential buried archaeological remains to exist, but not previously identified, which might be directly affected by construction within the Inner Study Area.

19. The Outer Study Area is employed to take account of possible setting impacts on heritage assets of regional and national Importance. All designated heritage and non-designated heritage assets of regional or national importance within the Outer Study Area are considered and assessed with reference to potential indirect impacts.

20. Following scoping consultation responses, designated heritage assets of national importance in proximity to the Outer Study Area and up to a maximum of 10 km from the proposed locations of the turbines have been considered for assessment of indirect impacts. Where the asset is of a type where distant views to and from the asset may be important for the understanding and appreciation of the asset, and thereby contribute to the experience of its cultural significance they have been included in the assessment.

21. The Solar Areas Study Area was employed to take account of possible indirect impacts on heritage assets of regional or national significance.

11.3.3 Effects assessed in full

22. The following effects have been assessed in full:

- direct effects on all heritage assets within the Inner Study Area;
- effects on the setting of designated heritage assets and selected non-designated heritage assets of regional and national importance within the Inner and Outer Study Areas;
- effects on the setting of selected designated assets of national importance nearby the Outer Study Area where long distance views towards the turbines may form part of the setting which contributes to the asset's cultural significance; up to a maximum of 10 km of the proposed wind turbines.
- Indirect effects of all heritage assets of regional or national importance within the Solar Areas Study Area

11.3.4 Effects scoped out

23. The following have been scoped out:

- effects on the setting of heritage assets more than 10 km from the proposed Development; and
- effects on the setting of heritage assets within the study area shown by the ZTV not to be intervisible with the proposed Development, and where there is no identified view point of the heritage assets which contributes our understanding, appreciation and experience of the that within the ZTV.

11.3.5 Data sources

24. The baseline conditions have been characterised from the following sources:

- data held on non-designated sites in the Argyll and Bute Historic Environment Records (HER), maintained by the West of Scotland Archaeology Service (WoSAS);
- data held on non-designated sites in the National Record of the Historic Environment (NHRE, 'Canmore');
- historic mapping on-line at the National Library of Scotland;
- aerial imagery held by the National Collection of Aerial Photography (NCAP) and Historic Environment Scotland (HES);
- data of the Historic Land-use Assessment, produced by HES
- schedules, listings and inventories of designated assets held by HES; and
- appropriate published archaeological and historical works.

25. Non-designated heritage assets within the Inner and Outer Study Area are numbered in this Chapter as set out in the gazetteer in **Technical Appendix 11.2 Cultural Heritage Gazetteer**. As this gazetteer is composed of records from several sources these have been combined into a single sequence with each assigned an SLR Number. References to other coding systems, e.g. Historic Environment Records (HERs) and Canmore are also included in the gazetteer. The designated assets within the study areas are listed separately within this Chapter and are identified by the number by which they are designated on the relevant statutory register or index.

11.3.6 Field survey

26. A targeted walk over survey examining the proposed turbine locations and access tracks, as well as a condition check on those recorded heritage assets where it was considered that there was the potential for impact, was undertaken on 18th, 19th and 27th of June 2019. Due to the dense forestry not all infrastructure locations or all the recorded assets could be reached (See 11.2.7 Limitations of Assessment). The results of the walk over survey are presented in **Appendix 11.1: Archaeology and cultural heritage walk over survey**.

27. Site visits to selected heritage assets in the Outer Study Area were undertaken between the 4th and 6th of September 2019 to assess the character and the contribution that the settings of heritage assets make to the heritage significance of the assets. The outcomes of the Site visits are described in the relevant sections for each of the visited assets. Only heritage assets where a visit was considered necessary to assess it for indirect impacts were visited.

11.3.7 Consultation

28. Scoping responses addressing cultural heritage matters were received from the West of Scotland Archaeology Service (WoSAS) on behalf of Argyll and Bute Council (A&BC) and HES. Further consultation by email was undertaken with consultees to agree the main study areas and to facilitate data acquisition. A summary of the consultation undertaken is provided in **Table 11.1**.

Consultee	Response	Method	Comment/Action Taken
HES 07/05/19	<p>HES confirmed that there were no assets within their remit inside the Site boundary.</p> <p>Within 5 km of the proposed turbines, HES request consideration is given to potential indirect impacts upon a network of forts and duns along West Loch Tarbert, including:</p> <ul style="list-style-type: none"> Dun Skeig, forts and duns (SM2491); and Leamnamuic, dun 275, NE of (SM3674) <p>HES are broadly content with a 5 km Outer Study Area but note that there are assets within proximity but outwith this study area. They recommend additional</p>	Scoping Response	<p>Consideration has been given to heritage assets of national importance out to 10 km from the proposed Development, where long distance views towards the proposed Development may have impacts upon the setting of the heritage asset.</p> <p>Consideration is given to impacts upon the setting of the heritage, even where there is no visibility of the proposed Development from the asset.</p> <p>SPR provided details of the proposed solar arrays and proposed a study area for assessing indirect impacts on regionally and nationally important heritage assets of 1 km to the south and 500m to the north of them.</p>

Consultee	Response	Method	Comment/Action Taken
	consideration of potential impacts on assets of national importance located within 10 km of the proposal. HES highlighted that setting impacts can occur in key views of heritage assets, where the asset itself falls outwith the ZTV of the proposed Development.		
HES 04/07/19	HES stated that they are broadly content with the methodology proposed for the solar areas, but special attention is given to impacts upon the setting of Dun Skeig, duns and fort (SM2491). Additionally, any photomontage visualisations provided from Dun Skeig should include a representation of the solar PV panels alongside the proposed turbine infrastructure.	Response to email	The solar areas were included in the assessment of the indirect impacts upon setting of Dun Skeig, duns and fort (SM2491). A photomontage was produced of the proposed Development from Dun Skeig, with the solar areas marked upon it.
HES 05/09/19	HES welcomed where comments in the EIA Scoping Stage have been taken into account.	Response to Gatecheck Report	No action required
WoSAS 26/06/19	Direct Impacts – WoSAS stated that the area contains significant recorded archaeology that should be avoided. That there was every possibility of unrecorded remains in the area, and a walk over survey of the application area is required. The survival of unknown buried remains is also an issue. Indirect impacts – WoSAS stated that the setting of all scheduled monuments up to 10 km distance will require to be assessed. All Non-Statutory Register (NSR) of sites will need to be assessed out to 5 km. WoSAS also stated that the setting assessment does not need to consider indirect impacts of the proposal on its significance but rather its setting.	Scoping Response	Extant archaeological features are avoided by the proposed Development where appropriate. A targeted walk over survey was completed of the Site to inform the design. SPR's consultant, SLR, responded (28/06/19) that the assessment would include: assets of regional and national importance out to 2 km; assets of national importance to 5km; and, in-line with the response from HES, assets of national significance where long distance views towards the turbines may impact on their setting. Each scheduled monument at 5 km to 10 km distance from the turbines would, therefore, be considered in regard as to whether a setting assessment is required. SLR clarified that it is only those assets recorded in the NSR with a MONUCODE of C or V that require a settings assessment, and that these are considered of at least regional importance. SLR clarified that they would only visit those assets where a site visit would be beneficial to assessing indirect impacts from the proposed Development. With regard to assessing impacts upon setting, SLR responded that they would follow the guidance set out by HES for this process (HES 2016b and SNH and HES 2018).

Consultee	Response	Method	Comment/Action Taken
			SLR also introduced the proposed solar arrays and proposed a study area for assessing indirect impacts of 1 km to the south and 500 m to the north of the solar areas.
WoSAS 19/07/19	WoSAS requested a clarification of the difference in approach to assessing assets of national importance up to 5 km distance from the turbines, and those between 5 km and 10 km distance. WoSAS stated they would consider an assessment of indirect impacts upon the setting of assets of regional and national significance of 2 km from the turbines insufficient. They consider assets of regional importance within 5 km from the turbines to be minimal and would except this. WoSAS confirmed that it is the NSR sites with a MONUCODE of 'C' or 'V' that require assessment and confirmed these are of at least regional importance. WoSAS noted that they would be wary of considering assets not coded by the NSR as of local importance only. Regarding the method of assessment, WoSAS stated that they are happy for us to follow the guidance as set out by HES, but that: 'in the case of impact on the setting of the monument, securing the preservation of the monument 'within an appropriate setting' as required by national policy is primarily a matter for the planning system, meaning that it is possible we / the Council may consider a setting impact to be unacceptable even if HES did not raise an objection within their statutory remit.' In relation to the solar arrays, WoSAS noted that some of the solar panels would be located on north facing slopes. As such, they requested a ZTV prior to agreeing that the study area should be	Response to email	SPR's consultant, SLR, responded (23/07/19) clarifying that the assessment would include all assets of national significance up to 5 km from wind turbines. In-line with the request from HES, SLR would check assets of national significance up to 10 km from the turbines in case specific types of asset in this zone have a significant association with long-distance views. If this is found to be the case (e.g. for hillforts, cairns, designed landscapes etc) then a setting assessment would be undertaken where long distances views towards the wind turbines from the assets may impact upon their setting. Where this is not the case, the assets would be identified with a statement provided of reasons for not assessing them further. Assets of regional importance are assessed up to 5 km from wind turbines. No ZTV could be provided of a final design of the solar arrays. SLR emailed WoSAS on the 13 th and 23 rd of August stating that solar panels upon north facing slopes would only be on slopes of up to a maximum of 5° with the panels facing south. No response was received and a 1 km study area from the solar areas in all directions was used in the assessment. No changes to the approach to the work were received following the Gatecheck Report.

Consultee	Response	Method	Comment/Action Taken
	restricted to 500 m to the north of the solar areas.		

Table 11.1: Summary of scoping and consultation responses for cultural heritage

11.3.8 Approach to assessment of effects

30. Assessment of effects on heritage assets was undertaken in accordance with guidance and best practice listed in paragraph 16.
31. Impacts may be caused by the proposed Development where it changes the baseline condition of either the asset itself or its setting.
32. In accordance with EIA Regulations, the assessment identifies impacts and effects as either direct or indirect, adverse or beneficial, and short-term, long-term or permanent. Direct impacts are those which change the heritage significance of an asset through physical alteration; for the purposes of this assessment indirect impacts are those which affect the heritage significance of an asset by causing change within its setting.
33. Direct effects on the heritage significance of an asset have been assessed on the basis of a combination of the heritage significance of the affected asset (where known), the probability of further assets being located within the affected areas and their likely significance, and the magnitude of impact on those assets to be caused by the implementation of the proposed Development.
34. Indirect effects on the heritage significance of heritage assets have been identified and assessed with reference to Managing Change in the Historic Environment: Setting (HES 2016b) and the guidance set out in SNH and HES (2018). Assessment has been carried out in the following stages:
- initial consideration of intervisibility and other factors leading to the identification of potentially affected assets;
 - assessment of the heritage significance of potentially affected assets;
 - assessment of the contribution of the setting to the heritage significance of those assets;
 - assessment of the magnitude of impact of the proposed Development due to causing change within the setting of the assets; and
 - prediction of the significance of the effect.

35. Assessment was undertaken separately for direct effects and indirect effects. The magnitude of both beneficial and adverse impact was assessed according to scale of impact, from high to neutral/none.

11.3.9 Heritage significance

36. The cultural significance of undesignated heritage assets was assessed by a consideration of their intrinsic, contextual, and associative characteristic as defined in Annex 1 of HES (2019b). In relation to these assets, this assessment focussed upon an assessment of the assets’ inherent capability to contribute to our understanding of the past; the character of their structural, decorative and field characteristics as determined from the HER and Canmore records and / or site visits; the contribution of an asset to their class of monument, or the diminution of that class should an asset be lost; how a site relates to people, practices, events, and/or historical or social movements. Assessments of significance recorded within the HER were taken into account where available.
37. **Table 11.2** shows the potential levels of heritage significance of an asset related to designation status and grading, and where non-designated, to a scale of Highest to Negligible importance. This **Table** acts as an aid to consistency in the exercise of professional judgement and provides a degree of transparency for others in evaluating the conclusions reached by this assessment.

Heritage significance	Explanation
Highest	Sites of national or international importance, including: <ul style="list-style-type: none">• World Heritage Sites;• Scheduled Monuments;• Category A Listed Buildings;• Gardens and Designed Landscapes included on the national inventory;• Designated Battlefields; and• Non-designated assets of equivalent significance.
High	Site of regional importance, including: <ul style="list-style-type: none">• Category B Listed Buildings;• Some Conservation Areas;• Non-designated assets of equivalent significance.
Medium	Sites of local importance, including: <ul style="list-style-type: none">• Category C Listed Buildings;• Some Conservation Areas; and• Non-designated assets of equivalent significance.
Low	Sites of minor importance or with little of the asset remaining to justify a higher importance.
Negligible	Negligible or no heritage significance
Unknown	Further information is required to assess the significance of these assets.

Table 11.2: Heritage significance of heritage assets

11.3.10 Contribution of setting to heritage significance

39. Setting is ‘the way the surroundings of a historic asset or place contribute to how it is understood, appreciated and experienced.’ (HES 2016b).
40. The setting of each heritage asset or heritage asset group is described, considering aspects such as location and orientation of the heritage asset, obvious views or vistas, both towards and from an asset, additional screening through small scale topographic variation and vegetation, how much change to the historic setting has occurred, integrity of the setting, topography, land use (including currently operational windfarms near-by and modern intrusive conifer plantations) and intervisibility to other contemporaneous and related heritage assets. All these aspects are considered in relation to how they affect the understanding, appreciation and experience of the heritage asset.
41. Once the setting of each heritage asset or heritage asset group has been defined and assessed, the ways the setting contributes to their heritage significance, and to what degree, are identified. This is not quantified on a scale but has been used to assist the assessment of the magnitude of impact.

11.3.11 Magnitude of impact

42. Determining the magnitude of any likely impacts requires consideration of the nature of activities proposed during the construction and operation of the proposed Development.
43. The changes could potentially include direct change (e.g. ground disturbance), and indirect change (the latter could include visible change, noise, vibration, traffic movements). Impacts may be beneficial or adverse, and may be short terms, long term or permanent. Magnitude of impact has been assessed with reference to the criteria set out in **Table 11.3**.

Magnitude of impact	Explanatory criteria
High Beneficial	The proposed Development would considerably enhance the heritage significance of the affected asset, or the ability to understand, appreciate and experience it.
Medium Beneficial	The proposed Development would enhance to a clearly discernible extent the heritage significance of the affected asset, or the ability to understand, appreciate and experience it.
Low Beneficial	The proposed Development would enhance to a minor extent the heritage significance of the affected asset, or the ability understand, appreciate and experience it.
Very Low Beneficial	The proposed Development would enhance to a very minor extent the heritage significance of the affected asset, or the ability understand, appreciate and experience it.
Neutral/None	The proposed Development would not affect, or would have harmful and enhancing effects of equal magnitude on the heritage significance of the affected asset, or the ability understand, appreciate and experience it.
Very Low Adverse	The proposed Development would erode to a very minor extent the heritage significance of the affected asset, or the ability understand, appreciate and experience it.
Low Adverse	The proposed Development would erode to a minor extent the heritage significance of the affected asset, or the ability understand, appreciate and experience it
Medium Adverse	The proposed Development would erode to a clearly discernible extent the heritage significance of the affected asset, or the ability to understand, appreciate and experience it.
High Adverse	The proposed Development would considerably erode the heritage significance of the affected asset, or the ability to understand, appreciate and experience it.

Table 11.3: Magnitude of impacts on heritage assets

11.3.12 Significance of effect

The significance of effect is presented in **Table 11.4**. This provides a matrix that relates the heritage significance of the asset to the magnitude of impact on its significance (incorporating contribution from setting where relevant), to establish the likely overall significance of effect. This assessment is undertaken separately for direct effects and indirect effects, the latter being principally concerned with effects on setting.

Magnitude of Impact	Heritage Significance (excluding negligible and uncertain)			
	Highest	High	Medium	Low
High beneficial	Substantial	Substantial	Moderate	Slight
Medium beneficial	Substantial	Moderate	Slight	Very slight
Low beneficial	Moderate	Slight	Very slight	Very slight
Very low beneficial	Slight	Very slight	Negligible	Negligible
Neutral/None	Neutral/Nil	Neutral/Nil	Neutral/Nil	Neutral/Nil
Very low adverse	Slight	Very slight	Negligible	Negligible
Low adverse	Moderate	Slight	Very slight	Very slight
Medium adverse	Substantial	Moderate	Slight	Very slight
High adverse	Substantial	Substantial	Moderate	Slight

Table 11.4: Significance of effects on heritage assets

11.3.13 Zone of Theoretical Visibility (ZTV) analysis

Assessment of visual impact has been assisted by a ZTV calculation, prepared principally for the Landscape and Visual Impact Assessment and presented in **Figure 11.2**. The ZTV calculation methodology is set out in detail in **Chapter 7 Landscape and Visual Impact Assessment**, but in summary it maps the predicted degree of visibility of the proposed Development from all points within a study area around the site, as would be seen from an observer's eye level 2 m above the ground. The ZTV model presented in **Figure 11.2** is for the maximum height of the blade tips of the proposed Development.

The ZTV is theoretical because it is based on landform only and does not take into account the screening or filtering effects of vegetation, buildings or other surface features, and in that respect is likely to provide an over-estimate of the actual visibility.

11.3.14 Potential cumulative effects

A cumulative assessment is presented in section 11.5.12. Cumulative effects are assessed with regard to assets that have been assessed as receiving an above negligible impact from the proposed Development. The other contributor developments are considered to be other windfarm developments within 5 km or 10 km of the affected heritage asset, depending on the heritage significance of the asset, that have been given planning consent, have an active planning application or are undergoing a planning appeal. Currently operational windfarms are considered as part of the baseline assessment.

11.3.15 Mitigation

A statement of the proposed mitigation of the identified impacts follows the assessment. The main approach to mitigation is through design: avoidance of direct impacts on heritage assets has been a consideration throughout the design process, and post consent this would continue, e.g. through micro siting. Direct impacts may also be mitigated by preservation by record. Screening to avoid impacts on the setting of assets is rarely feasible for wind turbines, but has been considered where other effects from other infrastructure may be mitigated in this way.

11.3.16 Residual effects

A statement of the residual effects has been given following consideration of any further site specific mitigation measures, where these have been identified.

11.3.17 Statement of Significance

The cultural heritage assessment concludes with a Statement of Significance summarising the predicted significance of the effects arising from the proposed Development. Effects that are considered significant in EIA terms are those that assessed to be moderate or substantial, in accordance with the suggestion contained in current guidance HES and SNH (2018) Environmental Impact Assessment Handbook, Section C, Page 75.

11.3.18 Limitations to the assessment

The assessment is based on the sources outlined in Section 11.3.5 and, therefore, shares the same range of limitations in terms of comprehensiveness and completeness of those sources. The densely afforested nature/dense brash cover of much of the Site has meant that not all of the proposed infrastructure or recorded heritage assets within these areas could be reached during the site visit. This does not significantly affect the validity of the findings, as assessment has generated sufficient records of known heritage assets from the surrounding study area, for a robust assessment to be made of the potential for unknown assets to occur within the Site.

11.4 Baseline conditions

11.4.1 Introduction

The current landscape character of the proposed Development and its immediate vicinity consists plateau moorland, rough grazing and conifer plantation. Adjacent areas along the Kintyre peninsula are similar, with rocky coastline to the north west and south east of the proposed Development and areas of enclosed fields. A full description of the proposed Development and environs is given in **Chapter 1 Introduction, Chapter 2 Site Description and Design Evolution, and Chapter 3 Proposed Development**.

11.4.2 Designated heritage assets

53. There are no World Heritage Sites, inventoried Battlefields, inventoried GDLs, Conservation Areas, or Historic Marine Protected Areas within 10 km of the proposed wind turbines.
54. There are no designated heritage assets within the Inner Study area.
55. There are nine Category B listed buildings of regional importance within the Outer Study Area, with two buildings on the Balinakill Steading, Balinakill Estate, Clachan under the same index number. These are listed in **Table 11.5**
56. Within the Outer Study Area there are nine scheduled monuments of a national importance, listed in **Table 11.6**. In response to consultation with HES, designated heritage assets in proximity of the Outer Study Area and up to 10 km from the proposed turbine locations have been considered for assessment, where location and nature of the assets indicates that long distance views may contribute to the heritage significance of the monument. Within this area there are 10 scheduled monuments and one category A listed building, listed in **Table 11.7**.

Name	Type	Index number	Distance to nearest turbine	Within ZTV
Clachan Churchyard, Cross, Cross Slabs & Tombstones	Scheduled Monument	SM3676	3.4km (T4)	Yes
Dun Skeig, duns & fort	Scheduled Monument	SM2491	3.9 km (T4)	Yes
Talatoll, shielings 1400m SE of, Kintyre	Scheduled Monument	SM3817	4.5 km (T4)	Yes
Cnoc Dubh na Leित्रreach, cairns 150m SSW of, Achaglachgach	Scheduled Monument	SM3874	4.7 km (T1)	Yes

Table 11.6: Designated heritage assets of national importance within the Outer Study Area

Name	Type and Category	Index number	Distance to nearest turbine	Within ZTV
Dun a Choin Duibh,dun	Scheduled Monument	SM2421	5.3 km (T1)	Yes
Corriechrevie,cairn	Scheduled Monument	SM2487	6.6 km (T4)	No
Ronachain Bay, fort S of	Scheduled Monument	SM3185	6.1 km (T4)	No
Sliabh nan Dearc, enclosure 570m E of Cnoc Moine Raibeirt	Scheduled Monument	SM3650	7.2 km (T16)	No
Cnoc na Sgratha, cairn 550m N of Glenbuie	Scheduled Monument	SM3651	5.1 km (T16)	No
Dun Ronachain, dun 400m NE of Ronachain House	Scheduled Monument	SM3673	5.2 km (T4)	Yes
Ballochroy, three standing stones & cist 400m NE of	Scheduled Monument	SM175	8.1 km (T4)	No
Skipness Castle and Kilbrannan Chapel	Scheduled Monument	SM13225	7.2 km (T16)	Yes
Escart, standing stones	Scheduled Monument	SM3656	8.9 km (T1)	Yes
An Dunan, dun 70m SW of Minen	Scheduled Monument	SM3184	6.4 km (T4)	No
Cour House	Building, Category A	LB18360	7.8 km (T18)	Yes

Table 11.7: Designated heritage assets of national importance up to 10 km distance from the turbines

60. Assets that fall outwith the ZTV are excluded from any further assessment, with the exception of where a viewpoint is identified of the heritage asset which would include the proposed wind turbines that may contribute to the assets cultural significance.

11.4.3 Non-Designated Assets of Regional or National Significance in the outer study area

61. Non-designated heritage assets are assessed for their potential to be of regional or national significance, following the criteria detailed in paragraph 36. The heritage significance of these assets has been assessed with reference to the data supplied by WoSAS and HES in order to determine the heritage significance and relevance of long-distance views as part of the assets setting. The heritage significance of each non-designated asset is provided in the gazetteer of sites (Appendix 11.2). After following the selection process, there are 21 heritage assets listed in **Table 11.8** which have been assessed to be of regional importance.

Name	Type and category	Index number	Distance to nearest turbine	Within ZTV
Ballinakill Steading Ballinakill Estate, Clachan	Category B Listed Building	LB12022	2.7 km (T4)	Yes
Kilcalmonell Free Church, Clachan	Category B Listed Building	LB12019	3.3 km (T4)	Yes
Dunmore House	Category B Listed Building	LB18245	3.3 km (T1)	Yes
Kilcalmonell and Kilberry Parish Church, Clachan	Category B Listed Building	LB12017	3.5 km (T4)	Yes
Kirkland (Formerly) Kilcalmonell and Kilberry Manse Clachan.	Category B Listed Building	LB12018	3.5 km (T4)	Yes
Skipness Parish Church Claonaig	Category B Listed Building	LB18406	3.5 km (T16)	No
McNeill Campbell of Kintarbert and Druimdrishaig Mausoleum, Kilnaish Burial Ground	Category B Listed Building	LB18244	4.3 km (T1)	Yes
K6 Telephone Kiosk at Ardpatrik Road End, West Loch Tarbert	Category B Listed Building	LB18982	4.8 km (T2)	No
Ardpatrick House	Category B Listed Building	LB18282	4.9 km (T3)	Yes

Table 11.5: Designated heritage of regional importance within the Outer Study Area

Name	Type	Index number	Distance to nearest turbine	Within ZTV
Leamnamuic, dun 275m NE of	Scheduled Monument	SM3674	1.8 km (T1)	Yes
Loch Ciaran, standing stone 1430m SW of Achaglass	Scheduled Monument	SM212	2.8 km (T4)	Yes
Glenreadell Mains, chambered cairn 200m SE of	Scheduled Monument	SM3281	3.1 km (T16)	Yes
Ballinakill House, cross by entrance to drive	Scheduled Monument	SM3695	3.2 km (T4)	Yes
Eilean Àraich Mhòir, dun 730m NNW of Tigh na Croit	Scheduled Monument	SM3183	3.4 km (T1)	Yes

Name	Type	SLR No	Distance to nearest turbine	Within ZTV
Loup	Cup-and-ring-markings	77	2.3 km (T3)	No
Larach Mor Burn	Cup-markings	87	0.9 km (T16)	Yes
Cille Bhride, Whitehouse / Kennacraig	Chapel; Socket Stone	115	4.2 km (T1)	Yes
Dun Mor / 170 Fort	Fort	116	3.5 km (T1)	Yes
Barr na Cour	Galleried Dun	117	3.7 km (T1)	Yes
Cill an Aonghais	Burial-ground; Incised Stone	118	4.3 km (T1)	Yes
Whitehouse Burn	Cup-markings	119	3.2 km (T15)	Yes
Whitehouse Burn	Cup-markings	120	3.2 km (T15)	Yes
Whitehouse Burn	Cup-markings	121	3.2 km (T15)	Yes
Whitehouse Burn	Cup-markings	122	3.2 km (T15)	Yes
Achadh-Chaorann / Achachaorunn, Creag na Cuile	Cup-marked Standing Stone	123	4.8 km (T3)	Yes
Glenreasdell Mains 6 and 7	Cup-markings & huts (possible shielings)	124	3.1 km (T16)	Yes
Glenreasdell Mains 6 and 7	Cup-markings & huts (possible shielings)	125	3.2 km (T16)	Yes
Glenreasdell Mains 6 and 7	Cup-markings & huts (possible shielings)	126	3.2 km (T16)	Yes
Glenreasdell Mains	Cup-markings	127	2.3 km (T16)	Yes
Glenreasdell Mains	Cup-markings	128	2.3 km (T16)	Yes
Glenreasdell Mains	Cup-and-ring-markings	129	2.6 km (T16)	Yes
Glenreasdell Mains	Cup-markings	130	2.6 km (T16)	Yes
Glenreasdell Mains	Cup-markings	131	2.9 km (T16)	No
Claonaig	Cup-markings	132	3.2 km (T16)	No
Oragaig	Cup-markings	133	2.5 km (T19)	No

Table 11.8: Non-designated assets selected for assessment within the outer study area of regional importance

11.4.4 Heritage assets of regional or national importance within the Solar Areas Study Area

63. There are no assets of regional or national importance within the Solar Area Study Area that require assessment for indirect impacts upon their setting.

11.4.5 Known heritage assets within the Inner Study Area

64. The location of the designated heritage assets in are provided in **Figure 11.1**. The location of gazetteer sites detailed in **Figure 11.2**.

Prehistoric periods

65. There are two assets attributed to the prehistoric periods within the Inner Study Area, SLR Nos 108 and 111. SLR No 108 is the location of two cairns recorded by a 1995 survey of the area (Firat Archaeological Services (FAS) 1995). The walk over survey produced no evidence of any cairns at the locations provided by the HER or in their immediate environs (**Appendix 11.1**). The walk over survey and examination of the archive of the 1995 survey indicated that cairns may be located to the north east of the given position and at a higher level to the given position. SLR No 111 is a standing stone, 0.8m in height, recorded by the same 1995 survey. The walk over survey demonstrated that the area is now one of dense sika spruce plantation adjacent to a small quarry and spoil heaps. Examination of the area produced no evidence of the stone, and it is likely to have been removed by forestry activity. SLR No. 96 is the site of a post-medieval sheiling, located near Loch Chorra-riabhaidh, but is suggested to be built upon a prehistoric hut platform.

66. Within 2 km of the Inner Study Area there are the five further assets that are conventionally dated to a prehistoric period. SLR No. 37 is the site of a small cave or rock shelter containing a shell midden, to the north west of the Inner Study Area near the shore of West Loch Tarbert. Although undated, the site may be of an earlier prehistoric period.

67. SM212 is a standing stone at near the shores of Loch Ciaran, to the south west of the Inner Study Area, approximately 2m in height. The stone probably dates to the later Neolithic or Bronze Age periods, and although in isolation, may well have been positioned for intervisibility with contemporary monuments or mark a route way.

68. SLR No 77 is the location of a stone bearing 15 cup marks to the west of the Inner Study Area, some with rings around them, removed from a nearby field. SLR No. 87, to the east of the Inner Study Area is the location of an outcrop of rock bearing 10 cup marks. Cup and ring marked stones, on both out crop and steadfast rock, is a petroglyph tradition attributed to the Neolithic period. In some instances, fragments of stones bearing pre-existing cup and ring marks have been included within bronze age burial monuments. The meaning behind such rock art to Neolithic peoples is unclear, but views from them and the stone upon which they are carved are both suggested to have significance for their interpretation.

69. Dun Leamnamuic (SM3674) is located above the shores of West Loch Tarbert to the north of the Inner Study Area. The dun may have housed an individual family or small community, their construction being associated with elite sites. Although possibly constructed as an elite ‘home’, duns may also have had a defensive function. The dun is one of a number of Iron Age or early historic duns or forts located on both sides of West Loch Tarbert.

70. SLR No 38 to the north of the Inner Study Area is the location of a cist found in 1852 which contained bones and, as quoted in the HER, “an urn of tasteful shape, notched on the outside with a shell, and with perforated knobs round the top”. Within the urn were ashes and a small quantity of bone. The site is undated by the HER or Canmore but is a potentially prehistoric cremation burial.

Roman and Medieval Periods

71. There are no assets attributed to the Roman or medieval periods within the Inner Study Area. There are two sites attributed to the Roman or Medieval periods within 2 km of the Inner Study Area, two adjacent crannogs SLR Nos 82 and 83 adjacent to the western extent of the Inner Study Area. They were discovered when Loch Dughail was drained in 1890. SLR No 82 is the larger of the two and is thought to have been constructed in the 2nd century AD and then reoccupied during the medieval period as a defensive strong hold of a regional elite.

72. There are two assets attributed to the medieval period within 2 km of the Inner Study Area. The remains of a mutilated stone cross situated upon a natural mound is located to the west of the proposed Development, within Clachan, and is a scheduled monument (SM3695). There is a suggestion in the HER that the cross originated from Clachan Church (SM3676). The church has other early Christian and later medieval crosses within its church yard, the current 18th century church probably replacing an earlier building.

73. Pont – Gordon map published by Joan Blaeu (Blaeu 1654) marks a church or chapel at Kilchamaig (SLR No 39) to the north of the Inner Study Area. There are no above ground remains of the site visible today. The HER records that shortly before 1867 a considerable quantity of human bone was removed from the site during levelling of the area. There is no dating evidence for the skeletal remains, but the site has been interpreted as that of a medieval chapel dedicated to St Cormac.

Post-Medieval

74. Most of the assets recorded within the gazetteer of sites are attributed to the post-medieval period. Within the Inner Study Area there are 18 assets, all associated with the agricultural landscape. SLR No 105 is a farmhouse called ‘Scotmill’ depicted with one long building, possibly a former longhouse, with associated smaller buildings and enclosures. The map regression (section 11.4.6) and walk over survey (**Appendix 11.1**) demonstrated that the existing two buildings, a farmhouse with collapsed roof and an unroofed outbuilding, do not match the morphology or location of the buildings depicted on the first edition OS (OS 1873). The former longhouse marked upon 19th century mapping is located to the north of the existing house. Roy’s Military Map (Roy 1747 - 55) depicts two buildings identified as ‘Scotmill’ with cultivation features in broadly the same topographic location. A small quarry (SLR No 141) to the south west of these buildings is almost certainly associated with the farm.

75. There are 14 sheiling sites identified in the gazetteer within the Inner Study Area, including: SLR Nos 74 and 75 to the south of Loch Lurach and Loch Cruinn; SLR Nos 60 to 64, 114, 134, 136, 137, 108 and 109 along the Larachmòr Burn in the eastern

part of the Inner Study Area; and SLR No 96 on a watercourse leading into Loch Chorra-riabhach. Sheilings are huts occupied during the summer months to take advantage of upland pasture. The walk over survey (**Appendix 11.1**), however, produced no evidence of sheilings at SLR No 60, 61 and 63. In addition, the walk over survey identified SLR Nos 108 and 109 as the remains of longhouses rather than sheilings, each with an adjacent stock enclosure. Longhouses are intended for all occupation, providing both a domestic dwelling and a byre.

76. Another stock enclosure identified by the walk over was found at SLR No 135 near sheiling SLR No 134, which is considered also to be of this period. Boundary SLR No 140 was located running from the enclosure of longhouse SLR No 108 to the north. The walk over survey and examination of the relationship between this boundary and post-medieval field drainage from aerial imagery suggests a post-medieval date for SLR No 140.

77. Enclosures SLR 138 are located within the northern part of the Inner Study Area. Examination of 19th century OS maps (paragraph 91) suggests a late 19th century date for these structures, used to collect and sort livestock driven off the hill.

78. Within 2 km of the Inner Study Area there are a further 47 sites attributed to this period. SLR No. 54 is a former township of Garvoine to the east of the Inner Study Area and adjacent to the Larachmòr Burn. Four buildings are shown at this location on Roy's Military Survey (1747 – 55), labelled 'Ganvon'. Four buildings are also marked on the late 19th and early 20th century OS maps (OS 1873 and OS 1900). SLR No 55 is a corn drying kiln a short distance to the north east of these buildings. There are sites of a further 13 sheiling recorded by the HER or Canmore sites to the south of this township (SLR Nos 44, 56 - 59, 66, 88 – 93 and 110), in addition to those detailed within the Inner Study Area, along Larachmòr Burn or its tributaries.

79. There are further two groups of sheiling including: SLR Nos 68 – 73 along the Claonaig Water to the north of the Inner Study Area; and SLR Nos 45 – 53 and 65 along the small watercourses that flow into the sea to the east of the Inner Study Area. In addition, SLR No 76 is an isolated shelling located near Loch Cruinn to the north of the Inner Study Area.

80. Ballinakill Steading (LB12022) and SLR Nos 104, 106 and 107 represent farmhouses or steadings marked on 19th century OS mapping, with a lime kiln associated with SLR No 107, to the west of the Inner Study Area. In addition, Ballinakill House (LB 12021) to the west of Ballinakill Steading was built as a mansion house by Sir William MacKinnon 1st Baronet (1823-93), who made his fortune in the orient and was the founder of the British East Africa Company. Gartnagrenach Farmhouse (LB12027) is a later 18th century building, to the north of the Inner Study Area.

81. Buildings SLR Nos 102 and 103 to the west of the Inner Study Area, located to the north east of Loch Nan Gad and adjacent to the A83 respectively, are both marked as unroofed structures on the first edition OS map of late 19th century (OS 1873). SLR Nos 78 is another unroofed structure to the north of the Inner Study Area. Other agricultural features within 2 km of the Inner Study Area include a sheepfold (SLR No 79) and an enclosure (SLR No 112), both to the north of the Inner Study Area.

82. The Kilcalmonell Free Church of Clachan (SLR Nos 80) is located to the west of the Inner Study Area. Its gate (SLR No 81) is formerly a listed building. The costs of building the church was covered by Sir William MacKinnon, with his knowledge of the orient possibly influencing its style. Cladh Mhicheil (SLR No 40), which translates to English as Michael's Burial Ground, dedicated to St Michael is recorded to the north of the Inner Study Area near Gartnagrenach. Its earliest tombstone dates from the mid-18th century. In addition, a tombstone (SLR No 35) positioned as a door lintel in Kilchamiag farm buildings probably came from Cladh Mhicheil.

83. The HER and Canmore also record two sundials (SLR Nos 13 and 36) and the loss of a 19th century schooner 'Benmore' (SLR No 2) within 2 km of the Inner Study Area. The precise location of the schooner is unknown, but it likely went down somewhere on OS map sheet NR75NE, NR76SW or NR86NW.

20th Century (Modern)

84. There are no 20th century assets within the Inner Study Area. There are two sites within the gazetteer attributed to the 20th century, a hunter's hide (SLR No 21) and a former RAF radio station (SLR No 20).

Undated Assets

85. There are two undated assets within the Inner Study Area recorded by the HER, a group of three oval mounds (SLR No 97) and two cairns (SLR Nos 109 and 110). The mounds were visited by the walk over survey, and as noted by the HER are probably natural. The walk over survey found no evidence for the two cairns at these locations.

86. Within 2 km of the Inner Study Area Canmore also records a small rectangular structure approximately 12 m by 8 m in size, with a possible smaller circular structure to the south south west, both just below the low tide mark in Gartnagrenach Bay (SLR No 5). To the south east of SLR No 5 is an undated slipway leading in to the bay (SLR No 6).

87. The HER records a group of stones upon a knoll thought to have been a stone circle, but which are of a natural origin (SLR No 43); a natural erratic (SLR No 67); and a prominent stone thought to be a standing stone (SLR No 94), but which is also of a natural origin. These features are excluded from any further part in this assessment.

11.4.6 Historic Mapping

88. A review of online historic mapping available from the National Map Library of Scotland was undertaken. The earliest map of a sufficiently large scale of the area of the proposed Development is Roy's Military Survey of Scotland (Roy 1747 – 1755). The majority of the Inner Study Area is depicted with hills, lochs and watercourses, and no other features. The township of Garvoine (SLR No 54) appears to be marked, named 'Ganvon' in this survey, to the north and east of the Inner Study Area. To the south west along the Larachmòr Burn there are two groups of buildings with surrounding cultivation features at the eastern edge of the Inner Study Area. To the west of the burn within the Inner Study Area four buildings are marked, and to the east outside the Inner Study Area three buildings are marked. These broadly coincide with the topographic positions of sheilings or long houses recorded by the gazetteer along the Larachmòr Burn.

89. Two buildings are depicted as, and presumably mis-labelled, 'Scotsmill' with cultivation features to the west of the Inner Study Area; broadly consistent with the topographic location of Scotmill (SLR No 105). The road to the west of the Inner Study Area on Roy's survey is broadly consistent with the current position of the A83, beyond which further settlement and cultivation are frequently marked between the coast and the road. Loch Dughail, 'Loch Duall' in this survey, which was drained in the late 19th century is shown to the west of the north-western extent of the Inner Study Area adjacent to the road. A former designed landscape is depicted, within which Glenreasdale Lodge (SLR No 291) is situated, to the north of the Inner Study Area.

90. The first edition 1:10,560 OS map (OS 1873) of the area shows the Inner Study Area as upland rough grazing. Scotmill (SLR No 105) is shown as a roofed structure. Although the township of Garveoline (SLR No 54) is shown with three buildings and one unroofed structure, there is no settlement or cultivation marked to the south west along the Larachmòr Burn. SLR Nos 108 and 109, former longhouses, are marked as unroofed structures. SLR No. 110, identified as a possible sheiling by the HER, from its form in the historic OS mapping is potentially another longhouse; also shown as an unroofed structure.

91. The second edition 1:10,560 OS map (OS 1910a-d) shows no significant changes. Scotmill (SLR No 105) is shown as in the earlier edition. The township of Garveoline (SLR No 54) has additional adjacent enclosures, and only three roofed buildings marked. A set of enclosures marked to the north within the Inner Study Area (SLR No 138) are likely stock management features associated with the sorting of livestock brought off the hill. There are also several drainage features marked within the Inner Study Area, from attempts to improve its pasture. There is what is likely to be a sheepfold marked to the north of the Inner Study Area (SLR No. 113).

92. The third edition 1:10,560 OS map (OS 1924) shows a new structure at Scotmill (SLR No 105), whose form and location matches the existing ruined farmhouse. The earlier building, probably a longhouse, is shown as still roofed to the north of this building. The township of Garveoline (SLR No 54) is shown with three unroofed buildings, the settlement abandoned with just a sheepfold utilised at the site. Sheepfold SLR No 113 is no longer shown, but a new sheep fold constructed closer to the Loch Cruinn (SLR No 118).

93. Current OS mapping of the area shows much the same landscape, with the notable exception of the existing plantation over the north western part of the site. Scotmill (SLR No 105) is depicted with two buildings, although only the early 20th century farmhouse and a small outhouse to the north are standing today. SLR Nos 108, 109 and 110 are all shown as unroofed structures.

11.4.7 Aerial Photography

94. Aerial imagery available from the National Collection of Aerial Photography (NCAP) and Canmore was reviewed. There was no oblique aerial imagery of the Inner Study Area available from Canmore.

95. NCAP hold six vertical images of a sortie flown on the 10th of June 1988 covering the Inner Study Area, at a scale of 1:24,000 (Sortie ASS/51388 of J A Story Ltd). The area of plantation within the Inner Study Area is smaller in 1988 and has not

extended to its western most extent near Scotmill (SLR No 105) and Loch Nan Gad. The central area of the plantation appears to be covered by young trees.

96. Due to the scale and orientation of the imagery, smaller features such as sheilings are not visible in the imagery. The buildings of Scotmill are visible, along with boundary features and drainage features used to improve pasture on lower ground.

97. Although the landscape is discernible around standing stones SLR No 139, there are no features identifiable such as a former enclosure with which they may they have been associated. No new heritage features were identified from the aerial imagery.

11.4.8 Discussion

98. Earlier prehistoric activity is scarce in the area, evidenced by a conceivably Mesolithic prehistoric rock shelter and shell midden, although the site is undated (SLR No 37). Neolithic and/or Bronze Age activity is evidenced by cup-and-ring marked stones (SLR Nos 77 and 87) and standing stones (SLR Nos 212, 111 and possibly 139). SLR No 87 is part of a larger group of cup-and-ring marked stones to associated with the valley of the Claonaig Water and its tributaries. Of the standing stones, SLR No 111 has been lost and SLR No 139 has not been satisfactorily assigned to a period. Assuming a contemporary date with SM212, a late Neolithic or Bronze Age standing stone near Loch Ciaran, the three form a broadly north east / south west alignment across lower ground with from Loch Ciaran at the south western end. There would, however, have been be no intervisibility between SLR Nos 111 and 139 with SM212 and without further evidence this relationship is speculative.

99. Possible prehistoric settlement is hinted at by a suggested hut platform within the Inner Study Area (SLR No 96), reused in the construction of a sheiling. Forts and duns of the Iron Age or early historic periods are focused on coastal positions along West Loch Tarbert creating, where contemporary, a network of defended sites controlling access to and passage along West Loch Tarbert.

100. There are no sites of 'Roman' origin within the environs of the proposed Development. This is unsurprising, giving its location in relation to Hadrians Wall and the Antonine Wall which mark the two frontiers of Roman Britain during its history. A potentially 2nd century AD crannog in the drained Loch Dughail is the only known settlement evidence of this period, reoccupied in the medieval period as a stronghold for a regional elite (SLR No 82). Further medieval activity is evidenced by religious sites, at Clachan (SM3695 and SM3676) and Kilchamaig (SLR No 39).

101. Post-medieval occupation in the form of sheilings and longhouses were located along Larachmòr Burn, near Loch Chorra-riabhaich, Loch Lurach, and Loch Cruinn within or close to the Inner Study Area (**Figure 11.2**); evidenced by both physical remains and along Larach mòr Burn by 18th and 19th century maps. The buildings or huts are located to take advantage of the topography in providing shelter from the prevailing wind, and sources of water. Summer occupation on these areas, utilising sheiling huts, whilst tending cattle grazing on upland pasture probably has a long history. Although these sites attributed to the post-medieval period, this practice dates from medieval times. The longhouses found along the Larachmòr Burn suggest permanent farms or small holdings along Larachmòr Burn, assumed to post-date the sheiling huts. During the post-medieval period most of the Inner Study Area would have been utilised for pasture at some time of the year. Drainage features on lower ground, probably of the 18th or 19th centuries, were installed to improve this pasture.

11.4.9 Potential for Unknown Heritage Assets

102. The potential for unknown remains of the prehistoric period is low to moderate. Much of the lower ground in the west of the proposed Development has been significantly affected by forestry activity. The highest potential lies in proximity to SLR Nos 111 and 139. Settlement activity on the slopes of the hills is also a possibility.

103. The potential for unknown remains of the Roman Period is low. Any further remains near the location of the possible 2nd century Crannog (SLR No 82) is likely to have been significantly affected by forestry activity. The potential for medieval remains is also low. The highest potential lies to the west of the Inner Study Area, if the settlement activity along Larachmòr Burn proves to have a long history.

104. The potential for unknown remains of the post-medieval period is high near the Larachmòr Burn and its tributaries, and moderate across the remainder of the proposed Development. Any features located are likely to be associated with the post-medieval agricultural landscape, and as such of local importance.

11.5 Assessment of effects

105. The assessment of effects is based on the proposed Development as outlined in **Chapter 3 Proposed Development**. The proposed Development has undergone design iterations and evolution in response to all environmental and technical constraints identified as part of the baseline research and field studies. The final proposed layout as shown in **Figure 11.2**, therefore, embeds design-based mitigation to avoid disturbance of known cultural heritage assets.

11.5.1 Potential construction effects

106. **Figure 11.2** shows there would be direct impacts upon standing stone SLR No. 101, from Borrow Pit 04. The walk over survey produced no evidence of the stone, and the area has been significantly affected by the establishment of the plantation and quarrying (**Appendix 11.1**). It is assumed that the stone has been lost due to these activities, and as such no longer forms a constraint to the proposed Development.

107. Scotmill SLR No 105 adjacent to Solar Area 2. Where solar arrays are located which affect known features of the farm, appropriate mitigation measures would be instigated in agreement with WoSAS (Section 11.5.3)

108. Two gazetteer sites are located in close proximity to elements of the proposed Development. SLR 60 is recorded by the HER as the location of two sheiling huts in close proximity to Turbine 16. The walk over survey demonstrated that these are mis-located, the correct location recorded as SLR 136 and 137 on the opposing side of a watercourse. These sites should not be affected by the proposed Development.

109. SLR No 98 recorded as the location of two cairns. The walk over survey found no evidence of the cairns at the grid references provided in the site description (Appendix 11.1 paragraph 5). The correct location of these cairns was not identified by the walk over, but comparison to the archived photography of a 1995 survey which first located the cairns to that taken during the site visit suggest they are positioned further to the north east and at a higher position than the location indicated by the HER. This location, therefore, was removed as a constraint and based on this assessment there would not be any direct impacts upon them from the proposed Development.

11.5.2 Embedded measures

110. Mitigation in relation to most heritage assets has been embedded into the design of the proposed infrastructure and has therefore avoided or reduced the risk of direct impacts wherever possible. This mitigation has taken the form of input to the design process, in order to avoid siting turbines and associated infrastructure on known heritage assets.

11.5.3 Proposed mitigation

111. Appropriate mitigation undertaken during construction would be in the form of:
- Fencing off and avoidance of known heritage assets in close proximity to the proposed Development that could otherwise be accidentally damaged during the construction works;
 - A watching brief on elements of the ground works that have potential to have direct impacts on unrecorded buried archaeology; and
 - Should the fabric of the existing structure of Scotmill (SLR No 105) be affected by the construction of the solar arrays, an appropriate level of building recording prior to its loss.

112. The precise scope of the mitigation works would be negotiated with WoSAS and the agreed mitigation programme would be documented in an agreed Written Scheme of Investigation.

11.5.4 Residual effects

113. The completion of the archaeological mitigation programme outlined in Section 11.5.3 would minimise the loss of the cultural heritage resource that could occur as a result of the construction of the proposed Development. Any harm caused to buried remains would be balanced by the gain in knowledge resulting from investigation and reporting. No significant residual direct effects are anticipated from the construction of the proposed Development.

11.5.5 Potential operational effects within the Inner Study Area

114. There are no regionally or nationally important cultural heritage assets within the Inner Study Area, which would require an assessment for impacts upon setting.

11.5.6 Potential operational effects on designated heritage assets within the Outer Study Area

115. There are nine scheduled monuments within the outer study area, all of which fall within the ZTV of the proposed wind turbines (**Table 11.6; Figure 11.1**). They include: two prehistoric burial monuments, Glenreasdell Mains, Chambered Cairn (SM3281) and Cnoc Dubh na Leitreach cairns (SM3874); Loch Ciaran, prehistoric standing stone 1430 m SW of Achaglass (SM212); three Iron Age duns or forts, *Dun Skeig*, *Duns and Fort (SM2491)*, *Leamnamuic Dun (SM3674)* and *Eillean Àraich Mhòir (SM3183)*, early Christian, medieval, and post-medieval carved stones in Clachan, Clachan Churchyard (SM3676) and The cross near Ballinakill House (SM3695) ; and **Talatoll** Sheilings (SM3817). As scheduled monuments, each site is of the highest heritage significance.
116. There are nine Category B listed buildings within the Outer Study Area, each of regional importance. Within the village of Clachan these include: Kilcalmonell and Kilberry Parish Church (LB12017); Kilcalmonell Free Church (LB12019); Kirkland (Formerly) Kilcalmonell and Kilberry Manse (LB12018); and Ballinakill Steading (LB12022) within the village of Clachan. Ardpatrik House (LB18282), Dunmore House (LB18245), and McNeill Campbell of Kintarbert and Druimdrishaig Mausoleum, Kilnaish Burial Ground (LB18244) are each located on the north western side of West Loch Tarbert. Both Skipness Parish Church, Claonaig (LB18404) and a K6 Telephone Kiosk at Ardpatrik Road End (LB18982) are located outwith the ZTV. It is not considered that any location within the ZTV of the proposed Development from which either Skipness Church or the telephone kiosk is viewed contribute to the appreciation and understanding of these assets. They have, therefore, been excluded from further assessment.
117. Clachan churchyard (SM3676) and Kilcalmonell and Kilberry Parish Church (LB12019) have been discussed together, as the two directly relate to each other.
118. Analysis of the terrain as viewed from the cultural heritage assets in the below discussion was undertaken as appropriate by site visits or a ZTV from the heritage assets. The ZTVs were calculated using OS Terrain 5 Digital Terrain Model (DTM) and observer heights of 2 m. Identification of whether only the rotating blades of the wind turbines are theoretically visible was identified from wireline drawings or a photomontage. Where these were not available, the assessment was made from a ZTV of the proposed wind turbine’s hub height.
119. **Glenreasdell Mains, Chambered Cairn (SM3281)** of the Neolithic period is a funerary monument of early agricultural communities, within which bones of several individuals, inhumations and cremations may have been interred. The cairn measures 20 m by 19 m in size and a maximum of 1.2 m high. It has evidently been robbed of stone and eroded by the plough with its original shape is uncertain, but two unroofed burial chambers are evident within the cairn.
120. The site is located at between 35 m and 45 m AOD on the lower north-eastern slopes of the valley of the Claonaig Water, which is broadly oriented north west / south east, with the Claonaig Water located to south west of the cairn. The local topography does not facilitate long distance views from the cairn but restricts visibility to the immediately surrounding hills and valley; in addition, there are no extensive views to the north west or south east along the valley. The hills of the Isle of Arran can be observed in the far distance to the south east, although analysis of the terrain suggests that Loch Tarbert would not have been visible regardless of the plantation trees now found in this direction. The limited visibility to and from the monument suggests the cairn was a focussed destination, with the landscape that contributes to our appreciation and understanding of the monument primarily that of the lower more fertile ground of the river valley and its immediate surroundings. Several potentially contemporaneous cup-marked stones (SLR Nos 87, 119 to 122, 124 to 130, 131 and 132) may also have been part of the same prehistoric landscape, and Bronze Age cists (SLR Nos 183, 185, 178 and 188) demonstrate the continued use of the landscape around Glenreasdell Mains for funerary remains. Analysis of the terrain suggests only three of the cup-marked stone locations have theoretical intervisibility with the chambered cairn (SLR Nos 129, 131 and 132).
121. The cairn is currently within an area of pasture, with plantations visible on many of the surrounding slopes of the valley. The riverine trees of an unnamed tributary of the Claonaig Water and Glenreasdell Mains Farm to the north east screen any views in this direction, as well as any approach to the cairn along the valley from this direction. The B8001 is located adjacent to the field containing the cairn, approximately 50 m to the south west. Telegraph poles with overhead wires are situated along the road and adjacent to the riverine trees of the unnamed tributary. A cottage is also located at the entrance to the field, approximately 30 m to the west of the cairn, with a further residential property, Bruiland, approximately 160 m to the south east of the cairn. Within the valley further lines of telegraph poles are located to the north east and north west, and a mast is situated approximately 680 m to the south east of the cairn north of Auchavae. All 11 turbines of Freasdail Windfarm are visible to the west of the asset, with the pylons of the Inverary to Crossaig Overhead Line to the fore of the turbines. (**Photograph 11.1**)



Photograph 11.1: View from Glenreasdell Mains Chambered Cairn (SM3281) looking west south west towards the proposed Development, with three turbines of the Freasdail Windfarm and a pylon of the Inverary to Crossaig Overhead Line in the distance and stones of the cairn in the foreground

122. Theoretically the top parts of 11 turbines of the proposed Development would be visible from the cairn, although four of these would be of turning blades only. Of the seven turbines where the turbine hubs are visible, these would appear to the left and behind those of Freasdail Windfarm (**Figure 11.3**), with the majority of the turbine structures screened behind the visible hills. The nearest turbine of the proposed Development to the cairn, Turbine 16, would be 3.1 km to the west south west of the cairn. They would appear within the backdrop to views west south west but would not impact on the key aspects of the landscape that contribute to our understating and appreciation of the cairn. The magnitude of impact from the proposed Development is neutral/none, the significance of effect is nil.
123. **Cnoc Dubh na Leitreach, cairns 150m SSW of, Achaglachgan (SM3874)** is the site of two burial cairns located on the south western slopes of Cnoc Dubh na Leitreach, upon the western side of a shoulder of the hill leading to Cnoc à Mhillitich, at between 80 m and 90 m AOD. The southern cairn is a low sub-oval feature, up to 0.5 m in height, measuring 3.6 m by 2.4 m in size with a standing stone 1.4 m high on its northern edge. The mound is locally named the Giant's Grave or Diarmid's Grave. The northern cairn is circular in form, 10 m in diameter and 2.5 m high. A hollow in the top of the cairn may indicate attempts to excavate the mound. The cairns are conventionally dated to the late Neolithic or Bronze Age periods.
124. Analysis of the terrain indicates that views within 2 km of the cairns are restricted. There is theoretical visibility to and from opposing side of the unnamed valley to the west, excluding the unnamed watercourse within it, and to and from the north western slopes of Bad Bheith and Cnoc Eilid including part of the shore approximately 1.5 km to the south of the cairns. Views east and north are foreshortened by the local topography, including those of West Loch Tarbert. If the loch was a significant aspect of the cairns' wider setting, we might expect them to be located on higher ground to the south west. Theoretical views of the proposed Development area from the cairn is largely limited to the hill tops only, which have no similar monuments located upon them. It is likely that the cairns' locality was chosen for its restricted visibility, with a potentially intended view from the east-facing slopes of the unnamed valley to the west. The size of the cairns in their original state as indicated by the remains and their position in the landscape suggests they would not have been visually dominant features observed from the wider landscape. The monument's setting which contributes to our understanding and appreciation of it is confined to its more immediate surroundings, and the historical activities associated with the monument itself.
125. The current setting of the cairns is one of being surrounded by plantation trees. The cairns themselves are free of trees, but the trees screen any views possible from the cairns. This prevents any ability to appreciate the landscape beyond the clearing, and any views of the cairns in an approach to them. Should the trees be felled it is assumed they would be replanted. If these

plantation trees were permanently removed, all 19 turbines of the proposed Development would be theoretically visible; one of which would be viewed as turning blades only. The nearest turbine of the proposed Development, Turbine 1, is located 4.7 km to the south of the cairns. In this scenario, the turbines would form the distant backdrop to views from the cairns across West Loch Tarbert. The proposed Development would not intrude on the key aspects of the monument setting, or any relationship with its more immediate locality. The magnitude of impact from the proposed Development in its current setting is neutral/none, the significance of effect is nil. Were the trees to be permanently removed, this would remain unchanged.

126. **Loch Ciaran, standing stone 1430 m SW of Achaglass (SM212)** is positioned 175 m from the shores of Loch Ciaran, between 120 m and 130 m AOD. The nearest turbine (Turbine 4) of the proposed Development is located 2.8 km to the north east of the stone. The stone appears to be in its original position, measuring approximately 2 m high, and probably dates to the late Neolithic or Bronze Age periods. This individual stone may have been constructed in isolation or as part of a more complex arrangement of stones, since lost, with possible solar or lunar alignments, or have had intervisibility with other contemporary monuments. Although there is a concentration of solitary standing stones within Argyll, the HER records 300 such monuments, this stone is unusual in that there are few contemporary sites in its environs. Paragraph 98 discussed a possible relationship with SLR No 111 and 139, a lost standing stone and potentially the remains of a prehistoric monument. Analysis of the topography, however, demonstrates there would have been no intervisibility with these sites. A potentially contemporary site of an undated hut circle approximately 1.4 km to the south, within the bounds of SM3817, is at the edge of the theoretical visibility from the stone. A crannog is recorded within the loch (SLR No 85) approximately 65 m from the eastern shore of the loch. Although artificial islands dating from the Neolithic period are known in Scotland, the crannog is more likely to have been constructed in the Iron Age or the early historic period and would not have been in existence when the stone was raised. Assuming this lone stone was intended to be visible in the approach to it, analysis of the terrain indicates it would have been best observed from the opposing side of the loch or from the hill slopes to the east and south which meet the loch. The same analysis does not indicate any significant visibility beyond this, and the stone would not have formed a prominent feature in the wider landscape.
127. The existing setting of the monument is one of being surrounded by plantation trees with a forestry track immediately to the north of the stone. The aforementioned hut circle and the opposing side of the loch are also within or covered by plantation trees. The modern plantation prevents the relationship between the stone and its immediately surrounding landscape being appreciated or understood. Should the trees be felled it is assumed they would be replanted. In the absence of trees, 14 wind turbines would theoretically be visible from the stone. This would include views of five turbines seen as turning blades only. In an approach to the stone from the east side of the loch or views to the loch from the stone, the proposed Development would occur to the north and north east. They would not intrude upon the understanding and appreciation of the topographic relationship between the stone, the loch, and ground to the east of the loch. In its current setting, the magnitude of impact upon the monument is Neutral/None, the significance of effect is Neutral/Nil. Should the trees be removed from its setting, the magnitude of impact upon the monument would be very low adverse, the significance of effect slight.
128. **Dun Skeig, Duns and Fort (SM2491), Leamnamuic Dun (SM3674) and Eilean Àraich Mhòir (SM3183)** are duns or forts potentially contemporaneous in date, located on the south eastern side of the loch. There is intervisibility between the sites with one possible exception. It was not feasible to assess from a site visit visibility between the Dun Skeig and Leamnamuic Dun, as Leamnamuic is covered by dense trees screening any views out from the site. Analysis of the terrain suggests theoretical visibility although the existing plantation and potentially historic trees upon Creag na h-Ingham would prevent this. Duns are interpreted as fortified homesteads of small groups of people or single families, which conventionally date from the Iron Age to the early historic period.
129. **Dun Skeig, Duns and Fort (SM2491)** is positioned at approximately 140 m AOD on the south eastern side of the entrance to West Loch Tarbert approximately 3.9 km to the east of Turbine 4, the nearest turbine of the proposed Development. The fort and duns are constructed upon a distinctive promontory hill visible from along West Loch Tarbert, the slopes surrounding the asset enhancing its defensive capabilities. Three phases of construction have been identified at the site, an earlier fort occupying the whole summit with its principal entrance to the west, a larger dun to the south west within the earlier fort, and a smaller but better-preserved dun to the north east also within the earlier fort. The entrance to the earlier dun is uncertain, but it is situated with better views west out to sea than the later dun. The entrance to the later dun is orientated to the north east, towards Turbines 1 and 2 of the proposed Development. Its location has slightly better views up West Loch Tarbert than the earlier dun. Although the location of the two duns suggests a slight change in emphasis, good views out to sea and up the loch are afforded from the top of the hill. The location of Eilean Àraich Mhòir Dun (SM3183) is discernible 7.5 km to the north east of Dun Skeig. Leamnamuic Dun (SM3674) 4.8 km to the north east of Dun Skeig is theoretically partially visible but would likely be obscured by any intervening trees or other screening as it is today. In addition: the location of Dun Ronachain

(SM3673) is visible from Dun Skeig, approximately 2 km along the coast south west; Dun a Choin (SM2421), approximately 8 km to the north east, would probably have been visible from Dun Skeig but for the plantation trees around this dun currently screen it from view; and Dun Mor Fort (SLR No 116) is also theoretically visible from Dun Skeig, but this site is also screened from view by trees.

130. Modern intrusions at the asset include a trig point surrounded by a cairn and a second ‘walkers’ cairn situated between the two duns. Pasture and woods surround the site inland, with blocks of plantation trees and rough grazing in the more distant landscape. A small quarry is located south of Corran Farm, approximately 900 m to the north east of the asset, and Port Askaig is visible at approximately 8 km to the north east of the asset near Eilean Àraich Mhòir Dun (SM3183). Approximately 6.5 km to the north east of the asset nine of the 11 turbines of Freasdail Windfarm are visible. Approximately 10 km south east of the asset, eight of the ten turbines of Cour Windfarm are visible.
131. The principal focus of the asset’s setting which allow us to understand and appreciate the monument is that of West Loch Tarbert, its shoreline with adjacent further potentially contemporaneous defensive sites, and the views out to sea. The asset’s location at the entrance to West Loch Tarbert provides the opportunity to survey and control passage along the loch and be a visible presence in any seaward approach to the loch, with intervisibility of potentially contemporaneous duns or forts. Longer distance views beyond this focus, or views inland, do not significantly contribute to this understanding or appreciation of the monument. All 19 wind turbines of the proposed Development are theoretically visible from the asset, of which two turbines would be views of turning blades only, as well as part of Solar Area 2. A photomontage and cumulative wireline drawing are provided of the proposed Development from Dun Skeig in **Figures 7.27a and 7.27b of Chapter 7 Landscape and Visual Impact Assessment**. The proposed Development would not be present in views out to sea, towards Ronachain Bay Fort (SM3185), or across the entrance to the loch. The proposed Development would appear in the views along West Loch Tarbert, to the right of the view and to the fore of the existing Freasdail Windfarm turbines. The proposed turbines are not situated on the low hills adjacent to the loch or near the shoreline, where contemporaneous duns are located, although Turbines 1 and 2 of the proposed Development are close to this key aspect of the assets setting. The south facing solar panels of Solar Area 2, approximately 3 km to the east south east of the Dun Skeig, would all be to the south of the monument and not turned towards it, preventing impacts from any glare. The proposed turbines would erode to a very minor extent the heritage significance of the asset. The proposed solar arrays would have no appreciable impact upon the principal aspects of the asset’s setting. The magnitude of the impact is very low adverse. The significance of effect is slight.
132. **Leamnamuc Dun (SM3674)** is located part way up West Loch Tarbert, upon a low ridge at approximately 35 m AOD. It comprises a dun protected by an outwork on its north western side, possibly a stock enclosure, with the entrance of the dun looking to the north east. The dun is positioned to provide views across and along West Loch Tarbert. Potentially contemporaneous visible sites include: Eilean Àraich Mhòir Dun (SM 3183), approximately 3.2 km in the north east; Dun Mor Fort (SLR No 116), 3.8 km to the north east; and Dun a Choin (SM2421), approximately 4.4 km to the north east. The dun forms part of a network of potentially contemporaneous sites along both sides of West Loch Tarbert.
133. Theoretically the 13 of the proposed 19 wind turbines would be visible from the site, of which six would be seen as turning blades only. The dun is both covered and surrounded by woodland, which to all practical purposes prevent any views out from the site including those of the wind turbines. The magnitude of impact upon the monument is Neutral/None, the significance of effect is Neutral/Nil.
134. **Eilean Àraich Mhòir, dun 730 m NNW of Tigh na Croit (SM3183)** is located upon a summit of a narrow rocky low-lying promontory at approximately 10 m AOD, with only a small piece of wet and boggy ground preventing it from being an island (**Photograph 11.2**). ‘Eilean’ translates into English as ‘Island’, and the dun may well have been an island during periods of its history. This, and its position upon a rocky promontory, enhance its defensive capabilities. The site includes an approximately 21 m by 9 m wall enclosing one or two buildings, with a possible entrance on the east north east side of the enclosure. A small bay is to the north eastern of the asset, somewhat enhanced by the existing Port Askaig on the other side of this bay, which the Red House Burn enters from the south east.
135. Its position affords good views across the loch and along the loch to the north east and south west. Both Dun Mor Fort (SLR No 116), approximately 2 km to the west, and Dun a Choin (SM2421), approximately 2.2 km to the north west on the opposing sides of the loch would be visible, if it wasn’t for the trees covering the former and surrounding the latter. Similarly, Leamnamuic Dun (SM3674) approximately 3.2 km to the south west would probably be visible, but that too is covered by trees. Dun Skeig (SM2491) appears as a distant but prominent hill 7.5 km to the south east at the entrance to West Loch

Tarbert. The Eilean Àraich Mhòir dun is currently covered in bracken and other vegetation and surrounded by scrub and small trees.

136. The asset's setting is affected visually by the proximity of Port Arkaig, approximately 500 m to the north east of the asset. The traffic upon the A83, with pylons of the Inverary to Crossaig overhead line beyond the road, are other modern intrusions on the landscape to the east north east. The surrounding landscape is dominated by significant numbers of plantations, with plantation trees approximately 200 m to the south east of the asset. Two wind turbines of Freasdail Windfarm are visible between these trees, with the single wind turbine at Gartnagrenach Farm and a mast visible to the south east (**Photographs 11.2 and 11.3**).



Photograph 11.2: Wide angle view from Eilean Àraich Mhòir, dun (SM3183) looking south towards the proposed Development



Photograph 11.3: View from Eilean Àraich Mhòir, dun (SM3183) looking south towards the proposed Development, showing two turbines of Freasdail Windfarm

137. Projecting out into the loch, with potentially contemporaneous sites on both sides of West Loch Tarbert, the loch and views along it characterise the setting of this asset. Views inland which contribute are those of the land below and adjacent to its promontory position, and across the bay. Distant inland views do not significantly contribute to this setting or our understanding and appreciation of the asset, but form part of the backdrop to the assets setting. The nearest wind turbine of the proposed Development is Turbine 1, at 3.4 km to the south/south west of the asset. The turbines would not appear in views of the loch or potentially contemporary sites associated overlooking the loch. The turbines of the proposed Development would appear beyond the plantation trees and upon Cruach nam Fiadh, the larger hill within the Inner Study Area visible in **Photograph 11.3**. They would not intrude into the key aspects of the asset's setting. The magnitude of impact upon the proposed Development on the dun is Neutral/None. The significance of effect is Neutral/Nil.
138. **Clachan Churchyard (SM3676) and Kilcalmonell and Kilberry Parish Church (LB12017)** are located within the village of Clachan, to the south west of the proposed Development. The churchyard is scheduled due to its collection of carved stones, including early Christian, medieval and post-medieval carved stones. The church was built in approximately 1760, probably replacing an earlier church, and is excluded from the scheduling as are parts of the church yard with a stone shelter and all modern burials. The church has a gothic gabled porch on the north side of the building with a small belfry at the western end. The location of the church at the southern end of the village, within the valley of the Clachan Burn, does not facilitate open views of the surrounding hills.
139. The setting of the carved stone that contribute to the appreciation and understanding of these features is that of the churchyard, its church, and the surrounding village of Clachan. Ground lying at significant distance to from the village does not contribute significantly to the understanding and appreciation of the stones or the church. The nearest turbine (Turbine 4) of the proposed Development would be approximately 3.4 km to the east north east of the churchyard. The ZTV of the proposed Development indicated that 12 turbines are theoretically visible from the church yard. The surrounding treescape and buildings would screen views of the most or all of these (**Photograph 11.4**). The magnitude of impact of the proposed Development on both of these assets is Neutral/None. The significance of effect is Neutral/Nil.



Photograph 11.4: View from Clachan Churchyard (SM3676), looking east

140. **The cross near Ballinakill House (SM3695)** is described by the HER as a mutilated disc-headed cross located on the summit of a what appears to be a natural mound. It is assumed to be of early Christian or medieval origin. The HER records that the cross may have originated from Clachan churchyard, with the cross having been moved to this location at some point

in its history. There is also a report that a few years before 1875 several urns were recovered from the mound. The cross is situated near the entrance to the drive to the later 19th century mansion, Ballinakill House (LB12021), which is sited on an earlier mansion. A road in the position of the A84, however, is a recent construction. Historic mapping shows the road through Clachan to the north of the Clachan Burn, crossing the burn to continue west between Clachan and Dunskeig on Roy (1747 – 1755) and at the location of the existing bridge over the burn 165 m to the east of SM3695 (OS1873).

141. If the cross has been moved it has been removed from its original setting. It also makes it problematic to assess its current setting, where the context and time of the move is not known. One possibility is it was moved to create a landscape feature, or has been incorporated as a landscape feature, of the current Ballinakill house or the earlier mansion. Its location is marked as a ‘Tumulus’ on 19th century OS mapping (OS 1873), located at the edge of woodland to the south of the main drive between the house and its lodge, approximately 130 m to the west of the stone.

142. Its current setting is formed from features of this 19th century landscape, current agricultural activity and the construction of the A83. Other modern additions include lines of telegraph poles with overhead wires that traverse the fields to the north and east of the stone, with one pole a short distance from the stone to the east south east. Two masts and telegraph poles are also present on the low hill to the north west of the stone. Views west from the stone towards Clachan and Clachan churchyard are screened from view by vegetation and trees.

143. If intended to be viewed as a landscape feature approaching the mansion along the drive, the part of the drive west of the stone has been lost to the construction of the A84. When approached from the west along the A84, the stone and views east are screened from view by vegetation. As viewed from an approach from the mansion house, the wind turbines of the proposed Development would be to rear of the viewer. Views of the house from the stone are almost entirely obscured by intervening trees. As incorporated into the 19th century landscape of Ballinakill House, the stone is likely to have been a focal point on passing the mound, but without any long distance views intended from the cross. As such it creates a focussed destination, with appreciation of the stone derived from its immediate surrounds.

144. The nearest turbine (Turbine 4) of the proposed Development is located 3.2 km to the west south west of the stone. 13 wind turbines are theoretically visible from the cross, of which four would have views of wind turbine blades. Views to the east from the stone would incorporate the turbines, where they are not screened from view by the intervening trees, as distant features. They would not intrude upon the principal aspects of the asset’s setting. The magnitude of impact upon the proposed Development is Neutral/None. The significance of effect is Neutral/Nil.

145. **Talatoll, shielings 1400m SE of, Kintyre (SM3817)** comprises two groups of sheiling huts, the western cluster including at least 42 huts located between 120 m and 135 m AOD on the south of Loch Ciaran between Cruach na Sellcheig and Creag Eanaiche. They vary in size from approximately 2.7 m by 2.1 m to 6.1 by 4.9 m in size. Most of the huts cluster around two unnamed hillocks, with an unnamed stream between the two clusters. Many of the huts are constructed upon small mounds and vary in design, the mounds themselves are potentially the remains of earlier huts attesting to the longevity of the site. Larger clusters of sheilings may be referred to as ‘Summer Towns’ where as a significant part of the community, possibly mainly young women and children, relocated to the site in order tend after cattle grazing on upland pastures. Roys Military Survey of Scotland (Roy 1747 – 1755) marks three buildings in broadly the same topographic location as the sheilings adjacent to a watercourse. Ordnance survey map of the later 19th century (OS 1873) does not mark any settlement at this location. The nearest known contemporaneous settlement on lower ground is that of Clachan, which may be approached via the valley of the Allt Mhòr, which runs from the loch to the village. Clachan itself is not visible from the sheiling.

146. The sheilings are located close to a water supply, found in the unnamed watercourses between the two clusters and Loch Ciaran to the north, with some shelter from south westerly prevailing winds from Cruach na Sellcheig. The surrounding area would have been one of unimproved pasture and moorland. The summer settlement would not have been positioned to provide extensive views of the surrounding landscape, or to be observed from distant locations, but to provide shelter, resources and access to upland pasture. As such, appreciation of the sheiling in its locality is derived from its topographic relationship with Loch Ciaran and the immediately surrounding hills, as well as the route between Clachan and the sheilings along the Allt Mhòr. The wider landscape beyond the loch and its surrounding hills does not significantly contribute to this understanding.

147. The modern landscape to the west of the sheilings has potentially not significantly changed, being one of moorland and rough grazing, but the sheiling clusters themselves are enclosed or partially enclosed by plantation trees. They obstruct an appreciation of the sheilings in most of their wider environment, as well between the two clusters of sheilings. These trees

would partially or fully screen from view the proposed Development. Should the trees be felled it is assumed they would be replanted. In the absence of any trees, 16 wind turbines would be theoretically be visible from the sheilings of which three would be views of turning blades only, with the nearest wind turbine (Turbine 4) located 4.5 km to the north east of the asset. The wind turbines of the proposed Development would not infringe upon the key aspects of the sheilings’ setting. They would appear in views towards the loch as part of the backdrop to the north-eastern hills, to the right of the loch, but would not significantly distract from the understanding and appreciation of the relationship with the loch and the immediately surrounding landscape. In its current setting the magnitude of impact of the proposed Development upon the monument is Neutral/None. The significance of effect is Neutral/Nil. Should the trees be removed permanently, the magnitude of impact of the proposed Development upon the monument would be very low adverse. The significance of impact slight.

148. **Kilcalmonell Free Church, Clachan (LB12019)** is a located in the centre of the village of Clachan, constructed at the expense of Sir William MacKinnon in 1878 (paragraph 82). The church was constructed in an oriental style with a pagoda like wooden belfry and ornamental timber canopy over the door at its western end. It’s was constructed prior to the A84, when the main road through Clachan came from the north, passing over the Clachan Burn to the north of the church, and continued to the west. The church would have been principally viewed from the road, and its surrounding grounds. The church has not been situated to facilitate long distance views of the surrounding landscape. The setting within which the church would be appreciated and understood is focused on the surrounding village of Clachan.

149. The church is currently a private residence. Vegetation and trees surround the property screening the village of Clachan and views of the church, although its belfry is visible from various locations within Clachan and the church itself from the entrance into the property from the adjacent road and from the A83. The nearest wind turbine of the proposed Development, Turbine 4, would be located 3.3 km to the east north east. Twelve wind turbines are theoretically visible from the building, although the immediately surrounding vegetation, treescape and other buildings of Clachan would screen the proposed Development from view. The magnitude of impact of the proposed Development upon the building is Neutral/None. The significance of effect is Neutral/Nil.

150. **Kirkland (formerly) Kilcalmonell and Kilberry Manse (LB12018)** is located on the north western edge of the village of Clachan. It is an early 19th century, two storey, Georgian building with its principal elevation to the north and south. The building is approached from east, along the minor road to the north of the bridge over the Clachan Burn. An Ordnance Survey map of the late 19th century (OS 1873) depicts trees lining at the edges of the surrounding garden, with potentially an intended view across the Clachan Burn to the south. Views to the north appear have been screened by trees. The surrounding landscape which contributed to an appreciation of the building in its setting is that of the village of Clachan, and potentially views from the house to the south. There are no intended long-distance views to the east, which would include the proposed Development.

151. The current setting of the building is largely unchanged from that as depicted on the OS map of 1873. Modern properties have been constructed in the immediate surroundings of the building and the trees are more mature than that suggested by the 1873 map. The nearest wind turbine of the proposed Development, Turbine 4, would be located 3.5 km to the north east of the building. Eleven turbines are theoretically visible from the building, although the intervening treescape and village is likely to screen the proposed Development from view. Where visible, they would be distant landscape objects and not detract from an appreciation of the building within Clachan. The magnitude of impact of the proposed Development upon the building is Neutral/None. The significance of effect is Neutral/Nil.

152. **Ballinakill Steading (LB12022)** located on the eastern side of the village of Clachan is a single storey 19th century steading with three wings around a central yard facing east and a byre in the yard which is part of the listing. A modern agricultural shed is orientated north / south adjacent to the eastern side of the steading, its length almost the full width of the steading building, allowing entrance to the yard at its north eastern corner.

153. The steading is situated within its surrounding probably 19th century agricultural landscape, largely surrounded by the trees, with further blocks of deciduous trees in the immediate vicinity. Between the listed building and the proposed Development, a modern agricultural building is situated. The nearest wind turbine of the proposed Development, Turbine 4, would be located approximately 2.4 km to the east of the steading upon hills beyond the Clachan Burn. Theoretically 14 wind turbines of the proposed Development would be visible from the building, of which five would be viewed as turning blades only. The intervening modern agricultural building and trees would screen the proposed Development from view. Where wind turbines are visible, they would not detract from the appreciation of the steading. The magnitude of impact of the proposed Development upon the building is Neutral/None. The significance of effect is Neutral/Nil.

154. **McNeill Campbell Of Kintarbert and Druimdrishaig Mausoleum, Kilnaish Burial Ground (LB18244)** on the north western side of West Loch Tarbert would be approximately 4.3 km to the north west of the proposed Developments nearest turbine, Turbine 1. The mausoleum was constructed around 1800 and is in a dilapidated state with no roof. The burial ground is enclosed by a sub-rectangular wall and contains a small erect stone with a plain incised cross. The burial ground is accessed from the B8024 to the south east of the burial ground. It is surrounded by agricultural land with areas of scattered trees and more densely wooded areas. Long distance views are not a feature of the burial ground, due to the surrounding topography and intervening trees, with West Loch Tarbert and hills to the south east of the loch largely obscured from view. The burial ground is a focussed destination appreciated from its immediate locality.

155. Theoretically nine wind turbines of the proposed Development would be visible from the burial ground, although two of these would be of the turning blades only. The wooded area upon Bàrr na Cour approximately 650 to the south east of the burial ground are likely to screen some of these from view. The proposed Development would have limited visibility from the burial ground, and where wind turbines are visible in the distant landscape they would not detract from an appreciation and understating of the asset. The magnitude of impact of the proposed Development upon the building is Neutral/None. The significance of effect is Neutral/Nil.

156. **Dunmore House (LB18245)** is situated on the north western side of West Loch Tarbert, on the southern slopes of Cnoc Eilid. The three storey Scots Baronial Tower is 19th century in date, with later additions, and was formerly the seat of Fraser Campbells of Dunmore. The tower was badly damaged by fire in 1986.

157. The tower is approached by a driveway from the B8024 to the south west, passing the lodge house and Dunmore Home Farm. The first edition OS map (OS 1873) indicates the driveway originally continued though woodland to re-join the B8024 to the east of the tower. Grounds around the tower include a small area of parkland with occasional parkland trees to the south and south west, surrounded by deciduous woodlands; probably 19th century plantations. A building is attached to the east of the tower, with gardens to the north of the property. Analysis of the terrain suggests trees to the south east of the tower screen much of West Loch Tarbert and the hills on the opposing side of the loch from view, when viewed from the parkland to the south and south east of the tower. On higher ground around the building the hills on the opposing side of the loch would be visible. The promontory position of the tower does afford visibility of the tower from the south eastern side of the loch, although as a distant feature, as well as parts of the loch from the tower itself, which were not obscured by intervening trees.

158. Visibility of the turbines is dependent on the position of the observer. The area of designed landscape around the property suggests the house was intended to be viewed from the south west on the approach uphill along the driveway. The view across to the hills on the opposing side of the loch is likely to have been intended to a degree but has not been enhanced by addition of deciduous trees along the B8024. Visibility of the tower amongst plantation trees may have been the intended purpose of building the tower on the high ground and the planting regime; as viewed in the approach to the house along the drive way, and from the opposing side of the loch or to travel along the loch itself.

159. The nearest wind turbine of the proposed Development, Turbine 1, would be located approximately 3.3 km to the south south east of the proposed Development and would not intrude views of the tower from the south east or on an approach along the driveway. They would appear in views from the house, either as distant turning blades above the plantation trees or upon the distant hills depending on the observer's position. The proposed Development would erode to a very minor extent the heritage significance of the listed building. The magnitude of impact would be very low adverse. The significance of effect would be very slight.

160. **Ardpatrick House (LB18282)** is a two story mid-18th century house with single story wings added in the 19th century. The gardens are to the north west, to the rear of the property, with a small area of parkland to the south east on land which drops down to the lochside. Small areas of woodland, probably 18th century plantations, are to the north, north east, and south of the house. The front house is approached either though woodland from the north east or from the south east.

161. The house has a designed view, framed by woodland, across West Loch Tarbert to the south east including the hills on the opposing side of the loch. The nearest wind turbine of the proposed Development would be Turbine 3 located approximately 4.9 km to the east south east of the house. 15 wind turbines are theoretically visible from the property, although of these 10 would be of turning blades only. The proposed wind turbines would not appear in views of the house in an approach to the building along the driveways or from the parkland to the front of the property. They would appear in the view across the loch, on the hills to the right of the view. The proposed Development would erode to a very minor extent the heritage significance of the house. The magnitude of the impact is very low adverse. The significance of the effect is very slight.

11.5.7 Potential operational effects on un-designated heritage assets within the Outer Study Area

162. **Table 11.8** identifies 21 non-designated heritage assets of regional importance within the Outer Study Area. Of these SLR Nos 11, 132 and 133 fall outwith the ZTV. No location within the ZTV from which these assets can be viewed was identified that contributes to the understanding or appreciation of them and they are excluded from any further assessment. SLR Nos 87 is a cup marked stone on the northern slopes of the valley of the Larachmòr Burn, adjacent to a plantation and within 100 m of pylons of the Inverary to Crossaig Overhead Line. The stone is recorded by the former Royal Commission for Ancient and Historic Monuments Scotland (RCAHMS) in 1971. Visits by the Ordnance Survey in 1973 and 1977 failed to locate the stone, and it is excluded from further assessment. SLR No 120 was within an area of plantation. It was not found during a visit to the site and is assumed to have been lost and is not included in any further assessment.

163. Three sets of closely grouped Neolithic cup marked stones are identified, including: SLR Nos 119 to 122; SLR Nos 124 to 126; and SLR Nos 127 to 130. These groups of stones have been assessed collectively.

164. Cup and cup and ring marked stones are conventionally dated to the Neolithic period. Where they do occur in Bronze Age monuments, such stones can have a weathered appearance suggesting they were originally situated elsewhere before being incorporated into the monument. They can occur on outcrop rock, earth fast boulders, and upon portable stones.

165. **SLR Nos 119, 121 and 122; 124 and 126, and 127 to 130** are cup marked stones located on the north eastern side of the valley of the Claonaig Water, totalling 11 sites. Descriptions of the cup marked stones are provided in **Table 11.9**. Further cup marked stones within the valley include SLR No 131, 132 and 194/195, although it is known that SLR No 194 is not located at its original position which it recorded by the HER at SLR No 195. The stones make a broadly north west / south east alignment of cup marked rocks located on the lower slopes of the valley.

SLR No	No of cup marks	Description of rock	Number of wind turbines of the proposed Development theoretically visible	Number of visible wind turbines of the Freasdail Windfarm, identified by site visit
119	Eight cups (four seen during a site visit, cups very worn)	Boulder 1.5 m x 1.5 m x 0.3 m in size	18 (two of turning blades only)	5
121	At least 25 cups	Boulder 1.5 m by 1.4 m by 0.8 m in size	18 (two of turning blades only)	6
122	Four cups	Boulder 1.8 m by 1.4 m by 0.6 m in size	18 (two of turning blades only)	6
124	Three cups	Earth fast boulder, exposed face measuring 0.9 m by 0.9 m	19	-
126	One faint cup	Boulder measuring 3.0 m by 2.0 m and 1.5 m in size	19 (one of turning blades only)	-
127	Four cups	1.7 m by 1.1 m by 0.3 m in size	15 (three of turning blades only)	11
128	Seven cups	0.9 m by 0.7 m by 0.3 m in size	15 (three of turning blades only)	11 (one of turning blades only)

SLR No	No of cup marks	Description of rock	Number of wind turbines of the proposed Development theoretically visible	Number of visible wind turbines of the Freasdail Windfarm, identified by site visit
129	At least 50 cups. One report describes two with rings around them and a channel, but no such marking were found in subsequent visits recorded by the HER or the authors visit to the site	Outcrop rock, exposed surface measuring 7.6 m by 6.1 m	17 (three of turning blades only)	11 (one of turning blades only)
130	Eight shallow cups	Boulder 1.4 m x 0.8 m x 0.3 m in size	17 (three of turning blades only)	11

Table 11.9: Description of cup marked rocks included in the assessment of effects

178.

Groups SLR Nos 124 and 126, and 127 to 130, are positioned to overlook the riverine trees of the Claonaig Water and the slopes of the opposing side of the valley. Long distance views are restricted from the locality of these stones, with views confined to surrounding valley slopes and nearby hills. Distant views to the south east include the Isle of Arran, with only very restricted views of Loch Tarbert found on higher ground. Mid and long distance views to the north west are prevented by the local topography. SLR Nos 119, 121 and 122 are in located in proximity to the Whitehouse Burn, a tributary of the Claonaig Water, between 3 m to 18 m south of the burn. The setting of the stones is characterised by the upper part of the valley of the Claonaig Water.
179.

SLR Nos 127 to 130 are situated in an area of rough pasture with tall rushes, near a stone sheepfold (SLR No 205). SLR Nos 124 and 126 are within an area of plantation trees, with no views of the surrounding landscape. Modern changes to the landscape include plantations, predominantly conifer plantations, of the slopes of both sides of the valley. Views to the south east of the group comprising SLR Nos 119, 121 and 122 are screened by an adjacent belt of conifers, and new planting of deciduous trees to the south of this will broaden this area of plantation. The B8001 passes between these groups of stones on a north west / south east orientation, with a parallel line of telegraph poles with overhead wires to the north east between the road and the plantation trees containing SLR Nos 124 and 126. Two houses are in proximity to the group comprising SLR Nos 119, 121 and 122. Between five and all eleven of the wind turbines of Freasdail Windfarm are visible from these sites (**Table 11.9**). Pylons and overhead lines of the Inverary to Crossaig Overhead Line are visible to the fore of this windfarm, being closest to SLR Nos 119, 121 and 122 at approximately 1 km from the stones.



Photograph 11.5: Wide angled view from SLR No 121 looking south west towards the proposed Development, with the cup marked stone in the foreground and turbines of Freasdail Windfarm in the distance



Photograph 11.6: Wide angled view from SLR No 129 looking south west towards the proposed Development, with the cup marked stone in the foreground and turbines of Freasdail Windfarm in the distance

180. The nearest wind turbine of the proposed Development to SLR No 119, 121 and 122 is Turbine 15, approximately 1.6 km to the south south west of the stones, and the remaining cup marked stones are approximately 2.3 km and 3.1 km from Turbine 16 (**Table 11.9**). **Photographs 11.5 and 11.6** present views from SLR Nos 121 and 129 looking towards the proposed Development. Wirelines of the proposed Development from SLR Nos 121 and 129 are found in **Figure 11.4 and 11.5**.
181. The proposed Development would not intrude on the key aspect of the stones' setting that allow us to understand and appreciate them, that of the valley and their relationship with its watercourses and other cup marked stones. They would not appear in views to the south east along the valley, incorporating views of the Isle of Arran. They would appear in views across the valley, upon hills on the opposing side as part of the back drop to the valley. From SLR Nos 119, 121 and 122 they would create a horizontal increment of turbines laterally to the right, as measured from Freasdail Windfarm, but would otherwise appear as additional wind turbines behind those of the Freasdail Windfarm. From SLR Nos 127 to 130 they would create a horizontal increment of turbines to the left along the valley, with the remaining turbines occurring behind those of Freasdail Windfarm. This visual effect would erode to a minor extent the heritage significance of SLR Nos 119, 121, 122 and 127 to 130. The magnitude of the impact upon these sites is low adverse. The significance of impact is slight.
182. There would be no impact upon SLR Nos 124 and 126. Should the plantation around SLR Nos 124 and 126 be felled it is assumed it would be replanted. Should the trees be removed permanently, the magnitude of impact and significance of effect would be the same as that of SLR Nos 127 to 130.
183. **SLR No 123** is a solitary standing stone, with four shallow cups on its north eastern face near the south eastern edge. At a higher position there is a forth cup, and on the opposing face a possible cup. The stone probably dates from the Neolithic or Bronze Age periods. Argyll has a large number of solitary standing stone, although it may have formed part of a larger group of stones since lost. Two further Neolithic petroglyphs are in the immediate vicinity of the standing stone, both with occurrences of single cup marks upon outcrop rock, including: SLR No. 226 approximately 30 m to the north west; and SLR No. 227 approximately 200 m to the south south west in the garden of Achadh-Chaorann house. The standing stone is positioned approximately 120 m to the north west of the Achradh-Chaorann Bay. It is noticeable that the faces of the stone are facing along the coast, rather than towards the bay. If the stone was intended as a solitary stone visible on the approach to it, it is best observed on an approach from the north east or south west rather than from the bay. There is a possible aligned view on Bar na Cour, a low hill approximately 2.3 km to the north east of the stone which is prominent in views in this direction. The setting of the stone is characterised by its immediate locality and potentially mid-range north-eastward view towards Bar na Cour.
184. The stone is located within an area of pasture. Views inland are screened by plantation trees to the north and west. A minor road is located approximately 100 m to the west of the stone with telegraph poles supporting overhead wires running parallel to the road. Nine wind turbines of Freasdail Windfarm are visible on the distant hills to the east south east of the stone, four of them visible as turning blades only. Theoretically, 16 wind turbines of the proposed Development would be visible from the stone of which 10 would views of turning blades only. Turbine 3 would be the closest wind turbine to the site, 4.8 km to the east south east of the stone (**Photograph 11.7**).



Photograph 11.7: SLR No 123 looking south east towards the proposed Development, with turbines of Freasdail Windfarm in the distance to the left of the image

185. The proposed Development would appear in the distant views upon the hills to the south east. They would not detract from the key aspects of the stone's setting, its immediate locality close to the bay or views to the north east. There would be no harmful effects on the heritage significance of the asset, to the ability to understand, appreciate or experience it. The magnitude of impact from the proposed Development is neutral/none. The significance of effect is neutral/nil.
186. **Dun Mor (SLR No 116)** are the remains of a sub-oval fort located on the north western end of a promontory of rock at 80 m to 90 m AOD, dating to the Iron Age or early historic period. The surviving stone wall of the fort stands at a maximum of 1.5 m high, and it is suggested that two phases to its construction can be identified within it. There are two entrances to the fort, located to the north east and south west. The remains of an outwork span the width of the rock promontory at its north eastern end, although an entrance through this has not been identified. Within the fort two structures can be identified, one probably the remains of a hut and the second a spread of tumbled stone wall. The second structure is oddly aligned to that of the fort, and of slight construction, and is suggested that this or both buildings maybe secondary to the original construction of the fort. There is theoretical visibility to potentially contemporaneous defended sites at Bar na Cour dun (SLR No 117) 1.1 km to the south west, Dun a Choin (SM2421) 1.9 km to the north east, Eillean Àrach Mhòir Dun (SM3183) 2.2 km to the east, Leamnamuic Dun (SM3674) 2.1 km to the south, and Dun Skeig (SM2491) 5.8 km to the south east, as well as extensive views of the loch.
187. All 11 wind turbines of Freasdail Windfarm are theoretically visible from the site. The fort is located within an area of deciduous woodland which would at least partially obscure views from the fort, depending on direction and time of year. The characteristics of the fort's setting which contribute to its understanding and appreciation are the fort's visual relationship with the loch and potentially contemporaneous fortified sites along the loch. Theoretically all 19 wind turbines of the proposed Development would be visible from the fort, the nearest (Turbine 1) located 3.5 km to the south/south east, with three of these wind turbines seen as turning blades only. They would appear in the backdrop to the view from the dun, to the right of the existing Freasdail Windfarm, upon hills on the opposing side of the loch but would not directly impact upon the relation between the principal aspects of the dun's setting. Their presence would erode to a very minor extent the heritage significance of the asset. The magnitude of the impact is very low adverse. The significance of effect is very slight.
188. **Bar an Cour Dun (SLR No 117)** is a galleried dun situated upon the rocky knoll of a low ridge to the north east of the Bar na Cour hill, on the north western side of West Loch Tarbert. A galleried dun has a doubled skinned exterior wall, which often contain galleries or a stairwell, and date to the Iron Age or early historic period. Only the section of wall with the entrance to the dun survives, with the entrance orientated to the north east. Approximately 8 m north east of the dun is an outwork with an

entrance aligned with that of the dun. The defence of other sides of the promontory are enhanced by naturally steep craggy slopes. Its position upon the promontory provides views out across West Loch Tarbert. There is theoretical visibility between the dun and Dunmore Dun (SLR113) 1.1 km to the north east, Eilean Àraich Mhòir Dun (SM3183) 3.3 km to the east north east, and Dun Skeig (SM2491) 4.9 km to the south west of Bar na Cour. There is no theoretical visibility between Bar na Cour and Leamnamuic dun, 1.9 km to the south east, or the intervening section of the loch due to a second promontory rock of Bar na Cour 60 m to the south east of the dun.

189. The dun is located between an area of deciduous trees to the north west and plantation to the south east. All 11 wind turbines of the Freasdail Windfarm theoretically visible from the site. The dun's setting is characterised by the views towards West Loch Tarbert and potentially contemporaneous defended sites. Its visual relation to these features contributes to our understanding and appreciation of the monument. The nearest wind turbine of the proposed Development, Turbine 3, is located 3.7 km to the south/south east of the dun. All 19 wind turbines are theoretically visible from the site, three of which as turning blades only. They would appear in the backdrop to the view from the dun, to the right of the existing Freasdail Windfarm, but would not impact upon the relation between the principal aspects which characterise the dun's setting. Their presence would erode to a very minor extent the heritage significance of the asset. The magnitude of the impact is very slight adverse. The significance of effect is very slight.

190. **Cille Bhrìde, Whitehouse/Kennacraig Chapel and Socket Stone (SLR No 115)** is located approximately 1.5 km to the north east of the village of Whitehouse. Within a square stone walled enclosure, which is surrounded by a double row of mature trees, there are two structures. One is the former burial enclosure of the Campbells of Stonefield of the late 18th century, the period when the enclosing wall was also probably constructed. The second comprises footings of a sub-rectangular building with rounded corners, measuring 10 m by 6.4 m in size on an east / west orientation. Although not typical, the building was possibly a former chapel. Nearby this is a boulder with a socket cut into it, reported in the late 19th century to have supported the fragment of a pillar presumably of a carved stone cross. The post-medieval structures are, therefore, thought to have been constructed on the site of a former medieval chapel and burial ground.

191. The enclosure is located on level area of ground otherwise falling to the west, with the hill of Kenna Craig to the west and Cnon an Fhreacadain to the east. The site is near the location of two unnamed watercourses to the east, with a spring 200 m to the south of the asset. Its position would theoretically overlook Kennacraig Farm and the village of Whitehouse, with a track to the site from Kennacraig Farm. The setting of SLR No 115 is characterised by its enclosing trees, views in the approach to it from nearby settlements, and surrounding watercourses and spring. Long distance views of the distant hills do not contribute to that appreciation of the site within its setting.

192. Modern additions to the landscape include the plantation trees cover both Kenna Craig and Cnon an Fhreacadain, with plantation trees at the north eastern boundary of the enclosure. The pylons and overhead wires of the Inverary to Crossaig Overhead Line pass within 100 m to the south and west of the enclosure. All 11 turbines of the Freasdail Windfarm are theoretically visible from the site.

193. The nearest wind turbine of the proposed Development, Turbine 1, would be located 4.2 km to the south east of the site. Theoretically all 19 wind turbines would be visible from the asset. The surrounding mature trees of the site would obscure some of the views towards the wind turbines, depending on the viewers position and the time of year. Where visible, the proposed wind turbines would not distract from the key aspects of the site's setting or impact on the potential for the appreciation and understating of the asset. The magnitude of the impact is neutral/none. The significance of the effect is neutral/nil.

11.5.8 Potential operational effects on designated heritage assets of national importance within up to 10 km from the proposed wind turbines

194. Five monuments are identified as within the ZTV of the proposed Development between 5 km and 10 km that may require assessment for impacts upon setting (**Table 11.7**). Skipness Castle (SM13225) includes both the medieval castle and Kilbrannan Chapels. They are located at approximately 10 m AOD on the south western shore of the Kintyre, approximately 7 km to the east of the proposed Development. The intervening mature deciduous trees adjacent to the castle prevent any intervisibility with the proposed Development. Regarding the chapels, there are four turbines theoretically visible from the site two of which would be viewed as turning blades only. Cour House (LB3656) is a large arts and crafts house built in 1921-2, on the south eastern coast of Kintyre approximately 8 km from the proposed Development. Five turbines of the proposed Development are theoretically visible from the house as turning blades only. Escart Standing Stones (SM3656) comprises five stones on a north east / south west alignment within a valley on the same orientation. Five wind turbines are theoretically

visible from the stones approximately 9 km from the south/south west of the proposed Development, of which one would be of turning blades only, although it is likely that the intervening trees would screen them from view.

195. It is not considered that long distance views over 5 km these three sites contribute in an appreciable way to the understanding, appreciation or experience of them. There would be no appreciable impact upon their setting and are excluded from any further assessment.

196. Regarding heritage assets in **Table 11.7** outwith the ZTV, no locations were identified within the ZTV of the proposed Development from where the assets could be viewed that might impact upon the setting of the asset. They are, therefore, excluded from further assessment.

197. **Dun a Choin, Duibh Dun (SM2421)** is located upon the summit of Dun a Choin between 120 m and 130 m AOD on the north western side of West Loch Tarbert, on a north east / south west orientated rocky promontory. The site comprises three duns. The central dun (Dun 1) is the best surviving of the three with stone walls up to 2 m in height, and potentially post-dates the other two. These latter are located upon the south western side of the highest ground of the rocky promontory (Dun 2) and in a lower position to Dun 1 to the north west of the promontory (Dun 3). Dun 3 possibly has an entrance to the east, where its wall meets the slope of the higher ground. A well-preserved entrance survives on the western side of Dun 1, with the rubble filled passage of a second entrance to the north. The eastern wall of the dun has eroded down the natural slope.

198. The dun location would provide it with extensive views of West Loch Tarbert and the opposite shore. The location of Eilean Àraich Mhòir Dun (SM3183) is visible from the site, at approximately 2.2 km to the south east. Dun Mor (SLR No 116) 1.9 km to the south west, Leamnamuic Dun (SM3674), located 4.4 km to the south west, and Dun Skeig (SM2491), 8 km to the east are theoretically discernible from the site; but the intervening plantation trees around the site screen them from view. Two prehistoric burial cairns, Cnoc Dubh na Leirreach cairns (SM3874) are located to the south of the dun upon the shoulder of the same hill. They probably predate the dun and likely would have been in existence when it was constructed. Analysis of the topography suggest there would not have been any intervisibility between these two scheduled monuments. The setting of the Dun a Choin monuments is characterised by their relationship with the loch and potentially contemporaneous sites, and the hill upon which the duns are constructed. The hills of Kintyre beyond this are part of the distant backdrop to the views across the loch.

199. The existing plantations surrounding the duns to all practical purposes screen most of the views of West Loch Tarbert, with views down to Eilean Àraich Mhòir Dun (SM3183) and Port Askaig maintained between the trees. In views above the trees the hills of Kintyre are visible, but currently obscure contemporaneous defended sites on land closer to the shore of the loch. All eleven turbines of Freasdail Windfarm to the south east and the single turbine of Gartnagrenach Farm to the south are visible from the dun (**Photograph 11.8**). The nearest wind turbine of the proposed Development is Turbine 1, 5.3 km to the south of the duns. Theoretically all 19 wind turbines of the proposed Development would be visible from the site, of which one would be viewed as turning blades only. The proposed Development would appear as distant landscape features to the left of Freasdail Windfarm. They would not intrude or detract from the key aspects of the dun's setting that allows them to be understood, appreciated and experienced. The magnitude of the impact is neutral/none. The significance of effect is natural/nil.



Photograph 11.8: View towards proposed Development looking south south east, with turbines of Freasdail and Gartnagrenach Farm visible in the distance



Photograph 11.9: View from Ronachain Dun (SM3673) looking east/north east towards the proposed Development

200. **Dun Ronachain (SM3673)** is an oval shaped dun located upon a rocky promontory at approximately 90 m AOD. It measures 18.5 m by 10.5 m in size, with an entrance possibly on its north eastern side. A ditch like hollow to the south west may be remnants of an outwork, but if so unfinished. The dun is positioned with views along the entrance to West Loch Tarbert, and theoretically also of Dun Skeig (SM2491) 2 km to the north east. It is partially covered with rhododendrons and the remainder covered with tall scrub and some trees. The surrounding by planation trees, mainly coniferous, prevent views along the coast towards Dun Skeig. The character of the dun's setting by which it is appreciated and understood is that of its relationship with West Loch Tarbert, potentially contemporaneous fortified sites along the coast, and the hill upon which it is situated.
201. The nearest wind turbine to the proposed Development is that of Turbine 4, located 5.2 km to the east north east of the dun. All 11 wind turbines of Freasdail Windfarm are theoretically visible from the site. 18 wind turbines of the proposed Development would be theoretically visible from the dun, with one viewed as turning blades only. It is expected that the surrounding trees would largely or entirely screen them from view (**Photograph 11.9**). Should the trees be felled, it is assumed they would be replanted. Should the trees be removed permanently, the turbines would not intrude on aspects of the monument's setting by which it is appreciated and understood. The magnitude of the impact is neutral/none. The significance of effect is neutral/nil.

11.5.9 Embedded measures

202. As part of the design process, the location of turbines and other infrastructure have been adjusted where possible to reduce the potential for impacts on nearby heritage assets.

11.5.10 Proposed mitigation

203. For assets outside the Inner Study Area mitigating indirect impact is limited, particularly as the historic landscape over much of the region is relatively open, and most forms of screening, such as tree planting, might also impact negatively on the understanding and appreciation of heritage assets within their setting. As the predicted significance of effect for these impacts is nil to very slight, no additional mitigation is suggested.

11.5.11 Residual Effects

204. The significance of operational effects through change to the setting for the heritage assets in the study areas are nil to very slight. As noted above, mitigation of such impacts is limited and may be detrimental. Therefore, no mitigation of such indirect operational effects through development within the setting of heritage assets is proposed. Consequently, the residual effects of the operation of the proposed Development would be of nil or negligible significance, except for: cup marked stones (SLR Nos 127 to 130, 119, 121, and 122) where residual effects are slight; and Dun Skeig, duns and fort, (SM2491), Dun Mor, fort (SLR No 116) and Bar na Cour dun (SLR No 117) where residual effects are very slight.

11.5.12 Cumulative effects

205. The baseline conditions for assessment have included existing windfarms. Cumulative effects have been considered with regard to any windfarm developments that are:
- consented or are in the planning process either as an original submission or in appeal;
 - within 5 km of heritage assets of regional importance; and
 - within 10 km for heritage assets of national importance that are predicted to receive an above negligible effect from the proposed Development.
206. There are no cumulative windfarms within the study area of Ardpatrik House (LB18282), and it is excluded from further assessment. There are an additional six windfarm developments included in the cumulative assessment (**Table 11.10**).

Development	Status	Height to blade tip	Height to rotary hub	Assessed with respect to
Eascairt Windfarm	Consented	100 m	60 m	Dun Skeig (SM2491); cup marked stones SLR Nos 119, 121, 122, and 127 to 130
Kilchamaig Farm Wind Turbine	Consented	23.8 m	10.4 m	Dun Skeig (SM2491); Dunmore House (LB18245); cup marked stones SLR Nos 119, 121, 122 and 127 to 130)
High Constellation Windfarm	In Planning	149.9 m	81.9 m	Dun Skeig (SM2491)
Airigh	In Planning	149.5 m	72.5 to 91 m	Dun Skeig (SM2491); Dunmore House (LB18245); Dun Mor (SLR No 116); and Barr na Cour, galleried dun, (SLR No 117)

Table 11.10: Cumulative sites used in heritage assessment

207.

Dun Skeig, forts and dun, (SM2491) and its setting are discussed in paragraphs 130 to 132. A photomontage of the view from Dun Skeig is provided in **Chapter 7 Landscape and Visual Impact Assessment (Figure 7a and c)**. Each of the cumulative windfarms and the wind turbine of Kilchamaig Farm would be visible from the site. All 13 of the Eascairt turbines, five of them as turbines blades only, would be theoretically visible predominantly to the right of the proposed Development at 7.4 km to 8.3 km to the south east of Dun Skeig on the opposing side of Kintyre. They would appear of a smaller size to those of the proposed Development and create a further horizontal increment as measured from the proposed Development to the right of the viewer. They would not impact upon the principal aspects of the site's setting but instead they would form part of the distant backdrop inland.
208.

High Constellation Windfarm would be located 7.4 km to 8.3 km to the south east of Dun Skeig. All 10 wind turbines are theoretically visible from the site on the opposite side of Kintyre but would not impact upon the principal aspects of the site's setting by which it is understood and appreciated. All 14 wind turbines of Airigh Windfarm would be theoretically visible from Dun Skeig, seven below the level of the horizon. They would be located 7.6 km to 9.6 km to the north of the site and would be seen as distant objects as part of the backdrop to West Loch Tarbert. Neither development would erode the heritage significance of the asset or our ability to understand and appreciate or experience it.
209.

Kilchamaig Farm Wind Turbine is located close to the shores of West Loch Tarbert, 5.8 km to the north east of Dun Skeig. It is in proximity to Eilean Àraich Mhòir dun (SM3183), which is discernible from Dun Skeig at a distance of 7.5 km. Although located within the setting which contributes to our understanding and appreciation of the site, the scale and distance of the turbine is such that the magnitude of the impact would have no appreciable impact upon our ability to understand, appreciate or experience the monument.
210.

The magnitude of impact from the cumulative windfarms upon the Dun Skeig is neutral/none. The significance of cumulative effects are, therefore, of neutral/none.
211.

The setting of Dunmore House (LB18245) is set out in paragraph 157 to 160. There is no theoretical visibility between house and Airigh Windfarm. Kilchamaig Farm Wind Turbine would theoretically appear on the opposing side of West Loch Tarbert 1.6 km to the south east of the house. Intervening trees along the B8024 screen the much of the view in this direction. Where visible, the development is of a scale that it would not impact upon are ability to appreciate, understand or experience the house. The magnitude of impact from Kilchamaig Farm Wind Turbine would be neutral/nil. The significance of cumulative effects are, therefore, neutral/none.

212.

The setting of cup marked stones (SLR Nos 119, 121, 122, and 127 to 130) is discussed in paragraphs 166 to 183. Only the tip of the tuning blades of Kilchamaig Wind Turbine would theoretically be visible from the cup marked stones (**Figure 11.4 and 11.5**). The presence of the wind turbine would not appreciably erode the heritage significance of the asset or our ability to understand, appreciate or experience it.
213.

All 13 wind turbines of Eascairt Windfarm would be visible from the cup-marked stones. From SLR Nos 119, 121 and 122 they would be at 4.7 km to 5.9 km from the stones, and theoretically largely appear amongst and to the rear of those of Freasdail turbines and those of the proposed Development. Four wind turbines would create a small horizontal increment to the left, as measured from Freasdail Windfarm. The Eascairt turbines would be partially, if not entirely, screened from view by the intervening plantation trees. Where entirely screened from view, they would create no cumulative impact upon the heritage assets. Where visible they would form a more distant cluster of wind turbines to the left of the view southward across the valley of the Claonaig Water (**Figure 11.4**). In this location they are peripheral and would not erode the heritage significance of the asset or our ability to understand, appreciate or experience it through the contribution made by setting and relationship with the river. The magnitude of impact from cumulative wind farms are neutral/none. The significance of effect upon SLR Nos 119, 121 and 122 is considered to be neutral/nil.
214.

Eascairt Windfarm would appear to the left of wind turbines of the proposed Development with Eascairt turbines located 3.5 km to 4.9 km to the south west of the cup marked stones SLR Nos 127 to 130, across the valley of the Claonaig Water. Ten wind turbines of the proposed Development would appear between those of Freasdail and Eascairt Windfarms (**Figure 11.5**). The combined turbines would create a line from Freasdail Windfarm upon the hills above the valley of the Claognaig Water to Eascairt turbines, with wind turbines of the proposed Development and Eascairt becoming more distant than those of Freasdail. The principal characteristics of the landscape which contributes to our understanding and appreciation of the rock art and stones are the upper part of the valley of the Claonaig Water and its watercourses. Eascairt Windfarm would not impact upon these key aspects of the monument's setting, but would appear as part of the more distant backdrop to the valley. The magnitude of impact from the cumulative effect of Eascairt Windfarm is neutral/nil to very low adverse when considered in conjunction with the proposed Development and the existing turbines of Freasdail Windfarm. The significance of effect is neutral/nil to very slight.
215.

Only one turning blade tip of Airigh Windfarm would be visible from Dun Mor (SLR No 116) and Bar na Cour (SLR No 117). Where visible through the intervening trees, it would not erode our ability to understand, appreciate or experience the heritage asset. The cumulative impact from Airigh Windfarm is neutral/nil.

11.6 Summary and statement of significance

216.

This assessment has considered data from a diverse range of sources in order to determine the presence of heritage assets which may be affected by the proposed Development. The potential direct and indirect effects on the identified assets, mitigation measures for protecting known assets during construction or recording of currently unknown features which could be lost due to groundworks during construction, and the residual effects of the proposed Development have been appropriately assessed. This assessment has found that there would be no direct impact upon known heritage assets within the application boundary.
217.

The proposed Development is partially covered to the west by recent plantations with the remainder of the area comprising rough grazing or moorland. The baseline concluded that, although there is potential evidence of prehistoric activity within the Site, much of the archaeological resource found within the Site is associated with a post-medieval agricultural landscape, specifically sheilings huts, occupied during the summer when tending cattle grazing the upland pasture, longhouses, and enclosures to the south of Loch Lurach and Loch Cruinn, and along the Larachmòr Burn. Utilisation of sheiling huts to access summer pasture has a long history, and the practice within the application area although conventionally dated to the post-medieval period has the potential for medieval origins.
218.

The proposed Development would improve access to those sites along the Larachmòr Burn. In close proximity to the Kintyre Way, the installation of information boards and recreational paths as part of the proposed Development would facilitate greater

understanding and appreciation of the historic land use and settlement of the area; thereby enhancing the experience of the general public. Such experiences may aid the public knowledge of the people who worked in these landscapes and stimulate interest in historic landscapes of Kintyre.

219. The assessment considered the operation effects upon nine listed buildings of regional importance; 21 NSR sites assessed as of regional importance, and 20 scheduled monuments of national importance, The assessment found indirect impacts from the operation of the proposed Development, which would include: very slight significance of effect upon Dun Skeig, duns and fort, (SM2491); a slight significance of effect upon cup marked stones SLR Nos 127 to 130, 119, 121, and 122; a slight significance of effect upon Dun Mor fort, (SLR No 116); and a very slight significance of effect upon Barr na Cour, galleried dun, (SLR No 117).

220. These are within the lowest level of effects identified within the SNH and HES EIA Handbook 2018 (Appendix 1, Figure 1). There are no predicted significant effects in EIA terms on heritage assets resulting from the construction or operation of the propose Development. In respect to SPP paragraph 145, the assessment concludes that there would be no EIA significant adverse effect on the integrity of the setting of scheduled monuments.

11.7 References

Chartered Institute for Archaeologists (2014). *Standard and Guidance for Historic Environment Desk Based Assessment*

Firat Archaeological Services 1995 Gartnagrenach Wind Farm Site Kintyre, Argyll: Archaeological Assessment

Historic Environment Scotland (May 2016a). *Historic Environment Circular*

Historic Environment Scotland (2016b). *Managing Change in the Historic Environment: Setting*

Historic Environment Scotland (June 2016c). *Historic Environment Scotland Policy Statement*

Scottish National Heritage and Historic Environment Scotland 2018 *Environmental Impact Assessment Handbook: Guidance for competent authorities, consultation bodies, and others involved in the Environmental Impact Assessment Process in Scotland*

Historic Environment Scotland 2019a *Historic Environment Policy for Scotland May 2019*

Historic Environment Scotland 2019b *Designation Policy and Selection Criteria*

Scottish Government, (2011) *Planning Advice Note 2/2011: Planning and archaeology*

Map	Date	Title/Sheet	Scale
		Kilcalmonell; Saddell and Skipness)	
Ordnance Survey	1900b	Argyll and Bute Sheet CCXII.SE (includes: Kilcalmonell; Saddell and Skipness)	1:10,560
Ordnance Survey	1900c	Argyll and Bute Sheet CCXII.NE (includes: Kilcalmonell; Saddell and Skipness)	Ordnance Survey
Ordnance Survey	1900d	Argyll and Bute Sheet CCXII.NW (includes: Kilcalmonell; Saddell and Skipness)	Ordnance Survey

Table 11.11 Cartographic reference sources used for EIA

Map	Date	Title/Sheet	Scale
Blaue	1654	Theatrum orbis terrarum sive Atlas novus Volume V	-
Roy Military Survey of Scotland	1747 - 1755		
Ordnance Survey	1873	Argyllshire, Sheet CCXII (includes: Kilcalmonell; Saddell And Skipness; South Knapdale)	1:10,560
Ordnance Survey	1900a	Argyll and Bute Sheet CCXII.SW (includes:	Ordnance Survey

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