

7. ARCHAEOLOGY AND CULTURAL HERITAGE

7.1 Introduction

This Chapter provides an appraisal of the potential effects of the Project on archaeology and cultural heritage receptors. The full baseline including site gazetteer is provided in **Annex R**. Cultural heritage receptors are illustrated on **Figure 7-1**.

7.2 Appraisal Methodology

The Study Areas outlined below are considered appropriate for this appraisal due to the need to understand the archaeological and landscape context and potential for an area with previous transmission infrastructure in-place.

This desk study was supported by previous experience of similar projects, fieldwork and the production of a zone of theoretical visibility (ZTV) and utilises the standard SSEN Transmission impact assessment methodology as outlined in **Chapter 1: Introduction and Scope** of this Environmental Appraisal (EA).

7.2.1 The Proposed Development

For the cultural heritage assessment of the Proposed Development (as set out in full in **Chapter 2: Project Description**) a 2 km radius Study Area for designated cultural heritage assets and a 250 m radius Study Area for the non-designated cultural heritage assets was established from the planning boundary for the Town and Country Planning Application within which the Proposed Development is to be located comprising of the following:

- A substation platform in the region of 1.43 ha at a height of 173 AOD;
- A temporary works area (TWA) adjacent to the Proposed Development Site, of approximately 0.67 ha.
- A sustainable drainage system (SuDS) basin and associated pipeline extending west from the Proposed Development Site, of approximately, 1.77 ha.

Additionally, a 50 m radius Area of Investigation (AoI) was created for the following elements of the Proposed Development:

- Use of existing forestry access track, approximately 4.7 km in length;
- Construction of a new access track, approximately 855 m long; and
- Turning and parking areas;

7.2.2 The Associated Development

For the cultural heritage assessment of the Associated Development (as set out in full in **Chapter 2: Project Description**) a 2 km radius Study Area for designated cultural heritage assets and a 250 m radius Study Area for the non-designated cultural heritage assets was established for the following Associated Development components:

- Three new towers to make the connection into and out of the proposed substation; and
- Temporary overhead line (OHL) diversions required during construction.

Additionally, a 50 m radius AoI was created for the following Associated Development elements:

- Approximately 352 m of temporary access tracks;

7.3 Baseline

7.3.1 Designated Assets

The Proposed Development

There are no designated heritage assets within the Proposed Development.

There are no World Heritage Sites, Inventoried Historic Battlefields, or Conservation Areas located within 2 km of the Proposed Development.

The number and range of designated assets within or just outside of 2 km of the redline boundary (RLB) is limited and includes the following:

There is one Garden and Designated Landscape:

- Crarae - GDL00118 *circa (c.)* 1.3 km from the Proposed Development (CE_001¹)

There are three Scheduled Monuments:

- Brainport Bay, stone alignments and quern quarries - SM5283 *c.* 2.1 km from the Proposed Development (CE_002)
- Crarae Lodge, long cairn - SM2310 *c.* 1.8 km from the Proposed Development (CE_003)
- Minard Cross, Free Church Manse - SM4071 *c.* 1.8 km from the Proposed Development (CE_004)

An initial assessment of setting as a potential indirect impact was carried out and field investigation recommended for:

- Crarae - GDL00118 *c.* 1.3 km from the Proposed Development (CE_001)
- Brainport Bay - SM5283 stone alignments and quern quarries *c.* 2.1 km from the Proposed Development (CE_002)
- Crarae Lodge, long cairn - SM2310 *c.* 1.8 km from the Proposed Development (CE_003)

The Scheduled Monument, Minard Cross, can be seen to derive its significance from the placement within the wider church grounds and was not considered for potential setting impacts.

The Associated Development

There are no designated heritage assets within the Associated Development area.

There are no World Heritage Sites, Inventoried Historic Battlefields, or Conservation Areas located within 2 km of the Associated Development.

There is one Garden and Designated Landscape within a 2 km radius of the Associated Development:

- Crarae - GDL00118 *circa (c.)* 0.9 km from the Associated Development (CE_001)

There are two Scheduled Monuments located within a 2 km radius of the Associated Development:

- Crarae Lodge, long cairn - SM2310 *c.* 1.5 km from the Associated Development (CE_003)
- Minard Cross, Free Church Manse - SM4071, located *c.* 1.5 km from the Associated Development (CE_004)

An initial assessment of setting as a potential indirect impact was carried out as described above for the Proposed Development.

7.3.2 Non-Designated

The Proposed Development

There is one known non-designated asset Standing stone within the Proposed Development (CE_019). This previously unknown non-designated asset was identified within the 50 m of the Proposed Development's permanent access track as a result of the archaeological walkover.

Within 250 m of the Proposed Development area, there are four known non-designated asset:

¹ Reference number, see Figure 7.1

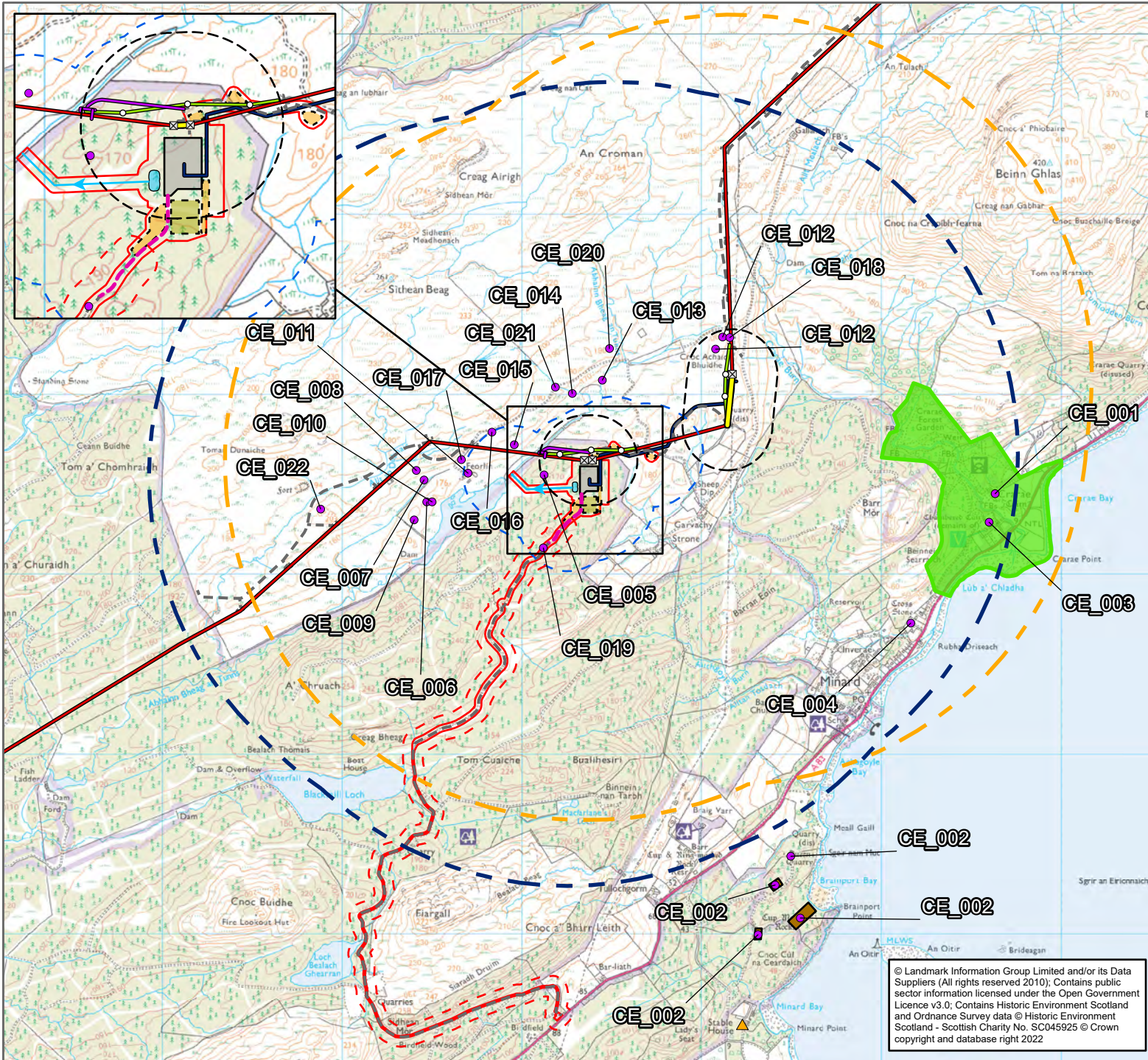
- Feorlin: Sheiling c. 56 m from the Proposed Development (CE_005)
- Feorlin: Farmstead c. 225 m from the Proposed Development (CE_011)
- A'Churach: Dyke c. 146 m from the Proposed Development (CE_015)
- A'Churach: Dyke c. 247 m from the Proposed Development (CE_016)

The Associated Development

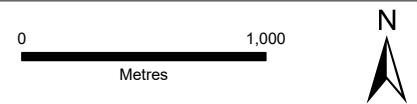
There are no known non-designated assets within the Associated Development.

There are four non-designated assets within 250 m of the Associated Development:

- Feorlin: Shieling c. 115 m from the Associated Development (CE_005)
- Cnoc Achaidh Bhuide / Garvachy: Farmstead (poss), enclosure, cultivation remains, quarries c. 75 m from the Associated Development (CE_012)
- A'cruach: Dyke c. 150 m from the Associated Development (CE_015)
- A'cruach: Enclosure (Post Medieval) (Possible) c. 40 m from the Associated Development (CE_018)



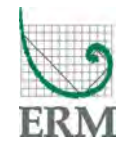
- Existing Inveraray to Crossaig Overhead Line
- - - Existing Access Track
- Associated Development:
- ⊠ Proposed Tower Location
- Proposed Temporary Tower Location
- Temporary Access Track
- Proposed OHL Alignment
- Proposed Temporary OHL Bypass
- - - Proposed Overhead Line Diversion - 250 m Buffer
- - - Proposed Overhead Line Diversion - 2 km Buffer
- Permitted Development:
- 33kV Interconnector Cable Route
- Proposed Development:
- Proposed Permanent Access Track
- SUDs Outfall Pipeline
- Proposed Substation Temporary Works Area
- Proposed Substation Layout
- Temporary Peat Storage Area
- Town & Country Planning Boundary
- SUDs Pond
- - - Existing Access Track - 50 m Buffer
- - - Red Line Boundary - 2 km Buffer
- - - Red Line Boundary - 250 m Buffer
- Cultural Heritage Receptors:
- Cultural Heritage Asset
- ▲ Grade A Listed Building
- ▲ Grade B Listed Building
- ▲ Grade C Listed Building
- Scheduled monuments
- Gardens and Designed Landscapes



SCALE: See Scale Bar	VERSION: A01
SIZE: A4	DRAWN: DN
PROJECT: 0607366	CHECKED: MW
DATE: 03/11/2022	APPROVED: SW

Figure 7-1
Crrae Substation Cultural Heritage
Receptors

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PROJECTION: British National Grid

7.4 Appraisal – Direct Effects

There remains the potential for unknown buried archaeology, however the general ground conditions of the area have low potential for the survival of buried archaeological remains due to the presence of forestry plantation and felling.

7.4.1 The Proposed Development

Standing stone (CE_019) will be directly impacted by track construction of the permanent access track. With the implementation of the proposed mitigation key direct impacts listed in **Section 7.5**, the magnitude of direct impacts is predicted to be low.

There is low potential for impacts to Feorlin: Sheiling (CE_005), Feorlin: Farmstead (CE_011), A'Churach: Dyke (CE_015), and A'Churach: Dyke (CE_016) due to the Proposed Development.

7.4.2 The Associated Development

No known assets will be directly impacted by the construction of the Associated Development.

7.4.3 Cumulative Assessment

Cumulative assessment will take into account successive, incremental, or combined effects of developments in the area. For this section projects that are underway, planned or reasonably anticipated are considered for cumulative assessment. Existing infrastructure will be considered as part of the existing landscape and therefore has been considered within the impact assessment for the Proposed and Associated Development.

The Proposed and Associated Developments

There are no predicted cumulative effects relating to the works from to the Proposed Development and the Associated Development as their respective footprints are not coincident on the same cultural heritage assets.

Other Projects

There are a series of additional projects in the wider Argyll area, considered beyond the present Crarae Study Area, which are associated with the transmission network. These are not being considered for this cumulative impact assessment. This is due to the separate projects' location being beyond the established Project Study Area. Cultural Heritage assets from the separate projects are not anticipated to be located in multiple Study Areas (for details see **Section 1.5**).

7.5 Mitigation

National planning policies and planning guidance, SPP (Scottish Government 2014) and PAN2/2011 (Scottish Government 2011) apply. These require a mitigation response that takes account of the potential for archaeological remains within the site to be impacted upon, enabling the preservation or recording of any significant remains which may be present.

Although the potential for buried archaeological remains to be present is considered to be low, it cannot be discounted and consequently a programme to mitigate the effects of any direct impacts is recommended in accordance with national and local planning policies on heritage.

It is recommended that a second survey of the site is carried out prior to works commencing in order to assess changes in design and the areas inaccessible during the initial survey, as a result of dense juvenile tree cover. In the wider area a programme of mitigation will be finalised once work zones are confirmed.

Any mitigation strategy developed should involve consultation with the West of Scotland Archaeological Service (WoSAS) as the regulatory authority, while concerns for designated assets necessitates consultation with Historic Environment Scotland (HES).

7.5.1 The Proposed Development

There is low potential for impacts to other known assets along the routes. However, it is recommended that an archaeological watching brief is deployed during all ground-breaking works.

For the standing stone (CE_019) which lies within the permanent access tracks, it is recommended that a buffer zone of 10 m is demarcated around the asset if works are to be carried out in the vicinity. It is also recommended that an archaeological watching brief is deployed during all ground-breaking works.

7.5.2 The Associated Development

No known assets will be directly impacted by the locations for the Associated Development; however, it is recommended that each OHL tower location is subject to an archaeological watching brief during all ground-breaking works.

No known assets will be directly impacted by the proposed temporary OHL diversions; however, it is recommended that each location of the towers required in connection with the temporary OHL diversion is subject to an archaeological watching brief during all ground-breaking works.

There is low potential for impacts to other known assets along the access track routes, however, depending on the scope of any track improvements, it may be necessary to demarcate buffer zones of 10 m around the post-medieval structures.

7.6 Appraisal – Indirect Effects

In cultural heritage terms, an indirect impact refers to any change in the baseline condition of a heritage asset resulting from a development beyond the boundaries of the asset. Indirect impacts can have a variety of forms for instance if a development affects the water table, it could potentially damage the preservation of organic remains within buried archaeological contexts beyond its boundaries. However, the majority of indirect impacts result from changes to the setting of heritage assets, as a consequence of the Project.

7.6.1 The Proposed Development

Crarae - GDL00118 (CE_001)

This Garden and Designed Landscape lies c.1.3 km east of the Proposed Development. It comprises 126 acres of designed woodland gardens and meadows laid out in the 20th century around the existing 19th century designed landscape of Crarae Lodge.

As a designed garden, the main function is recreational, particularly in relation to the natural beauty of the area. The garden, which is managed and maintained by the National Trust for Scotland, lies on the coast of Loch Fyne, affording wide views along the loch, and extends inland along the Crarae Burn valley, where its woodland setting is of high importance. It is bordered by steep hillsides to the north east and south west, which mostly block intervisibility between the proposed substation.

The Proposed Development has the potential to have, at most, a negligible impact on the setting and character of the designed landscape.

Brainport Bay, stone alignments and quern quarries - SM5283 (CE_002)

This Scheduled Monument lies c. 2.1 km to the south east of the Proposed Development. The monument comprises a number of quern quarrying sites associated with alignments of standing stones which can be linked to astronomical events. The different elements of the monument lie within a wooded area around Brainport Bay and are in places heavily overgrown by trees, bracken, and other vegetation.

The main function of the monument was for industrial artefact creation, with previous excavations also uncovering the presence of an ironworking hearth, however, it likely also had important ceremonial significance due to the astronomical alignments. As such, the relationship between the different elements of the monument was of high importance to its setting, with the surrounding landscape possibly holding lesser significance.

Prior to forestry, visibility to the area would have been limited by steep hillsides and was likely of low importance to the monument's setting. The presence of existing OHL towers in the area also means that the installation of the substation will not significantly alter the current landscape views from the asset.

The potential impact of the development on this monument is thought to be, at most, negligible.

Crarae Lodge, long cairn - SM2310 (CE_003)

This Scheduled Monument lies approximately 1.8 km east of the Proposed Development. The asset comprises the remains of a Neolithic chambered cairn which has been later built into the designed garden landscape of Crarae Garden GDL.

The cairn sits centrally within a well-maintained lawn, with several trees growing around the edges which partly obscure the monument. Its original function would have been as a burial monument, possibly used over a considerable time span, with later 19th-20th century importance as a historical feature within a forest garden.

As a burial monument, visibility over the landscape would have been key to its setting. In this case, the cairn sits on the south side of Crarae Burn, near the coast at Crarae point. A second cairn, known as Fairy Knowe (WoSAS 4595) lies on the opposite side of the stream and would have been clearly intervisible. Both cairns would have had wide views over Loch Fyne, suggesting that were designed to be seen from the water, which would have been a major routeway. Steep slopes lie to the north and west of the cairns and would have afforded limited views in those directions. Currently, the cairn sits within a forest garden and has limited views beyond the immediate lawn area in which it sits. There is no current visibility to the proposed substation and in the event of tree felling, steep ground would still block most of the line of sight.

The Proposed Development has the potential to have, at most, a negligible impact on the setting of the monument.

7.6.2 The Associated Development

Crarae - GDL00118 (CE_001)

This Garden and Designed Landscape lies c.0.9 km east of the Associated Development. It comprises 126 acres of designed woodland gardens and meadows laid out in the 20th century around the existing 19th century designed landscape of Crarae Lodge.

As a designed garden, the main function is recreational, particularly in relation to the natural beauty of the area. The garden, which is managed and maintained by the National Trust for Scotland, lies on the coast of Loch Fyne, affording wide views along the loch, and extends inland along the Crarae Burn valley, where its woodland setting is of high importance. It is bordered by steep hillsides to the northeast and southwest, which mostly block intervisibility between the proposed substation.

The Associated Development has the potential to have, at most, a negligible impact on the setting and character of the designed landscape.

Crarae Lodge, long cairn - SM2310 (CE_003)

This Scheduled Monument lies approximately 1.5 km east of the Associated Development. The asset comprises the remains of a Neolithic chambered cairn which has been later built into the designed garden landscape of Crarae Garden GDL.

The cairn sits centrally within a well-maintained lawn, with several trees growing around the edges which partly obscure the monument. Its original function would have been as a burial monument, possibly used over a considerable time span, with later 19th-20th century importance as a historical feature within a forest garden.

As a burial monument, visibility over the landscape would have been key to its setting. In this case, the cairn sits on the south side of Crarae Burn, near the coast at Crarae point. A second cairn, known as Fairy Knowe (WoSAS 4595) lies on the opposite side of the stream and would have been clearly intervisible. Both cairns would have

had wide views over Loch Fyne, suggesting that were designed to be seen from the water, which would have been a major routeway. Steep slopes lie to the north and west of the cairns and would have afforded limited views in those directions. Currently, the cairn sits within a forest garden and has limited views beyond the immediate lawn area in which it sits. There is no current visibility to the Proposed Development and in the event of tree felling, steep ground would still block most of the line of sight.

The Associated Development has the potential to have, at most, a negligible impact on the setting of the monument.

Cumulative Assessment

Cumulative assessment takes into account successive, incremental, or combined effects of developments in the area. For this section projects that are underway, planned or reasonably anticipated are considered for cumulative assessment. Existing infrastructure was considered as part of the existing landscape and therefore has been considered within the impact assessment for the Proposed and Associated Development.

The Proposed and Associated Developments

There are no predicted cumulative effects relating to the works from the Proposed Development and the Associated Development as their respective footprints are not coincident on the same cultural heritage assets.

Other Projects

There are a series of additional projects in the wider Argyll area, considered beyond the present Craae Study Area, which are associated with the development of the electricity transmission network. These are not being considered for this cumulative impact assessment. This is due to the location of these other projects being beyond the established Project Study Area. Cultural Heritage assets from these separate projects are not anticipated to be located in multiple Study Areas (for details see Section 1.5).

7.7 Summary of Effects

This Chapter has assessed the likely effects of the Proposed Development and the Associated Development on cultural heritage assets. The archaeological character of the area primarily dates to the prehistoric through the 19th centuries.

With the implementation of the proposed mitigation key direct impacts relating to CE_019 will be minor, with any effect reduced to no impact after works cease. It is assessed as minor as a result of contextual review, field investigation analysis, and mitigation measures' ability to avoid the asset.

The implementation of the proposed 'No Action' mitigation of key indirect impacts on CE_001-003, is anticipated to result in negligible effects. As a result of the assessment the Proposed and Associated Developments are not anticipated to have major impacts to known assets.

It is not anticipated that there will be any direct impact to known heritage assets as a result of the Associated Development.

The potential for unknown buried archaeological remains to be present is low but cannot be discounted. It is considered low potential due to the results of contextual review and field investigation analysis. Thus, a watching brief should be in place for all intrusive ground works.



Table 7.1 Appraisal of Cultural Heritage

Environmental Feature	Development Interaction	Mitigation Measures	Receptor sensitivity	Magnitude of effect	Significance of effect
Standing stone - CE_019	Direct during construction	A buffer zone of 10 m is demarcated around the asset if works are to be carried out in near proximity.	Medium	Low	Minor
Potential buried archaeological remains	Direct during construction	A watching brief is required for all ground works. Updated walkover survey of additional/previously inaccessible areas.	Unknown	Unknown	Unknown
Crarae - GDL00118 (CE_001)	Indirect upon setting during construction and operation	No Action	High	Negligible	Negligible
Brainport Bay, stone alignments and quern quarries - SM5283 (CE_002)	Indirect upon setting during construction and operation	No Action	High	Negligible	Negligible
Crarae Lodge long cairn - SM2310 (CE_003)	Indirect upon setting during construction and operation	No Action	High	Negligible	Negligible