11 CULTURAL HERITAGE

11.1 INTRODUCTION

This chapter considers the likely effects of the proposals on archaeology and cultural heritage resources. Individual sites have been identified and the effect of the development on the resource assessed. The findings of the study are presented in this section and where appropriate, mitigation measures have been identified.

Cultural heritage resources can include World Heritage Sites, Scheduled Ancient Monuments, other archaeological sites and features, Listed and other historic buildings, Conservation Areas and Historic Gardens and Designed Landscapes. Those of relevance to this project are:

- Scheduled Ancient Monuments (SAMs);
- Listed buildings; and
- Other archaeological sites, including the built heritage.

11.1.1 Scheduled Ancient Monuments (SAMs)

SPP23¹⁶² and PAN42¹⁶³ set out government policy and advice on how sites of archaeological and cultural heritage importance should be addressed within the development planning system. Where development is likely to encroach on such sites, early discussions should be sought and an archaeological assessment and field evaluation undertaken where appropriate. The protection of SAMs and their setting is expressly noted as a material consideration in determining planning applications. Ultimately the responsibility for scheduling monuments and protecting SAMs lies with the Scottish Government. The government agency that has responsibility for archaeology and the historic environment in Scotland (including SAMs) is Historic Scotland¹⁶⁴. SAMs are considered to be sites of national importance.

11.1.2 Listed Buildings and Other Sites with Statutory Protection

SPP23¹⁶⁵ also sets out the national framework of statutory designations for the protection of the historic environment, particularly Listed Buildings, Conservation Areas and other designations such as World Heritage Sites and Historic Gardens. It recognises the historic environment as an irreplaceable record of our heritage and seeks to prevent potential development impacts on these features. It also recognises the importance of survey and analysis in this policy area. As with SAMs the statutory responsibility for listing and protecting these buildings lies with Historic Scotland, acting on behalf of the Scottish Government. Listed buildings fall into three categories that reflect the degree of interest in, and importance of, the building. The following descriptions of listed building categories is taken from Historic Scotland's *Guide to the Protection of Scotland's Historic Buildings*¹⁶⁶.

¹⁶² Scottish Government, 2008. Scottish Planning Policy (SPP) 23 – Planning and the Historic Environment

¹⁶³ Scottish Office, 1994. Planning Advice Note (PAN) 42 – Archaeology – the Planning Process and Scheduled Monument Procedures

¹⁶⁴ Historic Scotland, 2006. Scottish Historic Environment Policy 2 – Scheduling: Protecting Scotland's nationally important monuments

 ¹⁶⁵Scottish Government, 2008. Scottish Planning Policy (SPP) 23 – Planning and the Historic Environment
 ¹⁶⁶Historic Scotland, 2006. Guide to Protection of Scotland's Historic Buildings – what listing means to owners and occupiers

- **Category A**: Buildings of national or international importance, either architectural or historic, or fine little-altered examples of some particular period, style or building type.
- **Category B**: Buildings of regional or more than local importance, or major examples of some particular period, style or building type which may have been altered.
- **Category C (S)**: Buildings of local importance, lesser examples of any period, style, or building type, as originally constructed or moderately altered; and simple, traditional buildings which group well with others in Categories A and B or are part of a planned group such as an estate or an industrial complex.

11.1.3 Other Archaeological Sites, including the Built Heritage

The National Park Authority is responsible for planning within the National Park and has prepared a National Park Plan. The Structure Plan for the area is still the concern of the local authority (Stirling Council). The Loch Lomond and Trossachs National Park Authority undergoing the process of producing a Local Plan for the area. However, at the time of writing this plan had not yet been produced and the Stirling Council Local Plan remains in place (see Section 5.5). Stirling Council curates the archaeological sites and monuments without statutory protection.

The National Park Plan 2007-2012 (Schedule 1) outlines the intention to safeguard important cultural remains and to enhance their landscape setting. Policy BH1 sets out the Authority's policies towards built heritage and includes the intention to protect designated and undesignated sites from inappropriate development (BH1a); to promote the use of statutory and non-statutory designations to protect built heritage (BH1c); and to improve knowledge and understanding of built heritage by promoting survey, recording and monitoring (BH1g). Schedule 6 outlines detailed objectives for Built Heritage. This includes encouraging protection and recording of archaeological sites; requiring developer funded research into sites that would be affected by development; protection of the setting of archaeological sites; and conserving and enhancing the setting of Historic Buildings and Historic Villages.

The Stirling and Clackmannanshire Structure Plan 2002 (Policy ENV6) commits Stirling Council to ensuring that 'cultural heritage resources are recognised, recorded, protected, and enhanced, and that new development respects and contributes to the character and quality of the area'.

The Stirling Council Local Plan 1999 (POL.E47) states that there would be a presumption against development that would adversely impact on a Scheduled Ancient Monument or its setting, and unscheduled remains that are worthy of preservation. POL.E48, E49 & E50 set out the requirement for appropriate archaeological investigation, assessment and monitoring to preserve or record sensitive archaeological remains.

11.2 Sources of Information

The sources of information listed below have been used for this assessment:

- consultation with statutory and non-statutory bodies to identify sites of cultural heritage interest in proximity to the proposal including:
 - Historic Scotland (HS);
 - Stirling Council Regional Archaeologist; and
 - The Forestry Commission (FC);
- original Crianlarich Bypass Stage 2 Environmental Assessment, 1994;

- original Crianlarich Bypass Stage 3 Environmental Assessment, 1995;
- National Monuments Record for Scotland (NMRS) at the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS);
- Historic Scotland: Scheduled Ancient Monument and Listed Buildings data;
- Stirling Council's online Sites and Monuments Record (SMR);
- further desk based work for this assessment; and
- findings of site visits in December 2007 and April 2008.

11.3 CONSULTATIONS

Key issues raised by consultees include:

Historic Scotland was consulted during the initial work in the mid-1990s.

- It had no major concerns with the line of the western bypass and due to extensive afforestation and other destructive land uses in this area excluded the need for additional survey work of the route.
- It raised the possibility of impact on a small part of Caulfield's Military road and the possible need for pier protection works on Glenbruar Viaduct (neither of these would be affected by the current design of the bypass).
- No further general mitigation for the bypass was suggested.

Historic Scotland was again consulted in 2006.

• It stated that their position had not changed and that they had no concerns should the Military Road and the Viaduct remain unaffected.

The Regional Archaeologist at Stirling Council was consulted in 2008.

- No concerns were raised with the route of the western bypass.
- The mitigation strategy suggested for the destruction of a Cold War bunker was considered appropriate (site 44).
- The mitigation strategy for sites identified by the Forestry Commission was considered appropriate (sites 47 53).
- No further general mitigation for the bypass was suggested.

The Forestry Commission was consulted in 2008.

 Nine features of possible archaeological significance four of these features were confirmed as being of archaeological interest (sites 44 & 48-50); four of the features were logged as being of possible archaeological interest (sites 47 & 51-53); and one site (an excavated area in the vicinity of the proposed South Roundabout) was discounted.

11.4 BASELINE

11.4.1 Site Records

The baseline information has been collated from work for the original Stage 2 and 3 studies; and specific work for the proposed route.

As the route of the bypass is short, and also in a compact area, a study corridor was not established around the route. Instead, all known sites of cultural heritage interest have been identified within some 1km of Crianlarich. This approach was taken as it would include the sites identified during the original fieldwork in 1994 and would also allow a clearer picture of the types of site in the area. In addition

to this all Listed Buildings and Scheduled Ancient Monuments within some 2km of Crianlarich were also identified. In addition to these known sites a further 11 sites were identified during site visits in December 2007 and April 2008. All sites have been plotted and are presented as Figure 11.1.

In total 53 cultural heritage sites have been identified within 1km of Crianlarich (2km for Listed Buildings and SAMs). The majority of these sites are of local importance and have no statutory protection. There are three Listed Buildings within Crianlarich (sites 7, 12 & 41), one of which is considered of Regional Importance, Crianlarich Church (site 12) (see Photograph 10, Annex E), and a single SAM (site 43) within some 2km, which is considered of National Importance. A full list of sites is presented as Table 11.1 and for a description of importance criteria see Table 11.2. Further information is available in the site gazetteer (see Appendix 11.1).

11.4.2 Historic Background of the Area

The current baseline conditions of the study corridor are a reflection of its archaeological and historic development. Therefore it is important to consider the historic background of the general area.

11.4.2.1 The Prehistoric Period

In the area around Crianlarich there is clear evidence of prehistoric activity. There are three cup-marked stone sites in the vicinity (sites 32, 34 & 38) and an isolated find of a stone axe (site 39). The cup-marked stones are located to the north east of Crianlarich in the flood plain of the River Fillan. The find-spot of the stone axe is unclear with the grid reference only being given to 1km accuracy and the description stating it was found at Crianlarich. There are no known prehistoric sites in the immediate vicinity of the proposed bypass.

An unusual accumulation of stones was noticed within the afforested area to the west of the proposed bypass during a site visit by the Forestry Commission (site 51). These stones lie along the edges of the furrows created when ploughing for the establishment of forestry and as such are likely to be have been displaced then rather than deliberately placed. There was no sense of structure and no carvings noted when visited by Kirkdale in April 2008.

11.4.2.2 The Medieval Period

Although there are no medieval sites in Crianlarich there are a number of sites in the wider area. Approximately 2km to the east of Crianlarich is Loch Dochart Castle (site 43), constructed on an island in Loch Dochart between 1583 and 1631. The castle burned down in 1646 and is ruinous. The ruins of St Fillan's Priory a fourteenth century Augustinian Priory are some 4km to the north west of Crianlarich (outside the study area).

11.4.2.3 Post Medieval

Crianlarich's historical origins are unclear, however it is marked at this location on the General Roy's Military Survey 1747-55. A cluster of structures is noted at this location which is interesting as the 1st edition OS map shows very few buildings. Interestingly the townships of Luibmore and Duinish (sites 33 & 37) are not shown on the Roy Map – perhaps indicating some confusion about settlements in the area when the survey was produced. Before the railways were established Crianlarich probably only comprised of the hotel, located along the junction of the roads. The mid-18th century also saw the construction of a number of military

roads in the area (sites 23 & 30). However, it is the railways that had the most influence on the development of the village.

A fairly large rectangular building footing or enclosure was noticed by the Forestry Commission during a site visit on a rise to the west of the A82 and south of Crianlarich. This building or enclosure is not shown on the early OS maps and it is possible that it is a Mediaeval or Later Rural Settlement (site 48). Another smaller levelled area can be seen on a rise to the north of this (site 49).

A number of possible old field banks were also noted by the FC (sites 47, 52 & 53). The origin and date of these is unknown and, although it could be possible that they are old, they may relate to forestry ploughing and drainage activity (sites 52 & 53). Site 47 is close to the modern roadside and was very difficult to identify.

11.4.2.4 Modern

The first railway station to be established in Crianlarich was the Lower Station, serving the Callendar – Oban Line which opened as far as Tyndrum in 1873. The first edition OS map of 1875 shows the line of the railway, the station, some sidings and a single building to the south of the station. Other buildings shown at this date are the hotel and a house opposite it.

The establishment of the West Highland Line and the Upper Station, which opened in 1894, was what prompted most of the development in Crianlarich. This line ran through Glen Falloch and crossed to the north side of Strath Fillan by means of two viaducts. The Glenbruar Viaduct crossed the road (site 8) and the Fillan Viaduct crossed the river (site 35). Later, in 1897 the two railway lines were connected and the road layout re-aligned to pass under them. The 1901 OS map shows the completed railway layout with the Upper Station and its associated infrastructure to the south of the village. Two rows of houses were built immediately east of Glenbruar Viaduct (of which only the south row still survives) along with a police station and a school. Other buildings, including the Church had been built by the early part of the twentieth century and the form of the village began to develop around the constraints of the road and rail networks.

In the twentieth century, Crianlarich expanded further, infilling the space to the east of the West Highland Line and along the roads. As such the village has a very fragmented layout and is widely spread out. The properties between the Callendar – Oban Line and the road were demolished which resulted in a lopsided layout to the village. However, recent development over the past decade in the vicinity of the former Lower Station has gone some way towards rectifying this. The Lower Station and the Callendar – Oban Line were closed in 1965 after a landslide blocked the line in Glen Ogle to the east.

A possible Second World War monitoring post has been noted just off the West Highland Way spur (site 50). In 1960 a Royal Observers underground monitoring post (site 44) was built to the south of Crianlarich on the west side of the main road.

11.4.2.5 Village Character

The village of Crianlarich has grown and developed due to the location and layout of transport infrastructure. Any development in the village has been constrained by the two railway lines and by the road layout, which has resulted in a fragmented and spread-out village layout infilling the areas between the railways and along the roadsides. The most dominant features in the village are those of the railways, with the Glenbruar Viaduct being the most impressive, as it is in the centre of the village. The Fillan Viaduct, to the North, is visible from the village and is a similar construction of stone faced piers with an iron deck. The use of stone facings, rather than concrete, on these structures is indicative of the importance that these features had at the time of construction. The large brick built engine shed to the south of the railway station (site 41) is an impressive example of this type of building on the West Highland Line and has been listed by Historic Scotland.

The village core is located to the east of the West Highland Line and to the south of the A85. The main facilities of the village are located here and include the church (a Listed Building), shop, school, youth hostel and police station. A large proportion of the housing within the village is also present within this area. To the north of the village core on the north side of the A85 are the village hall and the fire station along with some recently built housing. At the junction of the A82 and A85 is the Crianlarich Hotel (site 27), a three storey building that has seen much modification. Opposite the hotel is the War Memorial (site 7) which is a listed building.

To the south of the village, along the line of the A82 and between the road and the railway there has been sporadic development of housing. This contributes to the feeling that there is no defined limit to the village in this area. The western part of the village comprises mainly houses originally built by the local authority.

11.4.3 Identified Sites in the vicinity of Crianlarich.

Table 11.1 lists the archaeological and built heritage sites that have been identified within the study corridor. Each site has been given a reference number that is unique to this report (although there is continuity with the original Stage 3 assessment). A full record of all baseline sites can be found in the sites gazetteer (see Appendix 11.1). The gazetteer includes a brief description of each site and any other relevant information, such as grid references and SMR and NMRS references where possible.

No.	Name	Designation	Importance/Comments
1	Crianlarich, Railway Shed	None	Local
2	Crianlarich, Railway Shed	None	Local
3	Crianlarich, House	None	Local
4	Crianlarich, Rail Bridge	None	Local
5	Crianlarich, Prefabricated House	None	Local
6	Crianlarich, House	None	Local
7	Crianlarich War Memorial	Category C Listed Building	Local
8	Crianlarich, Glenbruar Viaduct	None	Local
9	Crianlarich, Prefabricated Building	None	Local
10	Crianlarich, Terraced Railway Cottages	None	Local
11	Crianlarich, Rail Bridge	None	Local
12	Crianlarich, Church	Category B Listed Building	Regional
13	Crianlarich, House	None	Local
14	Crianlarich, House	None	Local

Table 11.1: List of Baseline Sites

No.	Name	Designation	Importance/Comments	
15	Crianlarich, Levees and	None	Local	
	Drainage System			
16	Crianlarich, Rail Bridge	None	Local	
17	Crianlarich, Bridge and Rail Crossing	None	Local	
18	Crianlarich, Rail Crossing	None	Local	
19	Crianlarich, Cottage	None	Local	
20	Crianlarich, Dyke and Track	None	Local	
21	Crianlarich, Trackway	None	Local	
22	Crianlarich, Bridge	None	Local	
23	Tarbert - Crianlarich Military Road	None	Regional	
24	Crianlarich, Fortification	None	Local	
25	Crianlarich, Platform	None	Local	
26	Crianlarich, Rail Sidings and Freight Yard	None	Local	
27	Crianlarich, Hotel	None	Local	
28	Crianlarich, Dismantled Bridge and Trackway	None	Local	
29	Crianlarich, Quarry Activity	None	Local	
30	Stirling - Tyndrum - Fort William Military Road	None	Regional	
31	Crianlarich, Creag A' Bheannain, Bridge	None	Local	
32	Luibmore cup-marked stone	None	Regional	
33	Luibmore Township	None	Local	
34	Duinish 2	None	Regional	
35	Fillan Viaduct	None	Local	
36	Inverardran	None	Local	
37	Duinish Township	None	Local	
38	Duinish 1	None	Regional	
39	Crianlarich, Stone Axe	None	Local	
40	Crianlarich, Crianlarich Upper Station	None	Local	
41	Crianlarich, Crianlarich Station, Engine Shed	Category C Listed Building	Local	
42	Creag an Taghain	None	Local	
43	Loch Dochart Castle	Scheduled Ancient Monument	National	
44	Crianlarich, Bunker	None	Local	
45	Crianlarich, Scarping	None	Local	
46	Crianlarich, West Highland Way	None	Local	
47	Short remains of old field bank	None	Local	
48	Rectangular building/enclosure	None	Local	
49	Levelled area at side of knoll	None	Local	
50	Possible World War 2 lookout post	None	Local	
51	Accumulation of unusually shaped stones	None	Local	
52	Remains of old field bank	None	Local	
53	Remains of well defined	None	Local	
	complex of old banks			

11.4.4 Baseline Setting of SAMs and Listed Buildings

To assess the significance of potential effects of the proposals on the setting of the historic resource it is necessary to consider the baseline setting of the SAMs and Listed Buildings within the study corridor.

11.4.4.1 Baseline Setting of Site 7: Crianlarich War Memorial (Category C(S) Listed)

Historic Setting

- Erected in the early 1920s.
- Situated in a prominent location just to the east of the main road junction in Crianlarich.
- Immediately south west and east are the railways.
- The local hotel (site 27) is to the W over the road.

Present setting

- The present setting is largely similar to the historic setting.
- A toilet block and carpark have been built to the south of the memorial.
- The amount of traffic will have increased significantly since the 1920s thus slightly compromising its setting.
- More accessible due to the construction of a pathway nearby.

The War Memorial has been placed in a prominent and central part of Crianlarich in order to maximise its visibility. The present setting of this monument is little changed from its historic setting.

11.4.4.2 Baseline Setting of Site 12: Crianlarich Church (Category B Listed)

Historic Setting

- Located at a prominent high-point in what was a roughly central location in the village at the beginning of the twentieth century.
- At that time the only buildings in the immediate vicinity (to the south of the main road) were a small police station and a school to the north east and a small amount of housing to the north west.

Present Setting

- Since the village has expanded further to the west it is no longer in a central location but is still in what could be described as the core of the village.
- Further housing has been built to the north west.
- The village school, to the north east, has been expanded.
- A large Youth Hostel has been built to the south east.

This church was built to be an important feature within Crianlarich. Although the surrounding area has seen much development and expansion it is difficult to see this as negative as the church is still a working building that serves the community.

11.4.4.3 Baseline Setting of Site 41: Crianlarich Engine Shed

Past Setting

• The engine shed was constructed in the late-nineteenth century at the time of the establishment of the West Highland Line.

- Other structures established in the vicinity at this time were the railway station, and other associated railway buildings and infrastructure.
- The setting is very much a complex of railway buildings and infrastructure.

Present Setting

- The railway buildings and associated infrastructure are still in use but not as well-kept or well-used as they would have been during the railway's heyday.
- Private dwellings have been constructed between the A82 and the railway.

The setting of the Engine Shed is one of a working railway and is part of the wider transport network around Crianlarich. The railway, private dwellings and the current A82 are situated between the shed and the proposed bypass.

11.4.4.4 Baseline Setting of Site 43: Loch Dochart Castle

Historic Setting

- Built between 1583 and 1631.
- Constructed in a defensive position on an island.
- Built to control the lands in the vicinity.
- Was originally a two-storey tower house.
- Burned down in 1646 and has been ruinous ever since.

Present Setting

- Situated on an almost inaccessible and over-grown island.
- Is a picturesque ruin.
- Due to inaccessibility can really only be admired from a distance.
- Setting slightly compromised by the main road (the A85) to the south of the loch.

The castle has been a ruin for longer than it was inhabited. Due to its location on an island it can only really be appreciated and experienced from afar.

11.5 ASSESSMENT METHODOLOGY¹⁶⁷

The importance attributed to each archaeological site has been determined using the criteria outlined in Table 11.2, based on guidance provided in Annex A of SPP23 Planning and the Historic Environment¹⁶⁸. Adoption of these principles would help ensure the design affords appropriate importance to all archaeological features. For the purposes of this assessment, the sensitivity of a site to physical change is taken to be directly proportional to its importance.

Table 11.2: Definitions of Importance of Archaeological Sites

Level of importance	Criteria
National	Scheduled Ancient Monuments; Category A Listed Buildings; sites that are important within a national context
Regional	Category B Listed Buildings; sites that are important within a regional context

¹⁶⁷ The 2007 edition of DMRB (Volume 11 Section 3 Part 2 HA 208/07) gives five levels of sensitivity (or value) of sites (or assets): Very High, High, Medium, Low and Negligible. For the purposes of this assessment only three levels of sensitivity have been used. Had the full five been used then two additional levels of importance would have been added to include *International* (ie World Heritage Sites, of which there are none in proximity to the site) and *Negligible* (ie sites of no cultural heritage importance) of which only one would have been included (site 46). In addition, the terms used for significance of impact and magnitude of impact do not follow DMRB as a uniform approach has been taken across the ES (see Section 1.6)

¹⁶⁸ Scottish Government, 2008. Scottish Planning Policy (SPP) 23 – Planning and the Historic Environment

Level of importance	Criteria	
Local	Category C (S) Listed Buildings; other sites (e.g. findspots)	
	sites that are important within a local context	

11.5.1 Magnitude of Physical Impact

The magnitude of any adverse physical impact on a cultural heritage site resulting from the current development proposal, prior to final mitigation, was determined using the criteria in Table 11.3 Level of impact is defined as High, Medium, Low, Negligible and No impact.

Level of Physical Impact	Criteria
High	Ground-breaking works would result in the loss of an area, features or evidence fundamental to the historic character and integrity of the site. Severance would result in the complete loss of physical integrity
Medium	Ground-breaking works would result in the loss of an important part of the site or some important features and evidence, but not areas or features fundamental to its historic character and integrity. Severance would affect the integrity of the site, but key physical relationships would not be lost
Low	Ground-breaking works or the severance of the site would not affect the main features of the site The historic integrity of the site would not be significantly affected
Negligible	Ground-breaking works or the severance of the site confined to a relatively small, peripheral and/or unimportant part of the site. The integrity of the site, or the quality of the surviving evidence would not be affected
No impact	Ground-breaking works would have no impact on the site

11.5.2 Assessment of Physical Effect Significance

The significance of effects from the development proposals on individual archaeological and historic sites was determined by comparing the magnitude of the physical impact with the archaeological sensitivity of each site or monument. The level of significance can be defined as major adverse, moderate adverse, minor adverse, or no effect (see Table 11.4).

Table 11.4: Determining the Significance of Physical Impact

	Sensitivity			
Magnitude	Local	Regional	National	
No Impact	No Effect	No Effect	No Effect	
Negligible	No Effect	No Effect	Minor Adverse	
Low	No Effect	Minor Adverse	Moderate Adverse	
Medium	Minor Adverse	Moderate Adverse	Major Adverse	
High	Moderate Adverse	Major Adverse	Major Adverse	

11.5.3 Assessment of Setting Effect Significance

Assessing the effect of the proposals on setting is much a more abstract activity than assessing physical impacts. The reason being that physical impacts are easier to quantify and predict, while an assessment of an effect on the setting of an archaeological or built heritage site is more subjective and requires a degree of professional judgement and a 'feel' for the site in question. Historic Scotland has recently published guidance on assessing the impact on the setting of the historic environment: Scoping of Development Proposals: Assessment of Impact on the Setting of the Historic Environment Resource – Some General Considerations¹⁶⁹. This document sets out general guidance on the assessment of setting and states that "In determining what constitutes the setting of any particular site Historic Scotland does not consider that there are any fixed criteria which can be universally applied. Much will depend upon the circumstances of the individual case, including such variables as the nature, extent, design, location of the development proposed, the nature, extent and significance of the asset in question, its current relationship with its surroundings and the degree to which that would be altered by the development proposed". Therefore, the assessment of the setting of these sites entails a description of the past and present setting (see Section 11.4.4) and a description of the future setting (impact of the scheme) (see Section 11.8). These have been presented as a series of bullet points for each site. For the purposes of this assessment the effects of the development on the setting of Listed Buildings and Scheduled Ancient Monuments has been considered. Also, in recognition of the impact that noise level change can have on an archaeological and built heritage site, noise level changes at these sites have been considered in Chapter 13 (see Sections 13.5.2 and 13.8). The results of this analysis are summarised, where relevant, in Section 11.8.

Significance of Effect	Criteria
Major Adverse Effect	An adverse effect that alters cultural heritage resources
	fundamentally, such as the demolition of sites or buildings of
	National and Regional importance, a Category A and B Listed
	Buildings, or an archaeological site of equivalent standing
	(including, but not limited to Scheduled Ancient Monuments).
	Also the loss of integrity of a site of National importance
Moderate Adverse Effect	An adverse effect that alters cultural heritage resources
	materially but not fundamentally, such as the demolition of a
	site or building of local importance, such as a Category C (S)
	Listed Building or an archaeological site of equivalent
	standing. The loss of integrity of a site of archaeological interest of regional value, and/or a material change in the
	setting or visual amenity of a site of National importance,
	Category A Listed Buildings, SAMs etc
Minor Adverse Effect	A detectable adverse effect that does not alter the cultural
	heritage resources materially, such as a not detectable effect
	upon the setting or visual amenity of Listed Buildings and
	SAMs. Also the loss of physical integrity to a site of Local
	importance
No Effect	No detectable alteration to the cultural heritage resource
Minor Beneficial Effect	A detectable beneficial effect but which does not alter cultural
	heritage resources materially, such as a slight enhancement
	of the setting and amenity of a Listed Building or
	archaeological site
Moderate Beneficial Effect	A beneficial effect that alters cultural heritage resources
	materially but not fundamentally
Major Beneficial Effect	A beneficial effect that alters cultural heritage resources
	fundamentally

Table 11.5: Summary	of Significance Definitions
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¹⁶⁹ Scoping of Development Proposals: Assessment of Impact on the Setting of the Historic Environment Resource – Some General Considerations: http://www.historicscotland.gov.uk/scoping_of_development_proposals_2009.pdf

11.6 POTENTIAL IMPACTS

The following is a summary of potential impacts that have been identified during the EIA process. Only sites that would be impacted on are mentioned below. A full list of sites and potential physical impacts is presented as Table 11.6. The table includes sites even if there is the potential for a negligible impact of no significance. The impacts on the setting of listed buildings and SAMs have also been considered and are presented below and in Table 11.5.

11.6.1 Potential Impacts resulting in the (partial or total) Physical Loss of a Site

- A high physical impact on a Royal Observer Corps underground monitoring post (site 44).
- A negligible physical impact on a modern part of the West Highland Way (site 46) is deemed to insignificant in terms of cultural heritage and it will not be discussed further.
- A high physical impact on the remains of an old field bank (site 47).
- A high physical impact on the remains of a rectangular building (site 48).
- A high physical impact on a levelled area (site 49).
- A high physical impact on a possible World War 2 lookout post (site 50)
- A negligible physical impact on an old field bank (site 52).
- A negligible physical impact on a well defined complex of old banks (site 53).

11.6.2 Potential Impacts on Setting of SAMs and Listed Buildings

- There would be **no** visual impact from the scheme on sites 7 & 12 as they are shielded from the proposed bypass by railway embankments and the existing landscape.
- There would be **no** visual impact from the scheme on site 43 as it is shielded from the proposed bypass by the landscape and the village itself.
- There would be **no** significant visual impact from the scheme on site 41
- There would be minor beneficial noise level changes at sites 12, 41 and 43 and no change at site 7.

11.7 MITIGATION MEASURES

The previous section outlined the sites which could be directly affected by the bypass and those sites where it is considered relevant to appraise the effects of the proposals on setting. Committed measures which would be implemented to mitigate the impacts on the affected sites are presented below. Also a general mitigation strategy for the discovery of previously unknown sites is set out. The landscape strategy for the scheme is described in Section 10.7.

General Mitigation for the Bypass

After consultation with the relevant authorities a permanent archaeological watching brief has not been deemed to be necessary during groundbreaking works.

CH1 All known sites in proximity to the works would be fenced off or clearly pointed out to contractors to ensure they are not damaged.

Mitigation of Physical Impacts on Known Sites

Physical Impact on Bunker (site 44)

- CH2 This site would be recorded to a suitable standard prior to demolition. This would likely involve a photographic and descriptive survey of the site, both internally and externally.
- CH3 The demolition of the site would be monitored and recorded during a watching brief. Any items deemed to be of interest would be salvaged from the bunker prior to demolition.

Negligible Impact on West Highland Way (site 46)

CH4 The severance and re-routing of the WHW would have no effect on the cultural heritage value of the site and therefore no further mitigation is required.

Physical Impact on Old Field Bank (site 47)

- CH5 This site would be recorded to a suitable standard prior to demolition. This would likely involve a photographic and descriptive survey of the site, and also a section through the site.
- CH6 The demolition of the site would be monitored and recorded during a watching brief.

Physical Impact on Rectangular Building (site 48)

CH7 The site and immediate environs would be recorded to a suitable standard prior to demolition. This would likely involve survey of the immediately surrounding area and excavation of the site.

Physical Impact on Levelled Area (site 49)

CH8 The site and immediate environs would be recorded to a suitable standard prior to demolition. This would likely involve survey of the immediately surrounding area and excavation of the site.

Physical Impact on possible World War 2 Lookout Post (site 50)

CH9 This site would be recorded to a suitable standard prior to demolition. This would likely involve a photographic and descriptive survey of the site.

Negligible Impacts on Field Banks (sites 52 and 53)

CH10 Sites 52 and 53 are situated close to the west cutting of the bypass. While only a negligible impact is predicted (and therefore 'no significant effect') if the practicalities of cutting would result in the total destruction of these sites they would be recorded to a suitable standard.

11.8 ASSESSMENT OF RESIDUAL EFFECTS

11.8.1 Permanent Effects

The residual setting effects on SAMs and Listed Buildings and the potential physical effects on all sites are presented in Tables 11.6 and 11.7 respectively.

The significant effects of construction of the bypass are summarised below. Where it is possible to suitably mitigate a physical or setting impact on an archaeological or historic site it is proposed that the significance of the impact may be reduced by at least one magnitude (see Section 11.5 and Table 11.4).

A summary table listing the effects of the scheme on archaeology and cultural heritage is in Appendix 11.3.

11.8.1.1 Detailed Assessment of Residual Effects on Setting

The assessment of effects on setting is a more abstract task than assessing physical effects (see Section 11.5). The effects on the setting of SAMs and Listed Buildings are presented here. These bullet points are intended to be read in conjunction with the baseline setting data that is presented in Section 11.4.4. The following sections set out the effects on setting (see also baseline data in Section 11.4.4).

Future Setting of Site 7: Crianlarich War Memorial (Category C(S) Listed)

- The bypass would not be visible from the memorial.
- There would be a -1.4 dB (not significant) noise change at the site (see Section 13.8.3).
- The bypass would have no discernible effect on the setting of this site.

Future Setting of Site 12: Crianlarich Church (Category B Listed)

- The bypass would not be visible from the church.
- There would be a -3.2 dB (minor beneficial) noise change at the site (see Section 13.8.3).
- Although there would be a minor beneficial noise change at the church it is felt that overall, the bypass would have no discernible effect on the setting of this site.

Future Setting of Site 41: Crianlarich Engine Shed

- The bypass would be visible to the W of the building
- There would be a -4.5 dB (minor beneficial) noise change at the site (see Section 13.8.3).
- The immediate setting of the engine shed is that of the working railway and associated infrastructure. Therefore, any benefit from decreased traffic noise or detriment due to a reduction in visual amenity are of no consequence.
- The bypass would have no discernible effect on the setting of this site.

Future Setting of Site 43: Loch Dochart Castle

- The bypass would not be visible from the castle.
- The site was outside the area covered by the scheme noise change models. However, it was anticipated that the noise levels at this site should be dominated by local sources (such as the nearby road and natural sources) and the significance of any noise change impact from the bypass would be 'none' (see section 13.8.3).
- The construction of the bypass would have no discernible effect on the setting of this site.

The assessment indicates that there would be no significant effect on the setting of any of the protected sites. The appraisal is summarised in Table 11.5.

No	Name	Potential Effects	Designation/ Importance	Significance of Residual Effect
7	Crianlarich War Memorial	No effect	Category C (S) Listed Building / Local Importance	No effect
12	Crianlarich, Church	No effect	Category B Listed Building / Regional Importance	No effect
41	Crianlarich, Crianlarich Station, Engine Shed	No effect	Category C (S) Listed Building / Local Importance	No effect
43	Loch Dochart Castle	No effect	Scheduled Ancient Monument / National Importance	No effect

Table 11.5: Summary of Residual Setting Effects

11.8.1.2 Assessment of Residual Physical Effects

The construction of the bypass would result in a high magnitude physical impact of a sites 44 & 47-50. The recording of these sites prior to destruction and monitoring during destruction would reduce the residual physical effect from a moderate adverse to a minor adverse effect (not significant). The physical effects of the proposals on sites of archaeological and cultural heritage are summarised in Table 11.6.

Table 11.6: Summary of Residual Physical Effects

No	Name	Potential Effects	Importance	Magnitude of impact	Significance of Residual Effect
1	Crianlarich, Railway Shed	No physical impact predicted	Local	No Impact	No effect
2	Crianlarich, Railway Shed	No physical impact predicted	Local	No Impact	No effect
3	Crianlarich, House	No physical impact predicted	Local	No Impact	No effect
4	Crianlarich, Rail Bridge	No physical impact predicted	Local	No Impact	No effect
5	Crianlarich, Prefabricated House	No physical impact predicted	Local	No Impact	No effect
6	Crianlarich, House	No physical impact predicted	Local	No Impact	No effect
7	Crianlarich War Memorial	No physical impact predicted	Local	No Impact	No effect
8	Crianlarich, Glenbruar Viaduct	No physical impact predicted	Local	No Impact	No effect
9	Crianlarich, Prefabricated Building	No physical impact predicted	Local	No Impact	No effect
10	Crianlarich, Terraced Railway Cottages	No physical impact predicted	Local	No Impact	No effect
11	Crianlarich, Rail Bridge	No physical impact predicted	Local	No Impact	No effect

No	Name	Potential Effects	Importance	Magnitude of impact	Significance of Residual Effect
12	Crianlarich, Church	No physical impact predicted	Regional	No Impact	No effect
13	Crianlarich, House	No physical impact predicted	Local	No Impact	No effect
14	Crianlarich, House	No physical impact predicted	Local	No Impact	No effect
15	Crianlarich, Levees and Drainage System	No physical impact predicted	Local	No Impact	No effect
16	Crianlarich, Rail Bridge	No physical impact predicted	Local	No Impact	No effect
17	Crianlarich, Bridge and Rail Crossing	No physical impact predicted	Local	No Impact	No effect
18	Crianlarich, Rail Crossing	No physical impact predicted	Local	No Impact	No effect
19	Crianlarich, Cottage	No physical impact predicted	Local	No Impact	No effect
20	Crianlarich, Dyke and Track	No physical impact predicted	Local	No Impact	No effect
21	Crianlarich, Trackway	No physical impact predicted	Local	No Impact	No effect
22	Crianlarich, Bridge	No physical impact predicted	Local	No Impact	No effect
23	Tarbert - Crianlarich Military Road	No physical impact predicted	Regional	No Impact	No effect
24	Crianlarich, Fortification	No physical impact predicted	Local	No Impact	No effect
25	Crianlarich, Platform	No physical impact predicted	Local	No Impact	No effect
26	Crianlarich, Rail Sidings and Freight Yard	No physical impact predicted	Local	No Impact	No effect
27	Crianlarich, Hotel	No physical impact predicted	Local	No Impact	No effect
28	Crianlarich, Dismantled Bridge and Trackway	No physical impact predicted	Local	No Impact	No effect
29	Crianlarich, Quarry Activity	No physical impact predicted	Local	No Impact	No effect
30	Stirling - Tyndrum - Fort William Military Road	No physical impact predicted	Regional	No Impact	No effect
31	Crianlarich, Creag A' Bheannain, Bridge	No physical impact predicted	Local	No Impact	No effect
32	Luibmore cup-marked stone	No physical impact predicted	Regional	No Impact	No effect

No	Name	Potential Effects	Importance	Magnitude of impact	Significance of Residual Effect
33	Luibmore Township	No physical impact predicted	Local	No Impact	No effect
34	Duinish 2	No physical impact predicted	Regional	No Impact	No effect
35	Fillan Viaduct	No physical impact predicted	Local	No Impact	No effect
36	Inverardran	No physical impact predicted	Local	No Impact	No effect
37	Duinish Township	No physical impact predicted	Local	No Impact	No effect
38	Duinish 1	No physical impact predicted	Regional	No Impact	No effect
39	Crianlarich, Stone Axe	No physical impact predicted	Local	No Impact	No effect
40	Crianlarich, Crianlarich Upper Station	No physical impact predicted	Local	No Impact	No effect
41	Crianlarich, Crianlarich Station, Engine Shed	No physical impact predicted	Local	No Impact	No effect
42	Creag an Taghain	No physical impact predicted	Local	No Impact	No effect
43	Loch Dochart Castle	No physical impact predicted	National	No Impact	No effect
44	Crianlarich, Bunker	Construction of the bypass would result in the destruction of the site	Local	High	Minor Adverse Effect
45	Crianlarich, Scarping	No physical impact predicted	Local	No Impact	No effect
46	Crianlarich, West Highland Way	Construction of the bypass would sever a modern part of the path	Local	Negligible (the path at this location is of no historical significance and the path is being diverted)	No effect
47	Short remains of old field bank	Construction of the bypass would result in the destruction of the site	Local	High	Minor Adverse Effect
48	Rectangular building/enclo sure	Construction of the bypass would result in the destruction of the site	Local	High	Minor Adverse Effect
49	Levelled area at side of knoll	Construction of the bypass would result in the destruction of the site	Local	High	Minor Adverse Effect

No	Name	Potential Effects	Importance	Magnitude of impact	Significance of Residual Effect
50	Possible World War 2 lookout post	Construction of the bypass would result in the destruction of the site	Local	High	Minor Adverse Effect
51	Accumulation of unusually shaped stones	None	Local	No Impact	No effect
52	Remains of old field bank	Bypass passes very close to the site but only a negligible impact at most is predicted	Local	Negligible	No effect
53	Remains of well defined complex of old banks	Bypass passes very close to the site but only a negligible impact at most is predicted	Local	Negligible	No effect

11.9 SUMMARY

- There are 53 sites, of archaeological or historic interest in vicinity of Crianlarich, of which four have statutory protection.
- These include one Scheduled Ancient Monument and three Listed Buildings.
- A review of the historical background of the area shows that the area has undergone substantial pre-historic and historic development. This would indicate that there is the possibility for further unidentified archaeology in the area around Crianlarich.
- The bypass would have a direct physical impact on five sites of local importance (sites 44, 47-50).
- Where a physical impact on a site is predicted, the site would be revealed/excavated to determine whether there would actually be an impact by the route. If the archaeology was unavoidable then it would be excavated and recorded to a suitable standard prior to construction. Where the site is upstanding, rather than buried archaeology, it would be recorded to a suitable standard.
- The sites that would be physically impacted on are a Royal Observer Corps underground monitoring post (site 44), a section of old field bank (site 47), a rectangular building or enclosure (site 48) a levelled area (site 49) and a possible World War 2 lookout post (site 50). The sites would be recorded prior to and during demolition.
- Sites 52 and 53 are very close to the west side of the road cutting. Although only a negligible physical impact is predicted at most they would be recorded to a suitable standard should the practicalities of construction require their removal.
- The setting impacts of those sites with statutory protection have been considered. There would be no significant effect on the setting of these sites.

