DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



15 Cultural Heritage

This chapter assesses the potential impacts of the proposed scheme on cultural heritage assets comprising archaeological remains, historic buildings and the historic landscape.

The study area extended to 200m in all directions from the footprint of the proposed scheme. Baseline conditions were established through a desk-based survey, walkover survey and targeted geophysical survey. Designated assets beyond the study area but located within 2km of the proposed scheme were included in the baseline to assess potential impacts on setting. In total, 93 cultural heritage assets were considered as part of the baseline comprising 47 archaeological remains, 39 historic buildings and seven historic landscape types.

Before mitigation, significant potential construction impacts were identified on five archaeological remains. Three are Scheduled Monuments: Kindallachan Cairn (Asset 221), Kindallachan Standing Stone (Asset 225) and Westhaugh of Tulliemet, cross slab 180m SE of (Asset 235); and two are undesignated assets: Dowally, Possible Enclosure (Asset 213) and West Haugh of Tulliemet Curvilinear Features and Possible Field Boundaries (Asset 791).

Following discussions with Historic Environment Scotland (HES), mitigation proposed for Kindallachan, Cairn (Asset 221) and Kindallachan Standing Stone (Asset 225) comprises archaeological excavations in advance of construction, under Scheduled Monument Consent. The cairn would be lost and whilst archaeological excavations would mitigate the loss of information, the residual impact significance has been assessed to remain as Large. The standing stone would not be removed, however, some of the works necessarily encroach into the scheduled area and the residual impact significance has been assessed to be Moderate. Westhaugh of Tulliemet, cross slab (Asset 235) would not be directly impacted, however construction works would be in close proximity. The monument will be supported as required and will be clearly demarcated with appropriate signage and protective fencing, and the residual impact after mitigation has been assessed to be of Slight significance. Mitigation proposed for Dowally, Possible Enclosure (Asset 213) and West Haugh of Tulliemet Curvilinear Features and Possible Field Boundaries (Asset 791) comprises archaeological excavations, the extents of which will be informed by the results of trial trenching undertaken in advance of construction. After mitigation, the significance of residual impact on both assets has been assessed to be Neutral.

Before mitigation, significant potential construction impacts were identified on four historic buildings: Guay Farmhouse (Asset 216; Category B Listed), and three undesignated buildings: Dowally Bridge (Asset 212), Westhaugh of Tulliemet, Possible Military Bridge (Asset 781) and Cuilan-Duin Retaining Wall (Asset 782).

Following discussion with Perth & Kinross Council (PKC) and Perth & Kinross Heritage Trust (PKHT), historic building recording and reconstruction of the farmhouse Wing would be undertaken to mitigate the potential impact on Guay Farmhouse (Asset 216), reducing the residual impact to Moderate significance. In advance of construction, historic building recording will be undertaken to mitigate potential impacts on Westhaugh of Tulliemet Possible Military Bridge (Asset 781) and Dowally Bridge (Asset 212), and photographic survey will be undertaken in advance of construction to mitigate potential impacts on Cuil-an-Duin Retaining Wall (Asset 782). After mitigation, the significance of residual impacts on Assets 212, 781 and 782 have been assessed to be Neutral.

Potential significant impacts on Kindallachan Standing Stone (Asset 225) and Guay Farmhouse (Asset 216) during operation have been identified.

In addition to impacts on known archaeological remains, the potential for the presence of unknown archaeological remains was assessed for the study area. Archaeological recording in advance of or during construction may be required to mitigate the impact on unknown archaeological remains disturbed by the construction of the proposed scheme.

15.1 Introduction

- This chapter represents the DMRB Stage 3 cultural heritage detailed assessment for the proposed scheme. The chapter considers the impacts of the proposed scheme on cultural heritage under the three sub-topics of archaeological remains, historic buildings and the historic landscape. Additional information to support this chapter is presented in the following appendices:
 - Appendix A15.1: (Cultural Heritage Baseline Information);
 - Appendix A15.2: (Geophysical Survey Results);
 - Appendix A15.3: (Geophysical Survey Results Kindallachan Cairn and Standing Stone); and

DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



Appendix A15.4: (Cultural Heritage Impact, Mitigation and Residual Impact Tables).

15.2 Approach and Methods

The assessment was undertaken based on the guidance provided in DMRB Volume 11, Section 3, Part 2 (HA208/07) (Highways Agency et al., 2007; hereafter referred to as HA208/07) further details of guidance followed is provided in Appendix A15.1 (Cultural Heritage Baseline Information). Both designated and undesignated cultural heritage assets have been included in this assessment and Detailed Assessments (as defined by HA208/07) have been undertaken for all three sub-topics comprising archaeological remains, historic buildings and historic landscapes.

Study Area

- Based on the guidance provided by HA208/07 (Annex 5, paragraph 5.4.1) the study area for archaeological remains was defined as an area extending 200m in all directions from the footprint of the proposed scheme. For the purpose of this assessment, this study area has also been used for historic buildings and the historic landscape. This study area encompassed both designated and non-designated assets.
- Informed by the Zone of Theoretical Visibility (ZTV), and following consultation with Historic Environment Scotland (HES) and Perth & Kinross Council (PKC), designated cultural heritage assets up to 2km from the proposed scheme have been included as part of the baseline due to the potential for impacts on their setting. The ZTV establishes potential visibility of the A9 dualling from up to 5km; further details of this are provided in Chapter 13 (Landscape).

Baseline Conditions

- 15.2.4 Baseline conditions have been established through:
 - a desk-based survey and walkover survey. Details of these surveys, including sources consulted, are provided in Appendix A15.1 (Cultural Heritage Baseline Information);
 - a geophysical survey of targeted areas with the highest potential for the presence of unknown archaeological remains (totalling approximately 16.05ha) undertaken between April and May 2017 (AOC, 2017a). Further details are provided in Appendix A15.2 (Geophysical Survey Results); and
 - a geophysical survey of Kindallachan Cairn (Asset 221, Scheduled Monument) and Kindallachan Standing Stone (Asset 225, Scheduled Monument) undertaken between 27 and 28 September 2017 (AOC, 2017b). Further details are provided on Appendix A15.3 (Geophysical Survey Results Kindallachan Cairn and Standing Stone).

Consultation

- On 20 February 2017, HES was provided with a list of Scheduled Monuments and Category A Listed Buildings located outside the 200m study area which were to be included in the assessment due to the potential for impacts on their settings. HES responded (01 March 2017), stating that it was content with the approach to assessment and with the list of cultural heritage assets.
- 15.2.6 A list of Category B and Category C Listed Buildings that could be similarly affected was provided to PKC in a letter on 20 February 2017. The assets to be considered outside the 200m study area were subsequently confirmed by PKC on 28 March 2017.
- A meeting was held with HES on 12 April 2017 to discuss the potential impacts of the proposed scheme on Kindallachan Cairn (Asset 221); and a meeting to discuss mitigation proposals for Guay Farmhouse was held with HES on 23 August 2017.
- Meetings were held with PKC on 18 January and 27 March 2017 to discuss the potential impacts of the proposed scheme on Guay Farmhouse (Asset 216). In an email dated 29 June 2017, PKC confirmed that they were content with the mitigation proposed for Guay Farmhouse. Due to the changes in personnel, an additional meeting was held with PKC on 15 September 2017 to discuss the proposals for Guay Farmhouse with PKC's new conservation officer who had taken on the work of her



predecessor. A follow up meeting with PKC and Perth and Kinross Heritage Trust (PKHT) was also held on 08 March 2018.

- Jacobs sought confirmation in March 2018 that PKHT was content with the proposed mitigation for impacts identified in the draft assessment. PKHT responded on 28 March 2018 noting that they were content with the mitigation proposed, and in addition noted that a possible military bridge (Farnyhaugh, Military Bridge, Asset 189) should be included in the assessment.
- 15.2.10 HES and PKC, as members of the Environmental Steering Group (ESG), were also invited to review the draft ES in April-May 2018. A meeting was then held with HES and PKC on 11 June 2018 to discuss their review comments, which informed the update and finalisation of the ES.
- The discussions and feedback from the consultation summarised in this section have been used to inform the assessment and mitigation proposals set out in this chapter. Further information on the consultation process is provided in Chapter 7 (Consultation and Scoping) and supporting Appendix A7.2 (Summary of Consultation).

Impact Assessment

Value

For all three sub-topics (archaeological remains, historic buildings and the historic landscape), an assessment of the value of each cultural heritage asset was undertaken on a six-point scale of very high, high, medium, low, negligible and unknown, based on professional judgement and guided by the criteria provided in HA208/07 as presented in Table 15.1.

Table 15.1: Criteria to assess the value of archaeological remains, historic buildings and historic landscape types

Value	Criteria							
Archaeolog	Archaeological Remains							
Very High	World Heritage Sites (including nominated sites). Assets of acknowledged international importance. Assets that can contribute significantly to acknowledged international research objectives.							
High	Scheduled Monuments (including proposed sites). Undesignated assets of schedulable quality and importance. Assets that can contribute significantly to acknowledged national research objectives.							
Medium	Designated or undesignated assets that contribute to regional research objectives.							
Low	Designated and undesignated assets of local importance. Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with potential to contribute to local research objectives.							
Negligible	Assets with very little or no surviving archaeological interest.							
Unknown	The importance of the site has not been ascertained.							
Historic Bu	ildings							
Very High	Structures inscribed as of universal importance as World Heritage Sites. Other buildings of recognised international importance.							
High	Scheduled Monuments with standing remains. Category A Listed Buildings. Other listed buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in the category. Conservation Areas containing very important buildings. Undesignated structures of clear national importance.							
Medium	Category B Listed Buildings. Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historical associations. Conservation Areas containing buildings which contribute significantly to their historic character. Historic Townscape or built-up areas with important historic integrity in their buildings, or built settings (e.g. including street furniture and other structures).							
Low	Category C Listed Buildings. Historic (unlisted) buildings of modest quality in their fabric or historical association.							



Value	Criteria					
	Historic Townscape or built-up areas of limited historic integrity in their buildings, or built settings (e.g. includin street furniture and other structures).					
Negligible	Buildings of no architectural or historical note; buildings of an intrusive character.					
Unknown	Buildings with some hidden (i.e. inaccessible) potential for historic significance.					
Historic La	ndscape					
Very High	World Heritage Sites inscribed for their historic landscape qualities. Historic landscapes of international value, whether designated or not. Extremely well preserved historic landscapes with exceptional coherence, time-depth, or other critical factors.					
High	Designated historic landscapes of outstanding interest. Undesignated landscapes of outstanding interest. Undesignated landscapes of high quality and importance, and of demonstrable national value. Well preserved historic landscapes, exhibiting considerable coherence, time-depth or other critical factors.					
Medium	Designated special historic landscapes. Undesignated historic landscapes that would justify special historic landscape designation, landscapes of regional value. Averagely well-preserved historic landscapes with reasonable coherence, time-depth or other critical factors.					
Low	Robust undesignated historic landscapes. Historic landscapes with importance to local interest groups. Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations.					
Negligible	Landscapes with little or no significant historical interest.					

Impact Magnitude

- Magnitude of impact is the degree of change that would be experienced by a cultural heritage asset and (where relevant) its setting resulting from the construction or operation of the proposed scheme, as compared with a 'do-nothing' scenario. Magnitude of impact is assessed without reference to the value of the cultural heritage asset, and may include physical impacts on the asset, or impacts on its setting or amenity value (see also Chapter 17 (Noise and Vibration)).
- 15.2.14 Assessment of magnitude of impact was based on professional judgement informed by the methodology and criteria provided by HA208/07 for archaeological remains, historic buildings and the historic landscape presented in Table 15.2.

Table 15.2: Magnitude of impact on cultural heritage assets

Magnitude	Criteria
Major	Change to most or all key archaeological materials, such that the resource is totally altered. Change to key historic building elements, such that the resource is totally altered. Change to most or all key historic landscape elements, parcels or components; extreme visual effects; gross change of noise or change to sound quality; fundamental changes to use or access; resulting in total change to historic landscape character unit. Comprehensive changes to setting.
Moderate	Changes to many key archaeological materials, such that the resource is clearly modified. Change to many key historic building elements, such that the resource is significantly modified. Changes to some key historic landscape elements, parcels or components, visual change to many key aspects of the historic landscape, noticeable differences in noise or sound quality, considerable changes to use or access; resulting in moderate changes to historic landscape character. Considerable changes to setting that affect the character of the asset.
Minor	Changes to key archaeological materials, such that the asset is slightly altered. Change to key historic building elements, such that the asset is slightly different. Changes to few key historic landscape elements, parcels or components, slight visual changes to few key aspects of historic landscape, limited changes to noise levels or sound quality, slight changes to use or access; resulting in limited changes to historic landscape character. Slight changes to setting.
Negligible	Very minor changes to archaeological materials or setting. Slight changes to historic buildings elements or setting that hardly affect it. Very minor changes to key historic landscape elements, parcels or components, virtually unchanged visual effects, very slight changes in noise levels or sound quality, very slight changes to use or access; resulting in a very small change to historic landscape character.

A9 Dualling Programme: Tay Crossing to Ballinluig DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



Magnitude	Criteria
No change	No change to elements, parcels or components; no visual or audible changes; no changes arising from amenity or community factors.

Impact Significance

For all three sub-topics, the significance of impact with and without mitigation was determined as a combination of the value of the asset and the magnitude of impact. In accordance with the guidance provided by HA208/07, impact significance was assessed on a five-point scale of Very Large, Large, Moderate, Slight or Neutral using professional judgement informed by the matrix illustrated in Table 15.3. Five levels of significance of impact are defined which apply equally to adverse and beneficial impacts.

Table 15.3: Matrix for determination of impact significance

Magnitude Value	No change	Negligible	Minor	Moderate	Major	
Very High	Neutral	Slight	Moderate/Large Large/Very Large		Very Large	
High	Neutral	Slight	Moderate/Slight	Moderate/Large	Large/Very Large	
Medium	Neutral	Neutral/Slight	Slight	Moderate	Moderate/Large	
Low	Neutral	Neutral/Slight	Neutral/Slight	Slight	Slight/ Moderate	
Negligible	Neutral	Neutral	Neutral/Slight	Neutral/Slight	Slight	

15.2.16 For the purposes of this assessment, impacts of Moderate or greater significance are considered to be potentially significant in the context of EIA Regulations and are highlighted in bold in Table 15.3.

Impacts on Setting

- Setting is defined by 'Managing Change in the Historic Environment: Setting' as "the way the surroundings of a historic asset or place contribute to how it is understood, appreciated and experienced" (HES, 2016, page 6). Based on the guidance provided by the document, a three-stage process was undertaken to assess the effect of the proposed scheme on the setting of cultural heritage assets:
 - Stage 1: cultural heritage assets where the setting may be affected by the proposed scheme were identified. As noted in Section 15.2 (Approach and Methods), those designated cultural heritage assets located outside the 200m study area but within 2km of the proposed scheme to be included in the assessment due to potential effects on setting have been agreed with HES and PKC.
 - Stage 2: modern Ordnance Survey mapping, online aerial photography and walkover survey were
 used to define the setting of cultural heritage assets by establishing if and how their surroundings
 contribute to the ways in which the cultural heritage asset is understood, appreciated and
 experienced. Where relevant, further information on the setting of assets is presented in Annex A
 of Appendix A15.1 (Cultural Heritage Baseline Information).
 - Stage 3: the potential effect of the proposed scheme on the ability to understand, appreciate or experience a cultural heritage asset was then assessed. This was primarily informed by site inspections supported by viewpoint visualisations provided on Figures 14.6-14.16. This is presented in Appendix A15.4 (Cultural Heritage Impact, Mitigation and Residual Impact Tables).

Limitations to Assessment

- During the walkover survey the following cultural heritage assets were not visited due to land access restrictions, however data from desk-based review was available to inform the assessment of these assets:
 - five archaeological remains comprising King's Seat, fort (Asset 188), a Scheduled Monument, and four undesignated archaeological remains comprising Guay Station (Site of) (Asset 214), Haugh of

DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



Kilmorich, Cropmark (2) (Asset 230), Haugh of Kilmorich, Township (Site of) (Asset 232) and Ballinluig, Railway (Site of) (Asset 251); and

- the historic buildings Ledpettie Wade Bridge (Asset 194) and Guay Farmhouse (Asset 216) both of which are Category B Listed Buildings.
- No intrusive archaeological investigation has been undertaken, which is considered appropriate for the purposes of DMRB Stage 3 assessment.

15.3 Baseline Conditions

This section provides a characterisation of the three sub-topics: archaeological remains, historic buildings and historic landscapes. For each sub-topic a selection of baseline assets has been discussed and further information is presented in Appendix A15.1 (Cultural Heritage Baseline Information).

Summary

From sources identified in Appendix A15.1 (Cultural Heritage Baseline Information), a total of 65 cultural heritage assets were identified within the study area. A further 28 cultural heritage assets located outside the study area were included in the baseline due to the potential for effects on their settings (see paragraph 15.2.3). The total number of cultural heritage assets assessed as part of the baseline is therefore 93. Of these, 47 are archaeological remains, 39 are historic buildings and there are seven historic landscape types. A summary of the total number of cultural heritage assets and their value is provided within Table 15.4. Further information on each cultural heritage asset is provided in Annex A of Appendix A15.1 (Cultural Heritage Baseline Information). The location of all cultural heritage assets within the study area is shown on Figure 15.1 (Archaeological Remains and Historic Buildings) and Figure 15.2 (Historic Landscape Types).

Value Sub-topic	Negligible	Low	Medium	High	Very High	Total no. of Assets
Archaeological Remains	11	20	3	13 (all Scheduled Monuments)	0	47
Historic Buildings	0	18 (including 9 Category C Listed Buildings)	19 (including 18 Category B Listed B Buildings)	2 (comprising 2 Category A Listed Buildings)	0	39
Historic Landscapes	5	2	0	0	0	7
Total number of Assets	16	40	22	15	0	93

To provide consistency with previous DMRB assessment, asset numbering has been retained from an earlier, larger data gathering exercise as part of the DMRB Stage 2 report (Transport Scotland, 2015) with new assets added following the walkover and geophysical surveys undertaken during the DMRB Stage 3 detailed assessment. Therefore, the cultural heritage asset numbers do not start at one or run sequentially.

Archaeological Remains

A total of 47 archaeological remains have been included in the cultural heritage baseline. These remains include prehistoric ritual and funerary monuments dating from the Neolithic to the Bronze Age (4,100BC – 800BC), settlement sites of later prehistoric date (800BC – AD400), with the medieval period (AD400 – AD1500) represented by two cross slab standing stones and the earthwork remains of a castle. Given their rarity, 13 of these cultural heritage assets are designated as Scheduled Monuments and have therefore been assessed to be of high value. The remaining archaeological remains within the study area are predominantly post-medieval or modern in date (AD1500 – present)



and are characterised by remnants of General Wade's Military Road and associated features, and the sites of post-medieval townships.

- 15.3.5 Prehistoric ritual and funerary monuments comprise:
 - Asset 633: Dunkeld House, standing stone 490m NE of (Figure 15.1a);
 - Asset 207: Clachan More, two standing stones 100m WSW of Dowally Kirk (Figure 15.1c);
 - Asset 221: Kindallachan Cairn (Figure 15.1c);
 - Asset 225: Kindallachan Standing Stone (Figure 15.1c);
 - Asset 236: Clach Glas, standing stone 130m WSW of Westhaugh of Tulliemet (Figure 15.1d); and
 - Asset 765: Tynreich Cottages, stone circle 55m SSW of (Figure 15.1e).
- Further baseline setting information relating to Archaeological Remains within the study area is provided in Appendix A15.1.

Dunkeld House Standing Stone (Asset 633, Figure 15.1a)

- This standing stone (Asset 633) is of prehistoric date, and stands in an arable field in a fairly level but relatively low-lying position (approximately 90m AOD). The stone is a roughly oblong slab of schist with its longer axis set approximately E-W. It stands up to approximately 1.3m high. The stone is likely to represent a ritual monument of Neolithic or Bronze Age date though it may have retained a ritual significance in later periods. The monument is of national importance as a prominent and well-preserved Neolithic or Early Bronze Age ritual site. As well as contributing to the character of the landscape the stone may be accompanied by deposits which might contribute to our understanding of prehistoric ritual practice.
- The standing stone is located within a large open arable field, and is surrounded by woodland plantations that obscure views towards Strath Tay to the north and west, and towards Dunkeld to the east. There are no views towards the existing A9, and no clear intervisibility with other prehistoric monuments (see Photograph 15.1), and due to this lack of intervisibility with other contemporary monuments setting is not considered to form part of its overall value.
- Given the standing stones' designation as a Scheduled Monument, and taking its potential to make a significant contribution to the understanding of the design and development of prehistoric and ritual monuments, it has been assessed to be of high value.

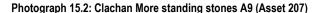






Clachan More Standing Stones (Asset 207, Figure 15.1c)

- 15.3.10 Clachan More (Asset 207) comprises two standing stones of likely Neolithic or Bronze Age date. They are situated on level ground at around 60m AOD, and are aligned east-west. There is evidence that the western stone has been re-set and early 20th century descriptions and sketches show the stones on a north-south alignment, and could have originally formed part of a larger alignment, or been part of a stone circle. The standing stones are identified as being of national importance as they have the potential to make a significant contribution to our understanding of the past, in particular the design and development of prehistoric burial and ritual monuments. In addition, there is the potential for the survival of archaeological remains beneath and around the standing stones.
- As outlined above, the standing stones may have formed part of a larger alignment or stone circle, and given their location in a valley bottom, would have been intended to be a focal point or marker, an attribute common to other prehistoric monuments within the study area. The stones today are located within an enclosed garden, and a high conifer hedge and surrounding dwelling obscures them from any previously intervisible monuments (see Photograph 15.2), and due to this intervisibility with other contemporary monuments are not considered to form part of their overall value.
- 15.3.12 Given their designation as a Scheduled Monument, and their potential to make a significant contribution to our understanding of the design and development of prehistoric and ritual monuments, the standing stones have been assessed to be of high value.





Kindallachan Cairn (Asset 221, Figure 15.1c, Appendix A15.3)

- 15.3.13 Kindallachan Cairn (Asset 221) comprises the remains of a mound of natural origin, that lies in a triangular area between the existing A9 and an unclassified road. The remains of a cist were found within the mound during excavations in the 1950s and a possible satellite burial was uncovered in 2007 (see Photograph 15.3), although very few artefacts were recovered from either feature. The triangular shape of the scheduled area reflects the nearby roads, and the mound was cut into during the realignment of the old A9 in the 1950s.
- The cairn is one of a number of prehistoric monuments located on the base of Strath Tay (Coles, Simpson & Denston, 2014). These include Kindallachan Standing Stone (Asset 225), Clachan More standing stones (SM1514), and Clach Glas standing stone (SM1515), which are located within 2km of the cairn suggestive of a wider cultural landscape in the area. More specifically, there may be a



relationship between Kindallachan Standing Stone and the cairn, given the location of the former, approximately 210m to the north.

The location of the cist on the top of the mound, exploiting a prominent natural feature on the valley floor, is suggestive of the creation of a focal point, or visible marker, within the surrounding landscape. While the natural mound itself would have been a prominent feature at the base of the river valley, its use as a place for human burial in proximity to other later prehistoric sites may indicate a shift towards the role of prehistoric funerary monuments acting as local land markers (Parker-Pearson, 2009). The palaeoenvironmental evidence from the satellite burial excavated in 2007 suggests that it was located in wider managed landscape, with samples yielding evidence of controlled vegetation and cereal production as well as rough ground and native trees (CFA, 2008), although the samples could not be securely dated to the prehistoric period they provide a suggestion of the landscape while the second possible grave was open.

Photograph 15.3: Cist slabs on the top of Kindallachan Cairn (Asset 221)



Photograph 15.4: View of Kindallachan Cairn looking north-west (Asset 221)



A number of comparable monuments to Kindallachan Cairn have been identified in Perthshire (Coles, Simpson & Denston, 2014). Examples include the Dunfallandy bell cairn, approximately 8km to the north of Kindallachan (SM2259), the Sithean cairn near Blair Atholl (SM2383), the possible Bronze Age Cairn at Millhaugh (Brophy and Green, 2014), and the Neolithic/ Bronze Age kerb cairn at Beech Hill (Stevenson, 1995). While these monuments differ from Kindallachan Cairn as artificially

A9 Dualling Programme: Tay Crossing to Ballinluig DMRB Stage 3 Environmental Statement





constructed mounds, their locations on largely flat fluvioglacial sands and gravels suggests that these locations may have been selected to provide visibility in the landscape.

- More specifically, kerb cairns are a distinct Scottish type of prehistoric monument found mainly in the Argyll and Perthshire regions (Downes, 2012). The remains of a modest kerb identified at Beech Hill of sub-rounded boulders around the circumference of the cairn (Stevenson, 1995), and a more substantial kerb noted at Millhaugh (Brophy and Green, 2014), are typical of the development of this monument tradition. While archaeological investigation would further clarify the presence of a kerb at Kindallachan, geophysical survey in the vicinity of the cairn identified a negative linear anomaly which respected the circumference of the mound indicative of such a kerb (see Appendix A15.3: Kindallachan Cairn and Kindallachan Standing Stone Archaeological Geophysical Survey).
- Cist burials such as that identified at Kindallachan Cairn were frequently used throughout the Bronze 15.3.18 Age. In Scotland, these burial types were often cut into natural mounds or earlier monuments (Downes, 2012), such as the use of a natural mound for the early Bronze Age cemetery at Holly Road in Fife (Lewis and Terry, 2004) and the natural fluvioglacial mound at Woodend, Upper Tweeddale (Ward, 2012). The identification of a small deposit of burnt bone within the short cist, and lack of associated grave goods, may indicate more of a 'token' burial at Kindallachan Cairn. Token deposits of burnt bone have been suggested as an expression of social identity beyond an individual's personal status during the Bronze Age in Scotland (Downes, 2012). In addition, while there has been a lack of artefactual evidence recovered from the cairn to inform date, the presence of the quartz pebble may parallel other early prehistoric burials in Scotland (Downes, 2012). For example, a quartz pebble was recovered from a late Neolithic to early Bronze Age double cremation at Beech Hill (Stevenson, 1995) and from an early Bronze Age cist burial at West Linton, in the Scottish Borders (Hunter, 2000). The significance of quartz to prehistoric people is not fully understood, however it has been identified in a number of Bronze Age burials in Scotland and evidences a less tangible element of contemporary belief systems (Downes, 2012).
- The cairn is located within an area of rough overgrown vegetation with the existing A9 to the west and an un-named village road to the east (see Photograph 15.4). Towards the River Tay (to the west) the land is relatively flat but it rises steeply to the east, beyond a row of stone cottages to the south of the village of Kindallachan, into established woodland. A drainage ditch runs adjacent to the A9, to the west of the cairn, and there is a mature beech tree growing on the cairn. Views to the north towards Kindallachan Standing Stone are filtered by woodland planting to the south of Croft Croy, although there is still an element of intervisibility between the two monuments.
- In summary, while no firmly dateable evidence has been recovered from the cairn, it does exhibit features characteristic of a prehistoric funerary monument, possibly dating to the Bronze Age. The use of a prominent natural feature, along with its location on the base of Strath Tay, is similar to other prehistoric examples in Perthshire and contributes to the understanding of the wider prehistoric domestic and ritual landscape of Strath Tay. The individual short cist at the top of the mound likely characterises a 'token' burial, with possible associated ritual symbolism through the inclusion of the quartz pebble. Taking this into account, along with the likely relationship with Kindallachan Standing Stone, and taking the cairn's designation as a Scheduled Monument into account it has been assessed to be of high value.

Kindallachan Standing Stone (Asset 225, Figure 15.1c, Appendix A15.3)

- Known locally as the 'Druid's Stone', Kindallachan Standing Stone (Asset 225) is squat and almost diamond in profile. It lies on a small mound that has been created by the plough avoiding the monument over the years. It lies within an agricultural field just east of the existing A9 at about 60m AOD, and stands at approximately 1m tall (see Photograph 15.5).
- The standing stone is related to ritual activity of Neolithic and/or Bronze Age date, and it is identified as being of national importance due to its ability to inform us about ritual practice in early prehistory. This importance is increased by its proximity to other monuments of potentially contemporary date. In addition, the standing stone forms part of a wider prehistoric landscape within Strath Tay including the Clachan More standing stones at Dowally (Asset 207); Clach Glas standing stone at Westhaugh of Tulliemet (Asset 236); Tigh Na Ruaich stone circle at Ballinluig (Asset 765); and Clach na Croiche standing stone at Balnaguard (located outside the baseline study area).



- When the standing stone was originally erected it is likely that it would have been intervisible with Kindallachan Cairn (Asset 221) a natural mound which is likely to have been utilised in the Bronze Age for human burial, located 210m to the south. In addition, the standing stone may well have been intended to be intervisible with the small prehistoric settlement at Kincraigie, located on high ground approximately 1km to the west. Notable also is the location of the standing stone close to the River Tay, the course of which is unlikely to have changed greatly since prehistory. This indicates a relationship between the river and the standing stone which is well attested along the River Tay with similar examples at Newtyle near Dunkeld, Clach na Croiche, Pitnacree and Haugh of Grantully.
- Geophysical survey undertaken as part of the assessment concluded that no responses indicating definitive archaeological remains were located within the scheduled area surrounding the standing stone. Further details are provided in Appendix A15.3 (Kindallachan Cairn and Kindallachan Standing Stone Archaeological Geophysical Survey).
- The setting of the standing stone today is dominated to the west by the existing A9 and Highland Main Line railway, with the A9 being located approximately 20m from it, although this does not affect the intervisibility of the standing stone with the River Tay or the views towards Kincraigie on the slopes of Creag na Larach. The area to the north, south and east of the standing stone has been compartmentalised during the Improvement Era, and the subsequent development of a small farmstead and the settlement of Kindallachan itself, as well as the planting of small pockets of woodland and lines of trees. The intervisibility of the standing stone with the Kindallachan Cairn is interrupted by woodland immediately to the south of Croft Croy.
- Taking the designation of the standing stone as a Scheduled Monument, its ability to inform us about ritual practice in early prehistory, and its likely association with other prehistoric monuments along Strath Tay, it has been assessed to be of high value.



Photograph 15.5: Kindallachan Standing Stone looking west to the existing A9 (Asset 225)

Clach Glas (Asset 236, Figure 15.1d)

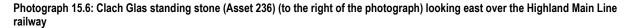
15.3.27 This single standing stone (Asset 236) is approximately 2m high, lying around 130m west of Westhaugh of Tulliemet. Of note are two cup marks on its east face. It is thought to date to the Neolithic or Bronze Age and relate to ritual activity from this time.

A9 Dualling Programme: Tay Crossing to Ballinluig DMRB Stage 3 Environmental Statement





- 15.3.28 It is likely that the standing stone remains at its original location, and it would originally have been intended to be a focal point or marker within the landscape given its height and location on the valley bottom. It is possible it could have been seen from other prehistoric monuments in the area, such as Kindallachan Standing Stone and Kindallachan Cairn, approximately 1.5km to the south-east and the prehistoric settlement at Kincraigie 1.7km to the south-west, particularly given the flat topography and the height of the stone.
- The standing stone is located next to a level crossing over the Highland Main Line railway, and views to the north and west are dominated by the railway, the existing A9 and modern farms and dwellings (see Photograph 15.6). To the south and west the stone retains its relationship with the open landscape, and river associated with Strath Tay.
- Given the designation of the standing stone as a Scheduled Monument, and its potential to make a significant contribution to our understanding of the design and development of prehistoric and ritual monuments, it has been assessed to be of high value.

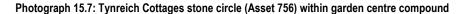




Tynreich Cottages stone circle (Asset 765, Figure 15.1e)

- These stone circle remains (Asset 765) date to the third or second millennium BC, that is visible as a slightly elliptical setting of six upright stones. It is located in the grounds of a garden centre on a terrace to the east of the River Tummel, at around 80m AOD.
- Today, the stone circle is located in the south-western corner of a fenced rectangular plot of land currently occupied by a garden centre (see Photograph 15.7). The existing A9 is located approximately 32m to the west of the monument, and forms a prominent component of its setting. Views to the west are restricted by forestry adjacent to the River Tummel with only the peaks of the hills beyond visible above the treeline. While the setting does not enhance our appreciation of the asset and creates difficulties in understanding its significance within the wider ritual landscape, it is likely that its position close to the Tummel and the hills beyond may have played an important role in its original siting.
- Given the stone circle's designation as a Scheduled Monument, and taking its potential to make a significant contribution to our understanding of the design and development of prehistoric and ritual monuments, it has been assessed to be of high value.







Westhaugh of Tulliemet cross slab (Asset 235, Figure 15.1d)

- This plain cross slab (Asset 235) (with the cross repeated on both sides of the stone), dates to the early medieval period and provides evidence of the spread of Christianity in Scotland from the 5th century AD onwards. The stone is approximately 1.8m in height.
- A house and gardens, as well as the existing A9, form the setting of the cross slab today, and it is considered likely that it no longer occupies its original, intended location (see Photograph 15.8). Despite this, taking into account its designation as a Scheduled Monument and its potential to contribute to the research theme of exploring the immediate context of this type of monument to better understand their possible ritual associations through physical and material remains (ScARF, 2012b), it has been assessed to be of high value.

Photograph 15.8: Westhaugh of Tulliemet cross slab (Asset 235), viewed from the west looking towards the existing A9



DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



Logierait Churchyard cross slab (Asset 765, Figure 15.1e)

- Similar to Asset 235, this cross slab (Asset 756) is an early medieval cross slab providing evidence of the spread of Christianity into Scotland. The cross slab is located within the churchyard of Logierait Church, and is likely to be within its original location.
- Taking into account its designation as a Scheduled Monument, and its potential contribution to the research theme of exploring the immediate context of this type of monument to better understand their possible ritual associations through physical and material remains (ScARF, 2012b), it has been assessed to be of high value.

Tom na Croiche castle (Asset 760, Figure 15.1e)

- Tom na Croiche castle (Asset 760) comprises the remains of a 14th century castle occupying a strategic and prominent location adjacent to confluence of the Rivers Tay and Tummel, on the south-eastern slope of Dunfallandy Hill. All round views are restricted by woodland, however, the existing A9 Ballinluig Junction is prominent in views to the south-east. The principal value of the asset is derived from its physical remains and the potential for these to inform and further our understanding of this class of monument.
- Taking into account its designation as a Scheduled Monument, and its potential contribution to research themes relating to our understanding of the construction techniques, defences and domestic life of these early castles (ScARF, 2012b), this asset has been assessed to be of high value.

Undesignated Archaeological Remains

- Dowally Possible Ring Ditch (Asset 211, Figure 15.1c) has been interpreted as remains of a roundhouse or barrow and Dowally Possible Enclosure (Asset 213, Figure 15.1c) is a possible double ditched rectilinear enclosure. Given their proximity to each other, it is likely that these assets are related and represent the remains of a prehistoric farmstead and field system. In consideration of their potential contributions to research themes regarding settlement types, their variety and land division, and use (ScARF, 2012b) these cultural heritage assets have been assessed to be of medium value.
- Archaeological remains associated with the 18th century military roads constructed between Dunkeld and Inverness in the wake of the Jacobite risings, principally for the purpose of moving Government troops quickly across the Highlands, include Assets 193 and 219 (Figures 15.1a and 15.1c). While poorly preserved, and likely to have been heavily disturbed, if not completely removed by the construction of the A9 in the 1970s, these sections of military road have the potential to contribute to research themes analysing the internal ordering of the state and providing insight into Scottish and British identities (ScARF, 2012c) and have thus been assessed to be of low value.
- The sites of three townships, including Dowally, Township (Site of) (Asset 204, Figure 15.1c), are earlier in origin than the current settlements that survive today, and are characterised by Improvement Era cottages and modern houses. While Haugh of Kilmorich, Township (Site of) (Asset 232, Figure 15.1d) no longer survives above ground, potential remains of it, and an earlier settlement (Kilmorich Possible Settlement, Asset 789, Figure 15.1d), have been identified during the geophysical survey (Geophysical Survey Results, Appendix A15.2).
- Archaeological geophysical survey undertaken as part of this assessment has identified areas that could be related to prehistoric, or later, settlement activity. These are recorded at Dowally Farm Possible Enclosures and Pits (Asset 786, Figure 15.1c) and Haugh of Kilmorich Possible Enclosure and Post Holes (Asset 788, Figure 15.1d), Haugh Cottages Rectilinear and Curvilinear Features (Asset 790, Figure 15.1d), and West Haugh of Tulliemet Curvilinear Features and Possible Field Boundaries (Asset 791, Figure 15.1d) (Geophysical Survey Results, Appendix A15.2). The geophysical surveys have contributed towards our understanding of the extent of potential settlement activity within the study area; and taking this into account they have been assessed to be of low value.
- The remaining archaeological remains within the study area include remains that have been excavated such as Westhaugh of Tulliemet, Cist Grave Cemetery (Site of) (Asset 239, Figure 15.1d), the conjectured locations of sites such as Guay, Possible Hospital (Site of) (Asset 217, Figure 15.1c)

A9 Dualling Programme: Tay Crossing to Ballinluig DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



and Kilmorich/Guay, Possible Standing Stone (Site of) (Asset 233, Figure 15.1d). In addition, there are sites of uncertain archaeological origin such as Haugh of Kilmorich, Cropmark (2) (Asset 230, Figure 15.1d).

- Archaeological remains of post-medieval and later date comprise buildings and structures which have been demolished, including Ledpettie Tollbooth (Site of) (Asset 197, Figure 15.1b), Ledpetty Bridge (3) (Site of) (Asset 196, Figure 15.1b) and Guay Station (Site of) (Asset 214, Figure 15.1c), as well as archaeological remains that are modern in origin for example, Dowally Roadside Memorial (Asset 780, Figure 15.1c). Taking into account the limited potential of these cultural heritage assets to increase our knowledge through their physical and material remains, these cultural heritage assets have been assessed to be of low and negligible value.
- 15.3.46 Informed by the results of the walkover survey, the results of the archaeological geophysical surveys, and from an appreciation of the baseline setting, areas of archaeological potential have been identified, and are shown on Figure 15.3

Historic Buildings

The built heritage baseline is characterised by historic buildings of post-medieval and early modern date. These historic buildings are associated with the development of early railway infrastructure, road-side inns, country houses and Improvement Era agricultural buildings including farmhouses, steadings and associated ancillary buildings.

Rotmell Farm (Asset 200, Figure 15.1b)

- Rotmell Farm (Asset 200), a Category B Listed Building, is a high status farmstead designed in a polite classical style (see Photograph 15.9). The farm is located on a plateaux on the 120m contour overlooking the River Tay floodplain, surrounded by large enclosed rectilinear fields, within sight of the head dyke which separates improved land from rough grazing and woodland on the upper slopes of Deuchary Hill. Its upland location, high above the River Tay, suggests it to have primarily served as a livestock farm.
- While views out from the building are not an important element of its value as a working farm, views of the farm itself contribute to its value, as the use of Classical design and its planned layout appear to have been intended to demonstrate the culture of the owner and their adoption of contemporary ideas in architecture and agricultural scienece. The siting on the edge of a plateaux overlooking the Tay flood plain, enabled the farm complex to be seen from a wide swathe of land to the west.
- Taking into account its designation as a Category B Listed Building, and as a good example of a high status building of its period, Rotmell Farm has been assessed to be of medium value.

Photograph 15.9: Rotmell Farm (Asset 200)





2 Dowally Village (Asset 206) and 3,4 Dowally Village (Asset 203, Figure 15.1c)

- 2, 3 and 4 Dowally Village (Assets 203 and 204), all Category C Listed Buildings and more commonly referred to as Dowally Cottages, comprise a group of single storey cottages dating from the late 18th or early 19th century, typical of rural worker's accommodation from this period. Together with 1 Dowally Village (Asset 205), the cottages form a tight-knit group, which forms part of the historic township of Dowally together with Dowally Church (Asset 208). The rural location of the cottages reflects their development as part of an agricultural township located close to General Wade's Military Road (the route now followed by the existing A9). While views to and from the cottages were not a consideration in their original development, a fortuitous aesthetic has resulted from their group value together with the church, although eroded by noise and visual intrusion resulting from the presence of the existing A9.
- Taking the designation of the buildings into account, 2, 3 and 4 Dowally Village have been assessed to be of low value.

Dowally Church (Asset 208, Figure 15.1c)

- Dowally Church (Asset 208) (also known as St. Anne's Church), is a Category B Listed Building, that was built in 1818. It comprises a T-plan church designed in a simple Gothic style, that replaced an earlier church dating from the 16th century (see Photograph 15.10). The location of the church with a small sub-circular walled churchyard, surrounded by historic gravestones, contributes to the understanding and appreciation of this as a historic church site.
- While the west gable of the church, with its arrangement of three lancet windows and belfry, form a noticeable element in views from the existing A9, the modest architectural style of the church is characteristic of the simple architectural treatment of Presbyterian churches in this period, and reflects its role as a local parish church serving surrounding settlements. The existing A9 forms a dominant element within the church's setting.
- The church forms a group with the historic settlement of Dowally which is located directly to the south (see Photograph 15.11). Comprising a small group of cottages strung along the banks of the Dowally Burn, the church contributes to the understanding of this as an historic settlement.
- Taking the designation of the church in account, and considering its association with the historic settlement of Dowally, the church has been assessed to be of medium value.











Guay Farmhouse (Asset 216, Figure 15.1c)

- Guay Farmhouse (Asset 216), a Category B Listed Building dating to the first half of the 19th century. The building is L-shaped in plan, set within a small farmyard and comprising a two-storey house (the Range) connected to a single and two-storey steading (the Wing). Both the Range and Wing are listed as a single unit within this designation. There are a number of recent additions to the Wing, including a block-constructed southern gable wall and a timber lean-to.
- The building is located in a rural setting, immediately to the east of the existing A9 and the Highland Main Line railway, and at the western edge of the small settlement of Guay. The building has had a roadside location since it was built, although the scale of the road has changed markedly over time. The building's cultural significance and special and architectural interest is derived from its remaining original built fabric, external appearance and the development of its historic context and the relationship it retains with its setting.

Photograph 15.12: Guay Farmhouse (Asset 216) viewed from the southbound carriageway of the A9



The farmhouse was built around 1835 as a roadside inn, and the original courtyard type arrangement of buildings of the inn complex (since removed by the existing A9 and Highland Main Line railway) was positioned so that the line of General Wade's Military Road (constructed in the 1740s) passed through the central yard of the inn. The building's original function as an inn has been deduced from

DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



cartographic evidence where it is denoted P.H on the 1st edition OS 25 inch to one mile, 1855-1882 (Perth and Clackmannan Sheet L.8 (Dunkeld & Dowally (Det. No 1)). It is possible, but not proven, that there may have been earlier buildings on this site, or that some of the buildings depicted on the 1st edition OS map are from an earlier phase of construction. Although not originally conceived as a farmhouse, the building is for the purposes of this assessment considered in the context of rural farm buildings and not as an inn.

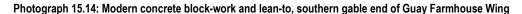
- Analysis of the 1st edition OS map and subsequent OS maps has shown that the building has been subject to change since its construction, the most significant aspect of this being the removal of approximately half of the original Wing and the removal of associated buildings (likely stables) that were located immediately to the west as a result of the first phase of A9 construction in the 1970s.
- Stone is the principal construction material of Scotland's pre-1919 building stock, and at the farmhouse the local building stone used in roughly-hewn blocks of various sizes has been used in the construction of the walls of the Wing (see Photograph 15.13). The greyish stone structure is covered by a moderately pitched stone slate roof supported by wooden trusses. The Wing is presumed to have originally been symmetrical in plan, i.e. there would have been three intersecting roof gables, with the central one being slightly taller than the symmetrically placed side ones. The Wing connects to the Range via a single-storey passage, and in terms of construction materials the passage has the same appearance as the Wing.

Photograph 15.13: The Wing of Guay Farmhouse viewed from the north



The southern end of the Wing has been rebuilt in modern concrete block-work, and it is a reasonable inference to associate this work with the construction of the A9 in the 1970s which resulted in the previous shortening of the Wing (see Photograph 15.14). Despite the alterations of the southern end of the Wing and the addition of larger doorways (presumably to accommodate modern farming machinery), it is still possible to read and understand the originally-intended relationship between the Range and the Wing as that of the farmer's residence and an ancillary agricultural building.







The Range, conversely, is constructed from more uniformly-sized and shaped reddish sandstone blocks that are coursed more regularly than the Wing. The symmetrical façade of the Range with its sash-windows can be interpreted as a vernacular take on the polite Georgian architecture in fashion in the early part of the 19th century (see Photograph 15.15). It is possible that the Range and the Wing could have been constructed at different times, given the differences between the masonry and style of their construction.

Photograph 15.15: The Range of Guay Farmhouse viewed from the west



In terms of its setting, the farmhouse retains a clear relationship with the settlement of Guay, and with the open agricultural land surrounding the property. While the existing A9 and Highland Main Line railway represent a barrier to the west, there are still clear views across Strath Tay available from the property.

15.3.65 Taking into account the farmhouse's designation as a Category B Listed Building, and its significance and special and architectural interest derived from its remaining original built fabric, external

A9 Dualling Programme: Tay Crossing to Ballinluig DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage

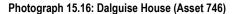


appearance and the development of its historic context and the relationship it retains with its setting, the farmhouse has been assessed to be of medium value.

Dalguise House (Asset 746, Figure 15.1c)

Dalguise House (Asset 746) was originally built in 1753 as three-storey, 4-windowed country residence (see Photograph 15.16). Additional extensions were made to the properly in the mid-19th century. The building is located within an area of managed woodland and its associated walled and formal terraced garden and stables to the south, and long avenue from Charleston leading northwards through the grounds to the house form components of its setting. It has historic associations with the author Beatrix Potter (known to have spent her summer holidays here), which further enhances the building's heritage interest.

Taking into account its designation as a Category B Listed Building and its historic association with Beatrix Potter, the building has been assessed to be of medium value.





<u>Dalguise Railway Viaduct Over River Tay (Asset 747, Figure 15.1c)</u>

Designed by the engineer Joseph Mitchell in 1861-2, the Dalguise Railway Viaduct (Asset 747) is a Category A Listed Building. It is a monumental structure with two wrought-iron lattice-girder spans of 64m and 43m respectively supported on a masonry pier and abutments which are carried up to form castellated terminals (see Photograph 15.17). This viaduct was designed to carry the Inverness and Perth Junction Railway across the River Tay and opened on 9 September 1863.

15.3.69 Given the designation of the bridge as a Category A Listed Building, it has been assessed to be of high value.

Photograph 15.17: Dalguise Railway Viaduct Over River Tay (Asset 747)



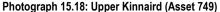
DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



Upper Kinnaird (Asset 749, Figure 15.1c)

- Upper Kinnaird (Asset 749) is a good example of an early 19th century bow-fronted centre house, dating from the early 19th century (see Photograph 15.18). The building is located on a spur on the lower slopes of Creag na Larach, and it has clear views to the east and south-east, including views of the existing A9, over to the hills of the Forest of Clunie. Views to the south, west and north are restricted by topography. Some screening in close proximity to the eastern elevation is provided by mature trees and garden vegetation, however the A9 is partially visible through these. The wider setting of the asset comprises the River Tay and the hills of the Forest of Clunie that contribute to the heritage value of the asset.
- Taking account of its designated as a Category B Listed Building, and as a good surviving example of an early 19th century bow-fronted house, the building has been assessed to be of medium value.





Kinnaird House (Asset 750, Figure 15.1c)

- 15.3.72 Kinnaird House (Asset 750) is a large house, believed to have been built around 1770 with was extensively modified in 1900 and in 1929. The complex is located on the edge of a scarp overlooking the River Tay and floodplain within its own extensive landscaped gardens containing mature trees, kitchen garden and outbuildings, forming its immediate setting. When visited as part of the DMRB assessment site visits, the buildings was undergoing renovation and was being re-roofed.
- The principal (south-western) elevation looks towards the B898. The north-eastern elevation has clear views over the River Tay and floodplain to the hills of the Forest of Clunie and this comprises its wider setting. There are clear views of the existing A9 (likely to be more extensive from the upper storeys). Both its immediate and wider setting contribute to its heritage value.
- Taking into account its designated as a Category B Listed Building, and as a good surviving example of an early 19th century country house, the building has been assessed to be of medium value.

Westhaugh of Tulliemet Farmhouse (Asset 240) and Steading (Asset 238, Figure 15.1d)

West of Tulliemet Farmhouse (Asset 240) is a Category C Listed Building, with a Category B Listed steading (Asset 238). The complex was constucted in the 1850s during the Improvement Era, and is located directly adjacent to the northbound carriageway of the existing A9. The Improvement Era from the late 17th to 19th centuries saw a dramatic change in the way agricultural activity was organised in Scotland, including investment in new styles of farmhouses and agricultural buildings. The complex was designed and laid out to present a formal frontage to the military road (now the route of the A9),



comprising the understated symmetrical farmhouse (see Photograph 15.19), closely associated with the large-scale steading and associated horse gin (see Photograph 15.20).

Photograph 15.19: Westhaugh of Tulliemet Farmhouse (Asset 240) and Steading (Asset 238) viewed looking west from the A9



Photograph 15.20: Westhaugh of Tulliemet Steading horse gin



The farmstead today is viewed against a backdrop of wooded hills and contemporary rectilinear fields which have suffered minimal boundary loss. While this setting contributes to the understanding of these assets as a historic farmstead, its value rests principally in its historic fabric, in particular the horse gin linked to the steading. The current A9 forms a prominent element in the building's setting when viewed from the principal east-facing elevation of the farmhouse, with the views looking southwest from the farmhouse overlook the Highland Main Line railway towards the wooded slopes of Creag Maoiseach.



Taking into account their designation as Category C and B Listed Buildings, and as good examples of the high status buildings of their period, Westhaugh of Tulliemet Farmhouse and Steading has been assessed to be of medium value.

Cuil-an-Duin (Asset 237, Figure 15.1d)

- Cuil-an-Duin (Asset 237) is a mansion in the Scots-Renaissance style dated to the 1920s (see Photograph 15.21). The house was sited to enjoy the surrounding landscape of Strath Tay, evidenced in its location on a hillslope high above the river, and its orientation to capitalise on views up and down the valley. The house is set within mature wooded grounds, with ornamental gardens surrounding the house. The principal elevation looks to the south-south-west, with a retaining wall used to create a lawned area in front of the house which would have enjoyed long views down the Tay valley, now screened by mature trees. Views to the west are also formally treated with an area of terraced grass creating a small ampitheatre leading to a centrally-placed gate which frames views westwards from the house, and provides access to the grounds beyond. The grounds reflect contemporary trends in gardening in the creation of a woodland garden and rhododendron garden, and continue to form an integral part of the asset's value today.
- Taking into account its designated as a Category B Listed Building, and as good example of Scots-Renaissance style architecture of the early 20th century, the building has been assessed to be of medium value.
- 15.3.80 Cuil-an-Duin Retaining Wall (Asset 782, Figure 15.1d) is located close to Cuil-an-Duin, and is a section of retaining wall approximately 100m long with a single 10m x 4m deep rectilinear recess that may have been used in the past to store road maintenance materials or act as a passing place. Given this asset's possible associations with early post-medieval road systems it has been assessed to be of low value.





Logierait Parish Church (Asset 757, Figure 15.1e)

- Built in 1806, Logierait Parish Church, a Category B Listed Building (Asset 757), comprises a large simple rectangle, harled with margins, round arched windows with keystones, angle urns, and a bell-cote. A vestry and porch was added in 1929. The church today retains a clear relationship with its churchyard, within the settlement of Logierait. The church's riverside location and views from the churchyard to the south-west towards Creag Maoiseach emphasise the rural character of the its location.
- 15.3.82 Taking its designation into account, the building has been assessed to be of medium value.

DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



Former Tullymet Baptist Chapel (Asset 766, Figure 15.1e)

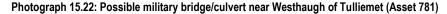
- This former chapel (Asset 766) is a Category C Listed Building. It was built in 1847, and is a single-storey, four-bay rectangular building, with a single storey lean-to entrance at its south-east corner. The setting has remained largely unchanged since the chapel was constructed, being located in a secluded and rural setting located next to the former manse (not listed), which is of a later date.
- 15.3.84 Taking its designation into account, the building has been assessed to be of low value.

<u>Logierait Railway Viaduct Over River Tay (Asset 753, Figure 15.1e)</u>

- The Logierait Railway Viaduct (Asset 753) is a Category A Listed Building designed by Joseph Mitchell to carry the Aberfeldy branch of the Inverness and Perth Junction Railway across the River Tay, which opened on 09 September 1863. It is of lattice girder type on cast iron piers and measures 128m in overall length and 15m in height; it comprises two spans of 42m and another two of 13m.
- The bridge was renovated in 2001 and is in use as a community owned foot and vehicle bridge. There are good views to the east and west along Strath Tay, although views to the north and south are restricted by topography. There are long distance views to the existing A9 largly screened by mature trees. The assets immediate setting comprises the River Tay and the village of Logierait that contributes to the assets heritage value. The wider setting is rural in nature.
- 15.3.87 Taking its designation into account, the bridge has been assessed to be of high value.

Other Historic Buildings

Located immediately to the east of Westhaugh of Tulliemet, within the heavily vegetated roadside verge, are the remains of a possible military bridge or culvert (Asset 781) (see Photographs 15.22 and 15.23). The structure if not recorded on the HER. It comprises a single span arch of coursed rubble construction approximately 8m in length and 1.5m in height. This asset is considered likely to be a component of the Dunkeld to Inverness Military Road (Asset 248). The heritage value of this asset is derived from its historic fabric and its possible association with General Wade's Miliary Road, and has been assessed to be of low value.







Photograph 15.23: Detail of the span of the Possible military bridge/culvert near Westhaugh of Tulliemet



Other historic buildings within the study area include Ledpettie Wade Bridge (Asset 194, Figure 15.1b), a Category B Listed Building comprising an early 19th century single arch bridge incorporating masonry of an earlier 18th century Wade era military bridge; Farnyhaugh, Military Bridge (Asset 189, Figure 15.1e); and Dowally Bridge (Asset 212, Figure 15.1c; Photograph 15.22), which was reported as being a military bridge, but as it dates to 1810 and was built when the road was realigned this has been discounted.

Taking into account its designation and preservation of fabric dating from the 18th century structure, Ledpettie Wade Bridge (Asset 194) has been assessed to be of medium value, Taking into account its association with Farnyhaugh Military Bridge (Asset 189) has also been assessed to be of medium value, while, as a later bridge with no known historic associations, Dowally Bridge (Asset 212) has been assessed to be of low value.

Photograph 15.24: Dowally Bridge (Asset 212) with traffic movement on the existing A9 visible in the background



15.3.91 Commercial and public buildings within the study area comprise the Category C Listed Buildings Logierait Hotel (Asset 754, Figure 15.1e), which dates to 1835, and Logierait Poorhouse, Including Gatepiers and Boundary Walls (Asset 762, Figure 15.1e) attributed to James Campbell Walker who was a specialist in the design of poorhouses. Taking into account their designations, and for Logierait Poorhouse's association with a known specialist architect, these cultural heritage assets have been assessed to be of low value.

DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



Historic Landscapes

- The 17th to 19th Century Rectilinear Fields and Farms Historic Landscape Type (HLT) (HLT1, Figure 15.2) reflects the reorganisation of agricultural land during the Improvement Era that resulted in the development of the pattern of straight-sided field boundaries that survive today. As a common landscape type, but reflecting its historic interest relating to the impacts of the Improvement Era on the agricultural landscape of Perthshire, this HLT has been assessed to be of low value.
- Areas of Managed Woodland HLT (HLT2, Figure 15.2) comprises largely deciduous woodland that was once intensively managed for the long-term production of timber to supply rural crafts and industries. While HLT2 provides evidence for earlier woodland management, given its lack of rarity it has been assessed to be of low value. The majority of 19th Century to Present Coniferous Plantation HLT (HLT3, Figure 15.2) has relatively modern origins as part of commercial forestry operations. Taking into account its frequency within the region, and reflecting the limited historical significance of this form forestry management, HLT3 has been assessed to be of negligible value.
- An additional four further historic landscape types have been identified within the baseline. These comprise 19th Century to Present Urban Area (HLT4, Figure 15.2) which covers the settlements of Dowally, Guay and Kindallachan, Transport (HLT15, Figure 15.2), Freshwater Area (HLT17, Figure 15.2) and Uncultivated Land, Flood Margin (HLT24, Figure 15.2) which is characterised by its location at the margins of cultivated land and rivers. These HLTs are not rare and as such have been assessed to be of negligible value.
- Further detailed discussion of the value of Historic Landscape Types is provided in Section 15.9 of Appendix A15.1 (Cultural Heritage Baseline Information).

15.4 Potential Impacts

- The design of the proposed scheme has been developed through an iterative design process involving engineering, landscape and cultural heritage specialists, in order to avoid or reduce potential impacts on cultural heritage assets. Further information is provided in Chapter 4 (Iterative Design Development). This section takes into account the embedded and standard mitigation presented in Section 15.5, and describes the potential impacts that would be expected to occur in the absence of specific mitigation.
- Potential significant impacts (i.e. of Moderate or higher significance) on cultural heritage assets are discussed in full below. Appendix A15.4 (Cultural Heritage Impact, Mitigation and Residual Impact Tables) presents a detailed assessment of all potential significant and non-significant impacts, mitigation measures where applicable, and residual impacts on cultural heritage assets. Unless otherwise stated, all impacts described below are adverse.
- 15.4.3 Close consultation has been maintained with other environmental teams during the development of the landscape and ecological mitigation plans to ensure that any potential impacts on cultural heritage assets, both physical and on setting, have been considered and integrated into mitigation plans, shown on Figure 13.5 and described in Chapter 13 (Landscape).

Construction

Archaeological Remains

Kindallachan Cairn (Asset 221, Figure 15.1c)

15.4.4 Consultation was undertaken with Historic Environment Scotland in relation to these potential impacts on 17 April 2017 (see paragraph 15.2.7) and 11 June 2018 (see paragraph 15.2.10). The proposed scheme design in the vicinity of Kindallachan Cairn involves the widening of the existing A9 on embankment to the east of the existing southbound carriageway due to the close proximity of the Highland Main Line railway to the west, and the construction of a new junction to allow access to Kindallachan from the A9. Between ch5930 and ch5970 the new embankment would remove a large portion (613m²) of the scheduled area (693m²) as defined by HES (Figure 14.13). Construction is expected to remove all above ground remains of the cairn, and any buried archaeological remains

A9 Dualling Programme: Tay Crossing to Ballinluig DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



associated with it, including the possible prehistoric kerb that was identified by geophysical survey (Appendix A15.3). Scheduled Monument Consent would be required for these works.

- As described in Annex B of Appendix 15.4 (Cultural Heritage Impacts, Mitigation and Residual Impact Tables) and in Chapter 3 (Alternatives Considered), offline design alternatives were considered at this location which would have avoided disturbance to the cairn. However, these would have posed environmental impact issues relating to community and private assets, ecology and nature conservation, as well as cultural heritage. As impacts could not be avoided, design development at DMRB Stage 3 sought to reduce potential impacts. As explained in Chapter 4 (Iterative Design Development) at paragraphs 4.3.39 to 4.3.41, DMRB Stage design development was cognisant of the potential impacts on the scheduled area and the proposed scheme design includes narrowed verge and central reserve that sought to reduce potential impacts on the cairn. However, even with these design refinements it is likely that the entire scheduled area will be lost to the proposed scheme.
- In addition to the loss of the cairn itself, there would be potential impacts on the wider prehistoric ritual landscape of Strath Tay. The cairn is part of the setting of Kindallachan Standing Stone (Asset 225), and while the cairn cannot be seen from the standing stone due to intervening woodland at Croft Croy, it is likely that the monuments would have been intervisible in the past. In addition, the cairn is contemporary with a number of other burial cairns of likely Bronze Age date such as the examples at Dunfallandy and Sithean as discussed in 15.3.14. The removal of the cairn would therefore result in a reduction in the way the prehistoric ritual landscape of Strath Tay is experienced and understood.
- 15.4.7 The potential impact on this high value asset has been assessed as of major magnitude and **Large** significance.

Kindallachan Standing Stone (Asset 225, Figure 15.1c, Annex A of Appendix A15.4)

- 15.4.8 Consultation was undertaken with Historic Environment Scotland in relation to these potential impacts on 17 April 2017 (see paragraph 15.2.7) and 11 June 2018 (see paragraph 15.2.10).
- As described in Annex B of Appendix 15.4 (Cultural Heritage Impacts, Mitigation and Residual Impact Tables) and in Chapter 3 (Alternatives Considered), offline design alternatives were considered at this location which would have avoided disturbance to the standing stone. The widening of the A9 carriageway on an embankment between ch6100 and ch6200 requires the moving of the southbound carriageway of the A9 approximately 15m closer to the standing stone; and the construction of a road cutting and retaining wall immediately adjacent to it. To reduce potential impacts on the standing stone, the DMRB Stage 3 design development incorporated relaxation from standards for horizontal curvature and stopping site distance, and a small in-situ or precast concrete retaining wall at the edge of the new southbound carriageway, which has been designed to prevent the encroachment of the road towards the standing stone. This is explained further in Chapter 4 (Iterative Design Development) at paragraph 4.3.41 and a sketch of the structure is provided in Annex A of Appendix A15.4).
- While the standing stone itself would not be removed by construction (an exclusion zone will be incorporated around the stone and this area of land will not be made available to the contractor), a portion (2m²) of the scheduled area (79m²), as defined by HES will be removed. It is expected that removal of this segment of land would result in the removal of any buried archaeological remains associated with the standing stone. In addition, construction activities would introduce a source of temporary visual intrusion into the setting of the standing stone; and there is the potential for accidental damage to be caused to the standing stone during the construction. Scheduled Monument Consent would be required for these works.
- The potential impact on this high value asset has been assessed as of moderate magnitude and **Moderate** significance.

Westhaugh of Tulliemet Cross Slab (Asset 235, Figure 15.1d)

15.4.12 Construction activities associated with the widening of the carriageway between ch7000 and ch7550 and the construction of a soil nailed slope with a structural face, between ch7350 and ch7550, would introduce a source of temporary visual intrusion into the setting of Westhaugh of Tulliemet, cross slab

DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



180m SE of (Asset 235, Figure 15.1d; a Scheduled Monument). While the footprint of the proposed scheme would not impact on the asset, given the proximity of it to the proposed scheme there is the possibility of accidental damage to it as a result of construction activities. Scheduled Monument Consent may be required for these works.

The potential impact on this high value asset has been assessed as of moderate magnitude and **Moderate** significance.

Dowally Possible Enclosure (Asset 213, Figure 15.1c)

The construction of the Dowally Farm Access Road and Swale D2 between ch4410 and ch4500 would result in the removal of any surviving archaeological remains associated with Dowally, Possible Enclosure (Asset 213) within the footprint of the proposed scheme. The potential impact on this medium value asset has been assessed as of major magnitude and **Large** significance.

Westhaugh of Tulliemet Curvilinear Features and Possible Field Boundaries (Asset 791, Figure 15.1d)

- The construction of the Inch Farm Access Roads 1 and 2, Westhaugh of Tulliemet Farm Access Track and Westhaugh of Tulliemet Access between ch7510 and ch7720, would result in the removal of any archaeological remains associated with West Haugh of Tulliemet Curvilinear Features and Possible Field Boundaries (Asset 791, Figure 15.1d). The potential impact on this low value asset has been assessed as of major magnitude and **Moderate** significance.
- 15.4.16 In addition to the impacts identified above, impacts during construction of Slight significance are predicted on a further 16 archaeological remains. These are presented in Appendix A15.4 (Cultural Heritage Impact, Mitigation and Residual Impact Tables).
- 15.4.17 Construction of the proposed scheme also has the potential to remove unknown (buried) archaeological remains.

Historic Buildings

Guay Farmhouse (Asset 216, Figure 15.1c)

- 15.4.18 Consultation was undertaken with HES in relation to potential impacts on Guay Farmhouse on 23rd August 2017 (see paragraph 15.2.7). Consultation was undertaken with PKC in relation to potential impacts on 18th January 2017, 27th March 2017, 15th September 2017 and 8th March 2018 (see paragraph 15.2.8).
- The construction of the dualled A9 on an embankment between ch5230 and ch5290, and the construction of the Dowally to Kindallachan Side Road, would require the removal of a large portion of the current farmyard that is currently used for car parking, and the southern gable end of the Wing of Guay Farmhouse (a Category B Listed Building). Listed Building Consent would be required for these works.
- During the development of the DMRB Stage 3 design, the alignment of the Dowally to Kindallachan Side Road was amended from that identified at DMRB Stage 2 to a design that would require the alteration of the Wing of Guay Farmhouse. This was prompted by stakeholder consultation and assessment of the revised alignment identified that the disbenefits associated with the alteration of the Wing of Guay Farmhouse were outweighed by the benefits associated with reduced impacts on other residential property, land-take, severance, constructability, landscape character and on numerous visual receptors, and on numerous undesignated cultural heritage assets.
- Further details of the alignment of the proposed scheme, and detail relating to the refinement of the alignment of the Dowally to Kindallachan Side Road in the vicinity of Guay Farmhouse are provided in Chapter 4 (Iterative Design Development), paragraphs 4.3.42 to 4.3.48.
- In addition, construction activities associated with the widening of the carriageway between ch5200 and ch5500 and Dowally to Kindallachan Side Road between ch5150 and ch5350 and Guay Retaining Wall between ch5260 and ch5320 would introduce a temporary source of noise (Chapter 17: Noise

DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



and Vibration, paragraphs 17.4.4 - 17.4.8) and interrupt clear views of the River Tay floodplain and the hills to the west resulting in visual intrusion in the setting of the asset. In the absence of mitigation there is also the potential for accidental damage to occur to the farmhouse as a result of construction activities.

The potential impact on this medium value asset has been assessed as of moderate magnitude and **Moderate** significance.

Dowally Bridge (Asset 212, Figure 15.1c)

Widening of the carriageway, and construction of the Dowally Burn Culvert and the Dowally - Kindallachan Side Road between ch4250 and ch4270 would result in the removal of Dowally Bridge. The potential impact on this low value asset has been assessed as of major magnitude and **Moderate** significance.

Westhaugh of Tulliemet Possible Military Bridge (Asset 781, Figure 15.1d)

15.4.25 Widening of the carriageway at ch7700 would result in the removal of Westhaugh of Tulliemet Possible Military Bridge. The potential impact on this low value asset has been assessed as of major magnitude and **Moderate** significance.

Cuil-an-Duin Retaining Wall (Asset 782, Figure 15.1d)

- 15.4.26 Construction of the Cuil-an-Duin Access Road between ch7980 and ch8080 would result in the removal of Cuil-an-Duin Retaining Wall. The potential impact on this low value asset has been assessed as of major magnitude and **Moderate** significance.
- Impacts during construction of Slight and Neutral significance are predicted on the setting of a further ten historic buildings. These are presented in Appendix A15.4 (Cultural Heritage Impact, Mitigation and Residual Impact Tables).

Historic Landscapes

- No significant impacts are predicted on historic landscape types as a result of the construction of the proposed scheme.
- Potential impacts during construction of Neutral significance are predicted on five historic landscape types. These are presented in Appendix A15.4 (Cultural Heritage Impact, Mitigation and Residual Impact Tables).

Operation

Archaeological Remains

Kindallachan Standing Stone (Asset 221, Figure 15.1c)

- During operation, the southbound carriageway of the A9 would be located approximately 5m to the west of the standing stone. Whilst this would introduce increased visual impacts associated with the movement of traffic, it is recognised that traffic movement already forms part of the standing stones' setting. The presence of new elements of highways infrastructure, in particular the concrete retaining wall and associated embankment, would result in the alteration of the monument's immediate landscape setting; a photomontage that illustrates how the proposed scheme would appear in relation to the standing stone is provided as Figure 15.4a and Figure 15.4b.
- The removal of Kindallachan Cairn (Asset 221) as outlined in 15.4.4 would affect the ability to appreciate the standing stone as part of the wider ritual prehistoric landscape of Strath Tay. As the standing stone was likely contemporary with the cairn, and would have been intervisible with it, its removal would reduce the ability to appreciate the visual and ritual relationship between these two monuments, and also their spatial and temporal link to the other Bronze Age ritual monuments of

A9 Dualling Programme: Tay Crossing to Ballinluig DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



Strath Tay. The magnitude of this potential impact on this high value asset has been assessed to be moderate and the significance of impact **Moderate**.

Westhaugh of Tulliemet cross slab (Asset 235, Figure 15.1d)

A potential impact during operation of Slight significance is predicted on the setting of Westhaugh of Tulliemet, cross slab 180m SE of. This is presented in Appendix A15.4 (Cultural Heritage Impact, Mitigation and Residual Impact Tables).

Historic Buildings

Guay Farmhouse (Asset 216, Figure 15.1c)

- 15.4.33 Although the Wing of the farmhouse will be reduced in size, the ability to appreciate and understand the historical roadside context and traditional methods and materials of construction that give this building its aesthetic quality will be retained. During operation of the proposed scheme, the Dowally to Kindallachan Side Road would be located almost immediately adjacent to the farmhouse, introducing new elements of highways infrastructure into the building's setting and restricting the views from the asset to the south-west over the River Tay floodplain that the building currently enjoys. In addition, the moving of the road closer to the building and the associated removal of a large area of garden ground and loss of amenity, could affect its ability to function as a dwelling and therefore affect its future viability.
- 15.4.34 The magnitude of these potential impacts on this medium value asset have been assessed to be moderate magnitude and the significance of impact **Moderate**.
- Potential impacts during operation of Slight and Neutral significance are predicted on the setting of a further eight historic buildings. These are presented in Appendix A15.4 (Cultural Heritage Impact, Mitigation and Residual Impact Tables).

Historic Landscapes

- No significant impacts are predicted on historic landscape types as a result of the operation of the proposed scheme.
- Potential impacts during operation of Neutral significance are predicted on five historic landscape types. These are presented in Appendix A15.4 (Cultural Heritage Impact, Mitigation and Residual Impact Tables).

Summary of Potential Significant Impacts

Table 15.5 summarises potential significant impacts on archaeological remains, historic buildings and historic landscapes associated with the construction and operation of the proposed scheme.

Table 15.5: Summary of potential significant impacts during construction and operation on archaeological remains, historic buildings and historic landscapes

Asset Number/Name	Description of Potential Impact					
Archaeological Remains: Construction						
Asset 221: Kindallachan Cairn	The construction of the southbound carriageway and associated earthworks between ch5930 and ch5970 would result in the removal of the scheduled area as defined by HES, the mound forming the cairn and any associated archaeological remains. Scheduled Monument Consent will be required for these works.					
Asset 225: Kindallachan Standing Stone	The construction of the southbound carriageway and associated earthworks between ch6180 and ch6190 would result in the removal of a small part of the scheduled area as defined by HES. This would remove any associated archaeological remains within the footprint of the proposed scheme. While the standing stone itself would not be affected, there is also the possibility of accidental damage as a result of construction activities. In addition, the loss of the Kindallachan Cairn (Asset 221) would impact on the setting of the asset. Scheduled Monument Consent will be required for these works.					
Asset 235: Westhaugh of Tulliemet, cross slab 180m	The construction of the northbound carriageway between ch7000 and ch7550 would introduce a temporary source of visual intrusion into the setting of the cross slab. Given the proximity of					

DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



Asset Number/Name	Description of Potential Impact				
SE of	the asset to the proposed carriageway there is also the possibility of accidental damage to the cross slab as a result of construction activities. Scheduled Monument Consent may be required for these works.				
Asset 213: Dowally, Possible Enclosure	The construction of Dowally Farm Access Road and Swale D2 between ch4410 and ch4500 would result in the almost complete removal of any surviving archaeological remains.				
Asset 791: West Haugh of Tulliemet Curvilinear Features and Possible Field Boundaries	The construction of the Inch Farm Access Roads 1 and 2, Westhaugh of Tulliemet Farm Access Track and Westhaugh of Tulliemet Access would result in the almost complete removal of any surviving archaeological remains associated with the asset.				
Historic Buildings: Constr	ruction				
Asset 216: Guay Farmhouse	The construction of the southbound carriageway, the Dowally – Kindallachan Side Road, Guay Retaining Wall and associated earthworks between ch5230 and ch5290 would result in the partial removal of the wing of the farmhouse and the removal of a large portion of the farmyard. Further, during construction there will be temporary noise and visual impacts from the movement of plant and construction works. In addition, there is the possibility of accidental damage to the farmhouse as a result of construction activities. Listed Building Consent will be required for these works.				
Asset 781: Westhaugh of Tulliemet Possible Military Bridge	The construction of the southbound carriageway and Tulliemet Retaining Wall at ch7700 would result in the removal of the bridge.				
Asset 212: Dowally Bridge	The construction of the southbound carriageway, Dowally Burn Culvert and Dowally – Kindallachan Side Road between ch4250 and ch4270 would result in the removal of Dowally Bridge.				
Asset 782: Cuil-an-Duin Retaining Wall	Construction of the Cuil-an-Duin Access Road would result in the removal of the retaining wall.				
Archaeological Remains:	Operation				
Asset 225: Kindallachan Standing Stone	During operation the loss of relationship between Kindallachan Standing Stone and Kindallachan Cairn (Asset 221) would continue.				
Historic Buildings: Operat	ion				
Asset 216: Guay Farmhouse	The operation of the southbound carriageway and the introduction of the Dowally-Kindallachan Side Road and Guay Retaining Wall would introduce significant new elements of infrastructure into the asset's setting and restrict views to the south-west. There would be an impact on the long-term viability of the farmhouse due to the removal of a large area of garden ground, the proximity of the new road, and loss of amenity				
Historic Landscapes: Construction and Operation					
No significant impacts are prescheme.	redicted on historic landscapes as a result of the construction and operation of the proposed				

15.5 Mitigation

- This chapter makes reference to overarching standard measures applicable across A9 dualling projects ('SMC' mitigation item references), and also to project-specific measures ('P03' mitigation item references). Those that specifically relate to cultural heritage are assigned a 'CH' reference.
- Mitigation for potential significant and non-significant impacts on cultural heritage assets is described below. Further detail is presented in Appendix A15.4 (Cultural Heritage Impact, Mitigation and Residual Impact Tables).

Embedded Mitigation

- The design of the proposed scheme has sought to avoid impacts through DMRB Stage 3 design development taking into account the Strategic Environmental Design Principles Historic Environment as listed in Appendix A2.1 of this ES. Chapter 4 (Iterative Design Development), describes key design developments that have avoided or reduced potential impacts on the following cultural heritage assets:
 - reduced carriageway central reserve and verge widths to reduce the scheduled area that will be removed; and
 - design development of a retaining wall has avoided a physical impact on the fabric of Kindallachan Standing Stone (Asset 225) a Scheduled Monument, and reduced the scheduled area that will be removed.



Standard Mitigation

The Contractor will consult with the appointed Curator and Transport Scotland's historic environment advisor should any archaeological or cultural heritage finds or sites be discovered or revealed during construction to enable appropriate measures to be implemented to mitigate potential impacts (Mitigation Item SMC-CH1).

Specific Mitigation

Archaeological Remains

- Trial trenching targeted on both known archaeological remains and areas of archaeological potential, to inform the nature, scope and scale of mitigation required will be undertaken prior to construction (Mitigation Item P03-CH2).
- Following trial trenching (Mitigation Item P03-CH2), archaeological excavation (Mitigation Item P03-CH3) will be undertaken in advance of construction to make a permanent record of any affected archaeological remains at:
 - Dunkeld to Inverness Military Road, Ledpetty Lodge to Dowally (Site of) (Asset 193);
 - Dowally, Possible Enclosure (Asset 213);
 - Dunkeld to Inverness Military Road, Guay to Kindallachan (Site of) (Asset 219);
 - Haugh of Kilmorich, Township (Site of) (Asset 232);
 - Kilmorich/Guay, Possible Standing Stone (Site of) (Asset 233);
 - Cuil-An-Duin, Wade's Road Culvert (Asset 242);
 - Dunkeld to Inverness Military Road (Site of) (Asset 248);
 - Dowally Roadside Memorial (Asset 780);
 - Rotmell Farm, Curvilinear Features (Asset 783);
 - Dowally Farm, Field Boundaries (Asset 784);
 - Dowally Church, Field Boundary and Curvilinear Features (Asset 785);
 - Dowally Farm, Possible Enclosure and Pits (Asset 786);
 - Kilmorich, Possible Settlement (Asset 789);
 - Haugh Cottages, Rectilinear and Curvilinear Features (Asset 790); and
 - West Haugh of Tulliemet, Curvilinear Features and Possible Field Boundaries (Asset 791).
- To mitigate the construction impacts on Kindallachan cairn (Asset 221; a Scheduled Monument), a Level 3 archaeological earthwork record (Historic England, 2017) (Mitigation Item P03-CH4) will be produced prior to a set piece excavation (Mitigation Item P03-CH6) and dissemination of the results via a staged reporting process as required will be undertaken along with the deposition of an ordered archive at the National Record of the Historic Environment (NRHE) (Mitigation Item P03-CH16). This will be agreed in advance with HES, the appointed curator and Transport Scotland's historic environment advisor.
- To mitigate potential construction impacts on Kindallachan Standing Stone (Asset 225; a Scheduled Monument) a set piece excavation (Mitigation Item P03-CH6) and dissemination of the results via a staged reporting process as required, and the deposition of an ordered archive at the NRHE will also be undertaken (Mitigation Item P03-CH16). This would be agreed in advance with HES, the local authority and Transport Scotland's historic environment advisor, and will require Scheduled Monument Consent.
- To mitigate any potential for accidental damage to Kindallachan Standing Stone (Asset 225; a Scheduled Monument) during construction, the asset will be protected as required following discussion

DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



between HES and Transport Scotland's appointed contractor and will be clearly demarcated with protective fencing and appropriate signage. In addition, prior to works commencing a photographic survey of the standing stone and scheduled area will be undertaken and again on completion of the works to ensure that the condition of the scheduled area is returned to its previous state (**Mitigation Item P03-CH7**). These measures would be agreed in advance with HES and will require Scheduled Monument Consent

- To mitigate any potential for accidental damage to Westhaugh of Tulliemet, cross slab 180m SE of (Asset 235; a Scheduled Monument) during construction, the asset will be supported as required following discussion between HES and Transport Scotland's appointed contractor and will be clearly demarcated with protective fencing and appropriate signage. The proposed fenced area will be confirmed with HES prior to the erection of any protective fencing and will be located outwith the scheduled area. In addition, prior to works commencing a photographic survey of the standing stone and scheduled area will be undertaken and again on completion of the works to ensure that the condition of the scheduled area is returned to its previous state (Mitigation Item P03-CH7). These works may require Scheduled Monument Consent.
- In addition to the detailed excavation and archaeological recording during construction outlined above, further archaeological mitigation may be required for previously unknown archaeological remains that may be identified during trial trenching (**Mitigation Item P03-CH2**). Archaeological mitigation to make a permanent record of any affected previously unknown archaeological remains can include:
 - archaeological excavation (Mitigation Item P03-CH3);
 - archaeological recording during construction (watching brief) (Mitigation Item P03-CH5); and
 - strip, map and sample (Mitigation Item P03-CH8).

Historic Buildings

Guay Farmhouse (Asset 216)

- The alignment and design of the proposed scheme was particularly constrained in the vicinity of Guay Farmhouse, giving very limited alignment options for both the A9 mainline and the side road linking Dowally with Kindallachan. Early iterations of the DMRB Stage 3 design included the side road passing between The Knoll and Guay Farmhouse (including Cattle Shed and Dutch Barn). This alignment necessitated the demolition of the Dutch Barn, land-take from The Knoll, and extensive construction works to provide a 7m high retaining wall to the rear of Guay Farmhouse. The alignment also effectively isolated Guay Farmhouse with roads infrastructure in close proximity to both the front and rear of the building. A number of retaining wall construction options were identified as part of the design development process, including a cantilever contiguous piled wall, an 'L' shaped cast in-situ retaining wall, a modular retaining structure, a concrete crib wall, cut and cover box, and soil mixing/soil nailing. However, the various construction options all had the potential to cause structural damage to Guay Farmhouse.
- 15.5.13 Following consultation and a review of the side road alignment, an alternative side road option was developed and has been incorporated into the DMRB Stage 3 proposed scheme design. The proposed alignment proceeds parallel to the mainline in a northerly direction from the U163 past Guay Farmhouse before connecting to the A9 mainline. The alignment limits roads infrastructure to one side of the farmhouse, has improved constructability, and lowered potential for construction impacts. However, it does encroach on the Wing of Guay Farmhouse and Guay Cattle Shed and will require alteration and demolition of these structures respectively. Further detail on the development of the side road alignment is provided in Chapter 3 (Alternatives Considered) and Chapter 4 (Iterative Design Development).
- A Level 2 building record (Historic England, 2016) will be undertaken of Guay Farmhouse prior to construction to record the asset in its current condition. A Level 2 record comprises a drawn record, a detailed measured plan, drawn elevations of areas to be removed/impacted by the alterations, and a photographic and written record (Mitigation Item P03-CH9).



To mitigate the removal of the southern gable end of Guay Farmhouse Wing (Asset 216, a Category B Listed Building) during construction, two phases of alterations are proposed. The first phase will be the alteration of the Wing, and the second phase will be the implementation of measures to protect the longevity of the Wing (**Mitigation Item P03-CH10**).

Table 15.6: Phase 1 – Proposed alterations to Guay Farmhouse (Wing)

Phase	Item	Proposed Works	Reason
1	1	Carefully take down external stair and steps to hayloft and set aside for reuse.	As much of the original building materials reclaimed during the demolition process to be reused elsewhere in the making good of the remaining farmhouse.
1	2	Carefully take down south gable wall and part return east and west elevations to approximate line shown on Photograph15.13 and set aside any reusable stone and slates. The removal will include the later potting shed and raised bed built against the south gable wall.	To ensure original building materials may be reused at a later date and to ensure that no damage is caused to the part of the building which is to be retained.
1	3	Construct foundation and rebuild new gable using reclaimed stone in rubble build style as shown in Photograph 15.13. This will be tied into west and east elevations. The ties will also be introduced along the line of the A-frame roof truss to provide lateral support to the head of the new wall. Guidance will be sought from Perth & Kinross Council's conservation officer on rubble build style.	The proposed alteration to be sympathetic to the existing built fabric, and respect local vernacular building methods and style. To secure the structural stability of the building.
1	4	Access doors to be retained into the new gable. All new construction to include three integrated bat boxes, two bat bricks and boarding.	To comply with agreed species protection procedures following consultation with SNH, and to ensure bat habitation can continue.

Table 15.7: Phase 2 – Protection of the longevity of Guay Farmhouse (Wing)

Phase	Item	Proposed Works	Reason			
2	5	Carry out repairs to the roof of the single-storey element on the west elevation of the Wing including: Roof repairs and slating as required; maintaining existing wooden lintel (if possible) or provision of a similar structure; and Replacement of window and re-boarding on inside	a) building.			
2	6	Takedown timber north gable that is in poor condition	To secure the structural stability of the building.			
2	7	Construct foundation and rebuild north gable using reclaimed stone in rubble build style. Ensure new gable wall is tied into west and east elevations.	To secure the structural stability of the building.			
2	8	Re-build the wall behind corrugated sheeting in north gable-end of the Wing, and infill the void in the east wall with reclaimed stone in rubble-build style.	To secure the structural stability of the building.			
2	9	Allow for the re-pointing of all walls where required for structural integrity, internal and external.	To secure the structural stability of the building.			
2	10	Allow for the replacement of all remaining windows and doors.	To ensure the building is adequately weather-proof.			

The proposed alterations presented in Tables 15.6 and 15.7 are intended to achieve the structural survival of the farmhouse in a stable, safe and functional condition, and in a way that is compatible with current best conservation practice. The approach and methods of these works will require further refinement through consultation with PKC's conservation officer, and taking into account SNH input relating to bat species protection as detailed in Chapter 12 (Ecology and Nature Conservation). All works will require Listed Building Consent from PKC prior to any works commencing, and works would only commence after the appropriate consent has been granted.

DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



To mitigate any potential for accidental damage to Guay Farmhouse during construction, the asset will be protected as required following discussion between PKC and Transport Scotland's appointed contractor and will be clearly demarcated with protective fencing and appropriate signage (**Mitigation Item P03-CH11**).

To facilitate the long-term future of the farmhouse, a detailed strategy will be developed for the management of Guay Farmhouse through to its resale after construction of the proposed scheme: completing any necessary initial remedial works to allow Guay Farmhouse to be let as a residential property (such as internal and external maintenance and repair); letting the property through to the commencement of construction of the proposed scheme in the immediate vicinity of the property; maintaining the property through the construction works whilst empty; completing improvements as necessary and introducing planting and landscaping to ensure it remains an attractive and viable dwelling prior to its resale; and marketing the property for resale and completing its sale (**Mitigation Item P03-CH17**).

Westhaugh of Tulliemet Possible Military Bridge (Asset 781)

15.5.19 A Level 3 building record (Historic England, 2016) (**Mitigation Item P03-CH12**) will be undertaken of Westhaugh of Tulliemet Possible Military Bridge prior to construction to record the asset in its current condition. Level 3 provides an analytical record containing information obtained largely through an examination of the building itself and those documentary sources most readily accessible.

Dowally Bridge (Asset 212)

A Level 2 building record (Historic England, 2016) (**Mitigation Item P03-CH13**) will be undertaken of Dowally Bridge prior to construction to record the asset in its current condition. A Level 2 record makes a descriptive record comprising a drawn record, photographs and a written record.

Cuil-an-Duin Retaining Wall (Asset 782)

- An historic building photographic survey (Historic England, 2016) (**Mitigation Item P03-CH14**) will be undertaken of Cuil-an-Duin Retaining Wall prior to construction to make a photographic record of the asset in its current condition.
- To achieve adherence to good practice guidance, all cultural heritage mitigation, including that outlined in Appendix A15.4 (Cultural Heritage Impact, Mitigation and Residual Impact Tables) will be undertaken in accordance with relevant guidance provided by the Chartered Institute for Archaeologists, HES and Historic England, and a Written Scheme of Investigation (WSI) (Mitigation Item P03-CH15) that will be agreed with Perth & Kinross Heritage Trust and Transport Scotland's historic environment advisor. For archaeological excavations at Kindallachan Cairn and Kindallachan Standing Stone, the WSI will be agreed with HES as part of the SMC process.
- To achieve appropriate reporting and dissemination of the results, all cultural heritage mitigation will include a programme of assessment, reporting, analysis, publication and dissemination of results commensurate with the value of the archaeological remains and historic buildings affected. This will include the preparation of reports which will be submitted to the Perth & Kinross Historic Environment Record and the NRHE, along with ordered archives which will be submitted to an appropriate repository (Mitigation Item P03-CH16).

15.6 Residual Impacts

Residual impacts are those that remain once the proposed mitigation measures have been implemented. Residual impacts of **Moderate** and above are considered to be significant and are described below. Non-significant impacts are not discussed here but are presented in Appendix A15.4 (Cultural Heritage Impact, Mitigation and Residual Impact Tables).

Archaeological Remains

15.6.2 The construction of the proposed scheme would result in the removal of Kindallachan Cairn (Asset 221), a Scheduled Monument. While the proposed mitigation will make a permanent record of the

DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



cairn, it would not mitigate its loss, therefore the significance of the residual impacts on the cairn have been assessed to remain as **Large**.

- The operation of the proposed scheme would result in the loss of the spatial link between the Kindallachan Cairn (Asset 221) that would be removed, and Kindallachan Standing Stone (Asset 225). This would reduce our capacity to understand the visual relationship between these two monuments, therefore the significance of the residual impacts on the standing stone have been assessed to be **Moderate**.
- 15.6.4 Table 15.8 presents significant residual impacts on archaeological remains.

Table 15.8: Significant residual impacts on archaeological remains

Asset	Designation	Value	Potential Impact		Mitigation	Residual Impact		
			Magnitude	Significance	Item	Magnitude	Significance	
Construction								
221: Kindallachan Cairn	Scheduled Monument	High	Major	Large	P03-CH4 P03-CH6	Major	Large	
Operation	Operation							
225: Kindallachan Standing Stone	Scheduled Monument	High	Moderate	Moderate	P03-CH2 P03-CH6 P03-CH7	Moderate	Moderate	

- 15.6.5 Residual impacts of Slight and Neutral significance on 19 archaeological remains are predicted during construction; see Appendix A15.4 for more information on these impacts.
- 15.6.6 A residual impact of Slight significance on the setting of Westhaugh of Tulliemet, cross slab 180m SE of (Asset 235, Scheduled Monument) is predicted during operation; see Appendix A15.4 for more information on this impact.

Historic Buildings

- The construction of the proposed scheme would result in the demolition of the gable end of the wing of Guay Farmhouse (Asset 216, a Category B Listed Building) and removal of a large portion of the farmyard. While the Level 2 building record will make a permanent record of the building in its existing state, it would not mitigate the loss of part of the Listed Building, and therefore the significance of the residual impact on Guay Farmhouse has been assessed to remain as **Moderate**.
- 15.6.8 Residual impacts of Slight and Neutral significance on the setting of 13 historic buildings are predicted during construction; see Appendix A15.4 for more information on these impacts.
- During operation the proposed scheme would be located on embankment adjacent to the south-facing gable end of the wing of Guay Farmhouse (Asset 216), a Category B Listed Building, introducing elements of road infrastructure into the farmhouse setting and restricting views from the asset to the south-west, therefore the significance of residual impact has been assessed as **Moderate**.
- Residual impacts of Slight and Neutral significance on the setting of eight historic buildings during operation are predicted; see Appendix A15.4 for more information on these impacts.
- 15.6.11 Table 15.9 presents significant residual impacts on historic buildings.

DMRB Stage 3 Environmental Statement

Chapter 15: Cultural Heritage



Table 15.9: Significant residual impacts on historic buildings

Asset	Designation	Value	Potential Impact		Mitigation	Residual Impact	
			Magnitude	Significance	Item	Magnitude	Significance
Construction							
216: Guay Farmhouse	Category B Listed Building	Medium	Moderate	Moderate	P03-CH9 P03-CH10 P03-CH11 P03-CH16 P03-CH17	Moderate	Moderate
Operation							
216: Guay Farmhouse	Category B Listed Building	Medium	Moderate	Moderate	P03-CH17	Moderate	Moderate

Historic Landscape

- 15.6.12 No significant residual impacts on historic landscape types are predicted to result from the construction and operation of the proposed scheme.
- Residual impacts of Neutral significance during construction and operation have been assessed for five historic landscape types. Details of these are provided in Appendix A15.4 (Cultural Heritage Impact, Mitigation and Residual Impact Tables).

15.7 Statement of Significance

- 15.7.1 With proposed mitigation, the overall impact on the cultural heritage resource comprising archaeological remains has been assessed to be of **Large** significance.
- 15.7.2 With proposed mitigation, the overall impact on the cultural heritage resource comprising historic buildings has been assessed to be of **Moderate** significance.
- 15.7.3 The overall impact on the cultural heritage resource comprising historic landscapes has been assessed to be Neutral.

15.8 References

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