

5.0 CULTURAL HERITAGE

5.1 INTRODUCTION

5.1.1 This section is an assessment of the cultural heritage features surrounding the A737 The Den, Dalry scheme. The assessment identifies the archaeological remains, historic buildings and historic landscape surrounding the scheme. The aim is to assess the potential impacts the realignment may have on cultural heritage features and to determine whether any further study is required.

5.1.2 Within the Design Manual for Roads and Bridges (DMRB) Volume 11 Section 3 Part 2 HA208/07 and for the purpose of this assessment, cultural heritage features are sub-divided into three topics: Historic Landscape, Historic Buildings, and Archaeological Remains.

- Historic Landscapes – are identified by perceptions that emphasise the evidence of past human activities in the present landscape. As most of the world has been subject to and modified by human activities, all landscapes are considered to be historic. However not all landscapes have the same historical significance.
- Historic Buildings – are the standing historical structures that are usually formally designated or have some architectural presence. These comprise a wide range of buildings and structures; include dwellings, defences, industrial buildings, places of worship, and individual items ranging from tombs and railings to paving and milestones.
- Archaeological Remains – are the material remains of human activity from the earliest periods of human evolution to the present, e.g. buried traces, visible monuments, moveable artefacts, material remains of walls, structures and field banks.

5.1.3 Cultural heritage is not neatly divided into these sub-topics and there can be overlap. However as stated in the DMRB, cultural heritage features should be included in only one sub-topic and not be double counted.

Consultation

5.1.4 Historic Scotland (HS), who were consulted previously between 2004 and 2009, advised that the realignment is unlikely to have any significant impact on the historic environment. Although records indicate that there are no sites within the immediate vicinity, the possibility of a new finding cannot be ruled out. Therefore there may be a requirement for some limited evaluation of the area of new land take and a standard archaeological sampling exercise may be required.

5.1.5 Further consultation with HS and West of Scotland Archaeological Service (WoSAS) was sought by Amey in September and November 2011. Details can be found in Chapter 3.

5.2 METHODOLOGY

5.2.1 The road realignment at The Den has the potential to adversely impact local historic environment sites. To ascertain the location of local sites of historic



environment importance within 300m, the following records were checked using Pastmap¹ and West of Scotland Archaeological Service (WoSAS)²:

- Records of Listed Buildings;
- Records of Scheduled Ancient Monuments;
- The National Monuments Record of Scotland;
- Scottish Sites and Monuments Record; and
- Gardens and Designed Landscapes.

Determination of Impact Significance

5.2.2 Impact significance is determined by assessing the sensitivity of the cultural heritage features with consideration of the magnitude of impact from the realignment scheme. Once the sensitivity and magnitude are established, Table 2.4 is used to determine the impact significance.

5.2.3 The sensitivity of all known potential assets that may be affected by the scheme is ranked on a scale from: very high to negligible. Cultural heritage assets are evaluated in relation to their statutory designations, and priorities or recommendations published in national, regional and local research agendas, priorities or frameworks. Professional opinion may also be used to assess the importance of a site where an asset has not been identified previously. The evaluation criterion for each sub topic has been set out in accordance with DMRB Volume 11, Section 3, Part 2 HA208/07 for Tables 5.1, 5.3 and 5.5.

Historic Landscape

Table 5.1: Criteria for Assessing Historic Landscape Sensitivity

Sensitivity	Typical Criteria Descriptors
Very High	World Heritage sites designated for historic landscape qualities; Historic Landscapes for international value; or Extremely well preserved historic landscapes with exceptional coherence, time-depth, or other critical factor(s).
High	Designated historic landscapes of outstanding interest Undesignated landscapes of outstanding interest or high quality and importance or national value. Extremely well preserved historic landscapes with exceptional coherence, time-depth, or other critical factors.
Medium	Designated special historic landscapes Undesignated historical 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 special 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.

¹ PASTMAP, Available from: <http://jura.rcahms.gov.uk/PASTMAP/Map> [Accessed 25/08/2011]

² WoSAS, Sites and Monuments Record. Available from: <http://gis.south-ayrshire.gov.uk/mapsWosas/mapSMR.htm> [Accessed 31/08/2011]



Table 5.2: Criteria for Assessing Magnitude of Impact on Historic Landscape

Impact Magnitude	Typical Criteria Descriptors
Major	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.
Moderate	Changes to many 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.
Minor	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.
Negligible	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.
No Change	No change to elements, parcels or components; no visual or audible changes; no changes arising from an amenity of community factors.

Historic Buildings

Table 5.3: Criteria for Assessing Sensitivity of Historic Buildings

Sensitivity	Typical Criteria Descriptors
Very High	Structures described as of universal importance as World Heritage Sites; or other buildings of recognised international importance.
High	Scheduled Ancient Monuments with standing remains; Category A Listed Buildings; Conservation Areas containing very important buildings; or Undesignated Structures of clear national importance
Medium	Category B Listed Buildings; Conservation Areas containing buildings that contribute significantly to its historic character; or 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; or Historic Townscape or built- up areas of limited historic integrity in their buildings, or built settings (e.g. including street furniture and other structures).
Negligible	Buildings of no architectural or historic note; buildings of an intrusive character.

Table 5.4: Criteria for Assessing Magnitude of Impact on Historic Buildings

Impact Magnitude	Typical Criteria Descriptors
Major	Change to key Historic Building elements, such that the resource is totally altered; or comprehensive changes to the setting.
Moderate	Change to many key historic building elements, such that the resource is significantly modified; or Changes to the setting of an historic building, such that it is significantly modified.
Minor	Change to key historic building elements, such that the asset is slightly different; or Change to setting of an historic building, such that it is noticeably changed.
Negligible	Slight changes to historic buildings elements or setting that hardly affect it.
No Change	No change to fabric or setting.

Archaeological Remains

Table 5.5: Criteria for Assessing Archaeological Remains Sensitivity

Sensitivity	Typical Criteria Descriptors
Very High	World Heritage Sites (including nominated sites) or other sites of acknowledged international importance.
High	Scheduled Ancient Monuments (including proposed sites).
Medium	Designated or undesignated assets that contribute to regional research objectives.
Low	Designated or undesignated assets that contribute to low research objectives
Negligible	Site is a non-statutory archaeological site with no surviving remains.

Table 5.6: Criteria for Assessing Magnitude of Impact on Archaeological Remains

Impact Magnitude	Typical Criteria Descriptors
Major	Change to most or all key archaeological materials, such that resource is totally altered.
Moderate	Changes to many key archaeological elements, such that the resource is clearly modified.
Minor	Changes to some key archaeological elements such that the resource is slightly modified.
Negligible	Very minor changes to archaeological elements or setting.
No Change	No observable loss of archaeological elements or setting elements.

Planning Policy, Legislative Context and Standards

5.2.4

The following guidelines, legislation and planning policies provide the framework for the protection and conservation of cultural heritage interests within Scotland and more locally within North Ayrshire. The impacts of the scheme on plans and policies are considered in greater detail within Chapter 14: Plans and Policies.

Planning policy

- Scottish Planning Policy (2010): sections on Historic Environment, National Designations and Coastal Planning provide guidance on archaeology and the historic environment.
- Planning Advice Note (PAN) 2/2011: Planning and Archaeology.
- SHEP (Scottish Historic Environmental Policy) (July 2009) Section 5 Conservation and the Historic Environment by Government Bodies.

Legislative Context

- Ancient Monuments and Archaeological Areas Act 1979.
- Town and Country Planning Act (Scotland) 1997.
- Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997.
- Planning etc. (Scotland) Act 2006.

- 5.2.5 Some archaeological sites are afforded statutory protection as Scheduled Monuments (SMs), under the Ancient Monuments and Archaeological Areas Act 1979, and are by definition of national importance. Without the prior written consent of the Scottish Ministers, known as Scheduled Monument Consent (SMC), it is an offence to undertake any works which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering up or affecting the setting of a SM.
- 5.2.6 Under article 15 (1) of the Town and Country Planning (General Development Procedure) (Scotland) Order 1992 notification to Historic Scotland of any planning application affecting a SM is also required.
- 5.2.7 Buildings of special architectural or historic interest may be afforded statutory protection as Listed Buildings (Category A, B or C(S)) under the terms of the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997. Listed Building consent must be obtained where proposals would alter the fabric or character of the Listed Building. Some buildings of lesser interest may be protected under Local Plan policies.
- 5.2.8 The Town and Country Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 imposes a duty of local planning authorities to designate and protect the historic character and appearance of some areas through designation as Conservation Areas.
- 5.2.9 The Planning etc. (Scotland) Act 2006 sets out arrangements for the National Planning Framework which is a spatial plan for Scotland. Details are also given for preparation of development plans, development management and enforcement. The Act allows the planning system to be more efficient, improve community involvement, support the economy and grow in a sustainable way.

Standards and Guidance

- DMRB Volume 11, Section 3, Part 2: HA 208/07 August 2007 – Cultural Heritage.
- DMRB Volume 10, Section 6, Part 1: HA 75/01 Trunk Roads and Archaeological Mitigation.
- Historic Scotland – Managing Change in the Historic Environment (October 2010) Institute for Archaeologists, Standards and Guidance for Archaeological Desk-based Assessment, November 2011: Sets out a code of practice for undertaking archaeological desk-based assessments defining procedures which should be used, sources of data, collection methods, monitoring and other considerations.

5.3 BASELINE

5.3.1 The proposed scheme is located at The Den, approximately 3km east of Dalry. The area surrounding the scheme comprises mixed grazing fields, areas of woodland and several detached houses to the south (The Den area). A desk-top study has highlighted four sites of cultural heritage importance within 300m of the existing carriageway.

5.3.2 Table 5.7 outlines Cultural Heritage Features within 300m. The distance of these sites to the existing and proposed carriageway is detailed in Table 5.8 Cultural Heritage Sites: Distance to Scheme. A description of these sites is detailed below. The locations of these sites have been highlighted in Drawing No 10/SW/0901/037/201 Rev A – Environmental Air Quality Bands and Cultural Heritage Features.

Table 5.7 –Cultural Heritage Features within 300m

Site Number	Monument Category	Details	Monument Name/Number	National Grid Reference
1	Historic Building	Muirhouse Farm is described as a single storey building with attic which was built in 1821.	Listed Building 1249 Category C.	NS 32626 51231
			NMRS NS35SW.207	
			SSMR Ev768	
2	Historic Building	This building has been described as The Den/Kersland Barony, School.	SSMR 17686	NS 32537 51177
3	Historic Building	A sinuous stone drain running through "the middle of the holding of Maulside Lodge". It was described as being of an ancient and unusual stone slab build.	SSMR 48751	NS 32852 51528
4	Historic Building	This Historic Building is named Glengarnock, Maulside Lodge and is pending classification as a National Monument Record of Scotland.	NMRS NS35SW.200	NS 32987 51517
N/A	Historic Landscape Type	Dry Stone Wall	N/A	1) NS 32266 51161 2) NS 32712 51396 – NS 32951 51489



Table 5.8 – Cultural Heritage Sites: Distance to Scheme

Site Number	Distance from Existing Carriageway (Approximate)	Distance from Proposed Alignment (Approximate)
1	20m	105m
2	20m	110m
3	98m	98m
4	80m	80m

Historic Landscape

5.3.3 There are two sections of dry wall located within the scheme extents which have been categorised as Historic Landscape. The sensitivity is assessed as low due to the walls not being designated as an historic feature.

Historic Building

5.3.4 There are four sites located within 300m of the scheme which have been categorised as Historic Buildings. Sites 1 and 2 are located within The Den and therefore are in close proximity to other properties and the existing A737 carriageway. Site 3 is located within an open field between 29 The Den and Maulside Lodge. Site 4 is located out with the eastern scheme extent within a rural setting. Site 1 is Muirhouse Farm which has been designated as a listed building (Category C). In accordance with Table 5.3, the sensitivity of these four sites is assessed as low.

Archaeological Remains

5.3.5 According to WoSAS, historic maps show clear evidence of extractive industries and associated domestic accommodation during the 18th and 19th centuries. Some of these features appear to lie directly on the route of the proposed realignment and are therefore likely to be affected by the construction.

5.3.6 There is potential for unrecorded archaeological remains to be buried in the land surrounding the existing road. The importance of unknown features cannot be ascertained, but archaeological remains are likely to have local importance. The overall sensitivity of unknown archaeological features has been assessed as low in accordance with Table 5.5, as no designated sites have been identified in proximity to the proposed alignment.



5.4 IMPACT ASSESSMENT

During Construction

Historic Landscape

- 5.4.1 The sections of dry stone wall adjacent to Fernside and between Auchengree Road and Maulside Lodge will be lost during construction. In accordance with Table 5.2 the impact magnitude is determined to be minor. The impact significance is therefore determined to be slight in accordance with Table 2.4.

Historic Building

- 5.4.2 The A737 carriageway will move further away from sites 1 and 2, and slightly closer to site 3. Site 4 is located out with the eastern scheme extents and will therefore not be impacted by the realignment. During construction, the increased noise and dust is likely to cause a short term negative impact. Therefore due to the slight changes to historic building settings, the impact magnitude is assessed as minor in accordance with Table 5.4. The impact significance is therefore determined to be slight in accordance with Table 2.4.

Archaeological Remains

- 5.4.3 HS and WoSAS have identified that undiscovered archaeological remains may be uncovered during excavation works. In accordance with Table 5.6, the impact magnitude is assessed as minor as there is a possibility for very minor changes to archaeological elements or settings as a result of construction. In accordance with Table 2.4 the impact significance is determined to be slight.

Post Construction

- 5.4.4 In accordance with DMRB Volume 11, Section 3, Part 2, HA 208/07 Cultural Heritage, "Impacts on the cultural heritage resource, in this guidance, are defined as changes to the cultural heritage resource caused by the mitigated scheme."

Historic Landscape

- 5.4.5 As the scheme design incorporates replacement dry stone walls using stone from the original wall, the impact on the historic landscape will be minimal. In accordance with Table 5.2 the impact magnitude is assessed as negligible. The impact significance is determined to be slight.

Historic Building

- 5.4.6 The realignment will result in a minor beneficial impact on sites 1 and 2 as the reduced traffic flow will improve the local air quality and reduce dust, therefore changing the setting of the historic buildings. The carriageway will move slightly closer to site 3 however, this is assessed as negligible. Site 4 is located out with the eastern scheme extents. The impact magnitude is assessed as minor beneficial and the resulting impact significance is determined to be slight beneficial.

Archaeological Remains

- 5.4.7 It is considered that there will be no observable change on undiscovered remains during operation of the new alignment. In accordance with Table 5.6 the impact magnitude is assessed as no change. With reference to Table 2.4: Determination of Impact Significance, the significance of the impact will be neutral.
- 5.4.8 Table 5.9 below provides a summary of the impacts on cultural heritage features in the study area.

Table 5.9 Summary of Impacts on Cultural Heritage Features

Cultural Heritage Feature	Sensitivity	Impact Magnitude		Impact Significance	
		During Construction	Post Construction	During Construction	Post Construction
Historic landscape	Low	Minor	Negligible	Slight	Slight
Historic Buildings	Low	Minor	Minor Beneficial	Slight	Slight beneficial
Archaeological Remains	Low	Minor	No Change	Slight	Neutral

5.5 MITIGATION

During Construction

Historic Landscape

- 5.5.1 The scheme design incorporates replacement dry stone walls using stone from the original wall.

Historic Building

- 5.5.2 General mitigation measures implemented during construction to address issues with air quality and noise will also mitigate impacts on the setting of these features.

Archaeological Remains

- 5.5.3 Due to the potential for discovering archaeological remains, HS has recommended an archaeological watching brief is carried out during any excavation work as a precaution to prevent damage to unrecorded sites or finds of archaeological interest. An archaeological watching brief is a programme of observation and investigation to record archaeological remains (where present) during ground works within a specified area.
- 5.5.4 North Ayrshire Council County Archaeologist and WoSAS will be made aware of the watching brief requirement by the contractor. They will provide

guidance to the contractor on the actions required should archaeological features be discovered.

Post Construction

Historic Landscape

- 5.5.5 The slight impact caused by the new dry stone walls will be reduced over time as the wall weathers and integrates into the surroundings. No further mitigation is therefore required.

Historic Building and Archaeological Remains

- 5.5.6 No further mitigation is required as the impact is determined to be neutral or beneficial.

5.6 RESIDUAL IMPACTS

During Construction

Historic Landscape

- 5.6.1 Implementation of the mitigation identified in paragraph 5.4.6 will reduce the impact magnitude to negligible, and the resulting impact significance to neutral.

Historic Building

- 5.6.2 Implementation of the mitigation measures identified will reduce the impact magnitude to negligible. The residual impact is neutral.

Archaeological Remains

- 5.6.3 The implementation of mitigation identified in paragraph 5.4.9 is considered to reduce the impact magnitude to negligible. The residual impact significance is therefore determined to be neutral as there will be no observable change.

Post Construction

Historic Landscape

- 5.6.4 As the new walls weather and integrate into the surroundings the impact will be reduced to neutral.

Historic Building and Archaeological Remains

- 5.6.5 There will be a slight beneficial impact on historic buildings as the new alignment will be located further from these. As there will be no observable impact on archaeological features, the residual impact will be neutral.

- 5.6.6 Table 5.10 provides a summary of the residual impacts on all cultural features within the study area.



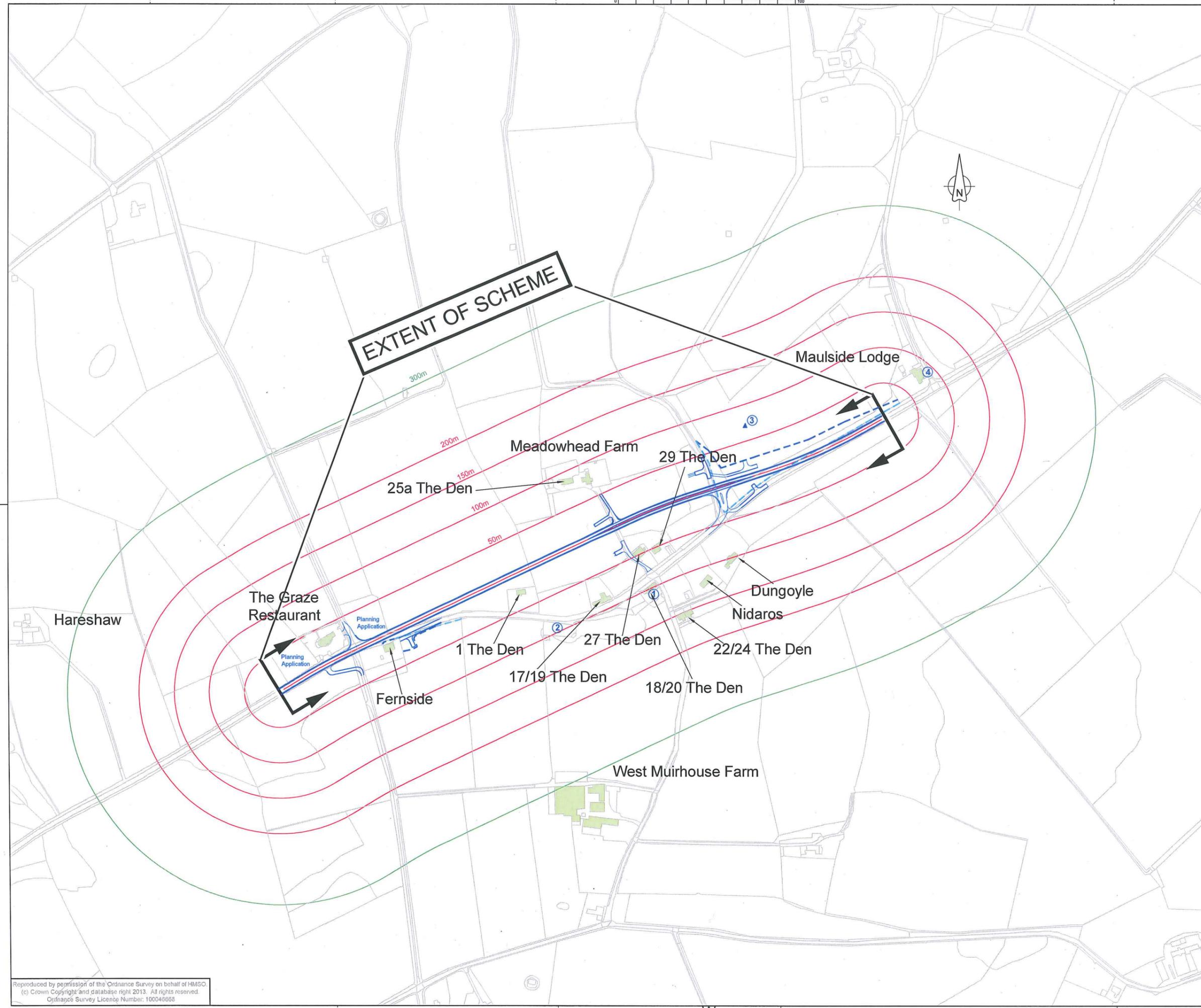
Table 5.10 Summary of Residual Impacts on Cultural Heritage Features

Cultural Heritage Feature	Sensitivity	Impact magnitude		Impact Significance	
		During Construction	Post Construction	During Construction	Post Construction
Historic landscape	Low	Negligible	Negligible	Neutral	Neutral
Historic Buildings	Low	Negligible	Minor beneficial	Neutral	Slight beneficial
Archaeological Remains	Low	Negligible	No Change	Neutral	Neutral

5.7 CONCLUSION

5.7.1 There will be no significant impacts on cultural heritage features either during construction or on operation of the new alignment.

S:\SHARED\001 - MTRIPS\09007 - The Den, Dalry\003 Design\002 Drawings\Work Area\1 Live Drawings\Environmental\Post Ext Audit\10_SW_0901_037_201 Air Quality Bands Rev A.dwg, 25/01/2013 14:29:18, Itholland



- General Legend**
 [] Scheme Extent
- Air Quality Legend**
 [] Air Quality Zones
- Cultural Heritage Legend**
 ① Muirhouse (Farmstead)
 ② Site of The Den/Kersland Barony School
 ③ Maulside Lodge
 ④ Glengarnock, Maulside Lodge
 [] 300m Buffer Zone
 [] Existing Dry Stone Wall
 [] Proposed Dry Stone Wall

A	Minor changes to layout	NS	14/2/12
Rev	Revision details	Chkd	Appd
Drawn:	I.H.	Preliminary	<input checked="" type="checkbox"/>
Design:	L.W. & H.F.	For comment	<input type="checkbox"/>
Chkd:	N.C.	For tender	<input type="checkbox"/>
Appd:	M.L.	For construction	<input type="checkbox"/>
Date:	14/02/12	As constructed	<input type="checkbox"/>



Project Name
**A737/A738 TRUNK ROAD
 THE DEN, DALRY**

Drawing Title
**ENVIRONMENTAL
 AIR QUALITY BANDS and
 CULTURAL HERITAGE FEATURES**

Original Drawing Size : A1 Dimensions : -
 Scale : 1 in 2500 Copyright © Arney

Drawing No
10/SW/0901/037/201 Rev
A

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