

18 Architectural Heritage

18.1 Introduction

This Chapter assesses the architectural heritage effects of the N9/N10 proposed road development. The assessment includes a description of the existing environment from an architectural and an industrial archaeological perspective and describes the known baseline data; it identifies potential impacts and recommends mitigation measures where appropriate. Finally, residual impacts of the scheme are presented.

18.2 Assessment Methodology

18.2.1 Introduction

This assessment consisted of a paper survey identifying all recorded sites within the area of study, such as protected structures; and a field inspection of the route alignment, including those known industrial archaeological and architectural heritage sites within and in proximity to the route. The assessment methodology has been developed in conjunction with the NRA Project Archaeologist for the scheme, and in line with the guidelines and procedures set out in the Code of Practice agreed between the NRA and the Minister for the Arts, Heritage, Gaeltacht and the Islands, in relation to the treatment of archaeology, architecture and cultural heritage issues in road scheme planning and development. In addition, consultation meetings with the heritage section of the Department of the Environment, Heritage and Local Government (DoEHLG) (formerly Dúchas) and the Kilkenny County Council Heritage and Conservation Officers took place as part of the scoping of desk and field studies, and the approach to the preliminary design of the scheme.

18.2.2 General Paper Survey

Record of Monuments & Places

Please refer to Chapter 17.

County Council Development Plans

Please refer to Chapter 17.

The Record of Protected Structures (RPS)

The 2000 Planning and Development Act⁽¹⁾ introduced a range of new measures for the protection of the architectural heritage. Included in these measures is the provision for a RPS. This record replaces the system of listing of buildings, which was in operation prior to January 2000. Under the legislation, each local authority is to include a record of protected structures, associated landscapes of architectural heritage significance and other items identified for preservation. It is the policy of each of the County Councils involved to seek the preservation of items listed in the RPS. No building or structure listed in this record may be demolished or materially altered without grant of permission under the Local Government Acts.

The National Inventory of Architectural Heritage (NIAH)

The NIAH for Carlow was published in 2002 and was consulted for this study. No such survey has been published for Kilkenny. The NIAH is a state initiative under the administration of the DoEHLG. The NIAH was established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999⁽²⁾. The aim of the survey is to identify the structures and sites of Architectural Heritage merit, to be recommended by the Minister of the DoEHLG for inclusion on the Record of Protected Structures. The RPS for the county already existed, in the form of the lists of structures contained in the County Development Plan. Each site/structure is given a catalogue entry, which includes a registration number, map information, location details, date, description and rating and appraisal of each site/structure's importance. Each site is evaluated and given a rating, varying from 'record only' to 'international'. Those sites of regional or higher rating are automatically recommended for inclusion in the RPS.

Irish Architectural Archive

The files of the Irish Architectural Archive were consulted as part of the Paper Survey. These files can contain information regarding the architectural history of individual structures. The information contained in the files has been collected by archive staff and the public, and mostly consists of newspaper clippings.

Urban Surveys

The Kilkenny and Carlow County Urban Archaeology Surveys were consulted during the course of this survey. The Surveys accompany the Sites and Monuments Record, their aim being to highlight and record the archaeological potential of the urban centres within the relevant counties. The Survey was established in 1982 to record known information relating to Irish towns and to present it to the public. Historical sources of information were compiled and known archaeology of the towns was evaluated.

Literary Sources

Please refer to Chapter 17. The principal sources consulted for this chapter include the following:

- Bence-Jones, M., 1988, A Guide to Irish Country Houses ⁽³⁾;
- Carrigan, W., 1905, The History and Antiquities of the Diocese of Ossory⁽⁴⁾;
- Craig, M. 1997, The Architecture of Ireland, from the earliest times to 1880. ⁽⁵⁾; and
- Malins, E. & Bowe, P., 1980, Irish Gardens and Demesnes from 1830. ⁽⁶⁾.

Cartographic and Photographic Sources

Please refer to Chapter 17. Much change has occurred in the use and the treatment of the landscape since the time of the first OS maps in the 1830s and 40s, with the destruction rate increasing rapidly during the second half of the 20th century. This is particularly relevant in the case of architectural sites and their sometimes large and extensive associated demesnes and/or gardens as many are no longer defined and are now in use as agricultural land.

18.2.3 Field Inspection

Architectural field inspections for this assessment consisted of two elements. Firstly, architectural field inspections were preceded by the archaeological field inspection undertaken within a 100m baseline corridor (50m either side of the centre-line and side-road re-alignments). The aim of this methodology was that any previously unrecorded structure impacted by the alignment was noted and photographed by the field archaeologist. Field inspection can also lead to the discovery of additional architectural heritage sites, such as derelict

cottages, and sites of industrial archaeological significance, such as lime kilns, small stone bridges and culverts. An architectural historian then reviewed these records and where applicable, a subsequent specific site inspection was undertaken, if deemed necessary. Secondly, the architectural historian inspected the known architectural and industrial archaeological sites identified from the preceding paper survey located in proximity to the proposed route. This is essential in determining the nature and extent of their above ground evidence and in projecting the potential impact of the proposed road development.

Field inspections were undertaken between June 2002 and December 2003.

18.2.4 Significance Criteria

The significance criteria have been developed in conjunction with the NRA Project Archaeologist for the scheme, and in line with the guidelines and procedures set out in the Code of Practice agreed between the NRA and the Minister for the Arts, Heritage, Gaeltacht and the Islands, in relation to the treatment of archaeology, architecture and cultural heritage issues in road scheme planning and development.

Impacts are classified under the following headings:

Rating	Significance
Major	The site lies wholly or partially within the CPO line. Construction of the route is likely to result in the removal of part, or all of the heritage site.
Moderate	The site is within the CPO line but can be avoided or preserved in situ. The site lies outside the CPO line but there is potential for the remains related to a heritage site to occur within the CPO line.
Minor	The site lies outside the CPO line but the road will alter its setting through indirect impact. Consideration should be given to noise and vibration, air quality and visual impacts.
No Predicted	The site lies well outside the CPO line.

When different elements of a site are subject to differing impacts the entire site is considered to be subject to the most severe impact identified.

Note: In this report SAH refers to architectural heritage sites and SIA refers to industrial archaeology sites.

18.3 The Existing Environment

18.3.1 General

This study consisted of a c. 500m corridor and field walk of the 100m wide route corridor. Recorded sites and newly discovered architectural sites within and in direct proximity to this study area have been addressed as part of the assessment.

Previously recorded architectural and industrial archaeological sites fall in to certain categories according to their legal status. The status of these monuments is outlined below.

A summary of the status of affected sites is also included below, followed by a description of these sites in the different sections of the scheme.

18.3.2 Legal Status

National Monuments

Please refer to Chapter 17.

Preservation Orders

Please refer to Chapter 17.

18.3.3 Status of Heritage sites

None of the sites of architectural heritage or industrial archaeological significance identified within the study area are protected by a Preservation Order.

Six architectural heritage sites and two sites of industrial archaeological significance are included in the Kilkenny and Carlow Development Plans ^(7,8), these are SAH1, SIA2, SIA5, SAH17, SAH22, SAH51, SAH65, SAH69, SAH72 and SAH76.

Site SAH86 is listed in Record of Historic Monuments and Places.

A number of historic towns identified from the Constraints and Route Selection phases of the scheme were listed in the Kilkenny and Carlow County Archaeological Urban Survey ^(9,10).

18.3.4 Waterford to King's River

Dunkitt, meaning Ceat's or Keth's fortress is adjacent to Granny. The edge of the route just crosses the border of Dunkitt into the townland of Granny. There are no

architectural heritage or industrial archaeological sites that will be impacted on in Granny. There are four sites of architectural heritage significance in Dunkitt. These are a former schoolhouse (SAH1), farm buildings (SAH2), a farmhouse with associated buildings (SAH3) and farmhouses (SAH4). Skeard, directly north of Dunkitt, has no architectural heritage or industrial archaeological sites. There are two farmhouse and associated outbuildings (SAH5 and SAH6) in Milltown and one of the sites (SAH6) is within Ballykeoghan side alignment. Ballykillaboy has a complex of farm buildings (SAH7). Ballykeoghan, north of Milltown, has an industrial archaeological limekiln (SIA1). The next townland north is Rossinan, where there are three sites of architectural heritage significance. These are two farmhouses with yards (SAH8 and SAH9) and a third farmhouse (SAH10). The townland name Rahard West (north of Rossinan) derives from the Irish, Rath-ard, meaning high fort. This townland has a complex of derelict farm buildings (SAH11). There are no sites of architectural heritage or industrial archaeological significance in Rathard East. Scart is an Anglicised form of Scairt, meaning a thicket or cluster. This townland has four sites of architectural heritage significance. These are a farmhouse (SAH12), a farmhouse and yard (SAH15), a farm complex (SAH14) and a derelict farm complex (SAH13). There is a former railway station (SIA2) on the border between Deerpark and Glendonell. Mullinavat, north of Glendonell, has one site of industrial archaeological significance. This is a corn mill and millrace (SIA3). The townland name of Garrandarragh is a compound of Garran (Garrán) meaning a shrubbery and Darragh (Dairbhreach) meaning a place abounding in oaks. This townland has a Catholic church (SAH17), a schoolhouse (SAH16), a gatepost (SAH18) and a single storey cottage (SAH19), all of which are of architectural heritage significance. Ballylusky (Baile-loisgthe) meaning the burnt town, comes from the practice of burning the surface in tillage. There is a complex of former religious buildings (SAH20) and a roadside monument (SAH21) in Ballylusky. Earlsrath is the next townland to the north and it has a small Country House with associated structures (SAH22). The 'rath' in Earlsrath refers to a circular fort. There are no sites of architectural heritage or industrial archaeological significance in Smithstown, Manselcourt and Crowbally. The townland

name of Knockmoylan comes from the Irish, Cnoc-mael, meaning a bald or bare hill. This townland has four sites of architectural heritage significance. These are a farmhouse (SAH23), and three farmhouses and outbuildings (SAH24, SAH25 and SAH26). Kilkeasy, north of Knockmoylan, has four derelict sites. These are derelict structure (SAH27) remains of two derelict structures, (SAH28), a derelict cottage (SAH29) and a derelict Country House (SAH30), avenue (SAH30a) and associated features (SAH30b). The 'Kil' in Kilkeasy refers to a church. The word 'kill' was most often used to describe a stone built church in Early Christian Ireland. Coolmore is derived from the Irish for either a corner (cuil) or a back (cul). It is more probably the former, with the townland name meaning the large corner. Coolmore has a cottage (SAH34), the remains of a derelict structure (SAH31) and a commemorative monument (SAH32). There is a side alignment at this townland into Carrickshock Commons where there are the remains of a derelict structure (SAH33). Ballygeadra, north of Coolmore, has a farmhouse and yard (SAH35). Ballyboodan has no sites. Sheepstown has two farmhouses. The first, SAH36, has associated outbuildings, while the second, SAH37, has a yard. The townland of Knocktopher Commons, Cnoc-a'-tochair meaning the hill of the causeway, has a farmyard with later residence (SAH39) and a single storey derelict structure (SAH38). Similarly there are no sites of architectural heritage or industrial archaeological significance in either Baysrath or Barretstown. Danganbeg, north of Barretstown, has two detached cottages with outbuildings (SAH40 and SAH41). There are no sites in Knockadrina. Tinvaun, north of Knockadrina, has a farmhouse with outbuildings (SAH42). There are four sites of architectural heritage significance in Stonecarthy West. There are two modern residences with associated 19th century buildings. SAH44 has 19th century farmyard, limekiln and modern bungalow. SAH46 has a 19th century farmyard and gate. There is also a farmhouse and outbuildings (SAH43) and a single storey derelict structure (SAH45) in Stonecarthy West. The townland of Rathduff, meaning the black fort, is the northernmost townland along this section of the route. Rathduff is subdivided into Rathduff Upper and Lower. There is a side alignment here into the townland of Lawcus. There is a farmhouse

with outbuildings (SAH47) in Rathduff and a stone bridge (SIA4) in Rathduff Lower.

18.3.5 King's River to Ballyquirke

Kellsgrange is north of Kings River. There are 2 sites of architectural heritage significance and 1 of industrial archaeological significance in Kellsgrange. These sites are a detached house and outbuildings (SAH48), derelict structures (SAH49) and a mill and millrace (SIA5). Ennisnag, directly, north of Kellsgrange, has no sites. Similarly, Ballyda, north of Ennisnag, has no sites. There are 2 sites of architectural heritage significance in Danesfort. These are the site of a 'Bathing Ho' and associated features (SAH50 and SAH50a) and a farmhouse with outbuildings (SAH51). At Danesfort there is a side alignment into the townland of Croan. Croan, meaning a round or piled up hill, has no sites. Rathclough is north of Danesfort. The townland name of Rathclough, is derived from the Irish for a ringfort and for stone. There is a farmhouse and outbuildings (SAH52), a farm complex (SAH53) and a derelict farm complex (SAH54) in this townland. Bennettsbridge, north of Rathclough has 2 sites of industrial archaeological significance. These are a weir (SIA8) and a flour mill (SIA9). To the west of Bennettsbridge is Kilree. There are 4 sites in Kilree. Two of these, structures marked on the first edition OS map (SAH55 and SAH56), are of architectural heritage significance. There is also a corn mill with the site of a kiln (SIA6) and the site of a weir (SIA7) in the townland of Kilree. There are no sites of architectural heritage or industrial archaeological significance in Sheastown, which is the next townland to the north. Dunbell Little, north of Sheastown, has two sites of architectural significance. These are both structures marked on the first edition OS map (SAH57 and SAH58). There is a farm complex, which was marked on the first edition OS map, in Holdenstown, which is north of Dunbell Little. There are 2 detached cottages (SAH60 and SAH61) and a cottage with a loft level (SAH63) in Dunbell Big, which is directly north of Holdenstown. There is also a site of structures marked on the first edition OS map (SAH62) in Dunbell Big. At Dunbell Big there will be a side alignment into Roughfield where there is a farmhouse with outbuildings (SAH64). The townland name of Clifden is a modern corruption of the Irish name *Clochán*, which signifies a beehive-shaped stone house. Clifden or Rathgarvan, which is to the north

of Dunbell Big, has a complex of a Country House and Castle (SAH65). Here the Kilkenny Link Road joins the main alignment. There are no sites of architectural heritage or industrial archaeological significance in Rathcash, Cloghoge or in Rathcash West. There is a cluster of derelict buildings and a possible deserted village (SAH73) in Rathcash East. There is also a single storey house (SAH74) and a single storey cottage with a loft level (SAH75) in Rathcash East. There are 5 sites of significance in Blanchvillespark, which is the northernmost townland from King's River to Ballyquirke. Four of these sites are of architectural heritage significance. These are 2 farmhouses and outbuildings (SAH76 and SAH77), a complex of farmbuildings (SAH79) and a cottage and outbuildings (SAH78). The site of industrial archaeological significance is a kiln and bridge (SIA11).

18.3.6 Kilkenny Link

The townlands on the Kilkenny Link Road are Clifden or Rathgarvan, Maddockstown, Ballynamona, Scart (Ed Dunbell), Rathbourne or Ratheenmore, Lavistown, Lyrath, Templemartin (Ed Clara and Ed Kilkenny) Cellarstown, Leggetsrath East, Archersrath, Blanchfieldsland and Garringreen. The townland name of Ballynamona translates as the town of the bog. There is a farmhouse with outbuildings (SAH66) in this townland. Rathbourn or Ratheenmore has a detached cottage (SAH67). Templemartin, the church of Martin, has a farmhouse and outbuildings (SAH68). There is a Country House and demesne (SAH69) in Lyrath. Leggetsrath East has a modernised farmhouse (SAH70), which is of architectural heritage significance. There are 3 sites of significance in the townland of Blanchfieldsland. Two of these are of architectural heritage significance. These are a modernised farmhouse (SAH71) and a derelict Country House with outbuildings (SAH72). There is also a stone bridge (SIA10) of industrial archaeological significance in Blanchfieldsland. There are no sites of significance in Garringreen.

18.3.7 Ballyquirke to Powerstown

Kilmacahill is the southernmost townland along this section of the proposed route. There are no sites in this townland. There is a derelict cottage and outbuildings (SAH80) and a farmhouse with an outbuilding (SAH81) in Ballinvally. Garryduff, north of Ballinvally, has a detached house (SAH82), a

derelict cottage (SAH83) and a farmhouse with an outbuilding (SAH84). There is one site of industrial archaeological significance on the Ballinvally/Garryduff border. This is a limekiln (SIA12). Jordanstown House (SAH85) is a large detached house with an entrance gate, in the townland of the same name. Kellymount, north of Jordanstown has 4 sites of architectural heritage significance. These are a detached house and outbuildings (SAH86), a cottage with outbuildings (SAH88), the site of a house and complex of outbuildings (SAH89) and a derelict Country House with an associated avenue and outbuildings (SAH87). Shankill, meaning old church, is north of Kellymount. There is a revetted stream and culverts (SIA13) in this townland. There are also 5 sites of architectural heritage significance. These are a cottage with a loft level and older cottage (SAH 90), a derelict structure with avenue and gate (SAH91) and a detached cottage (SAH93). There is also a 19th century complex of structures with a later detached house (SAH92) and a 19th century farmyard and kiln (SAH94). To the north of Shankill is Moanmore, great bog, where there are a further 5 sites of significance. Moanmore has 2 cottages with outbuildings (SAH97 and SAH98). There are 2 complexes of farmbuildings (SAH95 and SAH96), one of which is associated with a later residence (SAH95). Moanmore has one site of industrial archaeological significance. This is a kiln (SAI14). Bannagagole is north of Maonmore and has a farmhouse with associated outbuildings (SAH99). There are also one farmhouse with associated outbuildings (SAH100) and one derelict house (SAH101) in Moanduff, black bog, which is north of Closutton, where there are no sites. There is a complex of outbuildings (SAH102) in the Demense and a farmhouse with outbuildings (SAH103) in Seskin Lower. Cranavonane, north of Seskin Lower, has a country House with outbuildings (SAH104). There are no sites of architectural heritage or industrial archaeological significance in Cloghrstick. Tomard Lower, the most northerly townland along the route has 3 sites. Two of these are of architectural heritage significance. These are a Country House with outbuildings (SAH105) and a public house (SAH106). The final site of industrial archaeological significance is a waterpump (SIA15) in the townland of Tomard Lower.

18.4 Predicted Impacts

18.4.1 Waterford to King's River

The proposed road development will have a major impact on 17 known architectural sites and associated features and 2 industrial archaeological sites. It will have a moderate impact on a further 4 architectural sites. There will be a minor impact on 12 architectural sites and one industrial archaeological site. There will be no predicted impact on 14 architectural sites and 1 industrial archaeological site.

18.4.2 King's River to Ballyquirke

The proposed road development will have a major impact on 8 known architectural sites and associated features and 2 industrial archaeological sites. It will have a moderate impact on a further 1 architectural sites and 2 industrial archaeological sites. There will be a minor impact on 7 architectural sites and no industrial archaeological site. There will be no predicted impact on one architectural site and one industrial archaeological site.

18.4.3 Kilkenny Link Road

The proposed road development will have a major impact on 3 known architectural sites and associated features and 1 industrial archaeological site. It will have a moderate impact on one further architectural site and no industrial archaeological sites. There will be a minor impact on 2 architectural sites and no industrial archaeological sites. There will be no predicted impact on 2 architectural sites and no industrial archaeological sites.

18.4.4 Ballyquirke to Powerstown

The proposed road development will have a major impact on 7 known architectural sites and associated features and 1 industrial archaeological site. It will have a moderate impact on 1 further architectural site and 1 industrial archaeological site. There will be a minor impact on 14 architectural sites and 1 industrial archaeological site. There will be no predicted impact on 6 architectural sites and 1 industrial archaeological site.

18.4.5 Overall

In total, the proposed road development will have a major impact on 35 known architectural sites and associated features and 6 industrial archaeological sites. It will have a moderate impact on a further 6 architectural sites and 3 industrial archaeological sites. There will be a minor impact on 36 architectural sites and 2

industrial archaeological sites. There will be no predicted impact on 23 architectural sites and 3 industrial archaeological sites.

Table 18.1 provides a summary of the impacts and the mitigation measures proposed to ameliorate those impacts. Distances in each case are measured from the land acquisition line. These sites are shown on Figures 17.1 to 17.10. A description of the sites with significant impacts is given in the Site Catalogues in Appendix 18.1.

18.5 Mitigation Measures

18.5.1 General

The design development of the proposed scheme has endeavoured to minimise the impact on the architectural and industrial heritage wherever possible (see Chapter 3). Where it has not been possible to avoid adverse impacts, mitigation measures have been proposed, as discussed below.

Mitigation measures, both at pre-construction and construction phases, will be undertaken in compliance with national policy guidances and statutory provisions for the protection of the architectural heritage, including the following:

- National Monuments Acts 1930-2004⁽¹¹⁾.
- Code of Practice (2000) between the National Roads Authority and Department of Arts, Heritage, Gaeltacht & the Islands⁽¹²⁾.
- Framework & Principles for the Protection of the Archaeological Heritage (1999). Department of Arts, Heritage, Gaeltacht & the Islands⁽¹³⁾.
- Policy & Guidelines on Archaeological Excavation (1999). Department of Arts, Heritage, Gaeltacht & the Islands⁽¹⁴⁾.
- Architectural Heritage Protection, Guidelines for Planning Authorities (Draft 2001). Department of Arts, Heritage, Gaeltacht & the Islands⁽¹⁵⁾.

All works in association with architectural heritage sites will be undertaken in accordance with directions issued by the Minister for Environment Heritage & Local Government and in consultation with the Project Archaeologist.

Proposed mitigation measures are presented as recommendations as they are subjected to the approval of Department of the

Environment, Heritage and Local Government.

18.5.2 Recommendations and Mitigation Measures – Prior to Construction

It is recommended that the following measures be undertaken in advance of the construction phase. This is aimed at allowing a satisfactory time frame in which the mitigation measures can be conducted and the results assessed without causing delays to the construction programme.

If this scheme is approved by An Bord Pleanála it is the intention of Kilkenny County Council to apply to the Minister for Environment Heritage & Local Government for directions, under Sect. 14A (2) of the National Monuments Acts 1930 to 2004, for all archaeological works on this scheme. The following archaeological investigation works are recommended:

Archaeological Investigations

Archaeological investigative excavations, in the form of controlled test trenching is recommended for sites or their environs when a site of heritage potential lies close to or within the proposed route. The initial investigation will determine the nature, extent and significance of the heritage remains present. Some of the identified sites are without clearly defined indicators. Archaeological investigation will determine if full excavation and recording is required. Archaeological investigations are recommended for a number of sites, including SIA3, SAH30, SIA5, SAH53, SIA7, SAH65, SAH77, SAH85, SAH87, and SAH105.

Architectural Recording/Survey

Additional written and photographic survey and assessment is recommended for architectural structures that are impacted. This may incorporate measured hand drawn survey. Architectural recording/survey are recommended at Sites SAH2, SAH6, SAH14, SIA3, SAH16, SAH18, SAH20, SAH21, SAH22, SAH23, SAH24, SAH25, SAH26, SAH28, SAH30, SAH34, SAH36, SAH41, SIA4, SAH49, SAH50, SAH51, SIA8, SAH57, SAH67, SIA10, SAH73, SAH76, SAH83, SAH85, SAH88, SIA13, and SAH101.

Topographical Survey

Topographical surveys present a comprehensive picture of visible and partially

visible surface features, obtained in a non-intrusive manner. The results are provided in contour maps, three-dimensional surface maps and shaded relief maps which details and highlights potential sites that are present but are not always visible to the naked eye. Anomalies recorded in these surveys can be taken into account, allowing for a more controlled approach during the intrusive stage of investigation. This is recommended for Sites SAH2, SIA3, SAH30, SIA5, and SIA7,

NOTE:	Recommendations are subject to approval by the Department of the Environment, Heritage and Local Government
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18.5.3 Recommendations and Mitigation Measures During Construction

Mitigation measures at construction phase will be undertaken in compliance with national policy guidance and statutory provisions for the protection of the archaeological, architectural and cultural heritage. This may include archaeological monitoring of the topsoil stripping if deemed appropriate following assessment of the pre-construction surveys.

Archaeological Monitoring

It is recommended that archaeological monitoring of all ground disturbances at site SAH17 be undertaken prior to the construction phase. This technique will be effective in the locating of possible associated features of architectural significance in advance of construction. SAH17 is a church site. There is always a high probability of finding grave material in association with such sites. This may be found outside as well as inside the boundary wall. For this reason an archaeologist must always be present when groundworks are being undertaken in the vicinity of a church site. This allows for the resolution of these features in advance of construction, thus minimising delays during the construction phase.

Property Boundaries & Re-instatement

The reinstatement of structure associated with a number of architectural sites is recommended. These mostly consist of elements of the boundary walls and/or gates and entrances. Where a property boundary is impacted by the scheme, where practical it is recommended that the boundary be

replicated along the frontage facing onto the road. This is recommended for sites SAH6, SAH14, SAH18, SAH20, SAH21, SAH23, SAH25, SAH30, SAH34, SAH36, SAH51, SAH72, SAH76, SAH85 and SAH99.

Protection During Construction

It is recommended that sites SIA6 is fenced off and protected during the construction phase. No works are anticipated outside the land acquisition boundary. However, in the exceptional event of any construction activity taking place outside of the land acquisition boundary and in vicinity of the following sites SAH7, SIA2, SAH17, SAH19, SAH23, SAH25, SAH27, SAH29, SAH30, SAH30a, SAH34, SAH37, SAH40, SIA5, SAH50, SAH52, SAH58, SAH60, SAH69, SAH71, SAH74, SAH78, SAH86, SAH94, SAH95, SIA14, SAH97, SAH99, it is recommended that the sites are fenced off and protected during construction phase.

Discovery of Heritage Remains

In the event of potential heritage remains being uncovered during the construction phase, initial assessment will determine the nature, extent and significance of the remains present. As a result of the assessment, decisions on the most appropriate mitigation strategy will be taken with the approval of the DoEHLG.

NOTE:	Recommendations are subject to approval by the Department of the Environment, Heritage and Local Government
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Preservation In Situ

Any proposal for preservation in situ will be carried out to the approval of the DoEHLG.

Mitigation of Indirect Impacts

Consideration has been given to sites that are particularly sensitive to indirect impacts. In these cases, the general noise and vibration and air quality mitigation measures indicated for the construction phase (refer to Chapters 8 and 9 respectively for details) are specially important. In addition, the visual setting of certain sites will be impacted by the scheme, which may also result in an indirect impact. This has been assessed in Chapter 10 of this EIS and the relevant mitigation measures have been addressed in that chapter.

The site specific details for these issues are listed in Table 18.1.

18.6 Residual Impacts

Residual impacts may take the form of visual intrusion on sites or result in the loss of amenity value at affected sites.

18.7 Limitations, Constraints and Difficulties Encountered

There were none identified.

18.8 References

- 1) The Planning and Development Act, 2000. The Stationary Office, Dublin
- 2) Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. The Stationary Office, Dublin.
- 3) Bence-Jones, M., 1988, A Guide to Irish Country Houses, Revised Edition, Constable London
- 4) Carrigan, W., 1905, The History and Antiquities of the Diocese of Ossory
- 5) Craig, M. 1997, The Architecture of Ireland, from the earliest times to 1880. Lambay Books
- 6) Malins, E. & Bowe, P., 1980, Irish Gardens and Demesnes from 1830. Barrie & Jenkins, London.
- 7) Kilkenny County Council, 2002, Kilkenny County Development Plan, Kilkenny County Council, Kilkenny
- 8) Carlow County Council, 1997, Carlow County Development Plan, Carlow County Council, Carlow
- 9) Farrelly, O'Reilly, Loughran, 1993, The Urban Archaeological Survey of County Kilkenny", Archaeological Survey of Ireland, OPW
- 10) Bradley (ed), 1989, The Urban Archaeological Survey of County Carlow, Archaeological Survey of Ireland, OPW
- 11) National Monuments Acts 1930-2004. The Stationary Office, Dublin.
- 12) National Roads Authority and Department of Arts, Heritage, Gaeltacht & the Islands, 2000, Code of Practice.
- 13) Department of Arts, Heritage, Gaeltacht & the Islands (1999). Framework & Principles for the

Protection of the Archaeological Heritage.

- 14) Department of Arts, Heritage, Gaeltacht & the Islands, 1999, Policy & Guidelines on Archaeological Excavation.
- 15) Department of Arts, Heritage, Gaeltacht & the Islands, 2001 (draft). Architectural Heritage Protection, Guidelines for Planning Authorities.

Table 18.1 Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
WATERFORD CITY BY-PASS (Ch1+640)-KINGS RIVER (Ch31+300)							
SAH1	Dunkitt	258169 116190	Former schoolhouse CDP Rating: International Importance RPS Ref. C453	Ch 1+640	290m from mainline	No predicted	No specific mitigation measures.
SAH2	Dunkitt	258062 116499	Farm buildings	Ch1+650	Within mainline	Major	A topographical survey followed by a full architectural and photographic survey is recommended.
SAH3	Dunkitt	257990 116565	Farmhouse and buildings	Ch1+700	21m from mainline	Minor	Protection of the site during construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH4	Dunkitt	258381 116731	Farmhouses and outbuildings	Ch2+000	83m from mainline	No predicted	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH5	Milltown	258537 117742	Farmhouse and outbuildings	Ch3+050	62m from mainline	No predicted	No specific mitigation measures.
SAH6	Milltown	258431 117993	Farmhouse and outbuildings	Ch3+370 Ch0+000 (Ballykeoghan side alignment)	175m from mainline Site boundary within Ballykeoghan side alignment.	Major impact on site boundary	A written and photographic recording of the boundary should be conducted. The boundary should then be re-instated. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH7	Ballykillaboy	258789 118544	Complex of farm buildings	Ch3+800	158m from mainline 8m from land acquisition,	Minor	Protection of the site during construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SIA1	Ballykeoghan	258381 119483	Lime kiln	Ch4+950	53m from mainline	No predicted	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH8	Rossinan	256880 121322	Farmhouse and yard	Ch7+100	134m from mainline	No predicted	No specific mitigation measures.
SAH9	Rossinan	256808 121359	Farmhouse and yard	Ch7+150	159m from mainline 100m from side alignment	No predicted	No specific mitigation measures.
SAH10	Rossinan	256876 121404	Farmhouse	Ch7+150	110m from mainline 69m from side alignment	No predicted	No specific mitigation measures.
SAH11	Rahard West	256911 121542	Complex of derelict farm-buildings	Ch7+280	17m from mainline	Minor	Protection of the site during construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH12	Scart	256891 122367	Farmhouse	Ch8+100	56m from mainline	No predicted	No specific mitigation measures.
SAH13	Scart	256920 122477	Derelict farm complex	Ch8+200 Ch0+300 (Scart side alignment)	104m from mainline 68m from Scart side alignment	No predicted	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH14	Scart	257134 122462	Farm complex	Ch8+300 Ch0+490 (Scart side alignment)	225m from mainline Site entrance and boundary within Scart side alignment	Major on site and entrance boundary.	<p>A full architectural and photographic survey of the entrance gate and written and photographic recording of the boundary should be undertaken. Features should then be reinstated.</p> <p>For noise and vibration construction mitigation measures please refer to Chapter 8.</p> <p>For air quality construction mitigation measures please refer to Chapter 9.</p> <p>For visual impact please refer to Chapter 10.</p>
SAH15	Scart	256615 122519	Farmhouse and yard	Ch8+260, Ch0+000 (Scart side alignment)	130m from mainline 26m from Scart side alignment	Minor by side alignment	<p>For noise and vibration construction mitigation measures please refer to Chapter 8.</p> <p>For air quality construction mitigation measures please refer to Chapter 9.</p> <p>For visual impact please refer to Chapter 10.</p>

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SIA2	Deerpark/ Glendonell	256532 123971	Former railway station CDP: No Rating RPS Ref: D95	Ch9+650 Ch0+000 Glendonell side alignment	365m from mainline 14m from Glendonell side alignment	Minor	Protection of the site during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SIA3	Mullinavat	Mill: 256781 124305	Corn Mill and Millrace	Ch10+050 Ch0+150 (Garrandarragh side alignment)	Mill: 95m from mainline (Ch10+050) 35m from Garrandarragh side alignment (Ch0+150)	Major	A full architectural and photographic survey is recommended for the mill. Archaeological investigations of the section of the route that passes over the recorded line of the millrace and would take the form of a Topographical Survey followed by archaeological investigations in the form of test trenching. Further recommendations are dependant on the results of this work. If archaeological features are identified recommendations will be made as to whether they should be preserved <i>in situ</i> or by record.
		Millrace: 256910 124263		Ch10+020 Ch0+150 (Garrandarragh side alignment)	Millrace: within mainline (Ch10+020) Within Garrandarrgh side alignment (Ch0+150)		
SAH16	Garrandarragh townland (Mullinavat village)	256740 124352	Schoolhouse	Ch10+110 Ch0+100 (Garrandarragh side alignment)	135m from mainline Site boundary within Garrandarragh side alignment	Major on site boundary	A written and photographic recording of the boundary should be conducted.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH17	Garrandarragh townland (Mullinavat village)	256675 124387	Catholic Church CDP Rating: Regional Importance RPS Ref. C200	Ch10+110 Ch0+080 (Garrandarragh side alignment)	185m from mainline 6m from Garrandarragh side alignment	Moderate	<p>Protection of the site during the construction phase, if required.</p> <p>Archaeological monitoring of earthworks in the vicinity of this site due to the possibility of uncovering grave material. Further recommendations are dependant on the results of this work. If archaeological features are identified recommendations will be made as to whether they should be preserved <i>in situ</i> or by record.</p> <p>For noise and vibration construction mitigation measures please refer to Chapter 8.</p> <p>For air quality construction mitigation measures please refer to Chapter 9.</p> <p>For visual impact please refer to Chapter 10.</p>
SAH18	Garragharragh	256626 124772	Gate Post	Ch10+500 Ch0+080	150m from mainline Within R704 side alignment	Major	<p>A full architectural and photographic survey of the site should be undertaken. The feature should then be re-instated.</p>

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH19	Garragharragh	256889 125003	Single storey cottage	Ch10+700	0m from mainline at Mullinavat Junction	Minor	<p>Protection of the site during the construction phase, if required.</p> <p>For noise and vibration construction mitigation measures please refer to Chapter 8.</p> <p>For air quality construction mitigation measures please refer to Chapter 9.</p> <p>For visual impact please refer to Chapter 10.</p>
SAH20	Ballylusky	256518 125906	Former religious buildings	Ch11+720 Ch11+720 Ch0+220	<p>Convent: 43m from mainline</p> <p>Entrance gate: 25m from mainline</p> <p>Within Ballylusky Side Alignment</p>	<p>Minor on the Convent building</p> <p>Major impact on the site entrance and boundary.</p>	<p>For noise and vibration construction mitigation measures please refer to Chapter 8.</p> <p>For air quality construction mitigation measures please refer to Chapter 9.</p> <p>For visual impact please refer to Chapter 10.</p> <p>A full architectural and photographic survey of the gate and written and photographic recording of the boundary should be undertaken. Where possible the features should then be re-instated.</p>

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH21	Ballylusky	256433 125616	Roadside Monument	Ch11+450 Ch0+000 (Ballylusky Side Alignment)	110m from mainline Within Ballylusky Side Alignment	Major	Removal of monument and re-instatement after the construction of the route. A written and photographic record of the monument prior to its removal. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH22	Earlsrath	256262 126661	Farmhouse (small country house) and associated structures	Ch12+520 Ch12+500	Demesne within mainline House 93m from mainline	Major on demesne No predicted on house	A written and photographic record of the demesne should be undertaken. No specific mitigation measures for the house

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH23	Knockmoylan	255392 128238	Farmhouse	Ch14+450 Ch14+450	Boundary: Within mainline House: 5m from mainline	Major on boundary and outbuilding Moderate on house	A written and photographic recording of the boundary and outbuilding should be undertaken. Where possible the features should then be re-instated. Protection of the site during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH24	Knockmoylan	253929 128795	Farmhouse and outbuildings	Ch16+020	Within mainline	Major	A full architectural and photographic survey is recommended.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH25	Knockmoylan	253235 129556	Farmhouse and outbuildings	Ch17+080	Boundary: 0m from mainline House: 3m from mainline 20m from mainline	Major on boundary Moderate on house	A written and photographic recording of the boundary should be undertaken. Where possible the features should then be re-instated. Protection of the site during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH26	Knockmoylan	252665 130608 to 252708 130512	Farmhouse and outbuildings	Ch18+120 to Ch18+280	Within mainline	Major	A full architectural and photographic survey is recommended.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH27	Kilkeasy	252114 131692	Derelict structures	Ch19+460	56m from mainline 0m from access track	Moderate access track by	Protection of the site during construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH28	Kilkeasy	252199 132388	Derelict structures	Ch20+150 Ch0+480	83m from mainline Within Kilkeasy Side Alignment	Major	A full architectural and photographic survey is recommended.
SAH29	Kilkeasy	252281 132431	Derelict cottage	Ch20+220 Ch0+600 Ch20+220 Ch0+600	175m from mainline Gate piers: directly adjacent to Kilkeasy side alignment Cottage: 62m from side alignment	Moderate on gate piers No predicted on cottage	Protection of the gate piers during the construction phase. No specific mitigation measures for the cottage.
SAH30	Kilkeasy	251867 132783	Derelict Country House, and	Ch20+550	House: 106m from mainline	No predicted on house	Protection of the site during construction phase, if required. No specific mitigation measures for the house

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH30a		251873 132433	Avenue	Ch20+200 Ch0+180 (Kilkeasy Side Alignment)	Entrance/Avenue: 0m from Kilkeasy Side Alignment	Major on entrance and avenue	<p>A written and photographic recording of the entrance and avenue should be undertaken. Where possible the features should then be re-instated.</p> <p>Protection of the site during construction phase, if required.</p> <p>For noise and vibration construction mitigation measures please refer to Chapter 8.</p> <p>For air quality construction mitigation measures please refer to Chapter 9.</p> <p>For visual impact please refer to Chapter 10.</p>
SAH30b		252032 132828	Associated features	Ch20+400 to Ch20+750	Associated structures: (SAH30b) within mainline	Major on associated features	<p>Archaeological investigations of the section of the route that passes over the recorded associated features are recommended. This would take the form of a Topographical Survey followed by archaeological investigations in the form of test trenching. Further recommendations are dependant on the results of this work. If archaeological features are identified recommendations will be made as to whether they should be preserved <i>in situ</i> or by record.</p>

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH31	Coolmore	251871 133378	Remains of derelict structure	Ch21+185 Ch0+000 (Coolmore Side Alignment)	80m from mainline 11m from Coolmore Side Alignment	Minor	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH32	Coolmore	251854 133406	Commemorative monument	Ch21+185 Ch0+000 (Coolmore Side Alignment)	95m from mainline 20m from Coolmore side alignment	Minor	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH33	Carrickshock Commons	251685 133487	Remains of derelict structure	Ch21+350 Ch0+000 (Coolmore Side Alignment)	255m from mainline 205m from Coolmore Side Alignment	No predicted	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH34	Coolmore	252079 133853	Cottage	Ch21+230 Ch0+120 Ch21+230 Ch0+120	Site boundary: 95m from mainline Within Coolmore side Alignment Cottage: 95m from mainline 6m from Coolmore side Alignment	Major on site boundary Moderate on cottage	A written and photographic recording of the boundary of the property should be conducted. The boundary should then be re-instated. Protection of the site during construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH35	Ballygearda	251857 135636	Farmhouse and yard	Ch23+420 to Ch23+460	Western boundary 18m from mainline	Minor	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH36	Sheepstown	251382 137249	Farmhouse and associated outbuildings	Ch25+050 Ch0+060 (R699 side alignment)	House: 160m from mainline 37m from R699 side alignment Avenue/Entrance: 160m from mainline Entrance within R699 side alignment	Minor on house Major on entrance.	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10. A written and photographic recording of the entrance of the property should be conducted. The features should then be re-instated.
SAH37	Sheepstown	251508 137512	Farmhouse and yard	Ch25+300	0m from land acquisition.	Moderate	Protection of the site during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH38	Knocktopher Commons	252063 137402	Single storey derelict structure	Ch25+150 Ch0+320	350m from mainline 25m from side alignment off Knocktopher Junction	Minor	For visual impact please refer to Chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH39	Knocktopher Commons	251770 137549	Farmyard and later residence	Ch25+350 Ch0+100	House: 75m from Knocktopher Junction Yard: 61m from Knocktopher Junction	No predicted	No specific mitigation measures.
SAH40	Danganbeg	251313 138755	Detached house and outbuildings	Ch26+550 Ch0+000 Ch26+550 Ch0+000	Site entrance, boundary and associated culvert: 90m from mainline 0m from Danganbeg Side Alignment House: 115m from mainline 32m from Danganbeg side alignment	Minor on site entrance, boundary and associated culvert. Minor on house	Protection of the site entrance, boundary and associated culvert during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH41	Danganbeg	251335 139524	Detached cottage and outbuildings	Ch27+300 Ch0+580 (Knockadrina side alignment)	Boundary: 74m to mainline Within Knockadrina side alignment House: 80m to mainline Directly adjacent to Knockadrina side alignment	Major impact on boundary Moderate impact on house	A full architectural and photographic survey of the site and a written and photographic recording of the boundary of the property should be conducted. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH42	Tinvaun	251199 139695	Farmhouse and outbuildings	Ch27+500 Ch0+671 (Knockadrina side alignment) Ch27+480 Ch0+671 (Knockadrina side alignment)	House: 220m from mainline 126m from Knockadrina side alignment Buildings: 195m from mainline 113m from side alignment	No predicted	No specific mitigation measures.
SAH43	Stonecarthy West	251402 140043	Farmhouse and outbuildings	Ch27+800	70m from mainline	No predicted	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH44	Stonecarthy West	251598 140909	19 th century farmyard, modern bungalow, and lime kiln	Ch28+800 Ch28+740	Modern Bungalow: 86m from mainline Limekiln: 84m from mainline	No predicted	No specific mitigation measures.
SAH45	Stonecarthy West	251508 141444	Single storey derelict structure	Ch29+360 Ch0+060 (Stonecarthy Side Alignment)	100m from mainline 0m from Stonecarthy Side Alignment	Minor	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH46	Stonecarthy West	251358 141548	Modern residence on site of 19 th century farmyard and gate.	Ch29+400 Ch0+040 (Stonecarthy Side Alignment) Ch29+500 Ch0+040 (Stonecarthy Side Alignment)	Entrance gate: Directly adjacent to Stonecarthy side Alignment. House and yard: 176m from mainline 136m from Stonecarthy side alignment	Minor House: No predicted	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10. No specific mitigation measures are recommended for the house.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH47	Rathduff	251787 141823	Farmhouse and outbuildings	Ch29+650 Ch0+365 (Stonecarthy Side Alignment)	220m from mainline 135m from side alignment	No predicted	No specific mitigation measures.
SIA4	Rathduff Lower	251051 143127	Stone bridge	Ch31+100 Ch0+220 (Rathduff Side alignment)	Within mainline Wtihin Rathduff Side alignment	Major	A full architectural and photographic survey is recommended.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
KINGS RIVER (Ch31+300) TO BALLYQUIRKE (Ch49+100)							
SAH48	Kellsgrange	250849 143654	Detached house and outbuildings	Ch31+640	House:	Minor impact on house	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
				Ch0+000 (Kellsgrange Side Alignment)	82m from mainline 10m from side alignment		
				Ch31+640 Ch0+000 (Kellsgrange Side Alignment)	Farmyard: 62m from mainline 10 m from side alignment	Minor impact on farmyard	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH49	Kellsgrange	250882 143709	Derelict structures	Ch31+700 Ch0+020 to Ch0+040 (Kellsgrange Side Alignment)	46m from mainline Within Kellsgrange Side Alignment	Major	A full architectural and photographic survey is recommended.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SIA5	Kellsgrange	251061 143704	Mill and millrace CDP: No Rating RPS Ref. D115	Ch31+650 Ch0+200 (Kellsgrange Side Alignment) Ch31+600 Ch0+250 (Kellsgrange Side Alignment)	Mill: 62m from mainline 30m from Kellsgrange side alignment Millrace: 48m from mainline Directly adjacent to drainage works on side alignment	Mill: Moderate by the side alignment Millrace: Moderate by drainage works on side alignment	Archaeological investigations of the section of the route that passes over the recorded line of the millrace, pond and associated features, in the form of a Topographical Survey followed by test trenching. Further recommendations are dependant on the results of this work. If archaeological features are identified recommendations will be made as to whether they should be preserved <i>in situ</i> or by record. Protection of the site during construction phase, if required. For visual impact please refer to Chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH50	Danesfort	251587 146143	Site of "Bathing Ho" and associated features	Ch34+200	16m from mainline to structures recorded as "Bathing Ho" on 1 st edition	Minor impact on 'Bathing Ho'	Protection of the site during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH50a		251722 146381		Ch34+500	Associated features within mainline.	Major impact on associated features	A full architectural and photographic survey is recommended for the associated features.
SAH51	Danesfort	251829 147350	Site of a country house, now large farmhouse and outbuildings CDP Rating: National Importance RPS Ref. C451	Ch35+500 Ch0+300 (N10 North of Danesfort Junction) Ch35+400 Ch0+300 (Danesfort Junction)	Gate: 220m from mainline Within N10 realignment House: 341m from mainline 119m from N10 realignment	Major impact on gate No predicted on the house	A full architectural and photographic survey of the entrance gate should be undertaken. The feature should then be re-instated. . No specific mitigation measures for the house

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH52	Rathclough	252958 148790	Farmhouse and outbuildings	Ch37+100	House: 380m from mainline Gate and lodge: 10m from Rathclough side Alignment	No predicted on the house Minor on gate and lodge	No specific mitigation measures for the house. Protection of the gate and lodge during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH53	Rathclough	253550 148734	Farm complex	Ch37+500	Within mainline	Major	It is recommended that archaeological investigations of the section of the route that passes over the recorded location of the farm complex take place. This would take the form of archaeological investigations in the form of controlled test trenching. Further recommendations are dependant on the results of this work. If archaeological features are identified recommendations will be made as to whether they should be preserved <i>in situ</i> or by record.
SAH54	Rathclough	253894 148882	Derelict farm complex	Ch37+800	100m from mainline	No predicted	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH55	Kilree	254994 149751	Structures marked on 1 st edition OS map	Ch39+300	119m from mainline	No predicted	No specific mitigation measures.
SAH56	Kilree	255024 149803	Structures marked on 1 st edition OS map	Ch39+350 Ch0+345 (R700 side alignment)	67m from mainline 44m from R700 side alignment	Minor	For visual impact please refer to Chapter 10.
SIA6	Kilree	255334 149981	Corn Mill and Kiln (site of)	Ch39+700	Within land acquisition.	Moderate	Protection of the Corn Mill during the construction phase. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SIA7	Kilree	255404 150078	Weir (site of)	Ch39+820	Within mainline	Major	Archaeological investigations of the section of the route that passes over the recorded area of the weir site. This would take the form of a Topographical Survey followed by archaeological investigations in the form of test trenching. Further recommendations are dependant on the results of this work. If archaeological features are identified recommendations will be made as to whether they should be preserved <i>in situ</i> or by record.
SIA8	Bennetsbridge	255476 150144	Weir	CH39+920	Within mainline	Major	A full architectural and photographic survey is recommended.
SIA9	Bennetsbridge	255535 149994	Flour mill (site of)	CH39+900	95m from mainline	No predicted	No specific mitigation measures.
SAH57	Dunbell Little	255661 150199	Structures marked on 1 st edition OS map	Ch40+100	Within mainline	Major	A full architectural and photographic survey is recommended.
SAH58	Dunbell Little	255766 150238	Structures marked on 1 st edition OS map	Ch40+200	5m from mainline	Moderate	Protection of the site during the construction phase, if required. For visual impact please refer to Chapter 10
SAH59	Holdenstown	257076 151951	Farm complex marked on 1 st edition OS map	Ch42+440	56m from mainline	No predicted	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH60	Dunbell Big	257003 152667	Detached cottage	Ch43+100 Ch0+000 (Holdenstown side alignment)	10m from Holdenstown side alignment	Minor	Protection of the site during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH61	Dunbell Big	257027 152675	Detached cottage	Ch43+100 Ch0+000 (Holdenstown side alignment)	0m from land acquisition	Minor	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10
SAH62	Dunbell Big	257438 152756	Structures marked on 1 st edition OS map	Ch43+300 Ch0+270 (Holdenstown side alignment)	100m from Holdenstown side alignment	No predicted	No specific mitigation measures.
SAH63	Dunbell Big	257408 153095	Cottage with loft level	Ch43+650	61m from mainline	No predicted	No specific mitigation measures.
SAH64	Roughfield	257432 153597	Farmhouse and outbuildings	Ch44+100	70m from mainline	No predicted	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
KILKENNY LINK (LINK CH. 1+000 TO LINK CH. 7+300)							
SAH65	Clifden or Rathgarvan	257357 154340	Country House (Clifden) and Castle CDP Rating: National Importance RPS Ref. C336	Ch6+700	Avenue/mass path (S71) within mainline.	Major on avenue/mass path	Archaeological Investigations of avenue, in the form of test trenching and possibly subsequent full excavation. Further recommendations are dependant on the results of this work. If archaeological features are identified recommendations will be made as to whether they should be preserved <i>in situ</i> or by record. Please refer to S69 in Chapter 17.
				Ch6+700	House: 271m from mainline	No predicted on the house and the extant remains of the castle	No specific mitigation measures for the house or the extant remains of the castle.
				Ch6+700	Castle and outbuildings: 192m from mainline		
SAH66	Ballynamona	256727 154675	Farmhouse and outbuildings	Ch5+800	230m from Kilkenny Link	No predicted	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH67	Rathbourn or Ratheenmore	255402 154966	Detached cottage	Ch4+500 Ch0+153 (Templemartin side alignment)	Boundary: within Templemartin side alignment off Kilkenny Link. House: Directly adjacent to Templemartin side alignment off Kilkenny Link	Major impact on boundary Moderate impact on house	A full architectural and photographic survey of the site and a written and photographic recording of the boundary of the property should be conducted. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH68	Templemartin	255220 155387	Farmhouse and outbuildings	Ch4+100	183m from Kilkenny Link Road	No predicted	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH69	Lyrath Demesne	254366 155431	Country House and demesne (Lyrath) CDP Rating: Regional Importance RPS Ref. C364	Ch3+450 to Ch3+850	House: 90m from Kilkenny Link Road	No predicted impact on the house	Protection of the site during construction phase, if required. No specific mitigation measures for the house
					Demesne boundary: Directly adjacent to Kilkenny Link Road	Moderate on demesne boundary	Protection of the demesne wall during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH70	Leggetsrath East	253538 156671	Farmhouse (modernised)	Ch2+040	49m from Kilkenny Link	Minor	For visual impact please refer to chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH71	Blanchfieldsland	252829 156748	Detached house on site of 19 th century structure	Ch1+360 Ch0+220 (Blanchfields-land side alignment/access)	15m from Kilkenny Link 12m from Blanchfieldsland side alignment/access road	Minor	Protection of the site during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH72	Blanchfieldsland	252708 156512	Derelict Country House (Hebron/Heborn) and outbuildings CDP: No Rating RPS Ref. C475	Ch1+220	Site boundary and entrance within revised access/entrance Within Kilkenny Link House: 82m from Kilkenny Link	Major on site boundary and entrance gate No predicted impact on the house	This site has previously been recorded by ACS Ltd. No specific ameliorative measures are recommended for this site as all archaeological works relating to it are being carried out as part of the N77 Kilkenny Ring-Road Scheme. No specific mitigation measures for the house.
SIA10	Blanchfieldsland	252603 156626	Stone bridge	Ch1+180	Within Kilkenny Link road	Major	A full architectural and photographic survey is recommended.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
KING'S RIVER TO BALLYQUIRKE (continued)							
SAH73	Rathcash East	259202 154512	Cluster of derelict structures and possible deserted village	Ch46+060 to Ch46+160	Within mainline	Major	A full architectural and photographic survey is recommended.
SAH74	Rathcash East	259821 154711	Single storey house	Ch46+800	0m from land acquisition	Minor	Protection of the site during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH75	Rathcash East	259821 154752	Single storey cottage with loft level	Ch46+800	10m from land acquisition.	Minor	For visual impact please refer to Chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH76	Blanchillespark	260243 154782	Farmhouse and outbuildings	Ch47+200	Entrance gate: within Talbots Hill side Alignment.	Major on site entrance/boundary wall.	A written and photographic recording of the boundary of the property should be conducted. The boundary should then be re-instated. For visual impact please refer to Chapter 10.
				Ch0+400 (Talbots Hill Side Alignment)			
				Ch47+200	House: 100m from mainline		
				Ch47+200	Modern farm buildings: 42m from mainline		

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH77	Blanchillespark	260767 156014	Farmhouse and outbuildings	Ch48+500	Avenue, within mainline	Major on avenue	Archaeological Investigations of avenue, in the form of test trenching. Further recommendations are dependant on the results of this work. If archaeological features are identified recommendations will be made as to whether they should be preserved <i>in situ</i> or by record. Reinstatement of original access to the site. For visual impact please refer to Chapter 10
				Ch48+450	House: 215m from mainline	No impact on house	predicted on the

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH78	Blanchvillespark	261200 156195	Cottage and outbuildings	Ch48+800	Site boundary: 76m from mainline	Minor	Protection of the site during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
				Ch0+050 (Blanchvillespark side alignment)	7m from Blanchvillespark side alignment		
				Ch48+800 Ch0+050 (Blanchvillespark side alignment)	Cottage: 17m from side alignment 76m from mainline		
SIA11	Blanchvillespark	261103 156278	Kiln and bridge	Ch48+700 Ch0+000 Ch48+700 Ch0+000	Bridge: 72m from Blanchvillespark Side Alignment Kiln: 77m from Blanchvillespark Side Alignment	No predicted	No specific mitigation measures.
SAH79	Blanchvillespark	261402 156061	Complex of farmbuildings	Ch48+950	60m from mainline	No predicted	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
BALLYQUIRKE (CH. 60+000) TO POWERSTOWN CH. 77+000)							
SAH80	Ballinvally	263658 157931	Cottage (derelict) and outbuildings	Ch65+500	33m from mainline	Minor	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to chapter 10.
SAH81	Ballinvally	263949 157941	Farmhouse and outbuilding	Ch62+800	12m from mainline	Minor	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH82	Garryduff	263966 157956	Detached house	Ch62+800	21m from mainline	Minor	Protection of the site during construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH83	Garryduff	263902 157981	Derelict cottage	Ch62+800	Within mainline	Major	A full architectural and photographic survey is recommended.
SIA12	Ballinvally	263703 158109	Limekiln	Ch62+700	181m from mainline	No predicted	No specific mitigation measures.
SAH84	Garryduff	263690 158223	Farmhouse and outbuildings	Ch62+800	190m from mainline	No predicted	No specific mitigation measures.
SAH85	Jordanstown	264551 158955 &265147 158667	Large detached house (Jordanstown House), avenue, entrance gate	Ch64+100 Ch64+100	House: 190m from mainline Avenue and entrance gate: Within mainline	No predicted on the house Major on the avenue and gate	Archaeological Investigations of avenue, in the form of test trenching. Further recommendations are dependant on the results of this work. If archaeological features are identified recommendations will be made as to whether they should be preserved <i>in situ</i> or by record. A written and photographic recording of the gate should be conducted. The gate should then be re-instated. No specific mitigation measures for the house.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH86	Kellymount	265458 159122	Detached house and outbuilding RMP No. KK016-090 (01-02)	Ch0+100 Ch64+650	Within side alignment off Jordanstown Interchange 250m from mainline	Minor by side alignment	Protection of the site during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10
SAH87	Kellymount	264184 159751 &265088 159304	Avenue (a) Derelict country house and outbuildings (b)	Ch64+500 Ch64+500	House and outbuildings: 900m from mainline Avenue: Within side alignment off Jordanstown Interchange	No predicted on the house or outbuildings Major on former avenue	Archaeological investigations in the form of test trenches at location of former avenue. Further recommendations are dependant on the results of this work. If archaeological features are identified recommendations will be made as to whether they should be preserved <i>in situ</i> or by record. No specific mitigation measures for the house.
SAH88	Kellymount	265208 159534	Cottage and outbuildings	Ch64+800	Within mainline	Major	A full architectural and photographic survey is recommended.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH89	Kellymount	264696 159816	Site of house, complex of outbuildings	Ch64+800	344m from side alignment	No predicted	No specific mitigation measures.
SAH90	Shankill	266148 160519	Cottage with loft level and older cottage	Ch66+000	191m from mainline	No predicted	No specific mitigation measures.
SIA13	Shankill	265902 160608	Revetted stream and culverts	Ch66+100 Ch 0+000 to Ch0+100	Within mainline Within side alignment	Major	A full architectural and photographic survey is recommended.
SAH91	Shankill	266358 161075	Derelict structure and associated avenue with gate	Ch66+500 Ch0+750 Ch0+700	Structure: 100m from mainline and 110m from side alignment Gate: 12m from side alignment	No predicted on structure Minor on gate	Protection of the site during construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10. No specific mitigation measures for the structure

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH92	Shankill	266247 161240	Complex of 19 th century structures and later detached house	Ch66+800	35m from mainline	Minor	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH93	Shankill	266098 161487	Detached Cottage	Ch67+000 Ch0+200	120m from mainline 25m from side alignment	No predicted by mainline Minor by side alignment	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH94	Shankill	266173 161639	19 th century farmyard and kiln	Ch0+050 Ch67+150	Om from side alignment 86m from mainline	Minor by side alignment	Protection of the gate during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH95	Moanmore	266326 162084	Complex of farm buildings and later residence	Ch67+600 Ch0+300	House: 136m from mainline 84m from side alignment Gate: Directly adjacent to side alignment	Minor impact on gate No predicted impact on the house	Protection of the gate during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10. No specific mitigation measures for the house
SAH96	Moanmore	266870 162465	19 th century structures and modern farmyard	Ch68+200	114m from side alignment	No predicted impact	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SIA14	Moanmore	266718 162688	Kiln	Ch68+300 Ch0+120	4m from mainline 13m from side alignment	Moderate	Protection of the site during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH97	Moanmore	266442 162807	Cottage and outbuildings	Ch0+000 Ch0+000	Gate: 10m from side alignment Buildings: 29m from side alignment	Minor	Protection of the site during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH98	Moanmore	266565 163075	Cottage and outbuildings	Ch0+280	26m from side alignment	Minor	Protection of the site during construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH99	Bannagagole	266692 163460	Farmhouse and outbuildings	Ch0+100 Ch0+100	Gate: 0m from side alignment House: 8m from side alignment	Major on gate Moderate on house	A full architectural and photographic recording of the gate should be conducted. The gate should then be re-instated. Protection of the house during the construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH100	Moanduff	267484 165253	Farmhouse and outbuildings	(Ch71+000)	83m from mainline	No predicted	No specific recommendations
SAH101	Moanduff	267733 165394	Derelict house and outbuilding	Ch0+300 Ch71+250	Within side alignment 48m from mainline	Major by side alignment	A full architectural and photographic survey is recommended.
SAH102	Demesne	267474 165435	Complex of outbuildings and modern barns	Ch0+050 Ch71+250	31m from side alignment 115m from mainline	Minor	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH103	Seskin Lower	267900 166740	Farmhouse and outbuildings	Ch72+500 CH0+200	23m from mainline 16m from side alignment	Minor by side and alignment mainline	Protection of the site during construction phase, if required. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.
SAH104	Cranavonane	268849 167968	Farmhouse/ Country House and outbuildings (Craan House)	Ch74+600 Ch74+600	Country House: 142m from mainline Outbuildings and bungalow: 116m from mainline	No predicted	No specific mitigation measures.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH105	Tomard Lower	269150 168517	Farmhouse/ Country House and outbuildings	Ch75+100 Ch75+600 Ch75+600	Avenue: within mainline Modern house: 27m from mainline 19 th century house: 103m from mainline	Major on avenue Minor on modern house No predicted impact on 19 th century house	Archaeological Investigations of avenue, in the form of test trenching. Further recommendations are dependant on the results of this work. If archaeological features are identified recommendations will be made as to whether they should be preserved <i>in situ</i> or by record. For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10. No specific mitigation measures for 19 th century house
SIA15	Tomard Lower	269423 168789	Waterpump	(Ch0+200)	30m from side alignment	Minor	For noise and vibration construction mitigation measures please refer to Chapter 8. For air quality construction mitigation measures please refer to Chapter 9. For visual impact please refer to Chapter 10.

Table 18.1 (Cont'd) Impacts and Mitigation Measures for Sites within Study Area

Site	Townland	NGR	Site Type	Road Reference	Proximity	Impact	Mitigation measures
SAH106	Tomard Lower	269418 168823	Public house	(Ch0+000)	5m from side alignment	Minor	<p>Protection of the site during the construction phase.</p> <p>For noise and vibration construction mitigation measures please refer to Chapter 8.</p> <p>For air quality construction mitigation measures please refer to Chapter 9.</p> <p>For visual impact please refer to Chapter 10.</p>