APPENDIX A8.1 ARCHAEOLOGY AND CULTURAL HERITAGE RMP SITES WITHIN THE SURROUNDING AREA

Appendix A8.1 RMP sites within the surrounding area

RMP No.:	KD019-062 Figure 8.2
Townland:	Sallins
Parish:	Bodenstown
Barony:	Naas North
NGR:	289531, 223044
Classification:	Castle - tower house
Dist. from development:	c. 380m east
Description:	Two stories of a small, rectangular tower house (int. dims. L 6m NE-SW; Wth 4.9m; wall T 1.2m) were incorporated (for use as stables/outbuildings) into the later Sallins Lodge, which is attached to the SW wall of the tower house and accessed through the probable original tower house doorway (H 1.8m; Wth 0.95m). The ground floor is roofed by a fine round-arched vault (H 3.4m). A doorway (Wth 0.95m; H 2m) in the NW wall giving access from the yard outside appears to be a later insertion, as does a now shelved-off doorway in the N angle (at the NW end of the NE wall) which gave access to another outbuilding beyond. Traces of a window are visible in the NW wall and there is a gently splaying window embrasure with a low sill in the SE wall.
Reference:	www.archaeology.ie

RMP No.:	KD014-041001, 2 and 3 Figure 8.2
Townland:	Bodenstown
Parish:	Bodenstown
Barony:	Naas North
NGR:	289113, 224780
Classification:	Church, Graveyard, Font
Dist. from development:	c. 500m north-east
Description:	In Bodenstown church (KD014-041001-). Two granite pieces appear to be part of the same, possibly 13th century baptismal font. One piece is square (dims. L 0.67m; Wth 0.67m) with a central, circular perforation (upper diam. 0.23m; base diam. 0.009m) and forms part of the base. The second, slightly larger piece (dims. L 0.8m; Wth 0.8m) contains a shallow basin which has small, opposing mortices. Sherlock (1899-1902, 298-9) explains that the opposing mortices on a very similar font (KD014-042002-) from Sherlockstown, c. 1 mile to the ESE, would have contained 'iron rivets leaded into the stone for the cover and lock required by the Constitution of Edward, Archbishop of Canterbury, in 1236'. On the S side of a road, on the narrow summit of a short, low, N-S pasture ridge in an area of mixed tillage and pasture. An almost square area (dims. L c. 70m; Wth c. 70m) is enclosed by a stone wall and entered from the road along the N. Contains a church (KD014-041001-) in the N sector, with the main concentration of burials to its S. The oldest, legible grave markers date to the 19th century and stand to the E and W of the church. The E and W perimeter and S-third of the interior are planted with palm trees.
Reference:	www.archaeology.ie

RMP No.:	KD019-013 Figure 8.1
Townland:	Osberstown
Parish:	Naas
Barony:	Naas North
NGR:	287357, 221244
Classification:	Mound
Dist. from development:	c. 540m west
Description:	A small, steep-sided mound is marked on a manuscript map (NLI Ms. 21 F 35 (1727-1838)), but is not recorded on the OS 6-inch mapping. On top of a long, gentle, NE-facing, pasture slope. No obvious visible surface trace of an artificial mound survives.
Reference:	www.archaeology.ie

RMP No.:	KD019-072 Figure 8.1
Townland:	Osberstown
Parish:	Naas
Barony:	North Naas
NGR:	287645, 220629
Classification:	Enclosure
Dist. from development:	c. 560m south -west
Description:	Aerial photograph (GB89.AF.18) shows cropmark of an incomplete circular enclosure defined by a fosse and with a curvilinear annexe extending to the north-east.
Reference:	www.archaeology.ie

RMP No.:	KD014-040 Figure 8.2
Townland:	Castlesize
Parish:	Bodenstown
Barony:	Naas North
NGR:	288680, 224850
Classification:	Castle - unclassified
Dist. from development:	c. 600m NNW
Description:	According to the OSL (Herity 2002, 46 (141)) ' it is said, there was formerly a Castle, of which, a vestige does not remain now'. On the landscaped grounds of Castlesize house, c. 150m E of the River Liffey. There was no trace of the castle visible in 1985.
Reference:	www.archaeology.ie

RMP No.:	KD019-004 Figure 8.2
Townland:	Osberstown
Parish:	Naas
Barony:	Naas North
NGR:	289088, 222531
Classification:	Enclosure
Dist. from development:	c. 670m ENE
Description:	Recorded on Taylor's 1783 Map of County Kildare as circular feature, and shown as an enclosure named 'Moat' on a manuscript map in the National Library of Ireland (NLI Ms 21.F.35 (1727-1838) Map 43). Not recorded on any edition of the OS 6-inch mapping, the latest ed. of which (1938-9) shows the engine house at Sallins train station on the presumed location of the site.
Reference:	www.archaeology.ie

RMP No.:	VD010 002001 and 2 Figure 8 1
	KD019-002001 and 2 Figure 8.1
Townland:	Waterstown
Parish:	Brideschurch
Barony:	Clane
NGR:	287430, 222217
Classification:	Church and Graveyard
Dist. from development:	c. 760m WSW
Description:	The church was granted to John Eustace of Harristown in 1592 (Tickell 1958, 313-4), and was referred to as the parish church of St. Bridget in a Royal Grant to Sir Maurice Eustace in 1627 (ibid 1960, 408). In the NE sector of a graveyard (KD019-002002-). Described in 1986 (SMR File) as the very poorly preserved remains of a rectangular, nave and chancel structure with the S corner of the chancel and part of the E gable standing to full height (dims. of nave L c. 15.5m E-W; Wth 7.7m; chancel L 7m E-W; Wth 4m), and possibly the remains of a dividing wall. There was a narrow light in the E gable and another in the S chancel wall, close to the SE corner, both with deep rear splays, and the SE corner contained a small cupboard and a piscine recess. The division into nave and chancel is no longer easily identifiable. The surviving limestone masonry comprises large, roughly rectangular quoins, lower random courses of roughly rectangular limestone blocks with smaller, more rounded stones above. According to the OSL (Herity 2002, 45 139)), 'Burial is still continued in the graveyard'. On level ground at the top of a long and very gentle W-facing slope in tillage, near the W bank of the River Liffey. A ruined church (KD019-002001-) stands in the NE sector. Recorded on the latest ed. (1938-9) of the OS 6-inch map as a partially enclosed (along E and S), rectangular area (dims. L c. 70m E-W; Wth c. 45m), its extent has been significantly reduced since (dims. L 36.5m E-W; Wth c. 24m). Now enclosed by rail and post fencing, it survives as a slightly raised area

	defined by a low scarp (H 0.5m), with no obvious trace of grave markers.
Reference:	www.archaeology.ie

RMP No.:	KD019-017 Figure 8.1
Townland:	Ploopluck
Parish:	Naas
Barony:	Naas North
NGR:	287720, 220191
Classification:	Burial
Dist. from development:	c. 860m south-west
Description:	A cemetery of pit burials was discovered in an esker during gravel extraction in 1935. The recorded burials comprised: (1) an inhumation accompanied by a bowl food vessel; (2) an inhumation accompanied by a bowl food vessel; (3) a crouched inhumation accompanied by a bowl food vessel; (4) an unaccompanied inhumation. A fifth burial containing the inhumations of four individuals accompanied by a bowl food vessel and an urn sherd from this site may not be directly associated with the cemetery (Raftery 1951, 150).
Reference:	www.archaeology.ie

RMP No.:	KD019-073 Figure 8.2
Townland:	Waterstown
Parish:	Brideschurch
Barony:	Clane
NGR:	287192, 223030
Classification:	Burial
Dist. from development:	c. 885m west
Description:	In 1997, human remains were discovered at a depth of c. 1m. during construction work on top of a small sand and gravel ridge. The site of the burial had been almost completely destroyed and the remains were no longer in context. No associated artefacts were recovered. (Cahill and Sikora 2011, Vol. 2, 484)
Reference:	www.archaeology.ie

RMP No.:	KD019-0001001-005 Figure 8.1
Townland:	Barrettstown
Parish:	Brideschurch
Barony:	Clane
NGR:	387039, 223448
Classification:	Enclosure and four barrows

Dist. from development:	c. 1km west
Description:	Four barrows occupy the fairly level, nettle-covered, narrow upper surface of a short, N-S esker in level pasture, with evidence of previous extensive sand/gravel extraction immediately to the N and E. Three contiguous barrows (KD019-001001-, KD019-001002- and KD019-001003-) run N-S, in-line at the N end of the esker and are contained in an enclosure (KD019-001004-) which girdles the lower slopes of the esker, while a fourth barrow (KD019-001005-) lies c. 48m slightly down slope, and outside the enclosure, to the S.
Reference:	www.archaeology.ie

APPENDIX A8.2 ARCHAEOLOGY AND CULTURAL HERITAGE STRAY FINDS WITHIN THE SURROUNDING AREA

Appendix A8.2 Stray finds within the surrounding area

Information on artefact finds from the study area in County Kildare has been recorded by the National Museum of Ireland since the late 18th century. Location information relating to these finds is important in establishing prehistoric and historic activity in the study area.

No stray finds are recorded from in or within the immediate vicinity of the proposed scheme. However, the artefacts from the site of the recorded Bronze Age burials in the townland of Ploopluck (KD019-017), c. 860m south-west are recorded within the topographical files (NMI registration numbers 1935:3-10, 17, 544-548).

APPENDIX A8.3 ARCHAEOLOGY AND CULTURAL HERITAGE LEGISLATIVE FRAMEWORK PROTECTING THE ARCHAEOLOGICAL RESOURCE

Appendix A8.3 Legislative Framework protecting the archaeological resource

Protection of Cultural Heritage

The cultural heritage in Ireland is safeguarded through national and international policy designed to secure the protection of the cultural heritage resource to the fullest possible extent (Department of Arts, Heritage, Gaeltacht and the Islands 1999, 35). This is undertaken in accordance with the provisions of the *European Convention on the Protection of the Archaeological Heritage* (Valletta Convention), ratified by Ireland in 1997.

The Archaeological Resource

The *National Monuments Act 1930 to 2004* and relevant provisions of the *National Cultural Institutions Act 1997* are the primary means of ensuring the satisfactory protection of archaeological remains, which includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. A National Monument is described as 'a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto' (National Monuments Act 1930 Section 2).

A number of mechanisms under the National Monuments Act are applied to secure the protection of archaeological monuments. These include the Register of Historic Monuments, the Record of Monuments and Places, and the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

Ownership and Guardianship of National Monuments

The Minister may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

Register of Historic Monuments

Section 5 of the 1987 Act requires the Minister to establish and maintain a Register of Historic Monuments. Historic monuments and archaeological areas present on the register are afforded statutory protection under the 1987 Act. Any interference with sites recorded on the register is illegal without the permission of the Minister. Two months notice in writing is required prior to any work being undertaken on or in the vicinity of a registered monument. The register also includes sites under Preservation Orders and Temporary Preservation Orders. All registered monuments are included in the Record of Monuments and Places.

Preservation Orders and Temporary Preservation Orders

Sites deemed to be in danger of injury or destruction can be allocated Preservation Orders under the 1930 Act. Preservation Orders make any interference with the site illegal. Temporary Preservation Orders can be attached under the 1954 Act. These perform the same function as a Preservation Order but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister.

Record of Monuments and Places

Section 12(1) of the 1994 Act requires the Minister for Arts, Heritage, Gaeltacht and the Islands (now the Minister for the Environment, Heritage and Local Government) to establish and maintain a record of monuments and places where the Minister believes that such

monuments exist. The record comprises a list of monuments and relevant places and a map/s showing each monument and relevant place in respect of each county in the state. All sites recorded on the Record of Monuments and Places receive statutory protection under the National Monuments Act 1994. All recorded monuments on the proposed development site are represented on the accompanying maps.

Section 12(3) of the 1994 Act provides that 'where the owner or occupier (other than the Minister for Arts, Heritage, Gaeltacht and the Islands) of a monument or place included in the Record, or any other person, proposes to carry out, or to cause or permit the carrying out of, any work at or in relation to such a monument or place, he or she shall give notice in writing to the Minister of Arts, Heritage, Gaeltacht and the Islands to carry out work and shall not, except in the case of urgent necessity and with the consent of the Minister, commence the work until two months after the giving of notice'.

Under the National Monuments (Amendment) Act 2004, anyone who demolishes or in any way interferes with a recorded site is liable to a fine not exceeding $\in 3,000$ or imprisonment for up to 6 months. On summary conviction and on conviction of indictment, a fine not exceeding $\in 10,000$ or imprisonment for up to 5 years is the penalty. In addition they are liable for costs for the repair of the damage caused.

In addition to this, under the *European Communities (Environmental Impact Assessment)* Regulations 1989, Environmental Impact Statements (EIS) are required for various classes and sizes of development project to assess the impact the proposed development will have on the existing environment, which includes the cultural, archaeological and built heritage resources. These document's recommendations are typically incorporated into the conditions under which the proposed development must proceed, and thus offer an additional layer of protection for monuments which have not been listed on the RMP.

The Planning and Development Act 2000

Under planning legislation, each local authority is obliged to draw up a Development Plan setting out their aims and policies with regard to the growth of the area over a five-year period. They cover a range of issues including archaeology and built heritage, setting out their policies and objectives with regard to the protection and enhancement of both. These policies can vary from county to county. The Planning and Development Act 2000 recognises that proper planning and sustainable development includes the protection of the archaeological heritage. Conditions relating to archaeology may be attached to individual planning permissions.

County Kildare Development Plan 2011–2017

- **AH 1:** To have regard to the Record of Monuments and Places (RMP) and the Urban Archaeological Survey when assessing planning applications for development. No development shall be permitted in the vicinity of a recorded feature where it detracts from the setting of the feature or which is injurious to its cultural or educational value.
- **AH 2:** To seek to protect and preserve archaeological sites which have been identified subsequent to the publication of the Record of Monuments and Places (RMP).
- **AH 3:** To ensure that development in the vicinity of a site of archaeological interest is not detrimental to the character of the archaeological site or its setting by reason of its location, scale, bulk or detailing and to ensure that such proposed developments are subject to an archaeological assessment. Such an assessment will seek to ensure that the development can be designed in such a way as to avoid or minimise any potential effects on the archaeological heritage.

APPENDIX A8.4 ARCHAEOLOGY AND CULTURAL HERITAGE IMPACT ASSESSMENT AND THE CULTURAL HERITAGE RESOURCE

Appendix A8.4 Impact Assessment and the Cultural Heritage Resource

Potential Impacts on Archaeological and Historical Remains

Impacts are defined as 'the degree of change in an environment resulting from a development' (Environmental Protection Agency 2003: 31). They are described as profound, significant or slight impacts on archaeological remains. They may be negative, positive or neutral, direct, indirect or cumulative, temporary or permanent.

Impacts can be identified from detailed information about a project, the nature of the area affected and the range of archaeological and historical resources potentially affected. Development can affect the archaeological and historical resource of a given landscape in a number of ways.

- Permanent and temporary land-take, associated structures, landscape mounding, and their
 construction may result in damage to or loss of archaeological remains and deposits, or
 physical loss to the setting of historic monuments and to the physical coherence of the
 landscape.
- Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping and the passage of heavy machinery; disturbance by vehicles working in unsuitable conditions; or burial of sites, limiting accessibility for future archaeological investigation.
- Hydrological changes in groundwater or surface water levels can result from construction activities such as de-watering and spoil disposal, or longer-term changes in drainage patterns. These may desiccate archaeological remains and associated deposits.
- Visual impacts on the historic landscape sometimes arise from construction traffic and facilities, built earthworks and structures, landscape mounding and planting, noise, fences and associated works. These features can impinge directly on historic monuments and historic landscape elements as well as their visual amenity value.
- Landscape measures such as tree planting can damage sub-surface archaeological features, due to topsoil stripping and through the root action of trees and shrubs as they grow.
- Ground consolidation by construction activities or the weight of permanent embankments can cause damage to buried archaeological remains, especially in colluviums or peat deposits.
- Disruption due to construction also offers in general the potential for adversely affecting archaeological remains. This can include machinery, site offices, and service trenches.

Although not widely appreciated, positive impacts can accrue from developments. These can include positive resource management policies, improved maintenance and access to archaeological monuments, and the increased level of knowledge of a site or historic landscape as a result of archaeological assessment and fieldwork.

Predicted Impacts

The severity of a given level of land-take or visual intrusion varies with the type of monument, site or landscape features and its existing environment. Severity of impact can be judged taking the following into account:

- The proportion of the feature affected and how far physical characteristics fundamental to the understanding of the feature would be lost.
- Consideration of the type, date, survival/condition, fragility/vulnerability, rarity, potential and amenity value of the feature affected.
- Assessment of the levels of noise, visual and hydrological impacts, either in general or site specific terms, as may be provided by other specialists.

APPENDIX A8.5 ARCHAEOLOGY AND CULTURAL HERITAGE MITIGATION MEASURES AND THE CULTURAL HERITAGE RESOURCE

Appendix A8.5 Mitigation Measures and the Cultural Heritage Resource

Potential Mitigation Strategies for Cultural Heritage Remains

Mitigation is defined as features of the design or other measures of the proposed development that can be adopted to avoid, prevent, reduce or offset negative effects.

The best opportunities for avoiding damage to archaeological remains or intrusion on their setting and amenity arise when the site options for the development are being considered during the design process. Damage to the archaeological resource immediately adjacent to developments may be prevented by the selection of appropriate construction methods. Reducing adverse effects can be achieved by good design, for example by screening historic buildings or upstanding archaeological monuments or by burying archaeological sites undisturbed rather than excavating them. Offsetting adverse effects is probably best illustrated by the full investigation and recording of archaeological sites that cannot be preserved in situ.

Definition of Mitigation Strategies

Archaeological Resource

The ideal mitigation for all archaeological sites is preservation by avoidance, followed by preservation in situ. This is not always a practical solution, however. Therefore a series of recommendations are offered to provide ameliorative measures where avoidance and preservation in situ are not possible.

Geophysical survey is used to create 'maps' of subsurface archaeological features. Features are the non-portable part of the archaeological record, whether standing structures or traces of human activities left in the soil. Geophysical instruments can detect buried features when their electrical or magnetic properties contrast measurably with their surroundings. In some cases individual artifacts, especially metal, may be detected as well. Readings taken in a systematic pattern become a dataset that can be rendered as image maps. Survey results can be used to guide archaeological testing and excavation and to give archaeologists insight into the patterning of non-excavated parts of the site. Unlike other archaeological methods, geophysical survey is not invasive or destructive.

Archaeological Test Trenching can be defined as 'a limited programme of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate' (IFA 2009).

Full Archaeological Excavation can be defined as 'a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design' (IFA 2008a).

Archaeological Watching Brief/ Monitoring can be defined as 'a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or

destroyed. The programme will result in the preparation of a report and ordered archive (IFA 2008b).

Underwater Archaeological Assessment consists of a programme of works carried out by a specialist underwater archaeologist, which can involve wade surveys, metal detection surveys and the excavation of test pits within the sea or riverbed. These assessments are able to access and assess the potential of an underwater environment to a much higher degree than terrestrial based assessments.