

Laois to Kilkenny Reinforcement Project Environmental Reports

Assessment of Corridors Report – Cultural Heritage
Tobar Archaeological Services

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1. Introduction

This section provides an assessment of the potential route corridors within the study area for the proposed 110kV line for the Laois Kilkenny Reinforcement Project. The purpose of this assessment is to recommend the route corridor that has the least impacts on the Archaeological and Cultural Heritage landscape. This Report has been prepared by Tobar Archaeological Services.

A previous Constraints Report (*Study Area Constraints report, AOS Planning Ltd, October 2010*) identified the most significant Cultural Heritage constraints within the study area. The potential route corridors have been designed having regard to the identified constraints outlined in that report. This report should be read in conjunction with that Report.

2. Assessment of Route Corridors

A desk-based route selection report was undertaken for a number of different corridors (referred to as nodes in the report) between the intersection of the existing 400kV Dunstown Moneypoint line and the 110kV Carlow Portlaoise line in the north to Ballyragget, Co. Kilkenny in the south to highlight areas of potential archaeological sensitivity and to identify all recorded cultural heritage sites that may influence the selection of the potential routes for the proposed electricity transmission line. The routes include an eastern route corridor, a central route corridor and a western route corridor. A number of alternative options and variations are also included in these main routes. The final selected route, for example, may include combinations of each route. The lengths of corridors will be referred to in this report as nodes, e.g. Nodes 10-8-7-3 for clarity.

The aim of the route selection report is to assess each of the route corridors for their archaeological landscape potential and map each route showing the identifiable cultural heritage sites that may impact on choosing one route over another for the proposed electricity transmission line. For the purposes of this report, **cultural heritage** is considered to include the following elements:

- Sites listed in the Sites & Monuments Record (SMR)
- Record of Monuments & Places (RMP)
- Sites listed in the Archaeological Inventory of Laois (Kilkenny Inventory is not yet published)

- Archaeological sites listed on the National Monuments Service website: www.archaeology.ie
- Sites listed in the Record of Protected Structures (RPS)
- National Inventory of Architectural Heritage, Buildings of Ireland: www.buildingsofireland.ie
- Sites uncovered in Excavations Bulletins

Eastern Route Corridor (Nodes 10-1)

National Monuments

No *National Monuments* in State Care/Ownership are located within the route corridor from nodes 10 as far as Node 1. Timahoe Church and Graveyard (LA018-032-001 and 002) and Fossy Graveyard (RMP LA019-016-001) are located c. 900m to the west of the corridor. This is considered to be an adequate distance so as to avoid any potential visual impacts.

Record of Monuments and Places (RMP) and Sites and Monuments Record (SMR)

Forty recorded monuments occur within this corridor between nodes 10 and 1 and these are outlined *Figure 2.1* and *Table 2.1* below. Clusters of monuments and those which are prominent in the landscape will be highlighted here to assist in the route selection process. In general the majority of the monuments occur at the southern end of the corridor near to Ballyragget. Some clusters of monuments are apparent at this end.

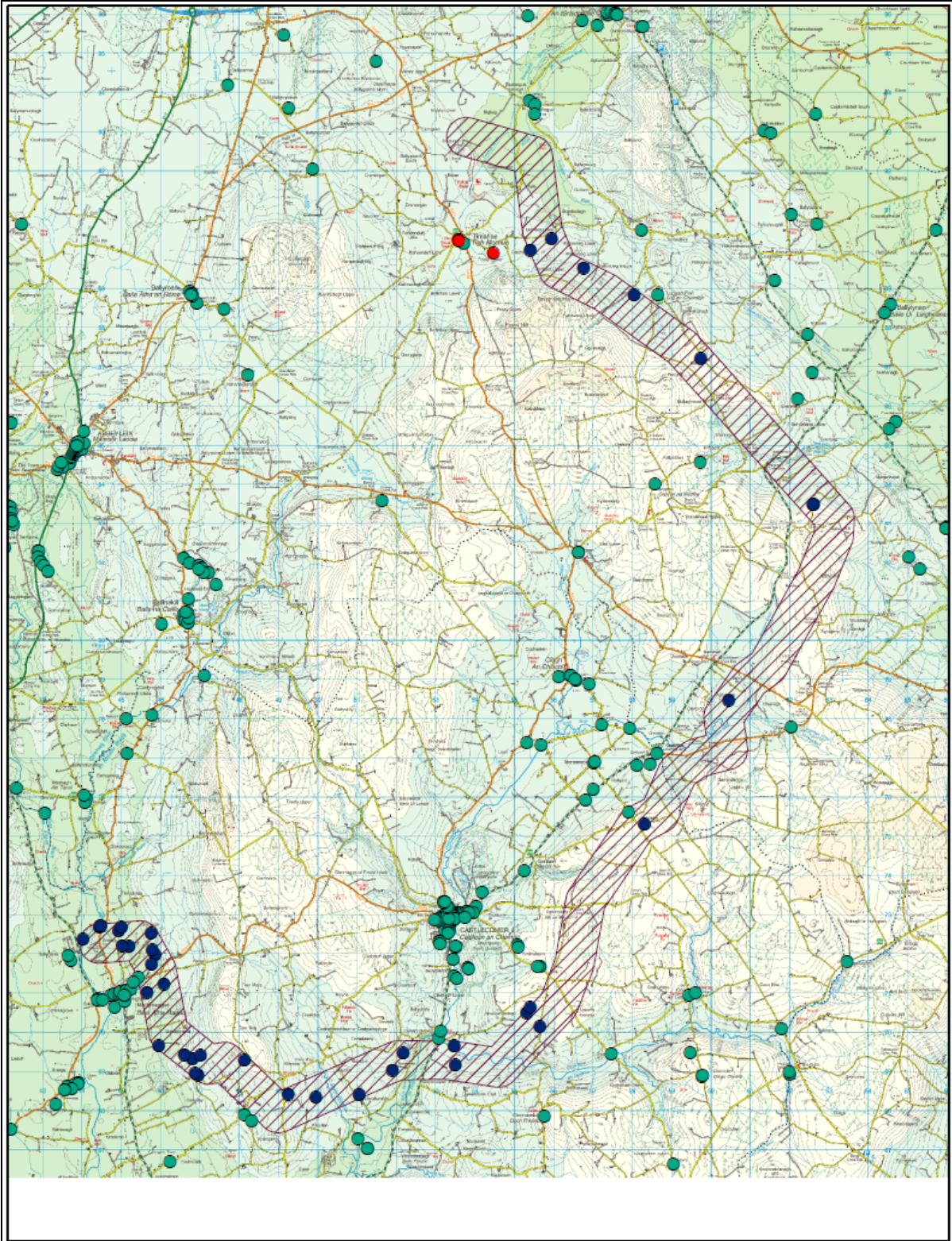


Figure 2-1: Map showing route corridor (Nodes 10 to 1) and existing constraints.

RMP	Easting	Northing	Townland	Monument Type
KK004-021----	244010	172370	BALLYCONRA	INSCRIBED STONE
KK005-023001-	244465	172696	MOATPARK	CASTLE - MOTTE
KK005-023002-	244464	172697	MOATPARK	CASTLE - UNCLASSIFIED
KK005-023003-	244434	172687	MOATPARK	CHAPEL
KK005-024----	245190	172200	RATHDUFF (FASSADININ BY.)	MOUND
KK005-061----	245750	172520	SRALEAGH	ENCLOSURE
KK005-089----	245856	171982	BALLYRAGGET	ENCLOSURE
KK005-090----	245778	172094	BALLYRAGGET	ENCLOSURE
KK005-091----	245759	171719	BALLYRAGGET	ENCLOSURE
KK005-094----	244924	172580	RATHDUFF (FASSADININ BY.)	ENCLOSURE
KK005-095----	244994	172669	RATHDUFF (FASSADININ BY.)	FIELD SYSTEM
KK005-096----	245011	172202	RATHDUFF (FASSADININ BY.)	ENCLOSURE
KK006-015----	258300	175300	GORTEEN (FASSADININ BY.)	BURNT MOUND
KK010-003----	245646	171007	BALLYRAGGET	RINGFORT - UNCLASSIFIED
KK010-004----	246077	171225	BALLYRAGGET	ENCLOSURE
KK010-006----	245940	169659	DONAGHMORE (FASSADININ BY.)	RINGFORT - UNCLASSIFIED
KK010-033----	246594	169419	DONAGHMORE (FASSADININ BY.)	RINGFORT - RATH
KK010-034----	246796	169310	CONNAHY	ENCLOSURE
KK010-035----	247000	169400	CONNAHY	ENCLOSURE
KK010-036----	246870	168941	CONNAHY	RINGFORT - RATH
KK010-037----	248117	169281	KILMACAR	RINGFORT - RATH
KK010-039----	249240	168411	KILMACAR	EARTHWORK
KK010-040----	249939	168336	KILMACAR	RINGFORT - RATH
KK010-044----	252164	169452	NEWTOWN (FASSADININ BY.)	MOATED SITE
KK010-045----	251883	169019	NEWTOWN (FASSADININ BY.)	RINGFORT - RATH
KK010-046----	253450	169644	KNOCKANADDOGE	ENCLOSURE
KK010-047----	253486	169166	DAMERSTOWN EAST	ENCLOSURE
KK010-132----	246941	168899	CONNAHY	ENCLOSURE
KK010-134----	251044	168383	MAUDLIN (FASSADININ BY., KILMACAR ED)	LEPER HOSPITAL
KK011-002----	255298	170489	KNOCKANADDOGE	ENCLOSURE
KK011-003----	255640	170139	KNOCKANADDOGE	ENCLOSURE
KK011-025----	255397	170637	KNOCKANADDOGE	ENCLOSURE
LA019-017----	255386	189972	CLASHBOY	ENCLOSURE
LA019-018----	255930	190260	ORCHARD LOWER	MOATED SITE
LA025-002----	256745	189515	FALLOWBEG LOWER	RINGFORT - RATH
LA025-006----	258031	188814	LUGGACURREN	RINGFORT - RATH
LA025-018----	259730	187217	MANGER	MEGALITHIC TOMB - UNCLASSIFIED
LA031-004001-	262586	183461	FARNANS	CASTLE - UNCLASSIFIED
LA031-004002-	262605	183482	FARNANS	MOATED SITE
LA031-007----	260440	178470	CLONBROCK	ENCLOSURE

Table 2.1: Recorded Monuments located within Eastern Route Corridor Nodes 10 to 1.

A group of enclosures and ringforts are located at Connaghy and Donaghmore townlands, south of Ballyragget. Some of the monuments are situated quite close to the centre of the corridor. Positioning the overhead line to the north of this cluster

would be preferable rather than placing polesets or angle masts adjacent to the monuments. Further to the north-west along this corridor, the townland of Ballyragget contains a large number of enclosures and ringforts and mounds all within close proximity to each other.

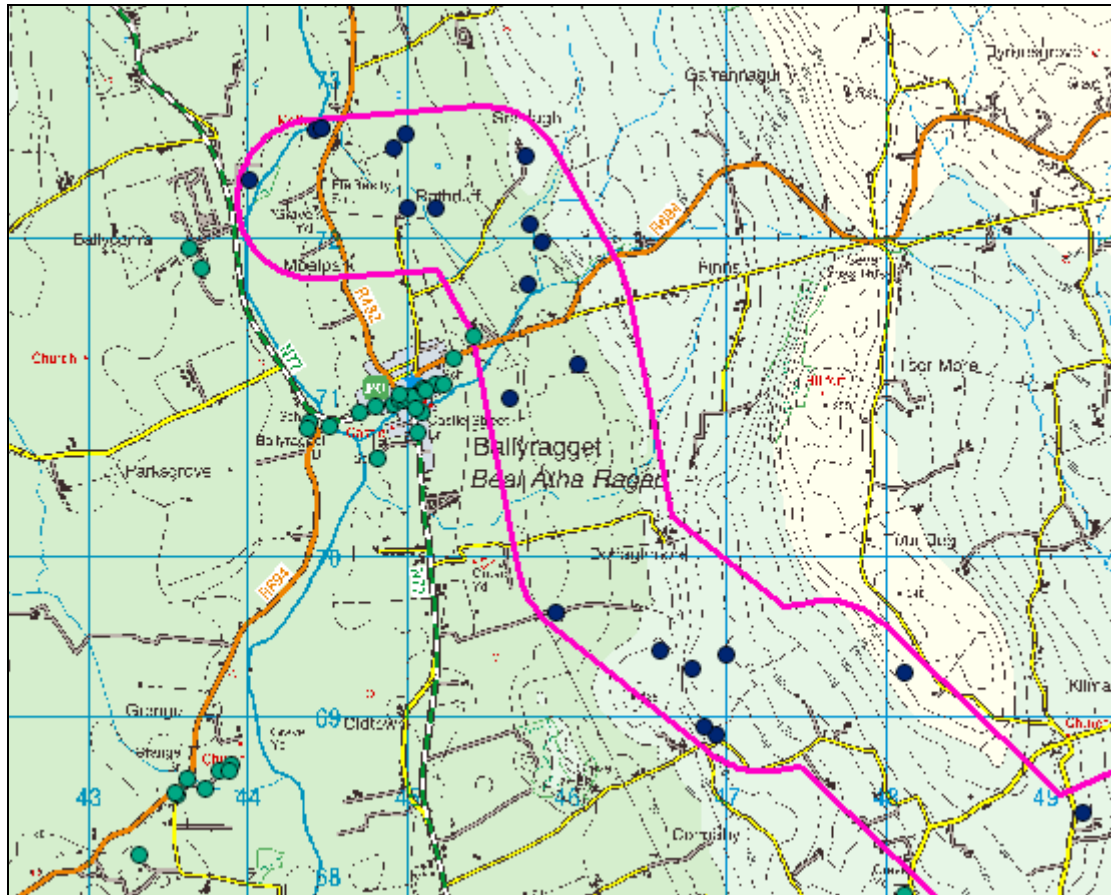


Figure 2-2: Constraints (Recorded Monuments) near to Ballyragget.

Buildings in the NIAH

Two structures listed in the NIAH are located between nodes 1 and 10 along the easternmost corridor. Both structures are located on the periphery of the corridor and therefore should not be impacted on by the overhead line.

Table 2-1: Buildings listed in the NIAH located between Nodes 10-1.

Structure	NIAH Reg.	Townland	NGR
Gorteen Methodist Chapel	12400618	Gorteen	257819, 175616
Eden Hall	12303015	Ballyragget	245423, 171394

Central Route Corridor (Node 7-3)

National Monuments

No *National Monuments* in State Care/Ownership are located within the corridor between nodes 7 and 3.

Record of Monuments and Places (RMP) and Sites and Monuments Record (SMR)

Twelve (12) recorded monuments are located within this corridor two of which are located in County Kilkenny and ten in County Laois. *Table 2.2* shows the total number of monuments which occur within the route corridor. In general the overall density of monuments within this corridor is low especially in the southern portion where no known constraints exist. Where the line changes direction in the townland of Knockbaun, Co. Laois (northern end of corridor) a number of monuments are located within relatively close proximity to each other. The structures consist of standing stones, megalithic tombs, enclosures, earthworks and battlefields. The presence of standing stones and megalithic structures in the same area may indicate a Bronze Age landscape. Traversing such monuments in the final selection process should be avoided. Placing polesets and angle masts at a remove from such monuments would be preferable. It would be preferable to confine the overhead line to the west of these monuments in order to avoid any direct impacts and visual impacts.

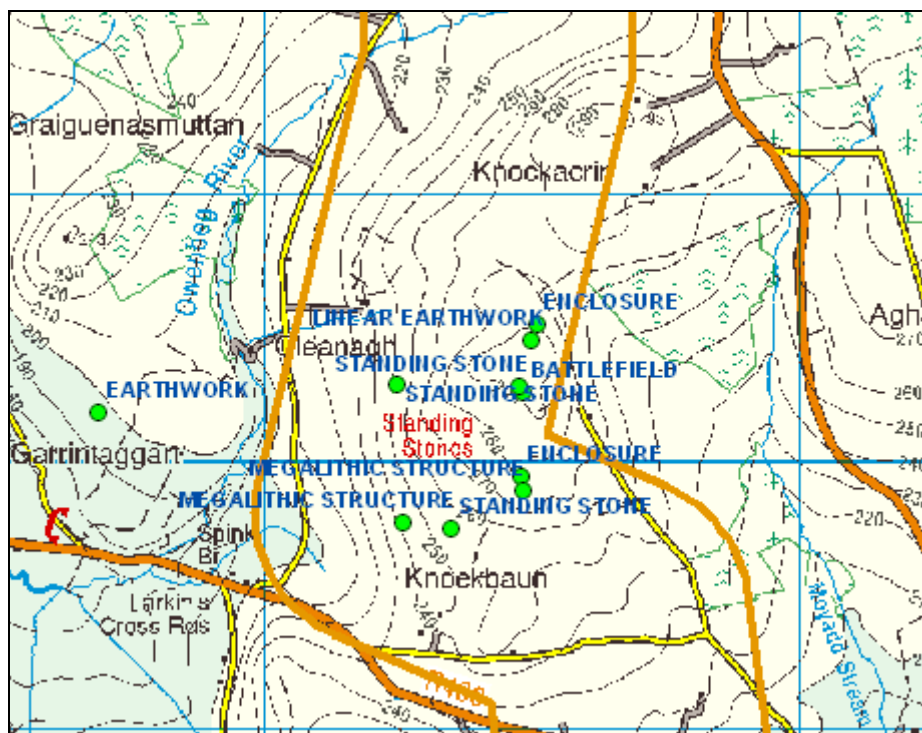
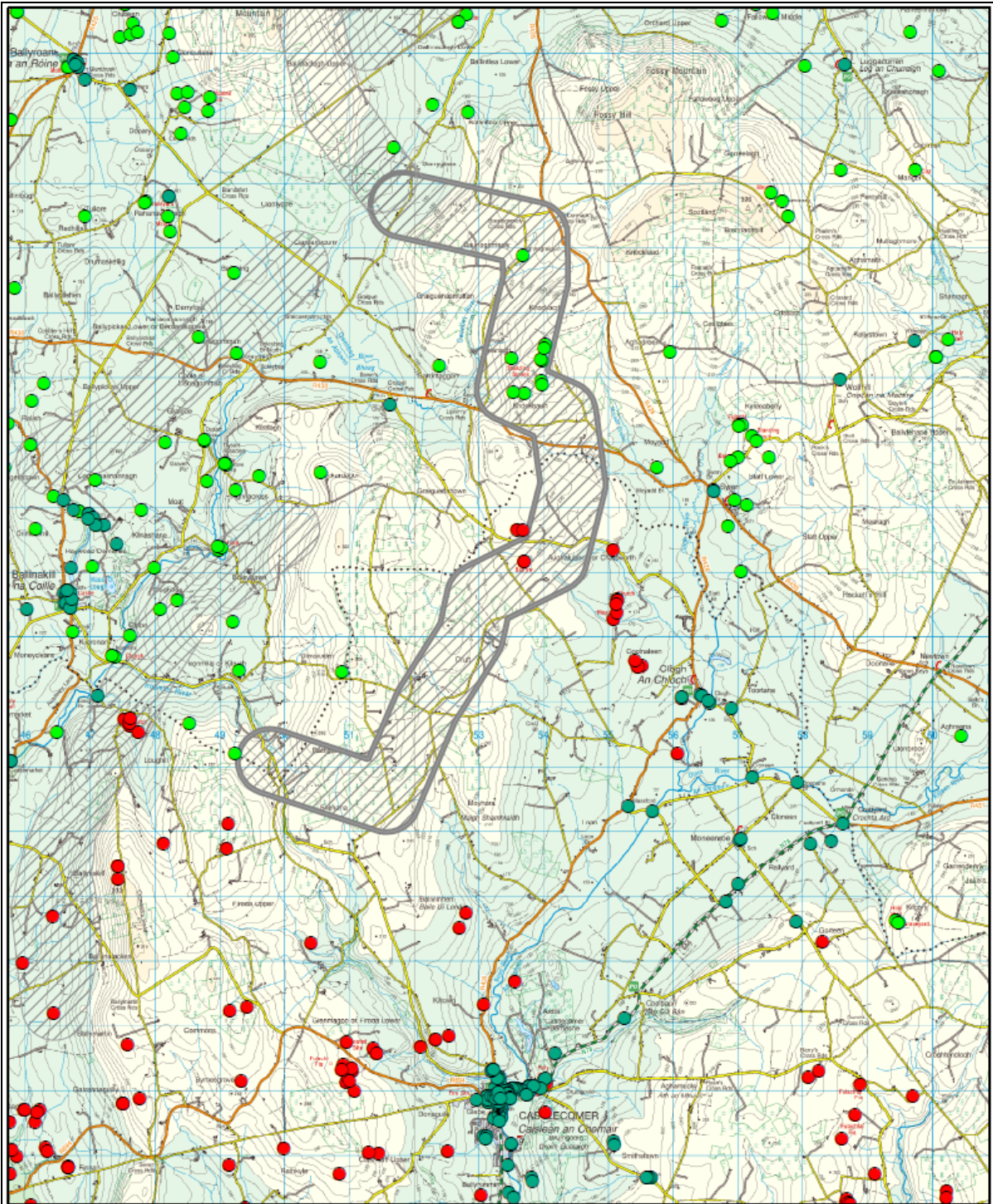


Figure 2-3: Constraints in the townland of Knockbaun, Co. Laois.



3,500 Meters

Legend

- National Monuments
- Recorded Monuments Kilkenny
- Recorded Monuments Laois
- NIAH
- 110kV Sub Route Corridors

Figure 2-4: Map showing Node 7 to 3 Corridor and Constraints.

Table 2-2: Recorded Monuments located within the Central Route Corridor

RMP	Easting	Northing	Townland	Monument Type
KK001-002001-	253690	181161	AUGHATUBBRID OR CHATSWORTH	BARROW - RING-BARROW
KK001-002002-	253690	181160	AUGHATUBBRID OR CHATSWORTH	ENCLOSURE
LA024-049001-	254020	184520	KNOCKBAUN	ENCLOSURE
LA024-051----	253970	184270	KNOCKBAUN	BATTLEFIELD
LA024-053----	253700	183760	KNOCKBAUN	STANDING STONE
LA024-054----	253960	183950	KNOCKBAUN	ENCLOSURE
LA024-048----	253499	184294	CLEANAGH	STANDING STONE
LA024-050----	253950	184290	KNOCKBAUN	STANDING STONE
LA024-055----	253970	183900	KNOCKBAUN	MEGALITHIC STRUCTURE
LA024-049002-	254000	184460	KNOCKBAUN	LINEAR EARTHWORK
LA024-038----	253670	185890	BAUNOGEMEELY	ENCLOSURE
LA024-052----	253522	183780	KNOCKBAUN	MEGALITHIC STRUCTURE

NIAH

No structures listed in the National Inventory of Architectural Heritage are located within this corridor.

Central Route Corridor (Nodes 10-9-8-7-6-4-3-2-1)

This corridor constitutes the main central route. A number of other alternatives are also included in this report which may be utilised along this route.

National Monuments

No *National Monuments* in State Care/Ownership are located within this corridor between nodes 10-9-8-7-6-4-3-2-1.

Record of Monuments and Places (RMP) and the Sites and Monuments Record (SMR)

Twenty three (23) recorded monuments are located within this route alternative and these are outlined in *Table 2.3* below. Few monuments are located between Nodes 10-3. One main cluster of monuments occurs at the southern end of the corridor between nodes 2 and 1 in Tinnalintan and Moatpark, Co. Kilkenny. A number of these sites are located relatively close to the centre of the corridor and therefore should be avoided by the transmission line. The castles and chapel at Moatpark (KK005-023 01-03) are located at the northern edge of the route corridor. Placing polesets and angle masts adjacent to these structures should be avoided in the interest of maintaining their character and setting. Two field systems KK005-016 and KK005-095 are located in Ballymartin and Rathduff townlands, Co. Kilkenny near the southern end of the corridor. Field systems may extend over several fields and this should be taken into consideration when selecting the final route. Ideally polesets

and angle masts should not be placed within a field system. The extent of KK005-016 is shown below in Figure 2.5.

Table 2-3: Recorded Monuments located within Main Central Route Corridor between nodes 10-9-8-7-6-4-3-2-1

RMP	Easting	Northing	Townland	Monument Type
KK005-015----	245614	173291	TINNALINTAN	RINGFORT - UNCLASSIFIED
KK005-023002-	244464	172697	MOATPARK	CASTLE - UNCLASSIFIED
KK005-023003-	244434	172687	MOATPARK	CHAPEL
KK005-088----	245498	172984	TINNALINTAN	ENCLOSURE
KK005-094----	244924	172580	RATHDUFF (FASSADININ BY.)	ENCLOSURE
KK005-096----	245011	172202	RATHDUFF (FASSADININ BY.)	ENCLOSURE
KK004-021----	244010	172370	BALLYCONRA	INSCRIBED STONE
KK005-005----	248120	176820	BALLYOSKILL	ENCLOSURE
KK005-006----	249119	177123	FIRODA UPPER	ENCLOSURE
KK005-007----	249099	176739	FIRODA UPPER	ENCLOSURE
KK005-016----	246430	174190	BALLYMARTIN (FASSADININ BY.)	FIELD SYSTEM
KK005-023001-	244465	172696	MOATPARK	CASTLE - MOTTE
KK005-014----	245505	173504	TINNALINTAN	RINGFORT - RATH
KK005-095----	244994	172669	RATHDUFF (FASSADININ BY.)	FIELD SYSTEM
LA018-021002-	251640	192220	CREMORGAN	GRAVEYARD
LA018-021003-	251650	192230	CREMORGAN	TOMB
LA024-046----	250540	184240	BOLEYBEG	MOATED SITE
LA030-015----	249600	182490	AGHNACROSS	ENCLOSURE
LA030-016----	250550	182540	KNOCKARDAGUR	ENCLOSURE
LA030-031----	249230	178200	IRONMILLS OR KILRUSH	ENCLOSURE
LA024-025----	251680	187550	GARRYGLASS	ENCLOSURE
LA018-021001-	251650	192230	CREMORGAN	CHURCH
LA018-021004-	251650	192230	CREMORGAN	ENCLOSURE

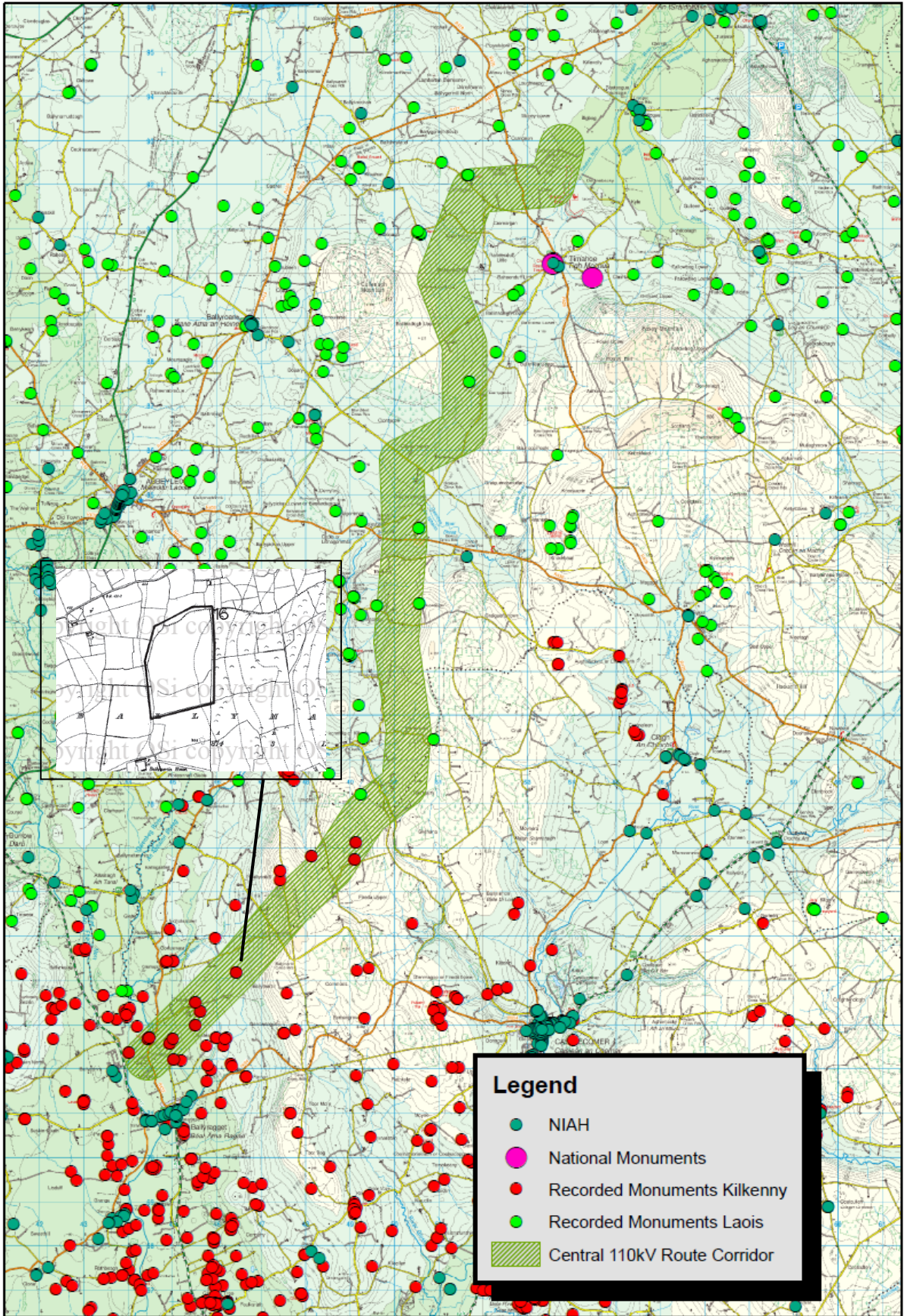


Figure 2-5: Map showing route corridor and Constraints (Recorded Monuments). Field System KK005-016 in insert.

NIAH Structures

No structures listed in the NIAH are located within this route alternative between nodes 10-9-8-7-6-4-3-2-1.

Historic Gardens and Designed Landscapes

Cremorgan House and Garden (Ref. LA-55-S-523917) is listed in the Historic Garden and Designed Landscape inventory (NIAH) and is located within this route corridor (node 9).

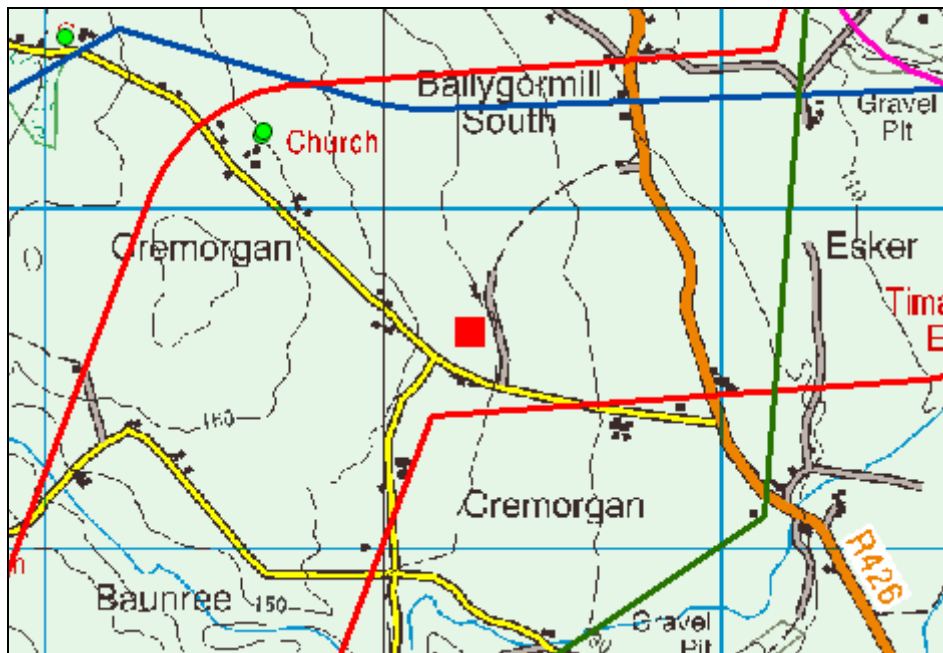


Figure 2-6: Cremorgan House and Demesne indicated by Red Square.

According to the 1st Edition mapping of 1840 the garden appears to be confined to the northern side of the road. Angle masts and polesets should not be placed within the demesne or historic garden and therefore should be confined to the southern side of the public road (See Figure 2-7 below).

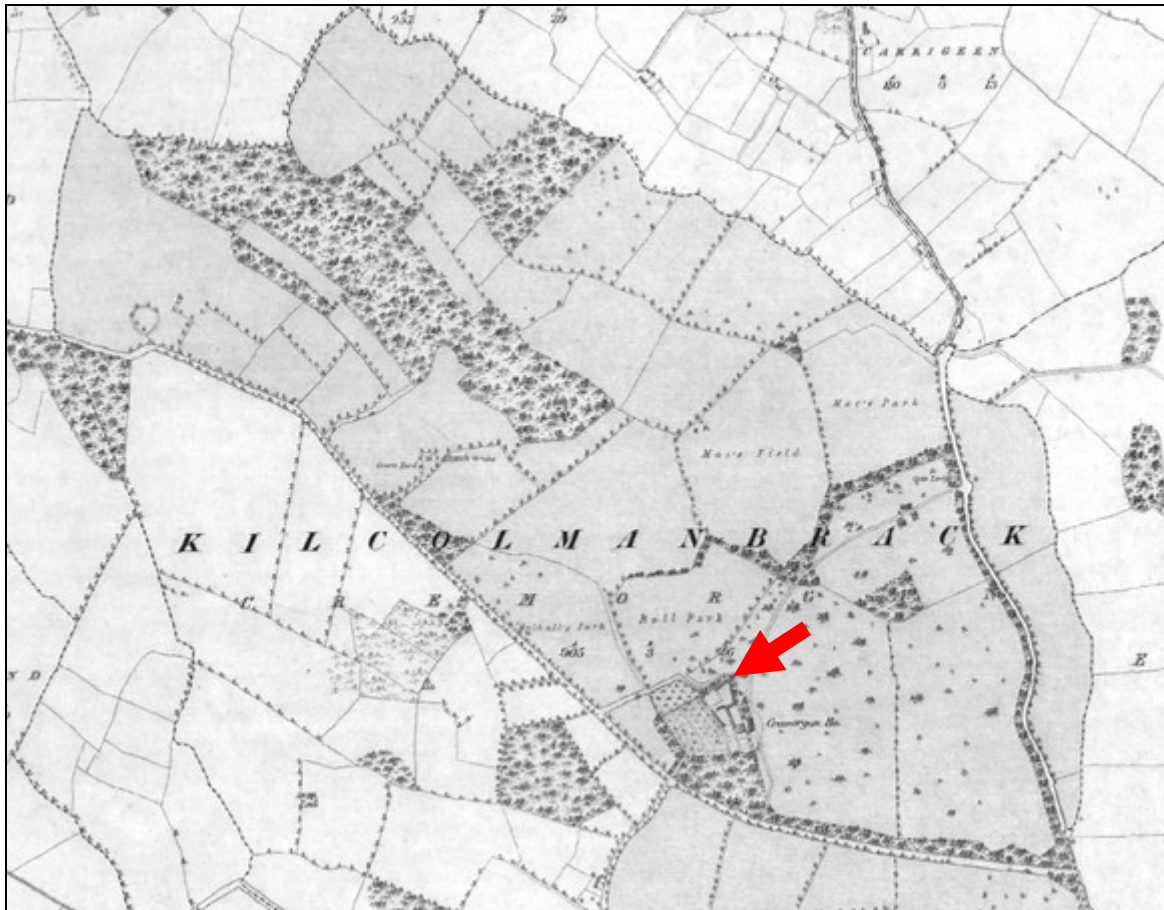


Figure 2-7: The demesne appears to be confined to the north of the public road. Cremorgan House indicated by arrow.

Central Route Corridor (Nodes 10-8)

This small route alternative is located at the northern end of the study area and measures approximately 5.7km in length. It may be used as a route alternative for the northern portion of the transmission line.

National Monuments

One *National Monument* in State Care/Ownership is located within this corridor between nodes 10 and 8. It consists of Timahoe Round Tower (Reg. 117 - ownership). This is a prominent and much visited structure therefore it is recommended that should this route alternative be selected, that angle masts and polesets be placed at a remove from the structure so as not to negatively impact on the monument. If the proposed overhead line is confined to the centre or left of the route corridor, this is considered to be acceptable. This should also be confirmed by field inspection.

Record of Monuments and Places (RMP) and the Sites and Monuments Record (SMR)

One recorded monument (containing 7 sites) LA018-031 is located within this route alternative and is outlined in *Table 2.4* below. The monument consists of an ecclesiastical site with upstanding remains including Timahoe Round Tower. It is located at the periphery of the route corridor and is unlikely to be impacted on either directly or visually if the transmission line is positioned along the centre or left side of the corridor.

Table 2-4: Recorded Monuments located within Route Corridor between nodes 10-8

RMP	Easting	Northing	Townland	Monument Type
LA018-031003-	253600	190230	TIMAHOE	GRAVEYARD
LA018-031007-	253590	190210	TIMAHOE	SHEELA-NA-GIG
LA018-031008-	253570	190230	TIMAHOE	SHRINE
LA018-031009-	253560	190220	TIMAHOE	BURIAL
LA018-031002-	253570	190230	TIMAHOE	CHURCH
LA018-031001-	253590	190210	TIMAHOE	ECCLESIASTICAL SITE
LA018-031005-	253564	190219	TIMAHOE	ROUND TOWER

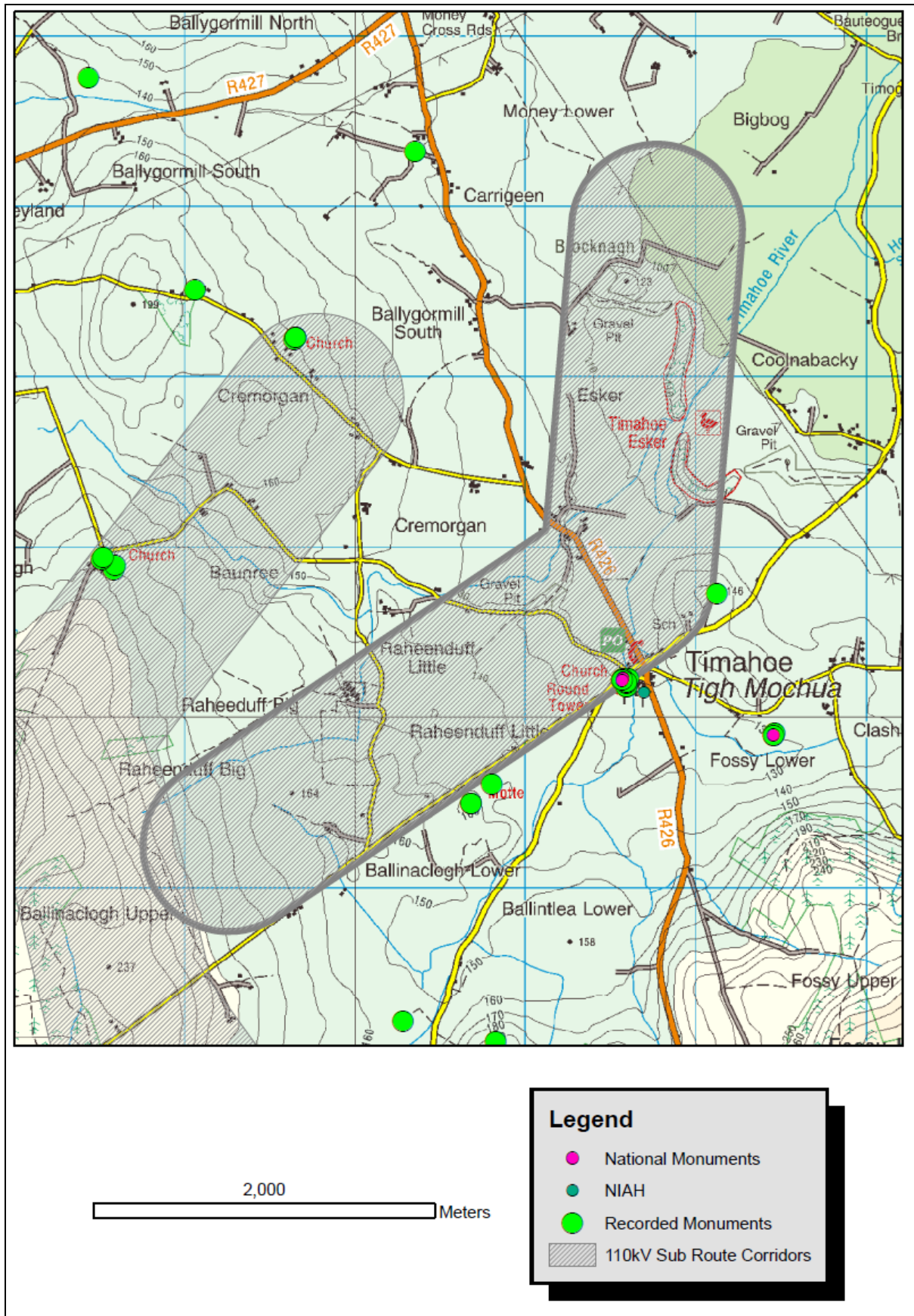


Figure 2-8: Map showing route corridor 10-8.

NIAH Structures

One structure listed in the NIAH is located within this route alternative between nodes 10 and 8. It consists of the *Willie Headon Memorial Library* (Reg. 12801802) and is unlikely to be impacted on by the proposed transmission line.

Central Route Alternative (Nodes 9-7)

This small route alternative is located at the northern end of the study area and measures approximately 7km in length. It may be used as a route alternative for the northern portion of the transmission line.

National Monuments

No National Monuments are located within this route corridor.

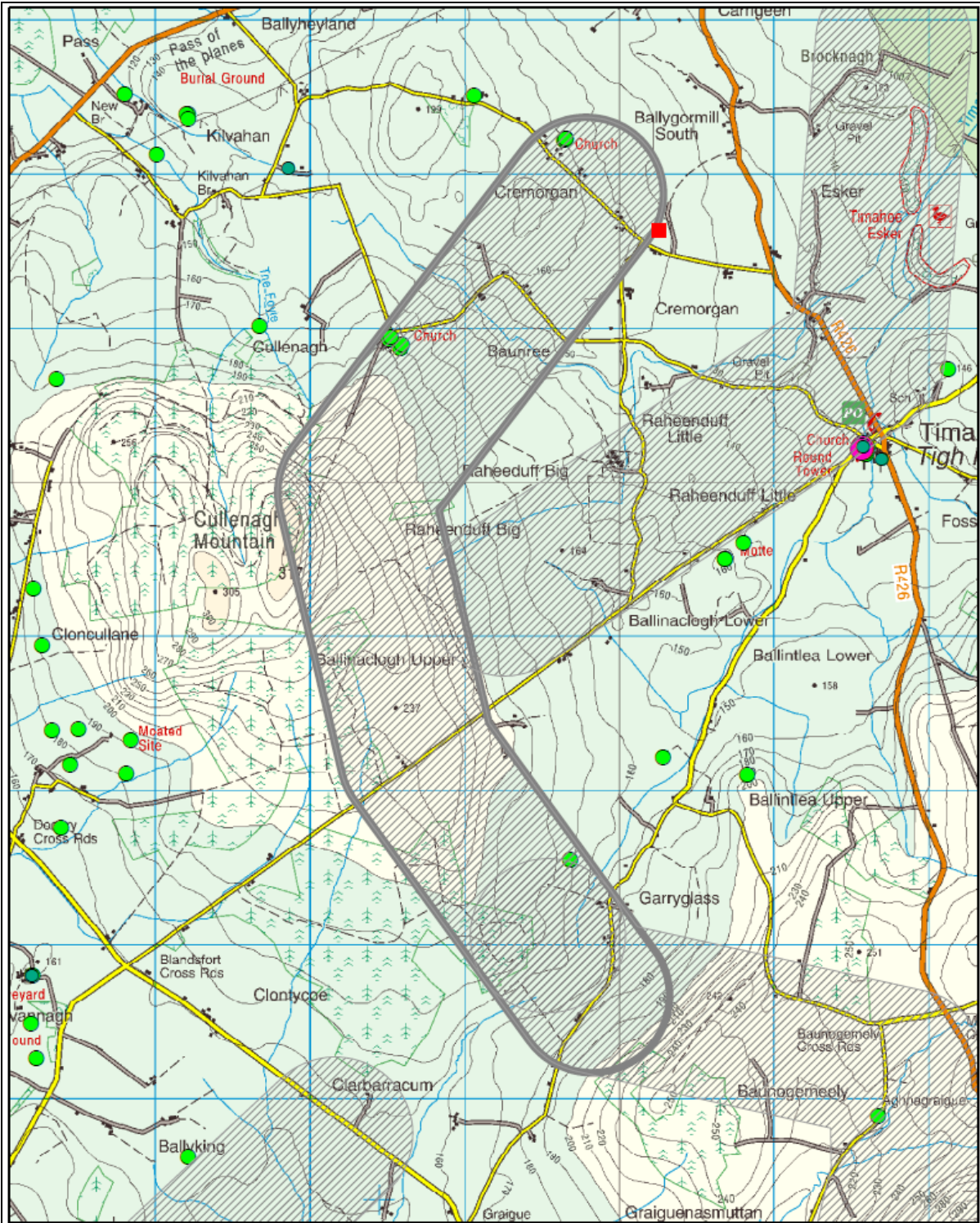
Record of Monuments and Places (RMP) and the Sites and Monuments Record (SMR)

Nine recorded monuments are located within this route alternative and are outlined in *Table 2.5* below. The monuments consist of a number of upstanding structures such as churches, graveyards and a fortified house. A cluster of 4 monuments are located at the eastern side of the route corridor. If the transmission line was to be placed centrally within this corridor, there would be no impact on the aforementioned archaeological monuments. A tomb and a graveyard are located at the northern end of the corridor (LA018-021) but due to their peripheral location within the corridor are unlikely to be impacted on by the transmission line (if the line is to be positioned centrally within the corridor).

In general this corridor would be suitable for an overhead line on the basis that the cultural heritage sites are avoided.

Table 2-5: Recorded Monuments located within Route Corridor between nodes 9 and 7

RMP	Easting	Northing	Townland	Monument Type
LA018-021002-	251640	192220	CREMORGAN	GRAVEYARD
LA018-021003-	251650	192230	CREMORGAN	TOMB
LA018-030002-	250582	190870	CULLENAGH (CULLENAGH BY.)	ROAD - ROAD/TRACKWAY
LA024-025----	251680	187550	GARRYGLASS	ENCLOSURE
LA018-021001-	251650	192230	CREMORGAN	CHURCH
LA018-021004-	251650	192230	CREMORGAN	ENCLOSURE
LA018-030001-	250592	190892	CULLENAGH (CULLENAGH BY.)	CHURCH
LA018-039001-	250511	190929	CULLENAGH (CULLENAGH BY.)	BAWN
LA018-039----	250521	190942	CULLENAGH (CULLENAGH BY.)	HOUSE - FORTIFIED HOUSE



2,000 Meters

Legend

- NIAH
- Recorded Monuments
- 110kV Sub-Route Corridors_region

Figure 2-9: Constraints between Nodes 9 and 7.

Route Alternative (Nodes 6-5)

This small route alternative is located at the north–western side of the study area and measures approximately 4.6km in length. It may be used as a route alternative for the northern / western portion of the transmission line.

National Monuments

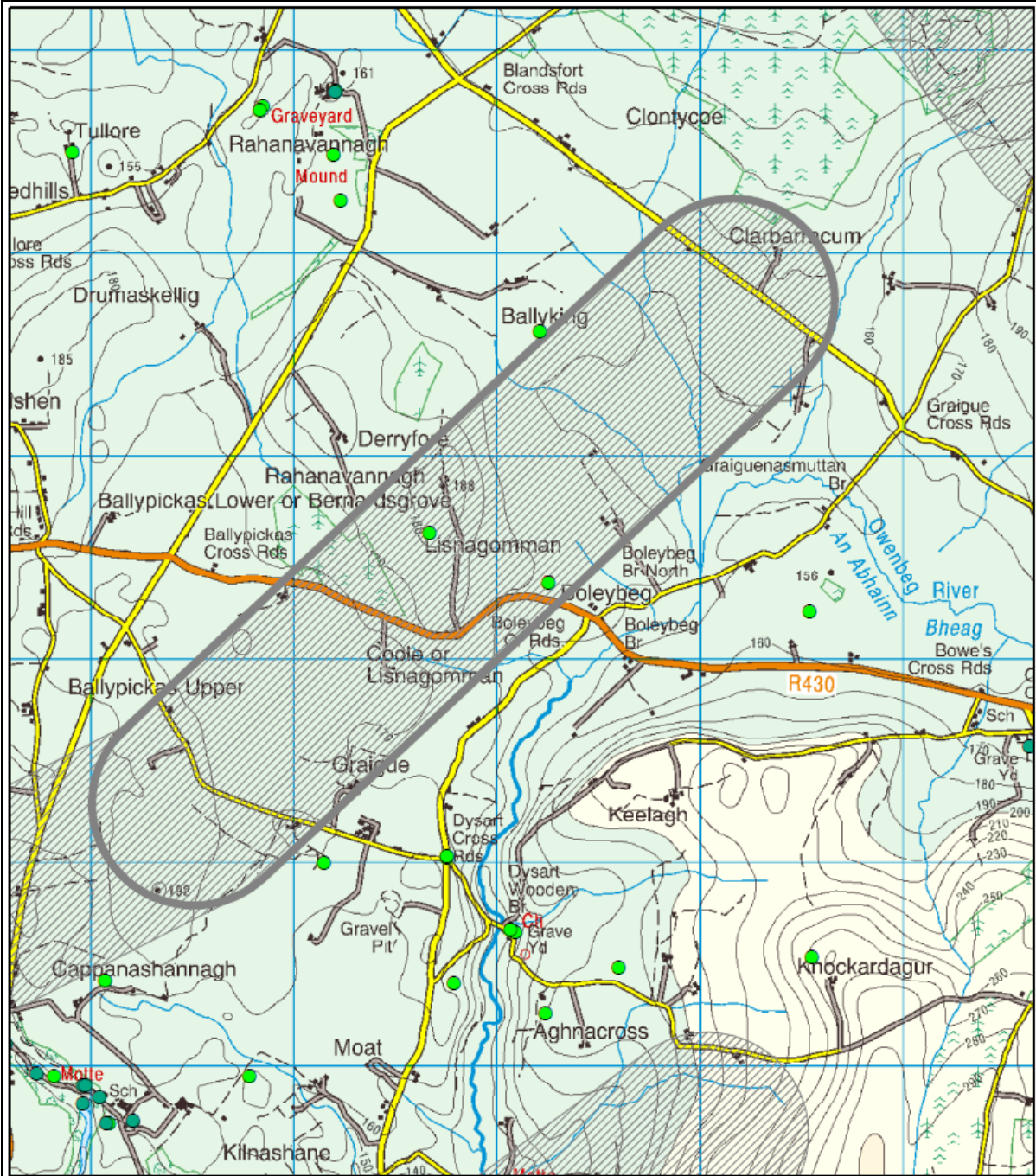
No National Monuments are located within this route alternative.

Record of Monuments and Places (RMP) and the Sites and Monuments Record (SMR)

Two recorded monuments are located within this route alternative and are outlined in *Table 2.6* below. They consist of a rath and an enclosure. While the monuments are located relatively close to the centre of the corridor it should be possible to place polesets along this route without having any negative impacts. The location of the two monuments should be taken into consideration when positioning polesets if necessary, i.e. the line should not span the sites or poles should not be placed adjacent to the forts.

Table 2-6: Recorded Monuments located between Nodes 6 and 5

RMP	Easting	Northing	Townland	Monument Type
LA024-044----	248666	184627	LISNAGOMMON	ENCLOSURE
LA024-045----	249253	184381	BOLEYBEG	RINGFORT - RATH



2,000 Meters

Legend

- NIAH
- Recorded Monuments
- 110kV Sub-Route Corridors_region

Figure 2-10: Map showing route corridor Nodes 6-5.

NIAH Structures

No structures listed in the NIAH are located within this route alternative i.e. nodes 6 to 5.

Route Alternative (Nodes 4-2)

This small route alternative is located at the south-western side of the study area and measures approximately 9.6km in length. It may be used in combination with other route alternatives.

National Monuments

No National Monuments are located within this route alternative.

Record of Monuments and Places (RMP) and the Sites and Monuments Record (SMR)

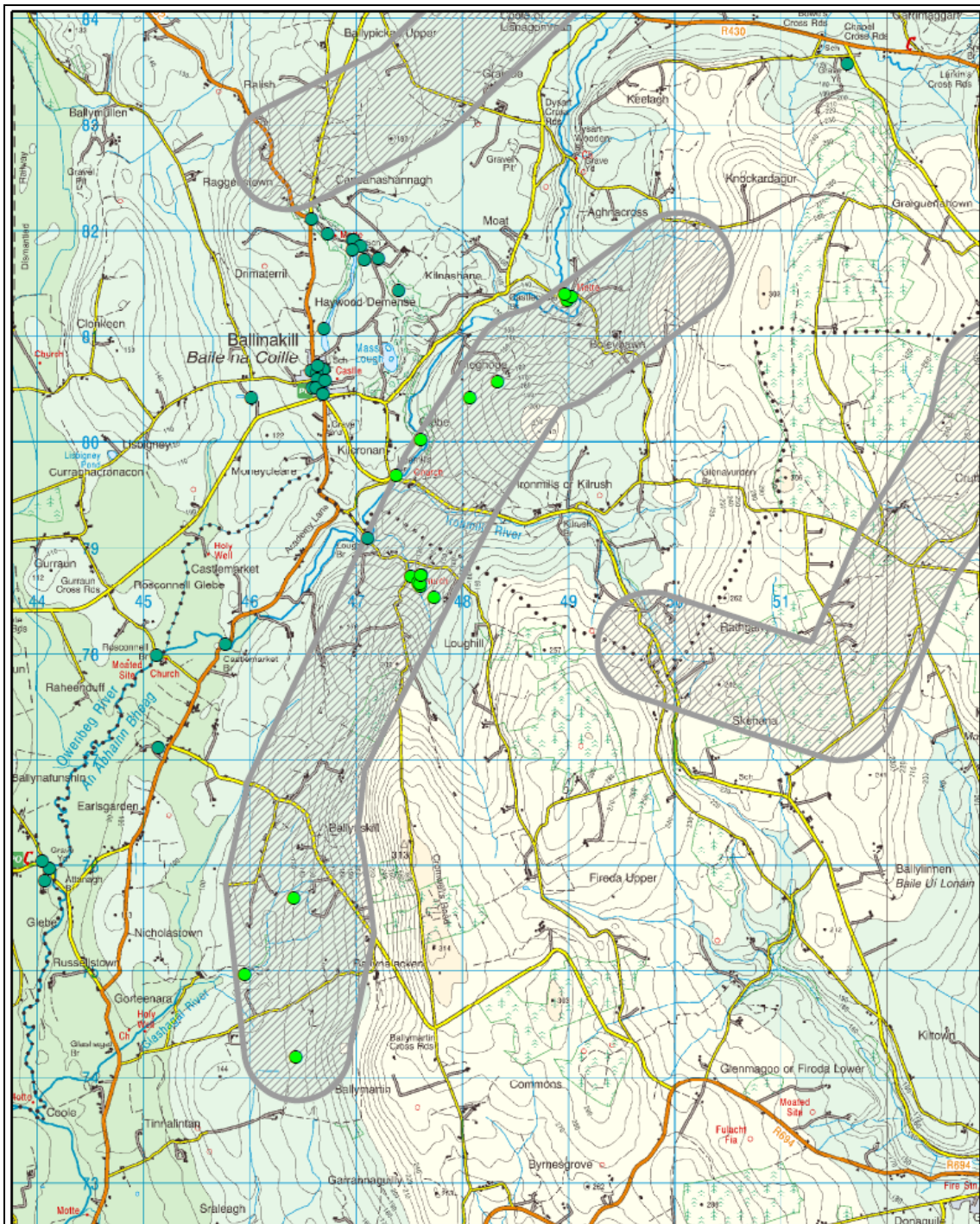
Nineteen (19) recorded monuments are located within this route alternative and are outlined in *Table 2.7* below. One cluster of monuments is located centrally in the route corridor in the townland of Loughill (Figure 2-11). These monuments are upstanding and consist of churches, graveyards and religious houses. The overhead line should not span these structures and the polesets should be placed at a remove from the buildings so as not to visually impact on the sites.



Figure 2-11: Cluster of monuments located in Loughill Td.

Table 2-7: Recorded Monuments located between Nodes 4 and 2

RMP	Easting	Northing	Townland	Monument Type
LA030-021001-	248984	181343	MOAT	CASTLE - UNCLASSIFIED
LA030-021002-	249022	181371	MOAT	CASTLE - MOTTE AND BAILEY
LA030-021003-	248963	181398	MOAT	FORD
LA030-040----	247376	179686	IRONMILLS OR KILRUSH, KILCRONAN	METALWORKING SITE
LA030-023----	248331	180572	CLOGHOGE	RINGFORT - RATH
LA030-022----	248069	180423	CLOGHOGE	ENCLOSURE
LA030-039----	247605	180027	GLEBE (CULLENAGH BY.)	WELL
KK001-004002-	247611	178740	LOUGHILL	GRAVEYARD
KK001-004003-	247514	178734	LOUGHILL	RELIGIOUS HOUSE - UNCLASSIFIED
KK001-004005-	247590	178670	LOUGHILL	MILL - UNCLASSIFIED
KK001-004006-	247603	178635	LOUGHILL	ENCLOSURE
KK001-004007-	247590	178660	LOUGHILL	CLOCHAN
KK001-004008-	247580	178670	LOUGHILL	ROAD - ROAD/TRACKWAY
KK001-004009-	247601	178662	LOUGHILL	EARTHWORK
KK005-080----	245950	174970	BALLYOSKILL	CASTLE - UNCLASSIFIED
KK005-002----	246412	175694	BALLYOSKILL	ENCLOSURE
KK005-016----	246430	174190	BALLYMARTIN (FASSADININ BY.)	FIELD SYSTEM
KK001-004004-	247732	178536	LOUGHILL	RELIGIOUS HOUSE - UNCLASSIFIED
KK001-004001-	247607	178746	LOUGHILL	CHURCH



3,000 Meters

Legend

- NIAH
- Recorded Monuments
- 110kV Sub-Route Corridors_region

Figure 2-12: Map showing route corridor Nodes 4-2.

An enclosure KK005-002 and Field System (KK005-016) are located centrally within this corridor in the townlands of Ballyoskil and Ballymartin, respectively. The field system has already been addressed in Nodes 10-9-8-7-6-4-3-2-1 above. Ideally the transmission line should not span these structures and polesets and angle masts should only be placed at a remove from these monuments so as not to impact negatively.

NIAH Structures

No structures listed in the NIAH are located within this route alternative i.e. nodes 4-2.

Route Corridor (Nodes 10-5-1)

This route corridor is located at the western side of the study area and spans the area between the proposed substation site and Ballyragget directly. It may be used in combination with other route alternatives.

National Monuments

No National Monuments are located within this route alternative.

Record of Monuments and Places (RMP) and the Sites and Monuments Record (SMR)

Forty Six (46) recorded monuments are located within this route alternative and are outlined in *Table 2.8* below. One cluster of monuments is located just to the west of Ballyroan village. These monuments consist of castle, motte, church and graveyard (See *Table 2-8* below). These monuments are upstanding therefore the overhead line should not span these structures and the polesets should be placed at a remove from the buildings so as not to visually impact on the sites. If the line was confined to the centre of the corridor in this area this would be considered to be an adequate distance from the monuments.

The remaining monuments between Ballyroan and Drimaterril Td. further to the south are located along the periphery of the corridor and therefore would not be negatively impacted on. One ringfort (LA030-017) is located centrally within the corridor at Drimaterril Td. where the line changes angle. The location of this monument should be taken into consideration when placing angle masts and polesets. An adequate distance (in excess of 60-70m) should be maintained between the overhead line structures and the monument.

A deserted medieval settlement and a castle (KK001-006/01-03) are located in Castlemarket Td. centrally in the route corridor. The deserted medieval settlement is not demarcated on the 6inch mapping therefore the full extent of this monument can only be established through field inspection. The placing of polesets and angle masts in this location should avoid the area of the recorded monuments.

A church, graveyard and ecclesiastical enclosure (KK005-011) are located at Gorteenara just north of the Glashagal River. These monuments are located centrally within the corridor and placing polesets and angle masts within close proximity to these monuments may result in a negative impact (visually). Two further recorded monuments (KK005-012/ 01 and 02 Holy Well and Moated site) are located approximately 140m to the east of the ecclesiastical enclosure in the townland of Tinnalintan. Any potential visual impacts on these sites should also be avoided by the positioning the transmission line structures at a remove from the monuments. A field system and enclosure (KK005-095 and 094) are located centrally within the route corridor in Rathduff townland. The full extent of the field system on the ground is not clear from the 6 inch mapping therefore this should be examined by field inspection should this route be selected. These monuments should also be avoided during the finalising of poleset and angle mast locations.

Table 2-8: Recorded Monuments located between Nodes 10, 5 and 1

RMP	Easting	Northing	Townland	Monument Type
KK001-003----	245598	178932	CASTLEMARKE	RITUAL SITE - HOLY WELL
KK001-005001-	245210	177968	CASTLEMARKE	CHURCH
KK001-005002-	245204	177952	CASTLEMARKE	GRAVEYARD
KK001-005003-	245210	177950	CASTLEMARKE	INSCRIBED STONE
KK001-006001-	245594	178165	CASTLEMARKE	CASTLE - UNCLASSIFIED
KK001-006002-	245594	178165	CASTLEMARKE	CASTLE - MOTTE
KK001-006003-	245590	178150	CASTLEMARKE	SETTLEMENT DESERTED - MEDIEVAL
KK001-007----	245770	178080	CASTLEMARKE	BRIDGE
KK004-021----	244010	172370	BALLYCONRA	INSCRIBED STONE
KK005-001----	245236	176469	BALLYOSKILL	RINGFORT - RATH
KK005-011001-	244858	174433	GORTEENARA	CHURCH
KK005-011002-	244845	174422	GORTEENARA	GRAVEYARD
KK005-011003-	244850	174421	GORTEENARA	ECCLESIASTICAL ENCLOSURE
KK005-012001-	245003	174436	TINNALINTAN	RITUAL SITE - HOLY WELL
KK005-012002-	245010	174429	TINNALINTAN	MOATED SITE
KK005-014----	245505	173504	TINNALINTAN	RINGFORT - RATH
KK005-015----	245614	173291	TINNALINTAN	RINGFORT - UNCLASSIFIED
KK005-023001-	244465	172696	MOATPARK	CASTLE - MOTTE
KK005-023002-	244464	172697	MOATPARK	CASTLE - UNCLASSIFIED
KK005-023003-	244434	172687	MOATPARK	CHAPEL
KK005-083----	244927	175167	NICHOLASTOWN (KILKEA AND MOONE BY.)	ENCLOSURE

KK005-088----	245498	172984	TINNALINTAN	ENCLOSURE
KK005-094----	244924	172580	RATHDUFF (FASSADININ BY.)	ENCLOSURE
KK005-095----	244994	172669	RATHDUFF (FASSADININ BY.)	FIELD SYSTEM
KK005-096----	245011	172202	RATHDUFF (FASSADININ BY.)	ENCLOSURE
LA018-017001-	249200	192390	KILVAHAN	CHURCH
LA018-017002-	249210	192390	KILVAHAN	GRAVEYARD
LA018-017003-	249210	192360	KILVAHAN	ECCLESIASTICAL ENCLOSURE
LA018-018----	249010	192130	PASS	ARCHITECTURAL FRAGMENT
LA018-020----	251060	192510	CREMORGAN	ENCLOSURE
LA018-025----	247150	190790	BALLYRUIN	ENCLOSURE
LA018-027----	247310	190160	CRUBEEN	ENCLOSURE
LA024-006001-	246647	188800	BALLYROAN (CULLENAGH BY.)	CASTLE - MOTTE
LA024-006002-	246636	188794	BALLYROAN (CULLENAGH BY.)	CASTLE - UNCLASSIFIED
LA024-019----	245769	187989	BALLYROAN (CULLENAGH BY.)	MOATED SITE
LA024-033----	245822	185388	BALLYMADDOCK (CULLENAGH BY.)	MOATED SITE
LA024-042----	246090	183640	RALISH	RINGFORT - RATH
LA024-043----	246280	183920	RALISH	ENCLOSURE
LA024-059----	246771	188853	BALLYROAN (CULLENAGH BY.)	BUILDING
LA024-060----	246799	188849	BALLYROAN (CULLENAGH BY.)	SETTLEMENT DESERTED - MEDIEVAL
LA024-060001-	246733	188915	BALLYROAN (CULLENAGH BY.)	CHURCH
LA024-060002-	246734	188902	BALLYROAN (CULLENAGH BY.)	GRAVEYARD
LA030-003----	246070	182970	RAGGETTSTOWN	ENCLOSURE
LA030-007----	246427	182170	RAGGETTSTOWN	QUARRY
LA030-017----	246143	181668	DRIMATERRIL	RINGFORT - RATH
LA030-025----	245470	179550	LISBIGNEY	ENCLOSURE

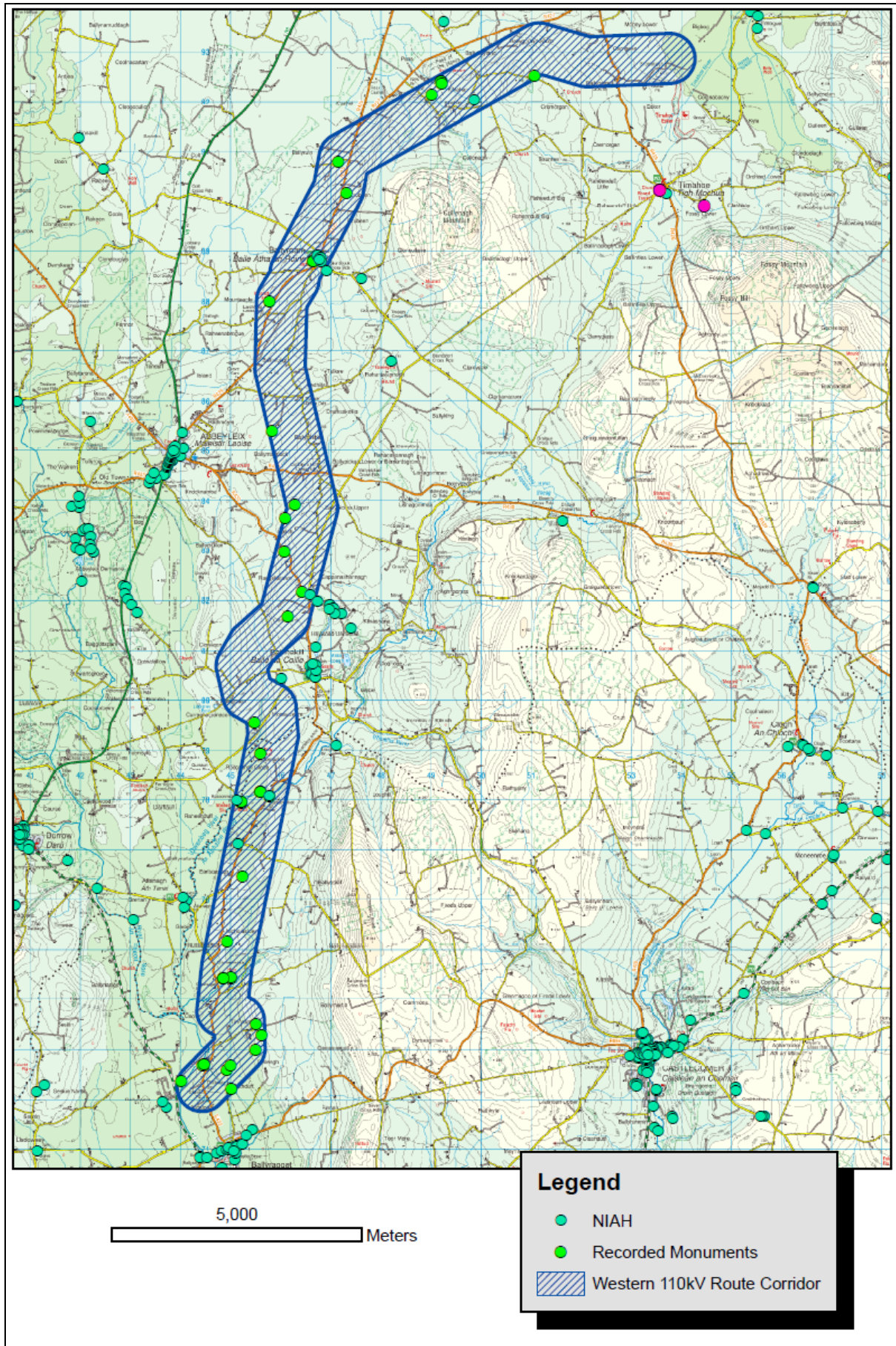


Figure 2-13: Constraints between Nodes 10-5-1.

NIAH Structures

Ten structures listed in the National Inventory of Architectural Heritage (NIAH) are located within this route corridor (See Figure 2-13 above). These are outlined in table 2-9 below and include bridges, houses and churches. Placing polesets and angle masts adjacent to these monuments should be avoided.

Table 2-9: NIAH structures located within route corridor between nodes 11 and 1

REG_NO	TOWNLAND	CLASSIFICATION	x	y
12801806	Ballyheyland	Yellow House	249859	192036
12802402	Ballyroan	Ballyroan Church of Ireland Church	246733	188913
12802403	Ballyroan	House, Ballyroan	246774	188853
12802404	Ballyroan	House, Ballyroan	246790	188869
12802405	Ballyroan	House, Ballyroan	246798	188794
12802413	Ballyroan	House, Ballyroan	246768	188825
12803001	Haywood Demesne	Tower Cross Roads Lodge	246580	182114
12400101	Castlemarket	Rosconnell Bridge	245119	177989
12400102	Castlemarket	Castlemarket Bridge	245767	178090
12400501	Earlsgarden	Saint Mary's Catholic Church, Ballyoskill	245137	177117

Historic Gardens and Designed Landscapes (NIAH)

A portion of Haywood Demesne (Ref. LA-60-S-472818) is located along the eastern portion of this corridor. One structure listed in the NIAH (Gate Lodge) is located at the entrance to the demesne. If this route is selected it is unlikely that the transmission line will traverse the demesne as it appears to be confined to the periphery of the route corridor.

400kV Route Corridor

This route corridor is located at the northern side of the study area and will link the selected route to the proposed substation site.

National Monuments

No National Monuments are located within this route corridor.

Record of Monuments and Places (RMP) and the Sites and Monuments Record (SMR)

No Recorded Monuments are located within this route.

NIAH Structures

No structures listed in the National Inventory of Architectural Heritage are located within this route.

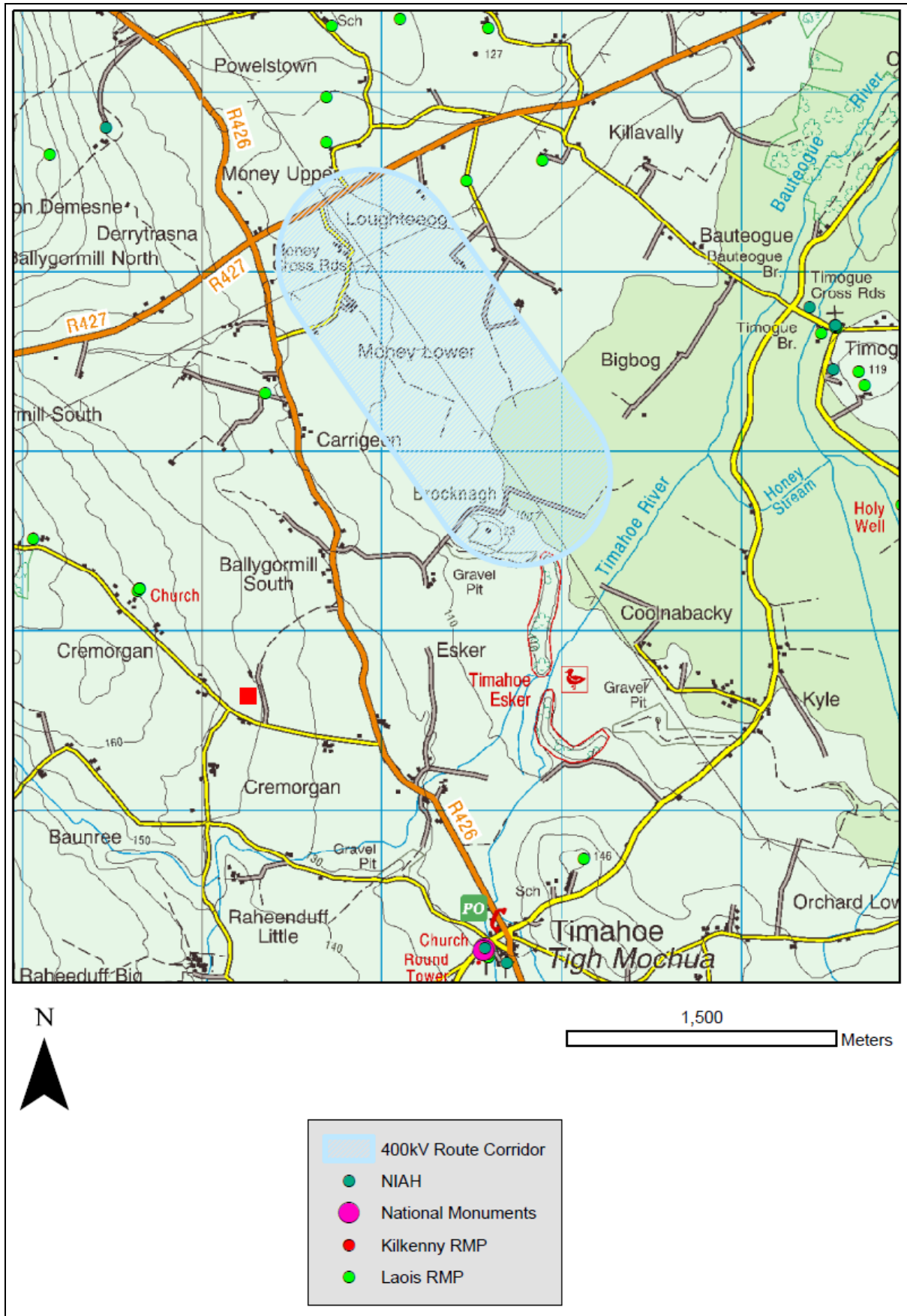


Figure 2-14: Proposed 400kV route corridor.

3. Selection of Preferred Route Corridor

The overall objective of this route selection report is to highlight cultural heritage sites within each route so that an informed decision can be made regarding the avoidance of cultural heritage features during the route selection process. A general impact statement will be made regarding each route alternative and a preferred route will be chosen. Cultural heritage sites include Recorded Monuments, Structures entered into the NIAH which may also be protected structures and National Monuments. Only the available documentary and cartographic sources were utilised in order to assist in the route selection process.

Nodes 10-1: This route contains 42 cultural heritage sites (including Recorded Monuments and NIAH structures). The majority of these sites are located south of Castlecomer as far as Ballyragget where the corridor passes through an area rich in archaeological sites. A number of clusters of monuments occur both to the south and north of Ballyragget. On the basis that there is a large concentration of monuments along the southern portion of the corridor this route is not preferable for selection.

Central Route (Nodes 10-9-8-7-6-4-3-2-1): This route contains 24 cultural heritage sites and does not include any National Monuments or NIAH structures. One historic House and Garden (Cremorgan House) is located at the northern end of the route. As the line changes direction in this area an angle mast may be placed in this location. If the angle mast is placed at the southern end of the public road, there should be no impact on the demesne / historic garden (See figure 2-6 and 2-7 above). No large clusters of monuments are located within this route therefore fewer potential impacts (direct and indirect) on cultural heritage sites are anticipated. Furthermore, there are lengthy stretches of land with no recorded monuments present. A concentration of monuments is located at the southern end of the route where all routes terminate. On the basis that recorded archaeological monuments are avoided during the positioning of polesets and angle masts along the corridor, this would be the preferred route. A number of route alternatives are also possible along this corridor (Nodes 6-5, Nodes 7-3 and Nodes 4-2 and Nodes 9-7). The latter route alternatives all contain clusters of monuments so on this basis none of these additional routes are deemed to be preferred. Node 9-7 contains small clusters of monuments although they are located along the periphery of the corridors. This route would therefore be suitable as an alternative.

Node 10-5-1 (West): This route contains 56 cultural heritage sites including NIAH structures and Recorded Monuments. This represents the most sites within any of the potential route alternatives. While this route does not contain any large clusters of monuments a number of recorded monuments are located centrally within the corridor. Many of the sites are upstanding structures such as mottes, castles and churches. On the basis that this route contains the most cultural heritage features, it is the least preferred option.

400kV Route Corridor

This route does not present any known constraints to the proposed 400kV transmission line. A full assessment should be carried out through field inspection to mitigate against the presence of previously unknown archaeological features/ sites that may exist.

4. Preferred route

The preferred route option is the central route corridor from Nodes 10-9-8-7-6-4-3-2-1 on the basis that it contains the least number of cultural heritage sites. Furthermore, it does not contain any large clusters of archaeological monuments or National Monuments or NIAH structures. The overall density of monuments within this route is low. Node 9-7 may also be incorporated into this corridor as the monuments are located at the periphery of the corridor. Furthermore the proposed 400kV route corridor does not present any known constraints to the transmission line and based on desktop assessment is considered to be suitable.

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