



DAVIDKELLY
PARTNERSHIP
CHARTERED ENGINEERS

Conservation of Ballybrennan Church for Wexford County Council



METHOD STATEMENT – CMF 2026 STREAM 3

January 2026
Rev. 1

Job No. 26002



Nelson House, Emmet Place, Youghal, County Cork, Ireland

10 Ormonde Street, Kilkenny, Ireland

• John Kelly, B.E., M.Sc., C.Eng., M.I.Struct.E., M.I.E.I., FConsEI, Conservation Accredited Engineer
• Colin Brennan, B.E., C.Eng., M.I.E.I., FConsEI • Dermot O'Shea, B.E., C.Eng., M.I.E.I., FConsEI

Contents

	Page No.
1.0 INTRODUCTION	1
2.0 DESCRIPTION OF THE MONUMENT	1
3.0 SCHEDULE OF PROPOSED WORKS	5
4.0 PURPOSE OF THE WORKS	5
5.0 MATERIALS	6
6.0 ON-SITE MANAGEMENT, SUPERVISION AND MONITORING	6
7.0 ESTIMATED COSTS	6
8.0 PROJECT TEAM	7
9.0 METHODOLOGY	7
10.0 STATEMENT OF PUBLIC VALUE BENEFITS	10
LOCATIONS OF PROPOSED MEASURES	11
PHOTOGRAPHS	13

1.0 INTRODUCTION

This method statement is prepared for Wexford County Council in connection with conservation work to Ballybrennan Church, in Ballybrennan, County Wexford.

1.1 Protected Status

The church and graveyard are Recorded Monuments:

WX031-007001: Church; .

WX031-007002- : Graveyard :

WX031-007003- : Cross :

WX031-007004- : Graveslab :

The site and structure are, therefore, afforded the protection of an historic monument and site under the National Monuments Acts, 1930-2004, the Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 and any new enactments in relation to such sites and monuments which are currently contemplated.

2.0 DESCRIPTION OF THE MONUMENT

2.1 History of Site

The parish church of Kilcowanmore had been granted by the Keatings to the Knights Hospitalers by 1338. According to a Visitation by Thomas Ram, the Protestant bishop of Ferns, in 1615 Robert Dreighan was the priest, but the church and chancel were in need of repair (*Archaeological Inventory of County Wexford' (Dublin: Stationery Office, 1996).*

2.2 Description of Upstanding Walls

West Gable Outer Face	Random sandstone rubble masonry wall with roughly dressed quoins at the northwest corner. The gable triangle is largely missing.
West Gable Internal	Sandstone Rubble Masonry Wall. Internal corners are missing.
North Wall External	Rubble sandstone masonry wall with roughly dressed quoins at the corner.
South Wall External	Low wall not more than 600 millimetres high with loose stone piled on top and at the outer face.
North Wall Internal	Low rubble masonry wall.
South Wall Internal	Low masonry stump covered with grass some loose masonry at the top.

2.3 Location

The church and graveyard are situated on a shelf with a small southwest to northeast valley c. 70m to the southwest and a bend in the west to east Boro River at its most southerly point is c. 250m to the North.

The sub-rectangular graveyard has a boundary to the public road and low mounds and wire fence forming the remaining boundaries.

2.4 Condition

Building Components and Condition							
Ref	Component	Component Description (materials, construction and location)	Condition		Risk Assessment and Recommendation		
			Condition Description	CC	Probable Causes/Consequences	Recommended Measures	UC
1A	West Gable Outer Face	Random sandstone rubble masonry wall with roughly dressed quoins at the northwest corner. The gable triangle is largely missing.	Heavy ivy growth at the southwest corner extending the full height of the gable.	CC 2	Lack of maintenance.	Remove the ivy and vegetation. Treat any embedded stems. Repoint the eroded joints with lime mortar.	UC 2
1B			Widespread loss of pinning stones particularly towards the northern end where decayed ivy roots are visible.	CC 3	Loss of bedding mortar and historic ivy growth.	Reinstate the missing pinning stones and secure the surviving pinning stones in situ by re-bedding them in lime mortar.	UC 2
1C			Wall top has been flaunched with cementitious mortar. There has been lots of stone under the cap causing it to become detached.	CC 2	Lots of mortar and water ingress through the cementitious cap.	Remove cementitious cap and secure the wall top as rough raked masonry bedded in lime mortar.	UC 2
1D			Loose masonry possibly fallen from the wall top at the base of the wall.	CC 1	Disintegration of the masonry.	Sort and stack the masonry under archaeological supervision and store on site.	UC 1

Building Components and Condition							
Ref	Component	Component Description (materials, construction and location)	Condition		Risk Assessment and Recommendation		
			Condition Description	CC	Probable Causes/Consequences	Recommended Measures	UC
2.	West Gable Internal	Sandstone Rubble Masonry Wall. Internal corners are missing.	Light ivy growth on the inner face. Loss of face masonry at the internal corners particularly on the south corner exposing the wall core of the returns.	CC 2	Collapse of the masonry.	Secure the exposed core as rough racked masonry bedded in lime mortar. Remove the light ivy and vegetation repoint the eroded joints with lime mortar throughout.	UC 2
3A	North Wall External	Rubble sandstone masonry wall with roughly dressed quoins at the corner.	Loss of masonry particularly towards the east end. Bulging masonry close to the gable.	CC 2	Alder growing from the wall top.	Cut back the Alder, remove, if possible, if not treat the roots with herbicide. Dismantle the bulging masonry and reset bedded in lime mortar.	UC 2
3B			Lots of pinning stones throughout with dead ivy stems visible in the joints some cementitious pointing at high level.	CC 2	Erosion of the joints and wedging of the pinning stones from ivy stems.	Reinstate the missing pinning stones and secure the surviving ones in situ with lime mortar.	UC 2

Building Components and Condition							
Ref	Component	Component Description (materials, construction and location)	Condition		Risk Assessment and Recommendation		
			Condition Description	CC	Probable Causes/Consequences	Recommended Measures	UC
4A	South Wall External	Low wall not more than 600 millimetres high with loose stone piled on top and at the outer face.	Loose masonry stacked against outer face of wall	CC 1	Collapsed masonry	Masonry is stable. Leave in situ.	UC 0
4B			The core of the gable is exposed where the return has collapsed. The core has been patched in the past with cementitious mortar. There has been some loss of facing stones at the inner face leaving some stone unsupported.	CC 2	Water ingress behind cementitious mortar.	Remove the cementitious mortar consolidate the exposed core as rough raked masonry with lime mortar. Insert stone where necessary to support surviving facing stone.	UC 2
5.	North Wall Internal	Low rubble masonry wall.	The interface has collapsed at the corner with the west gable. A short central section has survived with sapling growing from the outer face and collapsed masonry stacked against it. The remainder of the wall is visible as a low mound covers with grass.	CC 2	Collapse of the masonry and damage from saplings.	Cut back the trees growing from the wall tops and treat the stumps with herbicide. Secure loose wall top masonry by re-bedding in lime water.	UC 2
6.	South Wall Internal	Low masonry stump covered with grass some loose masonry at the top.	The surviving wall stumps are generally stable. Some loose pieces of masonry abutting the southwest corner.	CC 1	Collapsed masonry gathered for storage.	Monitor. Some of the loose masonry at the southwest corner could be used to secure the return of the west gable.	UC 2

2.5 Statement of Significance

The church is of significance for its association with the Knights Hospitallers, whose priory was located about 6km to the east. It is of importance to the local community who maintain the graveyard and have erected a small information board at the entrance to the graveyard. It is also associated with a nearby holy well, both being dedicated to St.Cuan (8th century) possibly indicating an early foundation date. It was a place of pilgrimage into the 19th century.

3.0 SCHEDULE OF PROPOSED WORKS

Recommendations		
Ref	UC	Priority List of Recommendations for Action based on Urgency Classes
1A	UC 2	West Gable Outer Face - Remove the ivy and vegetation. Treat any embedded stems. Repoint the eroded joints with lime mortar.
1B	UC 2	West Gable Outer Face - Reinststate the missing pinning stones and secure the surviving pinning stones in situ by re-bedding them in lime mortar.
1C	UC 2	West Gable Outer Face - Remove cementitious cap and secure the wall top as rough racked masonry bedded in lime mortar.
2.	UC 2	West Gable Internal - Secure the exposed core as rough racked masonry bedded in lime mortar. Remove the light ivy and vegetation repoint the eroded joints with lime mortar throughout.
3A	UC 2	North Wall External - Cut back the Alder, remove, if possible, if not treat the roots with herbicide. Dismantle the bulging masonry and reset bedded in lime mortar.
3B	UC 2	North Wall External - Reinststate the missing pinning stones and secure the surviving ones in situ with lime mortar.
4B	UC 2	South Wall External - Remove the cementitious mortar consolidate the exposed core as rough racked masonry with lime mortar. Insert stone where necessary to support surviving facing stone.
5.	UC 2	North Wall Internal - Cut back the trees growing from the wall tops and treat the stumps with herbicide. Secure loose wall top masonry by re-bedding in lime water.
6.	UC 2	North Wall Internal - Monitor. Some of the loose masonry at the southwest corner could be used to secure the return of the west gable.
1D	UC 1	West Gable Outer Face - Sort and stack the masonry under archaeological supervision and store on site.

4.0 PURPOSE OF THE WORKS

The purpose of the works is to secure the surviving historic masonry for the long-term. It is currently in poor condition and will continue to deteriorate without intervention. The increased frequency of heavy rainfall events resulting from global warming will accelerate this deterioration.

The works are permanent and will have a long-term benefit to the Monument.

5.0 MATERIALS

The works will reuse the existing loose stone on the site wherever possible. Rebuilding will only be undertaken where required to ensure the long-term structural stability of the walls.

This will require the gathering of loose masonry and the sorting of stone piles currently within the site, all under archaeological supervision. The introduction of new stone is to be avoided but, if required, it will be sourced locally to match historic masonry in material and colour.

New lime mortar will be used for repointing, consolidation and bedding of masonry. The design of the mortar will be informed by mortar analysis where this is possible and will use a weak natural hydraulic lime or hot-mixed lime and pozzolan-based mortar.

6.0 ON-SITE MANAGEMENT, SUPERVISION AND MONITORING

The works shall be undertaken by masons experienced in the conservation and repair of historic masonry and specifically archaeological monuments. The works will be supervised by a lead mason experienced in historic masonry and archaeological monuments. The works in progress will be inspected regularly by the project team (see below).

The quality of the work and the methods employed will be judged against this method statement, having regard to the “Advice Series – Ruins – The Conservation and Repair of Masonry Ruins” and “Guidance on Repointing Rubble Masonry in Historic Structures”, published by the Government.

8.0 PROJECT TEAM

Engineer: David Kelly Partnership (John Kelly, B.E., M.Sc., C.Eng., M.I.E.I., FConsEI., M.I.Struct.E., Conservation Accredited Engineer (EI/ICE/IStructE))

Archaeologist: Yvonne Whitty, BA, MIAI

9.0 METHODOLOGY

Conservation work on this Recorded Monument will be the subject of regular inspection by the project team. It is a requirement of this project that the masons employed on the works be experienced in the conservation of masonry in historic buildings/National or Recorded Monuments.

9.1 Ivy Removal

Where ivy removal is deemed to be necessary in areas designated for conservation work by this Method Statement, the following procedure shall be adopted.

The ivy shall be removed beginning at the outer and top edges of the growth. It may be necessary to carefully lever the stem and aerial rootlets away from the face of the structure taking care not to disturb the masonry. True roots embedded in the structure should be carefully teased out, pulling out the entire root where possible. Deeply embedded roots may need to be cut. All cut surfaces shall be treated immediately with neat glyphosate herbicide.

All heavy ivy stems will be drilled at the base of the stem and injected with herbicide using sustained release plugs (Ecoplugs or similar).

9.2 Making a Record

A high-resolution ortho-rectified photography (photographic plans/elevations to scale) survey of the monument will be undertaken. When vegetation has been removed, and prior to the commencement of work on the masonry, it will be re-surveyed. Alternatively, if cleared areas are small, they can be photographed by the team and added as a supplement to the record. This record is/will be sufficiently accurate to allow individual stones to be identified and located. If dismantling of masonry is required, the contractor will use this record to mark on enlarged copies of the survey drawings the location of each labelled stone for reinstatement in their original positions.

9.3 Consolidation of Wall Tops

Work to wall tops will involve the careful removal of accumulated humus and the lifting of those stones only which have been displaced by vegetation. The cleaned wall tops will then be consolidated by resetting any disturbed masonry and repointing around the remainder of the masonry carefully shaped to allow water to be shed from the top of the wall.

Consolidation of wall tops must be preceded by the creation of a record as described above. Once the archaeological recording has been completed and the working full-size drawing is made, work on cleaning the wall top may proceed carefully removing vegetation and ensuring to kill off any deep-rooted plants. Stones may be removed only where they are fully loose or where their removal is necessary to eliminate saplings etc. The wall top is then re-set, mortared and pointed but, in doing so, the top of the wall should not be fully filled with mortar rather it should be left in the shape in which it was found, the only change being to ensure that rainwater will drain away from the top surface and not pond. Where erosion of the mortar extends down several courses, the procedure to follow would be to grout, either by gravity or using a hand operated grout pump to ensure that voids are refilled with lime mortar or grout.

9.4 Dismantling and Rebuilding

Repair of protected structures or monuments proceeds on the basis of minimum intervention. There will, however, be occasions when dismantling and rebuilding is warranted, in this case a small area of the north return wall at the west gable too fragile to be conserved as-is may need to be dismantled and rebuilt in order to ensure the stability of adjoining sections of wall.

The procedure to be followed is described below.

Number and record the positions of each stone prior to dismantling. Dedicate an area of adjoining scaffolding for spreading and sorting the dismantled stone. Lay geotextile for spreading stone. Separate dressed and facing stone from core material. Separate pinning stones and store separately. Identify and number all dressed stone and as many as possible individual facing stones.

The team will be available on site at the outset and as necessary during this identification process.

Rebuild the wall, bedding the masonry in lime mortar designed to replicate the original mortar based on an analysis of a sample of the original mortar, placing the identified stones in their original location. The masonry should be rebuilt in character with the surviving wall in similar style and workmanship, taking account of the style and shape of any pinnings, coursing patterns, stone shapes and the like to replicate, as closely as possible, the rhythm of the surrounding masonry. It may be useful to get up a grid using a frame with mason's lines or similar to facilitate the reconstruction.

Rebuilding alone may not be sufficient to secure the section of wall and it may be necessary to incorporate modern materials such as stainless steel or bronze to tie sections of the wall together and so avoid a replication of the original cause of deterioration.

The rebuilt section is classified as new work and will be marked as such.

9.5 Repointing

Repointing must be preceded by careful cleaning of the joints. All vegetable matter and decayed mortar needs to be removed and the joint cleaned before repointing.

Samples of the raked-out mortar will be recovered for analysis. A groundsheet or plywood over plastic will be spread on the ground when raking out old masonry to capture the coarse aggregate.

A sieve analysis of a substantial sample of the mortar will be undertaken, so that the texture of the replacement mortar will match the original as closely as possible. An analysis of the sand and grit may also help to identify the source which will usually have been relatively local. The lime for the new mortar mix will be a natural hydraulic lime selected to replicate the properties of the original mortar. The mortar will be made with NHL 3.5, in combination with sand and grit. The sand needs to be washed and sharp and graded as close as is practicable to the sand in the original mortar. Coarse aggregate (grit), 12mm and down, will also be added in the proportion in which it occurred in the original mortar. The exact ratio of lime to sand and grit will be determined by the mortar analysis, the grading of the sand being used and the degree of exposure of the wall.

Sample panels of various lime and sand mixes will be carried out to find the closest match before further works are carried out. The contractor should have buckets of different size/type round aggregate on site from the start to ascertain the best mix.

New mortar will be pressed into the joint to a depth at least one and a half times the height of the masonry joint to ensure the stability of the new pointing mortar. The mortar, properly mixed, should be quite fat in texture, but with a well-controlled water content so that the mortar when placed remains firm. Pinnings will be inserted in large joints to reduce the depth of the joint to 15mm to 20mm.

The mortar will be tightly packed in the joint to ensure that it engages with the masonry and struck off level with the face of the stone. (In the raking out process some joints will be raked through the core of the wall in a regular pattern and a plastic grout tube fitted and held in place by the repointing mortar).

As the mortar is hardening up it will be hammered on the face with a bristle brush to finally tighten up the joint and to expose the coarse aggregate in the mortar. The contractor will be required to undertake sample repointing for approval.

The repointing guidance published by the Department of Housing, Local Government and Heritage will be given to the contractor in advance of the works and its recommendations shall be implemented in full.

9.6 Conservation Philosophy

Conservation work on a National or Recorded Monument is undertaken on the basis of the least disturbance of the existing fabric and where unstable materialistically dismantled for safety reasons and is carefully recorded and re-instated in its original position wherever possible.

9.7 Reasons for Choosing These Methodologies

These methodologies were chosen because:

- a) they apply international best practice consistent with the philosophies of conservation outlined in the International Charters agreed upon in Venice and Burra.
- b) they have been applied successfully on previous conservation projects of a similar nature.
- c) they follow published guidance from The Department of Housing, Local Government and Heritage's Advice Series 'Ruins – The Conservation and Repair of Masonry Ruins' and 'Architectural Heritage Protection Guidelines for Planning Authorities (2011)'; Historic Scotland and others.

9.11 Other Mitigation Measures

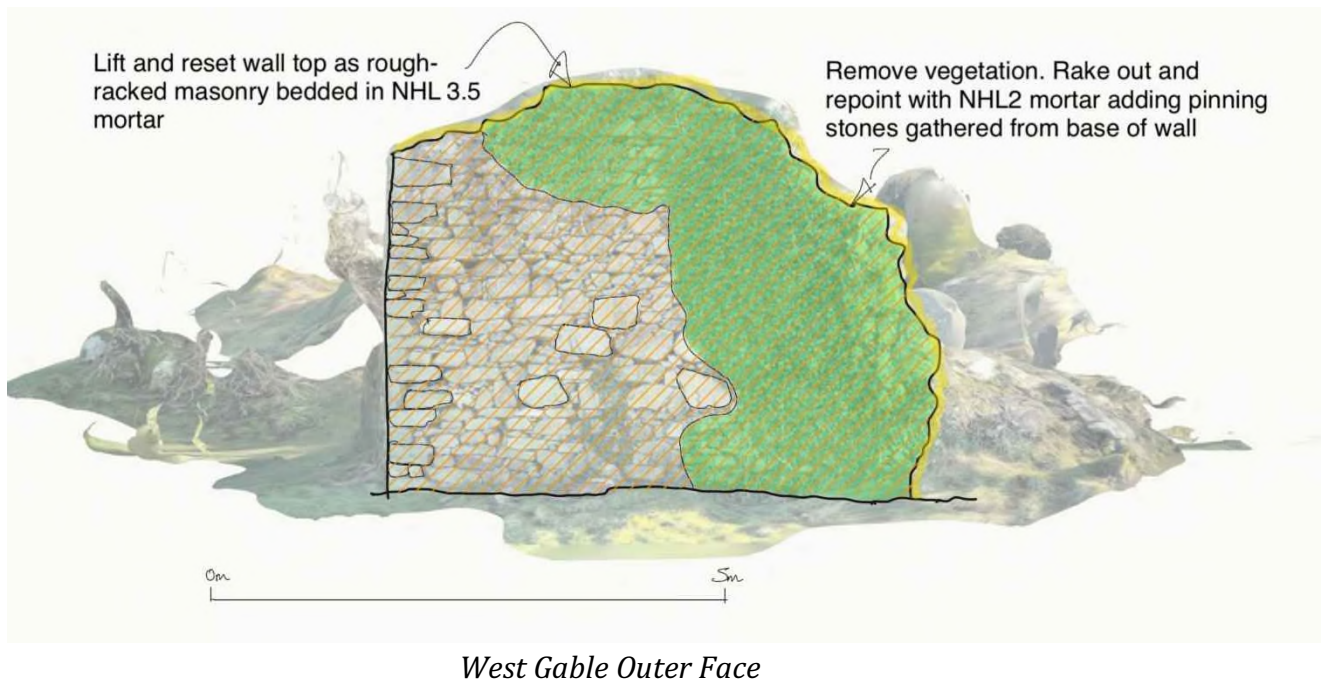
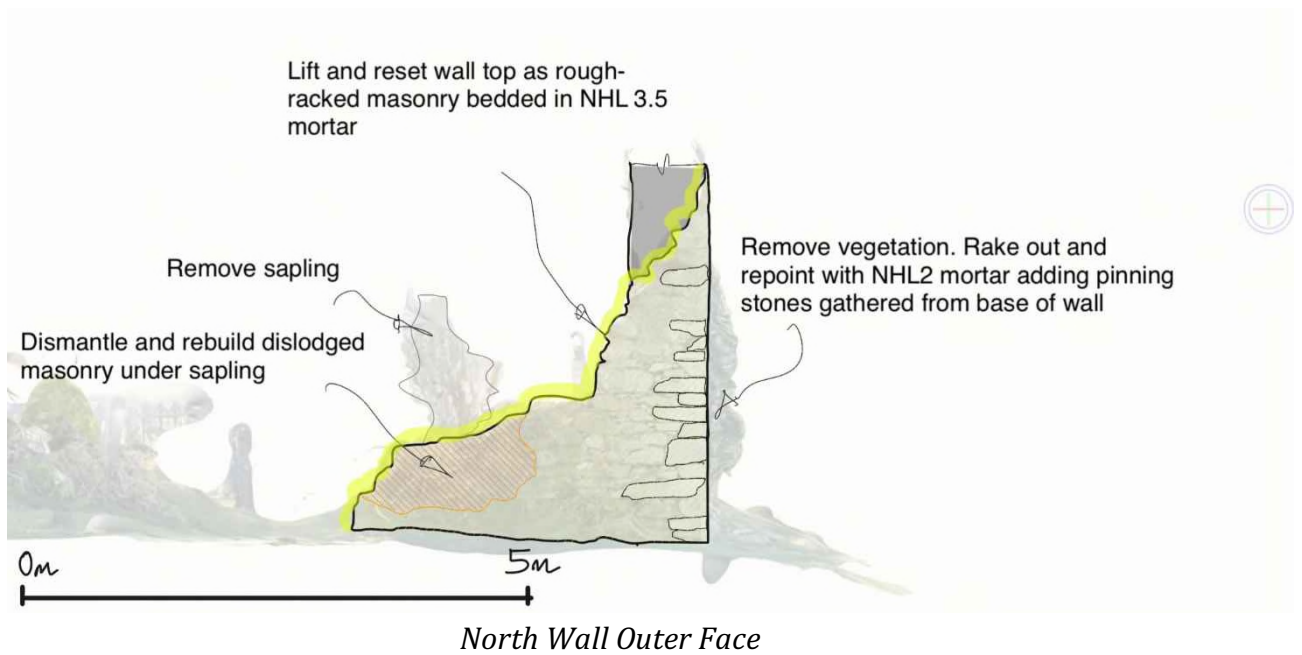
Consideration will be given to undertaking the vegetation removal under the supervision of an ecologist to allow temporary supports, scaffolding and inspections for bat roosts to be undertaken well in advance of masonry works.

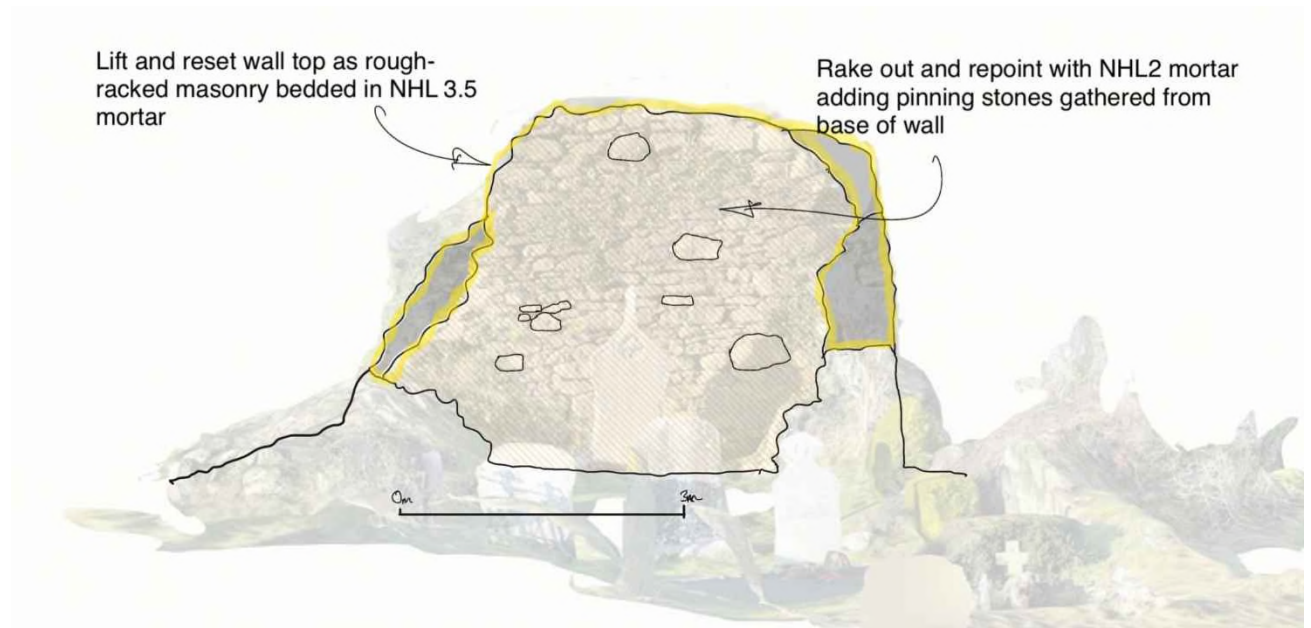
10.0 STATEMENT OF PUBLIC VALUE BENEFITS

The works will secure the remaining upstanding wall of this church, parts of which are currently at risk and make it safe for visiting members of the public. The graveyard is well maintained and regularly visited, including graves within the footprint of the church and near the surviving west gable.

JOHN KELLY

LOCATIONS OF RECOMMENDED MEASURES





West Gable Inner Face



PHOTOGRAPH 1 - BALLYBRENNAN CHURCH LOOKING WEST



PHOTOGRAPH 2 - WEST GABLE OUTER FACE



PHOTOGRAPH 3 - DEAD EMBEDDED IVY STEMS AND MISSING PINNING STONES



PHOTOGRAPH 4 - IVY STEMS GROWING FROM CORE OF THE WALL AT THE WEST GABLE



PHOTOGRAPH 5 - FALLEN MASONRY AT THE BASE OF THE WEST GABLE



PHOTOGRAPH 6 - REMAINS OF SOUTH WALL AT THE WEST GABLE WITH COLLAPSED MASONRY STACKED AGAINST IT



PHOTOGRAPH 7 - NORTH WALL RETURN AT THE WEST GABLE



PHOTOGRAPH 8 - DISLODGED MASONRY AT THE NORTH WALL RETURN



PHOTOGRAPH 9 - SAPLING GROWING FROM THE NORTH WALL



PHOTOGRAPH 10 - WEST GABLE INNERFACE



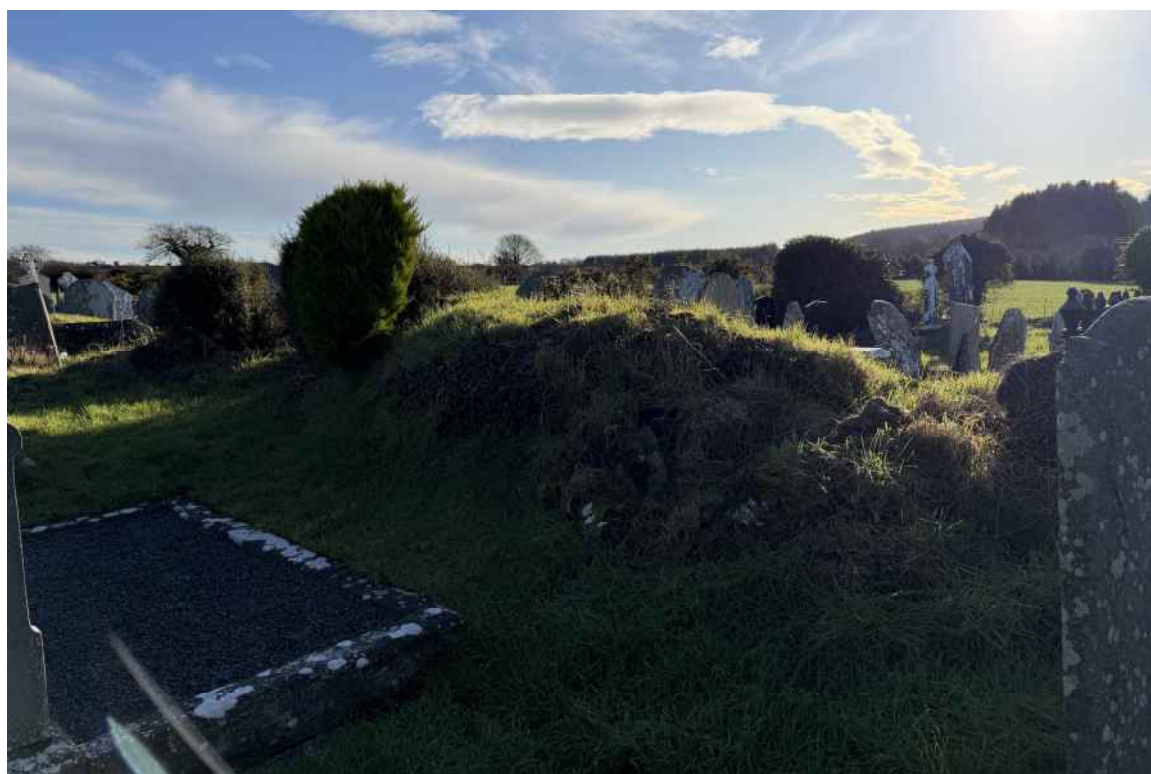
PHOTOGRAPH 11 - EXPOSED CORE AT THE NORTHWEST CORNER



PHOTOGRAPH 12 - LOOSE MASONRY AT SOUTH VERGE OF WEST GABLE



PHOTOGRAPH 13 - REMAINS OF SOUTH WALL INNERFACE AT WEST GABLE



PHOTOGRAPH 14 - GRASS COVERED STUMP OF SOUTH WALL



PHOTOGRAPH 15 - SECTION OF LOW SURVIVING NORTH WALL