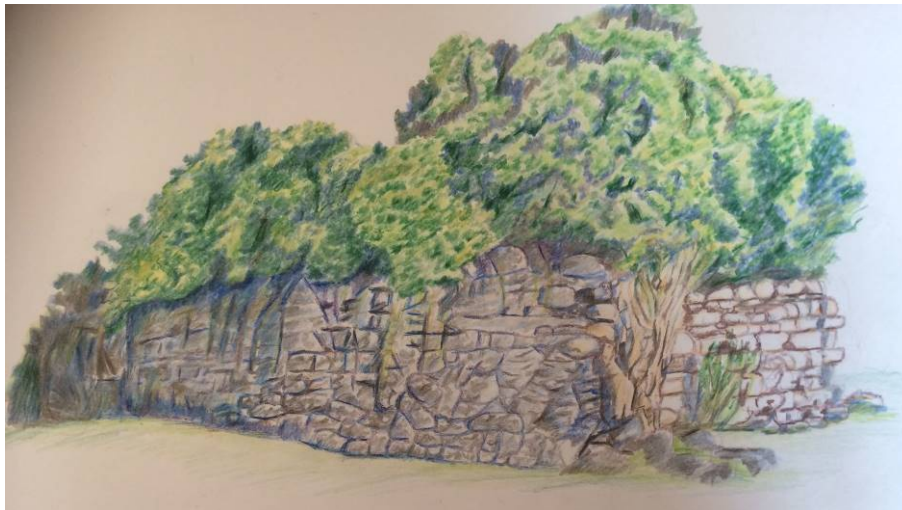


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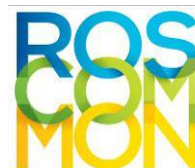


Report on Conservation Works required to
Cloonsellan Abbey, Ballymurray, Co Roscommon



November 2018

An Chomhairle Oidhreachta
The Heritage Council



Comhairle Contae
Ros Comáin
Roscommon
County Council

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Front cover sketch by Cora Mugan

Introduction:

Blackwood Associates Architects were appointed to assess the surviving ruins of the medieval structure in Cloonsellan and provide a strategy for the conservation of this registered monument. A number of site inspections have been carried out before and after the vegetation was trimmed back. Notification for the trimming of the vegetation was lodged with the National Monuments Service on 28.01.2016 and approval received on 14.03.2016.

Historical Background and Significance:

This stone structure is classified as a church on the Sites and Monuments Record (R0042-0011). It is a rectangular building set out roughly on a traditional east – west access. Relatively little is known about the construction and use of this structure but it is believed to date from the thirteenth century and have a connection to monasteries in Roscommon and Inchcleraun.

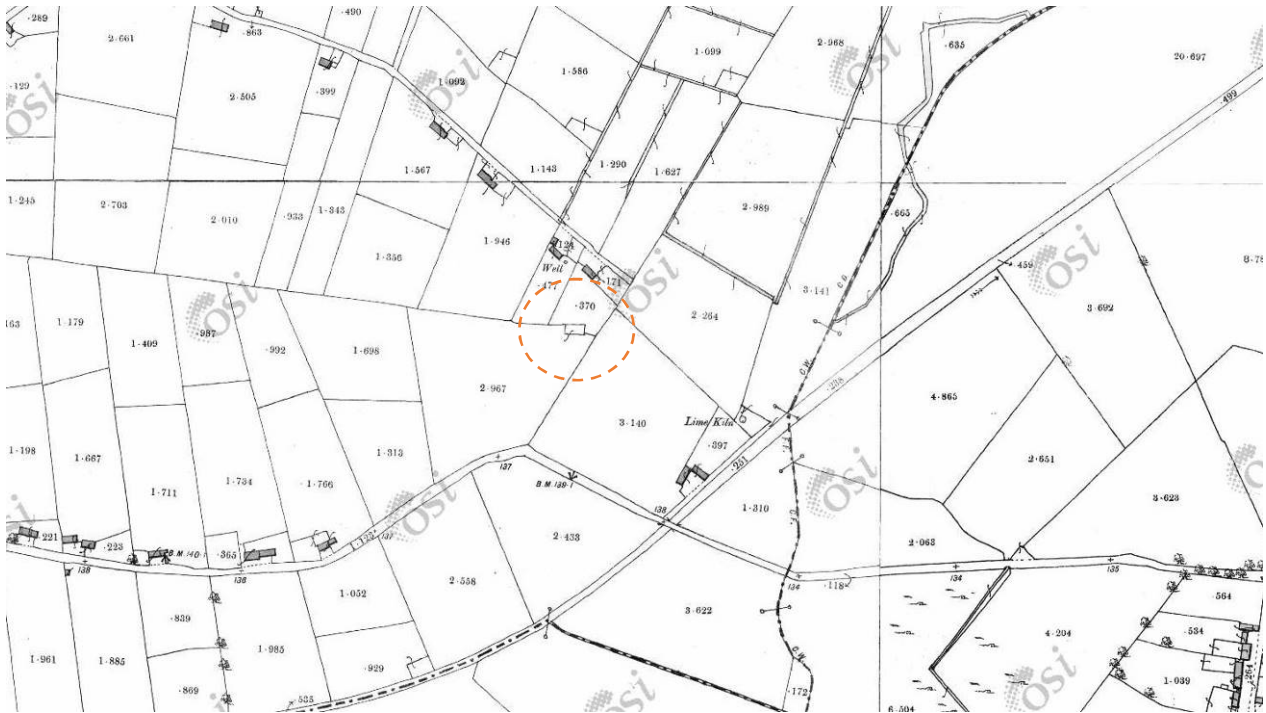
It is not clear which Abbey it is associated with but Felim O’Conner the founder of the Dominican Abbey in Roscommon had a connection to Cloonsellan. According to the Annals of Lough Cé his ‘fortress’ in Cloonsellan was burnt in 1261. The Dominican Abbey was founded in 1253 so it likely that Cloonsellan was constructed shortly after the Abbey was established. It may have been a resting place on the journey between the Dominican Abbey in Roscommon and Inchcleraun as it is situated at the midway point and directly on the route.

The structure is recorded in both the 6” and 25” maps but it is not identified on either. Interestingly the later 25” map shows the structure forming part of the boundary between two fields. The field layouts in this map is largely the same as it is today with the exception of the division abutting the church which has now been removed.

This structure is of significant historic significance to the local area particularly due to its probable connection to the larger monastic sites of Roscommon and Inchcleraun.



Fig 01: Extract from 6” Map – Structure identified but not annotated



Setting:

The site sitting including the road and hedgerow line on the surrounding land remains largely unchanged from the time of the 25" map with the exception of the field boundary abutting the structure on each side. The smaller field has now been subsumed into the larger leaving the structure standing alone in the middle of the field.

The rectangular structure has internal dimensions of approximately 13.35m x 5.35m and is constructed of coursed limestone. The stone is generally quite rectangular in shape and surprisingly large stones have been used on the higher courses. Most of the main features of the building have been lost with the exception of a niche close to the south east corner. The base stone in the niche is distinctive and may have been a piscina. Its rounded shape is in contrast to the more angular stone used throughout the rest of the construction. No evidence of the original building height has been uncovered during the investigations works but it would appear that the north wall is close to its original height as it is at a consistent level throughout its length. It is hoped that more evidence of the original height and line of the roof structure is uncovered during conservation works to the wall tops.



Fig 04: Possible piscina

In September the ivy sails were carefully cut back to reduce the weight on the structure and allow more of the structure to be carefully examined. There are large areas of wall that have been lost and it appears that the collapsed stone is still lying at the base of the wall with growth over. The walls to the north and east are the most intact with a lower length at the southeast corner the only other significant section of standing wall.



Fig 07: Trees growing from base of wall, high level stone not supported

The walls extend to approx. 3.5, at the highest points measured externally and the internal ground level is approximately 300mm lower than outside. All the corners have been severely damaged potentially by livestock rubbing against these sharp corners, a common feature of medieval masonry in farmland. This loss of stone removes the tie between the joining walls and severely reduces the structural stability of both walls. There are also two small trees growing out of the base of the wall at the south west corner. The facing stone on the external elevations is generally still in position but there are large pockets lost on the internal faces. Unfortunately the facing stone will continue to unravel at an ever increasing rate now that the core stonework is exposed to the weather. The bedding mortar has largely been washed out of the joints throughout, also leaving the facing stone vulnerable to serious collapse. The wall tops are completely overgrown and large ivy roots can be seen penetrating into the core stonework. A relatively minor collapse recently took place during a storm. Stonework was lost from the west gable wall top and this collapsed stone now lies as it fell at the base of the wall. This is an unfortunate loss of historic fabric and demonstrates the vulnerability of this medieval structure.



Fig 08: Connection between north and west elevation compromised



Fig 09: Recent loss of stone on west elevation and ivy roots on wall tops visible

There is a small but hugely significant section of the original wall remaining at the south east corner. This is where the niche containing the possible piscina is located. Ivy roots are completely tangled with the niche stonework, endangering this feature.



Fig 10: Niche entangle with ivy roots, base of east wall visible

Very little of the wall remains on the south and east sides. The outline of the wall is visible in most areas with very low level stonework projecting from the ground. Fortunately the base of the wall is visible on all corners so the original shape of the building is easily readable. The entrance location has not been identified at this stage but it is hoped that it will become evident during the conservation of these low level walls.

The ground level outside the structure on the south side is considerable higher than elsewhere. This would suggest that collapsed original stone is located below the growth. These high levels correspond closely to the areas that have suffered most fabric loss.



Fig 11: Mound on south side where collapsed stone is likely to be found

Conservation Methodology

There are a number of areas where emergency stabilisation and conservation works are required. This work will be focused on the remaining standing walls to the north and west along with the small section of wall to the south east. A conservation strategy is also required for the remaining outline of the structure to carefully conserve and present the site.

Emphasis will primarily be on stabilising the existing fabric, retaining all masonry elements, as far as possible, in their current location. Rebuilding will only. The fabric will be closely inspected by the design team during the works before any dismantling or re-building can take place. Reinstatement of collapsed stone will only be considered if deemed essential to stabilise the overall structure and even then only after examination and interpretation of the existing evidence to ensure no conjecture takes place. All interventions will be closely monitored by the design team to form a complete record of the works on completion.

Vegetation Clearance:

The ivy roots are to be injected a number of weeks in advance of the works progressing to ensure they are dead by the time they are removed. It is essential that the ivy is only killed off when the funding is in place and a contractor appointed as killing ivy is detrimental to the stability of the structure if the conservation works did not proceed. During the works the vegetation will be removed incrementally from the structure ensuring the stonework is stabilised and conserved before moving on to the next section. All roots and organic material must be removed from the wall to prevent rapid regrowth of the vegetation.

Corners:

A number of areas have been identified where some stone reinstatement will be required to stabilise the structure. The main areas are at the four corners which have been severely undermined by the loss of facing stone and the core stonework behind. The most substantial area of reinstatement will be to the north west corner where the connection between the two walls has been almost completely lost. Luckily the base stone is in position above ground so there is clear evidence of the original line of the wall. The facing stone at high level is toothed which will enable the re-built to be more successfully bonded to the original. The size of stone and coursing of the replacement will be determined by the existing facing stone on each side. The core stone is to be carefully rebuilt at the same time ensuring there are no voids.

Much less reinstatement will be required on the remaining three corners but some will be necessary at low level on each to re-create a connection to the adjoining wall. The south west corner also requires some low level reinstatement to support the projecting original stone at high level. This stonework is now vulnerable due to the unravelling of the original fabric below. Two small trees are growing in the area where the corner stone would be expected to be found. These trees are to be cut back and the roots either injected or removed from the ground. The design team will need to inspect closely on site prior to an approach being finalised and the archaeologist will monitor any ground disturbance caused by the removal of the roots. The extent of reinstatement on the other two corners can only be fully assessed once works begin and the vegetation is carefully removed to reveal the condition of the structure.

Facing Stone:

There are a number of pockets of facing stone that have been lost, particularly on the internal faces. It is essential that these pockets are reinstated to support the stonework above and prevent further unravelling. The exposed stonework behind is to be stabilised where required and the bedding mortar pushed in behind the new facing stone to ensure there are no gaps in

the core stonework and that the replacement stone is fully bonded to the original. Replacement of facing stone will only take place in areas where it is clear that stone has collapsed. The size of stone and coursing of the replacement will be determined by the existing facing stone on each side. All pockets will be inspected again by the design team on site following vegetation clearance to ensure there is no evidence of a niche of putlog before the stone is reinstated.

Wall Tops:

From the visual inspection it is clear that there is a large amount of organic material in the wall tops along with the ivy roots. This will all need to be carefully removed prior to any stabilisation taking place. From experience on other medieval structures in this area of the country it can be assumed that some dismantling of original stone along the wall top will be necessary to remove soil and roots. It is also likely that some of the existing stone has been dislodged from its original location by ivy roots. The wall tops will be closely inspected by the design team once the scaffolding has been erected.

Any facing stone requiring dismantling on the wall top will be numbered and recorded in position prior to dismantling and set aside for reinstatement. All roots and soil are to be carefully removed from the wall top before any consolidation can take place. On completion of the cleaning works any dismantled stone will be re-bedded in its original location. The core stonework may also need to be re-bedded in areas and some minor modifications to the core stone may be required to ensure water can run off from all areas of the wall top. On completion of stabilisation works the wall top is to be pointed, ensuring that joints are pinned wherever possible to reduce the width of these vulnerable horizontal joints. A fatty acid will be added to the pointing mix to reduce the amount of water that can penetrate to the core through the wall top.

Pointing

Much of the original bedding mortar has been washed out of the joints on all faces. This inevitably reduces the bond between facing stones and leaves them more susceptible to collapse. The building requires complete repointing with any small areas of sound bedding mortar retained.

All joints are to be carefully raked out and organic material removed while retaining any sound bedding mortar. Three mortar samples from the core of the wall are to be analysed to identify the binder type, mix ratios and size of aggregate in the original mortar. This information will aid the design of a compatible repair mortar. Matching the original mix will not be practical in this case as the original aggregate is far too large to form part of a pointing mortar.

It is essential that good site practices are maintained at all times to achieve a good pointing finish. Processes will need to be put in place by the contractor to ensure each batch is mixed the same way. Controlling the amount of water in the mixing process is critical to the production of a durable mortar. All joints are to be moistened prior to application and the mortar is to be pressed tightly into the joints to ensure there are no voids left behind the mortar. The joints are to be pinned wherever possible to reduce the size of mortar joints and add to the stability of the surrounding stonework. Finishing and protection of the mortar are also critical. The hardening mortar is to be tamped vigorously to close any shrinkage cracks. No brushing of joints will be accepted as this covers rather than closes cracks. Protection is to be left in place until the mortar has satisfactorily carbonated.

Low Walls:

The base of the low wall remains in place along the east gable and the east half of the south wall. At the moment there is no evidence of the remaining wall on the south elevation but this may appear when the growth is trimmed back further.

The low walls are to be retained as they are and consolidated much like the wall tops above. All organic growth is to be removed and stone re-bedded where unstable. A small amount of stone reinstatement may be required close to the corners to tie back to the higher walls but this can only be determined when the site is fully cleared. The wall tops will be pinned and pointed and adequately protected until the mortar has carbonated satisfactorily.

If evidence of the remaining wall is uncovered it will be carefully inspected and recorded by the design team. Any potential conservation works will be carefully designed by the design team and ground works monitored by the appointed archaeologist.

Collapsed Stone:

The recently collapsed stone from the inside face of the west elevation can clearly be identified on the ground below the wall. It is intended to reinstate these stones to reform the inside face of the elevation. The original facing stones are identifiable by the weathering on the face and these will be set aside for reinstatement. The remaining collapsed stone will be used to consolidate the core behind.

The stone reinstatement will be carried out carefully and the pattern of the stone will closely match the surround stone. Any lift coursing will be reinstated if present as will rows of larger stones which are a feature of this building at high level. Prior to commencement of the reinstatement works the facing and core stonework in the area will be carefully examined before being consolidated.

There is a large area of collapsed stone along the outside face of the south elevation. This is currently covered with soil and growth. It is intended to re-use this stone for the conservation and stabilisation of this structure. A significant amount of stone is required for some of the corners, particularly the north west, and it would be preferable to use stone from the original building rather than importing new stone to the site. The mound of stone will need to be carefully uncovered and inspected with the careful monitoring of the archaeologist. Stone suitable for re-use will need to be cleaned, sorted and stacked and the ground made good following the removal of the stone. All interventions will be carefully recorded by the design team.

Enclosure:

It is proposed to install a fence around the perimeter of the structure to keep livestock out. The fence will be a simple post and wire construction and the installation of the posts will be monitored by the design team archaeologist. The exact line of the fence will be decided on site but it will be kept far enough away from the monument to allow conservation works to be carried out within the curtilage.

Photographic Record:



Aerial image of Abbey in 2017. Extent of vegetation cover visible



West elevation prior to vegetation trimming



North elevation prior to vegetation trimming



Inside face of north elevation prior to vegetation trimming



West elevation – stone lost at each corner and along wall top. No evidence of original building height



North west corner – Loss of corner stone clearly visible. Ivy roots visible along wall top of both walls



North west corner – Corner stone lost and ivy roots growing into core stonework



North west corner – Original base stone still in place



North elevation – Flat stone projecting at bottom of wall. This is likely to be the base of the wall



West elevation, internal face – Recent collapse evident on the wall top. Pockets of facing stone lost at low level



North elevation, internal face – Pockets of stone lost and extensive ivy coverage in areas.



Original corner stone and base of wall still visible on east side



South wall – Low level original wall with potential collapsed stone at base under growth



South wall, internal – Niche clearly visible with a stone base that may be a piscina



Image of potential piscina



Extent of ivy roots growing into core of wall along wall top clearly visible



Large facing stone dislodged at low level



Much of the bedding mortar has been washed out of the facing stone throughout