

Sankt Mary's Priory and Parish church, Monymusk,  
Aberdeenshire, Scotland  
- a buildingsarchaeological survey



An early Christian foundation, a shared church and a methodological experiment

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## Abstract

The dissertation is the result of an exchange year spent at the Department of archaeology at Glasgow University, Glasgow, Scotland. The direction was buildings archaeology and the course was called an *M.phil. by research*, a postgraduate degree. At the time, in 1996-97, it was somewhat equal to a Swedish *magister* degree.

The object was St Mary's priory and parish church of Monymusk, situated in Aberdeenshire on the east coast of Scotland. The church is of high antiquarian and historical significance and is still in use as a parochial church.

The main aim of the dissertation was to develop a fast and accurate method for buildings archaeological surveys mainly for the world of rescue archaeology, involving rectified photography, totalstations and computer software like AutoCAD, correlated with a stratigraphical, single-context method. The survey was also to provide the first accurate survey of an important parochial and monastic church in Scotland, and to answer outstanding questions relating to the architectural and social history of the church.

The results showed that the church had been founded in the 10<sup>th</sup> century, probably by a local lair; that Christian missionaries, in the form of an order called the Culdees, settled in the church around the end of the 11<sup>th</sup> century; the church was a shared building from about 1078 until the reformation in 1560; the church kept transforming with the new direction of faith until today. The combination of methods proved successful and was applied to a series of objects in Scotland during the late 1990s. It was also useful in a public situation, creating analytical drawings and the possibility of three-dimensional reconstruction.

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I would also like to thank my family, who with their love, trust and support helped me to overcome all my fears and doubts! Mamma, Pappa, Janet, Magnus, Eken and Snoddas. I love you all!

The above acknowledgements are all dated 10 years back. During the finishing moments of the dissertation work my father unexpectedly passed away. The dissertation is dedicated to my father Kjell Ericsson.

Because of the untimely death of my father and the fact that I got a job as an archaeologist in Sweden, the dissertation work was put on ice until 2001, and all the obstacles were finally cleared by 2009. I would like to thank Barbro Sundnér, for helping me to finish, giving me loads of support and for being my supervisor in Sweden. I would also like to thank the Department of archaeology in Lund, for giving me the opportunity of spending the best year of my life in Glasgow; and for giving me a second chance at getting a degree, after twelve years.



Shona Nicol and Gertie Ericsson posing for the local newspaper the Inverurie Herald. St Mary's Priory and Parish church in the background. Photograph by Jim Forsyth 1997.



## Introduction

Sankt Mary's Priory and Parish church at Monymusk is an ancient church, situated in village of Monymusk in Aberdeenshire on the east coast of Scotland (figure 1 and 2). The church may have been founded by Irish Monastic Reformers, commonly known as the Culdees, who settled on the site towards the end of the 10<sup>th</sup> century, or by a local lair. Later, in the 13<sup>th</sup> century, the monastic order was changed and the Augustinian practice was adopted. After the reformation, in the 1560s, the community was discarded. The church became a ruin and was later handed over to a local laird. After necessary rebuilding work, the church started its function again, this time only with parochial obligations. The church is of high antiquarian and historic interest; to trace the development of Christianity and its expression in this part of Scotland.

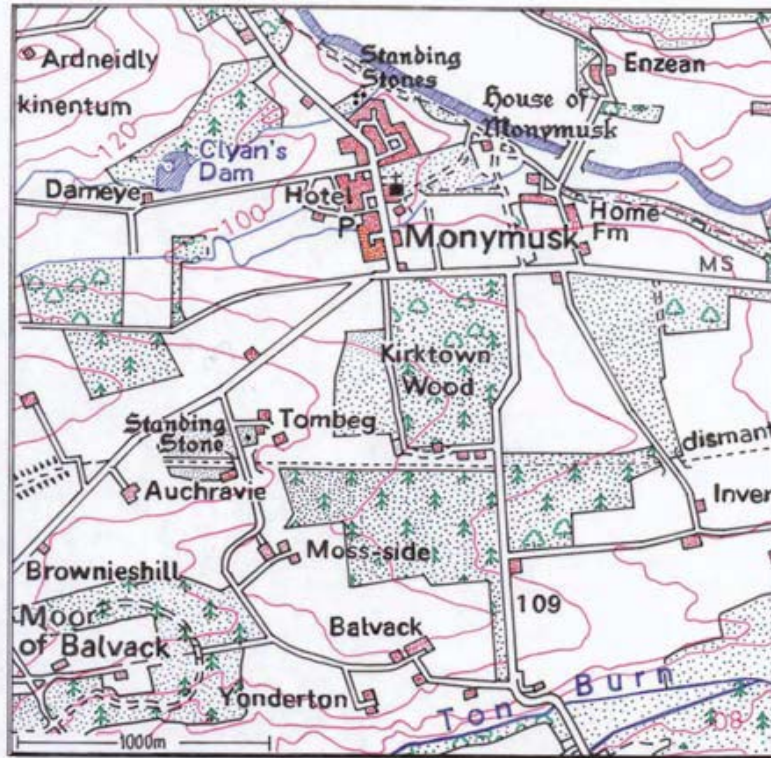


Figure 1: Map of the Monymusk village and the area surrounding it. By Gertie Ericsson 1997.

The survey was done in 1997 within a course called an M phil by research, conducted under the supervision of Dr Stephen T Driscoll at the Department of archaeology, University of Glasgow in Glasgow, Scotland. The fieldsurvey was funded by the Society of Antiquaries for Scotland and the Society for Medieval Archaeology. The completion of the project was to be assessed after returning to Sweden, together with the other projects produced whilst there, Macraes monument, Saddell Abbey and Glasgow Cathedral (Ericsson 1997; 1997; Driscoll, Ericsson and Fawcett 2002).

The architectural importance of the church at Monymusk has long been acknowledged. Two detailed studies were undertaken before the major restoration of 1929. Macgibbon & Ross in their *Ecclesiastical Architecture in Scotland* (1896-97, p 215ff), and Simpson, in his article *Augustinian Priory and Parish church, Monymusk* in the Proceedings of the society of antiquaries of 1924 (p 34ff). However, the interest of the church has failed to answer the outstanding questions of foundation, ownership and development. The latest survey of the church was done in 1924, and after that it has been left in obscurity.

## Purpose

The primary purpose of the survey was to develop a combination of methods, making the buildings archaeological survey in the field, faster and more accurate, than other methods existing in 1997. Also to do a full analytical as well as structural survey of the building, and to answer seven questions posted to the material. The thorough analytical survey of the church at Monymusk was to give an insight into the life of a small medieval village and church, also to reveal however the church building was shared between the priory and the parish (figure 3). The different architectural forms show the development of the building through time.



Figure 2: Map of Scotland. Picture from *Scottish Medieval churches* by Cruden 1986, plate 1.

### Outstanding questions and research aims

There were several different questions and aims applied to the material that were to be answered by the results from the fieldsurvey. It should be pointed out that the knowledge of the foundations, development and history of the church is limited, however much interest scholars before 1924 showed the church. The questions were put together with the help of my supervisor Dr Stephen T Driscoll and my referee Dr Richard Fawcett (1997). The outstanding questions related to the building are as follows:

1. To find a fast and accurate method for surveying standing buildings.
2. Could a correlation of the architectural evidence and the documentary records clarify the likely dating of the earliest parts of the fabric?
3. Is there a possibility to identify the extent of the medieval fabric and the chronology of the later Medieval and post-Reformation modifications.
4. What evidence is there of a monastic use of the building, length of the chancel, associated structures/openings.
5. Was the church a shared building between the priory and the parish? How has provision of space for the laity affected the structure?
6. When was the tower built, and what was the function? How does it relate to the history of the building?
7. What happened to the building at the reformation in 1560?
8. What has happened with the building between the reformation and today?
9. How were the conventual buildings related to the church?

The techniques used for capturing the data and resolving the questions has been a combination of methods, with a single-context basis combined with digital measuring and rectified photography, with the technical standard of 1997.

## Material

The material chosen for the dissertation is a church in the northeastern part of Scotland, called Sankt Mary's Priory and Parish church, situated in a village called Monymusk (figure 2 and 3). The foundations of a church on the site go back to ancient times. The building and the site has been used as an ecclesiastical meetingplace since the 10<sup>th</sup> century, which makes the stratigraphy intricate and complicated. The church comprises of six different building parts, each part and phase show, in a unique way, the different ideas, architectural styles and the need for space of different times. The architectural styles are mixed, however as a complex the architecture can be described as Romanesque. The church is situated in the eastern extent of the village, surrounded by graveyards on three sides, while the western part opens up to the centre of the village, through gateposts.



Figure 3: The material = The church at Monymusk, from the south. Photograph by Gertie Ericsson 1997.

## Method

The survey was undertaken using a combination of methods, the base being a single-context method, with digital applications and rectified photography applied to it. The measuring was done digitally, both in the field and when working with the drawings. One of the most important research aims were to find a fast, accurate and cost effective method for obtaining data in the field and for the production of the drawings. As was stated in the introduction the survey was done in 1997, with the techniques and methodologies existing then.

### *The rectified photography*

In preparation for the photographic survey a lot of books about photography in general and photographing architecture in particular were read for inspiration and technical advice (Bryan 1998, p 1ff; Dallas 1980, p 396-399; Dallas 1993, p 391ff; Dorrell 1989, p 112ff; MacLeod 1996, p 1ff; Wallace et al 1996, p 40-48). At beginning of the survey the exterior of the church was photographed thoroughly, to get a set of prints that could be marked with points to be measured in at the instrument survey.

For the photographic survey the intention was to photograph all internal and external elevations in full, to get close-up shots of all important architectural details, construction methods, redundant features, differences in bonding agent, the mixture of the same, and the colourchanges of the stonematerial.

A 35 mm Pentax single lens reflex camera format was used, with both a 50 mm and a 28 mm lens. Two different types of films were used, monochrome print and colourprint, in a varied range of speeds. A more light sensitive monochrome print film was used for the interior of the church. No additional lighting was used, which made the internal elevations of the tower fairly difficult to photograph. All the external elevation photographs were taken using a tripod, the distance from the elevation and the height of the camera being measured for each single photograph for easier overlapping in the production of the digital drawings (figure 4). The photographs were taken with the intention to be an accurate recording, to be used for the AutoCAD process, and the back of the camera was kept parallel to the wall surface as far as could be done (figure 5). The photographs were taken with a few different intentions, firstly for use in the production of the digital drawings and secondly for archive use. Thirdly the photographs were taken to assess the shape of the structure, like erosion, spalling, weathering of different kinds, the need for repointing, where repointing and change of stonematerial has been done. The photographs were taken to obtain minimal obliqueness, as square on as possible. To satisfy the criteria for effective



rectification of the photographs, a tripod and bubble level were used. All the lower elevations were photographed from a distance of twelve metres, while the tower elevations were photographed from a distance of twenty-four metres, to get the photographs as square on as possible (figure 4). The facade is not flat but is fairly interrupted, which is why each face was treated as a single unit. This was done to enhance accuracy, since change in depth means change in scale. Two-meter ranging rods were used for accurate scaling of the photographs. The advantage with this type of photographs is that an instant overview is gained, of the masonry and its character, which makes it easier to catch the different constructions and their relative chronology.



Figure 4: The west elevation of the tower. The left photograph is taken from about 6 metres while the right is taken from 24 metres. It has been taken with a straight on view, without obliqueness. Photograph by Gertie Ericsson 1997.



Figure 5: Shona waiting by the camera for the perfect light. The film is kept parallel with the wall plane. Photograph by Gertie Ericsson 1997.

#### *The measured survey*

The existing literature about digital surveying with totalstations, was studied before undertaking the survey and also several different practicals in how to operate cameras and totalstations were undertaken (Bettess 1992; Bryan 1998, p 1ff; RCAHMS 1996, p 40-48). For the survey of St Mary's priory and parish church of Monymusk, a Pentax PCS 2CS Electromagnetic Distance Measurer was used. It was used with a prism, although it could also be used reflectorless. The EDM had an accuracy of up to 2 km, and had a special function for measuring heights. The prism was placed at the bottom of the elevation. After pointing the device at the prism, the theodolite was

turned upwards to the top of the elevation, and the actual height (the y-co-ordinate) could be read from the display.

The instrument survey aimed for gaining control points for the establishment of drawings in a digital format. Each elevation was treated as a single unit, attempting to get more than five valid controlpoints on every unit, preferably more. The photographs had an important role in this, since they would serve as a source to get the masonry information from. For checking how straight the walls actually were, vertically, our only tool was to use the EDM and follow the walls from the bottom (the prism) to the top of the elevation. The handtapes were dropped from the parapet, to see the verticality of the tower walls. The EDM was set up several times around the building, one time for each elevation, making sure that the height of the instrument and the distance from the wall was the same each time. Since the earlier prepared annotated photographs were used along with the fieldsketches, it was a fairly simple task to establish an even spread of controlpoints over the approximately eighteen exterior elevations.

No topographic survey of the surrounding landscape and the remains of the conventual buildings were undertaken, the timescale of the survey proved too narrow. This would have been appropriate, mainly to tie the remains of the lay buildings in with the church.

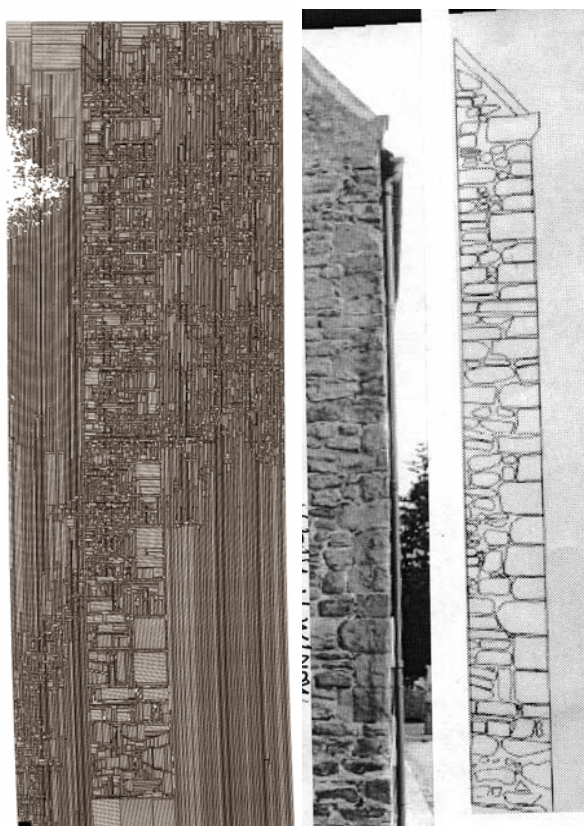


Figure 6: The southwest nave elevation in different formats. The left shows the outcome of a picture digitised in AutoCAD, being rectified in Aerial 5 and imported back into AutoCAD. Next picture shows the same elevation rectified in Aerial 5. The last picture shows the same elevation being digitised in AutoCAD and rectified in Aerial5. Printed out from Aerial 5. Pictures by Gertie Ericsson 1997.

### *The stratigraphical analysis*

The stratigraphical single-context method can be applied to a standing structure as well as to remains under ground (Pearson & Williams 1993, p 89ff). The difference is that in a building both the horizontal events and the ones that can be followed from the exterior to the interior are dealt with (Eriksdotter 1997, p 741ff). The purpose of the stratigraphical analysis is to arrange the contexts into a sequence of relative time. The arranged sequence can be presented in a Harris matrix, which is a two-dimensional graphical presentation of the mutual stratigraphical relations of the different contexts. The matrix illustrates the relative chronology of the contexts and forms the basis for a more detailed interpretation (Harris 1979). In areas with long and continuous use the stratigraphical situation is complex, with a large amount of contexts. These are often preserved in fragments due to activities in its contemporary period or periods following it. This means that every single context can have a vast amount of physical relations. To be able to produce a readable matrix, the information of the physical

relations is worked with and the relation closest in time can be extracted. The contexts are divided into building- or rebuilding phases, for which the criteria among other things are the same function and building material. These symbolise a period in the life of a building, of construction, deconstruction, renovation or ruin (Gardelin et al 1996, p 25ff). A structure is the result of numerous activities, combinations of construction, destruction, repair, alteration and reinstatement, which occur at specific periods of time (Davies 1993, p 177ff). An ancient building can be counted as a historical document, where the design of the building is dependent on ideas and traditions of different times, not only in architectural style but also in the choice of building material, technical solutions and handicraft (Andersson & Hildebrand 1988; Davies 1993, p 177ff).

The routines used at the survey, means that all documentation follow the same basic principle, every single occurrence in the stratified remains is treated equally. They are not graded on a scale, where some remains are treated as less interesting and receive little or no documentation. Each single context gets a two-dimensional documentation, is described and interpreted. The contexts are divided based on time of origin, function, building materials or timetypical buildingelements into a phase or period in the history of the building. The rectified and scaled photographs were a basis for the multicontext drawings of the elevations (Gardelin et al 1996, p 25ff).

A large amount of documentary research was done concerning British and Scottish architectural history and history, with a focus on Scottish churches (Bonham-Carter 1961; Cowan 1967, p III-V; Cowan 1995, p 1ff; Cruden 1986; Richardson 1964, p 1ff). A lot of revising about vertical archaeology was done as well as more technical reading (Andersson & Hildebrand 1988, p 32ff; Andrews 1998, p 2ff; Beaton 1992, p 52ff; Rodwell 1986, p 156ff; Smith 1996, p 19ff). Various handbooks were also studied before the survey took place (Alcock et al 1996; Cocke et al 1995; Essays in memory of Sonia Hackett 1992; Leith 1996, p 22ff; RCHME 1990, p 1ff; Stocker 1993, p 19-27).

#### *The mystery of the impossible software...*

Two different software types were suggested for working with the photographs and the collected data in the post excavation phase (figure 6). The idea was to rectify the photographs in the aerial photography software Aerial 5, using the data collected during the instrument survey, then importing it into Corel Draw or AutoCAD for the graphical work and the production of drawings. Several different steps were tried and failed before an attempt was made to rectify and digitise in the same software, AutoCAD. The software used was first and foremost AutoCAD releases 12 to 14. AutoCAD was, in 1997, one of the most powerful computer-aided design systems on the market. It also enhances the accuracy of the drawing, with the use of drawing aids that place the objects exactly where intended (Jeffries and Jones 1998, p XXV). AutoCAD offers accuracy, rectification and drawing speed. The described process proved successful and the drawings were produced from the rectified photographs. The actual digitising process started out with double-checking the data, after which the photograph was cellotaped to the digitising tablet. The tablet was calibrated using five x and y co-ordinates on each photograph, showed on the tablet in their true value. Each photograph was rectified in AutoCAD using the *transformation command*. The method involved the digitising of the photographs and the rectification of these via the control points retrieved at the survey. Each elevation required more than one photograph, so the angles were well chosen to create an overlap and a maximum accuracy of the control points. To keep track of the accuracy, a transformation form was created where the error of each single unit was given. The outcome of the survey was scaled, analytical and two-dimensional drawings, in plan, section and elevation. A wireframe of each elevation was created onto which the detailed drawings were hung. The drawings were made using a combination of photogrammetry and rectified photographs.

Literature and manuals dealing with the different proposed computer software for the production of scaled, analytical drawings were read critically before the survey, to try and distinguish the most accurate and appropriate for the project. In the autumn of 1996 a one term course was given at the department of archaeology, where dr Jeremy Huggett taught a course involving GIS and AutoCAD, which helped in making the software decision.

#### *Evaluation of the method*

The combination of methods, the basis formed of the single-context method with the digital survey and rectified photographs, proved successful. The time spent in the field could, because of the minimal amount of time spent on the measuring, be used for documentation, analysis and interpretation of the actual fabric. The fact that no scaffolding or skylifts are necessary for the buildings archaeological survey makes the process easier. This can help in the process of getting buildings archaeological surveys the same dignity and errandprocess as within archaeology under ground. The combination of methods is also non destructive for the buildings. The measured survey can also help in the reconstruction of buildings, for creating 3D models of buildings and building phases for the interested public, but also for an analytical purpose (Hill & Paasche 1996, p 12-25). It has to be noted that



the survey was undertaken in 1997, with the equipment, technical innovations and methodological achievements existing then, and a lot of progress has been done in the years following, regarding methods, totalstations, computersoftware, cameras and so on (see The development of a buildingsarchaeological method).

### Problems

During the survey of the exterior, some minor problems occurred, especially in measuring some of the elevations, three tower elevations were partly obscured. The lower fabric on some of the elevations was obstructed. The interior of the lair of Grant burial enclosure was not surveyed since the key in the custody of Lady Grant at Monymusk house. The aim was do to a full survey of both exterior and interior, however the interior of chancel and nave had been rendered white which meant that only the modern phases of the interior were visible. The chancel- and tower arches are mentioned in the analysis. The rest of the interior has been left out of the analysis due to the render and the narrowness of the tower where digital data was difficult to obtain. Though the tower was the only place where the masonry had not been rendered over.

### Research history

The site and building of St Mary's Priory and Parish church of Monymusk is of important historical and antiquarian interest, and it has been discussed by different scholars through the years, but it is mainly two academical articles that have dealt with the building from a research perspective. In 1896-97 the scholars Macgibbon & Ross invented the churches of Scotland, and the church at Monymusk was dealt with in the first volume of their work, *The ecclesiastical architecture of Scotland from the earliest Christian times to the seventeenth century*. Douglas Simpson made a survey of the building, and the article *The Augustinian priory and parish church of Monymusk, Aberdeenshire*, was published in the Proceedings of the Society of Antiquaries for Scotland in the year 1924 (p 34-71).

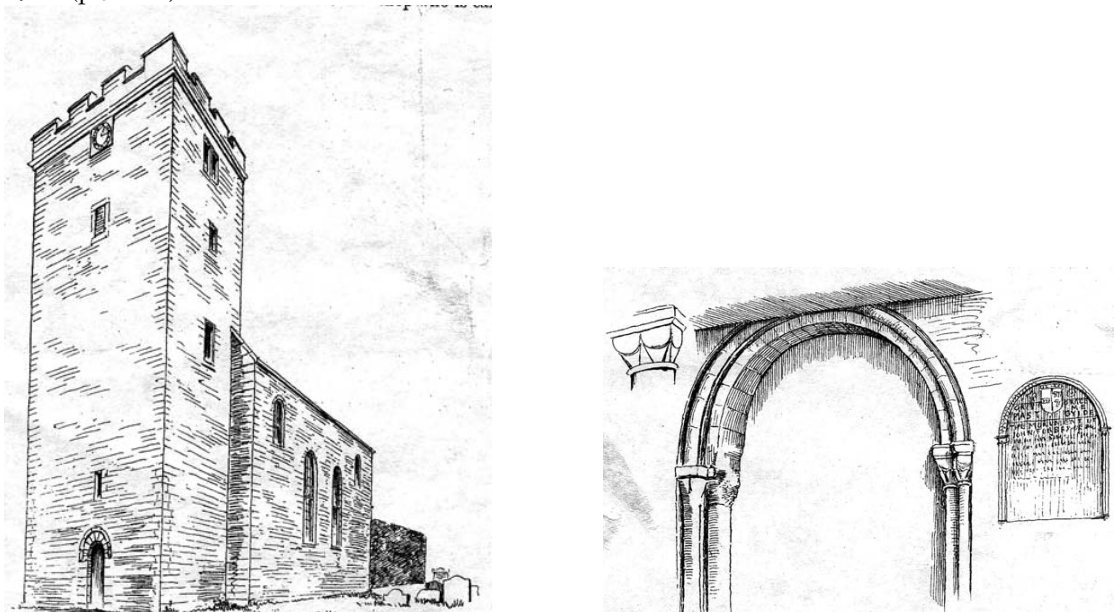


Figure 7: The church seen from the southwest and the chancel arch seen from within the nave. Drawings from the article by Macgibbon & Ross (1896-97, p 216 fig.184 and 185).

*The ecclesiastical architecture of Scotland: from the earliest Christian times to the seventeenth century, volume one, by David Macgibbon and Thomas Ross*

In the first part of the article the location of the site and the importance of it in the landscape is described, as a place of great antiquity and as one of the oldest seats of the Culdees in the north of Scotland. Important facts they have chosen to mention are for example the foundations by Malcolm Canmore who also vowed it to St Andrew. The Culdees are also mentioned in connection with the site in 1170, and Gilchrist the Earl of Mar who built them a convent in or about 1199.

The next part of the article is the description of the structure itself. They call the foundations Norman and mention that the lower part of the tower and the chancel arch are the only remains of this building period. A simple drawing of the church, made by Macgibbon and Ross, show the construction from the southwest. One of the things obvious on the drawing is that the two bottom windows of the south nave elevation are missing, which means that they either must have been built later, covered in ivy or plaster (figure 7). Macgibbon and Ross

describe how they interpret that the tower and the chancel arch show the length of the original structure, and that the, according to them, modern sidewalls mark the location of the original north and south walls. The abnormally long chancel is described, which is now called the lair of Grant burial enclosure. They go on to talk about the different functions of the interior blocks, the chancel area being used as a vestry, also the entrance from the tower into the actual church, which has been closed up, and the tower arch are briefly described. Their conclusion seems to be that the Romanesque remains they can trace are in the chancel arch and the lower tower courses, and that they most probably belong to the convent Gilchrist the Earl of Mar built for the Culdees at the end of the 12<sup>th</sup> century. The article is brief, a description of the history and architecture of the church.

*The Augustinian Priory and Parish church of Monymusk, Aberdeenshire by W Douglas Simpson, MA, D.Litt., F.S.A.Scot.*

Simpson starts off his article by describing the setting of the church as being favoured by nature. He plants the idea of the place being of large importance even before the first monastic community decided to settle here (figure 8). He then goes on to talk about the importance of the village through time; lord Cullen's early land improvements in the early 18<sup>th</sup> century, which was the beginning for the north-eastern land economy to move forward. He draws up a historical sketch of the church and village. He starts off with the earliest charters where Monymusk was mentioned, in the land grant of King Malcolm Canmore of 1078. Simpson also talks about St Andrews as the first episcopate to be founded by clergy during the 8<sup>th</sup> and 9<sup>th</sup> centuries, and also points to the historical connection between Monymusk and St Andrews. He goes on to describe the Culdee community, and the replacement of them by the Augustinians in the 13<sup>th</sup> century. He recounts the history of the priory, how the Culdees got their lands partly from Gilchrist earl of Mar in 1120-30; and their monastic buildings from Gartenach earl of Buchan. Gartenach granted the Culdees with monastic buildings such as an oratory, a refectory and a dormitory but no cemetery. A bishop named John is mentioned several times in the article, and according to Simpson the priory was built during his lifetime, before 1207. In a charter there is mention of *the church in which Culdees formerly were* from a period marked by attempts of abolishing the Culdees and transform the order into Augustinian beliefs. Simpson also describes Monymusk house and the ownership concerning the house and the church. Simpson then goes on to revise the discussion by different scholars about the foundations of the monastery. One idea was that the foundations could be derived to the year 1078 when king Malcolm Canmore gave a grant of land, but other scholars think that it was merely the reviving of an older house, and that the foundations of the monastic society goes further back in time.

Simpson also went through the session records of the church, which have a starting date from 1678 and are full of entries connected with the fabric and furnishings of the church. The entries are mainly for minor details but some do cast a light on the structural history of the church.

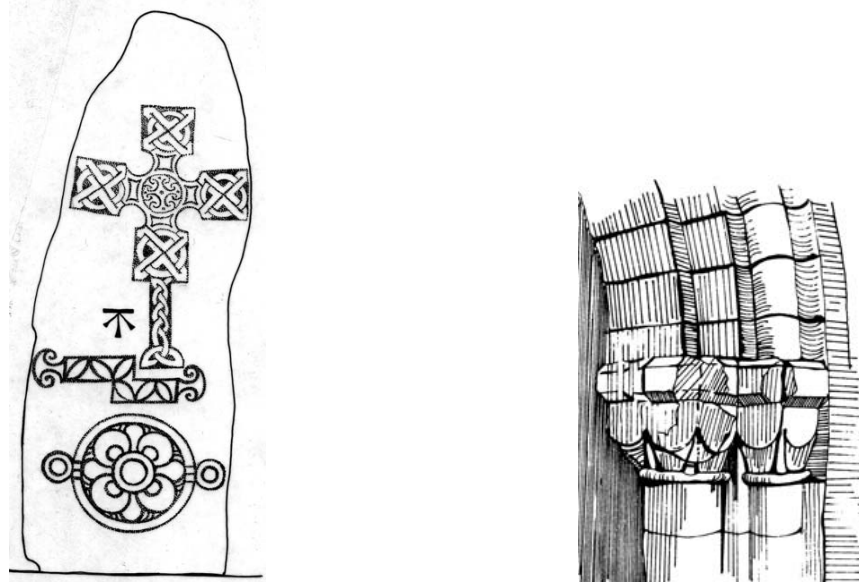


Figure 8: The Monymusk stone, and the south chancel arch capital, seen from the northwest. Drawings from article by Simpson (1924, p 37 fig. I and 61 fig. II).

The next part of the article handles the remains of the church, which Simpson describes as Norman in everything important. He goes on to discuss the priory and its construction, the abnormally long building at the eastern part of the church, and all the different building parts are architecturally described. He gives measurements to the different parts of the church, and describes them, first exteriors and then interiors. The chancel arch is described

as the only ancient work visible in the church (figure 8). The architectural features of the arch were described in great detail. After that a more composed conclusion of the whole structure was given. The discussion of the church and the reason for the abnormally long chancel has been dealt with by several different scholars in the time period before 1924. Some believed the church had been in joint function, with the nave serving the parish and the chancel belonging to the priory. In a constitution of 1211 a church was not specified, and the plan of the church with its western tower and lack of transepts, is that of a parochial not a monastic building. The possibilities for the shared church were discussed by Simpson and he gave different suggestions to solve the problem. One is that if the assumption was made that the east end of the chancel was demolished, the crosswall enclosing the vestry erected further to the west, and the enclosure erected eastward after 1840, when the original chancel was roofed and in use, which had been stated by the New Statistical Account. After a long discussion Simpson comes to the conclusion that the problem is obscure and the only solution to the problems would be a thorough excavation on the site of the conventual buildings, and the church. The article is thorough and gives both a pre- and post Reformation history, but it does not give an analytical account of the structure.

## Background

### A historical description of the village and church of Monymusk

The priory and parish church of Sankt Mary's is situated in the village of Monymusk, formerly known as the Kirktoon of Monymusk (figure 1 and 3, p 3 and p 5). The name Monymusk is said to derive from the Gaelic *monadb* that means a hill, and *musach* that is signifying low and marshy ground (Whiteley 1992, p 1ff). There is a reference in a land grant of the year 1078, by king Malcolm the III, of the church at Monymusk. Malcolm, with the last name Canmore, was the king of Scotland between 1057 and 1093. He went on a so-called expedition, or battle, against the Mormaer of Moray, or the king of Moray (Simpson 1924, p 35). Moray is an area around present day Elgin (figure 2, p 4). He granted the lands of Keig and Monymusk to God and to St Andrews if he was victorious in the battle. According to legend king Malcolm marked the tower off with his spear, before taking off. He did probably not give orders to build a new church, but to renovate and extend an old building on the site (Reeves 1864, p 122ff). *Canmore* or Gaelic *Ceann Mor* means bighead or great chief, and he was given the reputation of being a great warrior king. The grant of land was an important gain for the Culdees of St Andrews, since Monymusk was the only house of the order between Rosemarkie and Monifieth (Simpson 1924, p 35ff). The Culdees were the first missionaries to come to Monymusk, and they were also called *the servants of God*. They were possible followers of St Ninian of Whithorn or St Columba of Iona. St Ninian and his followers were the first to organise a Christian mission in the north-east of Scotland, into the South Pictland (Macquarrie 1997, p 50ff). Malcolm Canmore was married twice; the second time to Margaret who was the sister of the heir of the English throne Edgar the Atherling. They married in 1069, and hereafter transformed Scotland. She seems to have persuaded Malcolm, who was illiterate, to choose Roman Catholic traditions above the Celtic. In 1093 Malcolm was killed in an ambush in Alnwick, when he for the fifth time tried to invade England.

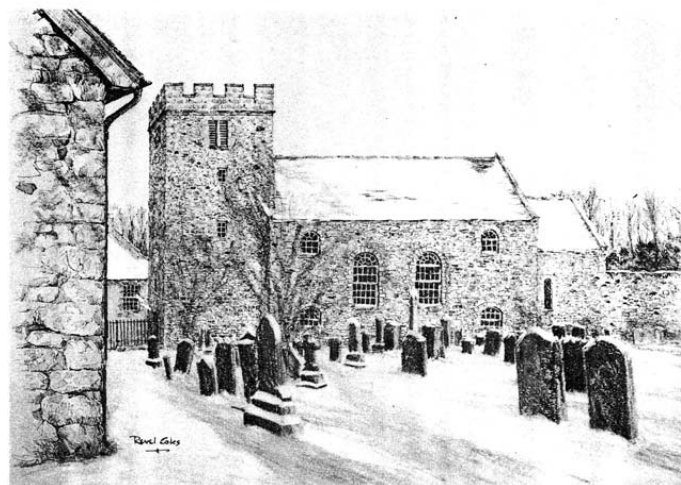


Figure 9: Painting of St Mary's Priory and Parish church of Monymusk, seen from the southwest. Painting by Revel Coles. From RCAHMS print no. AB/3709.

The priory and the Culdees of Monymusk are first mentioned together in 1170, when it is told that Gilchrist the Earl of Mar built them a convent in the village. They got the convent on condition that they followed canonical rule (Macgibbon & Ross 1896-97, p 215ff). The Culdees were not to have a private burial ground attached to the priory, but to use the one that belonged to the parish of Monymusk (Davidson 1878, p 126ff). The priory

comprised of an oratory, a refectory and a dormitory. The earl donated it with several other churches in the area and the lands of Dolbethock and Fornathy to Monymusk, before 1211 (Simpson 1924, p 41). The Culdees had difficulties conforming to Roman rite, and large disputes were going on between them and the archbishop of St Andrews. The disputes were settled and the archbishop has been called the founder of the Culdee house at Monymusk. The Culdees at Monymusk were allowed to keep their lands, but had to promise to do nothing to the harm of neither the church of St Andrew's nor the parish at Monymusk. The earliest Culdee community comprised of twelve Culdees; when they became a daughter house of St Andrew's this changed; one became the prior or head and the other eleven became canons. At the beginning of the 13<sup>th</sup> century, the Culdee priory was conformed into an Augustinian priory, a process started already at the end of the 11<sup>th</sup> century, by Malcolm Canmore and his queen. However, the Culdees of Monymusk had been reluctant to conform. Around the time when the Culdees transformed, William the Lion reigned over the kingdom of Scotland. The motherhouse of the Augustinians of Scotland was St Andrews, and several houses were dependant on it together with the church at Monymusk (Simpson 1924, p 42ff). Still in the 15<sup>th</sup> century the priests of Monymusk were called either Culdees or Denes, and there were four in the priory, and the head was the Prior. At the time before the Reformation, Monymusk was both a parish and a priory. Towards the end of the 15<sup>th</sup> century, the priory needed protection from their violent neighbours, which was the Forbes family. The prior had to defend the monastery and got legal right in 1542 to restrain a neighbour, *bosteous John Forbes, from occupying four oxgang of his lands* (Davidson 1878, p 127f). In 1549 the territories were handed over to a Duncan Forbes, son of the lair of Corsindae. He got a charter of the lands of the parish at Monymusk that formerly had belonged to the priory. Robert Forbes became the prior in 1556, and was the last prior before the Reformation, after which he became a Protestant. The order abandoned the church after the reformation, and the Forbes family bought the remnants together with surrounding estates. The priory continued in being until much of it was damaged in a fire in the early 1500s. The prior, John Elphinstone was tried in Aberdeen on a range of charges, including murder and arson. The church was transformed; the language changed from gaelic to saxon and the clansystem was replaced by feudalism (Davidson 1878, p 126ff). Lair William Forbes and his family built a castle in the year 1584, called Monymusk house. The priory church was restored and rebuilt as a parish church (Simpson 1924, p 45f).



Figure 10: The Episcopal Chapel, later turned into a gallery. Photograph by Gertie Ericsson 1997.



Figure 11: The main square and the Grant Arms Hotel. Photograph by Gertie Ericsson 1997.

The origins of the village of today date back to the year 1712, when Sir Francis Grant, lord Cullen, purchased Monymusk house and estate from his friend, Sir William Forbes. Monymusk house was in a poor state and the estate lands had extremely poor agricultural qualities. There were no enclosures and few trees, and the estate buildings were all old and semi-derelict. In the existing village Kirktoon of Monymusk lived 100 people. Sir Francis Grant appointed his 20 year old son, sir Archibald Grant, as estate factor. When the son got married in

1719, he became the owner of the estate. One of his early improvements was clearing the land of stone and using them to build enclosing walls. He introduced new farming methods and planted millions of trees. He also laid out a French styled landscape garden by the river Don, and named it Paradise (Whiteley 1992, p 1ff). He had become good friends with the English agricultural reformers Lord Turnip Townsend and Jethro Tull, and he was greatly inspired by their new ideas about farming. Sir Archibald also laid out a plan for a rebuilt and greatly improved village at the heart of the estate. It surrounded a central square planned to allow cattle drovers going to the market in Aberdeen to rest their cattle in security on the square. Most of the buildings of the first new village were replaced in the 19<sup>th</sup> century, and those buildings are still there today. The Grant Arms Hotel dates back to 1810, the cottages around the square to the 1830s and 1840s, the village hall to 1826 and the manse to 1850 (figure 10, 11 and 12) (Whiteley 1992, p 1 ff).

In the east end of the square, an opening between the detached houses and two massive, stone entrance posts, leads to the church and the graveyard. On entering this area the pink colour of the church is absolutely overwhelming (figure 17 p 16). There are two separate burial grounds, and in the northeast graveyard there are remains of the old priory building partly included in the new walls of the graveyard. There were about 700-800 people living in the village of Monymusk in 1997 (Jim Forsyth, pers.comm.). Monymusk house is still inhabited by the Grant Family.



Figure 12: The row of houses east of the main village square. Photograph by Gertie Ericsson 1997.

#### *The organisation of the Scottish church – priory and parish*

The word Culdee is originally built of two components, *Cele* and *De*. The first part is frequently used in Irish manuscripts, and is, according to Reeves, the word for *Socius* and *maritur* (the Wurtzburg copy of St Pauls Epistles, and the St Gall Priscian), in O'Davorens Glossary *chele* means “a servant”; *de* is the Latin genitive of God (1864, 122f). The Celi De or Culdees are also known as the servants of God. The Culdees were probably the first missionaries to come to Monymusk. With the Culdees religious life from Ireland was introduced into the country (Clancy 1996, p 111ff). Originally the Culdees were a form of monastic elite. They were a non-celibate community, probably established in Scotland in the early ninth century (Fawcett 1994, p 18f, 137).

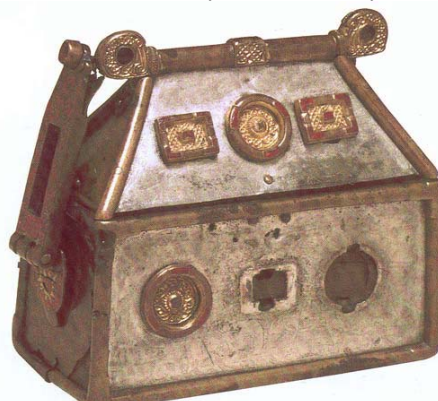


Figure 13: The Monymusk Reliquary or Breccbannoch. From *Picts, Gaels and Scots* (Foster 1996, plate 11).

The Church of Scotland was until the 12<sup>th</sup> century based on the monastic foundation. Nearly all establishments were monastic and parish churches were normally associated with a monastery. The country was not divided into dioceses and parishes until the beginning of the 12<sup>th</sup> century (Reeves 1864, p 143f). The term *Keledei sive Canonici* was applied to a wide range of people, like hermits and conventuals, and it was implying the conditions of



celibacy or married men, regulars and seculars (Davidson 1878, p 126ff). Prince David I (1124-53) restored the episcopates of Scotland during the 12<sup>th</sup> century. He added bishops to the societies at Brechin, Dunblane, Ross and Caithness; while at St Andrews and Dunkeld, chapters of canons regular were instated instead of the Culdees (Macgibbon & Ross 1896-7, p 215). The Order of Augustinians is one of the four mendicant orders of the Middle Ages. They were more moderate and less severe than the canons of the Cistercian and Premonstratensian orders (Fawcett 1994, p 128). Several houses of Culdees, for example, were like Monymusk transformed into Augustinian priories, with the old clergy being given the option to adapt to new ways or to leave (Fawcett 1994, p 18f, 23f).



Figure 14: The Pictish standing stone and the two crossslabs, contained in the foyer of the church at Monymusk. Photograph by Gertie Ericsson 1997.

#### *The relics of Monymusk*

Things that point to the early importance of Monymusk, despite the choice of site and the actual church at Monymusk, are the relics found in and around the church. The Pictish sculpted stone from the 9<sup>th</sup> century, and two of the formerly five cross stones are placed in the portico of the church. Also the former placing of the reliquary Breccbannoch points to the great importance of the village. It is one of the most priceless surviving relics of the early Celtic Church in Scotland, and it is believed to be a reliquary of St Columba (Macquarrie 1997, p 74ff). It was carried before the army in battle, including Bannockburn in 1314, and was guarded by “a hereditary keeper” (Foster 1996, p 87f, 106f). The reliquary was kept in Monymusk house until 1933, and has been kept in the National Museum of Antiquities in Edinburgh, but is now on display at the Museum of Scotland (figure 13).

Among the other priceless relics of the church is the Monymusk stone or the Monymusk house stone (figure 14). This Pictish symbol stone is a large, upstanding slab, of undressed granite. The face of the stone has been decorated with carved Pictish symbols; the Pictish Z-rod and discs, the “step”, the “disc-and double ring” and an interlaced, square-armed Celtic cross, all ornamented with knot-work (Simpson 1924, p 36f; Simpson 1935, p 65ff). The five cross slabs in the churchyard and church, also suggest an early Christian origin for the site. They are engraved burial stones, dated to the 6th century. All five have different carvings (Simpson 1935, p 65ff).



## The buildingsarchaeological survey

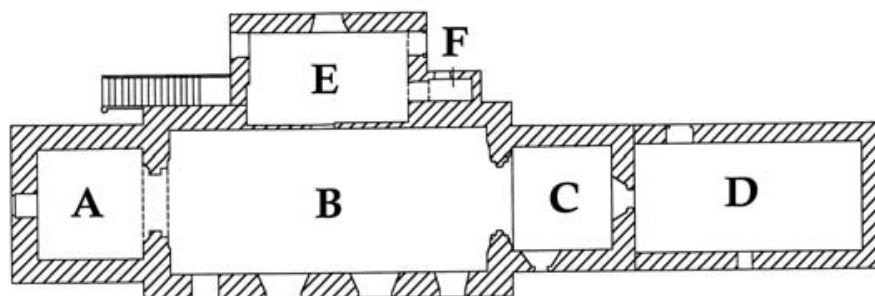


Figure 15: Plan with the different blocks distinguished and block letters marked.

### The survey of the building

The field survey took place during one week in April 1997. A basic description was made together with sketches of the different elevations. The initial ocular and structural survey was done, for assessing the condition of the structure and the fabric. At this initial survey, a set of preliminary photographs were taken of the exterior of the church. After these were developed control points were established evenly over the surface of the fabric, and marked on the photographs. The control points were surveyed in with the total station to obtain control data for the detailed photographic survey. After this was done the building complex was divided into blocks after having distinguished the different building parts, named A-F (figure 15). On this initial walk annotated fieldsketches were made. These contained information about the structure, plans, elevations and architectural detail, on exterior as well as interior.



Figure 16: Different types of stones, limemortar and repointed cement. Photograph by Gertie Ericsson 1997.



Figure 17: The tower at dusk. Photograph by Gertie Ericsson 1997.

### The building

A building is an obvious proof of the past and as such the different time periods with their ideas and trends have to be taken into consideration. St Mary's Priory and Parish church of Monymusk has gone through a lot of changes. The liturgy has changed from Celtic Christian to Roman Catholic, on to be a modern church in the Presbyterian Protestant realm. The church contains a tower, a nave and a chancel. It is orientated east west. Attached to the east of the chancel is the burial enclosure of the Grant family of Monymusk. The north side was partially renewed in the 17-19th centuries, and attached to the nave is a two-storey addition that, on the interior, contains the back of the organ and the church office on the ground floor and a session room for the congregation on the first floor. Built together with this north building is a small square one-story building which is a toilet.

The church is built of mainly granite, which is grey-pink in colour. The material is roughly dressed, the stones are sub-rectangular to sub-angular, and the outer faces are not straight. They are laid in regular courses, with the odd levelling course of small stones in between. The top of the tower is built of rubble and there a lot of small pinning stones have been used. The quoins, the arched entrance doorway and other decorated work are built of Kildrummy sandstone, like in the chancel arch (figure 17) (Simpson 1924, p 56; Whitely 1992, p 1ff).



Figure 18: The south elevation of the tower, where repointing work was done in 1997. Photograph by Gertie Ericsson 1997.



Figure 19: The south elevation of the tower where a piece of glass had been used as ballast in the masonry. Photograph by Gertie Ericsson 1997.

The stone of the lowest courses of the tower is red granite with large twinned feldspar phenocrysts (large crystal in porphyritic granite); also pink, even-and medium grained granite, and according to Simpson a similar stone is quarried in the Cunnigar Wood by Cluny Castle, which is about one and a half-mile south of the church (Atkinson 1979, p 14ff; Simpson 1924, p 56). The masonry above this consists of porphyritic, fine-grained granite, which is pale pink with large feldspar crystals and smoky quartz, which probably had been on the northeast slope of Pitfichie Hill (Bell & Wright 1994, p 70f). This quarry is situated two miles north of the church. For the last building phases, from the 19<sup>th</sup> century onwards, grey granite has been used. This has probably been quarried in the Kemnay quarry, south of Monymusk (Simpson 1924, p 56; Whitely 1992, p 1ff). All these quarries are to be found at a close distance to the village of Monymusk.

All the roofs of the church complex are covered with slate tiles, except for the tower, which has a lead roof. The gable roofs of the nave and chancel are laid with slate tiles. These may have been reused in 1990 when the roofs were re-laid. The material has probably been quarried nearby or at least in Scotland. The Scottish slates, called "Scotch slate", are normally a dark grey version (Beaton 1992, p 52f).



Figure 20: The north and south elevations of the tower. Photograph by Gertie Ericsson 1997.

The mortar of the church is mainly limemortar. In the older parts of the building limemortar is the main bonding agent, however repointing has been made through the years and on those instances cement has been used. Mortar is a blend of bonding agent, water and sand. The bonding agent can for example be lime or cement (Andersson &

Hildebrand 1988, p 64f). On the south elevation of the tower, repointing was made, after the fieldsurvey in 1997 (figure 18). This mortar is almost white and fairly soft, looks like limemortar.

### *The Tower*

The tower is a tall, square building at the westernmost extent of the church (figure 17, 20 and 21, appendix I). It is built in four stories, ended at the top with a lead roof and a crenellation. The tower has been given the block letter A (figure 15). The thickness of the walls of the different tower elevations is on the ground floor of the southwest - and east walls are 110 cm thick, while the north is 100 cm thick. The first floor south wall is 105 cm thick, the west and east are 110 cm thick and the north is 100 cm thick. The second floor walls are the same as the first floor walls, up until the height of 1040 cm, the east elevation of the second floor above this height is 100 cm thick. The third floor walls are respectively from south 110 cm thick, north 100 cm thick, east 80 cm, while the thickness of the west elevation changes from 110 cm to 95 cm a few decimetres from the roof.

The free angles of the tower have got quoins which are wrought of Kildrummy sandstone, up to approximately half the height of the tower (Simpson 1924, p 56). Above this the quoins are of granite and the top floor is built of random rubble. The masonry of the tower is of six different building phases, visible on three of the four elevations. The masonry of the bottom courses consists of coursed red, granite ashlars; varying from sub-rectangular to semi-circular in shape, the joints are wide and drawn. Higher up on the elevations there are masonry consisting of smaller, roughly dressed, sub-rectangular stones, with narrow joints, and neatly coursed. It is pointed with limemortar; later repointing has been done with cement. The corners between the nave and the tower are not coursed in the southeast and northeast of the tower. Between the Romanesque and modern types of fabric is the late medieval masonry which is evenly coursed, the size and shape of the granite varies. The height of the course increases and the joints get wider. The masonry of the top floor is mainly of 1822 build. It comprises of random rubble of different sizes and shapes, which are not coursed. The stones are laid in cement and pinning has been used for stability. On the east elevation the masonry is disturbed and was probably totally renewed in 1822 when the spire was erected (figure 4 p 6, figure 20).

### *The elevations*

The west elevation contains the arched entrance into the church, with the arch wrought of Kildrummy sandstone, above the arch a hood moulding of "trilateral section, springing from a plain top" with the voussoir stones of the same material (Simpson 1924, p 55). The actual aperture of this doorway is 95 cm wide by 210 cm high. Above the entrance is a small rectangular window with sill, lintel and rybats of blond sandstone. This window has a painted glass window (Whitely 1992, p 1ff). The small window measures 30 cm wide and 95 cm high. The rear arch of this window is visible in the first floor of the tower. The elevation contains of three redundant features, situated in the present first and second floors. In the first floor is a rectangular window with granite embrasures and between the present first and second floors there is an aperture which has the appearance of a loophole. It is narrow, roundheaded and has arch, rybat stones and sill of blond sandstone. In the second floor is a rectangular aperture with granite embrasures. The measurements of the above mentioned redundant features are respectively: 30 cm wide by 120 cm high, 30 cm wide by 90 cm high, 50 cm wide by 120 cm high. On the third floor is the clock, which is deriving from 1865 (Simpson 1924, p 52). Between the aperture in the second floor and the clock in the third, there is a small, rectangular redundant feature, which is probably a loophole. However the masonry is disturbed and the features are difficult to see. The south elevation contains two open apertures, rectangular windows, in first and second floors. The apertures have lintel, rybat stones and sill of pinkish grey granite, and the inner angle of the stones has a chamfer. There is a belfry window, with two lights in the third floor. The belfry window has embrasures of grey granite similar to the material in the crenellation (figure 20).



Figure 21: The east elevation of the tower seen from the southeast. Photograph by Gertie Ericsson 1997.



Figure 22: The second floor of the tower, showing the narrow nature of the interior. Photograph by Gertie Ericsson 1997.



Between first and second floor there is a narrow, redundant aperture, which is a possible loophole (figure 4 p 6 and appendix I). The first floor window is 65 cm wide by 120 cm high. The second floor window is 65 cm wide by 115 cm high. The belfry window has got, as mentioned before, two lights. These are both 50 cm wide and 155 cm high. The frames around the windows are 10 cm. There are similar belfry windows on east, south and north elevations. The north elevation is plain; it has only got one aperture, the two-lighted belfry window, in the third floor. It is of the same size as the one on the south- and east elevations. The embrasures of the window are of roughly dressed granite ashlars. The rear arches are of red brick. The east elevation has got one aperture, the two light belfry window. These two apertures are respectively 50 cm and 45 cm wide, while they are 165 cm high.

### *The Nave*

The nave is a rectangular building, which has been given the block letter B (figure 15). It is connected, to the interior of the chancel, through the chancel arch and to the tower through the tower arch. It has got a gabled roof and is a quite tall building (figure 23 and 24).



Figure 23: The north elevations of the nave. Photograph by Gertie Ericsson 1997.

### *The elevations*

On the south elevation, there are six modern windows (figure 24). This elevation is also the least disturbed of the nave elevations. There are two large round-headed windows in the centre of the wall, two small round-headed and two of casement type. Most of them have arches, rybat stones and sills of granite. Excluded from this is the top left window where the dressings, except for the sill, are of blond sandstone, and the bottom left where the dressings are of varying material, both sandstone and granite. The arches, rybats and sills of the top and bottom left window have chamfers at the inner angle of the embrasures. The windows of this elevation are all set with normal windowglass. There are two redundant features at the bottom of the wall, one window and one doorway. The embrasures of the redundant window and doorway are of dressed granite. There are also traces of earlier apertures further up on the elevation. Between the two easternmost windows, there is a large lintel-like stone. The quoins of this elevation are built of blond sandstone, but the top courses have been replaced with granite. The sandstone of the quoins is dressed ashlar which have been tooled using a quite broad chisel. The elevation contains several different building phases, primarily of three different types of build (appendix I).

The bottom courses are built of coursed red, granite ashlars; varying from sub-rectangular to semi-circular in shape; the joints are wide and drawn. They are fairly low in the course. The next dominant building part shows a masonry built up of small, sub-rectangular granite stones, evenly coursed. The next part of masonry is a fair bit higher in the course. The joints are narrow and the bonding agent is limemortar, though repointing has been done in modern times with cement. The top courses of the building are of 1822 build when a major renovation came about. These may be reused stones from the ruinous conventual buildings, or the north nave elevation, which was dismantled in this year. The joints are medium sized and seem to be pointed with cement. The quoins

are probably of the same build. They are large grey Kemnay granite ashlar. The mortar here has a dark colour, different from the rest of the church. The modern windows are of different sizes. The two large, central windows are 150 cm wide and 340 cm high. The west first floor window is 125 cm wide and 170 cm high while the west ground-floor window is 130 cm wide and 135 cm high. The east first floor window is 105 cm wide and 160 cm high, the east ground floor window is 115 cm wide and 125 cm high. The redundant doorway is 70 cm wide and 155 cm high, while the redundant window is 110 cm wide and 105 cm high. The lintel of the redundant window has been cut in the upper east corner.

The north wall of the nave is more disturbed than the south, mainly due to the build of the modern north aisle (figure 23 and appendix I). At the same time the interior galleries were being renovated, doorways leading to these were being opened all around the year 1822. There is an open doorway in the west part of the wall, leading into the west gallery and the first floor of the tower. Leading to the door is a stair leading up to the gallery door and into the session room. There is a rectangular doorway leading into the space under the stair, which has probably, been used for storage. The east part of the wall contains two redundant features, a doorway and a window, on a first floor level. The doorway is situated on the same height as the gallery doorway on the northwest part of the elevation, so this is probably the doorway leading to the east and north galleries. The doorway has got lintel and rybats of granite and the other redundant feature is a window, consisting of rybats of granite. The masonry of the northeast part of the wall is of five different building phases. The bottom courses consist of large subangular to subrectangular stones, high in the course. The masonry is coursed, with wide joints. The bonding agent is limemortar. This masonry has only survived to a height of three courses. The quoin up to a height of eight courses could also belong to this period. Above the three courses is the next type of masonry, where the stones are coursed red, granite ashlar; varying from sub-rectangular to semi-circular in shape; the joints are wide. Above this the sandstone quoin and the third type of masonry coursed with it. On the northeast the masonry is built of small pink granite stones, of small, roughly dressed stones, subrectangular. They are neatly coursed, with the odd levelling course. The joints are narrow and pointed with limemortar. Within this masonry is a redundant doorway. On this elevation the sandstone quoin is still in situ up to roof height. The sandstone quoin exists up to the same height as the before mentioned masonry, where there is a clear break. Above this break the quoin and the skew-putt are built of granite and the masonry looks fairly modern in appearance. The nave is of the same height as the north building, but they are not bonded in at the corner. The ridges of the chancel-and nave roofs run at the same extent, both these buildingparts have gabled roofs (figure 23 and appendix I)



Figure 24: South elevation of tower and nave. Photograph by Gertie Ericsson 1997.

The gallery doorway of the first floor is 1.15 m wide and 2.15 m high, while the stair doorway is 1.00 m wide and 2.05 m high. This door is the entrance to the storage space and cellar of the north elevation. The west and east elevations follow the same structural principals as the north and south (figure 24 and appendix I). The chancel building interrupts the east wall of the nave. Only one metre strips on each side of this building are visible, while the top of the elevation is easier to see. There is a one roof-light on either side of the chancel roof-ridge. They have got lintels, rybat stones and sills of granite; they seem to be cut by the chancel roof. These roof-

lights are 45 cm wide and 65 cm high. The east elevation has a reminder of the earlier roofheight and slant of the roof of the chancel, in the shape of a roofraggle. The roof that superseded this one was a saddle roof, so this raggle must be really ancient. It could also show the former nave height. The top of this elevation is modern, while the bottom is built of old coursed masonry. On the north side the quoin is built of sandstone from bottom to the top, and there are plenty of mason's marks. One says "Chivas" and the letters "RN"; two stones further up what looks more like a date "1692" or "1092" (Figure 25). This is mentioned by Simpson in his article of 1924, which also mentioned on the northeast quoin, the initials I.F. (Henderson, in *Aberdeen Epitaphs and Inscriptions*, suggests that this is for Sir John Forbes), and the initials H.F. (Simpson 1924, p 60f).



Figure 25: A few mason's marks on the northeast elevation of the nave, and chiselmarks on the northeastern quoin. Photograph by Gertie Ericsson 1997.

East of the tower is the west elevation of the nave. The bottom courses of the elevation are plain, while the top courses have been renewed. The quoins are built of sandstone, and the top courses of granite. There are about four different building phases in this elevation. The bottom courses are built of fairly evenly coursed red, granite ashlars; varying from sub-rectangular to semi-circular in shape; the joints are wide and scribed. Above these four courses the masonry is built of small, roughly dressed stones, with rounded outer phases. They have narrow joints and are pointed with limemortar. The sandstone quoin is of the same build and starts at this level. The masonry is not bonded at the corner above this level. The masonry looks disturbed higher up on the elevation and is fairly difficult to analyse. The top of the elevation has been rebuilt in 1822, with a granite quoin and reused material from conventual buildings and the north nave elevation. On the north side of the nave roof there is a small, rectangular window. The nave roof is 4.75 m high. The south elevation is 15.10 m wide from west to east and 6.23 from south to north (appendix I).

### *The Chancel*

It has to be mentioned that the burial enclosure and the chancel should be described together, since the edge between the two is hard to distinguish. However, the decision to describe them as two different building parts is based on the extents of them today. Their history together as one area ceased in 1822 when the vestry wall was built in the east. The chancel was for the documentation given the letter C (figure 15).

The chancel is normally the easternmost part of a parish church (figure 26, 27 and appendix I). The chancel has got round-headed windows in the south-and east elevations. It does not have an apse, the ending is square. The eastern wall is modern. The window may have been reused from another building, but it is not secondary in the masonry. The earliest extents of the chancel are approximately half of buildings C and D of today (Appendix I). Here the masonry is built of larger semi-rectangular stones, of pinkish-grey granite, high in the course. The stones are roughly dressed. The joints are fairly wide and pointed with white-yellow limemortar. On the north wall this old masonry survives in the west corner, up to 22 courses, and the lowest three courses stretch to the modern north doorway. On the south wall the masonry remains in the west corner, 21 courses high, and also parts of the lowest 6 courses approximately to the modern extents of the chancel. The corners between the chancel and nave are coursed. The next dominant building part shows the extended masonry of small, sub-rectangular granite stones. These are evenly coursed. The next extension of the chancel starts at what seems to have been tuskers. In modern times, 1822, an eastern wall was erected; to once again close off the chancel area. This wall is not bonded in with the masonry in the south and north walls. Above the walls of the burial enclosure in the east extent of the chancel, the quoins are built of large, dressed granite ashlars. The building has got a gabled roof. The structural bearings of the roof are built of wood, while the covering is of slate tiles. The roof is 365 cm high, and the full width of the building is 530 cm (appendix I).





Figure 26: The extended south elevation of the chancel. Photograph by Gertie Ericsson 1997.



Figure 27: The north elevation of the extended chancel, now in use as the Lair of Grant burial enclosure. Photograph by Gertie Ericsson 1997.



Figure 28: Masonry of phase one, southwest extent of chancel. Photograph by Gertie Ericsson 1997.



Figure 29: The east elevation of the lair of Grant burial enclosure. Photograph by Gertie Ericsson 1997.

The masonry in the chancel shows a lot of different building phases. The predominant fabric is built of small, sub-rectangular granite stones, which are evenly coursed. Most of them are pink in colour. Between building parts C and D there is a large patch of disturbed masonry, which shows that there probably have been structural weaknesses and collapse. This may have occurred when the modern east wall was erected, for easier accessing the building area. The masonry of the east wall was not possible to survey, since we did not gain access to the burial enclosure area and the interior of the chancel is rendered white. The extent of the present chancel is to the east, the modern east elevation (figure 26 and 27).

The modern round-headed window in the south elevation is with frame 75 cm wide and 180 cm high, while the aperture in itself is only 55 cm wide and 160 cm high. This window is secondary in the masonry. The east window is also round-headed, contemporary with the masonry surrounding it, which is also secondary in the building. The measurements of this aperture are 85 cm wide and 190 cm high with frame, and 75 cm wide and 175 cm high without. The voussoirs, arch and sill of these windows all have chamfers at the inner angle of the embrasures. The windows are both secondary painted glass windows.

The north elevation of the chancel is approximately 525 cm long and 530 cm high. The south elevation is 525 by 530. The east elevation is to the top of the gable 900 cm high, in the south corner it is 555 cm high and in the north corner it is 540 cm from the ground. The north elevation is 620 cm long from east to west.

#### *The lair of Grant burial enclosure*

The burial enclosure is the easternmost building of the church. This block has been given the letter D for the documentation (figure 15). It is the burial enclosure of the lair of Grant family of Monymusk (figure 26, 27, 29 and appendix I). Within its walls seems to be traces of the earlier extents of the chancel eastwards. The chancel has been extended in different stages, the first half then almost to the full extent of today. Of the first extension there is obvious scars, change in masonry, vertical joints, from large stones high in the course to smaller, rectangular stones. The next extension has fabric built of less even courses, a mix of high and low courses with the odd levelling course. Here a window has been inserted. Another vertical joint and the corner is again built of totally different masonry where the material seems to have been reused and granite quoins have been inserted. This building is not roofed, the top of the walls are crowned with flat, cement blocks. In the north wall is the only entrance into the enclosure. There is a redundant aperture in the shape of a rectangular window, in the south wall. On the east elevation is something that looks like a doorway, though it has been blocked by a tall, rectangular grave marker. The corners of this building part has been built of rectangular, random rubble, grey granite; while the cores are built of coursed, sub-rectangular granite stones, which are pink in colour.

The length of the burial enclosure is 1090 cm. The extent is from the west at the modern east wall of the chancel and is the easternmost part of the building complex. The height of the south elevation is in the west corner 390 cm, while in the east corner the height is 415 cm. The north elevation is 395 cm high in the west extent and 425 in the east. The east elevation is 620 cm long and 420 cm high. The roof blocks are 10 cm high and 110 cm long, seen from the top. The redundant window on the south elevation is 90 cm wide and 110 cm high; the blocked aperture with its embrasures has been almost mortared over. The doorway in the north elevation is 110 cm wide and 210 cm high. The doorway is secondary in the masonry. The interior space of the enclosure is 990 cm (west to east) and 460 cm (south to north) (appendix I).

#### *The North Aisle*

The north aisle is the northernmost extent of the complex. It is a modern building and it has been given the block letter E (figure 15). It is built in two stories and attached to the north wall of the nave (figure 30 and appendix I). Its purpose today is that of church office in the ground floor and the session room for the congregation in the first floor. The church office was probably here already in the beginning of the buildings' history, while the top floor held the north gallery. In the east wall is the entrance to the ground floor, a rectangular doorway, 110 cm by 215 cm. The embrasures and threshstane are built of granite ashlar laid in out -and inband. The north elevation contains two windows, a round-headed in the first floor and a sub-rectangular in the ground floor. The rectangular window of the north elevation is 105 cm and 130 cm without. The round-headed window is 105 cm wide by 195 cm high. The embrasures of these windows are built of dressed granite ashlar.

The entrance to the session room is situated up a staircase, which is oriented east to west (figure 30). The doorway is 110 cm wide and 215 cm high. The embrasures are built of dressed, grey granite ashlar. On the ground floor of the west elevation is a window, which is pierced through to the church office. It is a sub-rectangular window, which was changed from a doorway to a window after 1929. The window is 115 cm wide and 120 cm high. Below the window the blocking stones are set back from the masonry surrounding it. The embrasures of the window are all built of dressed granite ashlar. The rybat stones go down to ground level, on both sides of the

blocking. The lintel, rybat stones and sill are all coursed with the surrounding masonry. The staircase is 290 cm high; at the bottom 550 cm wide and at the top 130 cm. The masonry of the staircase contains pinkish-grey, sub-rectangular granite stones, roughly dressed, with a lot of levelling courses. The joints are narrow and the bonding agent used is limemortar. Later repointing has been done with cement. In the bottom courses the mortar is in a bad shape and there are several voids between the stones. It is a rectangular door, with lintel and west rybat stones of dressed, grey granite ashlar, out- and inband. The steps are built of rectangular blocks of grey granite, and the top of the stair seems to have been renewed when the steps were changed. In the renovations cement has been used as bonding agent (figure 30).



Figure 30: The modern north aisle. The east, north and east elevations. Photograph by Gertie Ericsson 1997.

The roof has got a small, rectangular roof-light window, which is 90 cm wide and 55 cm high. The roof is a hipped roof. There is one chimney on each side of the roof ridge. There is one chimney on the west side of the roof and one on the east. They are both 470 cm high and 60 x 60 cm wide. They are built of granite ashlar, and neatly coursed. The roof of this building is 365 cm high; 810 cm wide on the north elevation; 385 cm at the bottom and 255 at the top of the east elevation; 385 cm at the bottom and 35 cm at the top of the west elevation.

The masonry of the north elevation are mainly large sub-angular to sub-rectangular ashlar of grey granite, with pinning in between the courses; also levelling courses have been used. In the first floor, around the round-headed window, the medieval stone material has been reused. This masonry is built of small, sub-rectangular stones that are neatly coursed. The windows were probably inserted when the north gallery was removed and the session room was designed instead (figure 30 and appendix I).



Figure 31: The toilet on the north side of the complex. Photograph by Gertie Ericsson 1997.



### *The toilet*

The toilet is a small square building, a modern attachment to the North Aisle (figure 31). The toilet has been given the block number F (figure 15). There is a rectangular window in the north wall, with a lean-on roof. The roof height of the toilet is 330 cm high. The thickness of the walls is 35 cm. The masonry is built of large granite ashlars with fairly wide joints. The bonding agent used seems to be cement. The embrasures around the window is of granite ashlars, laid in out –and inband. The roof covering are slate tiles (appendix I).

### *The tower arch*

The tower arch was closed up until 1929, with only a small corridor passing through this space. The space had a cement floor with only the corridor paved with granite slabs. In the drawing by Wyness from 1924, on the south side of the small paved corridor there is an annotation for a consecration cross (Simpson 1924, p 54 figure 6). In 1929 it was renovated in a similar way as the chancel arch. The tower arch has got two large pillars with square capitals and a round headed arch. The inner order springs from the capitals, and it is made up of 23 voussoir stones. Three of them are chipped. The outer order rests on a pillar of large, square ashlars. The material used in the tower arch is blond sandstone, and it is Romanesque in its appearance.

### *The chancel arch*

The chancel arch is one of the earliest structural features in the church. It is built of blond sandstone. It has been mistreated through the years. The actual chancel arch consists of a central shaft, a half-circle, which is about 30 cm's in diameter. This central core is flanked by half-engaged nook-shafts, which are only half the size of the central shaft in diameter. The shafts are built up of column drums, eight in each, where every second one is a full circle. The bases of the shafts are plain, with only two roll mouldings with a taurus between, resting on a square plinth. These are also extremely eroded. The square corner of the pier is jutting out, between the shafts, but it has become eroded. Both the central shaft and the two flanking shafts are crowned with cushion capitals, which rise from a neck-mould. The capitals have heavy abaci, which seem to be chamfered on the underside, on the top the moulding is square. The northernmost capital seems to have been renovated, the moulding is new, while the southernmost is eroded and some of the abacus of the central shaft has spalled off. The abacus of the south central shaft seems to have been cut in the middle, while the renovated abacus does not have this feature. The cushion capitals of the nook-shafts are all badly damaged. The inner archivolt springs from the abaci of the central shafts; it has got twenty-seven voussoir stones; the first-and second on the north side has been renovated with cement, probably when the capital was renovated. This has also happened to the fourth voussoir on the south side. The springers of the two central shafts are wrought in a rectangular fashion they are narrow and sticking out further than the other voussoirs. The chancel was blocked up in the 19<sup>th</sup> and 20<sup>th</sup> centuries when it was used as a vestry for storing coal. The blocking was made mainly with planks and boards covered in render and plaster. They were fastened in the chancel arch construction (Simpson 1924, p 61ff).

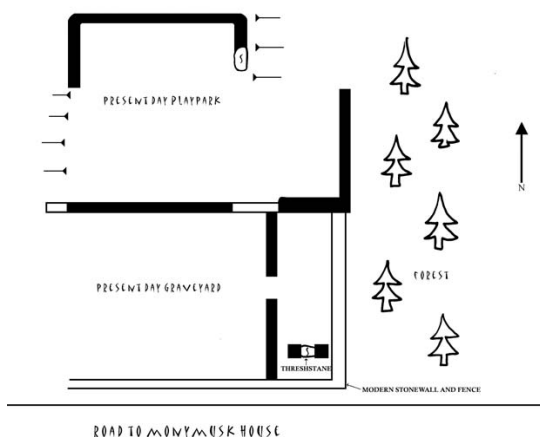


Figure 32: Principal sketch of the remains of the monastic lay buildings. By Gertie Ericsson 1997.



Figure 33: The relation between the lay buildings and the church. Photograph by Gertie Ericsson 1997.

### *The remains of the conventual buildings of the priory*

North- and east of the church building are remains of walls, interpreted as the conventual buildings for the priory. These walls were not part of the original research aim, so they have not been properly surveyed. On the second visit to the site, it became clear how extensive these remains actually are, and how important they actually are in

the history of the church. On this occasion there was no time to do the survey, so the only a quick survey with a principal annotated sketch of the remains and photographs (figure 32, 33 and 34).

The remains of the presumed priory buildings, are for example a long, low wall, forming a square ending in the north. It contains a long wall, oriented east to west with a small wall projecting southwards in both ends built of rubble with a cement top (figure 34). The rubble has rounded outer faces and is laid in limemortar. It is about three courses high on the westernmost extent, while halfway to the east it gets lower and there it is only two courses high. This seems to have been the northernmost extent of the priory conventual buildings. South of this, are the walls for the new churchyard, where the lowest courses of the walls also belong to the conventual buildings. The masonry of these walls is large, square blocks of granite, with wide joints. It is between four and four-and a half courses high. On the inside the wall is between five and five and a half courses high; the lowest course of this contains the same masonry as the long square shaped wall mentioned above. It has got the same east-west extents as the northernmost wall. These two could have formed a large, rectangular hall for the priory. Since it is situated furthest away from the church, forming the most private part of the complex, it was probably the dormitory (figure 34).



Figure 34: The northernmost part from the southeast, perhaps the dormitory; the easternmost part from the north, which might be the refectory. Photograph by Gertie Ericsson 1997.

On the eastern extent was a wall, which was not connected to the before mentioned walls (figure 34). The west facing parts consists of worked stone laid to form a corner, five stones high. There are no matches on the other side of the wall for this first part; the easternmost though has a corresponding south side. The masonry was small random rubble, with the odd stone looking more worked, like the above mentioned possible dormitory. The buildings had wide joints, where the bonding agent was limemortar but repointing work had been done with cement. The wallpart was orientated north-west to south-east. The wall projecting northwards from the easternmost corner was a low wall, built of random rubble. Attached to it was a wall jutting out northwards, between 2 and 3 m. In the eastern part of the north churchyard, are two gateposts, and between them was a flat stoneslab, which can be the threshstane of the original conventual buildings. Considering the fact that all the remains are to the north of the threshstane, the entrance to the complex is likely to have been from the south. In the northeast corner of the area are two wall parts orientated south to north built of random rubble. The southernmost ends in a tall wall which has got a random rubble core but the corner is built of worked stone, about 150 cm wide and 200 cm high. In the low extended wall the stones are larger and chunkier than in the rest of the wall. There does not seem to have been any physical connection between the conventual buildings and the church. However, in the north elevation of the burial enclosure has some suspicious looking scars that may prove a connection, such as a crosswalk. In the prolonged chancel there was one door in the south elevation in phase three, there may have been a doorway in the north (where the door is today) in phase four and a doorway in the east elevation during phase five. They could have been used by the convent to easy access to the shared church building. To be able to prove this a more extensive survey of the conventual buildings has to be undertaken.

## The analysis of the building

### *The survey*

There are eleven traceable construction phases, and probably as many deconstruction phases. In the matrix both the constructions and deconstructions have been illustrated (appendix III). The interface between the construction and deconstruction can be counted as the most interesting as it shows us how low and how high the walls of the different building phases have been, and how the destruction of fire, disuse and intentional deconstruction has affected the building of today. It may be the only means of finding out why the walls have been deconstructed and added on at so many instances. The analysis has been based on differences in masonry and build, choice of stonematerial and bonding agent, there are clear differences in fabric and in how well the parts of fabric are coursed, but there are no visible buttjoints. A lot of the material has been reused which has created problems in the analysis. Another thing that created problems in the stratigraphical analysis is that the interior has been rendered white, therefore all traces of earlier building phases and the the stratigraphical connection between exterior and interior has been hidden. Since the building has been in use for over a thousand years, the twelve phases show us that the time between the building operations have been a hundred years or more. However, only the major operations have been taken into account while the smaller renovations have not been mentioned.

The actual survey and description of the development of the church can be read in the beginning of this chapter, under *The building*, while the interpretation can be seen in *The analysis*.

### *The analysis of the building*

The archaeological data was collected during the fieldsurvey, and the written sources are mainly taken from the article by Simpson (1924, p 34-71). The criteria used for distinguishing the different building phases are based on the stratigraphical relations of the fabric. The analysis is based on acquired knowledge of the stratigraphy of the building correlated with the written sources. Below is a table where the approximate dates of the construction phases are stated (figure 35).

Phase	Date	Description
Phase One	Before 1078	Before the orders
Phase Two	Around 1078	The monastic foundations by the Culdees
Phase Three	1170-1207	The shared church, priory and parish
Phase Four	13 <sup>th</sup> century	The transformation phase
Phase Five	14 <sup>th</sup> -15 <sup>th</sup> century	The Augustinian monastery
Phase Six	16 <sup>th</sup> century-end of 17 <sup>th</sup> century	The reformation/ End of the convent
Phase Seven	End of 17 <sup>th</sup> century	Change from roman catholic to protestant
Phase Eight	18 <sup>th</sup> century-1834	Major renovation phase
Phase NIne	1850s	The decline of the chancel
Phase Ten	1891	The crenellation
Phase Eleven	20 <sup>th</sup> century renovations	The 20 <sup>th</sup> century renovations

Figure 35: Approximate dates of the different phases.

Below is an analysis and comparison for each of the eleven phases. A brief history of the intent with the building operation; the choice of material; parallels with other similar and contemporary churches in Scotland and relation with surrounding masonry.

### *Phase One – Before 1078 The Celtic church, pre-Culdee monastery*

The first phase in the history of the church, of which there are only slight evidence. The choice of site is typical for the Celtic Catholic church; a beautiful spot with a stream running through the centre, a forest close by, and in the background high hills (appendix 1).

### *Written sources*

The choice of site for these early churches and chapels, blessed to the new faith, would in many cases depend on existing centres of population or by pagan holy places. A stonechurch was probably built on the site before 1078, perhaps by an aristocrat in the area, or by Christian missionaries. Local aristocrats founded churches, even before the parochial system had been organised. The early importance of the village and area is shown by the presence of a Pictish standing stone. 19<sup>th</sup> and 20<sup>th</sup> century scholars all agree that the origins of the foundations are from before the Norman Conquest in 1066 (Macgibbon & Ross 1896-7, p 215ff). There is no mention of the church before



the grant by Malcolm Canmore in 1078, so the original dating of the church cannot be found in the written sources; however most scholars believe that there already was a church this date. The earliest church on the site of Monymusk may have been the foundation of a local laird.

#### *Archaeological evidence*

The parts of the church that remain from these times are in the east end of the complex; parts of the chancel and the nave. The chancel arch is most probably of the time before 1078, showing a moulding technique possibly belonging to the early Romanesque period. The exterior masonry of this building part is of more ancient origin than that in the rest of the building. The courses are high, uneven in the course and the stones are large and asymmetrical. The fabric basically contains of pink-grey granite; roughly dressed stones, with an even outer face. The joints between the stones and courses are wide. The bonding agent is lime mortar, which is now yellowish-white in colour. The remnants probably stand to the full height in the chancel, and maybe also to the full length towards the east. The nave and chancel are bonded in the corner, where the chancel arch is tied in with the masonry. The fabric in the nave shows the full width of the original church.

#### *Parallel structures*

Parallels can be drawn with other churches from this time. One example is St Brandon's in Birnie, Scotland, with architecture similar to the first church of Monymusk. It was also built of stone and derives from a later time period but it was probably of a similar floorplan and outer structure as the first stone church at Monymusk (Macgibbon and Ross 1896-7, p 218f). Other early Scottish churches which started out as simple buildings with one rectangular compartment for the nave and one for the chancel to the east were Loch Leven, Dunfermline and Restenneth. This may have been of the simplest forms of early Romanesque parish churches from before 1066. These were either rectangular or cruciform, and consisted of a nave and chancel (Cruden 1986, p 6ff). Two other parallel churches are Dalmeny near Edinburgh and Leuchars near St Andrews. Their plans are similar to that of Monymusk. The capitals of the chancel arch at Dalmeny church are similar in appearance to those at Monymusk, cushion capitals with heavy chamfered abaci (Cruden 1986, p 23). The early examples of Scottish medieval architecture consist mainly of small parish churches, but also large buildings almost entirely monastic (Macgibbon & Ross 1896-7, p 244ff).

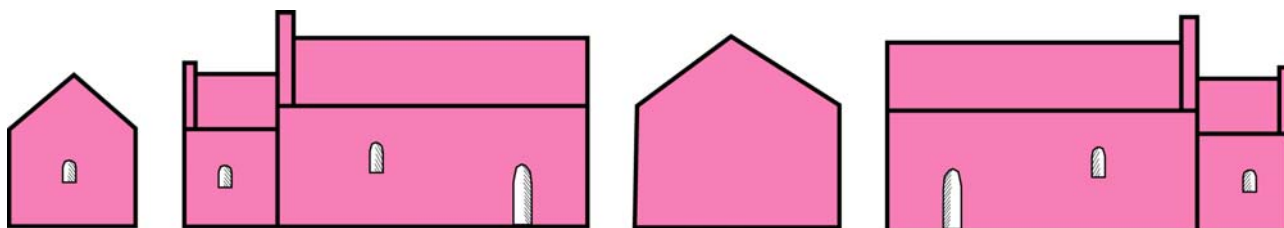


Figure 36: Reconstruction of the appearance the church may have had in the 10<sup>th</sup> and 11<sup>th</sup> centuries. By Gertie Ericsson 2009.

*Conclusion:* The remains of the **first phase** are in the east end of the nave, the west end of the chancel and the bottom courses of the chancel. The corner between the nave and the chancel remain up to full height, and they are bonded in the corner, and the chancel arch is tied in with the masonry. The chancel arch is showing a moulding technique belonging to the early Romanesque period. The church has probably been a simple structure, with a nave in the west and a short chancel with a straight ending, the two connected through the chancel arch (figure 36). From the remains in the east part of the nave it can be interpreted that the nave of phase one may have been slightly more narrow than that of the later periods.

#### *Phase Two – Around 1078, monastic foundations by the Culdees*

##### *Written sources*

In 1078 King Malcolm Canmore granted lands and dues to the bishopric at St Andrews, if he was successful in the battle that he was heading for (Simpson 1924, p 35). Scholars have had different ideas about the meaning of the grant of Malcolm, through time. Was he the founder of the church, or was he merely reviving an already existing church? The most likely interpretation has been put forward by Davidson that the church already existed at the time when King Malcolm granted the site with a visit (Davidson 1878, p126ff). The village must have been of great importance for the King to pay it a visit, and the mention in the grant said that he was tracing off the tower. Malcolm Canmore and his wife Margaret tried to transform the Culdees into Canons Regular. In 1120-30 the Culdees of Monymusk were granted lands by Gartenach, the Earl of Buchan. The early feudal barony churches by the middle of the 12<sup>th</sup> century became parish churches. This system was practical and organised in Aberdeenshire at an early date (Cruden 1986, p 1ff).

### *Archaeological evidence*

A major building operation took place where the earlier parts, which may have been in a bad way, and were deconstructed down to an appropriate foundation level (appendix I). The chancel was kept in its present state, up to the full height it had until the 20<sup>th</sup> century. The nave was torn down, or perhaps it was in ruins already and in need of a renovation. On the west end of the south elevation there was a door, which probably had a match on the north elevation, which today is obscured by the north aisle. The tower was built with a square plan, and it was coursed with the nave. The height of the tower is difficult to reconstruct from the remains now visible. The masonry was built up of granite with colour variation from grey to pink to dark red. The stonematerial was subangular, laid in fairly even courses. The stones were roughly dressed with straight outer faces. The joints are wide and have in modern times been scribed. This fabric is found on all elevations of the tower (except the east), and it is visible on all but one of the nave elevations. On the south tower elevation the remains are between 5 and 6 courses high, west tower elevation between 5 and 6; north about 10 courses high. The north nave elevation is disturbed, contains remains of phase two masonry in the bottom courses of the northeast part. Although there can be remains of this phase behind the north aisle, which was built in 1822. The original bonding agent was limemortar. The tower arch is original in the tower, and it was the entrance from the nave into the tower, to reach the upper floors. The heavy, square moulded tower arch was built of sandstone, probably similar to the choice of material for the quoins. The masonry surrounding it was contemporary with the masonry of the other walls of the portico, phase two. The space was not vaulted and the ceiling height was probably fairly great.

### *Parallel structures*

Parallels to the square tower of Monymusk are the one at Restenneth. This church dates from the later 11<sup>th</sup> century. Also St Rule's in St Andrews has a square tower dating from the middle of the 11<sup>th</sup> century. The height of the tower is impossible to know; however one can always speculate and look at parallel buildings of the time. Early towers like the ones at Restenneth, St Rule's at St Andrews, Dunblane, Dunning, Muthil and Markinch all have common features. They all have a square plan of approximately the same dimensions and height; they all lack windows in the lower floors (Cruden 1986, p 14ff). Since the church at Monymusk at this time was dedicated to the bishopric of St Andrews may have meant that they looked to the architecture of the diocese to get inspiration for the building of a tower. St Rule's is mainly Anglo-Saxon in its appearance. St Rule's church may be dated to the late eleventh century, from the episcopate of Fothad II (c. 1059-93), and therefore it correlates with the second building phase of the church at Monymusk (Cruden 1986, p 15). The west tower may have been inspired by St Rule's, since the lands and dues of Monymusk were dedicated to St Andrews, where the named church was situated (Macgibbon & Ross 1896-7, p 215ff). All the above mentioned western towers have been built on sites of ancient monastic importance, they share architectural detail and the interiors were lofty, to hold sanctuaries, dated to the late eleventh to the early twelfth centuries. These square towers of great height share the same purposes of landmark, safe-place and belfry (Cruden 1986, p 14ff). The seating has probably been on stone benches along the north south and the inner face of the west wall of the nave. These have later been added with west, square towers, just like the church at Monymusk. The above mentioned churches can also be seen as parallels to the second phase church building, with their added west towers.

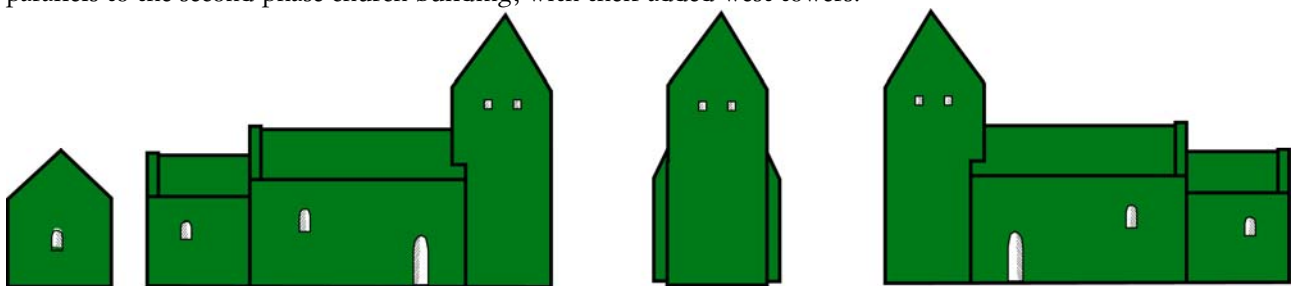


Figure 37: Reconstruction of the appearance the church may have had during phase two. By Gertie Ericsson 2009.

*Conclusion:* When Malcolm Canmore came to Monymusk he probably found a church in great disrepair. The walls in the nave were taken down to appropriate foundation levels and were then rebuilt. The parts remaining from the church after the grant of King Malcolm Canmore are in the nave and the tower (figure 37). The chancel was not affected by the buildingoperation. A tower was built which was bonded in with the new masonry of the nave, which was square and heavy. In the west end of the south nave elevation was a doorway leading into the church, and perhaps there was a match on the north elevation. The tower arch was pierced through to the nave. The nave was built up from the ground and the south, north and west walls were moved outwards to build a larger nave. The Culdees probably settled on the site, and shared the church with the parish.

### Phase Three - 1170-1207 The priory and parish church

#### Written sources

In 1170 the grant of 1120-30 was confirmed by Roger who was the bishop of St Andrews. The Earl of Mar built them a convent in the village, this on condition that they followed canonical rule. The earl died in 1211, so the building campaign must have been prior to this. The monastic foundations were by the 13<sup>th</sup> century no longer in a good state (Simpson 1924, p 40ff). In 1211 the bishop of St Andrews is called *the founder of the house of the Culdees at Monymusk* in a document. At the end of the 12<sup>th</sup> century and beginning of the 13<sup>th</sup>, the Culdees were given conventual buildings by Gilchrist Earl of Mar. The project was started in 1199 and finished in 1207. These buildings were an oratory, a refectory and a dormitory; they also had two gardens, a croft and pasture. They were not allowed to have a private burial ground attached to the priory, but they were to use the one belonging to the parish (Simpson 1924, s 41ff). Monymusk possessed the churches of St Andrew of Alford, Keig, St Andrew of Kindrocht in Braemar and St Marnan of Leochel, these were granted to the church during the bishopric of John, at Aberdeen (Cowan 1995, p 1ff). Before 1211 Gilchrist, the earl of Mar gave the lands of Dolbethok and Fornathy to the Culdees, and he erected a church erected together with the conventual buildings (Simpson 1924, p 41).

#### Archaeological evidence

The convent was probably built during this period, when Gilchrist the earl of Mar gave the Culdees lands and dues. The remains of the conventual buildings are still present at the edge of the forest, northeast of the church. The low wall remains are built of random rubble, laid in limemortar. The church had again fallen into disrepair, and it is said in the grant that the earl built a church together with the conventual buildings. The walls were taken down to a structurally sound level. During this building operation the chancel seems to have been prolonged. These long chancels were later than 1066, together with side chapels and west towers (Little 1985, p 103ff). The rectangular space in the nave was originally designed as a space where the parishioners were to gather. The masonry comprised of coursed, semi-rectangular to cubical, roughly dressed smaller stones with fairly wide joints. The material choice is pink to red granite ashlars. The joints had been pointed with lime mortar. The masonry of this building phase is also visible in the nave and the tower. In the nave the masonry is visible up to a height of 2/3 of the total height of the building. The sandstone quoins also seem to have been added at this time, they are coursed with the rest of the masonry. The masonry of differs totally from that of earlier periods. In the south elevation, fairly close to the east extent of the chancel of this time is a redundant doorway, which may have served the clergy during the first period of the shared church building. The church kept a Romanesque appearance since. The church at Monymusk still contained of a chancel in the east, now a fraction prolonged; a nave which keeps its appearance from phase two. There was a window built in the south elevation of the nave, which may have had matches on the south and north elevations but these are obscured by later additions. The tower had been deconstructed and rebuilt during this phase, and the west entrance door was original in the masonry. The low window of the west tower elevation is primary in the masonry and probably the windows of the building were of this kind, narrow windows with a wide inward splay.

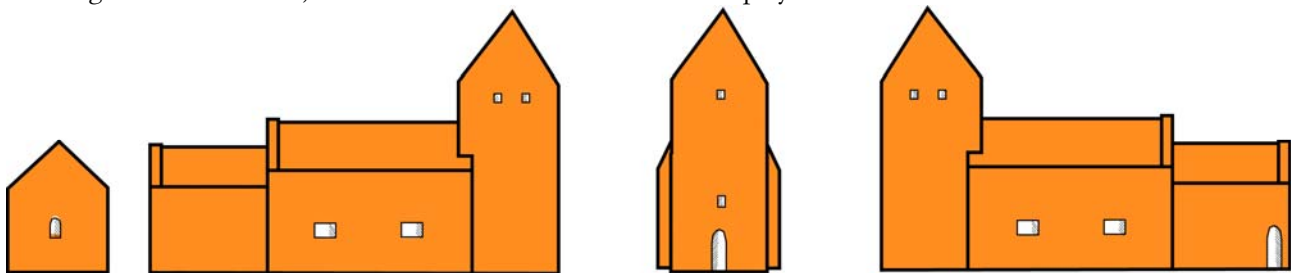


Figure 38: Reconstruction of the appearance the church may have had during phase three. By Gertie Ericsson 2009.

#### Parallel structures

This phase probably belongs to the Romanesque style of building, however adapted to Scottish tradition. The style is simple and massive, exteriors are plain and the arches are semi-circular. The columns are crowned with a cushion capital, with bold bases. Monastic foundations of this period have generally been ascribed to Queen Margaret and her sons. The buildings they have founded are among others the Romanesque nave of Dunfermline abbey, Holyrood and Jedburgh (Macgibbon & Ross 1896-7, p 398ff). In some examples, like at Monymusk, a Romanesque plan and outline of the walls is in use but the walls have been greatly altered through the years. The churches of the early periods only consisted of nave and chancel, connected through the chancel arch (Macgibbon & Ross 1896-7, p 215ff).

One of the least understood aspects of the Scottish monastic architecture is the way in which the smaller communities shared churches of essentially parochial origin with the layfolk of the parish, especially in the case of the small Augustinian communities which had their origins in earlier foundations and which tended to adopt a flexible approach. The sharing came about already when the community was a Culdee monastery.

*Conclusion:* A land grant from 1170 talks of the Earl of Mar building the Culdees a convent in the village of Monymusk. Conventual buildings were built northeast of the church. The church was thoroughly rebuilt during this period. The chancel was prolonged and a doorway was opened on the south elevation. The reason for the chancel to be prolonged was probably for the building to be shared between the parish and the priory. The nave was rebuilt, granite was used for the fabric while the quoins were built of sandstone. A small window was opened in the south elevation of the nave, which may have had matches spread over the north and south nave elevations. These are however obscured by later additions. The door into the church on the south elevation of the nave was made redundant and instead a new doorway was built in the west tower elevation. The tower was rebuilt and a window was pierced through on the west elevation. The remains of walls at the edge of the forest could probably belong to this phase and could be remains of the conventual buildings. The church kept its form with tower in the west, a nave and then a chancel in the east, during the third phase (figure 38).

#### *Phase Four – 13th century, The transformation phase*

##### *Written sources*

In the fourth phase, 13<sup>th</sup> century, the Culdee community was about to be transformed into an Augustinian community of canons regular and a transformation had been completed by 1245. Orders of Canons were more popular at this point in time, since they could be attached to an existing church and the numbers needed for a community were less (Fawcett 1994, p 128). The function of the church was greatly altered, the secular order of Culdees dwelling in the parish church, were now transformed into Augustinians. In the 13<sup>th</sup> century Augustinian houses were founded in Inchaffray, Inchmahome, Blantyre and Abernethy, most of these were on the sites of earlier communities or attached to an existing church. At Monymusk the Augustinians took over after the Culdees and became attached to the parish church there, which the Culdees had earlier shared with the congregation. There had been attempts to reform the order of the Culdees for at least a hundred years. This had not been and was not successful until the Pope Innocent ordered the reform. If the Culdees remained and became canons regular is not known. An Augustinian priory was founded at Scone by Alexander I in 1120, later several houses were founded by his younger brother David I. St Andrews was the Church of Scotland's leading bishop so the foundation of a monastery here was significant. By 1144 a new cathedral in St Andrews was under planning. The churches of Keig and Kindrocht were granted to St Mary's once the Augustinians had settled here (Simpson 1924, p 41ff).

##### *Archaeological evidence*

During phase four the church was rebuilt to a certain extent. The interior of the church and the tower was reached from within the ground floor of the tower through the west civil door. The top floors of the tower were reached via an interior stair or perhaps a newel stair in the portico of the tower. The chancel was prolonged another few metres. The new clergy probably found the space within the chancel too small, and perhaps they wanted to change and decorate the space according to their liturgical practices. A rectangular window was inserted in the south elevation of the chancel with embrasures of granite. The interior of the chancel was probably reached through the doorway in the south of the chancel, opened during phase three.

On the exterior much looks the same, however the nave was heightened. The masonry of the building operation differs totally from that of phase three, and is built of greyish pink granite ashlar. They are roughly dressed, subangular to subrectangular, with rounded outer faces. The stones are longer and lower in the course than the earlier masonry. The sizes vary considerably, which gives the masonry a disturbed appearance. The courses vary a lot in height; some courses are really low while others are really high. In between the proper courses are levelling courses. The joints are wider than phase three. It has been pointed with greyish-white-yellow limemortar, with ballast of grit and smaller pebbles. The joints are set back from the stones. The tower was heightened. A rectangular window was inserted in the west elevation of the tower, on the first floor. A doorway was inserted on the north elevation of the nave, to what seems to be a first floor or gallery in the north

##### *Parallel structures*

The high standards of design and construction kept by the masons and architects working in Scottish church architecture during the 13<sup>th</sup> century can be seen in examples such as Jedburgh, Holyrood and Dunblane (Cruden 1986, p 106-113). The abbey of Holyrood, which was an Augustinian house, remained such and kept growing for at least one hundred and fifty years (Cruden 1986, p 147-148). In the 13<sup>th</sup> century relations between England and Scotland were friendly, and the church established itself under the authority of Rome. The ancient Culdees



had been replaced by greater orders of canons regular, their dwellings and incomes had been appropriated. During this period the pointed style was spread in Scotland, however not transforming it totally. The round arch and other Romanesque forms of earlier periods were kept. The round arch was never entirely displaced by the pointed Gothic arch in Scotland (Macgibbon & Ross 1896-7, p 215ff).

*Conclusion:* In the **fourth phase**, 13<sup>th</sup> century, the Culdee community was about to be transformed into an Augustinian community of canons regular, a transformation completed by 1245. The church was rebuilt, to suit the new clergy dwelling there. The church was shared between the priory and the parish. A common loft was built along the interior of the north nave elevation; a door was opened on the first floor of the northeast nave wall, to gain access to the loft. The chancel was prolonged, the doorway in the south elevation was kept in use and a window was opened in the south elevation. The nave was heightened, and the tower was heightened (figure 39).

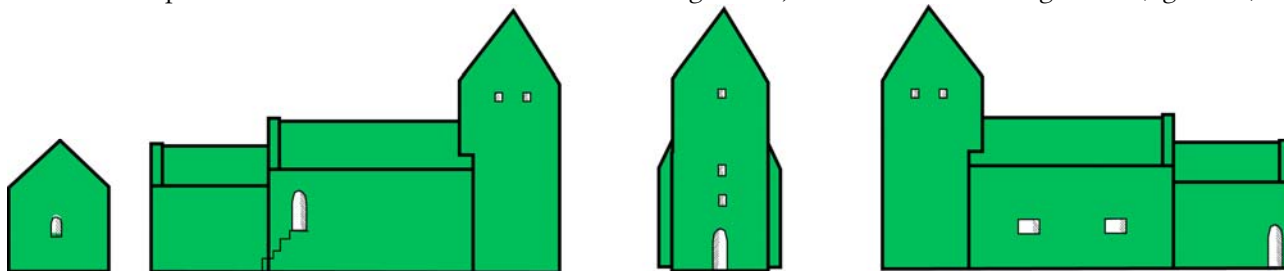


Figure 39: Reconstruction of the appearance the church may have had during phase four. By Gertie Ericsson 2009.

#### *Phase Five - 14<sup>th</sup>-15<sup>th</sup> centuries, The Augustinian monastery*

##### *Written sources*

King David II came to the village for a visit in the 14<sup>th</sup> century. The chancel was further prolonged and the intent may have to show the king how extraordinary the conditions were for the Augustinians of Monymusk so that more funding from the crown would be granted the priory. In 1337 Brice the prior gave parts of the lands to the Bishop of St Andrews together with the patronage of the priory. The Culdees agreed to meet the bishop in procession and to not have a separate burial ground attached to the priory. To the priory belonged the lands of Abersnithack, Ramstone, Ardniedly and Balvack; together with the patronage of the churches of Kindrocht, Keig, Alford and Leochel. In 1445 the parish of Monymusk was added to the chapter of Aberdeen, according to Cowan a church was erected by Bishop Ingram de Lindsay (Cowan 1967, p III-V). In the fifteenth century there were four priests by the name of Culdees in the church at Monymusk. The priests or Culdees were also called Denes and were led by a Prior. This was according to the constitution of the Augustinian Priory of St Andrews. Before the Reformation the church of Monymusk had both a vicar and the monastic establishment.

##### *Archaeological evidence*

In the 14<sup>th</sup> century the monastery was a shared community, and the chancel was again prolonged. The door in the south elevation of the chancel was blocked and another one was inserted in the east elevation of the chancel. The shared altar was placed within the area of the chancel of today.

The masonry of the fifth phase consists of subrectangular greyish pink granite stones, which have been roughly dressed. The joints are fairly wide and pointed with limemortar. The new masonry does not follow course with the extension of the 13<sup>th</sup> century, all the stones and courses are slightly off. Though the masonry is similar in appearance, because of the choice of stones and mortar, but the courses are slightly more irregular.

The tower had been falling into disrepair, was rebuilt and heightened. A roundheaded window was opened in the second floor of the west tower elevation.

##### *Parallel structures*

The mason and architect of the late Middle Ages in Scotland were conservative and did not cease the opportunity of following Renaissance inspiration from England and the Continent. Work done in the 14<sup>th</sup> and early 15<sup>th</sup> centuries was not looking forward but using old forms, like at Dunkeld Cathedral (1406) and the revival of Melrose Abbey. Other examples where the old form language was used are St Machar's Cathedral and Holy Rude parish church in Stirling (Cruden 1986, p 181, 184). The Iona abbey which was founded in 1203, on the site of the old monastery, has been restored so many times that original and secondary can no longer be separated, just like at Monymusk (Cruden 1986, p 1ff). During the fourteenth century the country was suffering great poverty, and ecclesiastical architecture must have suffered. The church lacked funds for completion of work in progress and the planning of new. Therefore there is a great lack of buildings representing the fourteenth century in Scotland, while the architecture of England and the Continent was blooming with Gothic expressions (Macgibbon & Ross

1896-7, p 1ff). Not until the fifteenth century was well underway did Scotland recover. The middle pointed or decorated period is similar to the decorated period in England, from the middle of the fourteenth to the middle of the fifteenth centuries (Macgibbon & Ross 1896-7, 1ff). After 1314 and Bannockburn, the architecture began reviving again. Abbeys such as Melrose, Dryburgh and Crosraguel were renovated during this period. At Glasgow Cathedral the central tower and the nave were completed during the fourteenth century (Cruden 1986, p 155-166). The third or late pointed period is the prevailing from the middle of the fifteenth until the Reformation of 1560 (Macgibbon & Ross 1896-7, p 1ff).

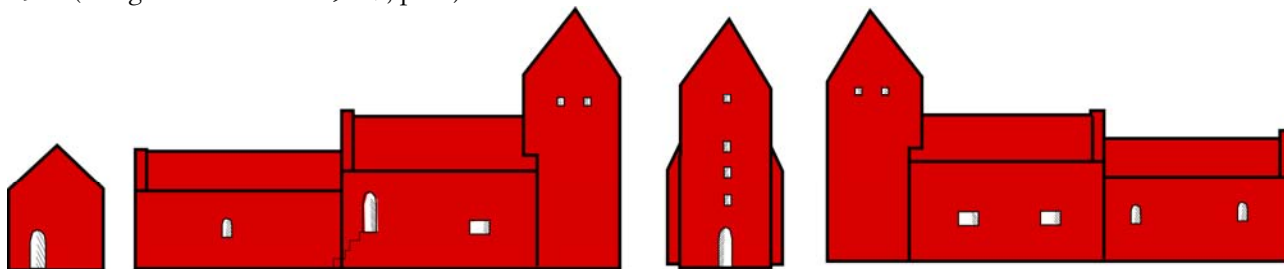


Figure 40: Reconstruction of the appearance the church may have had during phase five. By Gertie Ericsson 2009.

*Conclusion:* In 1337 Brice the prior gave parts of the lands to the Bishop of St Andrews together with the patronage of the priory. In 1445 the parish of Monymusk was added to the chapter of Aberdeen. The chancel was again prolonged, in everything else the church kept its appearance from the previous phase. The churchThe door in the south elevation of the chancel was blocked and instead one was opened in the east elevation of the prolonged chancel. This door was for the clergy to gain easy access to their sanctuary. The shared altar was placed within the area of the chancel of today. The structure kept the same appearance as the earlier periods, with a tower, nave and chancel, however the chancel had been substantially prolonged.

#### *Phase Six - 16<sup>th</sup> century, The reformation/end of the convent*

##### *Written sources*

The church was in the 16<sup>th</sup> century in a bad way, the conventual buildings were by 1549 in ruins. In 1550 the Prior John Elphinstone were brought to trial for murder, theft, adultery and violent assault on the Rector of Methlick. By 1563 the monastic buildings were almost levelled to the ground. The Reformation changed the religious rituals of the church and therefore the interior of the church was probably changed. The lofts in north, east and west were probably built. The vault in the tower was built around 1560s. The shared communal area was minimised, since the priory moved out of the now transformed church. The ownership of the lands and dues of the priory were handed over to a local lair and neighbour, William Forbes, in 1584, by the last commendatory prior of the monastery called Robert Forbes (Davidson 1878, p 126ff).

In the 16<sup>th</sup> century the liturgy of the churches was changed, from the Catholic multiple altars and screens to the open plan of a Protestant church. The open plan was more appropriate for preaching and the larger congregations, which were now allowed into the churches.

##### *Archaeological evidence*

The church was probably to a certain extent in ruins or at least without a roof and the conventual buildings were levelled. The top floor of the nave was renovated together with a few patches on the tower and the chancel. The interior was probably renovated too, and masonry of this period consists of roughly dressed granite stones with rounded outer faces. The stones are subangular to subrectangular and show a much larger variation than the medieval fabric below. As in the rest of the building the colour variation of the stones is great, but fairly greyer than the ancient masonry. The masonry is coursed, but the height of the courses varies greatly, and the odd levelling course is present. The bonding agent is limemortar, with ballast inclusion of large grit, chunks of coal and lime. The joints are fairly wide and are set back from the surface of the masonry. The masonry of phase six is similar in appearance to phase four, however more random and rough. Galleries were often inserted in these churches for growing congregations, and that also seems to have happened at Monymusk, where the common loft in the north was still in use and a west gallery was inserted. For reaching the common loft the nave door was still in use. The top of the nave walls had fallen into disrepair and were renovated together with the roof. Along with this quoinstones of the tower were replaced, situated on the southwest corner. A few minor renovations of the masonry have also been done.

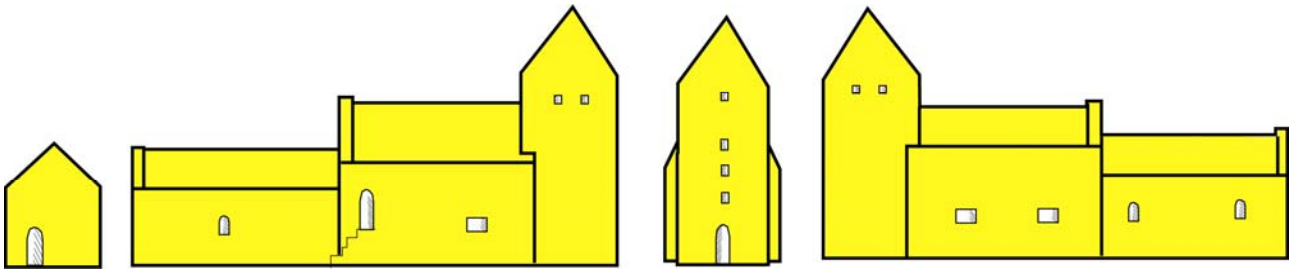


Figure 41: Reconstruction of the appearance the church may have had during phase six. By Gertie Ericsson 2009.

*Conclusion:* The church was in the 16<sup>th</sup> century in a bad way, the conventual buildings were by 1549 in ruins. The church was not in ruins during **phase six**, according to the physical evidence of the walls; however the church may have lacked roofs and wallheads of the nave. Fabric of this period is only present in the nave. The Reformation changed the religious rituals of the church and therefore the interior of the church was changed. The common loft in the north was kept while a new was built in the west. Access to these were through the door in the north nave opened during phase five. The shared communal area was minimised, since the priory moved out of the now transformed church. The ownership of the lands and dues of the priory were handed over to a local lair. However, the church kept its appearance of earlier periods on the outside, while the inside was changed according to the new beliefs (figure 41).

#### *Phase Seven – End of 17<sup>th</sup> century, Change from Roman Catholic to Protestant*

##### *Written sources*

This phase is placed at the end of the 17<sup>th</sup> century. A lot of information has been extracted from written sources since an account of the projects concerning the church exists from 1685 to 1730. The seating was changed during these years and fixed wooden benches were fitted along the north and south sides with an aisle in between. New seats were also put in the common loft where there were not enough benches and the seating was confused. A fence was built around the church, where the gateposts still visible were erected. Trees were planted in the churchyard, and some of these probably still remain. In 1692 the stair to the north gallery and a new post for holding it were fitted. In 1697 the lair of Monymusk gave money for a new bell and a clock for the tower facade (Simpson 1924, p 52). The new benches were rented out to the people of the congregation, where a choice was made between the foreside and the backside of the church.

##### *Archaeological evidence*

The church at this time consisted of a tall tower, a nave and a prolonged chancel. The nave was fairly long, with a window from phase three still open in the south elevation, and with gable roofs. It roughly keeps the appearance of the earlier phases. The chancel was a long building, with a door in the east elevation and a window on the south elevation. The roof of the chancel was also a gable roof, with a high pitch. The tower was renovated, a square window was inserted on the second floor of the west tower elevation. The quoins from phase three were rebuilt on the northwest, southeast and southwest corners of the tower. In the middle of the south nave elevation, a door was struck through the wall, which had granite embrasures and was fairly low. The door was built to make the way into the church easier for the minister. The tower exit was half blocked which made the passage into the church narrow. The pulpit was moved halfway down the south elevation, placed west of the doorway. There was a loft along the north elevation; there also seem to have been galleries in the west and east. The baptismal bowl was placed at the west end of the nave (Simpson 1924, p 49). The north door was inserted in the north elevation of the prolonged chancel. The east door was blocked and the corners were taken down and refitted.

*Conclusion:* The church keeps changing with the new protestant beliefs. The seating was altered and wooden benches were fitted along the north and south sides of the nave. The prolonged chancel changed and the seating was organised. The quoins of the tower were renovated, and a window was inserted in the west tower elevation. The quoin on the southeast nave elevation was renovated. The east door in the chancel was made redundant and instead a new north door was inserted in the north chancel elevation (figure 42).

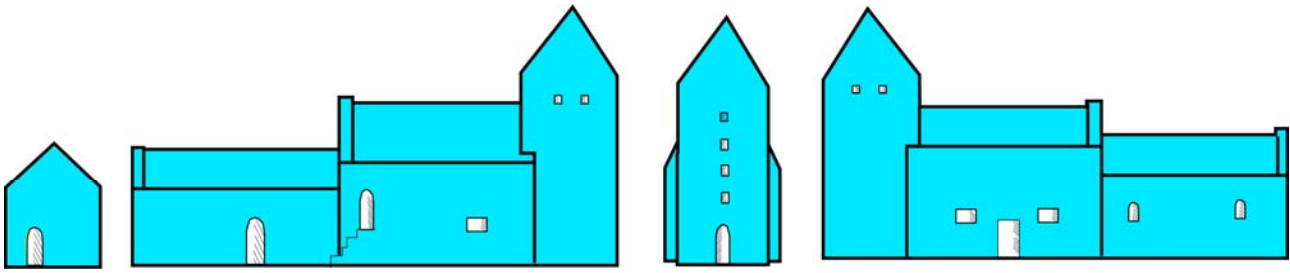


Figure 42: Reconstruction of the appearance the church may have had during phase seven. By Gertie Ericsson 2009.

#### Phase Eight – 18<sup>th</sup> century-1834, Major renovation

##### *Written sources*

This phase involves some minor building operations and one major. In 1723 the clock on the west facade of the tower was dressed; it had only been fitted in 1697. John Mowat was the man behind this and he had also cast the new bell of the church. In 1726 the west loft was about to fall and it was renovated. In 1778 a music gallery was present in the east gallery. In 1770 the dial plates of the steeple were painted (Simpson 1924, p 52). The major building operation of 1822 may have lasted until as long as 1834. The Presbyterian congregation of the St Mary's used the Episcopal Church across the street, while their church was being renovated. In 1834 there is a note which makes us understand that the favour is being repaid and that the Episcopal congregation is now using St Mary's for worship while their church is undergoing repair (Simpson 1924, p 53).

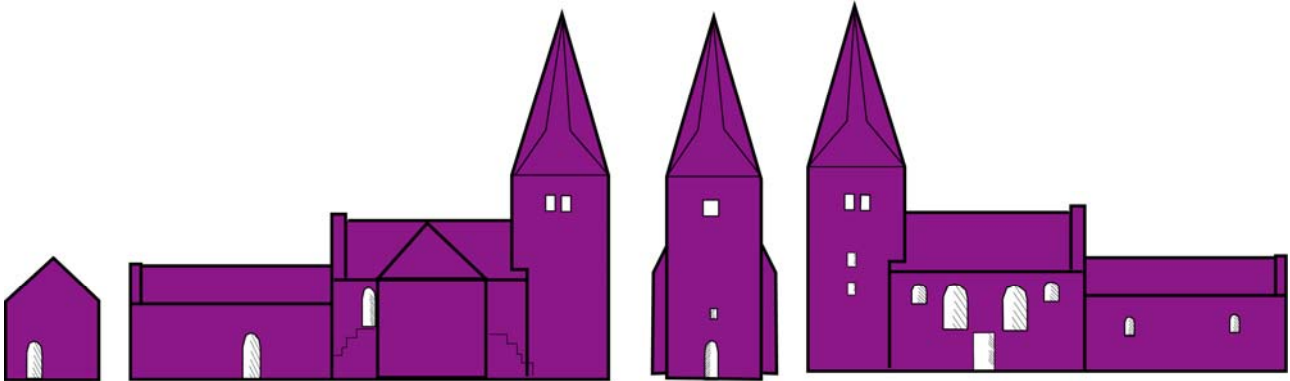


Figure 43: Reconstruction of the appearance the church may have had during phase eight. By Gertie Ericsson 2009.

##### *Archaeological evidence*

During this building operation a lot of things happened, and a lot of changes came about. The clock was again fitted on the west tower elevation. The tower was now in a bad way, and had to be repaired, and a tall octagonal spire was fitted. Once the parapet had been removed it was noticed that the masonry below it was bulging and seemed unsound. Therefore about parts of the wall head had to be taken down, all around the tower. The whole east tower elevation was redone. The Romanesque masonry was then refitted with random rubble laid in cement. The stones were natural, undressed boulders, mixed with much smaller stones, the so-called pinning stones. On the top floor of the tower three belfry windows were opened, in the east, south and north. They contain of two-light windows with brick rear-arches and ashlar built ingoes. On the second floor of the tower the rubble masonry is mainly visible in the corners. On the top floors the masonry was built of random rubble. The height of the tower was probably about one storey more than today. The floor levels of the interior were altered. The roof height of the first floor was raised from 1.96 m to 3.35 m. The remnants of the old heights are still there in the shape of joistholes. Before this the tower contained at least six floors and now only three. New windows were inserted in the first and second floors of the south elevation of the tower. When the floor levels were altered two of the apertures of the west elevation came out of use and were blocked up. From these and the blocked up joist holes of the second and third internal tower elevations, the original floor divisions can be traced. The tower above the nave roof head has been made thicker by putting a ledge along the nave roof. Here the tower is wider, for security reasons probably, to hold the heavy broach spire. The nave roof was built and altered in 1822.

The modern north aisle was built. In the bottom floor a church office was situated, while the first floor contained the north aisle or gallery for the church. On each the west and east sides of the building stairs were built, which led to the first floor. Two doors were built in the west elevation of the north aisle ground floor and the first floor. One door was opened in the north elevation of the nave, where the previous door was made redundant. The tower could not be reached from within the building, but instead the exterior stair was built leading both to the north



aisle and the gallery. Two large roundheaded windows and two small roundheaded windows were fitted in the south nave elevation.

A similar arrangement with galleries around the church for worship can be seen in Coldingham Priory choir (Simpson 1924, p 52).

*Conclusion:* In the 18<sup>th</sup> century the clock was fitted in the west elevation, which was refitted after 1822. The west gallery was renovated and the east gallery was turned into a music gallery. In 1822 a major building operation took place which lasted until 1834. During this building operation a lot of things happened, and a lot of changes came about. The tower was fitted with an octagonal spire, and a lot of the masonry was taken down because it was unsound, which was rebuilt and the whole east elevation was redone. Belfry windows were opened on the top floor of all four tower elevations. New windows were inserted in the first and second floors of the south elevation of the tower. Two windows in the west tower elevation were made redundant while two windows were inserted in the south tower elevation. The nave roof was built and altered in 1822. The modern north aisle was built, with stairs on both east and west, leading to doors in the northeast nave elevation and west north aisle elevation. When the north aisle was built a lot of masonry from earlier periods in the north nave elevation disappeared. On each the west and east sides of the building stairs were built, which led to the first floor. There were probably doors both leading through the walls of the north aisle and the north nave walls. The appearance of the church was dramatically altered between 1822 and 1834 (figure 43).

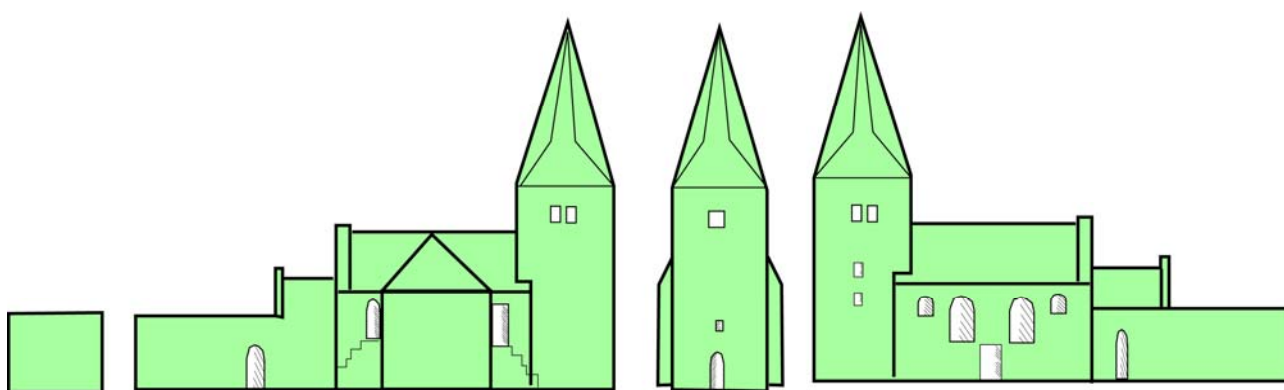


Figure 44: Reconstruction of the appearance the church may have had during phase nine. By Gertie Ericsson 2009.

#### *Phase Nine – 1850s, The decline of the chancel*

##### *Written sources*

The present east wall of the chancel is later than 1822. From an entrance in the New Statistical Account from 1840, we are told that the eastern part of the church was seating 40 people and was under roof. It was connected with the nave through the chancel arch. According to Dr Macpherson there was no tradition in the village of the burial enclosure being built later than the rest (1895). He speaks of a parishioner who remembers her parents talking about the whole structure being under roof with access from the nave (Simpson 1924, p 63ff). From a document of 1825, dealing with the seating of the church, there is mention of seating in the ground area, west, north and east galleries and east aisle. This east aisle had six pews. In July of 1851 is a note about the seating of the church when the east aisle has been omitted. This may be the date for the building operation of creating a burial enclosure in the east, and a vestry further west. Dr Macpherson visited the church in 1868 (Simpson 1924, p 63ff).

##### *Archaeological evidence*

The chancel was parted from the burial enclosure, when an east wall was erected with a roundheaded window fitted. It is built of coursed granite ashlar and a window was fitted in the centre of the elevation. The south window of the chancel was blocked. The east part of the former prolonged chancel was kept unroofed and used as burial enclosure by the Grant family. When the east wall was to be built a large part of the chancel south elevation was taken down and replaced with phase nine masonry. The chancel arch was blocked with boards and the interior was used as a vestry or coalhole. The window in the prolonged chancel was blocked. A doorway was opened in the south chancel elevation, and one doorway was inserted in the northwest elevation of the nave.

*Conclusion:* The building operation of creating a burial enclosure in the east, and a vestry further in the west was undertaken. The vestry wall at the present east end of the chancel was built. A window was made redundant, a

doorway was inserted in the chancel and one in the nave. The prolonged chancel was divided into a chancel and burial enclosure (figure 44).

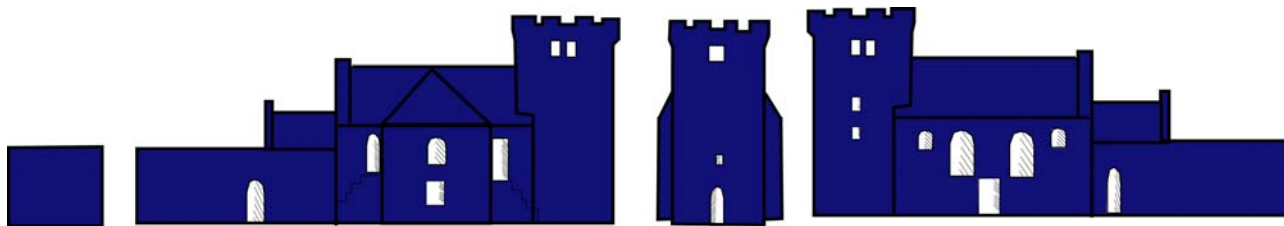


Figure 45: Reconstruction of the appearance the church may have had during phase ten. By Gertie Ericsson 2009.

#### *Phase Ten – 1890s, The crenellation*

##### *Written sources*

The next building phase came about when the church spire, which had been fitted in 1822, had deteriorated badly and a crenellation was built in its stead. The interior arrangements were still the same. The chancel arch was blocked up and used as a coal hole. On photographs from 1913 it is obvious that the pulpit was still placed on the south wall. They also showed that the south and east walls were panelled up to just below the Abersnithack stone. The vault of the tower ground floor was built and was probably whitewashed from the beginning. The interior of the nave was also rendered white and the ceiling had been plastered white. There were galleries in the east, west and in the north aisle. The chancel arch was blocked up, and the chancel arch was maltreated. The boards for the blocking were attached to the actual mouldings. The bases of the shafts were hidden under the floor, but according to Simpson they had been hacked away (1924, p 61f). The mouldings had been painted with ochre. The tower arch seems to have been blocked up at this time too. Only a low door was left open. The doorway through the northwest nave elevation does not seem to have been built yet, but a ladder seems to have led to the tower door and the west gallery.

##### *Archaeological evidence*

The crenellation erected was built of grey heavy Kemnay granite, cut into square, chamfered ashlar. The first floor bulges and thereafter it batters all the way up, it is accentuated on the top third of the building. The construction was probably done this way for relieving a corbelled parapet. Two windows were inserted in the north aisle north elevation. The masonry differs totally from the surrounding masonry. One window is roundheaded and one is rectangular. A renovation of the lower masonry of that same elevation was also done during this phase.

*Conclusion:* The spire of the tower was exchanged for a crenellation and the masonry of the tower was again rebuilt. The appearance of the church was somewhat changed, two windows were inserted on the north elevation of the north aisle.

#### *Phase Eleven – The 20<sup>th</sup> century, Renovations*

##### *Written sources*

Under this phase all the 20<sup>th</sup> century renovation phases can be traced. This century was fairly adventurous for the church, and different building phases have been undertaken. The major renovation phase plans and elevations were drawn up by an architect by the name of Wyness. In 1929, the renovation started. On the interior a lot happened which changed the appearance of the church. The chancel was opened up, and was again used for its original purpose, to hold the high altar, and the chancel arch was renovated. The north capital was rebuilt in cement after model of the south capital. The floor of the chancel was lowered. The chancel- and nave ceilings were crowned with barrel vaults. The pulpit was moved to its original position in the southeast corner of the nave. The panel was removed and instead the walls were whitewashed down to floor level. The tower arch seems to have been opened up. The vault of this space was rendered white and a large screen was used to create a foyer at the west end. In 1940 there was a renovation, mentioned by the RCAHMS.

##### *Archaeological evidence*

The walls of the chancel was heightened and a whole new gable and roof were added to the east elevation, with masonry of greyish pink granite stones, which are roughly dressed. They have slightly rounded outer faces and the joints are fairly narrow. The pointing has been done with what looks like cement, but it could be hardened limemortar. The joints are fairly even with the surface of the stones. The vestry doorway in the chancel was made redundant and changed into a roundheaded window, large parts of the masonry was refitted in this area.

The north gallery in the top floor was removed, which meant that the masonry of all north aisle elevations had to be rebuilt. For redeeming this old material from the church was used, consisting of roughly dressed small, greyish pink granite stones. The joints were medium sized and pointed with cement. The courses were even but they vary in height. The stairway leading to the north-and east galleries was removed and the doorway in the northeast nave elevation was made redundant. In the bottom floor of the west elevation of the north aisle, the doorway was partly blocked and turned into a window. In an attempt to modernise the church a toilet was built in a corner between the north aisle and the north nave elevation. The bathroom is a small building, built of ashlar masonry cut from grey Kemnay granite. Two windows with segment-shaped arches were inserted in the south nave elevation. A door was pierced through the west stair.

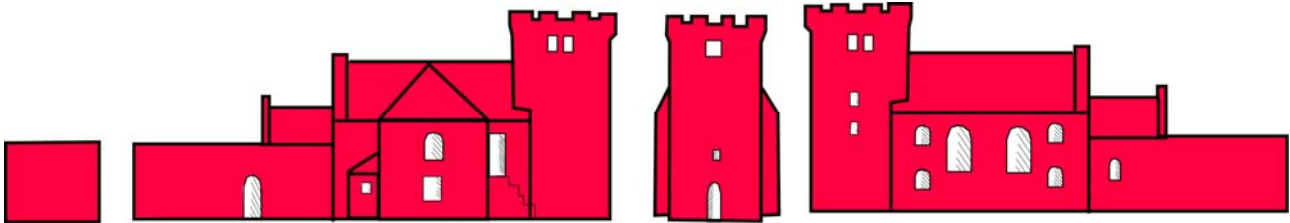


Figure 46: Reconstruction of the appearance the church may have had during phase eleven. By Gertie Ericsson 2009.

*Conclusion:* Under the heading phase twelve, all the 20<sup>th</sup> century renovation phases can be traced. The roof of the chancel was heightened and a whole new gable was added to the east elevation. The vestry doorway in the chancel was made redundant and changed into a roundheaded window. The north aisle was rebuilt and the north gallery in the top floor was removed. The stairway leading to the north-and east galleries was removed and the doorway in the northeast nave elevation was made redundant. In an attempt to modernise the church a toilet was built in a corner between the north aisle and the north nave elevation. The doorway in the west elevation of the north aisle was removed and turned into a window. The doorway in the south nave elevation was made redundant. Two windows were inserted in the ground floor of the south nave elevation (figure 46).

#### Summary of results and answers to the research aims

The word church can mean different things, for example a building or a people. The people called together by God. The word church has also been used about the building where the martyr's grave or the site of an earlier church. They show the best architecture of an era, and centuries of church history are often concealed within one single building. The church building has been used differently by generation after generation for at least one thousand years, and they have all left their mark on the building.

The conclusion of the survey at Monymusk is that the combination of methods actually works, and makes the fieldsurvey easier and faster (1). It is also cost-effective and can be used on all types of buildingarchaeological surveys. The photographs and digitally received data make it accurate and this gives an opportunity to spend more time with the fabric, the documentation and analysis. The production of drawings in AutoCAD not only gives sets of 2D drawings for the survey but also facilitates for reconstructions in 3D. The survey was undertaken in 1997 and a methodological development has come a long way since then (see Development of a buildingsarchaeological method, p 39). To be able to answer all the outstanding questions and aims posted to the material, a more thorough survey is needed, the render of the interiors must be taken down and an excavation possibly needs to be undertaken between the church and the presumed conventual buildings. However, a lot more information of the structure has been extracted more thorough dating of the buildingphases and a different view of the different constructions and deconstructions. The documentation was supposed to be of the whole structure, but only the exterior was surveyed fully, because of problems with measuring and render. Below is a summary of the answers to the outstanding questions, those that were possible to answer.

2: The foundations of the church at Monymusk could not be securely dated, from the survey of the building. However, it can be assumed that the Culdees did not found the church since it through time has been referred to as the parish church and that the Culdees did not have a church of their own according to charters. The foundations are most probably of 10<sup>th</sup> century origins, and the dating was done from a correlation of the architectural evidence and the documentary records. Of this period there are only limited remains, however enough to be able to reconstruct the building as consisting of nave and chancel, the nave being slightly more narrow than that of today.

3: An identification of the extents of the different building phases, from early medieval until today was made and can be seen in the analysis and the matrix of appendix I and II.

4 and 5: The monastic influence is evident in the history of the church on the site. The connection with the Culdees and the Augustinians has been mentioned in charters during medieval times, and scholars in modern times have discussed the likely use of the building through time. The church was probably erected by a local aristocrat, but already around 1078 the Culdees are mentioned in connection to the church. The long chancel built from this period onward is probably the answer to the question. There would have been no use of as long a chancel if it had not been used by the clergy and not only as a chancel of the parish church. It was extended several times before the reformation, and this shows that space was needed by someone else than the congregation of the parish who occupied the whole nave. There are openings in both the south and east elevations of the prolonged chancel that can probably have been connected to the conventual buildings north of the church. The church was shared, the convent was not allowed to have church and graveyard and the chancel could be extended eastwards.

6: The tower was built after 1078 and before 1170, and from the beginning the different floors of the tower held altars of saints, and the top floor held the bell. The towers of Scottish churches of this timeperiod were often used as sanctuaries dedicated to different saints (Macquarrie 1997, p 23ff). After the reformation the tower was used for storing things, but the top floor was still for the bells, like it is today. When the tower was built, the nave had been deconstructed down to a good foundation level; the walls were moved slightly southwards and westwards. The tower and nave were built up together. The rebuilding of the tower has followed the building of the rest of the church and the style has been kept.

7 and 8: After the Reformation a lot of things changed, at least on the interior of the church. The seating in the nave was extended and in the prolonged chancel a musicgallery was inserted. The whole structure was under roof and used for the congregation. On the exterior most was left unchanged. Until today a lot of changes have been done. An aisle was built on the north side of the church in 1822, and a toilet was built in 1929. A crenellation was fitted on top of the tower in the 1890s, and several floors were taken down for being unsound. An east wall was erected towards the west end of the present chancel and the prolonged chancel was divided in the 1850s. The east part was taken into use as a burial enclosure for the Grant family, while the eastern part was blocked up and used as a vestry or coal hole until 1929. The tower was also blocked up and only a narrow door led from the west entrance to the nave. A door was opened up in the centre of the south nave elevation for easier access to the church for the minister. The tower arch was opened and the south nave elevation door made redundant in 1929.

9: The conventual buildings do not seem to have been physically related to the church. The masonry of the prolonged chancel does not show scars from a crosswalk. However, to be totally sure, the interior of the burial enclosure would have to be investigated and maybe an excavation of the area between the convent and the church. If there had been such a crosswalk it could have been attached to the east end of the burial enclosure of today, towards the end of medieval times. There was a doorway in the south part of the structure which was followed by one in the east part of the structure. The corners of the prolonged chancel were renovated in the 17<sup>th</sup> century, perhaps a crosswalk had been attached here. There was a doorway in the east elevation of the lair of Grant burial enclosure that could have served as an entrance to the church for the clergy. Some kind of crosswalk or passage could have been attached to this east end, which by the end of the 17<sup>th</sup> century was taken off and the corners rebuilt (appendix I).

## The development of a buildingsarchaeological method

The last chapter deals with the methodological development within the field of buildingsarchaeology in Sweden, from the date of this dissertation until today.

Buildingarchaeological documentation was done using a contextual method from the middle of the 1990s (Eriksdotter 1996, p 21ff). Within the field of rescue archaeology there was an ongoing discussion about methodology in relation to current research (Larsson 2001, p 117ff). The documentation of buildings, however, more often involved a discussion concerning costs and less often a discussion about contents and goals (Sundnér 2001, p 17f). The use of the totalstation in rescue archaeology had not spread to buildingsarchaeology at the end of the 1990s, but had been tried in separate cases in connection with surveys (Eriksdotter 1999, p 7ff). A method was prepared and used at a project in the convent of Dalby, by Gunhild Eriksdotter (1999). The same method was used on a project at Kärnan in Helsingborg, slightly altered because of different equipment and computer applications (Sundnér 2001, p 17f). A combination of methods, single-context documentation, rectified photograph and digital measuring using totalstations (both with and without reflector, were used on both objects (Forssblad 2001, p 18f; Andréasson 2001, p 25f). On Kärnan an archaeological documentationsystem called Instrasis, developed by Riksantikvarieämbetet UV, was used for importing and registering data (Thorén 2001, p 27ff). The use of the 3-dimensional computerbased measuringtechnique applied to buildingsarhaeological



investigations, had been discussed in articles with a fear of the contact with the building being diminished if the manual measuring is replaced by a computerbased techniques. The fear can be justified in the use of only one method, but in the combination of methods. Gunhild Eriksdotter's study of 1999, deals with the situations suitable for digital measuring of standing structures. Another purpose of the study was to evaluate the visualisation of the received data in the shape of 3D models, and from a concrete technical course of events discuss the 3D models potential in relation to a conventional 2D measuring to be able to discuss the best combination of methods (Eriksdotter 1999, p 7ff).

In the year 2005 the PhD thesis *Bakom Fasaderna* by Gunhild Eriksdotter was published, and in this publication the discussion from the study of 1999, was continued. It showed how the buildings archaeology has approached the historical archaeology since the creation of the science, and also the limitations of only using a 2D way of thinking, bringing in a 3 dimensionality in the building (Eriksdotter 2005, p 20). Within the thesis three problems are discussed taking a starting point in different theoretical and methodological thoughts in field archaeology and architectural theory, to develop the buildings archaeological research. The three problems can be tied in with different elements in the buildings archaeological analysis when the time of the matter, visualisation of the room and capturing of the use in a historical building is done (Eriksdotter 2005, p 17ff).

At the castle of Läckö, in the south part of Vänern, render was taken down because of a renewal project, and Riksantikvarieämbetet UV Öst has carried out documentation and analysis of the masonry of the castle. The project was started by Barbro Sundnér but handed it over to UV Öst in (Sundnér & Thomasson 2006). Since 1999 a project led by Statens Fastighetsverk is in motion, with the purpose of develop and produce new limemortar that in the long term can replace the cement render visible everywhere on the castle. In connection with tests of the new lime render buildings archaeological surveys have been undertaken, since 2003 (Sundnér 2003, 2004; Sundnér & Thomasson 2006). The surveys have been done with a combination of methods, a contextual documentation where defined and interpreted stratigraphical events were documented separately, a rectified photographic process, the masonry being analysed and the contexts being defined, drawn in on the digital photograph and verbally described. After that the events were digitized, registered and stored in the digital documentationsystem Intrasis (Menander 2007, p 8). On the latest surveys a laserscanner has been used, for retrieving wall thicknesses and structure of the surface. The project at Läckö is ongoing, and the methods are developed whilst the project is running.

The combination in methods has also been used in buildings archaeological courses at the Department of Archaeology, Lund, by Barbro Sundnér. The objects have been for example Kungshuset in the centre of Lund. At this survey large rectified photographs were used and annotated with the contexts which then were measured in with the totalstation. In 2006 and 2007 two minor buildings archaeological surveys were undertaken of the north elevation, the east part of the building and the remains of earlier buildings under the house. It was a collaboration project, with UV Teknik, The department of archaeology in Lund and Kulturen. A stratigraphical analysis was combined with rectified photography and 3D measuring of the structure in the field (Sundnér et al 2006; Ericsson et al 2007). A research project of the Castle of Varberg is in progress since 2006, and the direction of the project is to try and reconstruct the built history of the castle from early medieval times until today, with the help of different digital methods and applications as described above (Håkansson & Ericsson 2007; Ericsson 2008).

*Conclusion:* The combination of methods used within the buildingsarchaeological field of today, are similar to those developed during the survey described in the dissertation, from 1997. Buildings archaeology in Sweden is slowly developing into a more problem orientated science where a methodological discussion is spreading, and hopefully the archaeology of buildings will soon be treated the same way as archaeology under ground is treated, within the field of rescue archaeology in the whole of Sweden. The development of methods is an ongoing process and discussion. The development in Europe has been somewhat different than that in Sweden, digital applications were used and worked into the process earlier than in Sweden and therefore the use of digital methods within the field of buildings archaeology were adopted earlier.

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Calibrating and Digitising

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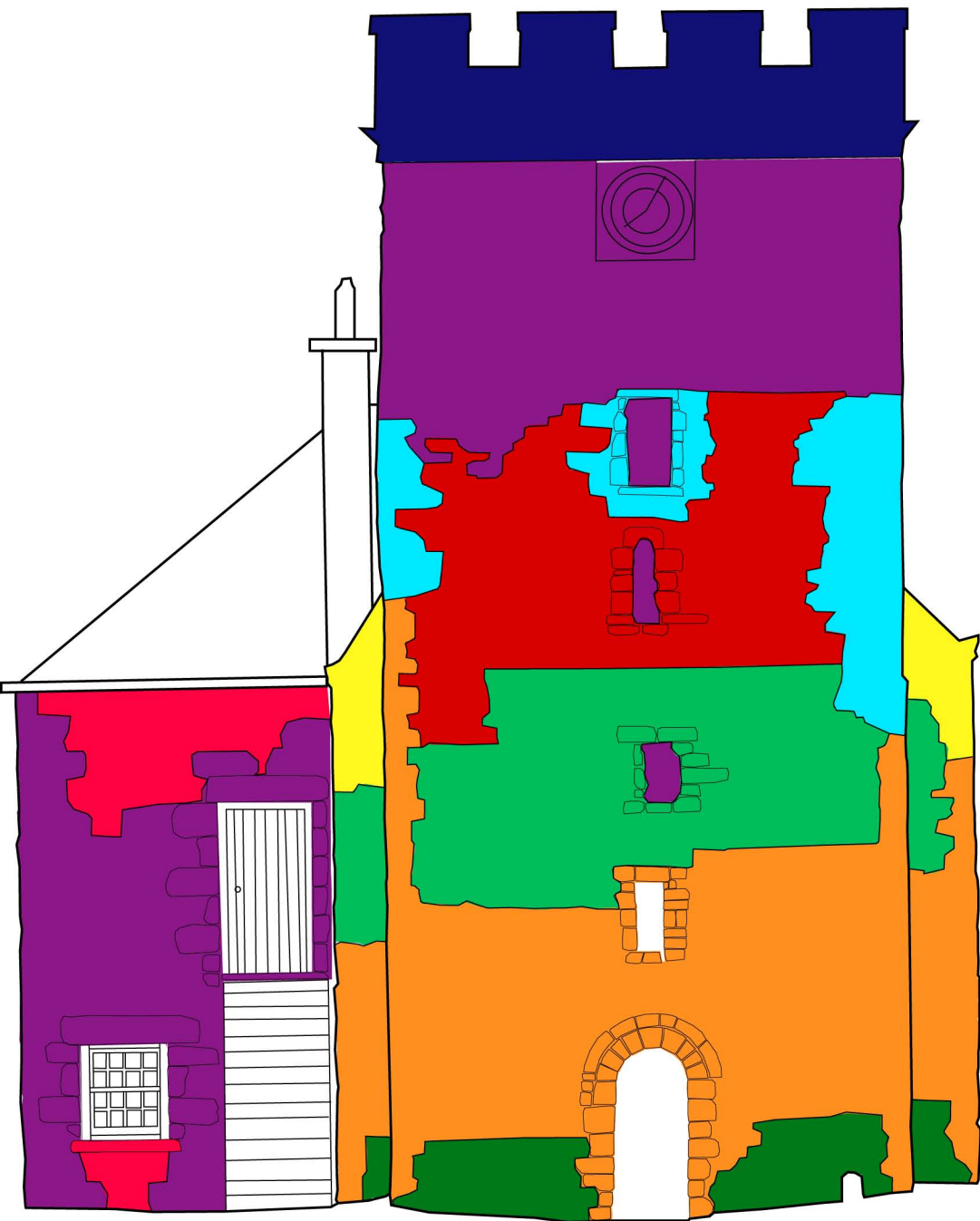
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The drawings

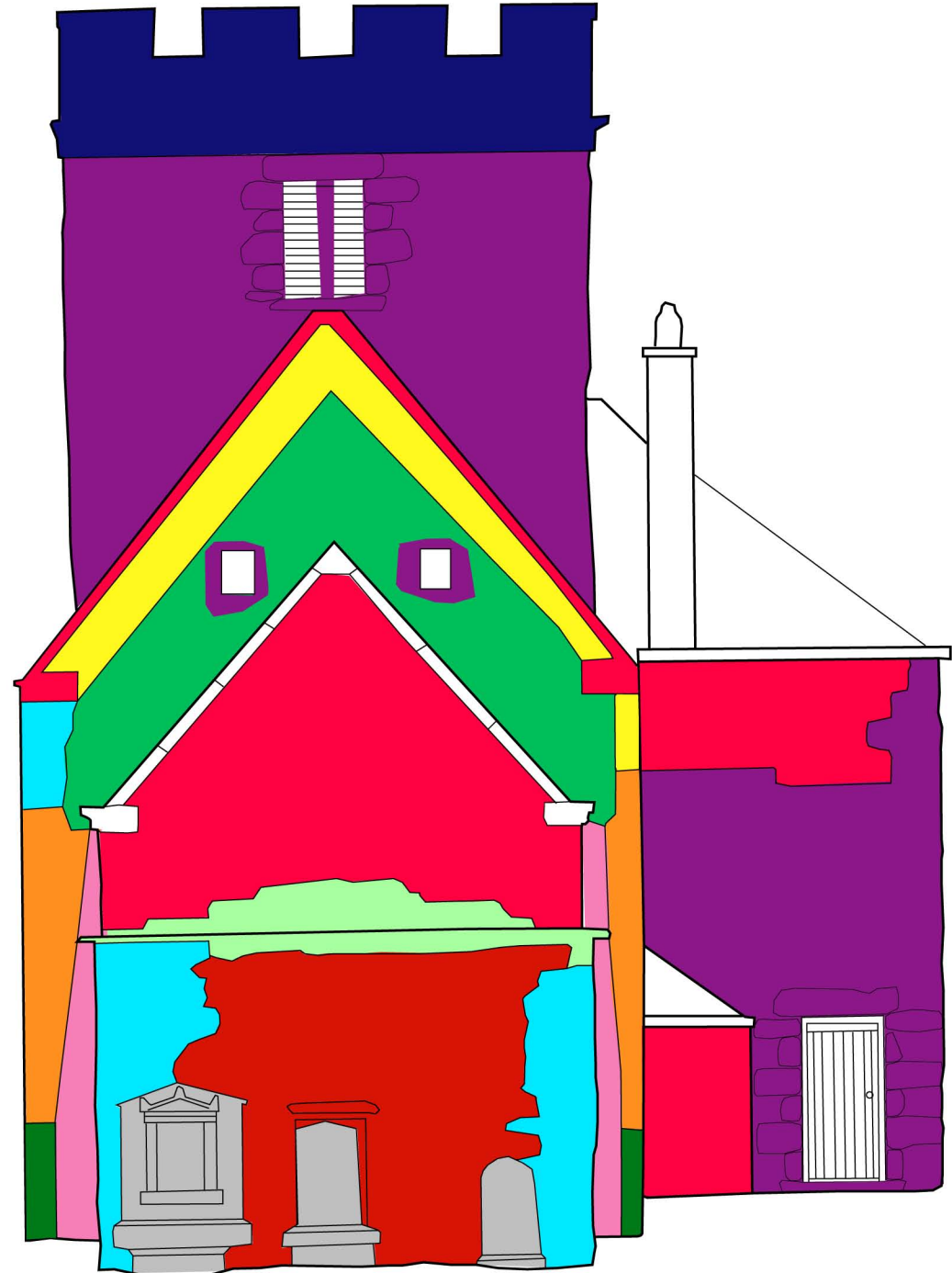
- Elevations
- Plans

# Sankt Mary's Priory and Parish church, Monymusk

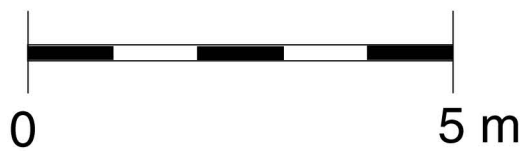


West elevations

- Phase 1
- Phase 2
- Phase 3
- Phase 4
- Phase 5
- Phase 6
- Phase 7
- Phase 8
- Phase 9
- Phase 10
- Phase 11



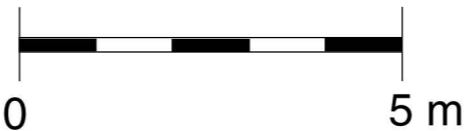
East elevations





# Sankt Mary's Priory and Parish church, Monymusk



South elevation



- |                                                                                               |                                                                                                |
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|  Phase 1 |  Phase 7  |
|  Phase 2 |  Phase 8  |
|  Phase 3 |  Phase 9  |
|  Phase 4 |  Phase 10 |
|  Phase 5 |  Phase 11 |
|  Phase 6 |                                                                                                |














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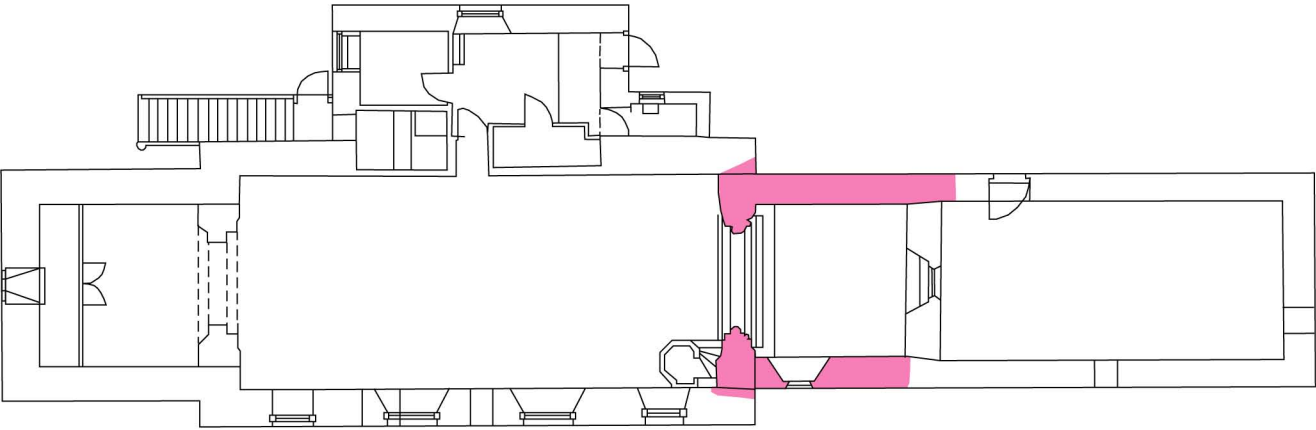


North elevation

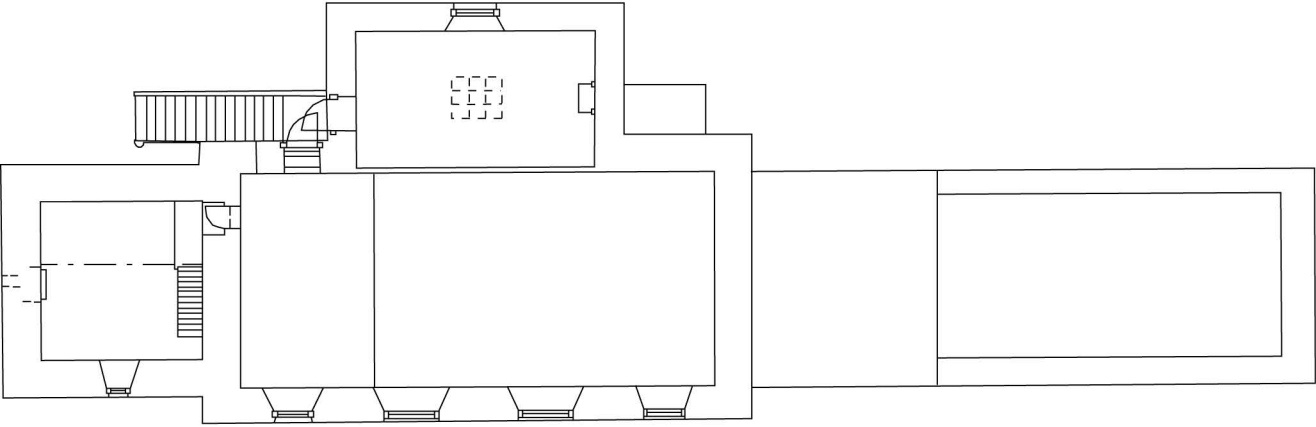


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|  | Phase 1 |  | Phase 7  |
|  | Phase 2 |  | Phase 8  |
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|  | Phase 4 |  | Phase 10 |
|  | Phase 5 |  | Phase 11 |
|  | Phase 6 |                                                                                       |          |

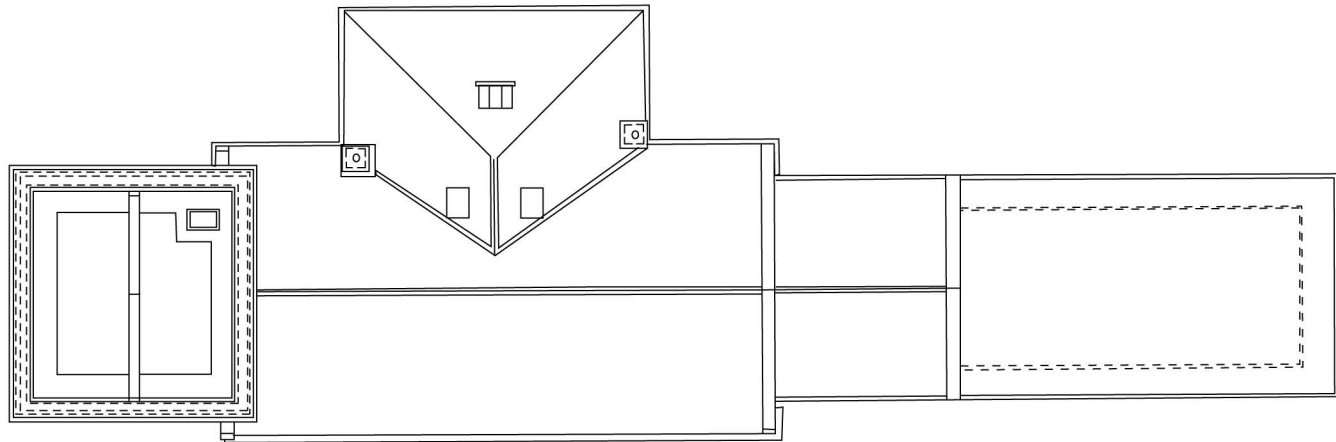
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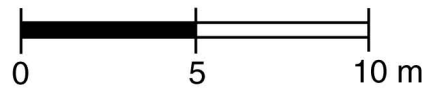
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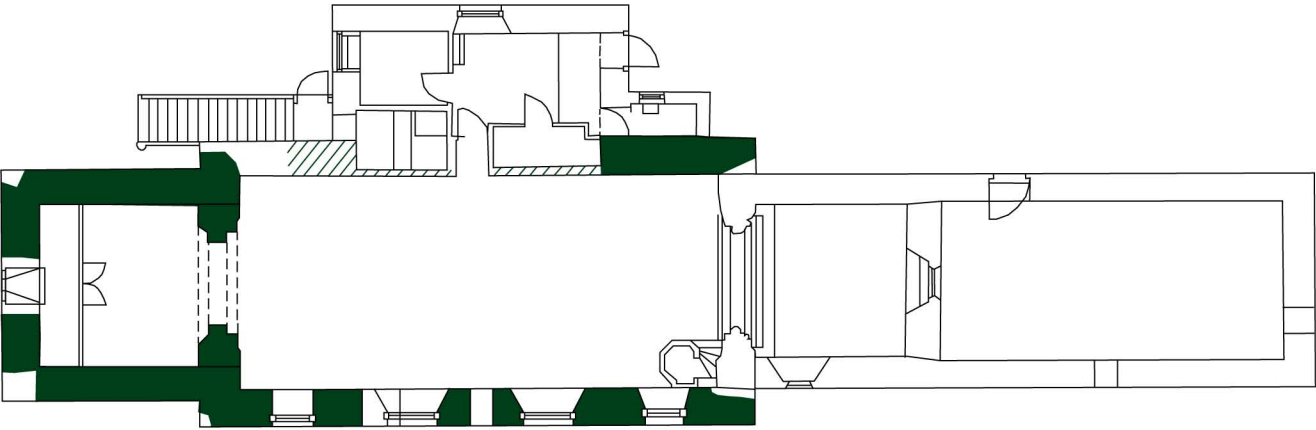
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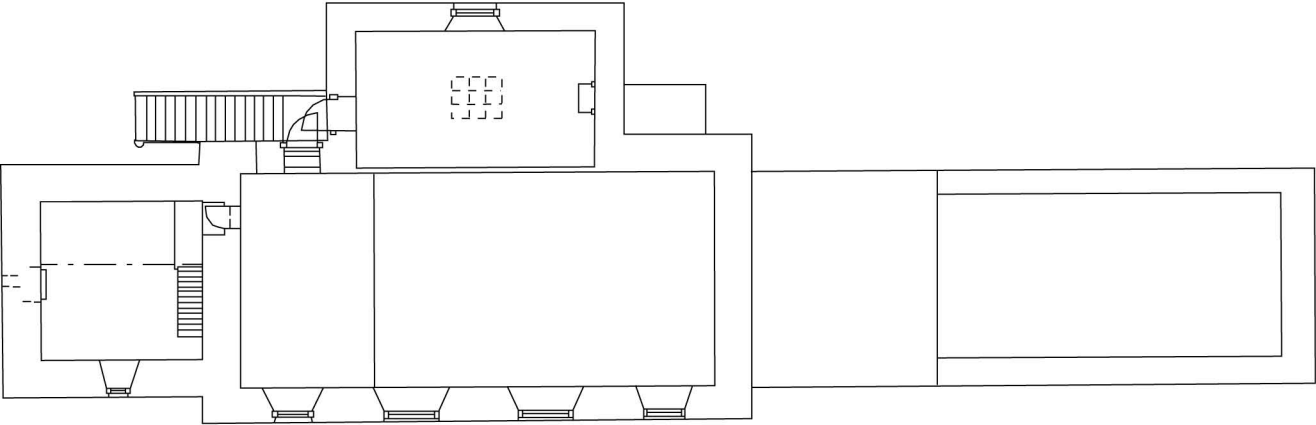
Second floor



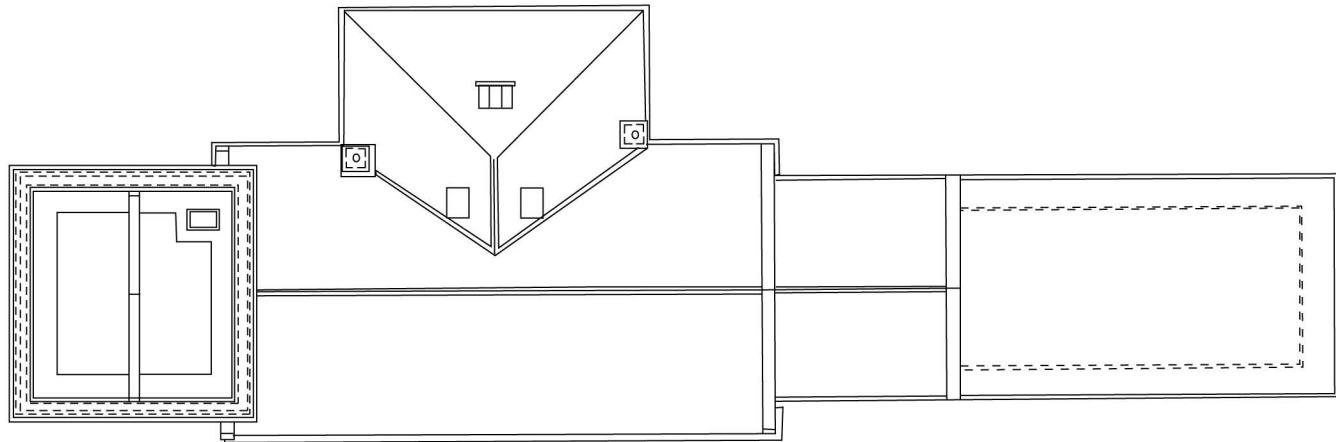
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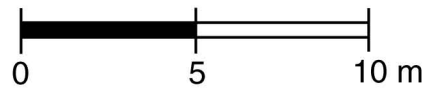
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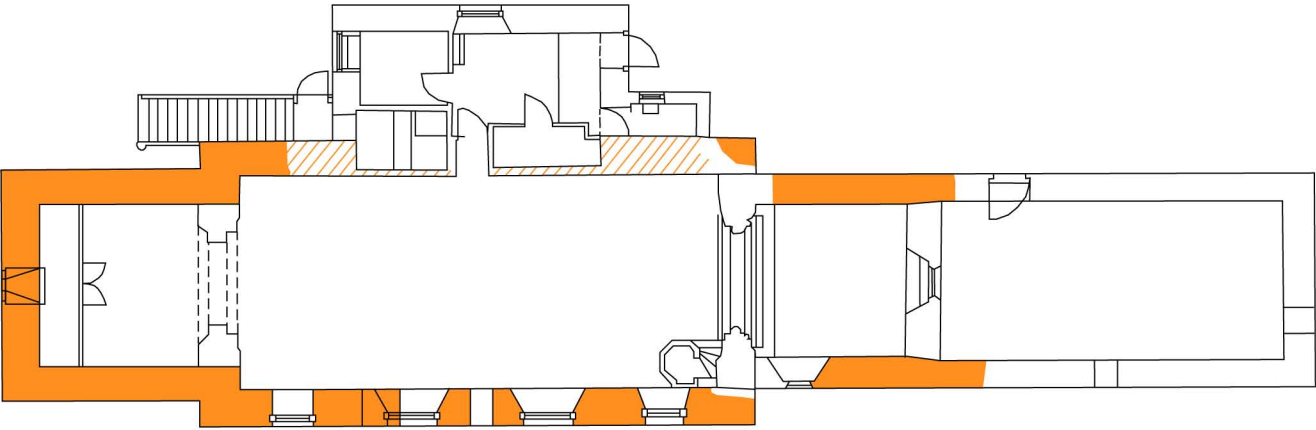
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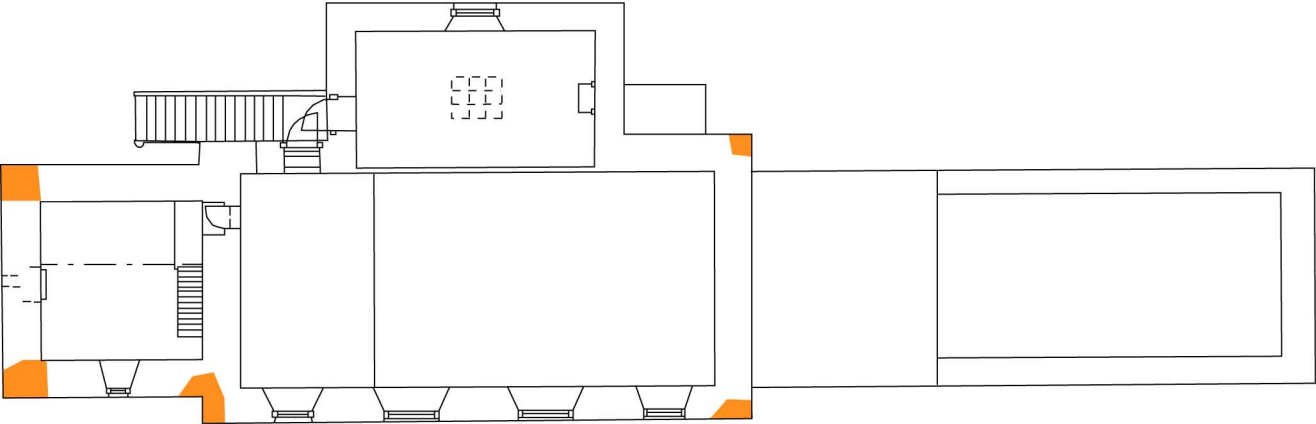
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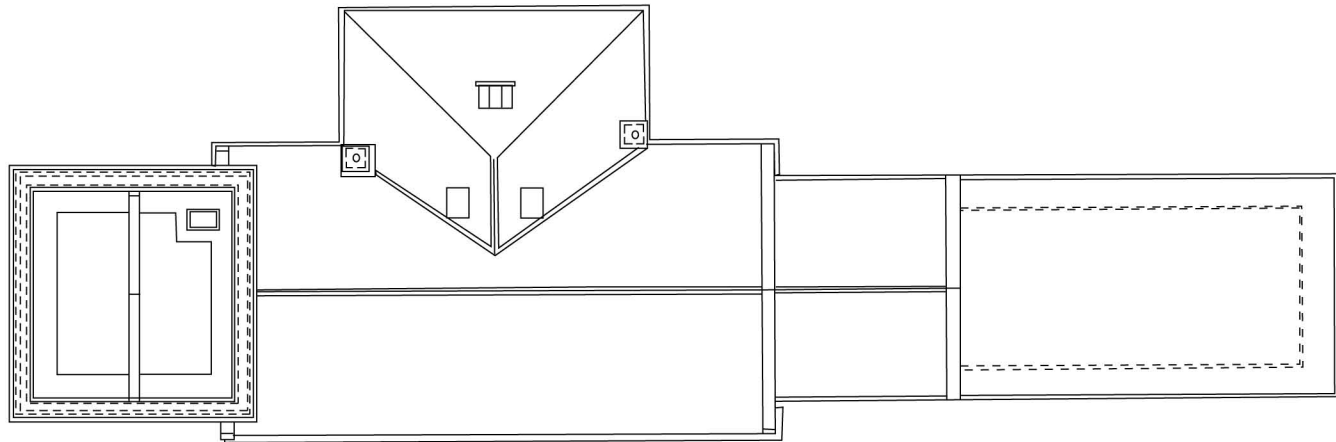
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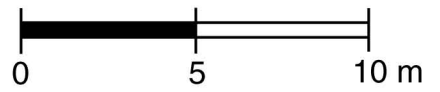
Ground floor



First floor

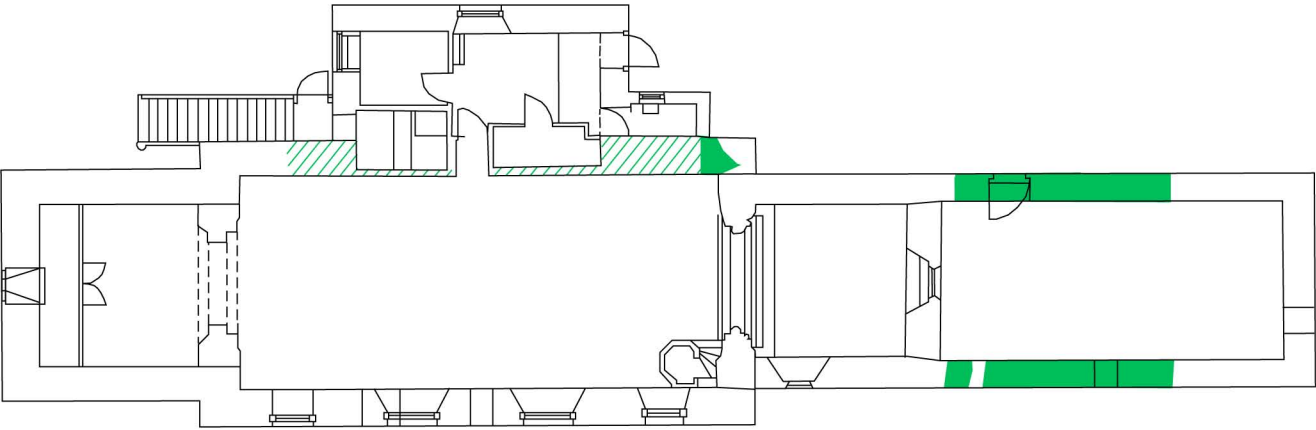


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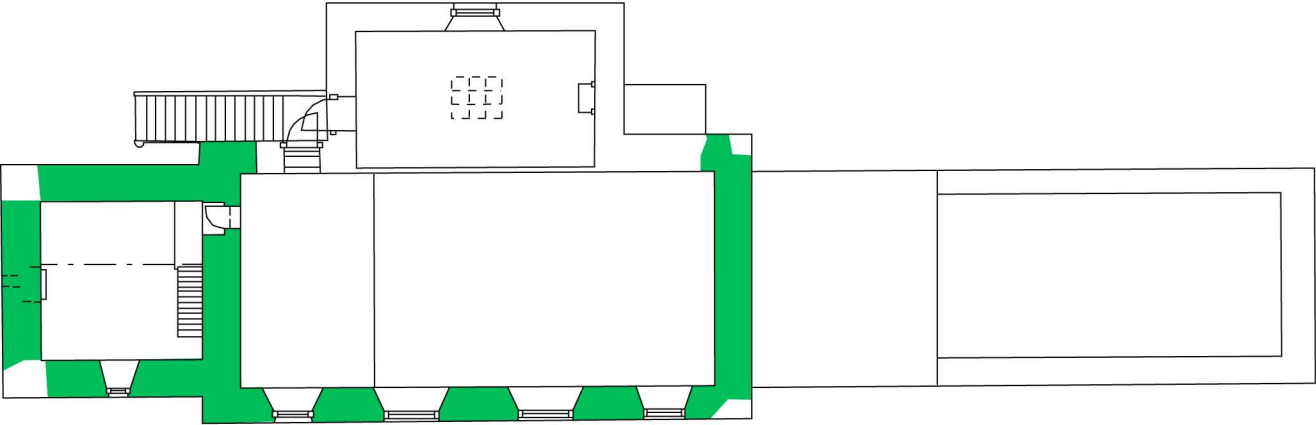




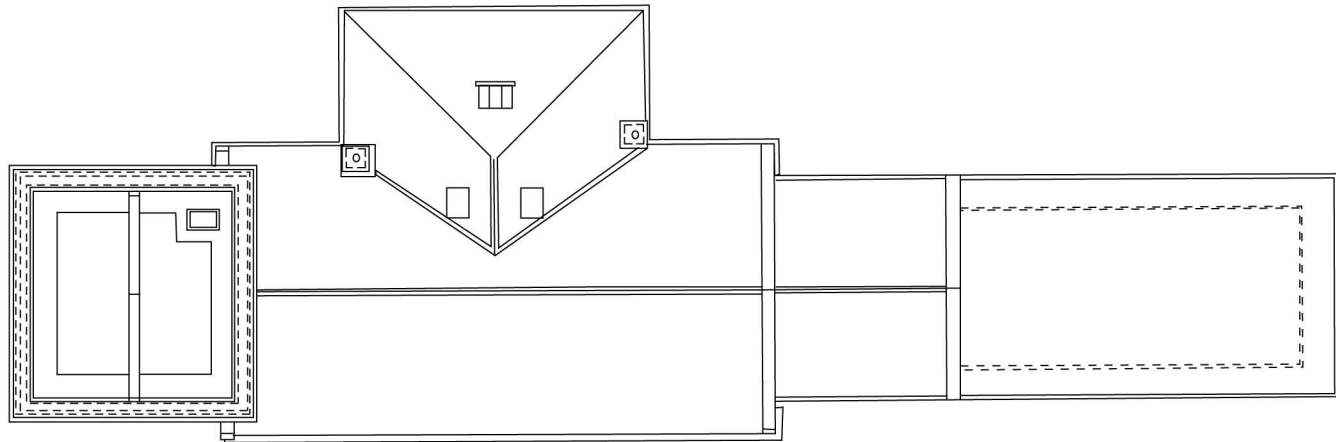
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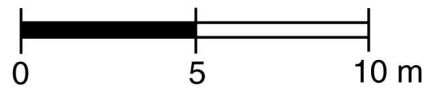
Ground floor



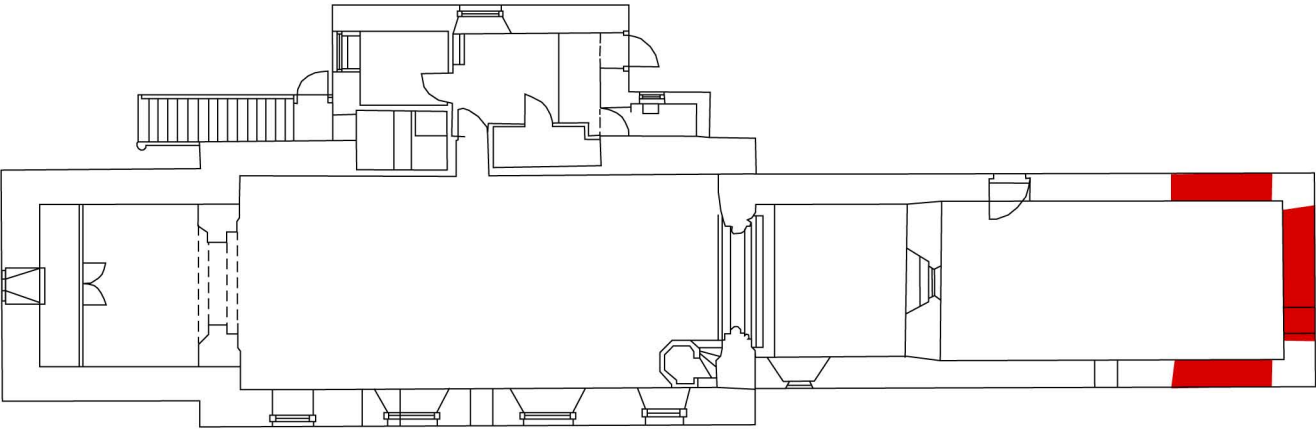
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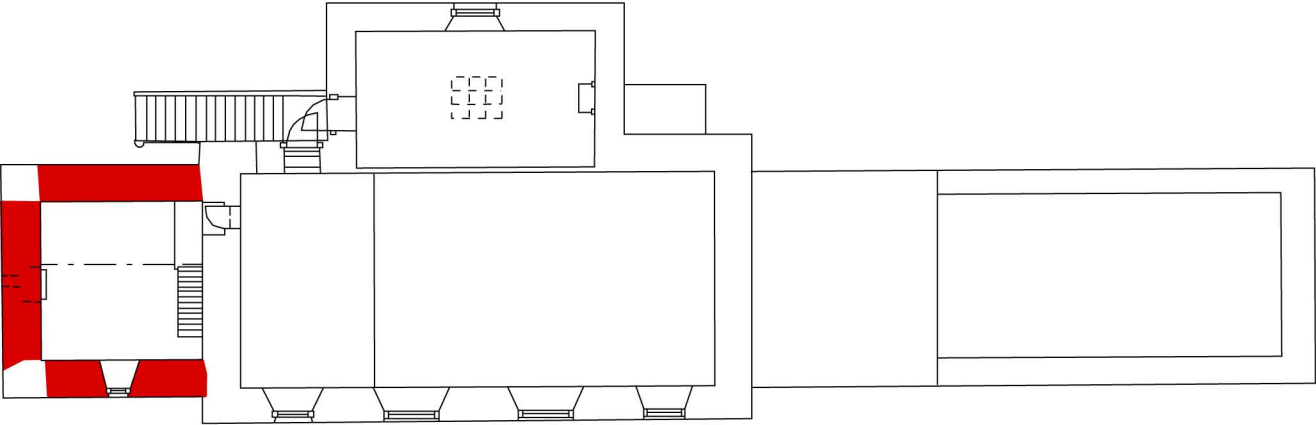
Second floor



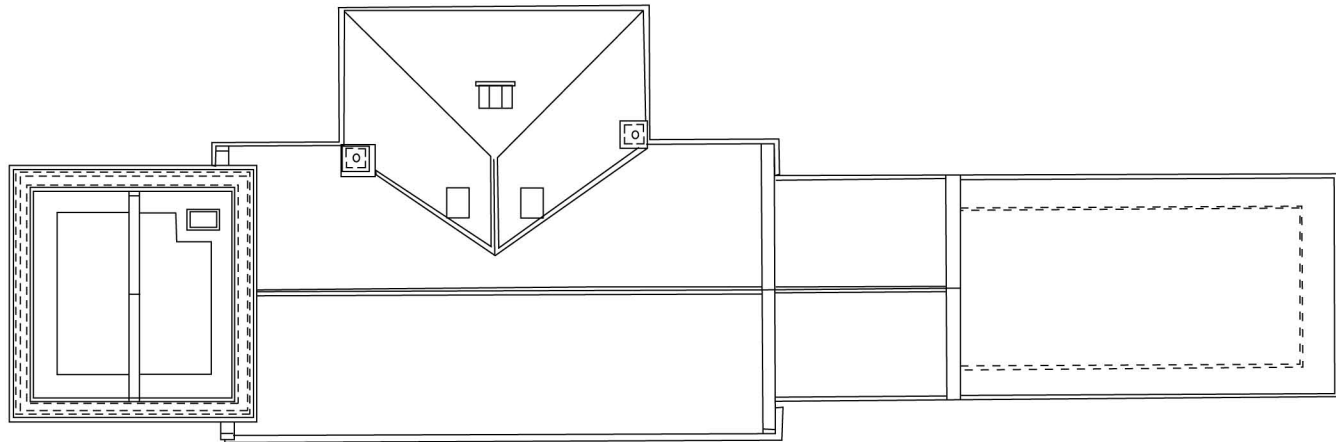
# Phase Five



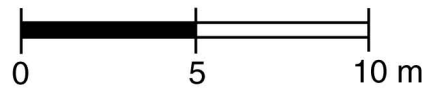
Ground floor



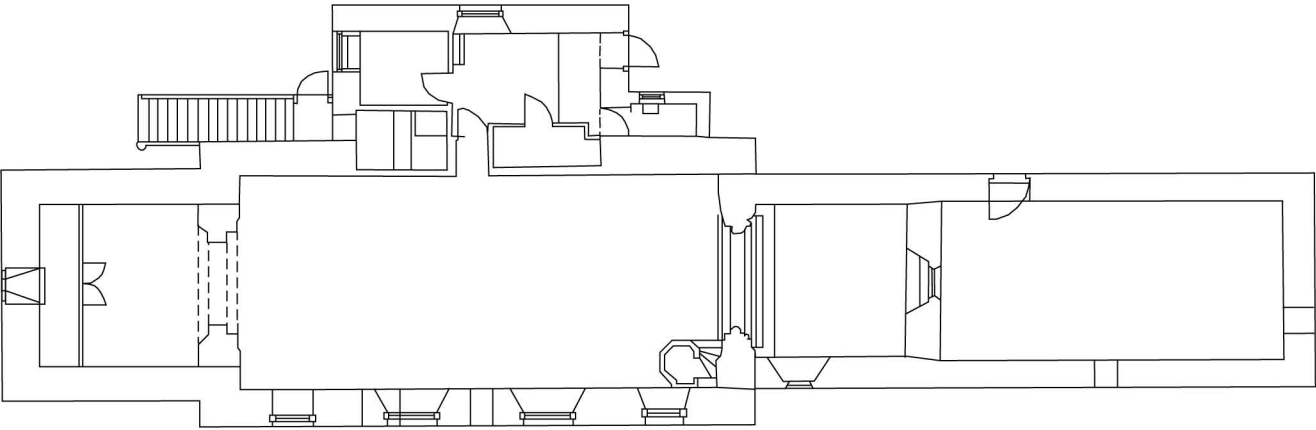
First floor



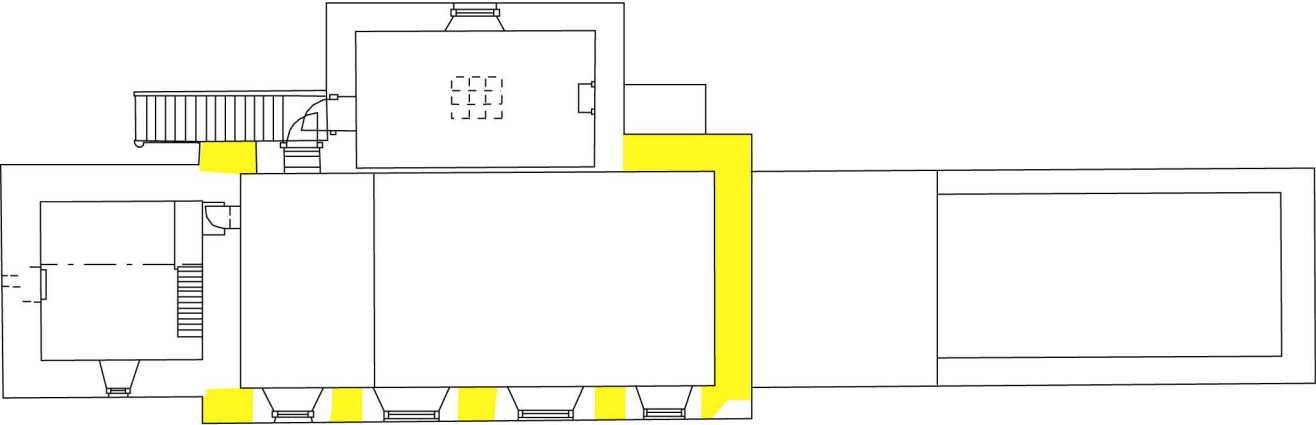
Second floor



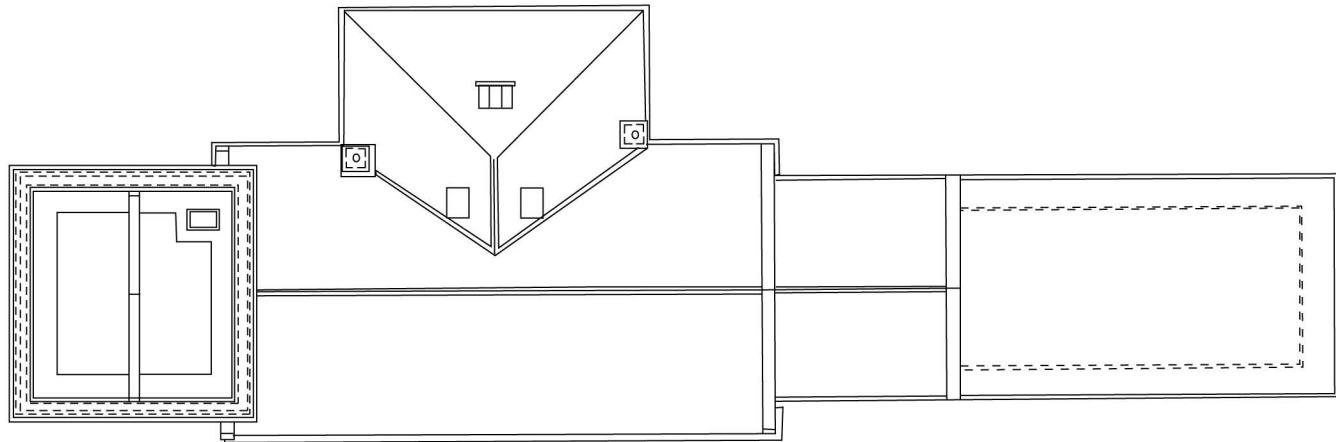
# Phase Six



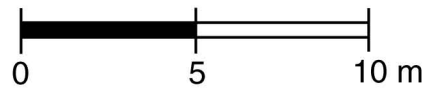
Ground floor



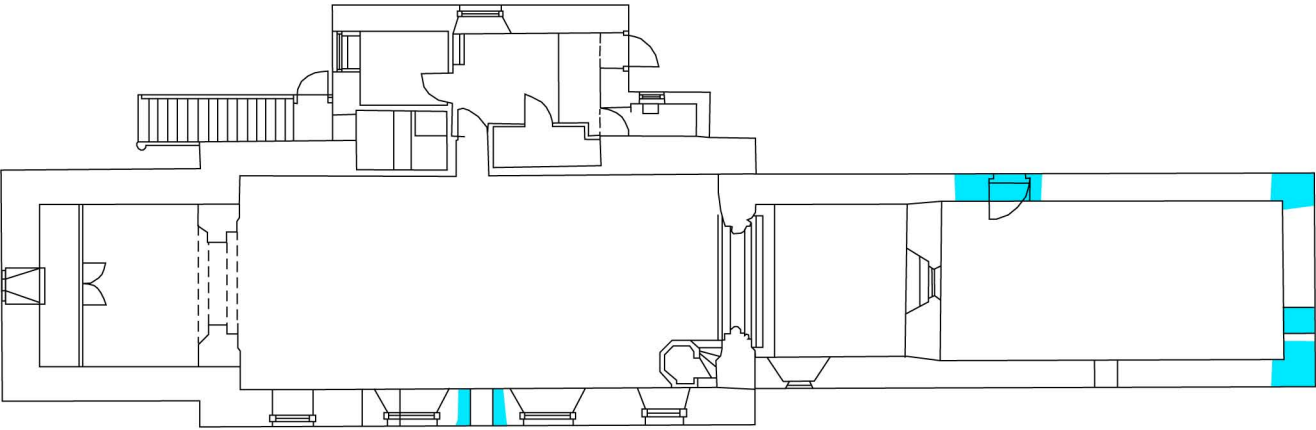
First floor



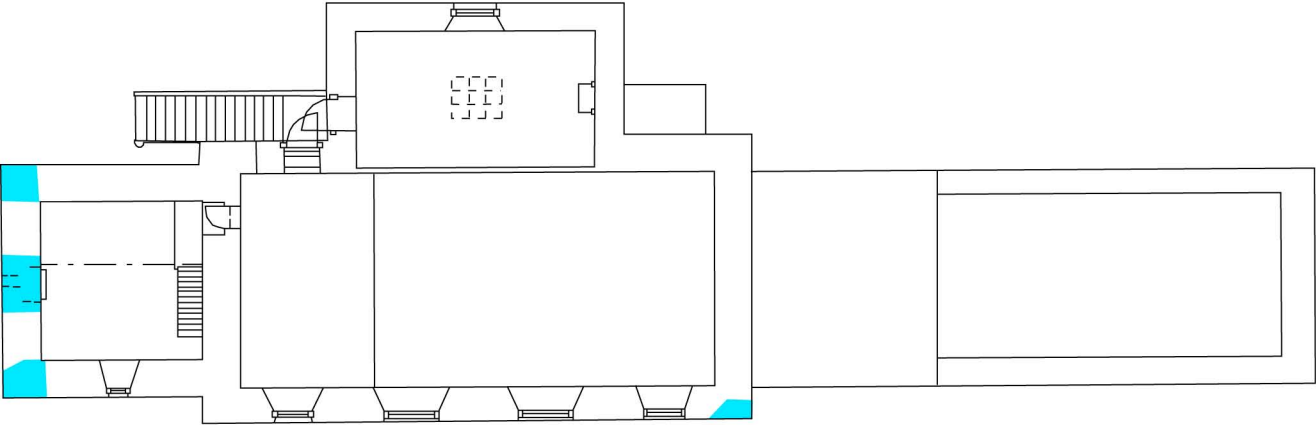
Second floor



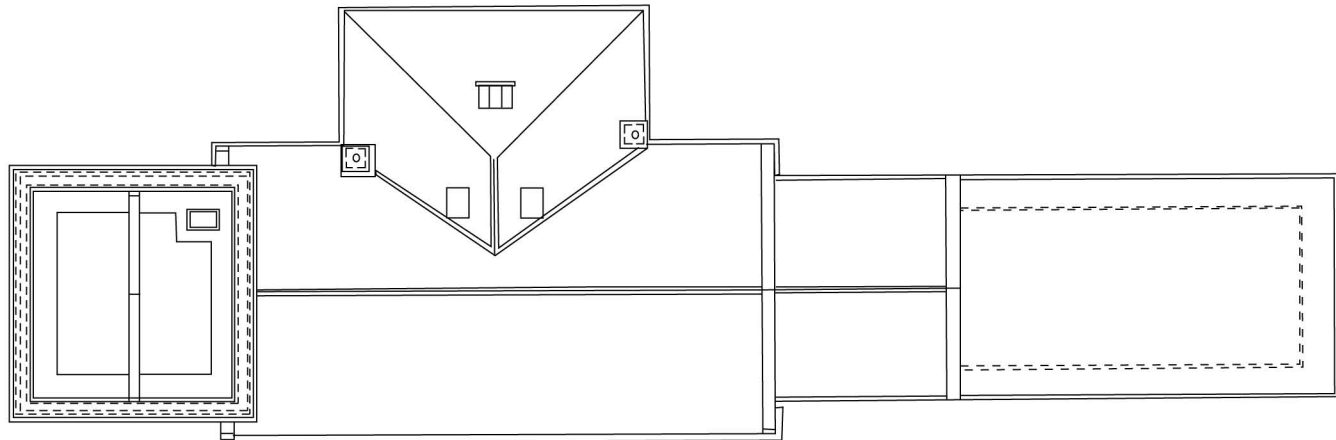
# Phase Seven



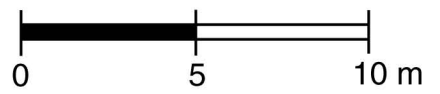
Ground floor



First floor

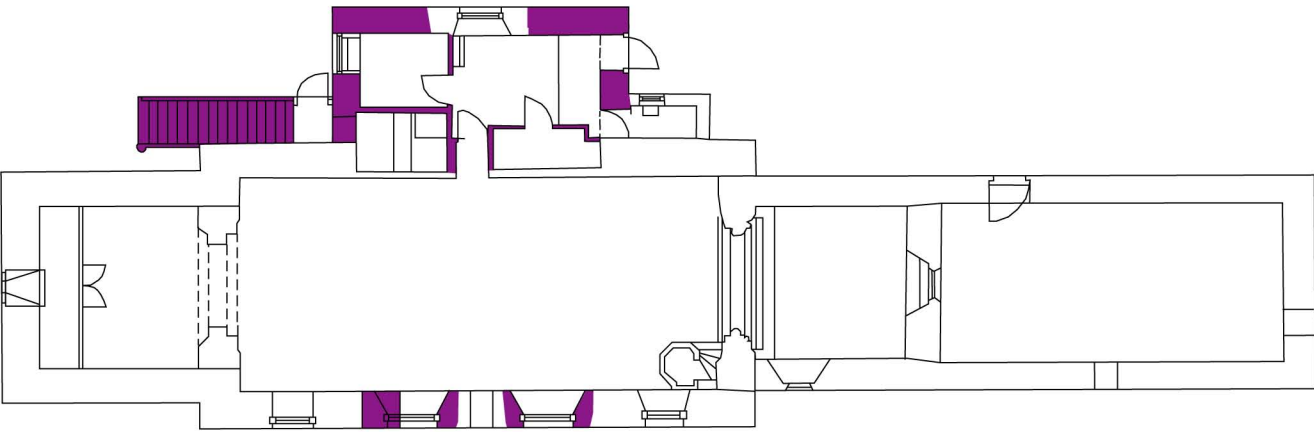


Second floor

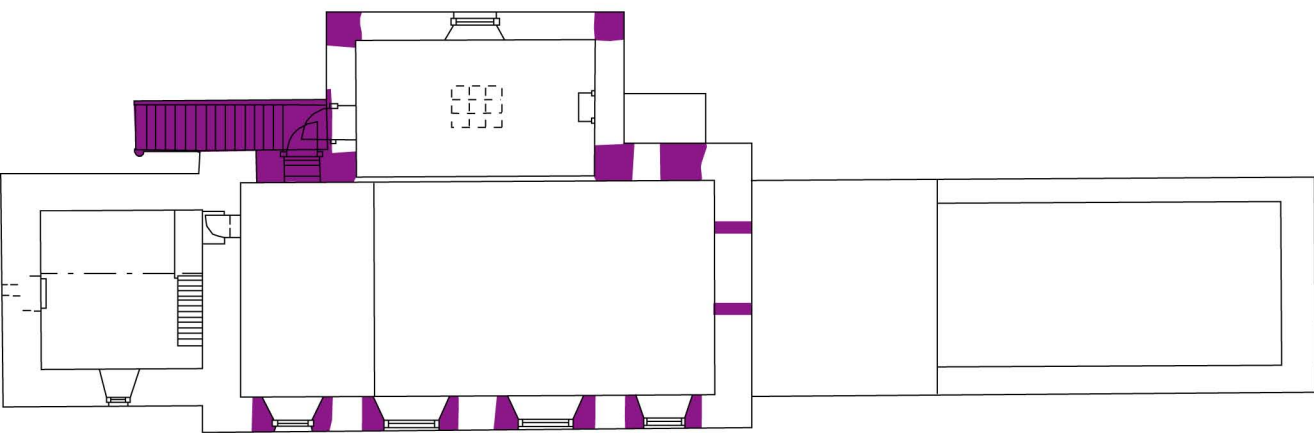




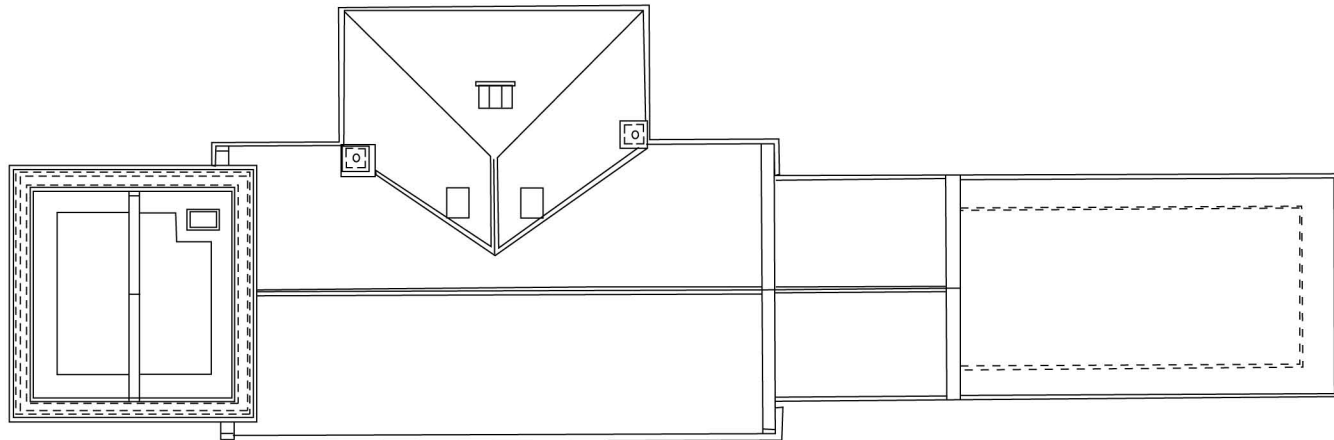
# Phase Eight



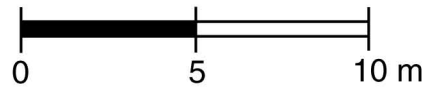
Ground floor



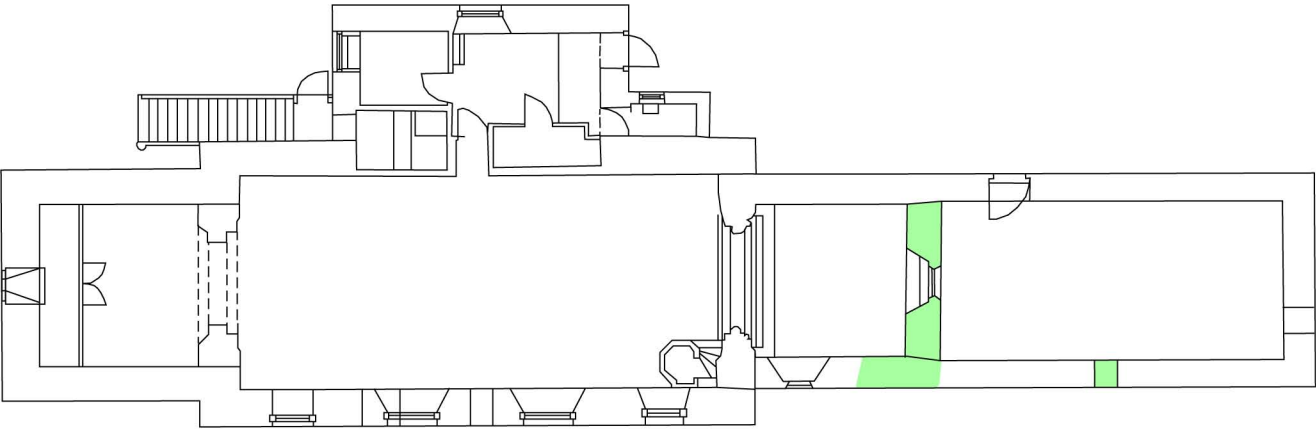
First floor



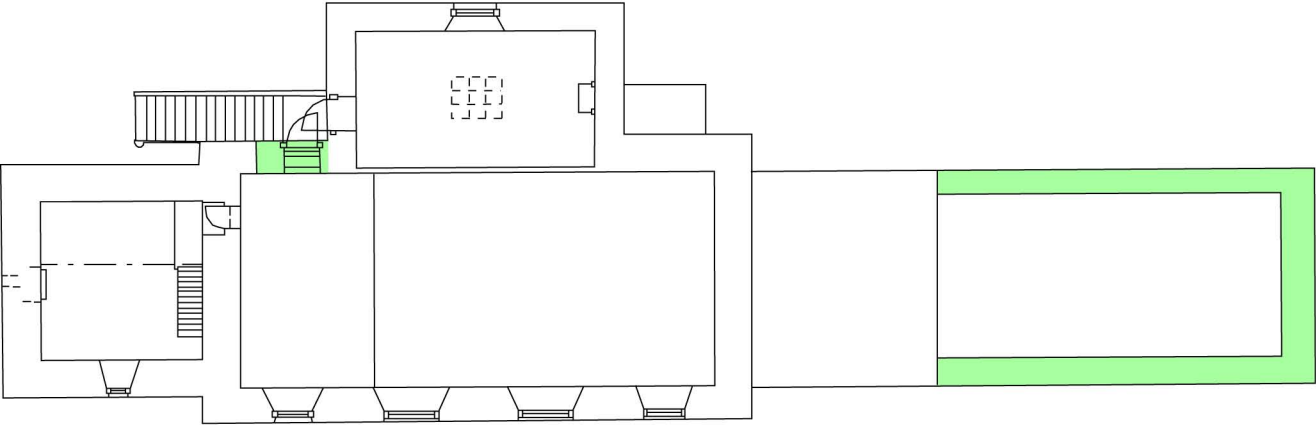
Second floor



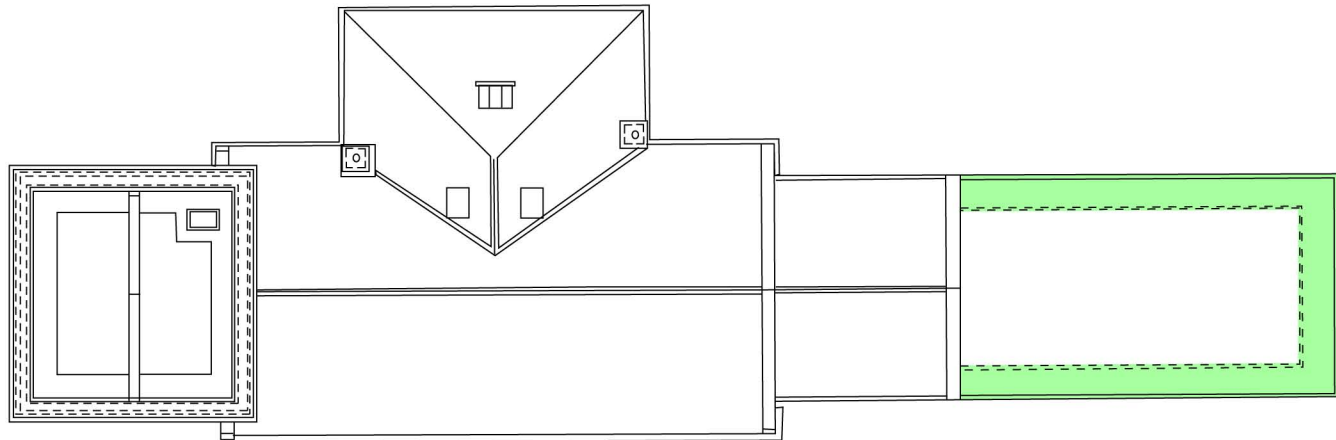
# Phase Nine



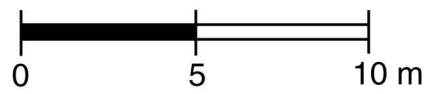
Ground floor



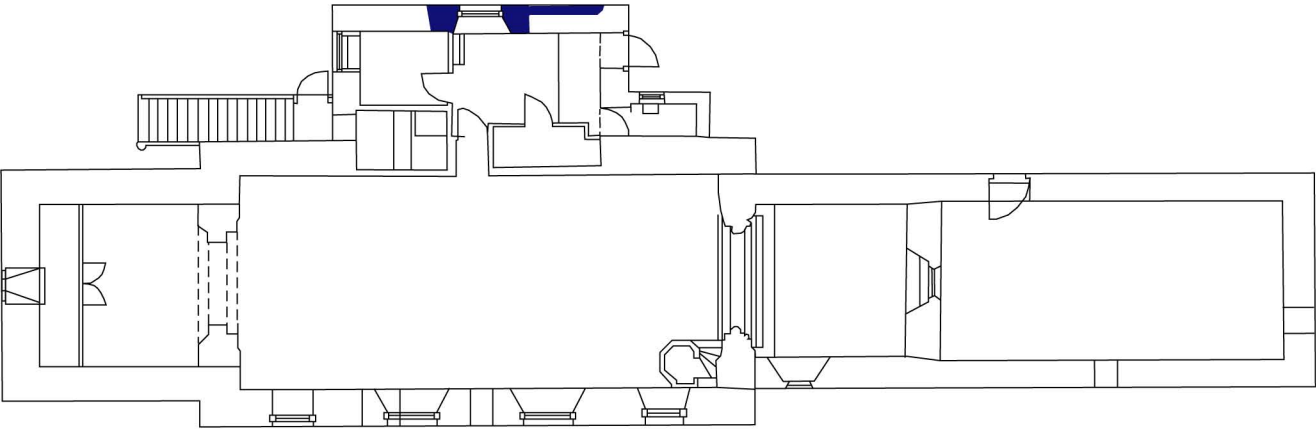
First floor



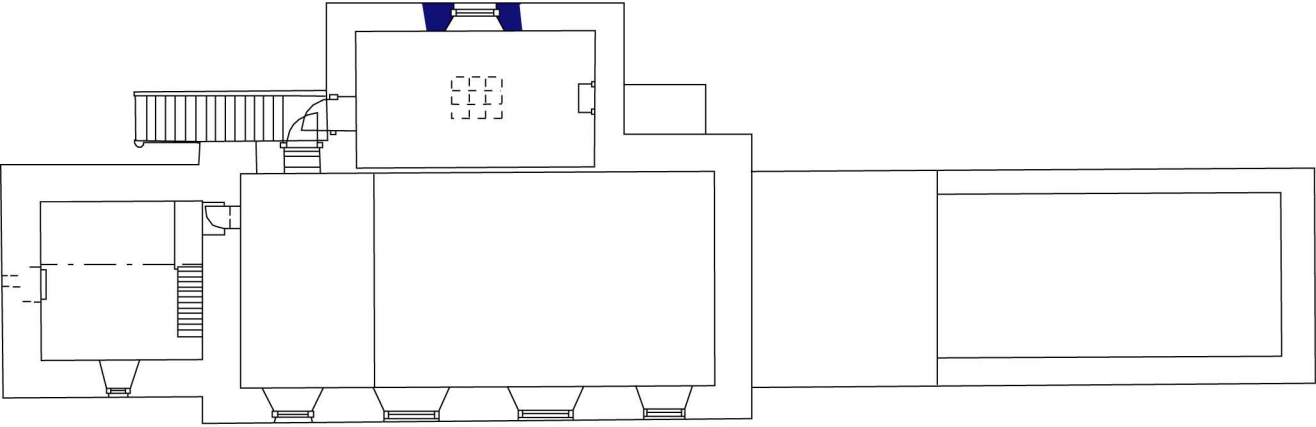
Second floor



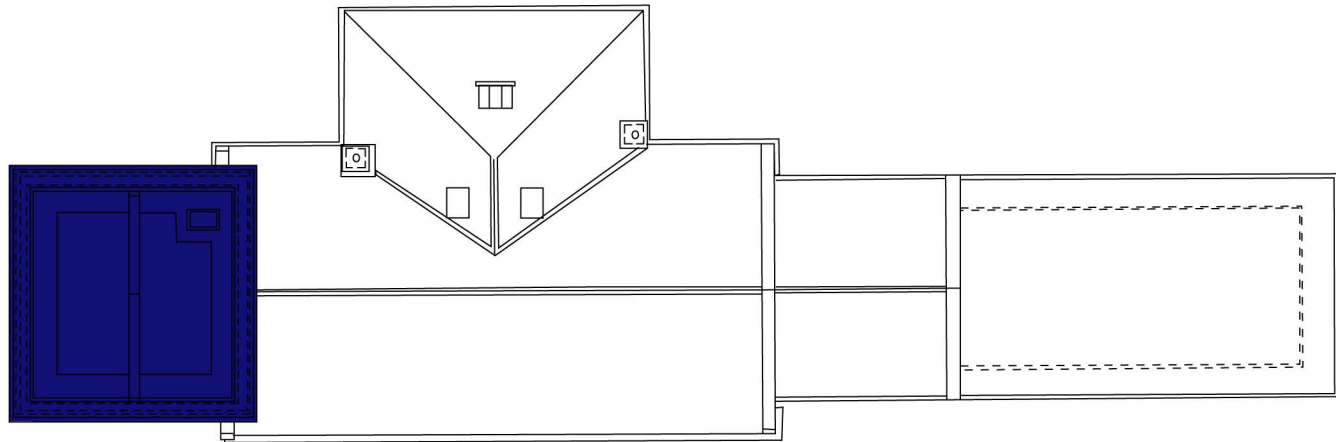
# Phase Ten



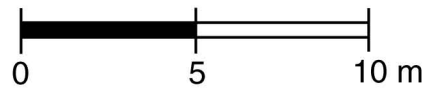
Ground floor



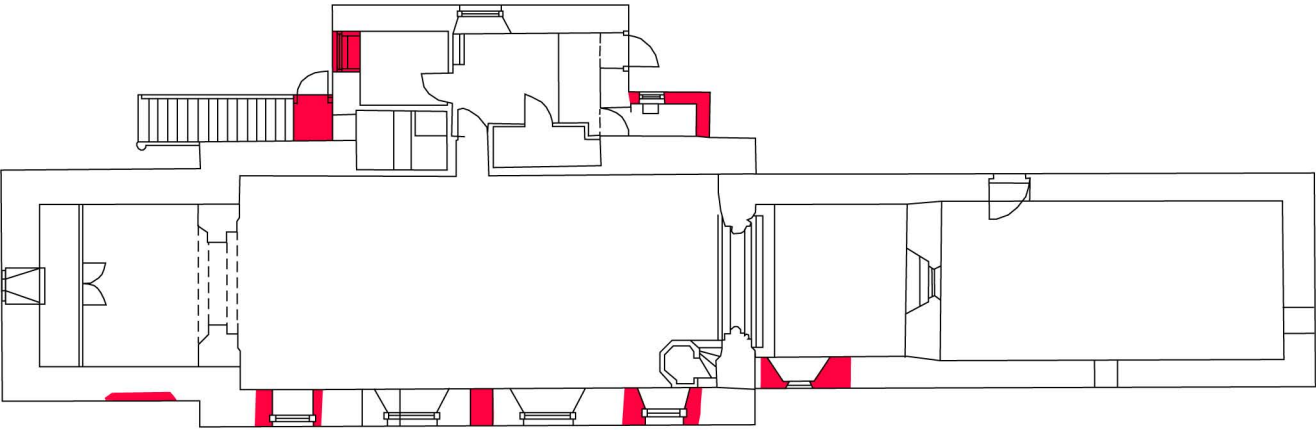
First floor



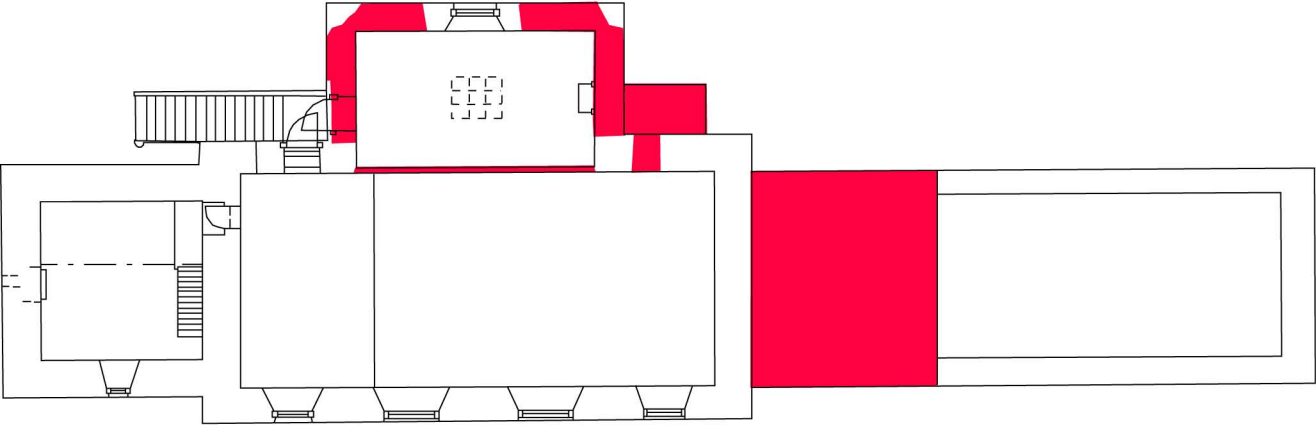
Second floor



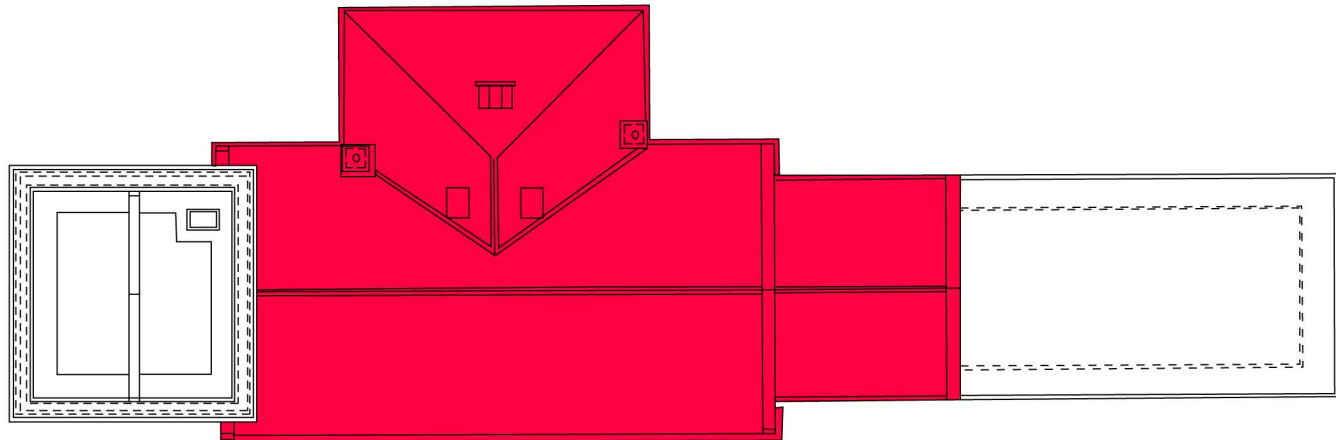
# Phase Eleven



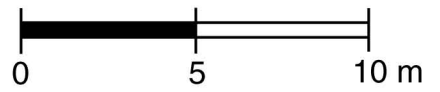
Ground floor



First floor



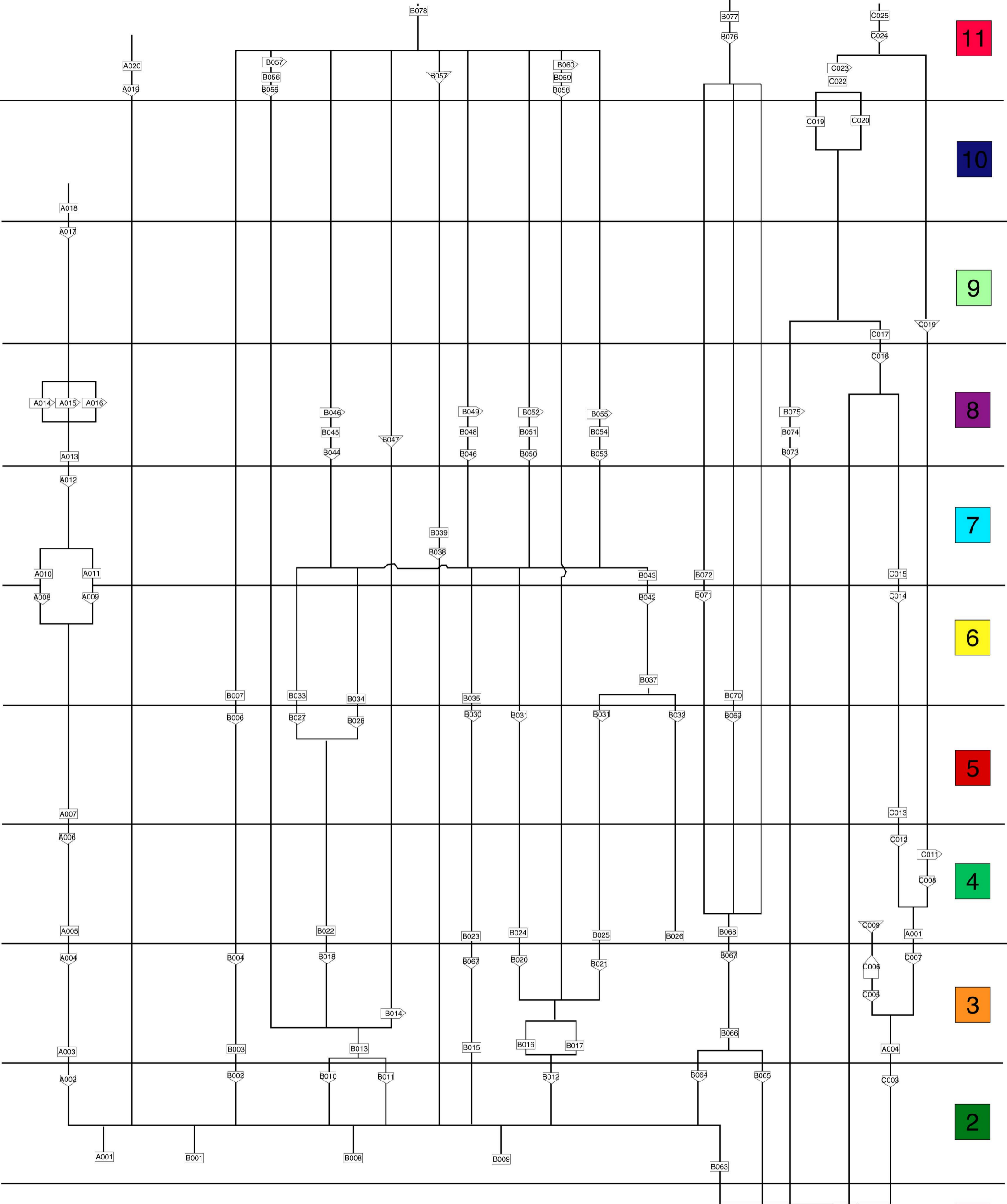
Second floor





The matrix

- The matrix for the south side
- The annotated elevations for the south side



11

10

9

8

7

6

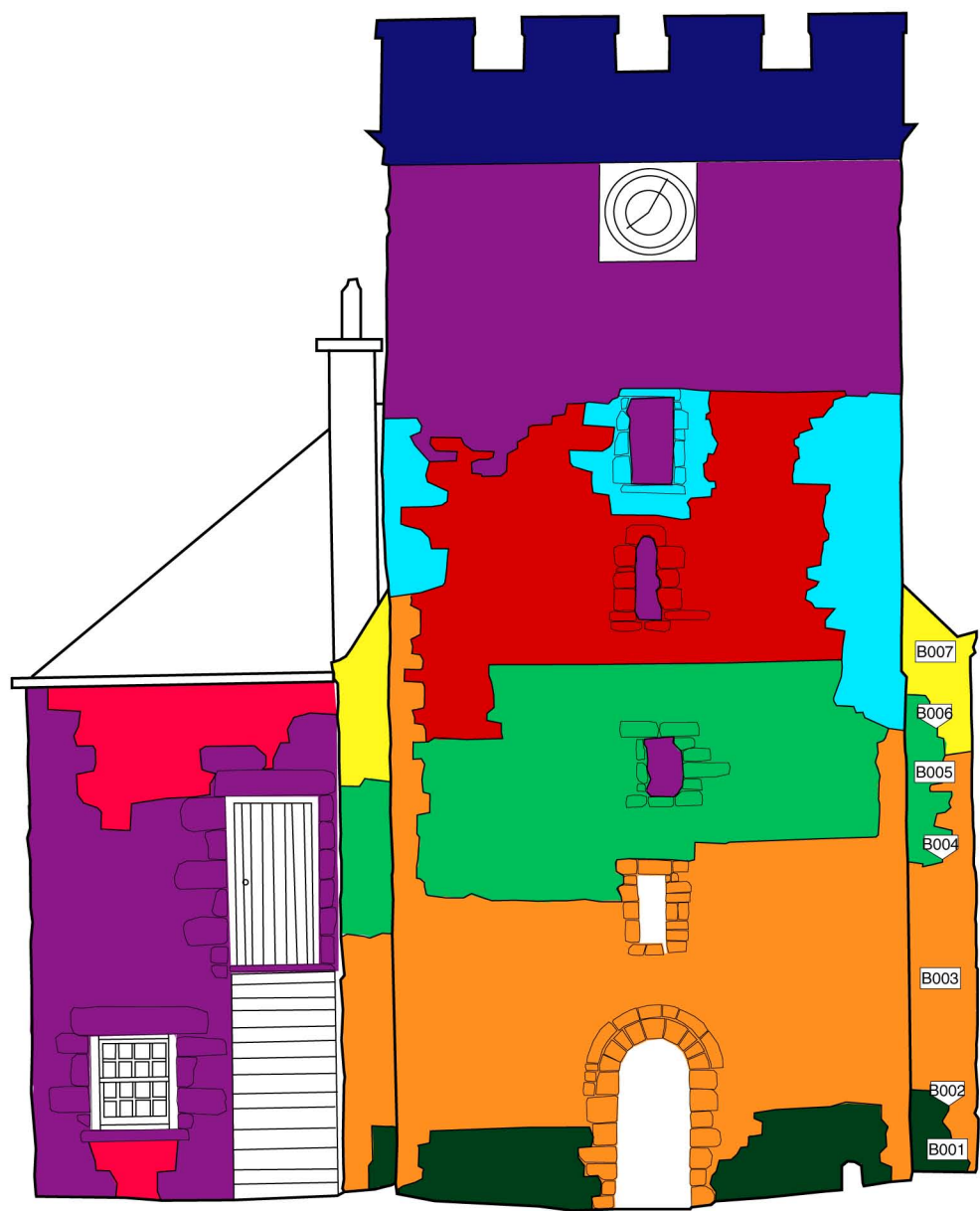
5

4

3

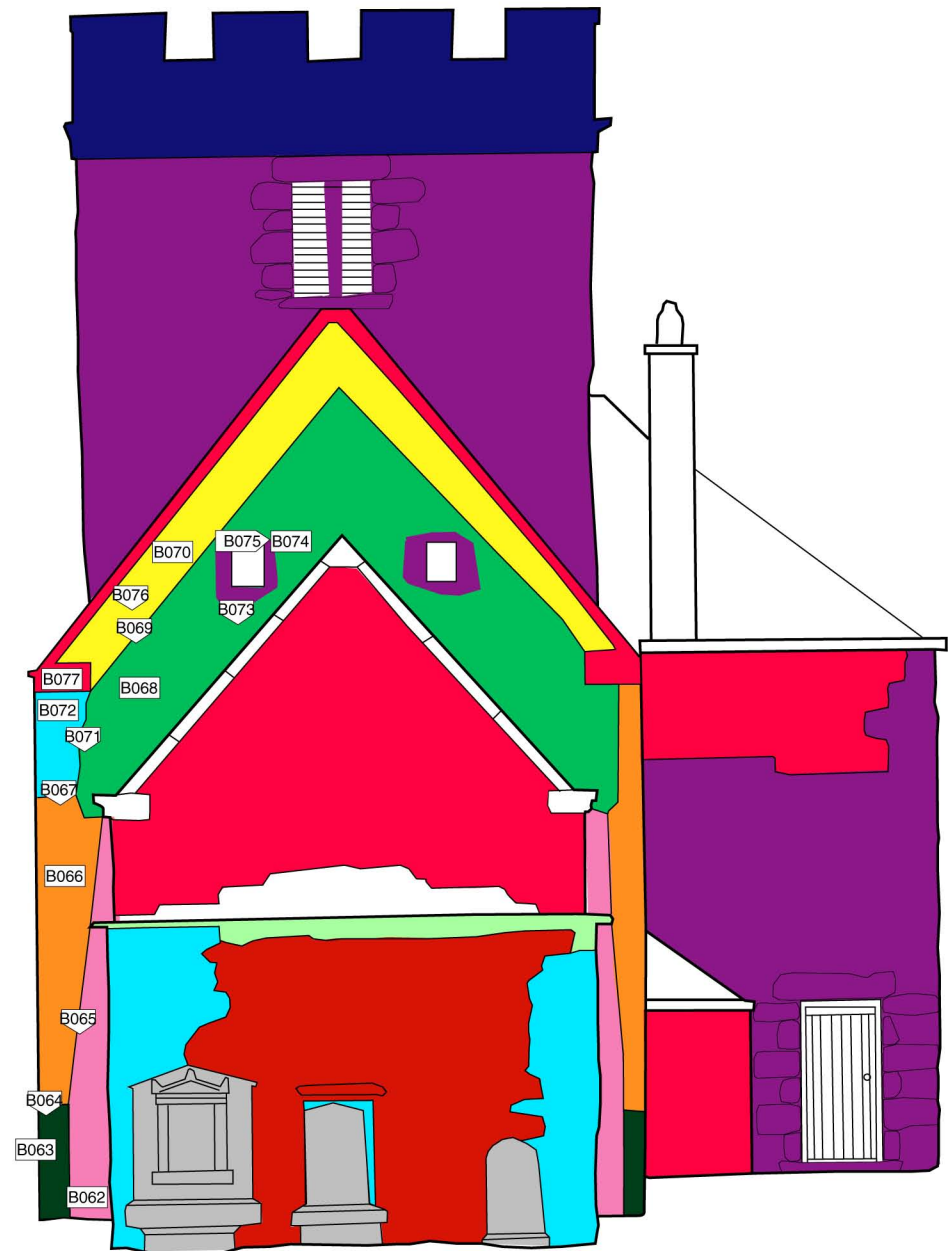
2

# Sankt Mary's Priory and Parish church, Monymusk



B007  
B006  
B005  
B004  
B003  
B002  
B001

- Phase 1
- Phase 2
- Phase 3
- Phase 4
- Phase 5
- Phase 6
- Phase 7
- Phase 8
- Phase 9
- Phase 10
- Phase 10



B070  
B076  
B069  
B075  
B074  
B073  
B077  
B072  
B071  
B068  
B067  
B066  
B065  
B064  
B063  
B062

West elevations

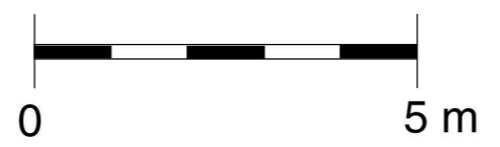


East elevations

# Sankt Mary's Priory and Parish church, Monymusk



South elevation



- |                                                                                                                                                        |                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #f080f0; border: 1px solid black; margin-right: 5px;"></span> Phase 1 | <span style="display: inline-block; width: 15px; height: 15px; background-color: #00bfff; border: 1px solid black; margin-right: 5px;"></span> Phase 7  |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #003366; border: 1px solid black; margin-right: 5px;"></span> Phase 2 | <span style="display: inline-block; width: 15px; height: 15px; background-color: #800080; border: 1px solid black; margin-right: 5px;"></span> Phase 8  |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #ffa500; border: 1px solid black; margin-right: 5px;"></span> Phase 3 | <span style="display: inline-block; width: 15px; height: 15px; background-color: #90ee90; border: 1px solid black; margin-right: 5px;"></span> Phase 9  |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #008000; border: 1px solid black; margin-right: 5px;"></span> Phase 4 | <span style="display: inline-block; width: 15px; height: 15px; background-color: #000080; border: 1px solid black; margin-right: 5px;"></span> Phase 10 |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #ff0000; border: 1px solid black; margin-right: 5px;"></span> Phase 5 | <span style="display: inline-block; width: 15px; height: 15px; background-color: #ff00ff; border: 1px solid black; margin-right: 5px;"></span> Phase 11 |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #ffff00; border: 1px solid black; margin-right: 5px;"></span> Phase 6 |                                                                                                                                                         |