

# **Initial and Planning Stages in Preservation Process, Contributions to Recommendation for Appropriate Conservation Treatments: A Case of Conservation of the Our Lady of the Rosary Church Project**

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## **Abstract**

This paper aims at understanding advantages of applying preservation process based on international doctrines to preservation practices in Thailand. The Conservation of the Our Lady of the Rosary Church Project that has been conducted based on such process was used as a case study. The project showed that the process of preparing a conservation plan helped to assemble important data covering a deeper understanding of the historic building's evolution over time as well as a better understanding of its heritage significances and its current specific circumstances. This information led to appropriate conservation treatments and conservation works.

**Keywords:** Preservation Process | Initial and Planning Stage | Historic Building

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## 1. Introduction and Background of the Study

Saving a historic building requires a unique process that is different from working on a contemporary building or a new construction. The initial stage of such process includes tasks that involve exploration and analysis of all important historic and current materials related to the historic building. It is widely accepted that gaining a clear understanding of the building and site during the initial procedure provides more opportunities for conservation architects to create a well-crafted preservation plan in order to maintain the building in a proper way (U.S. Department of Interior 2014, 2017, Historic England 2016). According to that statement, this paper would like to affirm the usefulness and importance of the information gained from an initial and planning stage in a preservation process by looking through the works along the Conservation of the Our Lady of the Rosary Church Project.

The Conservation of the Our Lady of the Rosary Church Project was conducted on the occasion of the 120th anniversary of the Church in October 2017. On this occasion, the Church Council, in cooperation with the Chulalongkorn University Department of Architecture, announced the preservation project. This project has started since the beginning of 2016, and a conservation plan was completely submitted to the Church Council in the mid of 2017. The objectives of the project include : 1) to set up a preservation plan for restoring building fabrics while maintaining contemporary uses; and 2) to be a good example of the local preservation projects that are carried by the preservation process based on international conservation principles. In addition to these two main objectives, the other goal was to initiate good collaboration among academics from the Chulalongkorn University Department of Architecture, property owners (the Church Council and members of the Church), and experienced conservation consultants, (Issarathumnoon 2018).

In order to understand the preservation process for working on historic buildings, particularly focusing on an initial and planning stage, this paper was divided into four main parts. The first part is a theoretical framework describing conservation principles, processes, and methods. The Second part identifies useful information gathered from the initial and planning stage. The third part illustrates a recommendation for conservation treatments based on analysis and study of gathered information from the former parts. Then, final part provides a conclusion of this paper.

## 2. A Theoretical Framework: Conservations Principles, Processes, and Methods

The theoretical framework of this project was to be in line with internationally accepted conservation standards and principles. To ensure a balanced, economically viable and preservation-sensitive project, the process should cover the following stages: Initial

Project Planning Stage; Planning Stage; Design Development Stage; Construction Stage; Occupancy Stage and Operational Guidelines; and Divestiture (U.S. Department of Interior 2014). The first two stages provide vital information for the next stages in order to design proper changes for historic buildings. The major concept is any intervention must be the minimum necessary; therefore, conservation techniques for repairing or the changes should pay high attention to the property's historic character and design integrity" (U.S. Department of Interior 2014, Feilden 2003).

The Initial Project Planning Stage is to determine the importance of historic buildings in terms of heritage significances, architectural merits and integrity of design, character, workmanship, and materials (U.S. Department of Interior 2014). For the initial stage, it is also important to understand a history of the property. In fact, it is necessary to understand various aspects of the historic building over its lifetime, and the considered issues should cover materials and methods; architects or designers, architectural characteristics or features; the current conditions, former (or original) drawings or any other planning documents; and evolution of the building (Ibid.). It is worth to note that gaining a better understanding of a history prior to the construction of the historic building, as well as a history during its construction period, should not be overlooked. Moreover, the Initial Project Planning Stage also covers gathering relevant national and local regulations, guidelines, and standards that are necessary for the conservation of the historic building.

The Planning Stage is to provide a preservation plan that should include the following information: key historical information (including archival research); site survey information; statement of significance; identification of character-defining features; documentation of existing conditions both interiors and exteriors (using maps and photos depicting existing physical conditions); material analysis covering assessment of overall conditions; recommendation for appropriate treatments; and future compliance requirements. In addition, a preservation plan also provides information about program functions of the building. The goal is to make the best possible use of existing historic features, minimizing the need for interventions that might compromise historic characters of the building or site (Ibid.).

In the Conservation of the Our Lady of the Rosary Church Project, conservation methods along the initial and planning stages included the following: data collection; historic significance assessment; building condition survey; building condition and performance assessment; and recommendation for conservation treatments.

- Data Collection:

To collect and analyze imperative information including history of the Church and its setting, historic characteristics, uses and changes of the building; and to conduct litera-

ture reviews about building preservation, survey and record, and building pathology. Historical materials essential to significance statement writing for the Church and its setting include old maps, architectural drawings, and title deeds.

- Historic Significance Assessment:

To make a judgement of heritage significances, authenticity, and integrity of the historic building and setting.

- Building Condition Survey:

To conduct survey and recording of the building current condition. The methods used in this part included photographic recording, measured drawing, computer drafting and modeling; and other illustration and graphic documentation.

- Building Condition and Performance Assessment:

To investigate and analyze architectural defects; to indicate a possible interrelation among problems; and to identify levels of crises.

- Recommendation for Conservation Treatments

To analyze all crucial information; to propose proper conservation treatments; and to develop a working phasing plan and illustrate the plan's compliance requirements.

Several kinds of information gained from the initial and planning stages comprise: a) the Church's history, architectural identity, and evolution; b) statements of heritage significances, authenticity and integrity; c) the current building condition; and d) the building's damages and levels of crises, and each piece of information is described in the next part.

### **3. Useful Information from Initial and Planning Stages**

#### **A. History, Architectural Identity, and Evolution**

This part provides an understanding of key aspects of the Our Lady of the Rosary Church including: the design and construction of the building; the architectural style and identity of planning; the building's form and ornaments; and changes of the building over its history. Useful information supporting a deep understanding of the heritage covers: 1) history of the Church and site; 2) architectural characteristics; and 3) building alterations and transformation of building use.

- **History of the Church and Site**

Main purposes of historical and archival study were to: 1) identify origin and replaced state of architectural fabrics; and 2) point out influences and impacts causing alterations of the Church building and its setting in each period. Based on trustworthy historical and archival materials, the study illustrated a holistic picture of the building, site, and surrounding. Historical, social and cultural contexts of the historic building relevant to regional and national circum-

stances were also concerned as one of the important issues because they might have affected the evolution of the historic building in different phases.

Due to an idea about an all-inclusive understanding of historic building for historic preservation planning, the study considered all essential information of the Church building over its lifetime including periods prior to, during, and after the construction of the Church. A long history of the Church was chronologically divided into five periods marked by major alterations and key historical circumstances, starting from an initial settlement of Portuguese community, to the period of a construction of the third church in the reign of King Rama V, and to the recent times when catholic schools were established.

*- The 1<sup>st</sup> Phase: From the Portuguese Community in Ayutthaya to the Holy Rosary Christian Camp*

The first period of the Church started from 230 years ago when the Portuguese catholic community moved from Ayutthaya to settle along the bank of the Chao Phraya River during the fall of the Ayutthaya kingdom in 1767.

*- The 2<sup>nd</sup> Phase: From Calvario Church to the Our Lady of the Rosary Church (King Rama I - King Rama V)*

The second period was the construction period of the first timber church in 1787 and the construction of the half-timber church in 1839. The area surrounded the Church had been formed to be the settlement precinct of the Western groups. A part of the surrounding areas, called “Talad Noi” connected to the biggest Chinese communities and market places namely Sam Peng and Yoawarat. One of the important circumstances in this period is that the Portuguese members of the Church were forced to be under the French patriarch. Afterwards, the Portuguese members moved out and were gradually replaced with the Chinese catholic community.

*- The 3<sup>rd</sup> Phase: The Construction of the 3rd Church—the Our Lady of the Rosary Church (King Rama V)*

The third period was in the reign of King Rama V during the Franco-Siamese War of 1893. The third church was constructed in 1890 (B.C. 2433). At the time, the Church was surrounded by imperative buildings, such as modern department stores, United Club, Hong Kong and Shanghai Bank, and a number of Western embassies.

*- The 4<sup>th</sup> Phase: The Establishment of Schools (King Rama VI)*

In this period, two catholic schools were established in the compound area of the Church. During the post-World War Second Period, the schools were expanded. A number of the schools’ buildings were increasingly constructed.

- *The 5<sup>th</sup> Phase: The Restoration of the Church / ASA Conservation Award / Kularb Wittaya School (combine 2 schools):*

The mid of 1980s was the time of the major restoration. The success of the restoration project led the Church to achieving the ASA Conservation Award in 1987. The important circumstance in this period was the merging of the two catholic schools.

#### - Architectural Characteristics

The study involves identifying the Church's architectural characteristics that are of the Gothic Revival Style, considering space, form, and character defining features, for instance, a bell tower, a high pitched roof, rose windows, pilasters, pinnacles, lancets, and pointed arches.

The Gothic Revival style was influential in Asia during the late 18-19th Century. The Our Lady of the Rosary Church showed unique form, space, and building ornaments with sophisticate design and construction. All original architectural elements and decorations were precisely designed for the Church building. The orientation of the Church followed the criteria of Catholic Church that the Christian worshipped towards the East ("ad orientem" in Latin words). The architectural plan of the Church is in the "Roman Cross" shape with dimension 23.03 x 50.65 meter. The symmetrical plan and the volume of main interior space—including: the space of nave; altar; north and south chapels—have helped the Church to maintain its stability and firmness until these days. It showed good structural design using masonry bearing wall construction and foundation that fit the site's ground condition. Moreover, architectural elements—for instance, the vents in the lower parts of the walls—were well designed to fit the tropical climate.

Besides identifying the Church's Gothic Revival characteristics, this project also found several historical evidences indicating that Joachim Grassi, a famous western architect working in Siam in the reign of the King Rama V, was an architect who designed the existing Church building.

#### - Use Transformation and Changes

This part examined transformation of uses and alteration of interior and exterior fabrics of the Our Lady of the Rosary Church. The major restorations were taken place during the 60th, the 90th, and the 100th Anniversaries of the Church.

- *The First State*

The first period started from the construction of the Third church in the late 19th Century until the second Vatican Ecumenical Council (1962-1965), known as Vatican II. In this period, the Church was in its “original state” without any major alteration or intervention practice.

*- The 60<sup>th</sup> Anniversary—the period consequent by the second Vatican Ecumenical Council during 1962-1965 (B.E. 2505-2508)*

The second Vatican Ecumenical Council caused a major change in the Church’s interior planning, particularly in the sanctuary area. The high altar that used to be attached to the tabernacle was moved to the center of the sanctuary area. The priests could face towards the congregation (*versus populum* in Latin words) when they worship. This tradition has been carried since then.

*- The 90<sup>th</sup> Anniversary: the first major restoration during 1983-1985 (B.E. 2526-2528)*

During the period of the first restoration work, the deteriorated components, such as the roof, tower, wall, floor, and architectural ornaments, were restored; while some poorly damaged elements were replaced with replicas. The building systems—including electrical and water drainage systems, were restored. Thanks to the proper concept of the first restoration, most of the worsened elements were repaired and replaced with quality materials compatible with the original ones. For instance, terra cotta roof tiles and cement floor tiles were well preserved. However, the replacement of Portland cement to original lime mortar has caused severe dampness problem.

*- The 100<sup>th</sup> Anniversary: the second major restoration in 1997*

Ten years after the first restoration, the second restoration was carried out. Some deteriorate components, especially roof tiles and roof gutter, were repaired while the worsened ones were replaced with the new ones.

*- The Minor changes after the second major restoration to the present day (during 1997-2017 /B.E. 2540-2560)*

Along the past twenty years, there have been some minor changes, for instance, the repair of walls, the extension of the altar’s floor and steps, the addition of confession rooms, and the construction of the pavement of the plaza (the school’s outdoor multi-purpose area) in front of the Church building.

B-10 หน้าจั่ว: ว่าด้วยสถาปัตยกรรม การออกแบบ และสภาพแวดล้อม  
วารสารวิชาการ ประจำคณะสถาปัตยกรรมศาสตร์ มหาวิทยาลัยศิลปากร

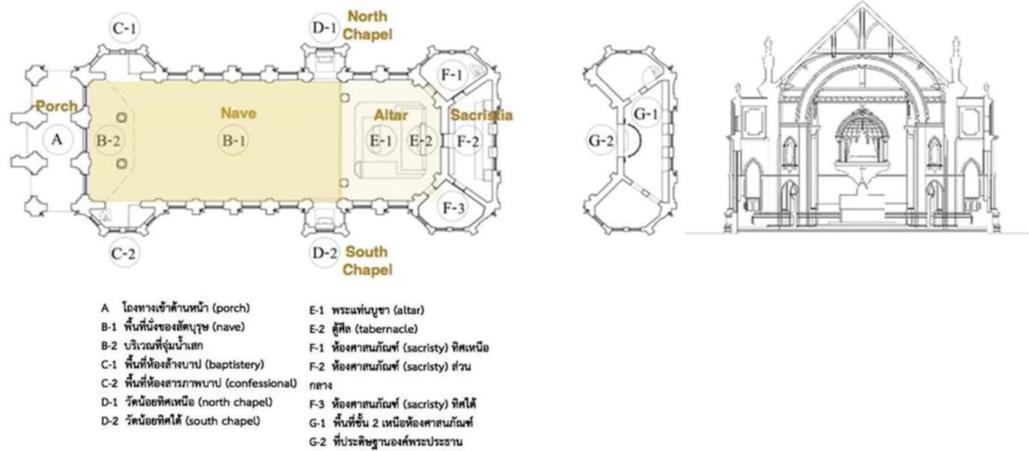


Figure 1: Plan and section of the Our Lady of the Rosary Church



Figure 2: The Our Lady of the Rosary Church (the 3rd church) constructed in the Reign of King Rama V

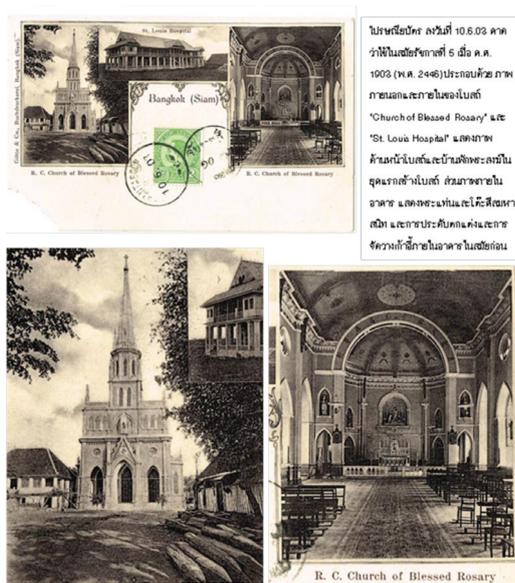


Figure 3: The Our Lady of the Rosary Church (the 3rd church) in the Reign of King Rama V (1903)



Figure 4: The Church in the Gothic Revival Style



Figure 5: The first heavy restoration during 1983-1985



Figure 6: “A Living heritage,”  
the Church still has been  
actively used for religious  
and communal services

## **B. Statement of Heritage Significances, Authenticity and Integrity**

This part of the study used the information from Part A to assess heritage significances, authenticity, and integrity of the Church.

### **- Statement of Significances**

The Our Lady of the Rosary Church possesses high values in terms of historical significance, architectural significance, artistic significance, and social significance. Regarding historical significance and architectural significance, the Our Lady of the Rosary Church could be considered as one of the most important architecture in Thailand. This building has been related with several key historical events and associated with important persons in local and national levels. This church also represents an old settlement of ethnic groups during the early Rattanakosin Era. The first group was the Portuguese catholic that moved from the Portuguese Village in the Ayutthaya Kingdom due to the ruin of the capital during the war of the second fall of Ayutthaya and, later, formed the Our Lady of the Rosary community in the area around the location of the current church building. The other groups were the oversea Chinese immigrants, in particular merchants and craftsmen, who had tight connections with other Chinese groups in China Town nearby the Holy Rosary community.

In term of artistic significance, this church represents Gothic Revival artistic and architectural features. It shows influences of a movement of the Revival style architecture in Siam as well as in other Indo-China countries during the 19th Century.

It also presents the delicate design by Joachim Grassi. This church was one of his last works during his stay in Siam.

Apart from being the best instance of Western style architecture in Siam with good architectural design and construction, today, the Our Lady of the Rosary Church is the third oldest existing church building in Thailand. As a religious place, it has been a spiritual and communal space for the Portuguese catholic people in the initial period, and then the Chinese catholic members in the latter periods. It expressed social significance consistent with its function in the interweaving urban communities of multiple cultures.

#### **- Authenticity and Integrity Assessment**

The Our Lady of the Rosary Church expresses high authenticity in location because the Church has originally been situated on its present site where the Portuguese settlement might have once stood. However, its setting has been transformed along its history, and it can be pointed out that the current conditions of the Church's surrounding buildings and physical elements do not contribute to values of the Church. The Church has high authenticity and integrity in term of use. Particularly, it has been maintained its original function as a center of the Catholic Christian community and been a part of Talad Noi, the urban Chinese community. It is obviously that the building's spirit has still been transmitted from one generation to the next. Regarding the authenticity of the building's form and design, the church's architectural ornaments and materials were repaired and replaced several times through previous restorations while the original main structures, planning and architectural elements have been retained. Therefore, it can be evaluated that the authenticity in terms of the building's materials, substances, workmanships, and traditional techniques is in a fair level.

The value-based statement of significances helps identify conservation principles and methods and determine a course of action in the next part.

#### **C. Current Building Condition**

The building surveys and recording work was focused on current conditions of the church building. Because the historic building was still intact, the work was carefully scheduled so that the survey and documenting activities did not disturb religious ceremonies carried out at the Church. Therefore, non-destructive techniques

were selected for the building and site investigation. The recording was divided into many parts by architectural elements including: roofs, walls, doors and windows, floors, stairs, ornaments, electrical system, water supply and water drainage systems. As a result, the documents; including architectural measured drawings, graphic illustrations, and photographs, helped reveal current conditions of the existing architectural features and point out the parts that were deteriorated.

#### **D. Building Damages and Levels of Crises**

The study not only indicates the building's physical changes defined as deterioration but also identified the causes of the building's defects, low performance, and degradation of heritage values. The investigation was grounded on consideration of a holistic view of the historic building and its site. All parts of building structures, fabrics and ornaments were exclusively investigated because the building's deteriorated and damaged features have been interrelated with one another. Some deterioration and consequential damages have been caused by the same agents. Therefore, series of damages should be all together analyzed.

In this part, the building's deterioration and current condition were assessed and then categorized into three levels of crises: 1) Very Poor/Extremely Damage; 2) Poor; and 3) Fair. Moreover, the damages resulted from previous restoration works were identified.

##### **- Damages of the Church building**

The deterioration of the Church building can be divided into four main groups.

*- Group A The damages of the roof drainage features, roof tiles, interior and external walls, and wall decorations (such as stucco molding, and wall painting).*

Based on the surveys, these damages have been affected by leaking rain water from the roofs to the upper parts of walls. The damages were also caused by deterioration of the building's roof tiles, roof gutters, water sprouts, and wall bricks and mortar. The other severe problem is the deteriorated stucco molding on top of the interior walls. To stop the decay and consequential damages, the water leakage problem should be primarily solved.

*- Group B The problems of ground/differential settlement and decrease of brick strength causing cracks on the wall, the area between the point-arched window and the rose window.*

Analytically, the causes of the cracked wall between the point-arched window and the rose window include:

- Deterioration of bricks leading to the decrease of brick strength;
- Ground/differential settlement; and
- Consolidation technique in the previous restoration work done by adding reinforced concrete beams into brick bearing wall.

The crack problem was one of the severe crises that should be urgently repaired. All causes leading to this problem should be solved. There are future works including to inspect the condition and strength of bricks, and to specify expansion of the cracks that should be done in order to gain more specific information before choosing conservation techniques. Additionally, the site's ground and differential settlement should be measured and analyzed.

- *Group C* The problems of dampness from ground soil and damages due to crypto-fluorescence and efflorescence caused by the use of Portland cement in the previous restoration works.

Based on the building inspection, the decay of the brick walls was affected from series of causes including:

- The use of Portland cement in the previous restoration works (particularly in the mid of 1980s) has brought about the unsolved problem of crypto-fluorescence on the brick masonry wall surface. As a result, some of the bricks on the church wall have been disintegration, crumbling, blistering, and exfoliation. Some parts of the brick walls have had efflorescence formation. Some dry marks of the salts have appeared on the deteriorated wall surfaces, especially in the areas that have falling-off pieces of bricks and mortar and holes of unused electrical outlets.

- Dampness from ground soil and rising groundwater has been caused by the construction of hard surface pavements around the Church building. As a result, dampness from the ground soil and groundwater could not evaporate through the ground surface, so the moisture has passed through the porous brick wall and evaporated through the wall surface. Simultaneously, it has caused such efflorescence effect when groundwater reacted with dissolved salts. Salts deposits have created the white stains—which is dry marks of salt on the highest level of dampness –on the interior wall surfaces.

- Dampness caused by air conditioning units located in the additional confessional booth in the existing confessional area inside the Church. The surveys found that there were some water and salt stains on the surface of the walls in this area.

The presence of crypto-fluorescence and efflorescence caused by dampness and dissolved salts should be raised as a hazardous problem. The salts should be examined through a laboratory study in order to find a proper technique to remove the salts and to prevent the agents bringing further damages to the building.

- *Group D* Deterioration of materials

The deterioration of materials was divided into several groups based on types of architectural elements, for instance, roof tiles, wooden doors and windows, and stain glasses. To

preserve the original materials and characteristics, thorough inspection and condition assessment of each building component is required in order to minimize replacement of original items and materials as well as to prioritize and quantify repair and replacement work.

- Physical problems of the site surrounding

Based on inspections, the occurrence of flood waters during heavy rain or high tide should be raised as one of the severe problems that need to be solved as early as possible. The site's water drainage system needs improvement on urgent basis and the investigation of the cracks on the concrete embankment along the River should be conducted.

**A. Roof drainage \* Roof tiles \* External wall \*  
Internal decoration (stucco, wall painting)**

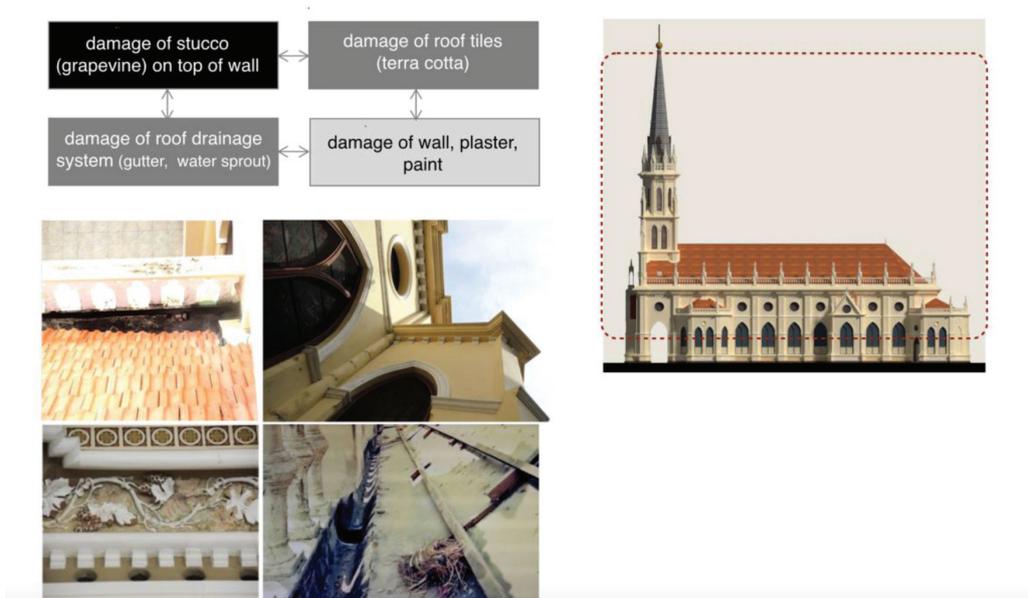


Figure 6: Group A: The damages of the roof drainage, roof tiles, interior and external walls, and wall decorations

**B. (ground/differential) Settlement \* Decrease of the brick strength\*  
Cracking (cracks on the wall near point arch)**

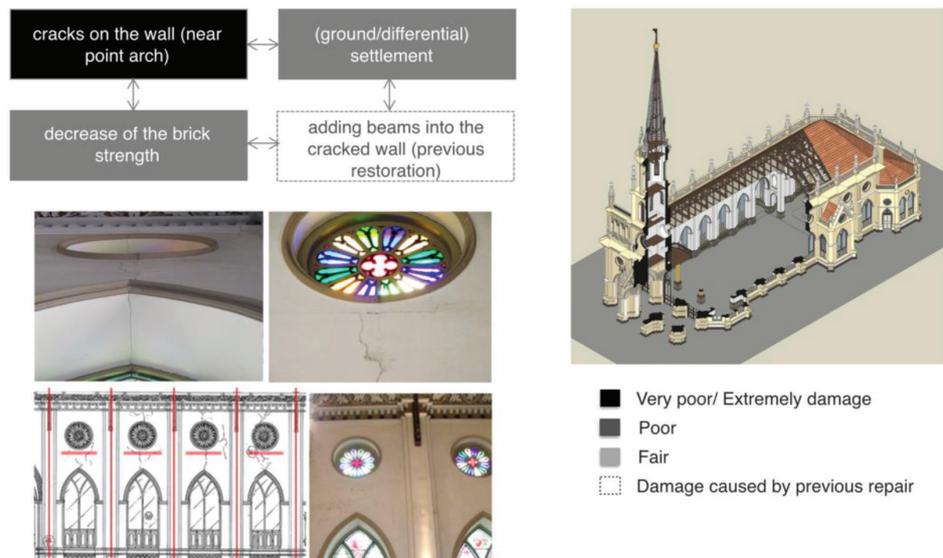


Figure 7: Group B: The problems of ground/differential settlement and decrease of brick strength, have caused extensive cracks on the wall area between point-arched windows and rose windows

**C. dampness from ground soil \* damage caused by the use Portland cement (previous restoration) \*  
dampness and crypto fluorescence / efflorescence**



Figure 8: Group C: The problems of dampness from ground soil, crypto-fluorescence and efflorescence, caused by the use Portland cement in the previous restoration works

B-18 หน้าจั่ว: ว่าด้วยสถาปัตยกรรม การออกแบบ และสภาพแวดล้อม  
วารสารวิชาการ ประจำปีคณะสถาปัตยกรรมศาสตร์ มหาวิทยาลัยศิลปากร

**D. deterioration of materials**



Figure 9: Group D: Deterioration of materials

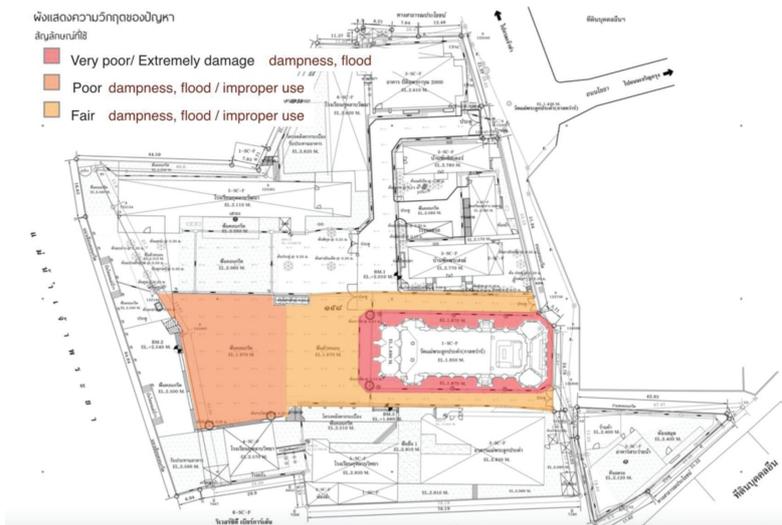


Figure 10: Physical problems of the site surrounding

#### 4. A Recommendation for Conservation Treatments

This part used all information from the study in the previous parts for designing appropriate course of actions.

##### Conservation Principles and Policies

The recommendation for the conservation of the Our Lady of the Rosary Church is based on the evaluation of the Church's heritage significances, authenticity and integrity as well as on the objective evidences from the survey and documentation. Correspondingly, the key conservation principle for the Our Lady of the Rosary Church is A Living Heritage because the Church has been actively used for its original function, particularly serving religious and social activities. A living heritage is also referred to a Sense of Place through a sense of strong association among networks of Chinese-Thai Catholic society.

According to the conservation principles, conservation policies are as follows.

*- To preserve originality of the design and form in the Gothic Revival style.*

Structure, planning, form, architectural elements, and decorating ornaments, identifying the Gothic Revival style should also be retained. However, layers of history and contemporary uses should be strongly considered.

*- To retain original materials, substances, workmanship and traditional techniques.*

In case of replacing damaged/lost original architectural components, the quality of the new ones should be compatible with the original ones in term of material quality, design and craftsmanship, and general appearance.

*- To enhance the original use of the building, especially as the center of religious and community activities.* Any new uses should suit for existing uses. The utilization of outdoor space and land sharing between activities of the Church and those of the school should be rearranged.

*- To improve the site and surrounding of the Church that is currently in poor condition.*

Not only that does the improvement of the site drainage system need to be done, but an interpretation plan to present the history of the Church through various kinds of tools should also be conducted. Moreover, the site's landscape should be improved in term of visual quality of the site. Architectural landscaped elements surrounding the Church building should be redesigned, especially for the waterfront area.

In accordance with the conservation policy that focuses on minimum preservation work to protect origin state of architectural fabrics and materials, the conservation work process presented in the preservation plan of this project is to be started from solving a severe crisis,

such as the dampness in the building wall and the flood problem. The repair and replacement of deteriorated of architectural elements and structures that are considered hazardous for the Church's visitors need to be done as soon as possible. The latter works covers the construction work for the site drainage system and the restoration of landscape elements and pavement in order to solve the problem caused by heavy rain, water flood and dampness from ground soil. Then the last part covered restoration of architectural elements; the repair and replacement of deteriorated part are to be done.

Prioritization of conservation works is based on level of crises of the problem. A hazardous problem with a high level of crisis should be treated as a top priority. Moreover, conservation works should be started from the upper parts to lower parts of the Church building in order to avoid unnecessary additional (or duplicate) work.

### **Preservation Plan**

According to the prioritization criteria stated above, a conservation plan for this project covers four phases of preservation works as follows.

#### *- Phase 1*

Preservation works for the first phase include: the restoration of the tower and the roofs. The roof works consist of: the repair and replacement of roof tiles, roof gutters and downspouts; and the restoration of the decorative elements of the main roof.

#### *- Phase 2*

Focused on solving flood problem, the second phase includes: the design and construction of the water drainage system for the whole property (on which the Church building, the associated buildings, and the school buildings are situated); and the investigation and maintenance of the concrete embankment along the River

#### *- Phase 3*

The works in this phase comprise of solving the problem of dampness in the Church building walls by replacing the existing hardscape pavements around the building with softscape features to allow water evaporating through a breathing material. The other main works is the restoration of the deteriorated walls that includes: consolidation of brick masonry wall; and replacement of Portland cement mortar with lime mortar. It is also recommended that an electrical wiring system on the wall be planned ahead in order to be completed in this phase.

#### *- Phase 4*

The final phase covers restoration of other architectural and decorative elements.

### **5. Conclusion**

This paper reveals that the information gained from the Initial Project Planning Stage

helps to provide a deep understanding of the Our Lady of the Rosary Church. It is worth to point out that information should be in a holistic view, covering all aspects of the historic building as well as the history and evolution of the place over time. The study of the Church building concerning various aspects of the Church including: historical and archival data based on the authentic reliable resources; historic significances based on value judgment; and documentation information of the building's current conditions gathered by non-destructive investigation techniques. The study of each aspect should be clearly distinguished and be separated from one another; however, each of them helps to support and to reaffirm correctness of one another. The data gained from the preservation process helps to clarify original fabrics, as well as to define significant features that are associated with different periods of the development of the Church, in other words with changes of the Church building's space and site over time.

Based on the evaluation of all significant aspects of the Church building, the latter stages of the preservation process, including: a design development stage; a construction stage; and a management stage, can be created in a way that helps to retain the building's significances as a whole as well as to illustrate the prioritization and budget management for conservation construction works.

Even though the study followed the preservation process based on international doctrines, it faced some obstacles causing the discontinuity of each state of the conservation project. Therefore, for the future use of the information gathered from the study in the initial stage, a revision of the information is mandatory. Also, the conservation methods presented in the planning stage should be redesigned to fit circumstances at the time.

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