



**A STRATEGIC APPROACH TO MANAGING THE CULTURAL HERITAGE VALUES OF
SUANSUNANDHA - A MODEL FOR SUSTAINABLE TOURISM**

**By
Suwannarit Wongcha-um**

**A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree
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Program of Architectural Heritage Management and Tourism
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This research examines the cultural heritage significance of Suansunandha as an inner court of Thailand. It analyses the cultural significance, it evaluates the impacts of tourism and it reviews cultural heritage management leading to new policy development to manage the cultural heritage values of Suansunandha.

The research findings demonstrate that Suansunandha has passed through six stages of the changes and development since 1908. However, all cultural heritage values of Suansunandha are associated with the period of Royal Garden and Royal Residences (1908-1923), the Growth of Royal Inner Court (1924-1932), and the Rejuvenation to Education Institutes (1937-1957). Suansunandha is an important place because it provides evidence of the royal garden and the glorious inner court demonstrating the golden age of the European architecture in Thailand and representing the beginning period of the national education development. Suansunandha also provides evidence of a Romanticism plan because it comprises the residences in the villa style; the countryside landscape and the hall as the central clubhouse of the inner court.

The results of the impact analysis as part of the management policy are gathered from stakeholder's opinions of Suansunandha in the evaluation of tourism impacts and potentials on cultural heritages of Suansunandha. The stakeholder's evaluation is the guidance of managing visitors and interpreting cultural heritages of Suansunandha.

The management policy of Suansunandha is formulated in relation to the cultural significance, and opportunities and constraints arising from the cultural significance and tourism development. The policy emphasizes retaining balance between the quality of cultural significance and satisfactory experience of visitors, and enhancing the understanding of cultural heritage values of Suansunandha. The policy framework consists of the conservation, visitor and interpretation management. The conservation management policy is ensured that new development, future use, interventions and conservation tasks would enhance the cultural significance of Suansunandha. The visitor management policy is designed to meet needs of target visitors, and to sustain cultural heritage values and the quality of life of stakeholders in Suansunandha. The interpretation management policy contributes to the understating of cultural heritage values in the period of Royal Inner Court through common and new media.

Sustainable tourism development and the continuity of cultural significance in Suansunandha would be impossible if the management policy lacks supports from all relevant parties in Suansunandha. The policy framework encourages stakeholders of Suansunandha participating in the management structure in order that all decision-makings are acceptable to everyone in Suansunandha. Besides the conservation policy, the stakeholders of Suansunandha are also engaged to be part of the visitor and interpretation management policy as service providers. Moreover, their views should be monitored always to ensure that tourism development would not cause social conflicts.

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Chapter 1

Introduction

Background of Suansunandha

Suansunandha that used to be an important royal inner court of the Kingdom of Thailand was established by King Rama V. There were three major purposes of building Suansunandha in order to commemorate Queen Sunandha passed away in a boat accident in 1880, to develop the king's private park and to prepare a setting of royal residences for the king's substantial family.

The revolution of the kingdom in 1932 influenced the use of Suansunandha setting. The traditional boundary of Suansunandha is now divided into three areas. There are two educational institutes and two government departments coexisting in the present ground of Suansunandha. The first two organizations, consisting of Suan Sunandha Rajabhat University and Suan Dusit Rajabhat University, provide tertiary education as public universities under the control of the Ministry of Education. The latter departments are government agencies, the Department of Local Administration and the Department of Provincial Administration regulated by the Ministry of Interior, facilitating administration of local government agencies of rural areas. Even though they serve the public with different functions, their major operational budgets depend on government subsidies. Moreover, they separately manage and maintain the cultural heritage values of Suansunandha with limited financial resources.

The government policy regarding decentralization and privatization may impact on the cultural heritage management of Suansunandha. These two public universities would eventually become autonomous universities under the Government's supervision and they will be able to generate and manage their own incomes. However, some people are worried about inadequate budget allocations to preserve the cultural heritage. Besides the lack of conservation budgets, they are also concerned about awareness and understanding of cultural significance. Although the departments are not affected by privatization, they also encounter insufficient budgets to manage the cultural heritage well.

Potential cultural resources in Suansunandha can be developed as a secondary tourist attraction to generate economic benefits and also encourage people learning more about the cultural significance. Due to the setting of Suansunandha is closely connected to a major tourist attraction (Vimanmek Mansion), cultural tourism may stimulate the stakeholders' interests to contribute cultural heritage conservation and continuity. Conversely, the prospective costs and benefits of cultural tourism development should be analyzed to predict changes that could cause critical damages to cultural heritage values.

The major purpose of providing services to students as a formal education and public service as a primary function should be sustained while an informal education and economic benefit through the aspect of cultural tourism should be a supplementary activity.

Therefore, this dissertation aims to demonstrate how not only cultural heritage conservation can be sustained but how also cultural tourism will help to engage people to become aware of, appreciate and understand the cultural heritage values in Suansunandha. Nevertheless, the conservation and exploitation of the cultural heritage values should be balanced along with sustainable development.

Research Question

Apart from present functions providing educational and public services, shortage of adequate understanding of heritage values, including lack of integrated policies have impacted on cultural heritage values of Suansunandha. Therefore, the problems are turned to be the following research question:

What would be the most suitable way to protect the cultural heritage values and allow the cultural tourism development in Suansunandha?

From the question, this research is convinced that sustainable forms of tourism will lead to a “concept of sustainable development to tourism” and “cultural resources” (Bramwell et al., 2000). Consequently, research hypotheses are:

Sustainable tourism may encourage a balance between utilization of cultural heritages and conservation of cultural heritage values; and

Sustainable tourism may decrease adverse effects of conservation and tourism development on economic, socio-cultural and environmental dimensions.

Goals and Objectives

1. To investigate tangible and intangible cultural heritage values of Suansunandha
2. To assess significant elements of cultural heritage values in Suansunandha
3. To evaluate potential economic, socio-cultural and physical environment impacts of cultural tourism and cultural heritage management
4. To outline a management policy for the cultural heritage values and tourism in Suansunandha
5. To define a strategic model to manage the cultural heritage values within the context of sustainable tourism development of Suansunandha

Scope of the Study

Study Areas. Boundaries, buildings and places of this research were focused on three areas within Suansunandha, ten historic buildings and one air-raid bunker inscribed on the National Register of Historic Sites by the Fine Arts Department. The first area consisted of one air-raid bunker and six buildings in Suan Sunandha Rajabhat University (SSRU). The second area was comprised of two buildings in Suan Dusit Rajabhat University (SDRU). The last area was composed of one building of the Department of Local Administration (DLA) and Nongkransamosorn Hall of the

Department of Provincial Administration (DPA). Apart from the buildings and places, involved people and related events to them were also researched.

Stakeholders. This research emphasized stakeholders who were directly impacted by the cultural tourism development and cultural heritage management. The target stakeholders were divided into a long term (or permanent) member group and a short term (or temporary) member group of Suansunandha. The long term group consisted of lecturers, staff and the management of both universities including officers and the management of the government departments. The short term members were students of SSRU and SDRU.

Study Periods. Because several changes had occurred within Suansunandha, this research examined both tangible and intangible changes from the time of the acquisition by King Rama V to 2010. Six periods of social changes and physical development were demonstrated in this dissertation, but two phases of changes were examined closely. The first phase was connected with the overlapped periods of the Royal Garden and Royal Inner Court during 1908-1932, and the second phase of change was associated with the period of educational institutes during 1937-1957.

Study Impacts. This research studied both positive and negative effects on economic, socio-cultural and physical environments of the cultural tourism development.

Study Values. The value is an enhanced understanding of how the social, historic, scientific and aesthetic values are managed sustainably within a modern urbanized society and within the broader tourism environment.

Overview of Research Methodology

This research design was divided into sections of physical investigation, target population, sampling, data collection, data analysis (evaluation of meaning) and conclusion.

Physical Investigation. The investigation process was to study physical evidence and to investigate current conditions of Suansunandha leading to the analysis of cultural significance, and opportunities and constraints of the management policy.

Target Population. A defined population consisted of stakeholders who were directly engaged in or influenced by changes in Suansunandha (target respondents) and who should have historical knowledge of Suansunandha (key informants).

Sampling. Sampling units comprised three areas covering Suan Sunandha Rajabhat University, Saun Dusit Rajabhat University, the Department of Local Administration and the Department of Provincial Administration. Sampling techniques were based on both qualitative and quantitative techniques. The qualitative data was collected by snowball sampling technique while the quantitative data was collected by convenience sampling technique.

Data Collection. The research required both primary and secondary data in order to learn about heritage places and their cultural context, to assess cultural significance, to analyze management's opportunities and constraints; and to form a policy framework. Therefore, documentary evidence and physical analysis were gathered as the secondary data while the primary data was collected by semi-structured

interviews and questionnaires.

Data Analysis. This research employed two analysis approaches for qualitative data consisting of the content analysis, and the data display and analysis to evaluate and present results. The former approach was adopted to analyze published documents and physical evidence; and oral history. The latter approach was used to analyze data collected through the semi-structured interviews. For quantitative data, the data collected by questionnaires was analyzed with frequencies, percentages and means. At this stage, the analyzed data were summarized and synthesized to design the framework policy of the cultural heritage management.

Conclusion. The research findings were reviewed in conjunction with research question and the objectives in order to present a strategic approach to manage the cultural heritage values of Suansunandha.

Process of the Study

1. To formulate the research subject and to specify problems and objectives
2. To review literature regarding theories and concepts including related studies of cultural tourism, cultural heritage managements, sustainable tourism development, and impacts of tourism and conservation
3. To gather documents, to investigate physical evidences, and to interview with key informants of the heritage places about inventory, current conditions, present relationship and physical changes of all elements in Suansunandha
4. To design collection instruments of self-administered questionnaires to obtain stakeholders' opinions regarding social value analysis, and tourism impacts and potentials
5. To conduct field study in SSRU, SDRU and DLA
6. To interpret research data by the content analysis, the data display and analysis, and descriptive statistics
7. To consider cultural heritage values and to prepare statements of cultural significance
8. To analyze opportunities and constraints arising from cultural significance, and tourism impacts and potentials
9. To outline a conservation, interpretation and visitor management policy
10. To present an outlined model of conservation, interpretation and visitor management policies based on the research objectives

Overview of the Dissertation

The dissertation's contents are described from the introductory chapter to the conclusion chapter. Brief details of each chapter are displayed below.

Introductory Chapter. Chapter one demonstrates issues of the study, a well worth study and the study's procedures. The chapter describes the background of

Suansunandha and also includes research questions, objectives, scope of the study, overview of research methodology, process of the study and overview of the dissertation.

Literature Review Chapter. Chapter two explores concepts, compares related studies and indicates previous studies connected to this research. Relevant literatures and preceding researches are concentrated on stakeholders, cultural heritage management, conservation, interpretation, impacts of tourism, sustainable tourism, cultural tourism, marketing management, and new media and information technologies.

Research Methodology Chapter. Chapter three thoroughly exhibits research process and study procedures according to the research objectives. This research design embraces physical investigation, target population, sampling, data collection, data analysis and conclusion.

History and Evidence Chapter. Chapter four presents overview history, physical and social environment, and sequences of the change and development in Suansunandha.

Condition and Description Chapter. Chapter five is associated with overall current condition of Suansunandha and describes physical conditions of all historic buildings in Suansunandha.

Analysis of Evidence and Significance Chapter. Chapter six indicates important evidence during the periods of the Royal Garden and Inner Court and the Educational Institutes. This chapter is also related to cultural significance analysis of Suansunandha.

Cultural Significance Chapter. Chapter seven explains contemporary social significance assessed by key stakeholders of Suansunandha, statements of cultural significance, level of significance and the comparison between actual and contemporary social significance.

Opportunities and Constraints Chapter. Chapter eight discusses the future of Suansunandha. This chapter demonstrates opportunities and constraints arising from cultural significance and tourism leading to a management policy of Suansunandha.

Framework Policy Chapter. Chapter nine demonstrates the outline of the management policy to conserve and interpret cultural significance and to manage visitors of Suansunandha. The last part of the chapter recommends findings and implication by how this research can be conducted in the future and how it can be used to improve the cultural heritage management in Suansunandha.

Conclusion Chapter. Chapter ten demonstrates answers to the research question and the objective achievement. This chapter starts with the research objectives, summarizes the achievement of each chapter and also displays a strategic approach in a diagram.

Definition of Key Terms

The Fifth Reign means the period of King Rama V, King Chulalongkorn, ruling the Kingdom of Thailand during 1868 to 1910.

The Sixth Reign means the period of King Rama VI, King Vajiravudh, ruling the

Kingdom of Thailand during 1910 to 1925.

The Seventh Reign means the period of King Rama VII, King Prajadhipok, ruling the Kingdom of Thailand during 1925 to 1935.

The Eighth Reign means the period of King Rama VIII, King Ananda Mahidol, ruling the Kingdom of Thailand during 1935 to 1946.

Dusit Royal Palace means a royal palace initiated by King Rama V and entitled Suan Dusit Palace and Suan Dusit Royal Palace respectively. Then, King Rama VI renamed the palace as Dusit Royal Palace.

Inner Court means the residence for female members of the royal family of King Rama V.

Suansunandha means a royal garden and an inner court during 1908-1932, and locations of educational institutes and government agencies since 1937. At present (2011), Suansunandha consists of Suan Dusit Rajabhat University (SDRU), Suan Sunandha Rajabhat University (SSRU), the Department of Local Administration (DLA) and the Department of Provincial Administration (DPA).

The revolution means the revolution in 1932 that changed the ruling system of the Kingdom of Thailand from absolute monarchy to the democracy, or the democratization revolution.

Chapter 2

Literature Review

This dissertation reviewed literature and preceding research in order to be a framework of the study according to the dissertation's objectives. Concepts, principles, theories and relevant research were synthesized and summarized in this chapter consisting of:

1. Stakeholders
2. Cultural heritage management
3. Conservation
4. Interpretation
5. Tourism impacts
6. Sustainable tourism development
7. Cultural tourism
8. Marketing management
9. New media and information technologies

Stakeholders

Stakeholders in Business Context

In business management perspective, stakeholders might be directly or indirectly influential to organizations. They consisted of various individuals and parties within and on the outside of organizations including “hybrid members” (Schneider, 2002). In order to develop an effective stakeholder management, a successful organization defined types of relevant stakeholders, considered both potential supports or benefits and threats or suffers from different stakeholders; and then, created strategies to manage stakeholder relationship (Savage et al., 1991; Schneider, 2002).

Organizational “stakeholders include those individuals, groups and other organizations who have an interest in the actions of an organization and who have the ability to influence it” (Savage et al., 1991). These authors also developed a framework to distinguish stakeholders into four types: the supportive stakeholder, the marginal stakeholder, the non-supportive stakeholder and the mixed blessing stakeholder.

Moreover, four strategies were proposed to change relationships from less favorable to more favorable stakeholders (Savage et al., 1991). These four approaches were to involve the supportive stakeholder, to monitor the marginal stakeholder, to defend against the non-supportive stakeholder and to collaborate with the mixed blessing stakeholder.

Schneider (2002) applied internal, external and hybrid stakeholders associated with new business practices as important inputs into leadership model that emphasized relationship between leaders and employees. This study emerged that inclination of reduced authority was a result of decrease in traditional vertical downward stakeholders. The second result led to expansion of new stakeholder control derived from increase in other intra-organizational stakeholders. Finally, the outcome of the study revealed that greater complicated role was taken place by increase in inter-organizational stakeholders.

Stakeholders in Context of Tourism

Tourism was concerned with many activities and people in origin, transition and destination regions. Within tourism system, interactions among stakeholders might occur within economic, socio-cultural and physical environments. The involvement of stakeholders had been initiated since tourists booking accommodation from tour operators in their residences. Then, such involvement might be interaction between tourists and a taxi driver en route to attractions. Eventually, when tourists arrived at the destination, local communities might suffer from overcrowding. These relationships also existed in “the tourism stakeholders system” (Weaver and Lawton, 2002) consisting of tourists, host communities, host government, tourism industry, universities, community colleges, non-governmental organizations and origin government.

Stakeholders as a Part of Sustainable Tourism Development

Even though sustainability concept emphasized on stakeholder involvement as a key factor of planning process, it was not easy to define relevant stakeholders (Munro, King and Polonsky, 2006). Furthermore, their goals and objectives were unequally achieved because there were different perspectives on short and long term benefits of sustainable development. Although these researchers also mentioned that even consulting with all stakeholders might consume time, engagement of stakeholders from the beginning process neither caused project delay nor expanded cost of postponed development.

“Sustainable tourism is about stakeholders” (Swarbrooke, 1999) that would have both rights and responsibilities in this field comprised six key actors of public sector, host community, tourism sector, media, voluntary sector and tourists. According to Swarbrooke (1999), each key stakeholder incorporated subsets of

1. Public sector consisting of supra-government, national or central government, regional government, and local government;
2. Host community embracing those people who lived within the community and even people who lived outside the community but they might be directly and indirectly affected;

3. Tourism sector comprising tour operators, attractions, transport operators, hospitality sector and retail travel;
4. Media dividing into travel and non-travel;
5. Voluntary sector consisting of non-government organizations, professional bodies and pressure groups; and
6. Mass and special interest tourists.

Different stakeholders might bring about conflict interests and views. Such conflicts were relevant to stakeholders' challenges of managing sites and conservation to meet different hosts' and visitors' needs (Timothy and Prideaux, 2004). Besides the difficulties to deal with varied interests and views, stakeholders were also aware of other contested issues on space or land use, funding, ownership, control, marketing and preservation (Timothy and Prideaux, 2004). If the development still lacked a balance between short term economic benefits and long term sustainable concepts, tourism might be incompatible with cultural heritage management. These issues existed or expanded because each stakeholder separately sought out his/her own benefit. Thus, partnership and cooperation among stakeholders were established to relieve conflicts.

Key Partners of World Heritage Management

While the number of key actors in tourism industry or even in business administration would not be too substantial to define, all of stakeholders to a World Heritage site might be formulated. Sue Millar (cited in Leask and Fyall, 2006) stated that "theoretically all the peoples of the world are stakeholders in World Heritage". They were assumed to participate in all process of managing a world heritage site; however, in fact, only some parties such as "government, conservation experts and local authorities were involved in the process." Due to aspects of conservation and management, responsibilities were enlarged from the traditional parties to regional and local stakeholders, new stakeholders integrated business sector, developers, owners, non-governmental organizations and local communities with conventional stakeholders into a partnership approach (Sue Millar cited in Leask and Fyall, 2006; UNESCO, 2008).

From general management to more specific purpose management as world heritage sites, stakeholders were regarded as a source generating problems as well as solutions. Although concerns of how stakeholders were specified and what benefits they might seek out remained, stakeholder determination helped relevant parties to project contested issues. If some process of the management missed consulting stakeholders or failed to look after stakeholder engagement, inherent conflicts became more severe.

Cultural Heritage Management

Cultural Heritage

The term "heritage is an old word" means "the property which parents handed on to their children" given by the original sense (Davison and McConville, 1991). In the past, the meaning of heritage was very concrete to mostly connect with tangible objects or

physical environments while the concept of heritage protection was limited to government responsibilities. As stated by Davision and McConville (1991), although heritage preservation was extended to professional bodies such as Victorian National Trust and international organizations such as UNESCO, the idea of heritage was given to objects, buildings and sites. Recently, the heritage was redefined to cover both tangible and intangible features.

Heritage combined both natural and cultural elements. This dissertation mainly reviewed literatures regarding cultural heritage.

According to ICOMOS International Cultural Tourism Charter (1999), the definition of

“Cultural resources encompass all of the tangible and intangible heritage and living cultural elements of a community.” and

“Cultural heritage is an expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expression and values.”

As stated by Guiding Principles of Sustainable Design (National Park Service, n.d.), National Park Service defined the meaning of

“Cultural resources are those tangible and intangible aspects of cultural systems, both past and present, that are valued by or representative of a given culture, or that contain information about a culture.”

Within Operational Guidelines for the Implementation of the World Heritage Convention (UNESCO, 2008), cultural heritage was defined in the Article 1 as the following;

-Monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which were of outstanding universal value from the point of view of history, art or science;

-Groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, were of outstanding universal value from the point of view of history, art or science;

-Sites: works of man or the combined works of nature and of man, and areas including archaeological sites which were of outstanding universal value from the historical, aesthetic, ethnological or anthropological points of view.

Besides professional body's guideline, international charter and convention defining cultural heritage, researchers also applied such definitions to be compatible with their different objectives of studies. Nevertheless, their contents of definitions were varied, most of them concentrated on the significance of cultures that was composed of intangible and tangible heritages (Taylor, 2004; McKercher and Ho, 2006), also called “immaterial and material culture” (Datzira-Masip, 2006). This meaning explained more obvious trend of present researches regarding cultural heritage concept. In addition, Datzira-Masip (2006) divided intangible cultural

heritage into contemporary cultural expression, languages, symbols and values, gastronomy, roots, and traditions while tangible cultural heritage comprised archaeology, architecture, urbanism, museums and libraries. Apart from apparent definitions were useful to classify cultural resources, they were associated with cultural heritage management for potential conservation and tourism development.

Cultural Significance

Before a policy was developed to manage cultural heritage within a place, the cultural heritage was assessed to define cultural significance. The cultural significance means “aesthetic, historic, scientific or social value for past, present or future generations” (Australia ICOMOS 1999). The concept of cultural significance establishment that was used to assess the values of places was associated with the understanding of aesthetic, historic, scientific and social values leading to establish statement of cultural significance (Australia ICOMOS, 1999). This value assessment was also applied with University of Sydney Ground Conservation Plan (Pearson et al., 2002)

For Hoi An Protocols (UNESCO, 2005), cultural significance was related with authenticity. A decision making to preserve or abandon cultural heritage depended on the degree of significance. The different degrees were based on the authenticity that was assessed by the representativeness, rarity, condition, completeness and integrity and interpretive potential of the cultural heritage. The protocols stated that the process of cultural significance assessment was associated with analyzing cultural resources, understanding their history and context, and identifying their value.

Principles for the Conservation of Heritage Sites in China (China ICOMOS, 2002) mentioned that the significance of a heritage site was associated with historical, artistic and scientific values. This significance of a heritage site differed from previous assessments because this significance assessment considered inherent values. The historical value of a heritage site was related with significant events, figures and places. The artistic value of a heritage site was connected with architectural, landscape and decorative arts, artistic works and skills, and the process of artistic expression. The scientific value reflected technological and scientific development and achievement of a heritage site.

The significance assessment of Hoi An Protocols tended to immaterial or intangible values of cultural heritages rather than other assessments.

Identity

Cultural heritage “is the places, traditions, and activities of ordinary people that create a rich cultural tapestry of life” (Taylor, 2004). Furthermore, both tangible and intangible cultural heritage were considered equally as essential elements of “the cultural identity of a destination” (Darzira-Masip, 2005).

From such definitions, tangible and intangible heritage were integrated with people and place into distinctive and valuable cultural heritage. The mentioned important components of the cultural heritage, that were consistent with Place and Placelessness model of Relph (cited in Taylor, 2004) regarding sense of place and identity, incorporated three interrelated components of Physical features, Activities and Meanings into Identity of place.

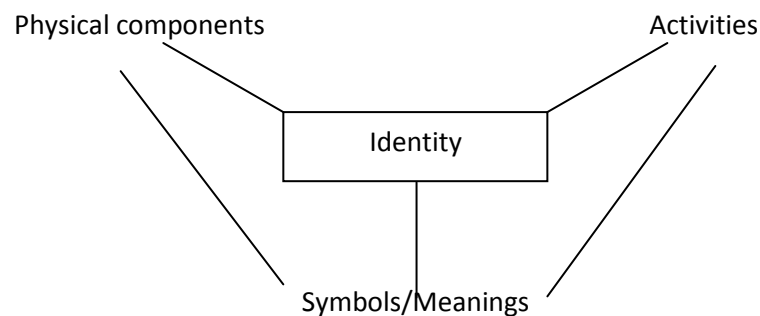


Figure 1 Place and Placelessness Model
Source: Taylor (2004)

The above model of Relph, all three interrelated components enhanced sense of place and one place more distinctive than other places. So if one of components was absent from any places, their identities might be decreased and not be considered as a valuable heritage. This might impact on making a decision to choose which place deserved preservation as cultural heritage because it was impossible to protect or conserve all heritages.

Conservation

Historic Towns and Urban Areas

Washington Charter of conserving historic towns and urban areas (ICOMOS, 1987) was associated with preserving qualities of historic characters consisting of:

- Urban patterns
- Relationships between buildings and green and open spaces
- Interior and exterior appearance of buildings including scale, size, style, construction, materials, color and decoration
- Relationship between town or urban area and its surroundings
- Functions of town or urban area

Even though the charter has been adopted since 1987, it is still contemporary with present situations. This charter mentioned that a successful conservation program depended on the participation and involvement of residents. The residents came before methods and instruments and were encouraged to be part of the conservation plan. Key elements of the conservation were associated with conservation planning, intervention, adaptation and contemporary elements such as continual maintenance, the compatibility of new uses with historic character, the respect to existing spatial layout, and controlled and planned traffic and parking areas.

Conservation Policy

A policy development was to identify opportunities and constraints, to define management policies and to establish an action plan (Heritage Victoria, 2010).

Managerial issues that were identified to define opportunities and constraints in a management policy were connected with conservation requirements, new development, new uses, interpretation potentials, multiple ownerships, resource availability, access, safety requirement and tourism.

A management policy was linked with cultural significance of a place and requirements (Heritage Victoria, 2010). The policy requirements included maintenance, repairs, uses, interpretation, stakeholders, monitoring and decision making.

The policy was put into actions by indicating required funds, skills or human resources, and defining sequences of activities (Heritage Victoria, 2010).

Strategic Plan

A management policy was developed to decrease visitor pressure and enhance cultural heritage conservation. These actions were included in a strategic plan that required spatial planning, community participation, monitoring and evaluation (Coccossis and Nijkamp, 1995 cited in Coccossis, 2006).

Spatial Planning was involved with strategies of concentration and dispersion. The concentration strategy focused on limited access of visitors to sensitive areas within a site and creates built-environment to meet visitor needs. This strategy was able to control physical impacts all over the site. While dispersion strategy applied promotional campaigns and provided facilities to attract visitors to other areas including other seasons, the pressure of sites was mitigated and, social and economic impacts were also allocated to surrounding communities.

Community Involvement was priority requirement to develop public policy and to gain public support, so stakeholders' participation and mutual agreement were taken into consideration.

Monitoring and Evaluation should be taken to study data regarding tourism impacts, effective performance and visitor experience although the plan's implementation revealed either expected results or threatened conditions. The obtained data was involved in evaluating and revising management plan and policy.

Urban Conservation

Urban conservation was associated with the improvement of historic buildings in a town (Wates, 2000:158). Seven steps of Urban Conservation process introduced by Wates (2000:159) consisted of:

1. Regeneration Project Established: To set up partnership from local authority and other amenity groups and to choose project staff
2. Technical Aid Center: To distribute information, give advice, and carry out studies about historic buildings.
3. Activity Week Started: To organize annual conservation week drawing local attention to initiate improvement such activities as competition, exhibition and guided tour
4. Annual Award Scheme Established: To award best historic building caretakers

5. Conversion to Development Trust: Project converted to responsibility of development trust (community based organization) and authority of community playing as a supporting role

6. Architecture Center: To alter a technical aid center to be an architecture center for enhancing local resident understanding and engagement to historic building and its built environment

7. Community Partnership: To renew and enlarge partnership with local authority, scholars and businesses supported by the development trust

This urban conservation process was even initiated by the local authority, but finally, the collaboration was expanded to all stakeholders participating in the whole process.

Interpretation

Most of interpretation definitions were associated with six principles of Freeman Tilden (1977) such as “interpretation is provocation and an art, and interpretation purposes emphasized on awareness, appreciation and understanding of the heritages” (McArthur and Hall, 1996).

Interpretation planning included three essential elements: the audience, the message and the technique (Hall and McArthur, 1998). Different visitors had different values, interests and characteristics. The first step was comparable with the marketing principles of market segmentation and targeting, and was to identify target audiences in order to create interpretation to meet their needs. The second step was to structure the content of interpretation. The content was influenced by heritage, heritage managers, interpreters and audiences. The structured content defined messages to communicate with different audiences. A theme, messages and a concept were associated with the content. The final step was to select techniques. Varied techniques were used to draw attentions of audiences for guided tours from the beginning to the end of the tour such as asking questions and participatory activities. Interpretation techniques were divided into verbal and non-verbal interpretation. Examples of the verbal interpretation included guided tours and walks, theatrical performance, educational activities, educational programs and historic theme parks. Examples of the non-verbal interpretation included exhibits, signs and labels, educational kits, publications, audio-visual devices, information technology and computer programs, visitor centers, galleries and museums, and self-guiding tours. The use of non-verbal interpretation was more frequent than the verbal interpretation because of the lower short term cost.

There were barriers to access and appreciate the heritage consisting of age, education, socio-economic backgrounds, disabilities and language (Alpin, 2002). Alpin mentioned that the use of interpretation enhanced public awareness through both on and off-site interpretations, encouraged visitors to have first-hand experience, added educational and entertainment values to visitor experiences, built identity, provided general and specific education, and managed visitor behaviors. Interpretation and presentation tools of Alpin were similar to Hall and McArthur such as signs, guides, printed materials, audio-visual aids, websites and visitor centers.

Tourism Impacts

Mason (2003) stated that tourism impacts were conventionally categorized into socio-cultural, economic and environmental impacts. They were not easy to be solely separated as well as they were likely to have interrelated dimensions. Tourism impacts generated not only negative effects but also positive development (UNEP, n.d.). Some attitude towards positive economic impacts of tourism development inclined to outweigh negative economic impacts (McKercher and du Cros, 2002) whereas previous works tended to propose that negative impacts were more important than positive impacts but local residents still viewed tourism as an opportunity and desired number of visitors (Jafari and Wall cited in Mason, 2003:29).

Positive Impacts of Tourism

Economic benefits

-Contributions to the local economy and regional development where tourism establishment was owned and managed by local residents rather than outsiders consequently gained direct tourism activities and revenues (Oppermann and Chon, 1997; Mason, 2003). Such revenues were able to be brought to improve local infrastructure (McKercher and du Cros, 2002).

-Job creations or generation of employment (Oppermann and Chon, 1997; Mason, 2003). Tourism was a labor intensive industry generating direct employment and inducing indirect employment from re-spending tourism income.

-Contributions to government revenues and to foreign exchange earnings (Oppermann and Chon, 1997; Mason, 2003). According to Oppermann and Chon (1997), tourism contributed to national balance and generated exchange earnings through tourists' expenditure at tourist destinations because tourism product was produced and consumed in host destinations whereas they exported travel experiences.

-Stimulation of infrastructure investment (UNEP, n.d.). Tourism attracted local government to improve local infrastructure to satisfy not only tourism sector but also local residents.

Social advantages

-Revival of traditional art or handicraft activity (Mason, 2003) or cultural rejuvenation (Oppermann and Chon, 1997) was stimulated by the demand of tourists.

-Strength and participation of communities (UNEP, n.d.). Tourism, besides encouraging cultural revival and rejuvenation, it also reduced emigration from local communities because it increased job creation. Moreover, tourism helped to raise awareness and pride of local population to participate in tourism development, operation and conservation.

-Understanding the need of conservation and retention of cultural heritage was appropriately presented to tourists through cultural tourism (McKercher and du Cros, 2002).

-Cultural exchange between tourists and local residents created

acceptance of cultural differences in societies (McKercher and du Cros, 2002; UNEP, n.d.). Tourism fostered mutual understanding and sympathy between hosts and guests leading to reduce tension and prejudices including to contribute peace.

-Sense of co-ownership (Timothy and Boyd, 2003). If local people realized participation, involvement and value, they would become enthusiastic for preservation as guardians or stewards.

Environmental impacts

-To bring back the attraction (Mason, 2003) by use of tourism revenues. Some historic buildings and sites including abandoned buildings were restored and reused with tourism purpose (Swarbrooke, 1999).

-To improve landscape and utilize marginal or unproductive lands (Mason, 2003).

-To raise visitors' interests protecting the environment and motivate government to conserve natural resources including their value as assets of tourism (Swarbrooke, 1999).

-To promote the preservation, maintenance and protection of monuments, buildings and artifacts, including the establishment of protected or conserved areas (Mason, 2003; Timothy and Boyd, 2003) as tourist attractions.

-To provide new infrastructure and upgrade existing infrastructure (Swarbrooke, 1999).

-To develop environmental change to become more "green" and to create appropriate landscaping as enhancing ambience of heritage properties (Timothy and Boyd, 2003).

Negative Impacts of Tourism

Negative economic impacts

-Inflation increasing cost of basic needs at tourist destinations (Oppermann and Chon, 1997; Mason, 2003). As a result, the increase of prices (UNEP, n.d.) of services and goods by tourism demand hiked local prices by 8% in addition to the estate and building costs.

-Opportunity costs (Mason, 2003) were caused by infrastructure development (UNEP, n.d.) of tourism that government spent less public resources for other critical areas of investment such as health and education.

-Over-dependence on tourism or market dependency or economic dependence. Small or developing countries mostly relied on tourism development as revenue generator rather than other development. They depended on one or a few tourist generating countries. When economic recession of such countries occurred, tourist destinations were effected (Oppermann and Chon, 1997; Mason, 2003; UNEP, n.d.).

-Seasonality (Oppermann and Chon, 1997) referred to seasonal character of jobs (UNEP, n.d.) that was insecurity and non-guaranteed employment hardly obtained training, medical benefit, recognition and other remunerations. Factors determined seasonality consisted of climate of destinations and holiday

patterns of tourists' countries of origin according to Oppermann & Chon.

- Leakage (Oppermann and Chon, 1997; McKercher and du Cros, 2002; UNEP, n.d.) was income from tourist expenditures after tax, wage and profit that were paid outside tourist destinations. According to UNEP, each US\$ 100 spent by a tourist from developed country, only US\$ 5 remained in a destination's economy.

- Enclave tourism (UNEP, n.d.). All inclusive packages lessened economic opportunity of local business earning tourism's income due to all expenditures tourists made already including everything they needed.

Negative environmental impacts

- Emergence of pollution, littering, disturbing locale and damage of landscape features (Mason, 2003) because of "overuse by tourists" (McKercher and du Cros, 2002).

- Physical deterioration and degradation of fabrics and assets (McKercher and du Cros, 2002; Timothy and Boyd, 2003). Physical damage of sites occurred by lacks of monitoring impacts, controlling on tourism infrastructure development and preventing natural destruction. Excessive visitor pressure generated "wear and tear" on sites caused by touch, moisture and condensation, and heat (Timothy and Boyd, 2003).

- Vandalism (Timothy and Boyd, 2003). Graffiti resulted in irreversible damage due to possible clean-up was difficult and enlarged damage to delicate surface. Apart from spray painting, souvenir hunting was also damage on historic properties. Stealing, chipping and breaking piece of artifacts as souvenirs also caused permanent damage including costly and complicated restoration.

- Destructive visual impact on natural and non-natural landscapes (Mason, 2003). New architectural styles of buildings were introduced not relevant to vernacular architecture.

- Congestion included the overcrowding of people and traffic congestion (Mason, 2003).

Negative social impacts

- Loss of cultural identity (Mason, 2003). A community became dependent on tourism leading to loss of self-reliance and traditional style activities including local customs abandoned by young people because of modernization and globalization (McKercher & du Cros, 2002). According to UNEP, there were four tourism influences on change or loss of indigenous identity and value through Commodification, Standardization, Loss of authenticity, and Adaptation to tourist demands (UNEP, n.d.).

- Commoditization (Mason, 2003). As mentioned by Mason (2003), experiences on real culture or authenticity as desire of tourists that forced cultural artifacts and performances packaged in order that tourists were able to consume them conveniently. Limited time span and tourist's expectation claimed by Stymeist (cited in Oppermann & Chon, 1997) enhanced to modify traditions to simplify show performance. The modification and package endangered true meaning, value and significance of event, performance and artifacts failed to recall by local people.

-Loss of control over cultural property (McKercher and du Cros, 2002). Communities or traditional bearers losing control over cultural products that were not legally protected or not on copyright.

-Demonstration effect (Oppermann and Chon, 1997; Swarbrooke, 1999; Mason, 2003). Swarbrooke (1999) stated that the presence of tourists and their lifestyles influenced expectation and lifestyle of local people leading to “behavioral changes in the resident population” (Mason, 2003). Mason also raised some instances of such effect regarding young teenagers’ urban migration to search for demonstrated lifestyle, separation in local societies between old and young residents and acculturation process reducing diversity of cultures.

-Crime (Oppermann and Chon, 1997) drug and drinking (McKercher and du Cros, 2002). Tourism involved increasing crime because tourists were easier target of violence and crime, and they themselves engaged in illegal activities such as drugs.

-Social stress (UNEP, n.d.) caused by land and resource use conflicts brought about competition between tourism and local populations exploiting such resources, and by overcrowding or tourist flow impacted recreational experience of residents.

-Irritation of tourist behaviors (UNEP, n.d.). Tourists that failed to respect local customs and values acted as invaders taking snap shots and leaving. They also brought irritation and stereotype into the local communities.

Host Perceptions of Impacts

This study of residents’ perceptions of tourism in Urgup, Turkey, was associated with “contributing to the body of knowledge concerning the perceptions of host communities towards the presence of tourists and tourism” (Tosun, 2002).

Although the research findings had no negative feelings towards tourists, some specific negative impacts on social aspects were perceived by respondents. Local residents considered mutual confidence and honesty, crime, morality, drug, alcoholism, and inappropriate sexual behavior as the negative impacts of tourism. Conversely, the positive impacts of tourism were associated with economic aspects such as employment opportunities and income earnings. Tosun (2002) also mentioned that tourism development even generated economic benefits and drove economic growth to local community but only small portion of residents gained such benefits. Moreover, most of the residents faced burdens of high cost of living brought about by “expense of other” and experienced worsened community’s welfare (Tosun, 2002).

For occupation preference, residents in Urgup were inclined to have negative perceptions on tourism occupation due to the nature of tourism jobs and its associated works involved seasonality, low wages, heavy working condition, poor image, and lack of some welfares (Tosun, 2002).

Some efforts pushed by policymakers in developing countries emphasized macroeconomic solution, concealed negative impacts and maximized benefits for only small fraction of involved people. These attempts inevitably generated both positive and negative impacts. In order to maximize the positive impacts and to lessen the

adverse effects, private sectors and policy makers enhanced awareness of negative impacts of tourism and participatory measures of tourism development.

The research findings also demonstrated that several site conditions influenced residents' perceptions of tourism impacts. These conditions included welfare gap between hosts and tourists, distribution of tourism benefits, socio-cultural similarities or variation between hosts and tourists, level of community participation, and status of development (type, phase and scale) including tourism policies.

Resident and Community Perceptions of Tourism Impacts

According to the research conducted by Snaith and Haley (1999), this opinion study investigated residents' perceptions on social, economic and physical impacts of tourism in York city, England.

This study used questionnaires to collect both negative and positive tourism impacts. The questionnaires contained both statements of the positive and negative impacts. The statements of negative impacts consisted of "tourism increases traffic", "tourism leads to more litter", "tourism development increases council tax", "tourism unfairly increases property prices", "tourism businesses are too influential politically", "tourism increases the amount of crime", "tourism negatively affects the environment", and "tourism reduces the quality of outdoor recreation" (Snaith and Haley, 1999).

The statements of positive impacts involved "more tourism improves the economy", "the benefits of tourism outweigh its negative impacts", "tourism should play a vital role in the future", "tourism provides good jobs for residents", "York should not try to attract more tourists", "tourism improves the appearance of York", "tourism increases recreational opportunities", "York should become more of a tourist destination", and "tourism development increases the quality of life" (Snaith and Haley, 1999).

The research results were apparent that varied opinions were related to residents' interpretation on tourism impacts. Some research findings were disclosed that shorter residential period had greater effect on recognition of both positive and negative impacts of tourism, residents perceiving the importance of tourism to their occupation were more likely to feel positive towards the existence of tourism and residents posing more negative opinions were tended to be more supportive of local government control. Furthermore, those residents who viewed tourism important to their occupations were the most likely to feel that they influenced on the process of tourism development decision-making.

Sustainable Tourism Development

Concepts and Principles

Many researchers share the same concept of sustainable development that means development meets the needs of the present without compromising the ability of future generations to meet their own needs (Al-Nammari, 2006; Swarbrooke, 1999; Siegel and Jakus, n.d.). While tourism development may generate economic benefits in communities, it would also cause social and environmental concerns to the

communities. Sustainable tourism development should balance all stakeholders' needs in all aspects of environment, socio-culture and economics in order to reduce potential conflicts.

Some people may even consider tourism industry generating positive economic benefits, but they would not allocate such benefits equally and adversely affect local quality of life. Some communities' economics would depend on tourism industry but it failed to be supported by local people. Nonetheless, some local residents such as seniors may prefer tranquility; tourism industry would bring both revenues and irritation to communities. This is relevant to Kotler, Bowen and Makens (2003) that mentioned cooperation between tourism industry and community would lead to successful long run tourism destination.

From tourism's marketing standpoint, sustainable tourism means "giving up current revenues from tourism by limiting capacity to ensure that there will be demand for tourism in the future" (Kotler, Bowen and Makens, 2003). Furthermore, they also stated that sustainable tourism development respected not only destination's carrying capacity but also depended on environmental impact assessment (EIA).

Partnership

According to Savage et al. (1991), managing stakeholder involvement effectively required the alteration of key stakeholders to be key partners, that led to "share working and decision making" for entire stages of development (Wates, 2000). Moreover, Wates also mentioned that partnership was an agreement between two or more individuals and organizations to work together to achieve common aims. Some groups were considered as marginal stakeholders (Savage et al., 1991) such minority or ethnic groups, which might be excluded from a group of tourism partners. Thus, they might lack opportunities of tourism development. According to Berlin Declaration 1997(cited in Choi and Sirakaya, 2005), tourism development should respect local communities in economic, social and environmental aspects. Besides this declaration concerning positive impacts of tourism, it also introduced a political tool of policies and legislation to ensure local community benefits so these efforts would explain fair treatment to communities and residents as key partners.

Participation

A sustainable concept reinforced not only "community involvement" (Alipour and Dizdarevic, 2007) but also engaged all key stakeholders participating in planning process. The participatory stakeholders would search for "consensus-building that is critical for the design of sustainable tourism development" (Siegel & Jakus, n.d.). The general agreement to sustainable tourism development would come up from relevant parties. Even if they may not entirely agree with the consent, they would become more patient to the development rather than without a participation. Several articles proposed and referred guidelines about active involvement of stakeholders such as:

Collaborative networks were established in order to identify problems, define authorities, explore planning options, determine appropriate outcomes, execute and evaluate policies (Munro, King and Polonsky, 2006).

Equity

Sustainable tourism development emphasized not only fair accessibility to cultural resources of inter-generations but also concerned equal use of present generation. This equity was often referred to social issues between host communities and tourists. There were four concerns regarding equity: fair treatment for all stakeholders, equal opportunities of tourism employees and tourists, honesty among all stakeholders, and equal partnerships (Swarbrooke, 1999). Service providers in tourism industry were associated with lowered wage occupation and considered as inferior servers. Some neglected equity issues might build adverse effects to tourists and local communities; for example, dual price policy might generate short term benefit for vendors but, eventually, local residents inevitably encountered high cost of living. Moreover, a development that concentrated on attracting tourists rather than maintaining local quality of life might cause competitions to approach limited resources and social conflicts (Lankford et al., 2003).

Carrying Capacity

Carrying capacity concept was often used for sustainable tourism development and connected with other sustainable approaches (such as marketing, zoning and interpretation). Six different capacities were used to manage visitor numbers in protected areas or fragile sites.

1. Physical capacity demonstrating numbers of visitors was physically accommodated in a specific area.
2. Environmental capacity indicating numbers of visitors was accommodated within an area before physical environment damaged.
3. Economic capacity reflecting numbers of visitors would be served in an area before generating adverse effects on local economy.
4. Social capacity showed visitor numbers before causing irreversibly negative impacts on socio-culture of host community.
5. Infrastructure capacity determined visitor numbers before competing for insufficient infrastructure with host communities.
6. Perceptual or Psychological capacity pointing out number of visitors would be absorbed before adversely affecting quality experience of other tourists.

These capacities were established to indicate a limit for accommodating visitors without damages to destinations, sites, places, communities and tourists but, in fact, they would be difficult to be put together for practices. Swarbrooke (1999) stated some capacities such as social and perceptual were very subjective and measured hardly. That was consistent with an issue of social capacity that the level of capacity could be related to the level of community involvement in tourism stated by Oppermann and Chon (1997). Besides the involvement level, different demographic and economic backgrounds of host communities influenced the level of capacities. However, carrying capacity level might differ from one place to other places. If any indicator alerted the number of visitors exceeding a site capacity, it would be a sign of troubles and should be reacted with a reactive approach.

De-marketing

Profit maximization, which was a major objective of business, mostly relied on market-oriented strategy to accomplish. Consequently, tourism business formulated a marketing mix to develop product, to set up price, to create promotion and to seek out place in order to satisfy their target customers. However, a concept of sustainable tourism called “De-marketing” (Swarbrooke, 1999) approach might be contrast to typical marketing strategy for hospitality and tourism of Kotler, Bowen and Makens (2003) dealing with customer expectation, and creating customer value and satisfaction as a key philosophy of industries. The De-marketing discouraged planner or manager marketing their products or services (sites or tourism) to customers (tourists or visitors).

Product: to restrict accessibility to tourism products during a peak period and to reposition image of the products being less attractive to visitors with unacceptable behavior.

Price: to increase price such as entrance fees and accommodation rates during a congestion period to obstruct tourists with undesirable behavior.

Place: to suspend some channels of distribution, pre-booking or other marketing intermediaries during high seasons to decrease tourists with interests being incompatible with sites.

Promotion: to reduce promotional tools, campaign and sales promotion discouraging tourists from visiting a specific site during peak seasons.

This approach might be against a sustainable development principle of equity or fairness. Moreover, overcrowdings that might be shifted from one place to other places instead might become a burden of their capacities.

Ten Rs

The 10 Rs (Middleton & Hawkins cited in Swarbrooke, 1999) were suggested to deal with operation management for sustainable tourism development comprising:

1. Re-educate tourists to change their unacceptable behavior.
2. Recognize threats and opportunities surrounding impacts, and sustainability coming before implementation.
3. Refuse to engage in activities damaging all environments.
4. Reduce level of usage.
5. Replace products or producers with ones being more environmentally friendly.
6. Re-use materials.
7. Recycle where re-use is impossible.
8. Re-engineer traditional strategic management and operation.
9. Retrain involved people to behave in sustainable ways.
10. Reward involved people performing in the manner of sustainability.

The re-educate was directly connected with tourists or demand side while the rest of the principles were primarily associated with service providers or supply side.

Cultural Tourism

Cultural Tourism Charter

According to ICOMOS International Cultural Tourism Charter (1999), a major objective “for managing heritage is to communicate its significance and need for its conservation to its host community and to visitors,” and there were six principles to manage tourism at places of cultural significance. Besides the application of principles, the charter also provided guideline of information collection and evaluation about the places.

The six principles were associated with encouraging public awareness, managing the dynamic relationship, ensuring a worthwhile visitor experience, involving host and indigenous communities, providing benefit for the local community and responsible promotion programs.

To evaluate a heritage site or historic place, the necessary data were gathered to describe nature of the place, significance of the place, conservation context, tourism context; and relationships between tourism and conservation.

This charter also mentioned that tourism generated benefits such as cultural exchange, cultural conservation, funding, community’s education and influence on policy; however, significant heritages, physical environment, integrity, culture and lifestyle of communities could be threatened by poorly managed tourism.

Types of Cultural Tourism

Coccossis stated that cultural tourism was categorized into historic towns and cities, ancient and historic sites, and festivals (Coccossis, 2006). The different operational management was required to deal with their specific characteristics.

Historic towns and cities were filled up with population, lively communities, activities and transport hubs. Concentration of tourists brought about not only environmental management problems but also produced conflicts between tourism and communities in such small towns and cities. The tourist flow might alter daily life of communities and threaten tourism and community development.

Archaeological sites, monuments and temples might be located in isolation or situated within settings. Their scale, accessibility, importance and historical recognition had effects on visitor number.

Festivals’ scale was able to be ranged from local festival to a festival attracting thousands of visitors. The arrangement of festivals had to be compatible with significant values, sites’ regulations and integrity of the place.

Types of Cultural Tourists

“No two cultural tourism products are exactly the same, no two cultural tourists are exactly the same” (McKercher and du Cros, 2002:35) but their almost identical characteristics were considered into similar behavioral segmentation.

Moreover, demographic and psychographic segmentations also influenced to distinguish cultural tourists, which were female, mature, wealthy and well-educated with inclining interests to learn unusually cultural activities during their traveling. Besides demographic and psychographic segmentations, behavioral segmentation was also used to identify cultural tourists. Some behavioral differences between mass tourists and cultural tourists were regarding length of stay, spending and user status. Consequently, cultural tourists were longer-stay, more spending and regular travelers at a destination. McKercher and du Cros also mentioned that five different types of cultural tourists (McKercher and du Cros, 2002:144) consisted of

1. The serendipitous cultural tourists did not travel for cultural tourism reason but after participation, they had a deep cultural tourism experience.
2. The purposeful cultural tourists considered cultural tourism as primary motive for visiting a destination and had a deep cultural experience.
3. The incidental cultural tourists did not travel for cultural tourism reasons; however, the tourists participated in some activities and had shallow experience.
4. The casual cultural tourists were associated with cultural tourism as a weak motive for visiting a destination and had shallow cultural experience.
5. The sightseeing cultural tourists were associated with cultural tourism as a primary reason for visiting a destination but more shallow experience from the cultural tourism.

They were revealing their different needs and behavior. There were two factors comprising cultural tourism role to choosing a destination and deep experience sought during visitation used to categorize such cultural tourists. The first factor indicated that the stronger role of cultural tourism played an important part on decision making for choosing attractions. Specific cultural tourists intended to visit attractions motivated by cultural or heritage tourism; consequently, they were frequent travelers to visit cultural attractions. While general cultural tourists were less influenced by the role of cultural tourism, they considered that cultural tourism was an important part of their trip but not a major factor on the tourism experience. The latter factor denoted that different types of cultural tourists searched for different benefits from attractions. Tourists with specifically cultural purpose were assumed to find out deeper experience than tourists with other travel purposes. This issue might not be reliable in all cases due to the fact that it depended on time availability, prior knowledge, cultural likeness and education level.

Tourists were also divided into different categories according to psychographic basis. Personality dimensions were used to define characteristics of tourists and classified tourists into Allocentrics, Midcentrics and Psychocentrics according to Plog's typology (cited in Weaver and Lawton, 2002:187). Some distinctive characters of tourist types of Plog are shown below.

The first type, Allocentrics tourists were venturers or high risk takers, designed their own travel arrangement, traveled individually or in small groups, explored new experiences, avoided well developed places and preferred small numbers of people.

The second type, Psychocentrics tourists were low risk takers, sought familiar

goods and services, traveled in well-developed places, and preferred standard accommodation, meals and souvenirs.

The third type, Midcentrics tourists were the most population of tourists. They sought relaxation, participated in local events, tried local cuisine, required safety and security of travels, and were in between Allocentrics and Psychocentrics characters.

Some cultural tourists of McKercher and du Cros were similar to Plog's tourist types. The serendipitous and purposeful cultural tourists were compared with Allocentric tourists because they had intentions to explore new experiences from unfamiliar cultures. The casual and incidental cultural tourists might be comparable to Midcentric tourists because they might be engaged in some cultural activities during their travel intentionally or unintentionally.

Visitor Experience

Besides the cultural tourism typology, Coccossis (2006) also mentioned that visitor experience should be taken into consideration of effective visitor management. There were several factors influencing visitor satisfaction such as site of interest, quality of service, number of visitors. Moreover, "personal expectations and anticipated outcomes of the visit" determined visitor experience and satisfaction (Coccossis, 2006). Thus, understanding of visitors' expectation was associated with learning their profiles, preferences and needs. In order to make visitors more pleasurable experience, interpretation, facilities and services, accessibility, and quality of surroundings were adopted in operational management.

Heritage Interpretation that played important role in visitor management plan communicated themes and ideas. Various media that were used to interpret sites consisted of signage, outdoor panels, visitor center, promotional materials, information communication technology, audiovisual program, introductory site exhibit and guided tour. All site interpretation programs and tools were purposely designed to satisfy and to educate different segment of visitors.

Facilities and Services were necessarily provided to satisfy visitor needs while historic fabric and authenticity of the site influenced visitors' expectations. The marketing strategic approach aimed to benefit from assets of sites provided good quality of service to visitors and it also encouraged environmental friendly practices.

Accessibility and Quality of Surroundings. An access of sites that was properly planned to avoid traffic congestion and pollution might apply "park and ride facilities". Moreover, capacity of public amenities was examined in order to enhance visitor experience and to ensure local residents' quality of life.

Problems Arising from Visitors

The study of operational management of cultural and heritage sites (Coccossis, 2006) indicated that problems arising from visitors were connected with three issues:

Urban Management Capability: Cultural sites encountered physical environmental problems of traffic congestion, and noise and air pollution, including conflicts with local people when visitor numbers exceeded the capacity of local amenities. As a result, urban fabric and architectural character of sites might be altered and then, sense of place might be damaged.

The Site: A bottleneck at interpretation displays, overwhelming exhibitions and block on the flow of visitors generated negative impacts on visitor experience. Apart from visual impact, tourist flows were also sources of site damages and decayed environment. Interior materials and finishes might be deteriorated because of humidity and fluctuations of temperatures.

Local Community: Quality of life of local people might be adversely affected by pressure of visitor numbers. Competition between tourists and local residents using facilities and infrastructure brought about irritating local community and had an effect on visitor experience. Social conflicts might be arisen in the community due to tourism dominated urban society, leading to increasing cost of land and lessened city's attractiveness.

Management Responses

Coccossis (2006) mentioned measures to deal with the above problems as shown below.

Historic towns and cities: They regularly confronted an issue of fragmented management. Fragmentation of management in historic towns and cities dealt with various levels of agencies. Thus, a planning process of managing tourism in the site that required co-operation and co-ordination along with relevant agencies included basic elements of "integration in Planning Process and Institutional Context" and "establishing a Process of Concerted Action" (Coccossis, 2006).

The Integration in Planning Process and Institutional Context respected local capacities, set up limits for sustainable tourism activities and engaged relevant parties in participation. The process presented all parties a guideline framework for tourism, which consisted of principles, goals, objectives and policy measures.

Establishing a Process of Concerted Action emphasizes participation and mutual agreement of all stakeholders in order to identify common interests. In this process, problems ignored by other stakeholders, required conditions of sites, local cultural differences were presented to all stakeholders.

Archaeological Sites, Monuments and Temples: These sites defined specific areas and might be under the control of a single agency so they were more directly and easily controlled than historic towns and cities. Inevitable problems came up in these sites regarding "too many visitors at the same time or at the same period" (Coccossis, 2006). Solutions that recommended dealing with overcrowdings were to limit the number of visitors by advanced booking system and to increase entrance fees in given periods; however, these methods had to be applied carefully. Even though the methods might drive visitors to other sites and to different periods, unsolved problems were transferred to elsewhere instead.

Festivals: Potential problems had to be projected to cope with both expected demands such as safety and sanitary standards, facilities and accessibility, and uncontrolled conditions such weather conditions. Event management employed information management as useful tools to build public awareness as prior warning and to prevent potential problems.

Marketing Management

Segmentation

Market segmentation was to divide markets into groups with some criteria, to evaluate market segments and to select market segments (Kotler, Bowen and Makens, 2003). Different market segments required different products, services or marketing mixes. A market was divided into groups with geographic, demographic, psychographic and behavior segmentations. An evaluation of potential market segments was based on size and growth of segments, long-term attractiveness of segments such as weak competition, and existing objectives and resources of organizations. Some segments that might create opportunities to the organizations were selected to develop marketing strategies.

In order to differentiate products and services from competitors, competitive advantages were applied to match right position of the products and services with selected segments. The competitive advantages comprised physical differentiation, service differentiation, personnel differentiation, location differentiation and image differentiation (Kotler, Bowen and Makens, 2003:286)

Marketing Mix

Standard marketing mixes comprised product, price, place and promotion strategies. The product in hospitality services had “four levels: the core product, the facilitating product, the supporting product, and the augmented product” (Kotler, Bowen and Makens, 2003:302). The core product was the core benefit that customers were seeking. The facilitating product was the service that facilitated customers to use the core product. The supporting product was associated with the value added to the core product differentiated from competitor’s products. The augmented product demonstrated atmosphere, customer interaction (with service organization or other customers) and customer participation (coproduction).

The pricing was related to “value of the product being offered” (McKercher and du Cros, 2002:212). The pricing might reflect a product quality and might be connected with the expectation of customers. Varied pricing strategies depended on new or existing products (Kotler, Bowen and Makens, 2003:469-481). The new product pricing strategies included prestige pricing (high price), market-skimming pricing (high price at short term) and market-penetration pricing (low price at the beginning). The existing-product pricing strategies consisted of product-bundle pricing (product combination at a reduced price), price-adjustment strategies (volume and time discounts, and discriminatory pricing) and last minute pricing (selling unsold inventory at below-market rate).

The place or distribution channel was associated with a number of marketing intermediaries used to bring products to customers. There were five channel levels with different channel members. The first channel indicated a direct marketing channel or no intermediary. The second channel comprised a retailer. The third channel contained a wholesaler and a retailer. The last channel contained a wholesaler, a jobber and a retailer.

The promotion consisted of advertising, sales promotion, public relations and personal selling. These promotion tools were used to create effective communications

depending on target audiences, communication objectives (for examples, awareness and knowledge), message design (content, structure, format and source), communication channels (personal or non-personal communication), message source (credible sources) and communication's results.

New Media and Information Technologies

Destination Information, Marketing and Management System

According to Destination Information, Marketing and Management System (DIMMS) and Sustainable Heritage Tourism Development (Papathanasiou-Zuhrt and Sakellariadis, 2006), this study aimed to show sustainable interaction between supply and demand via revealing problems of mass cultural tourism to heritage cities including illustrating interrelation between tourism and DIMMS, and DIMMS improving tourism. This study also pointed out periphery policy raising problems to core historic areas while benefiting its surrounding areas because visitors increased pressure on heritage sites and a burden of costs to locals, but they were accommodated by service providers in peripheral zones and also generated economic value outside the core area. When the core areas became overused and congested, they might no longer attract high spending visitors.

There were two factors consisting of time estimate and information affecting demand pattern. A critical rationale of such problems occurring in the core heritage areas was informational inequality between supply (producers) and demand (visitors). When duration spent in the heritage areas decreased, visitors experienced only few reputation attractions because of the minimum information required. This situation brought about "information gap" which encouraged visitors overusing vital location of cultural assets whereas less important attractions were unused. Thus, the reduced time forecast brought about a deficiency of information search leading to the overuse and underuse of attractions.

Tourism products in surroundings of primary attractions were considered as monopolistic services and then became low quality. Monopolistic price-setters caused by lack of competition had impact on quality of services and quality of tourist experience. The visitor trend was to choose attractions without prior information search and made a decision according to others; consequently, high pressure and excessive carrying capacity happened. This "bandwagon effect" on consumption pattern resulted from lack of time and information.

DIMMS created informative balance of holistic tourism products and also exposed positioning of places because it served both visitors and producers by exchanging and processing information about customized and organized tourism products at all levels. Furthermore, it played roles as a counselor that saved time and financial budget to obtain information guided markets to find out distinctive features and attractions of a destination. Other benefits of DIMMS included regulating tourist flows and decongesting primary attractions with information and visitor flow management. Besides DIMMS manipulated information systems by the use of multimedia technology as new promotion and communication methods; it also involved mobile computing, intelligent agents and self-organizing information systems.

A key function of interpretive process enabled visitors to acquire and retain information, understand messages, and maintain cultural heritage resources. The website was employed as a medium of information technology that engaged visitors participation and exploration in given areas. When DIMMS interpretation was designed, three major principles were taken into account:

1) Interactive interpretation framework: digital narratives that built impressive displays enhanced different perspectives on cultural setting. Each heritage object was independent narrative elements linked with larger narrative structures. Thus, the narratives became visualized storytellers supported other elements.

2) Interpretive representation through information management: computer was used to arrange, present and classify heritage representations. Web-based tools enabled visitors to create their own collections and living heritage spaces.

3) Edutainment: the computer technology was helpful to change difficult messages into meaningful messages and pleasant experiences. Edutainment that comprised entertainment and exploratory learning was successful by information structure and management. Consequently, the edutainment generated both visitor and place benefits. It encouraged visitors to receive both virtual and actual experiences, and also educated public about places' requirement and threats.

Social Media

Social media "is a hybrid element of the promotion mix" (Mangold and Faulds, 2009). Mangold and Faulds mentioned various interesting aspects of the social media in the context of marketing communications. The social media provided consumers with on-line information and changed communications of consumers. The social media influenced consumer behavior such as awareness, information, acquisition, purchase behavior, post-purchase communication and evaluation.

Examples of social media were social networking sites (Facebook), creativity works sharing sites such as video sharing sites (YouTube) and photo sharing sites (Flickr), business networking sites (LinkedIn) and collaborative websites (Wikipedia). Roles of social media enhanced communication between companies and consumers and communication among consumers. The social networking sites, such as Facebook, were used to keep connection with customers while the second role was associated with viral marketing or word-of-mouth communication. The social media disseminating both satisfactory and dissatisfactory information of customers were faster and broader than conventional marketing tools.

The social media trends were associated with the use of internet as mass media vehicle; they disclosed that customers were more reliable on the social media than traditional communication sponsored by companies; they demonstrated the demand of customers to control over media and they indicated that customers turned to the social media for information searches and purchasing decisions. Consumers were engaged with products by the social media because they were enhanced to send feedback through websites. The social media created networks for consumers with similar interests because they were able to share experiences and have discussions with others on on-line communities. Moreover, the social media were recommended to be a part of the promotion mix leading to multiple ways of communication.

Teen and Social Media

This study was associated with social media and mobile internet used among American teens and young adults. The research findings disclosed teen internet use, tools, on-line activities, teen communication and use of social networking sites (Lenhart, 2009). The research findings demonstrated that almost every teenager used the internet, and most of them connected the internet at homes, schools and friends and relatives house respectively. Mobile devices owned by teenagers consisted of game consoles, iPod or Mp 3 players, mobile phones, desktop computers and portable gaming devices, respectively. Mobile phone ownership of teenagers had growth increase from 2004 to 2008 while computer ownership was stable (Lenhart, 2009).

Teenagers preferred playing on-line games as the first activity on the internet, searching websites for entertainment such as movies, TV shows and music groups as the second activity, using on-line social networking sites as the third activity and getting news or information about current events as the fourth activity. This study indicated that teenagers communicated with friends with face-to-face interaction, landline, mobile phones, email, messages through social networking sites, instant messages and text messages, respectively.

Daily communications of teenagers were associated with mobile phones, sending messages through social networking sites, sending text messages to each other, landline phones, spending time with friends for outside activities, sending instant messages and sending emails. Trends in 2006 demonstrated increasing popularity of texting communication but decreasing instant message and landline communications.

For social networking sites, most of on-line teenagers had a profile online. Popular activities were associated with social networking sites. Most of social network users had comments on a friend's picture, posted messages on friend's page, sent private messages to friends, posted comments on a friend blog, sent group messages to all friends and sent text messages to friends through the social networking sites, respectively.

From these three studies, the social media and computer technologies created opportunities to connect people together and to connect them with products and services at all times. Obstacles (limited time and information) of physical access to cultural heritages as products and services of cultural tourism were mitigated by social media and information technologies. Consumers and visitors were enhanced to reach new information sources, to search, store and share relevant information, to better understand communication, and to make a right purchasing decision. The social media and information technologies empowered consumers and visitors to control over media and to demonstrate their needs and aspirations independently, and that should be considered by producers and service providers.

Chapter 3

Research Methodology

This dissertation, which is applied research, employed both qualitative and quantitative studies to achieve all objectives. This research design can be divided into sections of physical investigation, target population, sampling, data collection, data analysis and conclusion.

Physical Investigation

The beginning stage of this dissertation was to study physical evidence and to investigate current conditions of Suansunandha. The investigation process was associated with a review of existing information, field surveys and analyzed information reports.

The results of the investigation demonstrated the area usage of Suansunandha, the current number of new and historic buildings, the usage of the historic buildings, the physical conditions of the historic buildings and places which were also reported in Chapter 5. For the physical description, the findings covered current functions, forms, materials and components of all types of the historic buildings.

These findings were used along with documentary evidence and interviews to analyze cultural significance, and to indicate opportunities and constraints of the management policy.

Target Population

For quantitative data, key stakeholder groups who were directly engaged in or influenced by changes in Suansunandha were the target population of this dissertation. The target population consisted of a long term (or permanent) group of stakeholders and a short term (or temporary) group of stakeholders. Firstly, the long term group consisted of lecturers, staff and the management of both Suan Sunandha Rajabhat University (SSRU) and Suan Dusit Rajabhat University (SDRU) including officials of the Department of Local Administration (DLA). Even though Nongkransamosorn Hall, which has been occupied by the Department of Provincial Administration (DPA), is also located in Suansunandha, the hall is not used as a regular workplace; thus, this dissertation did not include stakeholders of DPA in the target population. Lastly, the short term group was comprised of students of both campuses. Therefore, the target respondents were selected from 39,818 stakeholders in 2010 (Department of Local Administration 2010; Suan Sunandha Rajabhat University 2010; Suan Dusit Rajabhat University 2010) and are divided into:

The first group had 3,438 members, comprised of 1,218 lecturers and staff of

SSRU (3.06% of the target population), 1,704 lecturers and staff of SDRU (4.28% of the target population) and 516 officials of DLA (1.3% of the target population).

The second group had 36,380 members, consisting of 17,332 students of SSRU (43.53% of the target population) and 19,048 students of SDRU (47.84% of the target population).

For qualitative data, key informants who should have historical knowledge of Suansunandha such as alumni, building caretakers, and senior lecturers and officials were also the target population of this dissertation.

Sampling

When the key population had been defined, sampling unit, sample size and techniques were then designed.

Sample Units. Due to the ground of Suansunandha that was physically fragmented into three boundaries; the sampling units were involved with SSRU, SDRU and DLA.

Sample Size and Techniques. This research collected both qualitative and quantitative data.

The qualitative data of the required members of the population was difficult to find, so samples were selected by adopting non-probability sampling technique (Altinay and Paraskevas, 2008:95). Consequently, individual cases of the population were chosen by the snowball sampling. This sampling technique started with the first few cases holding desired characteristics of the population, followed by the identification of additional informants and, eventually, new samples were not sought due to the sample size which was manageable or due to new involved cases that were no longer recommended (Saunders, Lewis and Thornhill, 2007:232). The sample size of semi-structured interviews demonstrated 15 key informants.

The quantitative data used convenience sampling technique, so the sample size was derived from the stakeholders of Suansunandha in 2010 as the population of the research. The finite population (39,818 stakeholders) was compared with the sample size table of Taro Yamane (1967) (cited in Pichit Ritcharoon, 2001) demonstrating 396 respondents as the required samples of this research (the calculation as shown below). The quota sampling was used to divide the sample size into groups according to proportions of students, lecturers and staff, and officials in each organization. Thus, this sample size was distributed to 12 lecturers and staff of SSRU, 173 students of SSRU, 17 lecturers and staff of SDRU and 189 students of SDRU; and 5 officials of DLA.

n = size of samples

N = population

e = probable error

Confidential level 95%

Error 5%

$$\begin{aligned}
n &= \frac{N}{1+Ne^2} \\
&= \frac{39,818}{1+39,818(0.05)^2} \\
&= \frac{39,818}{1+99.545} \\
&= \frac{39,818}{100.545}
\end{aligned}$$

$$\therefore \text{Sample size} = 396 \text{ respondents}$$

Data Collection

The data collection aimed to learn about the tangible and intangible cultural heritage values of Suansunandha, to assess cultural significance and to evaluate tourism impacts.

According to the research first objective was to investigate cultural heritage values of Suansunandha by gathering information from applied documentary evidence, physical analysis and oral history. The documentary evidence was derived from published and unpublished documents, maps, plans and drawings. They were used to help understand the backgrounds regarding buildings, land use, inhabitants, activities and sequences of changes within Suansunandha. Besides documentary records, the physical investigation was helpful to gather site information concerning current inventory and conditions of all elements within the study area (Chapter 5). In order to supplement documentary and physical evidence, the oral history was derived from semi-structured interviews with alumni, and senior lecturers and officials within the sample units to acquire information regarding the history, evidence and sequence of changes of Suansunandha (Chapter 4). For the scope of the semi-structured interviews, questions were associated with:

- History of Suansunandha, and historic buildings and places (i.e. physical description, residents, users and ownership)
- Outstanding components and characters of historic buildings and places
- Use of historic buildings and places (i.e. current functions and planned functions)
- Improvement and conservation of historic buildings

These information collection techniques also led to the understanding of cultural heritage values in Chapter 6 and cultural significance assessment in Chapter 7 according to the second objective.

The second objective was to accomplish the assessment of significant elements of cultural heritage values of Suansunandha. The cultural heritage data was

collected by semi-structured interviews with key respondents being aware of situations and facts of Suansunandha, and the collected data from the interviews was analyzed in association with the data of physical investigation and documentary evidences in order to establish significant values in Chapter 6 and prepare statement of significance in Chapter 7. The analysis of cultural significance of Suansunandha was comprised of historic, aesthetic, scientific and social values according to the Burra Charter (Australia ICOMOS Burra Charter, 1999). Moreover, the values were divided into high, moderate and low levels of the significance based on the representativeness, rarity, condition, completeness and integrity, and interpretive potential of a cultural heritage (UNESCO, 2005).

For the third objective, a self-administered questionnaire was designed to investigate opinions of stakeholders of Suansunandha regarding the social value and tourism development. The defined target respondents were interviewed with 396 questionnaires to assess physical environment, socio-cultural and economic impacts of cultural tourism development, and tourism potentials in order that opportunities and constraints of the cultural heritage management were identified. They were also invited to participate in the assessment of the contemporary social significance in order to compare the assessment of the respondents with actual social significance. Sample questionnaires are shown in Appendix D.

The questionnaire was divided into four parts. The first part was to investigate different attitudes of respondents from five groups in three areas of Suansunandha. The second part was designed to learn views of respondents to the levels of significance. The 6-attitude scales were used to measure opinions of respondents from high levels to low levels of significance. The third and fourth parts were created to study different attitudes toward the impacts and the potentials of tourism. The 5-attitude scales were applied to measure respondent opinions from strongly-agree to strongly-disagree to show the attributes of the impacts and the potentials.

Data Analysis

At this stage of the methodology, the data was analyzed, and research findings were presented. After the qualitative data collected, this research employed two analysis approaches, consisting of content analysis, and data display and analysis, to evaluate and present results. The content analysis technique (Altinay and Paraskevas, 2008:128) together with data display and analysis technique (Saunders, Lewis and Thornhill, 2007:493) was used to analyze published documents and data collected by semi-structured interviews.

The secondary data from relevant documents were compared and contrasted with the data from the interviews. The content analysis technique was used to analyze both documentary and interview data to demonstrate cultural heritage values, cultural significance, and opportunities and constraints arising from significance in Suansunandha. The data display and analysis technique were applied to draw conclusions of results, obtained from the content analysis, and presented the research findings in forms of tables and networks. The data display and analysis technique were used to compare historic building types with traditional designs to indicate characteristics of the historic buildings in Suansunandha, to discuss cultural values, to

summarize cultural significance, to draw a diagram of historic characters, and to demonstrate models of the management structure and the visitor and interpretation management.

For the questionnaires, the collected data was analyzed by descriptive statistics comprised of frequencies, percentages and means; then, they were summarized in tables. The statistical analysis demonstrated different levels of social significance assessed by respondents in Chapter 7. The analysis also indicated opinions of respondents to positive and negative impacts of tourism and the confidence of respondents to cultural tourism potentials of Suansunandha in Chapter 8. The research findings from all data analysis techniques led to the policy framework for conserving the significance of Suansunandha in Chapter 9. Finally, further research studies were recommended to improve the cultural heritage management of Suansunandha, and the policy framework was suggested to apply with other similar cases.

Conclusion

The research methodology's final stage was necessary to conclude results from the data analysis. From the previous stage, the data analysis demonstrated cultural heritage values, statements of significance, impacts and potentials of cultural tourism; and opportunities and constraints of the cultural heritage management resulting in a policy framework for conserving significance of Suansunandha. The policy was reviewed with the dissertation objectives in order to establish an outlined model to manage the cultural heritage values. Consequently, the outlined model consisted of the significance and the conservation of the cultural heritage values, the visitor management policy, and the interpretation management policy. This strategic model was proposed to manage the integral cultural heritage values of Suansunandha within the context of sustainable tourism development.

Chapter 4

History and Evidence of Suansunandha

Dusit Royal Palace and Establishment of Suansunandha

King Rama V developed a plan to construct a new palace, leading to the building of Suansunandha. The king aimed to create royal residences to take care of his immense family and to create a more appropriate place than the Grand Palace to live in during the summer. Consequently, a plot of land was purchased from his royal personal purse in 1898 to build Suan Dusit Palace.

In 1899, King Rama V ordered a construction of a pavilion there called “Suan Dusit Palace” to serve as the king’s vacation place. Then, Vimanmek Mansion was established in Suan Dusit by relocating an incomplete throne hall from Sichang Island, Chonburi province. King Rama V stayed in the mansion with his queens, royal consorts, consorts and princesses before it was officially opened on March 27, 1901.

Later, a road was extended to the palace. The palace became King Rama V’s favorite residence. The king ordered the construction of Ratchadamneun Road to link the Grand Palace and Suan Dusit Palace. As a consequence of the construction of the palace and the road, the city’s development was extended in a northern direction of Bangkok (see figure 2).

The king frequently resided in Suan Dusit Palace and commanded the construction of a new throne hall there, named “Ampornsathan” from 1902 to 1906. King Rama V reordered Suan Dusit Palace by separating the site into an inner court and a frontage court by canals according to a traditional palace plan. Over time Suan Dusit Palace’s courts were developed with roads, bridges, new landscape features, walls and gates, and many royal residences.

After a visit to Europe by King Rama V in 1907, the king ordered an expansion of the boundary of Suan Dusit Palace to the west. In 1908, the new western boundary was established as a palace garden. King Rama V named the new garden “Suansunandha” or Garden of Sunandha and planned to incorporate the garden with royal residences as the inner court for queens, queen consorts, princess daughters, consorts and servants. Suan Dusit Palace became “Suan Dusit Royal Palace” in 1909.

When King Rama V passed away in 1910, the crown prince succeeded to his father’s kingdom to become King Rama VI. After the king had recently ascended the throne, the king preferred to live in provincial palaces such as Sanamchan Royal Palace, Nakornprathom province, and did not have his own family at the beginning of the ruling. The royal residence construction in Suansunandha was accomplished in 1919, but King Rama V’s family still resided in the inner court of Suan Dusit Royal Palace. There was no resident in Suansunandha for four years (1919 to 1923).

During the period of King Rama VI, this royal palace was given a new name to be “Dusit Royal Palace” because it fostered the growth of the capital city and became an important palace in Bangkok (Naengnoi Suksri, 1994).

When an audience hall was finished in 1923, Suansunandha was ready for residents. Moreover, King Rama VI designated his queen and royal owned servants to reside in Dusit Royal Palace. They replaced the previous king’s family in the inner court of Dusit Royal Palace so royal family members and maids of King Rama V gradually moved out to reside in Suansunandha. In the reign of King Rama VI, Suansunandha was physically separated from Dusit Royal Palace (Naengnoi Suksri, 1994:127) but it was still a part of the palace as an inner court which housed over 900 residents (National Archives of Thailand, 1912) (see figure 3).

Social Environment of Suansunandha

Royal inner courts were places of training Thai elite women. A traditional custom of the kingdom, boys were educated at temples or at schools while inner courts became informal educational institutes for girls. Thai parents hardly supported their daughters to study at schools but preferred to send them to palaces in order to be trained as noblewomen. They were taught about home economics, handiworks and social graces. Thus, royal inner courts were filled up with girls from the royal family, noble families and royal servants’ kin.

Besides Suansunandha was recognized as an important inner court of the kingdom, it also gave good instruction to Thai ladies. A school named as Nipakarn was established by Queen Consort Saisawaleepirom and directed by the queen’s daughter, Princess Nipanopadol. Students were from royal families and royal servants. This school provided primary and secondary educations according to curriculums of the Ministry of Education. Students were also prepared to be noblewomen. The school was terminated because of the revolution in 1932 (Piyanuch Sujit, 2007).

Other activities were also initiated in Suansunandha, apart from being residences of King Rama V’s family and training noblewomen. Suansunandha included a royal kitchen to serve the Sixth Reign and the Seventh Reign. It also created royal food recipes that were then well known such as a kind of chili pastes named “Nampriklongrua”. Moreover, modern sports such as badminton, golf and tennis, including recreational activities such as movie and puppet shows were also played within Suansunandha. These activities encouraged interrelationship among people living in the court.

During the period 1924 – 1932, Suansunandha was considered a large and principal inner court of the monarch, even in the periods of King Rama VI and VII, because of their smaller families. Suansunandha housed royal family’s members of King Rama V while grand palace and other palaces were not sizeable because their royal families’ members were fewer than the members of Suansunandha. It became a considerable village that was a restricted area available only for the king and his female royalties. Accordingly, it also played an important role as the last inner court of the kingdom reflecting the prosperity of the monarchy.



Figure 2 Boundary of Suan Dusit Palace and Suansunandha in the North of Bangkok in 1937

Source: National Archives of Thailand (1937)

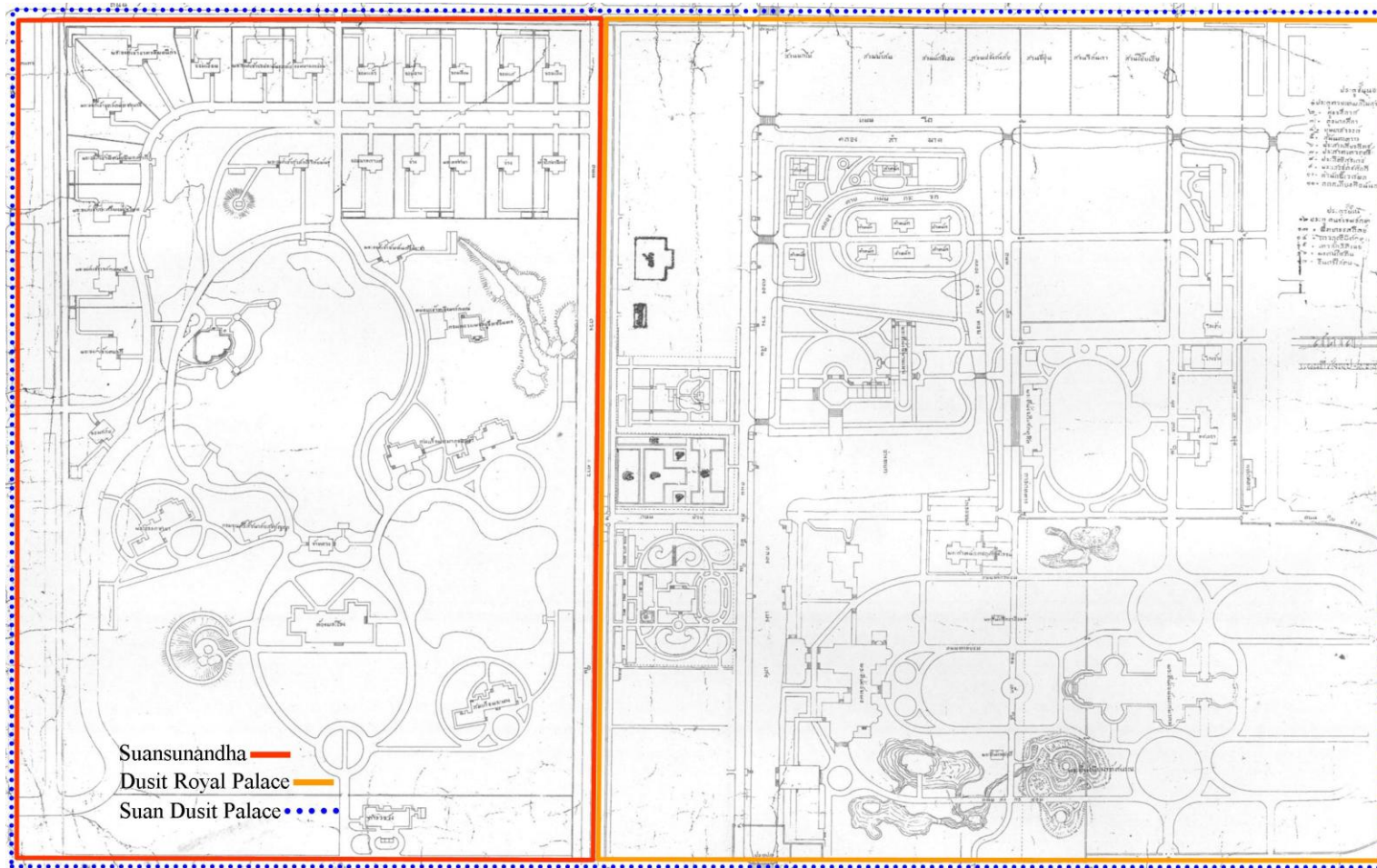


Figure 3 Boundary of Dusit Royal Palace and Suansunandha
 Suansunandha was physically separated from Dusit Royal Palace, but it was also a part of the royal palace as an inner court in the reign of King Rama VI.
 Source: National Archives of Thailand (n.d.)

Royal Residents of Suansunandha

Royal residents who owned residences in Suansunandha consisted of two queens, a queen consort and a number of princesses. According to documentary evidence (Kittipong Wirojthamakoon, 2007; Fine Arts Department, 1997; Krai Krajaiwong, 1986; Somjit Thanasukarn, 1980), there were 38 female royalties engaged in ownership of residences. They lived in 32 residences of Suansunandha, but only nine residences are still existed. Therefore, 17 royal residents who once owned the existing residences are summarized in the following table.

Table 1 Summary of Royal Residents

Royal Residents	Details
Queen Sawangwathana (see figure 5) Princess Yaowapongsanit (see figure 10 & 13) Princess Wapeebusbakorn (see figure 4 & 13) Princess Prapapanpilai (see figure 12 & 13)	Queen Sawangwathana owned a F-type villa The queen handed down this residence to Princess Yaowapongsanit, Princess Wapeebusbakorn and Princess Prapapanpilai.
Queen Sukumalmarasi (see figure 6 & 7) Princess Suthatipayarat (see figure 7) Princess Napapornprapa (see figure 6 & 7)	Queen Sukumalmarasi owned a F-type villa and resided in this residence with the queen's daughter, Princess Suthatipayarat. Then the queen handed down this residence to the queen's sister, Princess Napapornprapa. Princess Napapornprapa was the director of inner court affairs and designed a miniature golf course in Suansunandha.
Queen Consort Saisawareepirom (see figure 8) Princess Nipanopadol (see figure 8 & 13)	Queen Consort Saisawareepirom owned a F-type villa and resided in this residence with the queen's daughter. The queen moved in the residence in 1924 and influenced other royal residents to reside at Suansunandha. The queen patronized lots of followers and was spontaneously respected as the leader of the inner court. A school was established within the area of the queen residence. The queen passed away in 1929. The royal funeral was arranged at Nongkransamosorn Hall.
Consort Uan (see figure 11) Consort Tham	Consort Uan shared a D-type villa with her niece, Consort Tham.
Princess Athorntipayanipa (see figure 4, 10 & 13)	The princess owned a D-type villa. The princess established a Thai classical music band. All members of the band were residents of Suansunandha. The princess's residence was used for rehearsal.

Royal Residents	Details
Princess Jutharatrachakumari (see figure 4)	The princess owned a D-type villa.
Princess Pisamaipimolsat (see figure 4)	The princess owned a D-type villa.
Princess Sasipongprapai (see figure 4)	The princess owned a D-type villa.
Princess Uppantripach (see figure 4, 9 & 13) Princess Thipayalangarn (see figure 9 & 13)	Princess Uppantripacha owned and resided in a C-type villa with the princess's sister.

Even though some members of King Rama V's family had never resided in Suansunandha due to they either built their own residences or lived with relatives, Suansuandha still housed a larger number of female royalties than other royal inner courts. It became the substantial royal inner court where noble women were instructed. It was also a source of creating royal food recipes and modern activities. Suansunandha had been a considerable royal inner court from 1924 to 1932. Its function eventually came to the end with the revolution in 1932.



Figure 4 Princes and Princesses of King Rama V in 1925

Middle row: (from left) 1) Princess Sasipongprapai, 4) Princess Jutharatrachakumari, 6) Princess Pisamaipimolsat

Front row: (from left) 1) Princess Uppantripacha, 3) Princess Wapeebusbakorn, 6) Princess Athorntipayanipa

Source: National Archives of Thailand (1925)

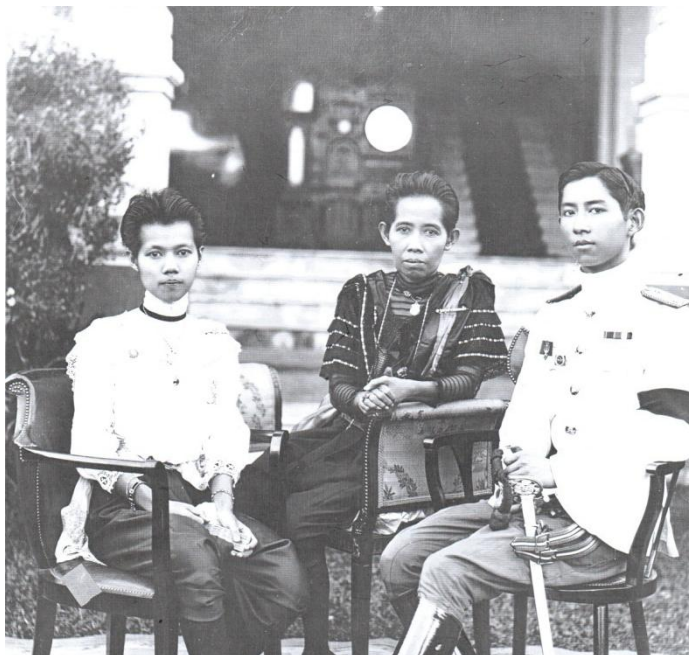


Figure 5 Queen Sawangwathana

From left: Princess Walaialongkorn, Queen Sawagwathana and Prince Mahidoladulyadej

Source: National Archives of Thailand (n.d.)



Figure 6 Queen Sukumalmarasi and Princess Napapornprapa

Source: National Archives of Thailand (n.d.)



Figure 7 Princess Suthatipayarat (standing)
 From left: Princess Napapornprapa, Princess Suthatipayarat, Prince
 Boriphat Sukhumphan and Queen Sukumalmarasi
 Source: National Archives of Thailand (n.d.)



Figure 8 Queen Consort Saisawareepirom
 Right: Princess Nipanopadol (front)
 Source: National Archives of Thailand (n.d.)

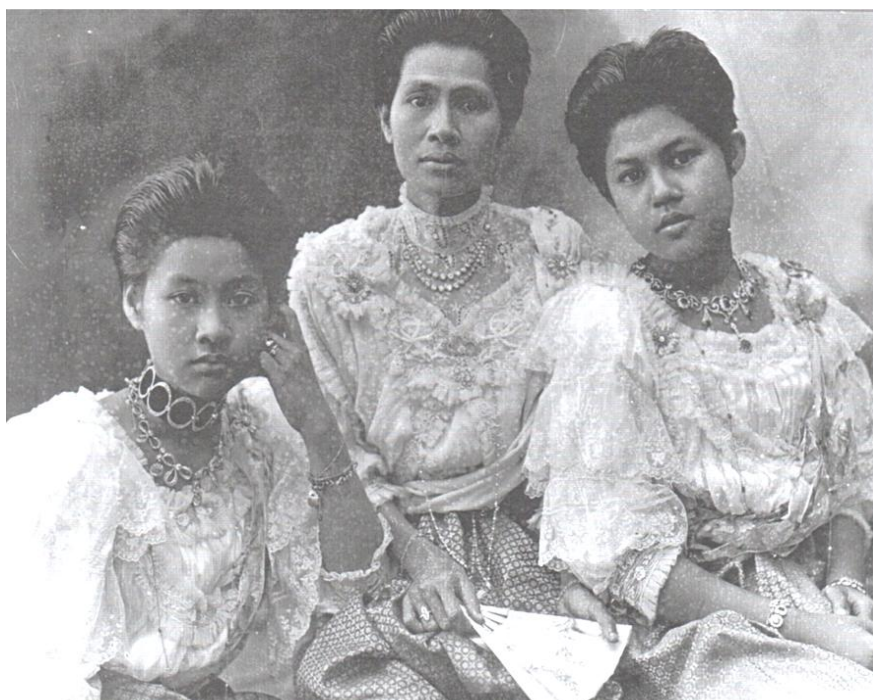


Figure 9 Princess Uppantripacha (left) and Princess Thipayalangarn (right)
Source: National Archives of Thailand (n.d.)



Figure 10 Princess Athorntipayanipa and Princess Yaowapongsanit
Source: National Archives of Thailand (n.d.)



Figure 11 Consort Uan (2nd from right)
Source: National Archives of Thailand (n.d.)

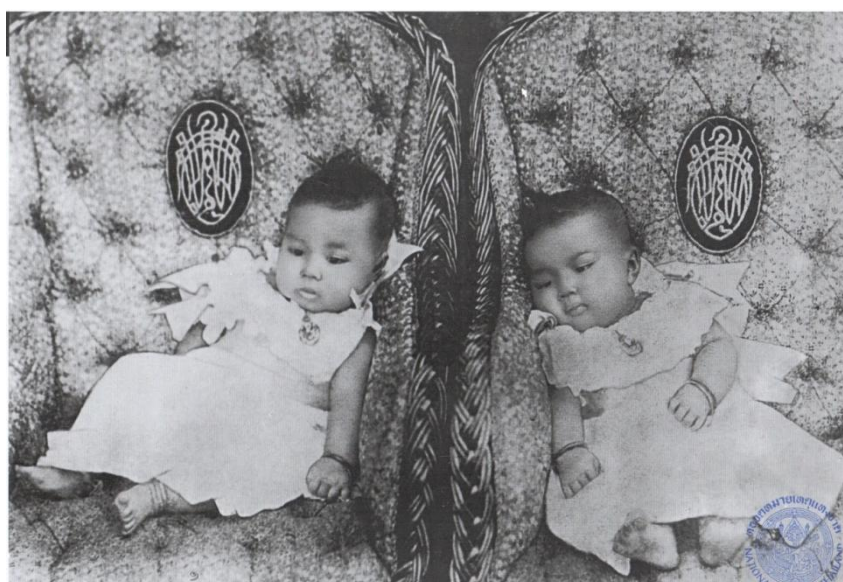


Figure 12 Princess Prapapanpilai (left)
Source: National Archives of Thailand (n.d.)



Figure 13 Princes and Princesses of King Rama V

Back row: (from left) 1) Princess Uppantripacha, 2) Princess Prapapanpilai, 3) Princess Yaowapapongsanit

Middle row: (from left) 3) Princess Athorntipayanipa, 4) Princess Nipanopadol

Front row: (from left) 2) Princess Thipayalangarn 3) Princess Wapeebusbakorn, 4) Princess Uppantripacha

Source: National Archives of Thailand (n.d.)

Impact of the Revolution in 1932

Besides a number of royal family members of King Rama V who lived in Suansunandha had passed away since 1926, the ruling system of the Kingdom under the sovereignty of King Rama VII, which changed in 1932, also impacted the living and physical environment in Suansunandha. Moreover, when King Rama VII immigrated to England and gave up possession of the throne in 1934, the royal family members gradually left Suansunandha to live abroad and in the countryside with their relatives due to they were much concerned about the revolutionary troops. Eventually, Suansunandha had been left without any custodian for five years (1932-1937).

The ground of Suansunandha had been affected after it encountered the democratization. In 1937, the cabinet resolved to adapt the site of Suansunandha to be a location of educational institutes and a government agency during the reign of King Rama VIII (Terdpong Kongchan, 2003); however, the ownership belonged to the Crown Property Bureau. New purposes of the usage fragmented Suansunandha into partial boundaries according to the new cabinet's resolution. Firstly, Crown Property Bureau as the ownership of Suansunandha granted Ministry of Interior the

right to occupy partial ground, a royal residence and a hall. This new user adapted its own landscape and buildings to be an administration college. Secondly, Ministry of Education was allowed to utilize the rest area of Suansunandha. The area was divided into two boundaries that mostly belonged to Suansunandha College and was slightly the property of Karn Ruen School. Such new uses impacted on the original site, the landscape and the buildings of Suansunandha because the royal residences were adapted for their new functions and replaced by new buildings.

Buildings and Landscape of Suansunandha

The site of Suansunandha approximately covers 48.79 acres (122 rai as approximate area in Thai measurement) and is bounded by four roads. Its boundary is enclosed by Uthongnok Road as the main entrance in the south, Rajvithi Road in the north, Nakornrachsima Road in the east and Samsen Road in the west (see figure 14).

Suansunandha featured 32 buildings, where were resided in by the royal family of King Rama V, in addition to slopes, pools, canal and botanic gardens attributed to its landscape. There were four types of residences in two different sizes of buildings in Suansunandha.

The first type was designed as a large mansion resided by a queen or a queen consort and their daughters, and enclosed with associated buildings of royal servants. This type of large residences was comprised of mansions of Queen Sawangwathana and Queen Sukumalmarasi. The second type, considered as another large mansion of Queen Consort Saisawareepirom, was situated in the southwest of Suansunandha, but its structure was different from the first type. The third type was designed as a small residence where was lived in by a consort or a princess. The fourth type was also another small residence where was resided by a royal mother or a princess.

Besides 32 buildings, there is an audience hall in Suansunandha. Nongkransamosorn Hall was established during 1922-1923 by the royal command of King Rama VI in order to be a meeting place for royal ceremonies such as a high royal resident's birthday anniversary and a funeral ceremony.

In the heart of Suansunandha, a large pool and two small pools were dug up; consequently, earth was extracted from the ground and moved up to become a huge slope. It was turned to be an earth tunnel look-alike underneath the earth hill to contain queen consort's kitchen utensils. Suansunandha was intentionally created to replicate forest garden; thus, the winding canal and free form of pools were designed as a natural site. The canal was constructed as the waterway connecting the Chaopraya River with pools inside Suansunandha. Its flow into the pool passed through Vasuki Pier to the inner court's western water gate and moved along Suansunandha's western and northern wall. There were three groups of 21 small residences established along both of the banks of the canal while all large mansions were designated beside the pools (see figure 15).

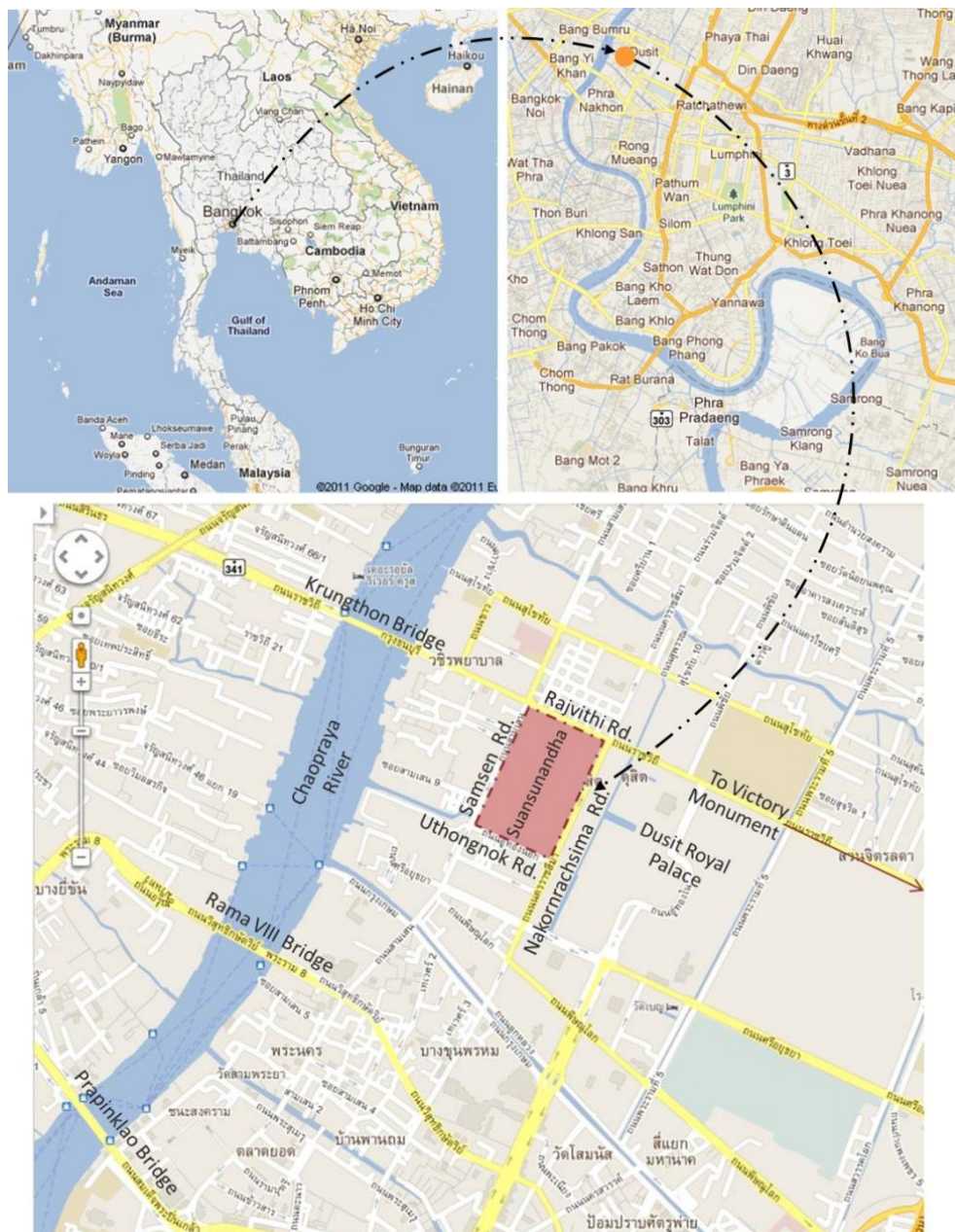


Figure 14 Location of Suansunandha in 2011

Source: GoogleMaps (2011)

Type of Residences in Suansunandha

According to the plan of Suansunandha in 1911, Mr. A. Rigassi, an Italian architecture, worked for Local Sanitary Department of Thailand, Building Section (Chantana Surasawadee, 2000:13) began to design the plan in 1911 and then made detailed drawings of buildings in 1913. The department later revised the plan in 1914 and divided residences into 4 types of villas in Suansunandha.

1. F-type villa was designed as a large building suitable for two to three high royalties. As illustrated in General Plan below (see figure 15), there were three F-type villas situated beside pools and in the southern part of Suansunandha. These villas later

belonged to Queen Sawangwathana, Queen Sukumalmarasi and Queen Consort Saisawareepirom. However, only upper floor plan of the villa existed in National Archives of Thailand. (see figure 95 in Appendix A)

2. C-type villa was also planned to serve two to three royalties, but it was smaller than the F-type. There were four C-type villas designed in the plan (see figure 15). The first villa was co-resided by Princess Uppantripacha and Princess Thipayalangarn and was located in the east of the plan. The other two C-type villas were established in the northwest of the plan and belonged to Princess Hemwadee and Princess Woraluksanawadee. The last C-type villa was established in the south of the plan and was occupied by Princess Malineenopadara. (see figure 96 & 97 in Appendix A)

3. D-type villa was designed to be appropriate for two royalties and comprised of eight villas located in the north of the plan (see figure 15). This type of villas was later possessed by Royal mother On, Princess Onprapanrampa, Princess Suwapakwilaipan, King's Consort Uan, Princess Athorntipayanipa, Princess Jutharatrachakumari, Princess Pisamaipimolsat and Princess Sasipongprapai. (see figure 98 & 99 in Appendix A)

4. E-type villa was designed to be the smallest villas which were planned to be residential places of royal consorts or royal mothers or king's consorts. The E-type villa was suitable to house only one resident. According to General Plan of Suansunandha in 1911, there were 11 E-type villas (see figure 15). Group of 10 buildings were located in the east of the plan while the other E-type villa was placed in the west of the plan; however, all of them were later pulled down and replaced by new buildings. (see figure 100 & 101 in Appendix A)

In 1915, the Architecture Division of the Fine Arts Department adjusted and drafted building plans of Suansunandha (Chantana Surasawadee, 2000:27) which were undifferentiated to plans designed by the Local Sanitary Department of Thailand. Such plans were divided into 4 types of buildings comprising unnamed plan, plan B, plan C and plan D.

1. The unnamed plan was able to be compared with the plan of F-type villas. The distinctive design of the plan was a veranda laid down along the length of the facade. There were three entrance stairs placed in the building's facade while three stairs were positioned at the back. Besides the long veranda, groups of rooms that were designed in two rows of rooms were characteristics of this type. Each of the groups of rooms was composed of an independent staircase. (see figure 102 & 103 in Appendix A)

2. Plan B was similar to C-type villa's plan. The ground floor plan of the plan B residence had four entrance stairs displayed at front, back and both sides of the building while two inside staircases consisted of a major stair situated at the east and a service stair placed at the west of the plan. (see figure 104 & 105 in Appendix A)

3. Plan C was undifferentiated to the plan of D-type villas. This plan was comprised of two entrance staircases at both sides of the building. The first one was positioned at the west, whereas the other was placed at the east of the ground floor plan without the facade's entrance. This floor plan demonstrated two interior stairs which were comprised of a main stair at the east and a service stair at the west. (see figure 106 & 107 in Appendix A)

4. Plan D was comparable with E-type Villas. Because both of them were purposely designed to house one person, they were the smallest type of all residences. Each floor was comprised of two rooms and connected by one staircase. (see figure 108 & 109 in Appendix A)

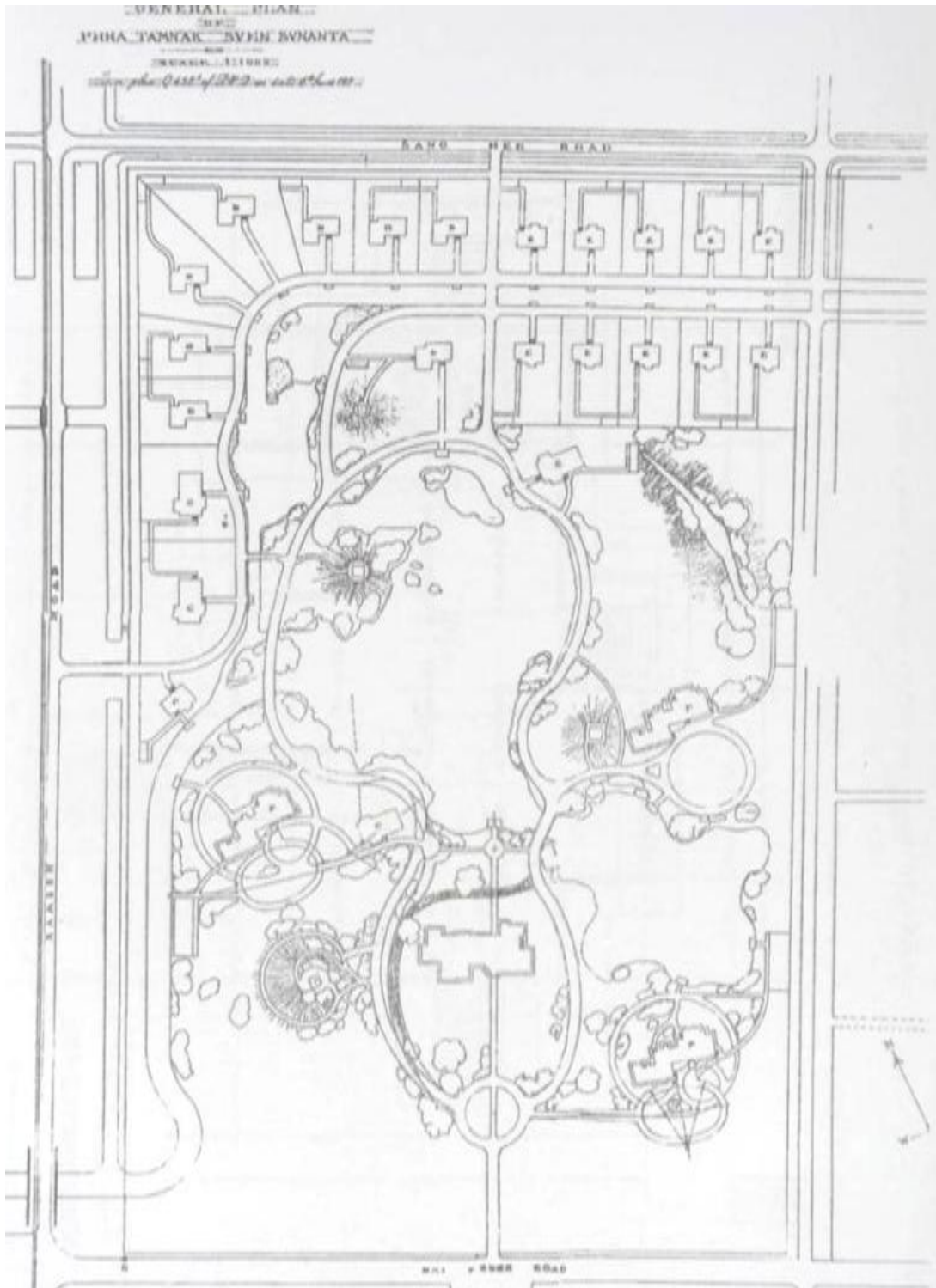


Figure 15 General Plan of Suansunandha in 1911
Source: Chantana Surasawadee (2000:17)

When both sets of plans were verified, they were not differentiated. Although the lack of the ground floor plan of the F-type Villa, the ground floor plan of the unnamed design and the F-type villa should be alike.

Suansunandha was proposed to be an ancient site by the Fine Arts Department. Early site of Suansunandha was considered as historic significance and should be inscribed in the national register of ancient monuments. Thus, the Office of Archaeology and National Museums of the Fine Arts Department carried out investigation to collect data, to prepare site plan and to shoot pictures of buildings and landscape in 1996. After the investigation, Suansunandha Palace's report was prepared by the Fine Arts Department in 1997 (Fine Arts Department, 1997). This report described the location, history, architectural styles and current condition of Suansunandha.

According to the sizes of surviving residential buildings, Suansunandha encompassed large mansions and small residences that were subdivided into two types of mansions and two types of small residences. Apart from the size and ranking royalties, locations also had an effect on these buildings' characteristics. Mansions were dispersedly located by pools or in the middle of the site while small residences were grouped in patterned formation along both banks of the canal. These mansions were designed to be places of residences of the queens or the queen consort while small residences were established to serve princesses, royal mothers or consorts. Consequently the characteristics of the buildings in Suansunandha were classified into four types.

1. Examples of the First Type Mansion. These mansions were established to house either the queen or the queen consort with princesses. The mansion design emphasized both functions and stylish appearances. Thus, this type looked like two rows of houses connected to each other while woodwork decoration made these buildings delicate (see figure 16).

1.1 The first large mansion designed to be a residence of Queen Sawangwathana was built circa 1911 to 1913 (see figure 20). Then, it was handed over to be the residence of Princess Yaowapongsanit, Princess Wapeebusbakorn and Princess Prapapanilai (1919 to 1932). After the democratization, the ground of Suansunandha was redefined in order to serve educational and public service purposes. Consequently, this mansion was utilized and constantly improved for educational benefits.

In 1941, the Ministry of Education established a school in the original ground of Suansunandha named Karn Ruen School (Siroj Polpanthin, 1984). Therefore, this school was allowed to occupy and make use of Queen Sawangwathana Mansion and Princess Uppantripacha Residence.

During the years of 1943 to 1945, air strikes of the World War II affected physical environment and educational activities of this place. Students were relocated to study at other schools; as a result of suspending the use of this building.



Figure 16 Front Elevation of the First Type
Source: Somchart Chungsiriarak (2010)

In 1946, students and educational activities were brought back to the school; consequently this building was reused. When the number of boarding students decreased, they resided in the building used to be a residence of Princess Uppantripacha instead. This whole building was used for teaching.

In 1963, the mansion of Queen Sawangwathana was used as a multi-purpose building. This building was utilized as a lecture building and administration office, whereas its upper floor was made use as a dormitory for boarding students.

In 1974, this mansion was repaired and changed to be a classroom building for special students who were hearing defects. Thus, some rooms were appropriately changed for disabled students (such as children restrooms and sound proof rooms) from 1975 to 1976.

In 1981, this building was purposely adapted to be an arts and culture center. The repair had been carried out since 1984; in addition to the building underground and its surroundings were filled up in 1991 as a means of getting rid of underground water and rising dampness.

During 1992 to 1994, both floors of the building had been repaired all the time. The upper floor's ceiling was replaced while an electric cable was installed. Moreover, flooring, eaves, the drainage and the room decoration were periodically improved.

After the building improvement, even some building fabric was substituted by modern material; for example, original roof tiles were replaced by Monier tiles, and it was recognized by a conservation award from the Association of Siamese Architects in 1994.

This building has been occupied by Suan Dusit Rajabhat University and renamed Yaowapa Building since it used to be a residence of Princess Yaowapongsanit. The building functioned like exhibition rooms that displayed images of King Rama V and former royal residents, royal costumes, sacred Buddha statues, periodical exhibitions; and porcelain collections.

1.2 The second large mansion remaining in the Department of Local Administration was constructed to be a residence of Queen Sukumalmarasi (Fine Arts

Department, 1997) (see figure 20). The queen's daughter, Princess Suthatipayarat also lived in this mansion and then, it was handed over to the queen's sister, Princess Napapornprapa.

After the revolution in 1932, this mansion was no longer used. Until 1940, the Ministry of Interior was granted to the utilization of Queen Sukumalmarasi Mansion and Nongkransamosorn Hall. The ministry set up Public Administration College at this site and adapted this mansion to operate as a student dormitory and classrooms while the audience hall was reused as the college office. This college was under the supervision of the Department of Provincial Administration, an agency of the Interior Ministry.

When the Public Administration College was relocated in 1994, this building was not involved in academic affairs but was still used by the Department of Provincial Administration. In 2002, this building was taken over by the Department of Local Administration, a new agency of the Interior Ministry. It was adapted to be the office of Local Human Resources Development while Nongkransamosorn Hall has been in possession of the Department of Provincial Administration. Then, this building was renamed to Suwatthana Building.

2. The Second Type Mansion. The building façade was composed of two entrance halls that were built of cement walls and reinforced concrete structures including marble flooring. However, woodworks have been the major components of this mansion. This mansion was constructed to be the residential place of Queen Consort Saisawareepirom and Princess Nipanopadol (see figure 17 & 20). This place was also used to be a royal kitchen during the reign of King Rama VI and King Rama VII. After democratization in 1932, this mansion was reused as a multi-purpose building of Suansunandha College.

This residence was changed to be an office of college administration on the ground floor while the upper floor was adapted to be a classroom building. This building was changed to be classrooms of the Music and Performing Arts Department in 1958 and became the place of rehearsing plays (Sansanee Jasuwan, 2010).

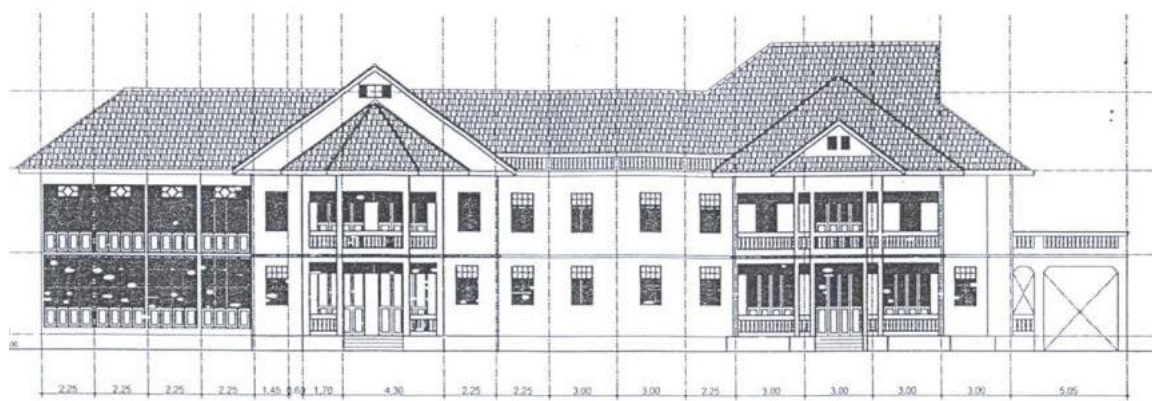


Figure 17 Front Elevation of the Second Type

Source: Suan Sunandha Rajabhat University (2010)

In 1978, Suansunandha College gave up boarding students, so all royal residences that used to be dormitories were primarily became classroom buildings, but the partial area of the buildings temporarily became teacher lodging. Consequently, Queen Consort Mansion was adapted to be the college's administrative center. The ground floor of the buildings was divided into the office of the rector, the financial department, a store and the office of the Home Economics Department. The classrooms of the Music and Performing Arts Department remained on the building's upper floor.

Teachers no longer resided in college's buildings including this building, and campus lodging was given up in 1979. All dormitories had become classroom buildings since 1980. The classrooms of the Music and Performing Arts Department were moved to one of such buildings. This building was likely planned to be a museum in 1982; therefore, its upper floor was gradually renovated to serve the new function.

Until 1986, the office of the rector and the upper floor classrooms were moved to other buildings. The first major repair was implemented to the entire building in 1988.

The rooms were rearranged for office works. Therefore, the repair was to bring back earlier space. New partitions of the rooms were removed and damages were improved (Sansanee Jasuwat, 2010).

When the repair was finished, the whole building space was developed to be the arts and culture center in 1989. It was officially opened by Princess Sirindhorn in 1990.

Faced with one of typical problems, the surface of the arts and culture building was peeled and cracked. Rising dampness from the underground was the major source of the problem. The underground water was eliminated by filling up the basement with cement, and this replacement was coated with humidity resistance (between 1996 and 1997) (Sansanee Jasuwat, 2010). However, the problem still existed, specifically on posts and walls connecting with the posts.

The second major repair mostly involved exterior components which took place in 2003. The original roof tiles in rhombus shape were replaced with Monier tiles because of better durability. The white surface of the building was repainted with dark yellow. Besides having the building repainted, the decayed wall surface of the wall was also repaired.

Although Monier tiles were more durable than the original roof tiles; their heaviness troubled the original roof frames made of wood. As a result, deforming the roof's purlin occurred, seams between roof tiles were not attached tightly. In 2010, the Monier roof tiles were replaced with rhombus shaped tiles including spouts that were equipped along the roof (Sansanee Jasuwat, 2010).

3. Examples of the Third Type Residences. This residence type was distinctive with a façade topped with a gable and featured the wooden parts of walls and windows including decorations (see figure 18). These buildings used to be residences of Consort Uan, Princess Athorntipayanipa, Princess Jutharatrachakumari, Princess Pisamaipimolsat and Princess Sasipongprapai (see figure 20). After the revolution in 1932, these residences were in possession of Suansunandha College and had been adapted to be dormitories for female students, offices or classrooms since 1937.



Figure 18 Front Elevation of the Third Type
Source: Suwannarit Wongcha-um (2010)

3.1 Consort Uan Residence has been modified to serve various purposes all the time. This building used to be a girl dormitory and office of boarding students of Suansunandha College, used as an office of college welfare and classrooms at the same time, and turned to be a faculty office of the Home Economics Department. Then, it was altered to be a classroom building of the Performing Arts Department because the Home Economics Department has been relocated.

3.2 Princess Athorntipayanipa Residence was used as a multi function building from 1937 to 2010. Apart from being a girl dormitory of the college, it also functioned simultaneously as an infirmary and a teacher lodging. Then, it was changed to be an office of the Teacher Training Department and the office of the Fine and Applied Arts Faculty, and used as the faculty office of the Music Department respectively.

3.3 Princess Jutharatrachakumari Residence was used as a girl dormitory after 1937. When Suansunandha College gave up boarding students in 1978, this building functioned as classrooms for music teaching and rehearsal in the care of the Music Department.

3.4 Princess Pisamaipimolsat Residence that was identical to other residences was adapted to be a girl dormitory since 1937. This building was then used to be both classrooms and a faculty office of the Art Industry Department. It has become a faculty office of the Computer Application for Architecture Department so far.

3.5 Princess Sasipongprapai Residence was adapted to be a girl dormitory, a teaching building and the office of student affairs respectively.

At the present, these residences have been utilized by different functions and under renovation except Princess Pisamaipimolsat Residence. All of them were occupied by Suan Sunandha Rajabhat University.

4. The Fourth Type Residence. This residence's frontage comprised double gable roofs. It used to house Princess Uppantripacha and Princess Thipayalangarn

(circa 1924 to 1932). After the revolution in 1932, this residence had been unused for nine years. (see figure 19 & 20)



Figure 19 Front Elevation of the Fourth Type
Source: Somchart Chungsiriarak (2010)

In 1941, Princess Uppantripacha Residence was reused by Karn Ruen School (Siroj Polpanthin, 1984). All rooms of both floors were turned to be a dormitory for boarding students and teachers while entrance passage was adapted to be a teaching area.

During 1943 to 1945, the use of this building was discontinued because of the World War II. The schooling was revived in 1946 and the building had been reused as a student's dormitory and lodging for teachers.

In 1972, the use of the building was entirely changed to be a classroom building for art works. This building was improved to be music classrooms and a place of Thai classical music rehearsal in 1976. Besides it was used as a teaching building, it was also adapted to be a storeroom and the school infirmary (Siroj Polpanthin, 1984; Maneerat Chantanapalin, 2011). Before it was changed to be the polls office, it had operated as the Education Administration Center of Suan Dusit Rajabhat Institute.

Then, it has been adapted to be the office of Suan Dusit Polls of Suan Dusit Rajabhat University since 1992 (Maneerat Chantanapalin, 2011).

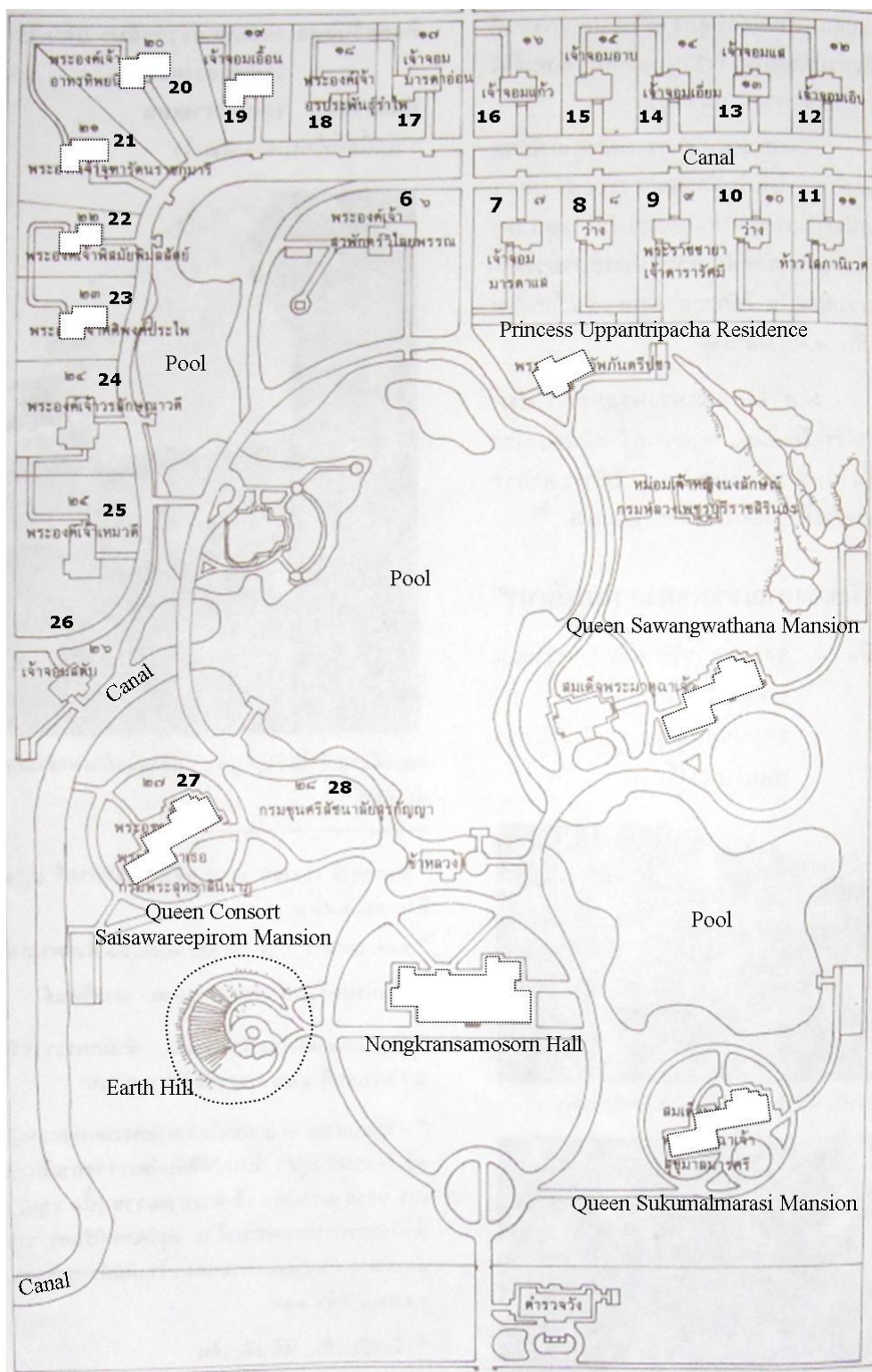


Figure 20 Suansunandha Layout
Source: Krai Krajaiwong (1986)

Monuments of Suansunandha

Suansunandha was announced to be an ancient site, encompassing 11 ancient monuments in 1998 and then, its boundary, location and monuments were published by the Fine Arts Department on the Royal Gazette in 1999 (Fine Arts Department, 1999). However, the audience hall has been published on the Royal Gazette as an ancient monument since 1979 (Fine Arts Department, 1979).

The boundary of Suansunandha is approximately 48.79 acres (121 rai 3 ngan 90 talangwa in the Thai measurement) in area and it is located in Dusit District, Bangkok. According to the site plan of the Fine Arts Department, the ancient site of Suansunandha is comprised of 11 ancient monuments divided into one hill, one hall and nine buildings (see figure 20 & 21).

Item 1: Earth Hill (earth tunnel) used as an air raid bunker (Suan Sunandha Rajabhat University)

Item 2: Nongkransamosorn Hall (Ministry of Interior)

Item 3: Suwatthana Building (Ministry of Interior)

Item 4: Cultural Center Building (Suan Sunandha Rajabhat University)

Item 5: Cultural Center Building (Suan Dusit Rajabhat University)

Item 6: Education Administration Center (Suan Dusit Rajabhat University)

Item 7: Lecture Building 23 (Suan Sunandha Rajabhat University)

Item 8: Lecture Building 22 (Suan Sunandha Rajabhat University)

Item 9: Lecture Building 21 (Suan Sunandha Rajabhat University)

Item 10: Lecture Building 20 (Suan Sunandha Rajabhat University)

Item 11: Lecture Building 19 (Suan Sunandha Rajabhat University)

Besides four types of residences, an audience hall and an earth tunnel coexisted in Suansunandha. The hall has been inscribed as an ancient monument by the Fine Arts Department since 1979 before the earth tunnel was considered as a monument of Suansunandha in 1998. Both of them were also the important features of Suansunandha palace.

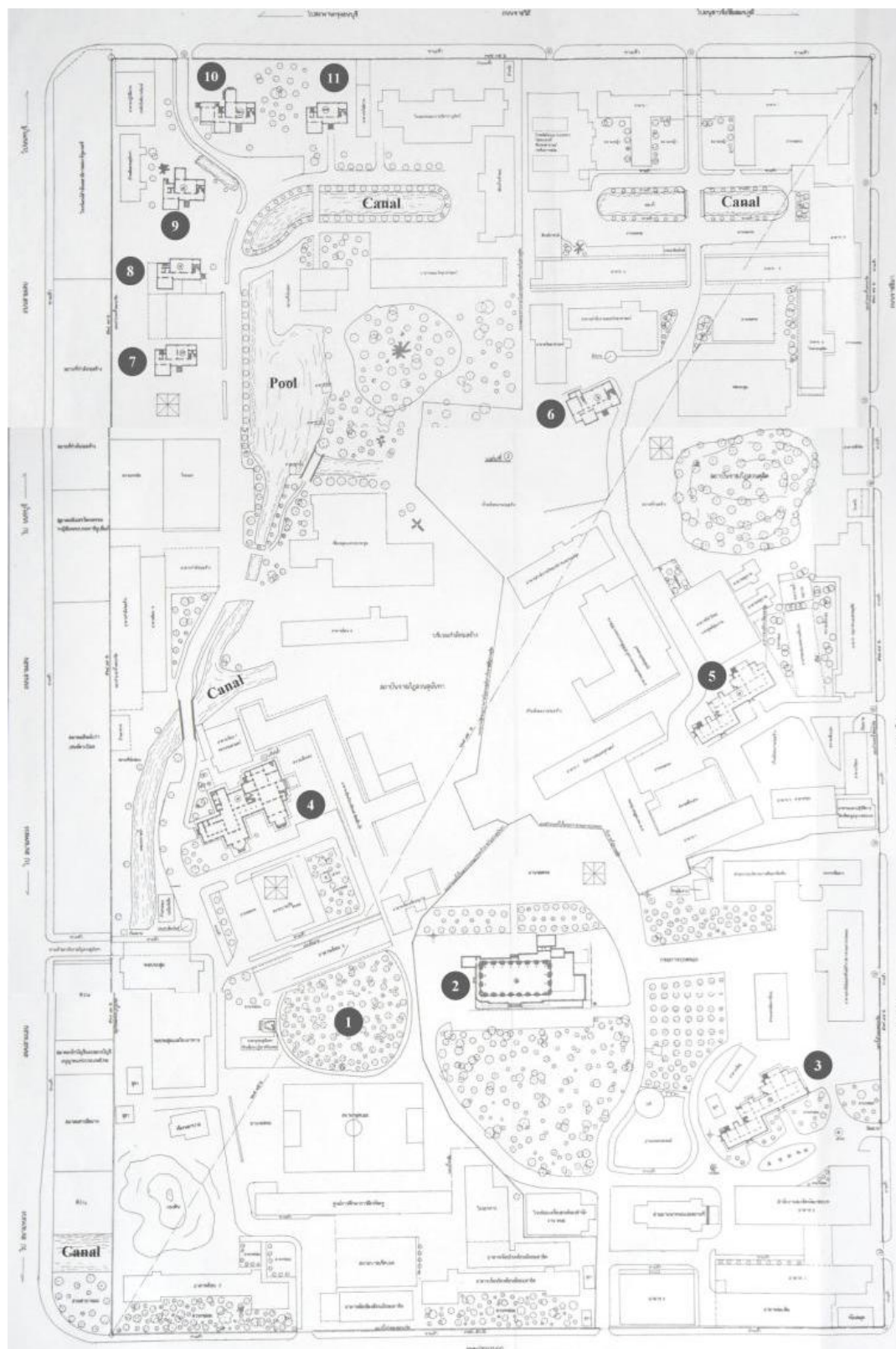


Figure 21 Ancient Monuments in Suansunandha
 Eleven places in Suansunandha were registered by the Fine Arts Department.
 Source: Fine Arts Department (1999)

Audience Hall

Nongkransamosorn Hall that was designed by Mr. Mario Tamagno, an Italian architect, was situated closely to the south of the large pool and the main gateway of Suansunandha (see figure 20 & 21). The site of the hall was originally planned to build a large mansion. Its process of construction initiated only the foundation and the wall bearing structure, but the aim of construction was then changed to build an audience hall instead. Nongkransamosorn Hall was established on the old structure (Krai Krajaiwong, 1986) or on the existing foundation of Queen Palace (see figure 110 & 111 in Appendix A) in order to be a multi-purpose hall of royal residents in Suansunandha (Fine Arts Department, 1997). The architecture of the hall was designed with the arcade style and looked like a two-story building (see figure 22). Apart from four types of historic buildings registered, Nongkransamosorn Hall was also inscribed as a national monument by the Fine Arts Department in 1979 (Fine Arts Department, 1979).

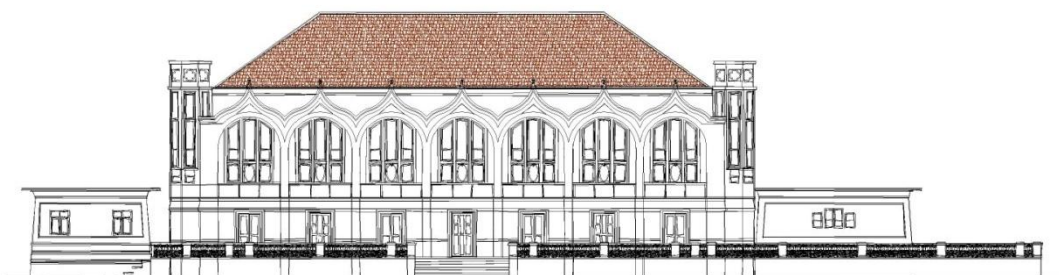


Figure 22 Front Elevation of Nongkransamosorn Hall
Source: Suwannarit Wongcha-um (2010)

The primary use of Nongkransamosorn Hall aimed to be a meeting place of royal family's members and to organize royal ceremonies during the period of King Rama VI and King Rama VII. According to royal command of King Rama VI, Nongkransamosorn Hall was constructed to be a multipurpose hall of Suansunandha (Office of Mass Cooperation, 1999). The hall construction was initiated in 1922 (Somjit Thanasukarn, 1980; Kitti Wattanamahat, 1993a; Fine Arts Department, 1997) and finished in 1923. Some special events were held at Nongkransamosorn Hall such as the 60th birthday anniversary celebration of Queen Sawangwathana and the religious ritual for the funeral of Queen Consort Saisawareepirom in 1929 (see figure 23) (Somjit Thanasukarn, 1980; Kitti Wattanamahat, 1993a; Naengnoi Suksri, 1996; Office of Mass Cooperation, 1999; Kittipong Wirojthamakoon, 2007).

After the democratization in 1932, the hall was no longer in use according to its primary purpose and was adapted to have new functions. Since 1940, Bureau of the Royal Household has allowed the Ministry of Interior to utilize this hall and its setting; however, they were assets of Crown Property Bureau. When this hall was given to the Department of Provincial Administration, it was included as a part of Public Administration College and then served a large extent of use. It was turned to be an office, a former Bangkok City Hall, a training venue, a place of organizing important ceremonies such as certificate and award presentations to local officers; plus a meeting place of commissions (Office of Mass Cooperation, 1999).

Due to the changed purpose of usage from event arrangements to a routine workplace, the hall was constantly deteriorated although the hall was periodically preserved. The limitations affecting the hall preservation consisted of insufficient budgets and varied perception of management toward the value of Nongkransamosorn Hall (Office of Mass Cooperation, 1999). The setting of the hall which was also possessed by the Department of Provincial Administration had been improved such as surrounding car parks, a road and lighting during 1996 to 1997 (Office of Mass Cooperation, 1997); however, the hall was awaiting later conservation. The major problem that the hall faced was a leak of the roof; consequently, rain water and moisture damaged its murals and painted surface. In 1998, the hall's leaked roof was replaced while new gutters were installed and peeled surface was repainted (Office of Mass Cooperation, 1999).



Figure 23 The Royal Funeral of Queen Consort Saisawareepirom
The ceremony was organized in Nongkransamosorn Hall in 1929.
Source: National Archives of Thailand (n.d.)

Earth Hill

The canal and pools were major features of Suansunandha landscape. When the establishment of Suansunandha was initiated in 1908, the ground had been excavated to form the waterway linkage between Suansunandha and the Chaopraya River and the pools in the middle of Suansunandha. Consequently, the byproduct of the excavation was a lot of earth dug out from the ground.

An earth hill became earth tunnel to store kitchen utensils. Some earth that was excavated to the landscape arrangement was gathered up to be earth slopes at the west of Nongkransamosorn Hall. (see figure 20 & 21) They were turned to be an artificial earth hill covered with high rise trees and located at the southwest of Suansunandha (Krai Krajaiwong, 1986). According to Nuang Nilnart (1986), apart from growing forest trees over the huge earth hill, there was an earth tunnel coated with cement inside, and it was used as storage of chinaware. This storeroom, that looked like a tunnel was built underneath the earth hill, was composed of cabinets on both wall sides in order to keep Queen Consort Saisawareepirom's kitchenware and utensils.

The physical environment and usage of this earth hill changed. Since 1937, partial area of Suansunandha has been in possession of the Ministry of Education including the hill. Consequently, the earth tunnel was used as a temporary library (Krai Krajaiwong, 1986) including as a bookstore (Lamead Limaksorn, 1986) during 1937-1943. Besides the altered use of the underneath tunnel, over the top of the hill, there were a flag pole and various kinds of trees; however, an old tree is still grown up. After visiting Indonesia, King Rama V brought back this tree, named *Lignum Vitae* or *Guaiaacum Officinale* Linn (or Kaewjaojoam), which was firstly cultivated in Suansunandha.

When Bangkok encountered the critical air raids during the World War II, Suansunandha inevitably faced heavy aerial bombardment. The earth tunnel was therefore turned to be a bunker for teachers, students and staff of Suansunandha College in 1944. The impact of air strikes destroyed buildings (no. 6 and 12 to 18 of Figure 20) that were situated in the north and the north east of Suansunandha. All of them were classified as the third and fourth type of residences. After the World War II, UN troops adopted Suansunandha as a military camp instead of Japanese armed forces and made use of the earth tunnel to store weapons (1945-1946).

Influence of Western Architecture and Art

European palaces inspired King Rama V to establish Suansunandha. The great park of Versailles Palace (Kitti Wattanamahat, 1993a) and gardens of Bernstorff Palace (Krai Krajaiwong, 1986 a; Office of Mass Cooperation, 1997), that King Rama V visited, influenced the design of Suansunandha. Berstorff Park was designed in Anglo-inspired Romantic style in the late 1760s and was appropriate for healthy walk due to plenty of lawns, oak and beech woods (Ministry of Finance, 2009). As a result of designing Suansunandha as a royal garden of Dusit Royal Palace, the landscape was planned similarly to the natural environment of Bernstorff Palace, and royal residences were laid in the surrounding of numerous trees comparable to Versailles Palace.

The aim of palace construction was changed in the Sixth Reign from

traditional concept to natural emphasis. Since King Rama VI had studied in England for nine years, new palace compounds might be influenced by his overseas experience. The layout of the royal palaces in the reign of King Rama VI was different from the traditional compound of royal palaces comprised of outer, middle and inner courts. The new palaces were established in order to serve healthy living rather than the classic or balance aspects of traditional plans (Somchart Chungsiriarak, 2010:290). Suansunandha demonstrated unbalanced plans because building plans were designed with sets of rooms for each function such as living rooms and bedrooms, and each group of rooms was linked with verandas or balconies.

Besides overseas experiences indirectly influenced on the design of royal residences, the employment of the Western designers working for royal projects had a direct effect on the kingdom's architecture and arts. Even though the revival of Thai arts and antique crafts were initiated to be Thai applied architecture in the period of King Rama VI, the Western craftsmen were still hired for architecture works as well. The influence of the Western style might be combination or domination. The evidence of the mixture between Thai and Western architecture was in form of a Thai roof on a the Western structure and European style rooms within a Thai style exterior; in addition to the Western architecture was transferred to the completeness of buildings (Sithapitanonda and Mertens, 2005:220).

Some buildings had been constructed since the previous monarch (the Fifth Reign) such as Dusit Royal Palace including Suansunandha; however, their constructions were incomplete. Therefore, the Western architects were responsible for the design of these buildings and their constructions were continued until the completion in the reign of King Rama VI. For instance, the layout and building plan of Suansunandha designed by an Italian Architecture, Mr. A. Rigassi reflected "Italian Renaissance" on his work (Terdpong Kongchan, 2003) in the reign of King Rama VI. Apart from building designs, art was also influenced by the Western style. King Rama VI employed the Western artists for buildings' interior decoration; for example, Nongkransamosorn Hall's ceiling and wall were designed and painted by the Italian painter (Naengnoi Suksri, 1994).

The golden age of the Western architecture in the kingdom had been during the Fourth, the Fifth and the Sixth Reigns. Besides influential style, the Western materials were also introduced in the kingdom such as terrazzo, marble flooring, stained glass and metal fittings were used in the 19th century (Somchart Chungsiriarak, 2010). Moreover, construction techniques accepted scientific development from Europe. The advancement of structure and construction began at the same time. Vault ceilings and steel reinforced concrete enlarged building scale (Sithapitanonda and Mertens, 2005:220) and made architecture's structure appear lighter. This obvious technique was used to widen structure for large buildings in addition to increase building spaces by minimizing columns and using reinforced vault structure such as Nongkransamosorn Hall's roof structure. Although the design and construction techniques were influenced by the Western craftsmanship, the construction materials were applied by mixture between Thai and overseas supplies. A type of roof tiles; rhombus shaped tiles or kite shaped tiles, that was made of cement, mortar as well as colored cement-asbestos board became a typical Thai material and style used in the reign of King Rama VI.

Sequence of Changes and Development

This section summarizes the social development and physical changes in Suansunandha from documentary sources and oral history (Fine Arts Department, 1997; Krai Krajaiwong, 1986; Kittipong Wirojthamakoon, 2007; Maneerat Chantanapalin, 2011; Piyanuch Sujit, 2007; Sansanee Jasuwat, 2010; Somjit Thanasukarn, 1980; Siroj Polpanthin, 1984). For 102 years, Suansunandha has passed through six stages of changes from the royal garden to public universities and government's agencies (1908 to 2010).

1. The Introduction of Royal Garden and Royal Residences from 1908 to 1923

King Rama V commanded to create Suansunandha as a royal garden of Suan Dusit Palace in 1908. The king emphasized natural environment creation of forest garden. Because Suansunandha became a part of Suan Dusit Palace, there was a palace gateway connecting to the garden. Suansunandha was also planned to be a place of royal residences after the garden completed.

In 1910, King Rama V passed away. Thus, only the royal garden had been created in Suansunandha but the royal residences had not been initiated yet.

King Rama VI continued King Rama V's projects. The royal residences of Suansunandha were constructed in 1911. The construction of residences was finished in 1919. There were 32 royal residences in Suansunandha.

An audience hall was constructed in 1922 and completed in 1923 and named as Nongkransamosorn Hall.

Suansunandha was prepared for royal residents but it had not been used from 1919 to 1923 because the royal family's members of King Rama V still resided in Suan Dusit Royal Palace.

2. The Growth of Royal Inner Court from 1924 to 1932

Queen Consort Saisawaleepirom was the first member of the royal family residing in Suansunandha. The queen consort was allowed to reside in Suansunandha by King Rama VI in 1924 and consequently, followed by other members of King Rama V's family.

A school was initiated by Queen Consort Saisawaleepirom and supervised by her daughter during 1924-1932. This school, named as Nipakarn, was established in the area of the Queen Consort's residence and directed by the Queen Consort's daughter, Princess Nipanopadol. Students who came from royal families and royal servants were educated with formal education and trained to be noblewomen. This school provided primary and secondary education according to the curriculums of the Ministry of Education. When Queen Consort Saisawaleepirom passed away in 1929 and the political change affected the school operation, the school was terminated in 1932.

From 1924 to 1932, Suansunandha was considered as a large and prominent community. A number of elite women were trained in Suansunandha with Thai traditions such as home economics and handiworks, and taught with formal education at Nipakarn School to prepare to be noblewomen. Suansunandha became larger inner court than other courts in the Sixth Reign and the Seventh Reign. Suansunandha had been the last inner court of the kingdom before the absolute monarchy was transformed into democracy in 1932.

Suansunandha had been unused for five years (1932 to 1937). Its landscape and residences became deteriorated.

3. The Rejuvenation to Educational Institutes from 1937 to 1957

When Suansunandha had been revived from the old inner court to educational institutes during 1937 to 1946, it served the country both fundamental and specific purpose educations.

The Ministry of Education established Suansunandha College in 1937 where primary and secondary education was provided, including the teaching curriculums for boarding female students. Suansunandha College became the only one teaching college of the country during 1937 to 1943. The college was recognized as the leading institute of dramatic arts. From 1937 to 1957, Suansunandha College had been developed to be a large educational institute to teach a number of students; thus, the condition of old royal residences became worse.

In 1940, Administration College of the Department of Provincial Administration (DPA) was established in the southeast of Suansunandha. The Administration College modified Queen Sukumalmarasi Mansion to be a student dormitory while Nongkransamosorn Hall was adapted to be an office building.

The first kindergarten of the country was established in Suansunandha in 1940. This kindergarten named “La-or Utis” was recognized by the general public and was the first one to admit both normal and disabled pupils. As a result of the first kindergarten of the country and for learning disability, it became the model kindergarten of the country. The success of La-or Utis Kindergarten influenced the Ministry of Education to expand kindergartens to other provinces and to initiate a teaching curriculum for the pre-primary education in 1943.

In 1941, the Ministry of Education set up Karn Ruen School. This girl school shared the traditional site of Suansunandha with Suansunandha College and Administration College of the Ministry of Interior. The school was located in the northeast of Suansunandha and occupied royal residences (building no. 9, 10, 11, 12 & 13 in figure 20), Princess Uppantripacha Residence and Queen Sawangwathana Mansion. Group of the royal residences were adapted to be dormitory buildings. The queen mansion was utilized as classrooms and offices on the ground floor while the dormitory was on the upper floor.

In 1943, Suansunandha was entirely used by the Ministry of Education and the Ministry of Interior. Most of the ground and the old royal residences were used by Suansunandha College and Karn Ruen School, but the southeastern ground including Nongkransamosorn Hall and Queen Sukumalmarasi Mansion were utilized by Administration College. Even though both of the ministries made use of Suansunandha, ownership belonged to the Crown Property Bureau.

During 1943 to 1945, Suansunandha had been affected from severe air strikes of the World War II because Japanese troops used Suansunandha as their military camp. Students of Suansunandha College, Karn Ruen School and Administration College were evacuated to both provincial schools and other schools in Bangkok. Thirteen buildings (no. 6 to 18 in figure 20) were damaged by bombings while a tunnel underneath the earth hill was used as the air-raid bunker. Buildings 7 to 11 although

damaged, they were still in use. Both the northern and northeastern buildings (6 and 12 to 18) deteriorated severely and were removed in 1947.

When the war was brought to an end, the UN troops replaced Japanese troops in 1945. After the UN force departed from Suansunandha in 1946, the ground of Suansunandha was returned to Suansunandha College, Karn Ruen School and Administration College. Since Suansunandha was used for military activities and attacked by air raids, buildings and the landscape of Suansunandha decayed and were not appropriate for schooling. Later, damaged buildings were improved and students were brought back to Suansunandha in 1946-1947. A new admission of overall curriculums began in 1947.

In 1948, boarding students, using Queen Sawangwathana Mansion of Karn Ruen School as a dormitory, were moved to Princess Uppantripacha Residence. The whole mansion was changed to be a classroom building.

In 1950, Suansunandha College opened for male students, both boarding and non-boarding students. It opened for non-boarding students because its dormitories became inadequate, and old residences were being removed.

Karn Ruen School became the first educational institute of Thailand to teach a Home Economics Curriculum in 1956.

4. The Development of Teacher Colleges from 1958 to 1994

In 1958, Suansunandha College became a teacher college. The Ministry of Education aimed to increase a number of teachers and to improve teaching curriculums. Suansunandha College was shifted to be Suan Sunandha Teacher College.

In 1961, Karn Ruen School was turned to be Suan Dusit Teacher College. When other teacher colleges were changed from female colleges to unisex colleges, Suan Dusit Teacher College became the existing female teacher college (1961 to 1985).

In 1963, Queen Sawangwathana Mansion was used as a multi-purpose building. The ground floor of this building functioned as a lecture building and an administration office while the upper floor was adapted to be a dormitory for boarding students.

In 1971, Queen Sunandha Monument was established at the southern part of earth hill within Suansunandha Teacher College and officially opened by King Rama IX. The annual ceremony of Queen Suanandha's birthday anniversary is organized on November 10th at this monument (see figure 24).

In 1974, Suan Dusit Teacher College initiated a Bachelor of Education in Primary Education Major. It expanded undergraduate programs to three faculties in 1978. The Faculty of Humanities and Social Science provided 12 programs. The Faculty of Education provided 7 programs. The Faculty of Science provided 9 programs. This expansion led to old building improvement and new building construction.

In 1974, Queen Sawangwathana Mansion of Suan Dusit Teacher College was renovated to serve pupils with defective hearing. When the renovation was finished, disabled pupils were moved to study at Queen Sawangwathana Mansion from 1975 to 1976. Suan Dusit Teacher College became the first institute to enhance the disabled pupils learning with normal pupils in 1969; moreover, it organized a bachelor's degree of teaching for the disabled in 1976.



Figure 24 Queen Sunandha Monument
Homage to the birthday anniversary of Queen Sunandha on 10th of November
Source: Suwannarit Wongcha-um (2010)

Suan Sunandha Teacher College was approved to provide tertiary education in 1975. The Ministry of Education allowed Suan Sunandha Teacher College to set up undergraduate programs within three faculties of Education, Humanities and Social Sciences, and Science and Technology. The college gave up dormitories of boarding students, removed building 24 that was replaced by a gymnasium and expanded gateways on Rajvithi Road and Uthongnok Road during the years of 1975 to 1981.

From 1979 to 1984, Suan Dusit Teacher College had improved, developed and gave up curriculums. However, newly changed curriculums were constantly engaged in the teaching profession.

In 1979, Nongkransamosorn Hall was considered as a national ancient monument by the Fine Arts Department.

In 1984, Suan Sunandha Teacher College was granted to establish a new faculty. When the demand of teachers was declined, the Ministry of Education tried to decrease excessive number of teaching graduates by enhancing new curriculum introduction. Suan Sunandha Teacher College initiated the Faculty of Management Science and organized curriculums under four faculties.

In 1985, Suan Dusit Teacher College began to admit male students. From 1986 to 1992, Suan Dusit Teacher College provided teaching curriculums and also organized science and arts programs for undergraduates.

Princess Uppantripacha Residence has been adapted to be the office of Suan Dusit Polls in Suan Dusit Teacher College since 1992.

In 1994, Administration College was moved out. The use of Queen Sukumalmarasi Mansion was not involved in academic affairs but it was still in use

under the Department of Provincial Administration.

5. The Stagnation of Teacher Colleges from 1995 to 2003

Both Suan Sunandha Teacher College and Suan Dusit Teacher College were altered to higher education institutes in 1995.

Suan Sunandha Teacher College was transformed into Suan Sunandha Rajabhat Institute because graduates from teacher colleges were lack of various career opportunities. When undergraduate programs were extended to cover bachelor's degrees in education, sciences and arts, Suan Sunandha Rajabhat Institute was composed of six faculties of Education, Science and Technology, Humanities and Social Sciences, Management Science, Arts; and Industrial Technology; moreover, the institute developed three postgraduate programs. Therefore, Suan Sunandha Rajabhat Institute organized primary, secondary and tertiary educations.

Suan Dusit Teacher College was changed to Suan Dusit Rajabhat Institute. This transformation led to a diversity of educations to meet different needs of students and thus, it was able to organize undergraduate programs of education, arts and sciences including postgraduate programs. Furthermore, a kindergarten and primary schools remained in Suan Dusit Rajabhat Institute.

Department of Provincial Administration had improved the surroundings of Nongkransamosorn Hall such as car parks, the road and lighting system during the period of 1996 to 1997. The hall's leaking roof was replaced, new gutters were installed, and peeled surface was repainted in 1998.

Suansunandha was considered as an historic site including its nine historic buildings; one hall and one earth hill were inscribed on National Register of Historic Monuments by the Fine Arts Department (FAD) in 1998.

In 2002, Queen Sukumalmarasi Mansion was taken over by the Department of Local Administration (DLA), a new agency of the Interior Ministry. It made use of this old building as the office of Local Human Resources Development, but Nongkransamosorn Hall has remained in use under the Department of Provincial Administration.

In 2003, Suan Sunandha Rajabhat Institute was allowed by FAD to renovate Queen Consort Saisawareepirom Mansion. The scope of the mansion renovation included the basement, the ground floor, the upper floor and the roof.

The basement improvement was about elevating the floor for better drainage and the ventilation for humidity control.

The ground floor improvement was to change woodworks on the floors and on the walls; and to repair brick walls, restrooms, doors and windows.

The upper floor improvement was concerned with replacing flooring materials, repairing walls and ceiling; and changing sanitary wares.

The roof improvement was to change roof purlins, and roof tiles from rhombus shaped tiles to Monier tiles.

6. The Maturity of Universities and Government Agencies from 2004 to Present

In 2004, both educational institutes were established as public universities, and DLA constructed a new building and repaired a historic building.

Suan Sunandha Rajabhat Institute was developed to be Suan Sunandha Rajabhat University (SSRU). There were six faculties for undergraduate programs (Education, Science and Technology, Humanities and Social Sciences, Management Science, Arts; and Industrial Technology) whereas Graduate School created a Doctor of Philosophy program (Piyanuch Sujit, 2007).

Suan Dusit Rajabhat Institute was developed to be Suan Dusit Rajabhat University (SDRU). It emphasized four areas of education (primary education, culinary study, service industry and learning disability) and, consequently, comprised five faculties of Education, Science and Technology, Management Sciences, Humanities and Social Sciences; and Nursing Science including Graduate School.

The Department of Local Administration was allowed by the Fine Arts Department (FAD) to construct a 5-story building. However, FAD suggested that the new building style should not dominate historic buildings and DLA should no longer add other massive buildings to Suansunandha. This building was located at the northeast of Nongkransamosorn Hall.

DLA was granted by FAD to repair a historic building (Queen Sukumalmarasi Mansion). This building renovation was about fixing mortar and timber walls, changing timber floor, eaves and leaked roof; and repainting walls.

In 2006, DLA established a convenient store on the eastern wall of Suansunandha. The store construction was completed without FAD permission; in addition, the partial wall was demolished. Thus, FAD ordered DLA to pull down some part of the store and restore the wall.

In 2010, SSRU was allowed by FAD to renovate its five historic buildings.

Queen Consort Saisawareepirom Mansion was changed from Monier roof tiles to rhombus shaped tiles and installed with roof spouts.

Royal residences of Consort Uan, Princess Athorntipayanipa, Princess Jutharatrachakumari and Princess Sasipongprapai have been repaired. Their features and structures were improved including foundations that were lifted up about 50 centimeters from the ground.

In 2010, DPA carried out a major conservation of Nongkransamosorn Hall. Exterior surface, interior wall, doors and windows were repaired. Air conditioning system was maintained. Floor material was replaced. Its associated buildings were also improved.

Suansunandha has continually encountered a series of changes and development since 1908. As a result of changes, Suansunandha was developed from the Introduction of Royal Garden and Royal Residences (the complete inner court without residents during 1908 to 1923), the Growth of Royal Inner Court (Suansunandha became the largest court during 1924 to 1932), Rejuvenation to Education Institutes (the rebirth of Suansunandha serving fundamental educations during 1937 to 1957), the Development of Teacher Colleges (numbers of teachers graduated from Suansunandha during 1958 to

1994), the Stagnation of Teacher Colleges (the need of teachers declined from 1995 to 2003) and to the Maturity of Universities and Government Agencies (the use of whole areas from 2004 to present). Each stage of alterations inevitably impacted on the physical and social environment because the development increased new interventions, but it might, in turn, decrease historic buildings and places.

Chapter 5

Condition and Description of Suansunandha

Current Condition of Suansunandha

The original site of Suansunandha has been separated into three areas (A1, A2 and A3 in figure 27). New additions and adaptation have been introduced constantly to the site since 1940s. As a result of new alterations, 71 recent buildings coexist with nine royal residences and one hall in the traditional ground of Suansunandha. When ground use changed and the numbers of users increased, physical environment was adjusted over the time. The existing features of the landscape have a small pool, a canal, an earth hill, and a memorial tree. Roads and red brick walls are other features that still remain in Suansunandha. (see table 2 & 3)

At the present time, ground and properties of Suansunandha have been shared by Suan Sunandha Rajabhat University (SSRU), Suan Dusit Rajabhat University (SDRU), the Department of Provincial Administration (DPA) and the Department of Local Administration (DLA). SDRU and SSRU organize tertiary education for undergraduate programs and graduate schools. There are six faculties, a primary school and a secondary school in SSRU. SDRU consists of five faculties, and has a kindergarten and a primary school. DLA shares the ground of Suansunandha with DPA and has 14 divisions working in Suansunandha. DPA does not use Suansunandha as a regular workplace.

There are 18,550 stakeholders in SSRU divided into 17,332 students, and 1,218 lecturers and staff (Suan Sunandha Rajabhat University, 2010). There are 20,752 stakeholders in SDRU divided into 19,048 students, and 1,704 lecturers and staff (Suan Dusit Rajabhat University, 2010). DLA has 516 officials working in this area (Department of Local Administration, 2010). Therefore, Suansunandha is comprised of 39,818 relevant stakeholders separated into two groups. The first group is the permanent stakeholders of officials, lecturers and staff. The second group is the temporary stakeholders of students.

SSRU and SDRU utilize their buildings for teaching, student affairs, office works and lodging service. SSRU has the total of 38 buildings consisting of 32 new and six historic buildings. SDRU has the total of 35 buildings consisting of 33 new buildings and two historic buildings.

DPA occupies the audience hall and a new building. The new building provides lodging service for both DPA staff and officials of the Ministry of Interior. DPA transferred other buildings to DLA in 2002. DLA has taken over an historic building and other three buildings from DPA since 2002. This old building is used as the office of Local Human Resources Development. Then, DLA constructed a five-story building and a two-story building, so it has the total of six buildings (one historic building and five new buildings).

Most of the new buildings in Suansunandha are low to medium rise. The highest ones are six-story buildings used as an office of DLA, classroom buildings and a gymnasium in SSRU. New buildings in SDRU are from one-story to five-story buildings. There is a new four-story building of DPA. According to Bangkok Metropolitan Administration's law in 1983, any construction or adaption of buildings, except buildings of government agencies, in zone 1 of Bangkok is not allowed to reach the height over 12 meters. Suansunandha belongs to this zone; however, its buildings are utilized for public benefits and occupied by government agencies. Thus, they are exempt from this law.

Roads can be divided into three networks in Suansunandha (see figure 27). The road that parallels the canal reflects the early route. The southern road to the hall (H1) is also a member of the old route. New road extensions mostly connect the northern roads to the southern roads in addition to the gateways.

The red brick walls of Suansunandha are considered as a part of the historic site, so changes or new additions on the walls must be allowed by FAD. The northern, western and southern red brick walls of Suansunandha were built in 1908, and they were comparable with the wall of Dusit Royal Palace, while the eastern wall was built later. SSRU, occupying the entire western wall, shares the northern wall with SDRU and the southern walls with DLA. The walls are composed of 11 gateways (G1 to G11), but only G1 is the early one that is a part of the southern wall of DLA (A3).

The canal route starts from the Dusit Royal Palace through SDRU and SSRU to the Chaopraya River (see figure 25). The canal enhances the landscape and is used to control water level within these areas. A small pool (P1) is a landscape feature of SSRU (A1). It is surrounded by eastern and southern gardens, the western road; and a five-story building in the north. This pool is connected the northern and southern canals. There is a large pavilion projecting into the pool.



Figure 25 Pool (P1) and Canal (C2)

Pool from the south, pool from the north and the canal connecting with the Chaopraya River
Source: Suwannarit Wongcha-um (2011)

The earth hill (T1) is located in SSRU (A1). It was made of excavated ground from the canal and the pools; in addition, it features an underneath tunnel, a memorial tree on the top and the southern monument (see figure 26). The hill adjoins a three-story building in the north, Queen Sunandha Monument, running tracks and field in the south, a road and an assembly hall in the west; and Nongkransamosorn Hall in the east. The tunnel of the earth hill is used as a general storeroom. The memorial tree named *Lignum Vitae* that was firstly planted on the hill of Suansunandha. It was imported from Indonesia during the Fifth Reign. It produces purple blossoms used as the symbol of SSRU.

Historic buildings are in good conditions because most of them have recently been improved and some has been under renovation. However, these buildings typically encounter moisture that leads to surface peelings, microorganism and water stains, and decayed woodworks. The sources of these problems may be underground water, rain water, the water from the pool and the canal. Vibration of the traffic may cause structure movement and foundation distortion since some buildings are located near roads and parking areas.

The ground of Suansunandha has been filled up with a number of new constructions. Public spaces become limited between historic buildings and new surroundings because some new building constructions adjoin the historic buildings. Further construction on space might be hardly possible unless the existing new buildings are removed.



Figure 26 Earth Tunnel (T1)

Top: from left memorial tree (Lignum Vitae), pathway on the top and the eastern tunnel entrance

Middle: high rise trees and southern memorial monument of Queen Sunandha

Base: western tunnel entrance

Source: Suwannarit Wongcha-um (2011)

Table 2 Features of Areas in Suansunandha

No.	Organizations	Old Built Features	Other New Built Features
A1	Suan Sunandha Rajabhat University (SSRU)	Registered buildings: 5 small residences (S1,S2,S3,S4,S5) One large mansion (L3) Places: Earth tunnel & hill(T1), Pool (P1) and Canal (C2) Boundary: Red brick wall in the north, west and south	32 new buildings: One story to six story buildings Uses of new buildings: Teaching, student affairs, office works and lodging service Queen Sunandha Monument
A2	Suan Dusit Rajabhat University (SDRU)	Registered buildings: One small residences (S6) One large mansion (L1) Place: Canal (C1) Boundary: Red brick wall in the north	33 new buildings: One story to five story buildings Uses of new buildings: Teaching, student affairs, office works and lodging service
A3	Department of Provincial Administration (DPA)	Registered building: The audience hall (H1)	One new building: A four story building used as lodging service
	Department of Local Administration (DLA)	Registered building: One large mansion (L2) Boundary: Red brick wall in the south	Five new buildings: One story to six story buildings used as office buildings

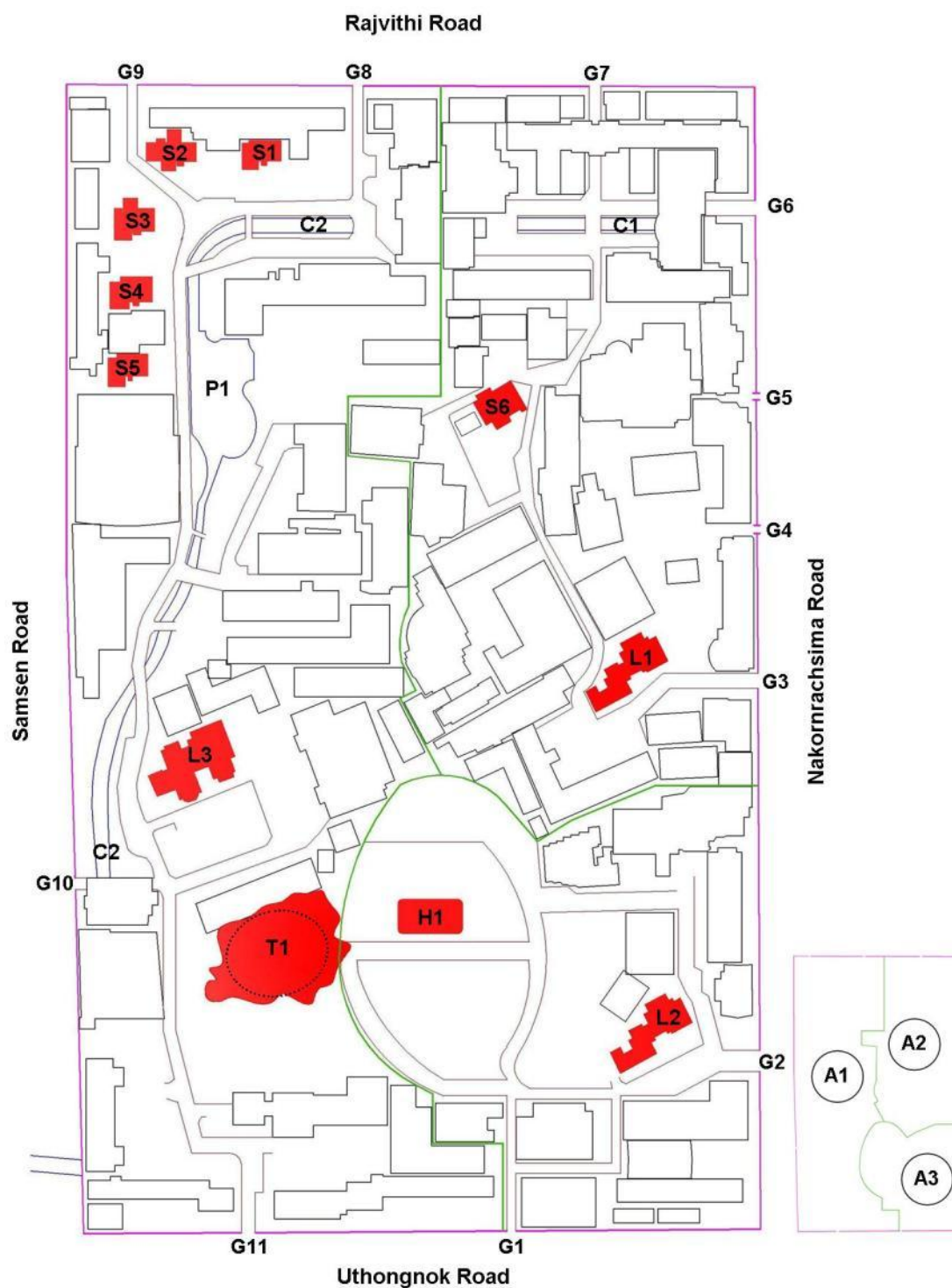


Figure 27 Layout of Suansunandha in 2010

A1 = Area 1 of SSRU, A2 = Area 2 of SDRU, A3 = Area 3 of DLA and DPA

S1-S6 = Small Residences, L1-L3 = Large Mansions, C1-C2 = Canal

P1 = Pool, T1 = Earth Tunnel & Hill, H1 = Audience Hall, G1-G11 = Gateways

Source: Suwannarit Wongcha-um (2010)

Physical Description of Historic Buildings

There are two groups of old residential buildings and an audience hall in Suansunandha. The first group is composed of two types of large mansions. The second group is composed of small royal residences divided into two types. (see table 3)

1. Large mansions

The large mansions are separated into two types. The first type is comprised of two existing mansions. The second type has one large mansion.

1.1 The first type buildings

These residential buildings that consist of Queen Sawangwathana Mansion of SDRU (A2) and Queen Sukumalmarasi Mansion of DLA (A3) are 92 years old (1919 to 2011).

1.1.1 Queen Sawangwathana Mansion (L1) or Yaowapa Building or Arts and Culture Center is surrounded by a fitness center building in the north, a primary school building in the east, a kindergarten building in the south; and a car park and buildings of the Faculty of Education in the west. (see figure 28 to 33)

Sidewalks and high rise trees define intermediate space between L1 and its surroundings. The narrow walkway is between L1 and northern buildings. The western and southern sidewalks are limited spaces between L1 and the road. The eastern space is comprised of both the walkway and the garden in between L1 and the school building.

Current functions of L1

This building has been adapted to the Arts and Culture Center. Its ground floor is divided into a training and exhibition area and offices. It is a venue to organize handiwork training courses such as flower arrangement and temporary exhibitions.

Its upper floor is divided into an exhibition area, King Rama V image room and a royal resident image room (Princess Yaowapapongsanit, Princess Wapeebusbakorn and Princess Prapapanpilai). The exhibition area displays royal costumes, textiles and garlands of flowers.

SDRU is going to develop L1 as a learning center to exhibit the middle age of Rattanakosin history in the form of an interactive museum. It has budgeted 1.6 million Baht for renovating the building to create four exhibition themes about cuisines, costumes, architecture; and Thai herbs and medical treatment.

1.1.2 Queen Sukumalmarasi Mansion (L2) or Suwatthana Building is surrounded by one-story and three-story buildings in the north, a road and a two-story building in the east, a front garden in the south; and a parking area in the west. (see figure 34 to 38)

Public space is composed of walkways and gardens in between L2 and its surroundings. There is no intermediate zone between L2 and eastern road, so cars can park and run very close to the building. Walkways and high rise trees divide L2 from the western parking area and northern buildings. The front garden is between L2 and the southern road.

Current functions of L2

This building has been changed to the office of Local Human Resources Development, a division of DLA. The whole ground floor is used for offices and a meeting room.

Its upper floor is divided into an exhibition area, King Rama V statue room, Queen Sunandha statue room and a chapel (or a worship room).

DLA has planned to develop L2 as a museum to organize events on the ground floor and permanent exhibitions on the upper floor. Both statue rooms and the chapel still exist.

Building forms

The wide building plan was designed with two connecting L-shapes. This building type is a two-story building with a basement.

The top of the buildings has three front pediments, three back pediments, one right pediment and an inclined roof.

The building structure consists of post and beam; and load bearing walls.

Building materials

Wood is applied with fretted grilles, doors, windows, staircases (steps, balusters, and handrails), ceilings, floors and walls.

Bricks and mortar are applied with building walls.

Concrete and marble are used with entrance staircases.

Reinforced concrete is applied with the building structure.

Mortar is used for projecting window heads and sills.

L1 is roofed over with Monier tiles and L2 is covered with metal roof sheets.

Glass and aluminum are applied with new windows, doors and walls. Glass walls are installed among posts along veranda of L1. Glass doors are placed at entrance staircases of L1.

Building components

The roof system is made of wood frame supporting gable roofs, the hip-gable roof and the hip roof.

The gutter follows the roof line and downspouts are installed at all sides.

The windows are both Venetian blind windows or louvered windows and casement windows. The angled slat panels can be pivoted outward. Some wood panels were replaced by glass panels.

The panel doors have both double doors and single doors with transom. The double doors are held with two hinges but the single doors are attached with three hinges. The double doors are used for rooms while the single doors are

used for restrooms.

The brick wall is used for both the foundation and the wall construction.

The floor is composed of wood frames and joists supporting wood planks except for the restroom floors that are made of concrete covered with tiles.

Ceiling air conditioners are installed in the whole building (L1). Wall air conditioners are installed in rooms and along the upper floor balcony of L2.

Mural painting is used for room decoration. Fresco secco mural painting technique was applied with both the wall and ceiling of chapel of L2.

L1 and L2 have good overall condition. However, they have peelings and microorganism stains on the walls of the ground floor. In addition, they might encounter adverse effects from vibration and air pollution of traffic. Both buildings have close relationship with the surrounding roads and the parking areas.



Figure 28 Front of Queen Sawangwathana Mansion (L1)

Source: Suwannarit Wongcha-um (2011)



Figure 29 Left of L1

Source: Suwannarit Wongcha-um (2011)



Figure 30 Back of L1

Source: Suwannarit Wongcha-um (2011)



Figure 31 Right of L1

Source: Suwannarit Wongcha-um (2011)



Figure 32 Condition of L1

Source: Suwannarit Wongcha-um (2011)



Figure 33 Surroundings of L1
From left: northern traffic, southern road and western parking area
Source: Suwannarit Wongcha-um (2011)



Figure 34 Front of Queen Sukumalmarasi Mansion (L2)
Source: Suwannarit Wongcha-um (2010)



Figure 35 Left of L2
Source: Suwannarit Wongcha-um (2010)



Figure 36 Back of L2
Source: Suwannarit Wongcha-um (2010)



Figure 37 Right of L2
Source: Suwannarit Wongcha-um (2010)



Figure 38 Surroundings of L2
From left: western road and parking, eastern parking area, and northern space
Source: Suwannarit Wongcha-um (2010)

1.2 The second type building

Queen Consort Saisawareepirom Mansion (L3) or the Art and Culture Building is located in SSRU (A1). This former residential building is 92 years old (1919 to 2011). It is surrounded by a southern parking area, a five-story building in the east, two two-story buildings in the north and the western road. (see figure 39 to 43)

Walkways and gardens are public spaces between L3 and its surroundings. The front garden divides L3 from the southern parking area. There is a narrow walkway between L3 and two northern buildings. The western garden and a walkway are between L3 and the road. The eastern garden and a walkway have wider spaces between L3 and the five-story building.

Current functions of L3

This building ground floor is shared by offices of the rector and cultural center; and Thai Medical Treatment section. The whole upper floor is used as a museum to exhibit history of Queen Consort Saisawareepirom and the queen's daughters, Suansunandha story, paintings; and artifacts.

SSRU has planned to move Thai Medical Treatment section to S5 and to replace it with the office of cultural center.

Building forms

The wide building plan was designed with two connecting L-shapes. This building type is a two-story building with a basement.

The top of the building is composed of pediments; and pyramid and inclined roofs.

The building structure consists of post and beam; and load bearing walls.

Building materials

Wood is applied with fretted grilles, brackets, doors, windows, staircases (steps, balusters, and handrails), ceiling, floors and walls.

Bricks and mortar are applied with building walls.

Concrete and marble are used with entrance staircases.

Reinforced concrete is applied with the building structure.

Mortar is used for projecting window sills.

Roof is covered with rhombus shaped tiles.

Cast iron is used for window grilles.

Glass panes are applied with transoms and new doors.

Building components

The roof system is made of wood frame supporting gable roofs, a pyramid roof, hip-gable roofs and hip roofs.

The gutter follows the roof line and downspouts are installed at all sides.

The windows are Venetian blind windows or louvered windows, sliding windows and casement windows. Their Venetian blind panels were able to be pivoted outward but they do not function because of repainting. Sliding panels below windows are placed along the veranda.

The panel doors consist of double doors and single doors with transom. The double doors are held with two hinges, but the single doors are attached with three hinges. The double doors are used for rooms while the single doors are used for storerooms.

The brick wall is used for both foundation and wall construction.

The floor is composed of wood joists supporting wood planks except for the restroom floors are made of concrete covered with tiles.

Wall air conditioners are installed only in the offices.

An addition is applied with extended façade. This additional façade is composed of the covered entrances and the entrance halls.

L3 has good overall condition. Peelings and water stains appear on the wall of the ground floor and water infiltration is on the upper ceiling. This building is closed to the western road and the canal.



Figure 39 Front of Queen Consort Saisawareepirom Mansion (L3)

Source: Suwannarit Wongcha-um (2011)



Figure 40 Left of L3

Source: Suwannarit Wongcha-um (2011)



Figure 41 Back of L3

Source: Suwannarit Wongcha-um (2011)



Figure 42 Right of L3

Source: Suwannarit Wongcha-um (2011)



Figure 43 Surroundings of L3

From left: southern parking and western building; and eastern road and northern buildings

Source: Suwannarit Wongcha-um (2011)

2. Small Residences

Small royal residences are divided into two types. The first type of small residences or the third type of historic buildings is comprised of six remaining residences. The second type of small residences or the fourth type of historic buildings has one last residence.

2.1 Group of the third type buildings

This building group is located in SSRU (A1). These residential buildings that are 92 years old (1919 to 2011) comprise S1, S2, S3, S4 and S5.

2.1.1 Consort Uan Residence (S1) is surrounded by the six-story building of the Faculty of Fine and Applied Arts in the west. The north and the east of the building are bounded by the southern road and the canal (C2). (see figure 44 to 47)

The southern public space is composed of a front garden and a sidewalk in between the building and the road. S1 is adjacent to the six-story building so small sidewalk has narrow space between them.

2.1.2 Princess Athorn tipayanipa Residence (S2) is surrounded by six-story building of the Faculty of Fine and Applied Arts in the north and the east, S3 in the south; and a one-story building in the west. (see figure 48 to 52)

There are a front garden and a sidewalk between the building and the southern road. The western walkway and the road have a space between the building and a one-story building. S2 is very adjacent to the six-story building; thus, very narrow spaces are in between them.

2.1.3 Princess Jutharatrachakumari Residence (S3) adjoins a dormitory in the west and is surrounded by S2 in the north, the canal (C2) in the east and S4 in the south. (see figure 52 to 56)

Its front and back gardens are between S3 and roads. The western sidewalk and the garden divide S3 from the road and the canal. There is some space between S3 and the western dormitory.

2.1.4 Princess Pisamaipimolsat Residence (S4) is surrounded by S3 in the north, a road and a canal (C2) in the east and a classroom building of the Faculty in the west. It also faces an office building of the Faculty of Industrial Technology in the south. (see figure 57 to 60)

The northern garden is a public space between S4 and S3. S4 and the southern and western buildings are divided by a small space. The eastern garden and a sidewalk are between S4 and the road.

2.1.5 Princess Sasipongprapai Residence (S5) is surrounded by an office building of the Faculty of Industrial technology in the north, pool (P1) in the east, a gymnasium in the south and the classroom building of the Faculty in the west. (see figure 60 to 63)

The eastern garden is a public space between S5 and the road. The southern space between S5 and the gymnasium is quite small. The narrow space divides S5 from the western and southern buildings.

Current functions of S1 to S5

They are used as office buildings and classrooms but the functions of buildings S1, S2, S3 and S5 would be changed because SSRU has planned to develop S1, S2 and S3 to be a gallery, a museum and an art exhibition respectively for students and faculties. S5 would be utilized by the Thai Medical Treatment Section. The whole building of S4 is used as the faculty office of Computer Application for the Architecture Department.

Building forms

This building group has an L-shaped floor plan. It is a two-story building with a basement.

The top of the building has one pediment as gable front and an inclined roof.

The building structure consists of post and beam; and load bearing walls.

Building materials

Wood is applied with fretted grilles, brackets, doors, windows, staircases (steps, balusters, and handrails), ceilings, floors, walls and covered entrance.

Bricks and mortar are applied with building walls.

Reinforced concrete is applied with the building structure.

Precast mortar is used for ornamental works such as flower motif and window casing along the external surface.

The roof of the building group (S1, S2, S3 and S5) and their entrances are covered with rhombus shaped tiles, but S4 is covered with Monier tiles.

Glass and aluminum are applied with new windows of S4.

Building components

The roof system is made from wood frame supporting two gable roofs and a hip roof.

Gutter follows the roof line and downspouts are installed at all sides.

The windows are composed of Venetian blind windows or louvered windows and casement windows. The Venetian blind panels were able to be pivoted outward but they do not function because of repainting. Some wood panels are replaced by glass panes.

The doors are double panel doors with transom. These wood doors are held with two hinges. Some wood panels are replaced by glass panels.

The entrance staircase is covered with a gable roof.

The brick wall is used for both foundation and wall construction.

The floor is composed of wood frames and joists supporting wood planks.

Wall air conditioners are installed in rooms.

SSRU has improved the exterior and interior components of S1, S2 and S3. These buildings (S1, S2, S3 and S5) have been renovated by improving their landscape, reinforcing their foundations and heightening them about 50 centimeters from the ground. S4 is in good condition even if it encounters graffiti, water stains, plants and peelings.



Figure 44 Front of Consort Uan Residence (S1)
Source: Suwannarit Wongcha-um (2011)

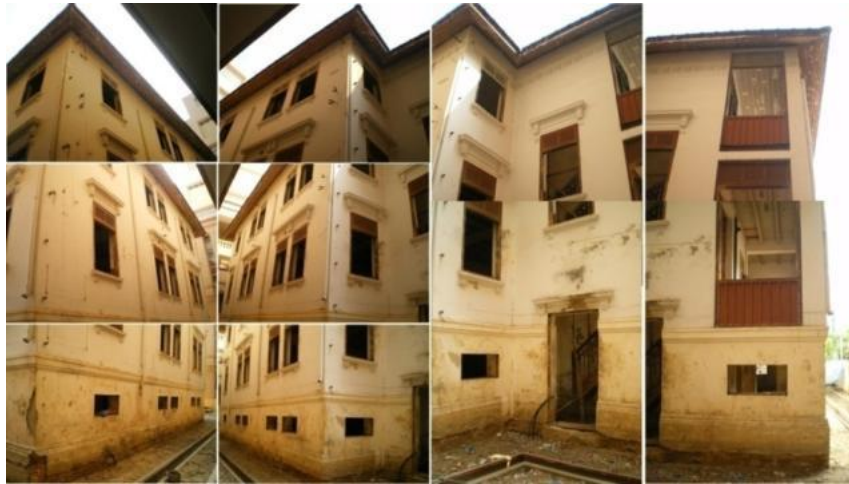


Figure 45 Back of S1

Source: Suwannarit Wongcha-um (2011)



Figure 46 Right and Left of S1

Source: Suwannarit Wongcha-um (2011)



Figure 47 Surroundings of S1
Source: Suwannarit Wongcha-um (2011)



Figure 48 Front of Princess Athorntipayanipa Residence (S2)
Source: Suwannarit Wongcha-um (2011)



Figure 49 Left of S2
Source: Suwannarit Wongcha-um (2011)



Figure 50 Back of S2
Source: Suwannarit Wongcha-um (2011)



Figure 51 Right of S2
Source: Suwannarit Wongcha-um (2011)



Figure 52 Surroundings of S2 and S3
Source: Suwannarit Wongcha-um (2011)



Figure 53 Front of Princess Jutharatrachakumari Residence (S3)
Source: Suwannarit Wongcha-um (2011)



Figure 54 Left of S3

Source: Suwannarit Wongcha-um (2011)



Figure 55 Back of S3

Source: Suwannarit Wongcha-um (2011)



Figure 56 Right of S3

Source: Suwannarit Wongcha-um (2011)



Figure 57 Front of Princess Pisamaipimolsat Residence (S4)

Source: Suwannarit Wongcha-um (2011)



Figure 58 Left and Back of S4
Source: Suwannarit Wongcha-um (2011)



Figure 59 Right of S4
Source: Suwannarit Wongcha-um (2011)



Figure 60 Surroundings of S4 and S5
Source: Suwannarit Wongcha-um (2011)



Figure 61 Front of Princess Sasipongprapai Residence (S5)
Source: Suwannarit Wongcha-um (2011)



Figure 62 Left and Right of S5
Source: Suwannarit Wongcha-um (2011)



Figure 63 Back of S5
Source: Suwannarit Wongcha-um (2011)

2.2 The fourth type building

Princess Uppantripacha Residence (S6) is located in SDRU (A2). This residential building is 92 years old (1919 to 2011). It is surrounded by a parking area and an infirmary building in the north, a parking building in the east, a southern recreational area; and a one-story building in the west. (see figure 64 to 68)

A public space is comprised of a recreational area in front of the building and the western garden. In the west, there is a small sidewalk between S6 and the one-story building. There is an eastern road between S6 and the parking building.

Current function of S6

This whole building has been used as SDRU's Poll Office building since 1992. Its space arrangement has been changed to serve office work; for instance, veranda was divided into rooms.

Building forms

S6 has a rectangular floor plan and is similar to a C-shape. It is a two-story building with a basement.

The top of the building has two pediments as a gable front and an inclined roof.

This building structure consists of post and beam; and load bearing walls.

Building materials

Wood is applied with fretted grilles, brackets, doors, windows, staircases (steps, balusters, and handrails), ceilings, floors, walls and covered entrance.

Bricks and mortar are applied with building walls.

Reinforced concrete is applied with the building structure.

Precast mortar is used for ornamental works such as flower motifs and window casing along external surface.

Roof of the building and its entrance is covered with Monier tiles.

Glass and aluminum are applied with window casing, doors and walls of a new room division on the veranda.

Building components

The roof system is made of wood frame supporting two gable roofs and a hip roof.

The gutter follows the roof line and downspouts are installed at all sides.

The windows are comprised of Venetian blind windows or louvered windows and casement windows; and have pivoted panels.

The doors are double panel doors with transom. These wood doors are held with two hinges. Some wood panels are replaced by glass panes.

The entrance staircase is covered with a gable roof.

The brick wall is used for both the foundation and the wall construction.

The floor is composed of wood frames and joists supporting wood planks.

Ceiling air conditioners are installed in rooms.

The form, components and materials of the fourth type building (S6) are almost identical to the third type except for the façade. S6 is in good overall condition although it faces peeling, water stains, pale surface and wood decay at the ceilings.



Figure 64 Front of Princess Uppantripacha Residence (S6)
Source: Suwannarit Wongcha-um (2011)



Figure 65 Left of S6
Source: Suwannarit Wongcha-um (2011)



Figure 66 Back of S6
Source: Suwannarit Wongcha-um (2011)



Figure 67 Right of S6

Source: Suwannarit Wongcha-um (2011)



Figure 68 Surroundings of S6

Source: Suwannarit Wongcha-um (2011)

3. Audience Hall

Nongkransamosorn Hall (H1) is in DPA (A3). This audience hall is 88 years old (1923 to 2011). It is surrounded by a northern parking area, a five-story building in the east, the southern road and earth hill (T1) in the west. (see figure 69 to 74)

This hall has a surrounding terrace and a garden as its intermediate zone. Both the southern terrace and garden are smaller than other directions. The hall closely faces to the southern road and the parking area. A northern garden and large trees divide the hall from parking area. The eastern terrace and walkway are public spaces between the hall and the five-story building. The western space and the wall are between the hall and the earth hill (T1).

Current function of H1

This hall has been used as a meeting place and a special event organization venue of DLA since 1940.

Building forms

H1 has a rectangular floor plan and is a two-story building.

The top of the hall is covered with a hip roof.

The middle of the hall is comprised of pitched roofs, pointed arch and narrow towers.

This hall structure consists of vault ceiling, arches, niches and columns.

Building materials

Wood is applied with roof truss, doors, windows, balusters, handrails, and floors.

Bricks and mortar are applied with hall walls.

Reinforced concrete is applied with the building structure.

Precast mortar is used for ornamental works and balusters.

Concrete and marble are used with terrace staircases.

The roofs are covered with Monier tiles.

Glass is applied with window and door panels.

Building components

The roof system is a two-tiered roof structure consisting of a vault and hip roof.

The gutter follows the roof line and downspouts are installed at all sides.

The hall corners consist of diminutive towers connecting pilasters. There is a spiral staircase within the northwest tower to the gallery.

The windows consist of dormer windows and Venetian blind windows.

The panel doors are oversized and consist of both double doors and single doors. The inside doors use Venetian blind panels. Some wood panels are replaced by glass panes.

The brick wall is used for both the foundation and the wall construction.

The floor is built of concrete and wood joists supporting wood planks.

Columns are placed on round bases and consist of capitals supporting entablature of niche and gallery arches.

Fresco secco technique is applied to mural paintings of the ceiling, the walls and the niches.

Floor air conditioners are installed on the ground floor.

There are two associated buildings used as restrooms and a residence of caretakers.

Nongkransamosorn Hall is in good condition because it was renovated in 2010.



Figure 69 Front of Nongkransamosorn Hall (H1)
Source: Suwannarit Wongcha-um (2011)



Figure 70 Left of H1
Source: Suwannarit Wongcha-um (2011)



Figure 71 Back of H1
Source: Suwannarit Wongcha-um (2011)



Figure 72 Right of H1
Source: Suwannarit Wongcha-um (2011)

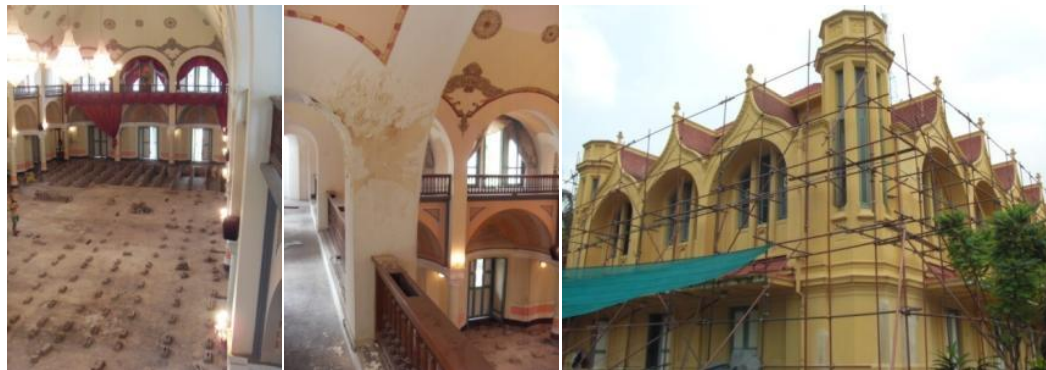


Figure 73 Condition and Renovation of H1 in 2010
Source: Suwannarit Wongcha-um (2010)

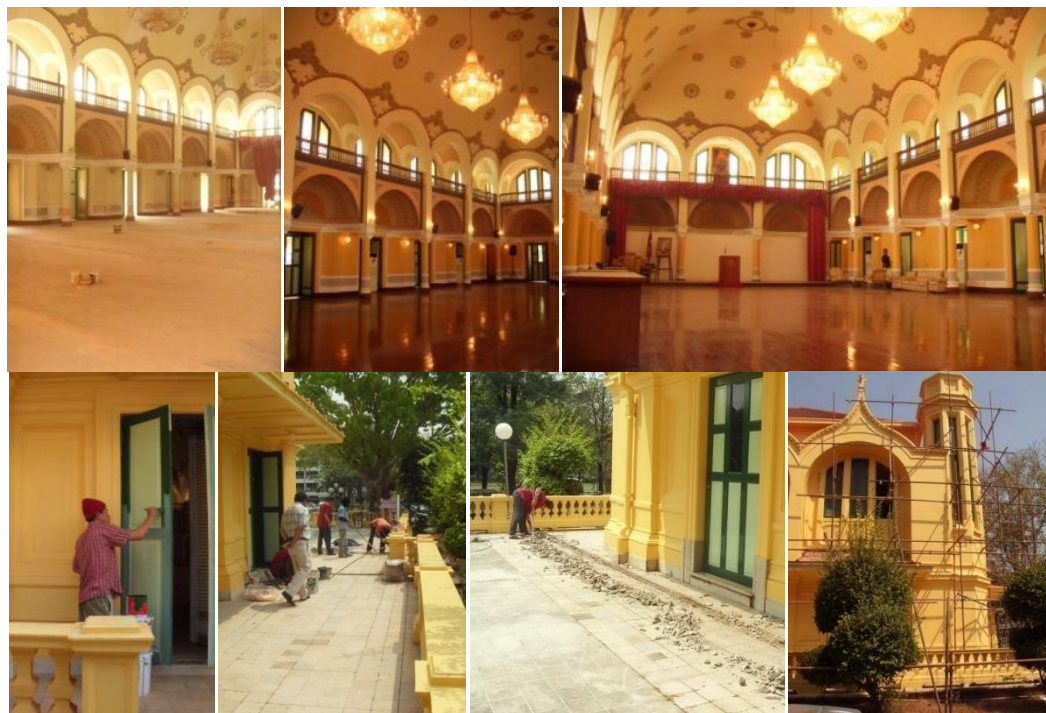


Figure 74 Interior and Exterior of H1 in 2011
Source: Suwannarit Wongcha-um (2011)

Table 3 Description of Historic Buildings and Places in Suansunandha

No.	Name	Owners, Users and Functions	Description
Large Mansions			
L1	Queen Sawangwathana Mansion or Yaowapa Building or Arts and Culture Center of SDRU (figure 28 to 33)	<u>Owners:</u> Queen Sawangwathana (1924-1932) Crown Property Bureau (1932 to present) <u>Users:</u> Princess Yaowapongsanit, Princess Wapeebusbakorn and Princess Prapapanpilai (1924-1932) SDRU (1941 to present) <u>Current Function:</u> Office, handicraft training and temporary exhibition on ground floor Permanent exhibition on upper floor <u>Planned Function</u> An interactive museum about Rattanakosin history	The first type of historic buildings The first type of large mansions <u>Building forms:</u> Two connecting L-shapes of building plan Two-story building with basement Pediments and inclined roof on the top of buildings Post and beam; and load bearing walls for structure <u>Building materials:</u> Wood fretted grilles, doors, windows, staircases (steps, balusters, and handrails), ceiling, floors and walls Bricks and mortar walls Concrete and marble entrance staircases Reinforced concrete structure Mortar window heads and sills Monier roof tiles for L1 Metal roof sheets for L2 Glass and aluminum for new windows, doors and walls. Glass walls for veranda of L1 Glass doors for entrance staircases of L1 <u>Building components:</u> Roof system (wood frame, gable roofs, hip-gable roof and hip roof)
L2	Queen Sukumalmarasi Mansion or Suwatthana Building (figure 34 to 38)	<u>Owners:</u> Queen Sukumalmarasi (1924-1932) Crown Property Bureau (1932 to present) <u>Users:</u> Queen Sukumalmarasi, Princess Suthatipayarat and Princess Napapornprapa (1924 to 1932) DPA (1940 to 2002)	

No.	Name	Owners, Users and Functions	Description
		<p>DLA (2002 to present)</p> <p><u>Current Function:</u> Office of Local Human Resource Development, meeting room and office of deputy secretary-general on ground floor Permanent exhibition, statue rooms and chapel on upper floor</p> <p><u>Planned Function</u> A museum on upper floor and event organization on ground floor</p>	<p>Gutter and downspouts Venetian blind windows and casement windows Panel Doors (double doors for rooms and single doors for toilets) with transom Brick wall foundation and wall construction Floor system (wood frames, joists and planks) Concrete floors covered with tiles for toilets. Ceiling air conditioners for the whole building (L1) Wall air conditioners in rooms and along upper floor balcony of L2 Fresco secco mural painting technique for chapel of L2</p> <p><u>Current situations:</u> They are in good condition. Appearance of peelings and microorganism stains on ground floor walls (see figure 32)</p>
L3	<p>Queen Consort Saisawareepirom Mansion</p> <p>or</p> <p>Arts & Culture Center of SSRU (figure 39 to 43)</p>	<p><u>Owners:</u> Queen Consort Saisawareepirom (1924 to 1932) Crown Property Bureau (1932 to present)</p> <p><u>Users:</u> Queen Consort Saisawareepirom and Princess Nipanopadol (1924 to 1932) SSRU (1937 to present)</p> <p><u>Current Function:</u> Office of rector, arts & culture center and Thai Medical Treatment Section on ground floor</p>	<p>The second type of historic buildings The second type of large mansions</p> <p><u>Building forms:</u> Two connecting L-shapes of building plan Two-story building with basement Pediments; and pyramid and inclined roofs on top of the building Post and beam; and load bearing walls for structure</p> <p><u>Building materials:</u> Wood fretted grilles, brackets, doors, windows, staircases</p>

No.	Name	Owners, Users and Functions	Description
		<p>Museum on upper floor</p> <p><u>Planned Function</u></p> <p>To move Thai Medical Treatment Section to S5 and to extend the office of arts & culture center to its place</p>	<p>(steps, balusters, and handrails), ceiling, floors and walls</p> <p>Bricks and mortar walls</p> <p>Concrete and marble entrance staircases</p> <p>Reinforced concrete structure</p> <p>Mortar window sills</p> <p>Rhombus shaped roof tiles</p> <p>Cast iron for window grilles</p> <p>Glass panels for new doors</p> <p><u>Building components:</u></p> <p>Roof system (wood frame supporting gable roofs, pyramid roof, hip-gable roofs and hip roof)</p> <p>Gutter and downspouts</p> <p>Venetian blind windows and casement windows (blind panels not operated)</p> <p>Panel Doors (double doors for rooms and single doors for storerooms) with transom</p> <p>Brick wall foundation and wall construction</p> <p>Floor system (wood frames, joists and planks)</p> <p>Concrete floors covered with tiles for toilets.</p> <p>Wall air conditioners for the offices</p> <p>Additional façade (covered entrances and entrance halls)</p> <p><u>Current situations:</u></p> <p>Good condition</p> <p>Appearance of peelings and water stains on ground floor walls</p> <p>Water infiltration on upper ceiling</p>

No.	Name	Owners, Users and Functions	Description
Small Residences			
S1	Consort Uan Residence (figure 44 to 47)	<u>Owners:</u> Consort Uan (1924 to 1932) Crown Property Bureau (1932 to present) <u>Users:</u> Consort Uan and Consort Tham (1924 to 1932) SSRU (1937 to present) <u>Current Function:</u> Office and classrooms <u>Planned Function</u> A museum	The third type of historic buildings The first type of small residences <u>Building forms:</u> L-shaped floor plan Two-story building with basement Post and beam; and load bearing walls for structure <u>Building materials:</u> Wood fretted grilles, doors, windows, staircases (steps, balusters, and handrails), ceiling, floors, walls and covered entrance Bricks and mortar walls. Reinforced concrete structure. Precast mortar of flora square and window casing along external surface Monier roof tiles for S4 Rhombus shaped roof tiles for S1, S2, S3 and S5 <u>Building components:</u> Roof system (wood frames, two gable roofs and hip roof) Gutter and downspouts Venetian blind windows and casement windows Double panel doors with transom Covered entrance staircase Brick wall foundation and wall construction
S2	Princess Athorntipayanipa Residence (figure 48 to 52)	<u>Owners:</u> Princess Athorntipayanipa (1924 to 1932) Crown Property Bureau (1932 to present) <u>Users:</u> Princess Athorntipayanipa (1924 to 1932) SSRU (1937 to present) <u>Current Function:</u> Office and classrooms <u>Planned Function</u> Music and art gallery	
S3	Princess Jutharatrachakumari	<u>Owners:</u> Princess Jutharatrachakumari (1924 to 1932)	

No.	Name	Owners, Users and Functions	Description
	Residence (figure 52 to 56)	<p>Crown Property Bureau (1932 to present)</p> <p><u>Users:</u> Princess Jutharatrachakumari (1924 to 1932) SSRU (1937 to present)</p> <p><u>Current Function:</u> Classrooms</p> <p><u>Planned Function</u> Art exhibition venue</p>	<p>Floor system (wood frames, joists and planks)</p> <p>Ceiling air conditioners</p> <p><u>Current situations:</u> Good condition for S4 Under renovation for S1, S2, S3 and S5 Reinforcing foundation, lifting building up about 50 centimeters from ground and improving landscape for S1, S2, S3 and S5 Improving interior and exterior of S1, S2 and S3</p>
S4	Princess Pisamaipimolsat Residence (figure 57 to 60)	<p><u>Owners:</u> Princess Pisamaipimolsat (1924 to 1932) Crown Property Bureau (1932 to present)</p> <p><u>Users:</u> Princess Pisamaipimolsat (1924 to 1932) SSRU (1937 to present)</p> <p><u>Current Function:</u> Faculty office of Computer Application for Architecture Program</p>	
S5	Princess Sasipongprapai Residence (figure 60 to 63)	<p><u>Owners:</u> Princess Sasipongprapai (1924 to 1932) Crown Property Bureau (1932 to present)</p> <p><u>Users:</u> Princess Sasipongprapai (1924 to 1932) SSRU (1937 to present)</p>	

No.	Name	Owners, Users and Functions	Description
		<u>Current Function:</u> Office of Student Affairs <u>Planned Function</u> Thai Medical Treatment Section	
S6	Princess Uppantripacha Residence (figure 64 to 68)	<u>Owners:</u> Princess Uppantripacha Residence (1924 to 1932) Crown Property Bureau (1932 to present) <u>Users:</u> Princess Uppantripacha and Princess Thipayalangarn (1924 to 1932) SDRU (1941 to present) <u>Current Function:</u> Office of Suan Dusit Polls of SDRU	The fourth type of historic buildings The second type of small residences <u>Building forms:</u> C-shaped floor plan Two-story building with basement Post and beam; and load bearing walls for structure <u>Building materials:</u> Wood fretted grilles, doors, windows, staircases (steps, balusters, and handrails), ceiling, floors, walls and covered entrance Bricks and mortar walls Reinforced concrete structure Precast mortar of flora square and window casing along external surface Monier roof tiles Glass and aluminum for additional window casing, doors and walls <u>Building components:</u> Roof system (wood frames, two gable roofs and hip roof) Gutter and downspouts

No.	Name	Owners, Users and Functions	Description
			<p>Venetian blind windows and casement windows</p> <p>Double panel doors with transom</p> <p>Covered entrance staircase</p> <p>Brick wall foundation and wall construction</p> <p>Floor system (wood frames, joists and wood planks)</p> <p>Ceiling air conditioners</p> <p><u>Current situation:</u></p> <p>They are in good condition</p>
Other places			
C1	Canal (figure 25)	<p><u>Users:</u></p> <p>Royal residents (1924 to 1932)</p> <p>SDRU (1941 to present)</p> <p><u>Current Function:</u></p> <p>Drainage system & landscape</p>	<p>A feature of Suansunandha landscape since 1909</p> <p>Route from Dusit Royal Palace to SDRU</p>
C2	Canal (figure 25)	<p><u>Users:</u></p> <p>Royal residents (1924 to 1932)</p> <p>SSRU (1937 to present)</p> <p><u>Current Function:</u></p> <p>Drainage system & landscape</p>	<p>A feature of Suansunandha landscape since 1909</p> <p>Route from SDRU through SSRU to the Chaopraya River</p>
H1	Nongkransamosorn Hall (figure 69 to 74)	<p><u>Owners:</u></p> <p>Royal property (1923-1932)</p> <p>Crown Property Bureau (1932 to present)</p>	<p><u>Building forms:</u></p> <p>Rectangular floor plan</p> <p>Two-story building</p> <p>Inclined roof on the top</p>

No.	Name	Owners, Users and Functions	Description
		<u>Users:</u> DPA (1940 to present) <u>Current Function:</u> Meeting and event organization place	Pitched roof, pointed arch and narrow towers in the middle Hall structure (vault ceiling, arches, niches and columns) <u>Building materials:</u> Wood roof truss, doors, windows, balusters, handrails, and floors Bricks and mortar wall Reinforced concrete structure Precast mortar ornamental works and balusters Concrete and marble terrace staircases Monier roof tiles Glass window and door panels <u>Building components:</u> Roof system (two-tiered roof structure consisting of vault and hip roof) Gutter and downspouts Diminutive towers at hall corners Dormer windows and Venetian blind windows Panel Doors (double doors and single doors) Brick wall for foundation and wall construction Floor system (concrete and wood joists and planks) Columns supporting entablature of niche and gallery arches Fresco secco mural paintings of ceiling, walls and niches Floor air conditioners Two associated buildings as toilets and residence of caretaker

No.	Name	Owners, Users and Functions	Description
			<u>Current situation:</u> H1 is in good condition.
P1	Pool (figure 25)	<u>Users:</u> Royal residents (1924 to 1932) SSRU (1937 to present) <u>Current Functions:</u> Landscape Connecting northern and southern canals	A feature of Suansunandha landscape since 1909 Only one remaining pool
T1	Earth Hill & Tunnel (figure 26)	<u>Users:</u> Royal residents (1924 to 1932) SSRU (1937 to present) <u>Current Functions:</u> Landscape Tunnel used as general storeroom	A feature of Suansunandha landscape since 1909 <u>Components:</u> Memorial tree called Lignum Vitae and garden on top Queen Sunandha Monument at the south Underneath tunnel

Chapter 6

Analysis of Evidence and Cultural Significance

The Period of the Royal Garden and Inner Court

Suansunandha was a closed community and a restricted area for female royal residents. The residents were unable to connect with outside society independently. Access was strictly controlled. Suansunandha did not have intimate relationships with surrounding communities. Suansunandha was thus designed as a small town (or a large village). Different royal residences were built according to royal status of the residents. The grounds were landscaped to enhance the environment within. The audience hall was constructed as the central gathering place of the inner court for royal functions. Recreational activities were organized to build interrelationships among royal residents. The building and landscape designs of Suansunandha may inspire the later design of large residential buildings in urban villages (Somchart Chungsirirak, 2010:301).

Some royal residences were used for education and recreational activities within Suansunandha. The school founded within the Queen Consort Mansion (L3) was the only one institute to educate the court residents and recreational activities were also organized at there. The Queen Mansion was therefore pivotal place within the court. Princess Athorntipayanipa Residence (S2) was associated with the establishment of a Thai musical band of the court and it was used also as a rehearsal and study place for music students of Suan Sunandha Rajabhat University (SSRU). The garden of Queen Sukumalmarasi Mansion (L2) was adapted to be a miniature golf course designed by Princess Napapornprapa. These residences became highlighted places gathering the royal residents.

Suansunandha was an important inner court in the Sixth and the Seventh Reigns. Its royal residences were able to serve larger numbers of females of the extended Royal Court royalties than other palaces. The members of the Royal Court and other residents of Suansunandha also played a leading role in creating handiworks and preparing the royal cuisine for the monarchs. Suansunandha was the principal place for the female royalties and the largest inner court in Thailand. The major roles were to serve the royal families and house royalties; however, Suansunandha also developed a role of the educational management in this period.

The Period of Educational Institutes

After 1937, Suansunandha became a part of the national education development for fundamental, specific purpose and tertiary educations. It was turned to sites of four educational institutes. The first one was Suansunandha College that was then changed to be Suansunandha Teacher College, Suan Sunandha Rajabhat Institute and Suan Sunandha Rajabhat University. The second one was Administration College of the Ministry of Interior and then became the workplace of the Department of Local Administration. The

third one was La-or Utis Kindergarten as Thailand's the first kindergarten. The last one was Karn Ruen School that was turned to Suan Dusit Teacher College, Suan Dusit Rajabhat Institute and Suan Dusit Rajabhat University respectively.

In the beginning, new building constructions were not introduced to Suansunandha. Old residential buildings and a landscape feature became the important part of the education management in girl schools and teacher colleges because all of them were adapted to classrooms, dormitories and offices; and moreover, the tunnel underneath the earth hill was also changed to the library and the bookstore.

Queen Sawangwathana Mansion (L1) was the major component of La-or Utis Kindergarten as the teaching building. The kindergarten was the first preschool of the country allowed disabled pupils to study with normal pupils. It was an evidence of being the model kindergarten that was introduced to provinces by the Ministry of Education. The mansion and Princess Uppantripacha Residence (S6) reflected the role of Suan Dusit Teacher College as a leading institute to produce teaching graduates because they became the main places of the studies and accommodations of the college students.

Queen Sukumalmarasi Mansion (L2) and Nongkransamosorn Hall (H1) indicated the political change and the local administration development in Thailand because they were converted to the Administration College as the major institute of the Ministry of Interior to train local officials.

Queen Consort Saisawareepirom Mansion (L3) and the group of small royal residences where were used as dormitories and teaching buildings demonstrated the role of Suan Sunandha Teacher College as a principle institute of developing teachers in Thailand.

The Second World War had an effect on the use of the tunnel (T1). It was changed into an air raid bunker for teachers and students that reflected the severity of the war; and was used as the weapon warehouse of UN's force after the war. Suansunandha might be close to being one of the strategic targets.

Building Type and Traditional Design

In the beginning of Suansunandha, the intention was to build a royal garden and residences to serve the royal family in the Fifth Reign thus, the architect brought Romantic style to design landscape of Suansunandha. This landscape emphasized the delicate design, the free form of waterways, isles and pools, trees including healthy livings. The remaining pool, canal and earth hill indicated the oldest built environments that reflected the early landscape features of the royal garden and the inner court.

The royal residences were laid down both in formal pattern and in harmony with the natural environment of the layout. The traditional order of residence formations was placed along roads while the rest of royal residences were set up freely by pools. Suansunandha plan became a unique work of Romanticism comparable with Bernstorff of Denmark, Villa Nobel Sanremo in Italy and Petit Trianon of Versailles (Somchart Chungsiriarak, 2010:297).

Due to the designer of Suansunandha residences was an Italian architect, the traditional design of royal residences might be inspired from countryside villas in Italy.

Even villas in Suansunandha were similarly designed like bungalows in Europe, but their features were adapted to the tropical climate of Thailand such as an elevated ground floor, the group of rooms connecting with the veranda and more and larger openings. These villas were also designed by concerning a number and the royal status of the residents; as a result, these villas were divided into four types with two sizes. (see table 4)

The appearance of building types was compared with traditional designs and contrasted with other buildings in order to distinguish characteristics among royal residences and understand traditional building components.

Royal Residences

Large mansions or Type F villa included both the first and the second types of buildings. Both types were mostly undifferentiated except the additional structure and the façade of the second type. Due to both Queen Sawangwathana and Queen Sukumalmarasi who owned the first type of large mansions might stay in Suansunandha at the beginning, they permanently resided in other palaces and then handed on these mansions to be places of the residence to other high royalties. New additions or major alternations were not applied with these buildings, thus most of their physical features made of wood materials have remained so far. Only room arrangement and entrance staircase placement of the first type buildings were unlike the traditional design. When Queen Consort Saisawarepirom and the queen's daughter, Princess Nipanopadol including a number of royal servants resided in Suansunandha at the beginning, the queen consort occupied a Type F villa. Later, the new addition and adaption was employed with this large mansion. Therefore, former F villa of the queen consort was turned to be another type of large mansions or the second type building, because most of the building structure became reinforced concrete and cement walls while two entrance halls and two balconies were added to the building façade.

The fourth type residence was able to house two female members of the royal family. Earlier this type was designed as a Type C villa and a type of small residences. This fourth type's uniqueness was two gables topped over the façade and the building accessible from all directions. Every elevation of this building initially featured an entrance staircase although one stairway was made of a covered entrance and remained merely in the building frontage. Building elements were not differentiated from the design that wooden materials were used to build floors, windows, doors, walls and components of staircases. Furthermore, the room arrangement was similar to the traditional design because room space and numbers were not different from the plans of Type C villa.

Although the building as constructed was compared with the earlier design, this type might differ from others. The projecting façade covered with two gable roofs that became a characteristic component distinguished the fourth type from another type of small residences or Type D villa. Even though both small residences were identical to the formal balance of the façade fenestration, the fourth type building or Type C villa generated more space of window arrangement in the wall and looked more solid than other small residences.

The third type or Type D villa was designed as a type of small residences to

serve a female member of the royal family. Group of these residences was situated in the north of Suansunandha. They were accessible by two entrance stairways from both sides of building according to the traditional design. After the construction, they were used as a place of residence and diverse purposes; consequently, the third type building had only one covered entrance placed at the frontage. Because this building type's façade was mainly made of wooden walls and a number of windows, less space appeared on the wall and in between windows. Furthermore, this building façade was topped with a single gable roof that was different from the fourth type. These residences became the smallest buildings remaining in the site even though their design of building plans was larger than the Type E villa.

The last type of small residences was the Type E villa that was planned to be a house of consorts or royal consorts in the Fifth Reign. These small residences were mainly established in the north east of Suansunandha and became the largest numbers of residences. All of them were eventually removed from the site due to impact of the War and deterioration including changed ground use.

Table 4 Comparison between Building Type and Traditional Design

Four Types of Buildings	Four Traditional Designs of Villas	Distinctive Forms and Components
The first type: Queen Mansions	F-type villa or Unnamed Plan	A large mansion, half timbered building, delicate facade
The second type: Queen Consort Mansion		A large mansion, concrete building decorated with woodwork, massive facade
The fourth type: Princess Uppantripacha Residence	C-type villa or Plan B	A small residence, two façade gables, less openings, more unfilled space of wall
The third type: (no.19 to no. 23)	D-type villa or Plan C	A small residence, one façade gable, more openings, less void
-	E-type villa or Plan D	Smallest residence but no longer in the site

Although Suansunandha was comprised of four types of residences, building classification was, in fact, differentiated by three characteristics. The differences were defined by size, location and status of the occupancy; consequently, the buildings were classified as the following table.

Table 5 Different Characteristics of Buildings in Suansunandha

Characteristics	Building Classification	
Size	Two types of Large Buildings: Two mansions of the first type One mansion of the second type	Two types of Small Buildings: Five residences of the third type One residence of the fourth type
Location	Beside the large pool and in the south, independent formation	In the north and the north east, uniformed arrangement
Royal Status	Queen or Queen Consort	Princess or Royal Mother or Consort

Three different characteristics should be used as the features to classify types of buildings existing in Suansunandha. The ranking of royalties might have an effect on the design, size and location of royal residences. Higher status deserved larger, more comfortable and more elegant residence. Even the royal status of owners was definitely a significant factor to occupy different royal residences, but the number of descendants was also taken into consideration. All large mansions were possessed by the queen or queen consort but one large mansion that was early planned to be the residence of Queen Sawangwathana was later allowed to be the residence of three daughters of King Rama V. Royal status, size and location became primary factors but the number of royal residents might be a secondary factor to the building classification.

The Audience Hall

Nongkransamosorn Hall indicated the distinctive architecture in the reign of King Rama VI that was influenced by the European architecture. Its high and light components including the balance fenestration demonstrated the Gothic style. The line of arches of the gallery represents the arcade. The roof and the middle components of the hall were similar to a cathedral in Italy (Naengnoi Suksri, 1994).

The structure construction, components and materials reflected the advancement of the European architecture to Thailand in this reign. Both the high vault ceiling and the minimized column size were evidence of the reinforced concrete structure to expand the horizontal and vertical spaces of the hall (Somchart Chungsiriarak, 2010:303). The hall wall was not necessary to support the roof and replaced with large windows.

Both the detailed interior and exterior decorations of the early design had never happened, but the hall still proved the quality of the rare mural painting technique. The interior that was decorated with the geometric and flora shapes of Fresco secco mural paintings (Naengnoi Suksri, 1994; Pisit Puntien, 2011) reflected the Stile Liberty or Art Nouveau style (Somchart Chungsiriarak, 2010:291). The hall construction and mural painting techniques were comparable to buildings of the Government House (Norasing House and Banthomsin House) (Naengnoi Suksri, 1994).

The wider, higher and lighter appearances of the hall were influenced by the introduction of Portland cements in the Sixth Reign. A cement manufacturer was

founded in Thailand (1913-1915) so that it helped to decrease imported supplies and the cement gradually substituted brick and wood materials (see figure 75). The hall represented the architectural evolution in Thailand (Naengnoi Suksri, 1994).



Figure 75 A Cement Factory in Thailand in 1913
Source: National Archives of Thailand (1913)

Cultural Significance Analysis

Suansunandha is composed of both tangible and intangible cultural heritages that were analyzed to identify the value of the place. These cultural heritages indicated the significance of Suansunandha comprising historic, aesthetic, social and scientific values according to international charters, a national guideline and a preceding conservation work (Australia ICOMOS Burra Charter, 1999; China ICOMOS, 2002; Pearson et al., 2002; Australia Heritage Council, 2009). Their criteria were adapted to the guidelines of defining the specific cultural value and the value assessment of Suansunandha. Some cultural heritage values may be important to the country while other values may be significant to particular groups of Suansunandha.

The cultural heritage values in Sunasunandha may result from the location, form and design, use and function, event and activity, intangible qualities; and association with important figures (Australia ICOMOS Burra Charter, 1999:12; UNESCO, 2005:10). The degree of the value depends on the representativeness, rarity, condition, completeness and integrity, and interpretive potential of a cultural heritage according to Hoi An Protocols (UNESCO, 2005) and is used to determine which components of the cultural heritages in Suansunandha must be preserved, should be preserved and will be abandoned (UNESCO, 2005:10).

The cultural heritage values were identified from both primary and secondary sources of studies consisting of the physical survey, the personal interview, the oral history, maps, documentary and graphic records.

The values shown in the following tables are even discussed separately but interrelation among their own values and between different values should be considered. The cultural significance is explained in the group of the integrated analysis and the separate assessment due to the group of value components may

contribute to the strong significance and may have identical value qualities while some single components may create their own right of the significance. Moreover, the cultural significance analysis was assessed beyond the present boundaries because some cultural values have occurred in the early ground of Suansunandha.

Historic Value

A place or building or group of buildings is associated with the important activity, event, phase, use and user including was constructed with important reasons in the cultural history of Suansunandha.

Aesthetic Value

A place or building or group of buildings is important to Suansunandha by demonstrating characteristics of the architectural form, style, component, material and craft related to its landscape and spaces.

Social Value

A place or building or group of buildings has association with social functions for particular groups in Thailand.

Scientific Value

A place or building or group of buildings has a potential to provide important information to understand the history of the architectural development and the technical achievement in Thailand.

Table 6 Analysis of Value

Name	Components	Value Discussion
Historic Value		
Group of the First Type Buildings	Queen Sawangwathana Mansion (L1) Queen Sukumalmarasi Mansion (L2)	The mansions are associated with female members of the Royal Court as the royal residences. They are the part of the largest and the last inner court of Thailand (1924-1932). L2 is associated with the initiation of a miniature golf course in Suansunandha. The course was designed by Princess Napapornprapa.
The Second Type Building	Queen Consort Saisawareepirom Mansion (L3)	The mansion is associated with female members of the Royal Court as the royal residence. The mansion is the key part of the largest and the last inner court of Thailand (1924-1932) and is recognized as the principal place of Suansunandha. The mansion is associated with the introduction of new recipes of the royal cuisine.

Name	Components	Value Discussion
Group of the Third Type Building	<p>Consort Uan Residence (S1)</p> <p>Princess Athornnipayanipa Residence (S2)</p> <p>Princess Jutharatrachakumari Residence (S3)</p> <p>Princess Pisamaipimolsat Residence (S4)</p> <p>Princess Sasipongprapai Residence (S5)</p>	<p>They are associated with female members of the Royal Court as the royal residences.</p> <p>They are the part of the largest and the last inner court of Thailand (1924-1932).</p>
The Fourth Type Building	Princess Uppantripacha Residence (S6)	<p>It is associated with female members of the Royal Court as the royal residence.</p> <p>It is a part of the largest and the last inner court of Thailand (1924-1932).</p>
Audience Hall	Nongkransamosorn Hall (H1)	The hall is associated with the high royal residents as a venue of royal ceremonies and rituals.
Earth Hill and Waterway	<p>Earth Hill & Tunnel (T1)</p> <p>The Memorial Tree</p> <p>Pool (P1)</p> <p>Canal (C1 & C2)</p>	<p>The tunnel represents the use and function in the period of the Royal Court and education development.</p> <p>The tunnel as the kitchenware store reflects the function of Suansunandha as an important royal cuisine to serve the monarchs (1924-1932).</p> <p>The tunnel is associated with the education development as a library and the severity of the Second World War as the air-raid bunker in the period of Suansunandha College (1937-1945).</p> <p>They provide the oldest evidence of the royal garden and inner court formation.</p>
Aesthetic Value		
Group of the First Type Building	<p>Queen Sawangwathana Mansion (L1)</p> <p>Queen Sukumalmarasi Mansion (L2)</p>	<p>They are the part of the Romanticism palace. Their locations demonstrate the informal pattern of the residence formation.</p> <p>Their materials and form contribute to the attractiveness of the buildings.</p> <p>Their building components demonstrate the applied villa style.</p>
The Second Type Building	Queen Consort Saisawareepirom Mansion (L3)	This mansion is part of the Romanticism palace. Its location demonstrates the informal pattern of the residence formation.

Name	Components	Value Discussion
		<p>Its architectural composition contributes to the attractiveness of the building.</p> <p>Its building components demonstrate the applied villa style.</p> <p>The location of the building contributes to its landscape and surroundings as the landmark of SSRU.</p>
Audience Hall	Nongkransamosorn Hall (H1)	<p>The hall provides an impressive appearance because it demonstrates the quality of the exterior form and design of the Gothic style.</p> <p>It provides an outstanding craft of the architecture because it demonstrates the quality of the interior elements of the arcade.</p> <p>The mural painting technique represents Stile Liberty or Art Nouveau.</p> <p>The placement of the hall in the middle of the open space contributes to the landscape of A3.</p>
Earth Hill & Waterway	Earth Hill & Tunnel (T1) Canal (C1 & C2) Pool (P1)	They demonstrate the oldest elements of the court landscape in the Romantic style.
Group of the Third Type Building	Consort Uan Residence (S1) Princess Athorntipayanipa Residence (S2) Princess Jutharatrachakumari Residence (S3) Princess Pisamaipimolsat Residence (S4) Princess Sasipongprapai Residence (S5)	<p>They are the part of the Romanticism palace.</p> <p>The building alignment along the canal contributes to its landscape and reflects a sense of the traditional court formation.</p> <p>They demonstrate the applied villa style.</p>
The Fourth Type Building	Princess Uppantripacha Residence (S6)	<p>The residence is part of the Romanticism palace.</p> <p>Its building components demonstrate the applied villa style.</p>
Social Value		
Group of the First Type Building	Queen Sawangwathana Mansion (L1) Queen Sukumalmarasi Mansion (L2)	<p>They are associated with training elite women in Thai society and the preparation of handiworks and meals for royal functions.</p> <p>L1 is associated with the education</p>

Name	Components	Value Discussion
		<p>enhancement of pupils with disabilities. It is part of the model kindergarten in Thailand.</p> <p>L1 is associated with the development of the education and teaching studies in Thailand.</p> <p>L2 has an association with the political change and development of the local administration in Thailand. It is part of the Administration College.</p>
The Second Type Building	Queen Consort Saisawareepirom Mansion (L3)	<p>It is associated with training elite women in Thai society and the preparation of handiworks and meals for royal functions.</p> <p>It enhances the education of the court residents because a school was founded within the mansion.</p> <p>It is associated with the development of the education and teaching studies in Thailand.</p>
Group of the Third Type Building	Consort Uan Residence (S1) Princess Athorntipayanipa Residence (S2) Princess Jutharatrachakumari Residence (S3) Princess Pisamaipimolsat Residence (S4) Princess Sasipongprapai Residence (S5)	<p>They are associated with training elite women in Thai society and the preparation of handiworks and meals for royal functions.</p> <p>S2 provides the evidence of enhancing Thai classical music for the court residents and has been used constantly as the place of the music rehearsal and studies.</p> <p>They are associated with the development of the education and teaching studies in Thailand.</p>
The Fourth Type Building	Princess Uppantripacha Residence (S6)	<p>It is associated with training elite women in Thai society and the preparation of handiworks and meals for royal functions.</p> <p>It is associated with the development of the education and teaching studies in Thailand.</p>
Audience Hall	Nongkransamosorn Hall (H1)	It has an association with the political change and the development of the local administration in Thailand. It is a part of the Administration College.
Scientific Value		
All Residential Buildings	Queen Sawangwathana Mansion (L1) Queen Sukumalmarasi Mansion (L2)	<p>They demonstrate the influence of the European architecture adapted to Thailand's conditions in the Sixth Reign.</p> <p>They represent the popularity of building</p>

Name	Components	Value Discussion
	<p>Queen Consort Saisawareepirom Mansion (L3)</p> <p>Consort Uan Residence (S1)</p> <p>Princess Athorntipayanipa Residence (S2)</p> <p>Princess Jutharatrachakumari Residence (S3)</p> <p>Princess Pisamaipimolsat Residence (S4)</p> <p>Princess Sasipongprapai Residence (S5)</p> <p>Princess Uppantripacha Residence (S6)</p>	<p>materials in the Sixth Reign.</p> <p>They provide evidence of the new age of the residential and site design. They represent the present design of residential buildings and urban villages in Thailand.</p> <p>L2 is associated with the rare quality of the artistic work. A worship room of L2 is decorated with Fresco Secco Mural Painting Technique in the Sixth Reign.</p>
Audience Hall	Nongkransamosorn Hall (H1)	<p>The hall demonstrates the influence of the European architecture adapted to Thailand's conditions in the Sixth Reign.</p> <p>It reflects advanced construction techniques and state-of-the-art building materials influencing the architecture in Thailand.</p> <p>It is the evidence of the new age of the residential and site design. It represents the present design of urban villages in Thailand.</p> <p>It is associated with the rare quality of the artistic work. The hall interior was decorated with Fresco Secco Mural Painting Technique in the Sixth Reign.</p>

Chapter 7

Cultural Significance of Suansunandha

The assessment of cultural heritage values described above in Chapter 6 provides the basis of the cultural significance statements that follow. These statements of cultural heritage values are used in the following chapters to inform the discussion about options and future uses.

Contemporary Social Significance

This part demonstrates the social significance assessed by current stakeholders of Suansunandha in order to learn their opinions to historic places and buildings in association with the social value. The stakeholders include students, lecturers and staff of Suan Sunandha Rajabhat University (SSRU) and Suan Dusit Rajabhat University (SDRU), and officials and staff of the Department of Local Administration (DLA) as the key stakeholders. The officials and staff of the Department of Provincial Administration (DPA) were not included in this assessment because they do not use Suansunandha as their regular workplace.

The stakeholders were invited to participate in the ranking of the social significance. This significance assessment might be based on their personal interest and background knowledge, thus the research findings may be or may not be consistent to the actual social significance of Suansunandha assessed by the author. However, the following results should be considered when a conservation management plan will be developed. The findings may contribute to a better understanding of the discrepancy between the actual and contemporary social significance.

Suansunandha is comprised of six attributes of the social value. They were assessed from the high to moderate-to-high significance (see table 7). The following ranking should be used together with the statement of significance and level of the significance as discussed below in this chapter.

Queen Sawangwathana Mansion (L1) was assessed at the high significance level of the social value. The mansion provides the evidence of enhancing the equal chance of both pupils with disabilities and normal pupils to study together. The assessment indicated the mansion attaining the highest social value because this rare quality has been continued from the early period and still educated them in SDRU.

Queen Consort Saisawareepirom Mansion (L3) was assessed at the high significance level of the social value. This mansion is associated with the founding a school demonstrating the enhancement of primary and secondary education for the court residents. This attribute of the value represents the initiation and continuity of education development in SSRU, thus this mansion was considered the second

ranking of the social significance.

All historic buildings were assessed at the high significance and as the third ranking of the social value because they are associated with preparations of handiworks, cuisines and performing arts for royal functions. Stakeholders may perceive this value from current media (word of mouth, publications and displays) within areas of Suansunandha.

All historic buildings were also assessed at the high significance and as the fourth ranking of the social value because they are associated with training elite women in Thai society. This social function of the inner court may be perceived by stakeholders as Thai society's old-fashioned value or norm.

All historic buildings were assessed at the moderate-to-high significance. They represent the quality of the social values as the contribution of the education development and teaching studies in Thailand; however, this is a common attribute embodied in all historic buildings of Suansunandha. They were considered as the fifth ranking.

Queen Sukumalmarasi Mansion (L2) and Nongkransamosorn Hall (H1) were assessed at the moderate-to-high significance of the social value. They were used as the Administration College that represents the political change and the development of the local administration in Thailand but it was no longer in Area 3. The assessment indicated that this specific social function was counted as the last ranking.

Table 7 Ranking of Social Value

Rank	Attributes of Social Value	Components	Level of Significance
1	An old residence as the evidence of enhancing the equal chance of both disabled and normal pupils to study together	Queen Sawangwathana Mansion (L1)	High
2	An old residence as the evidence of enhancing the fundamental education for the court residents	Queen Consort Saisawareepirom Mansion (L3)	High
3	Old residences as the part of creating handiworks, cuisines and performing arts for the monarchs	All historic residential buildings	High
4	Old residences as the part of training elite women in Thai society	All historic residential buildings	High
5	Old residences as the contribution to the fundamental education and teaching studies in Thailand	All historic residential buildings	Moderate to High
6	The old residence and the hall as the evidence of the political change and the development of the local administration in Thailand	Queen Sukumalmarasi Mansion (L2) & Nongkransamosorn Hall (H1)	Moderate to High

Statement of Significance

Suansunandha provides evidence of the royal garden and the glorious inner court demonstrating the golden age of the European architecture in Thailand and representing the beginning period of the national education development.

Suansunandha provides evidence of a Romantic plan because it comprises the residences in the villa style; the countryside landscape and the hall as the central clubhouse. It demonstrates the influence of the European architecture in the building materials and the design.

All surviving former residential buildings form the part of the largest and last inner court in Thailand. They have strong connections with female members of the Royal Court and of the training of the elite women in Thai society.

The old residential buildings of Area 1 and Area 2 have strong association with the continual development of the fundamental education and teaching studies in Thailand since 1924.

Queen Sukumalmarasi Mansion and Nongkransamosorn Hall of Area 3 reflect the political change and decentralization in Thailand. They have social significance as the part of provincial and local development. The hall and mansion decoration indicates the rare quality of the artistic achievement.

The group of small residences has its own right of aesthetic value as the group of buildings reflecting a traditional court formation and as secondary structures of the applied villa style. Princess Athorntipayanipa Residence has been associated with the continuity of Thai music teachings and studies.

Queen Sawangwathana Mansion, Queen Sukumalmarasi Mansion and Queen Consort Saisawareepirom Mansion are places of outstanding aesthetic significance. They demonstrate the architectural composition as primary buildings of the applied villa style.

Queen Sawangwathana Mansion is associated with the education enhancement of pupils with disabilities.

Queen Sukumalmarasi Mansion is associated with the initiation of a modern sport in Suansunandha.

Queen Consort Saisawareepirom Mansion is associated with the traditional educations of court residents. It is also associated with the introduction of new recipes to Thai Royal cuisine.

Nongkransamosorn Hall is a place of outstanding aesthetic significance. The hall demonstrates the architectural composition of the Gothic Style. It reflects the quality of the interior elements of the architecture.

Nongkransamosorn Hall has historic significance arising from its role as a venue of royal ceremonies.

The earth hill, canal and pool have high aesthetic significance. They provide the oldest evidences of the royal garden and the court formation. The earth tunnel is historically significant. It has a strong relationship with historic inner court and the modern Suansunandha College.

Level of Significance of Suansunandha

As discussed in Chapter 6, the cultural heritage significance of Suansunandha is contained in a different number of the values. Some of the places within and individual buildings have a number of values but share the similar components with the other buildings and places. Some buildings have fewer components of values than others but they are associated with a distinctive quality. Some buildings provide material evidences of significance while others may have a strong relationship with immaterial heritage. Thus, the level of the significance should not base solely on a number of significant components or material cultural heritage but the outstanding value (representativeness, rarity, condition, completeness and interpretive potential) and the immaterial heritage should also be relied on. The level of significance will contribute to better understanding of the cultural heritage values in Suansunandha.

High Level of Significance

All cultural heritage values of Suansunandha are important to the history of the court and the education development in Thailand. They provide evidence of aesthetic, historic, social and scientific significance. The evidence contributes to the understanding of the establishment, architecture, functions and roles of the inner court. The evidence also demonstrates a leading role of the enhancement and the development of national education. The overall components of the significance associated with the period of the Royal Inner Court (1908 to 1932) and the beginning period of the Education Institutes (1937 to 1957) should attain the high level of significance.

The components of historic value have connections with the royal inner court and educational history.

The inner court functioned as royal residences of the female members of the royal court. All surviving residential buildings have strong association with members of the royal family in the Fifth Reign. These members were former residents of the Dusit Royal Palace. They relocated to Suansunandha when the following royal family replaced the former family according to a royal tradition. These residential buildings are associated with the movement of the members of the royal family and form part of the largest and the last inner court in Thailand.

The Queen Consort Mansion (L3) is associated with the introduction of new food recipes to the royal cuisine. The earth tunnel is part of the mansion as the kitchenware store. The mansion and the tunnel reflect a role of the court as an important royal cuisine. Nongkransamosorn Hall has connection with high members of the court as the venue of royal ceremonies and rituals. The use of the tunnel is also associated with the education development as a library and the war incident as an air-raid bunker (1937-1945).

The canal, hill and pool in Area 1 and Area 2 can represent the extended garden of the Dusit Royal Palace. The canal still links with waterways in the palace. They demonstrate the nature of the royal garden and the inner court according to the intention of King Rama V (see figure 76).

Therefore, overall surviving residential buildings and elements of the landscape should have highly historic significance as the components of the royal garden and the inner court. The Queen Consort Mansion, the hall and the earth tunnel

(T1) should have high level of historic significance in their own right.

The components of aesthetic value are associated with the site and building formation as a Romanticism plan and demonstrate a characteristic design in the period of the inner court.

Suansunandha was designed by a group of Italian architects. These architects influenced architectural designs of public and residential buildings in Thailand. They adapted the European villa style to suit Thailand's conditions (tropical climate, building materials and crafts) to create royal residences in Suansunandha. The architectural expression of the royal residences in Suansunandha thus represents the applied villa style.

All surviving residential buildings clearly show the co-existence between the traditional and Romanticism plan. Large residential buildings and the fourth type building demonstrate the Romanticism plan while a group of small residences provides clear evidence of the traditional plan. The canal, pool, and earth hill as the surviving elements of the landscape contribute to the Romanticism plan. Suansunandha demonstrates the new concept of the court design concentrating on comfortable living and country atmosphere according to Romantic palaces in Europe. It is differentiated from the classical plan of the Royal Palace emphasizing the formal (or balance) pattern of building formation consisting of outer, middle and inner courts. The site plan and building forms represent the unique design of Suansunandha.

Nongkransamosorn Hall also represents an outstanding architectural work of the group of the architects and reflects the influence of the European architecture in Thailand. The form and elements of the hall demonstrate the architectural composition of the Gothic Style. The hall interior indicates the decorative design of Stile Liberty or Art Nouveau.

The hall and large surviving residential buildings should have highly aesthetic significance. The fourth type of the residence represents the rare sample reflecting the diversity of royal residences in Suansunandha, so it should have high level of aesthetic significance. However, the assessment of surviving small residential buildings will have high level of aesthetic significance as the entire group of buildings.

The components of social value are associated with royal functions in the period of the court and the enhancement of modern education in the period of the education development.

The role of the inner court is strongly associated with training elite women and royal ceremonies. Its principal responsibility is to prepare meals, handiworks and performing arts for royal functions (see figure 77). The members of the inner court were trained with these traditional skills. All former residential buildings have a connection with the leading role of the meal and handiwork preparations to the royal family. Princess Athorn tipayanipa Residence is associated with the enhancement of Thai classical music performing in the royal functions.

Suansunandha demonstrates social functions in connection with the national education development in both periods of the inner court and educational institutes. The Queen Consort Mansion (L3) is associated with the enhancement of the primary and secondary educations of the court residents because the only one educational

institute was located at the mansion. Queen Sawangwathana Mansion (L1) is associated with the education enhancement of pupils with disabilities. It is a part of the model kindergarten in Thailand. Queen Sukumalmarasi Mansion (L2) and the hall have a connection with the political change and decentralization in Thailand as the Administration College. All surviving residential buildings have strong relationships with primary and secondary educations, and teaching studies in Thailand. These social functions indicate a leading role of Suansunandha associated with the education enhancement in Thai modern society.

The Queen Consort Mansion (L3), Queen Sawangwathana Mansion (L1), Princess Athorntipayanipa Residence (S2), Queen Sukumalmarasi Mansion (L2) and the hall should have highly social significance. Other residential buildings have high level of social significance as the components of the inner court and educational institutes.

The components of scientific value can enhance the learning of the European architecture in the period of the inner court.

All surviving residential buildings and the hall demonstrate architectural know-how influenced by the European architecture in Thailand. This architectural influence contributes to the knowledge and skills of the local architects and craftsmen. The benefits derived from this influence are of proper building materials, plan, design and technique enhancing more durable buildings.

The hall and Queen Sukumalmarasi Mansion (L2) are also associated with the rare quality of the artistic work. The hall interior was decorated with Fresco Secco Mural Painting Technique in the Sixth Reign. A worship room of the mansion is also decorated with this technique (see figure 78 & 79). This rarity of the artistic work is similar to the decoration of royal residences in Prayathai Palace.

The conservation of the hall and all surviving residential buildings will help to understand high quality of architectural knowledge and craftsmanship.

The hall and the queen mansion (L2) exceptionally achieve the high level of scientific significance. Other surviving residential buildings are highly significant of scientific value as the group of architectural works in the inner court.

The cultural heritage values in the period of the Royal Inner Court may have strong potential to develop interpretive programs. This period demonstrates “sense of the place” rather than other periods of Suansunandha. It is associated with important figures (members of the royal family), significant places (royal residences) and events (royal functions). The court history, functions and formation may provide primary potentials of interpretation while the social and historical composition in the period of the education development may produce secondary interpretive potentials. It may be associated with events of modern colleges in Suansunandha areas and the national crisis during the war but it may not connect with any important figures in Thai society.

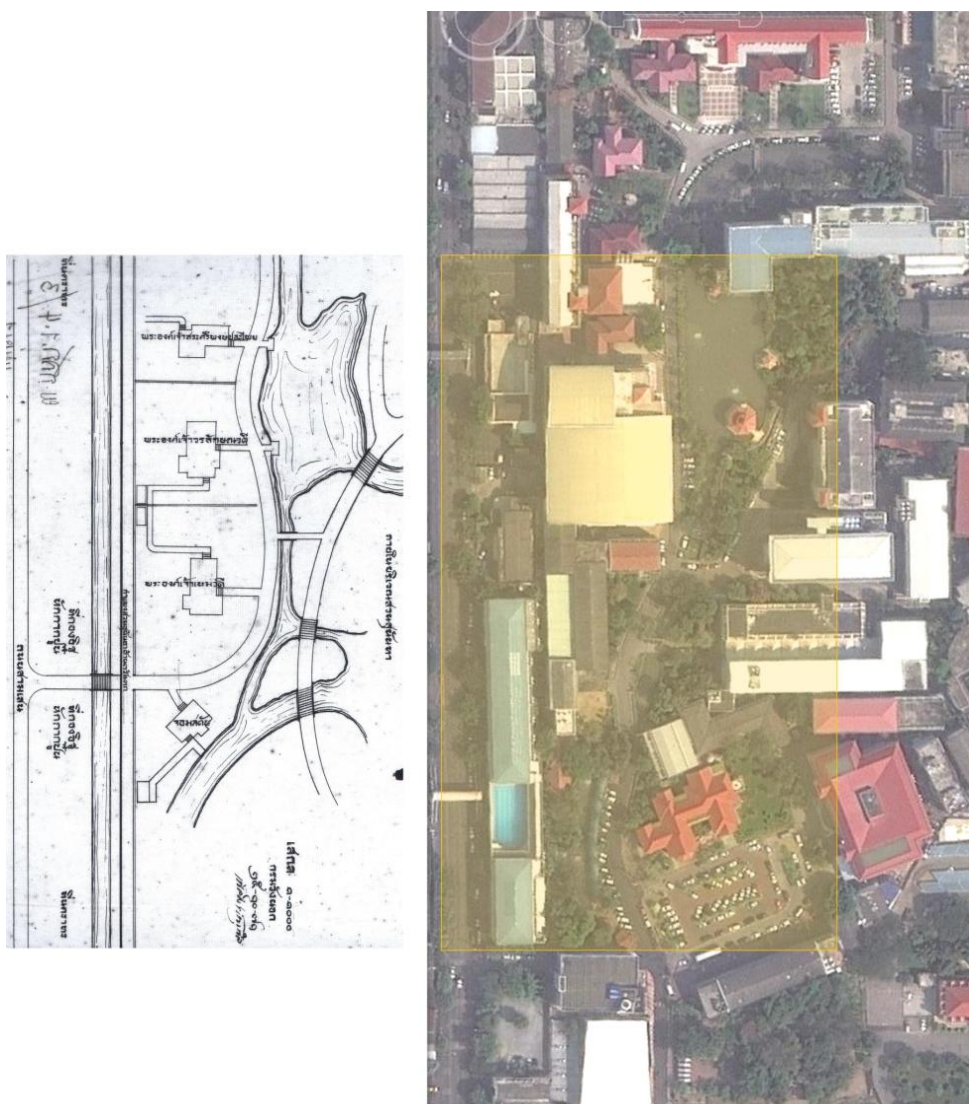


Figure 76 Comparison between the Pool of Suansunandha in 1928 and in 2011
Source: National Archives of Thailand (1928) and GoogleEarth (2011)



Figure 77 Flower Arrangements and Kitchen Operation by Queen Consort Saisawarepirom
Source: National Archives of Thailand (n.d.)



Figure 78 Fresco Secco in the Worship Room of Queen Sukumalmarasi Mansion (L2)

Source: Suwannarit Wongcha-um (2010)



Figure 79 Fresco Secco of Nongkransamosorn Hall (H1)

Source: Suwannarit Wongcha-um (2011)

Moderate Level of Significance

If the following historic places and buildings are individually assessed, their cultural heritage values may be considered as the moderate level of significance. The places and buildings may contribute to the cultural significance or share common attributes of cultural heritage values with other buildings and places. They may attain a high level of significance as an integral part of cultural heritage values.

These individual small residences may not have enough interpretive potential. The architectural composition of the surviving small residences is similar to Suriyanuwat House (a former house of a high noble in the Sixth Reign); however, they do not demonstrate an outstanding component of the aesthetic value. Although these small residences are influenced by the European architecture and demonstrate

the applied villa style, but their architectural expression may be less distinctive than other types of surviving residential buildings in Suansunandha. These small residences may provide the evidence of aesthetic significance as a group of buildings. Former royal residents as the building owners were not associated with any important events. They might have only supporting roles in the court. The function and use of these residences are not differentiated from other surviving residential buildings in Suansunandha. However, the location of the building group represents the building formation of the traditional court plan.

The canal (C1) in SDRU may provide less quality than the canal (C2) in SSRU and lack the completeness and interpretive potential. C1 may become a minor element of the landscape in Area2 because it is disturbed by surroundings and may not contribute to the quality of the landscape. The integrity of the canal line is disconnected by new boundaries and intervened by later building constructions. Its current condition may not reflect the earlier form. It is, somehow, still associated with historic and aesthetic value as an element of the royal garden and the court formation.

Thus, the canal (C1) and individual surviving small residences may have insufficient quality of the values, the architectural expression and the use and function. They may have moderate significance. However, they must be conserved as components of a registered historic site; they have lesser importance than other components.

Table 8 Summary of Significance

Place or building	Components of Significance
Area 1 (SSRU)	<p>Historic Significance:</p> <p>It demonstrates evidence of the royal garden and inner court.</p> <p>Aesthetic Significance:</p> <p>It reflects a Romanticism plan.</p> <p>The components of historic and aesthetic significance include:</p> <p>Earth hill and tunnel (T1), the pool (P1) and canal (C1)</p> <p>Queen Consort Saisawareepirom Mansion (L3)</p> <p>The group of small residences (S1 to S5)</p> <p>Social Significance:</p> <p>It is associated with training elite women in Thai society and the enhancement of the fundamental education and teaching studies in Thailand.</p> <p>Scientific Significance:</p> <p>It represents the influence of the European architecture in Thailand.</p> <p>The components of the social and scientific significance include:</p> <p>Queen Consort Saisawareepirom Mansion (L3)</p> <p>The group of small residences (S1 to S5)</p>

Place or building	Components of Significance
Area 2 (SDRU)	<p>Historic Significance:</p> <p>It demonstrates evidence of the royal garden and inner court.</p> <p>Aesthetic Significance:</p> <p>It reflects a Romanticism plan.</p> <p>The components of historic and aesthetic significance include:</p> <p>The canal (C2)</p> <p>Queen Sawangwathana Mansion (L1)</p> <p>Princess Uppantripacha Residence (S6)</p> <p>Social Significance:</p> <p>It is associated with training elite women in Thai society and the enhancement of the fundamental education and teaching studies in Thailand.</p> <p>Scientific Significance:</p> <p>It represents the influence of the European architecture in Thailand.</p> <p>The components of the social and scientific significance include:</p> <p>Queen Sawangwathana Mansion (L1)</p> <p>Princess Uppantripacha Residence (S6)</p>
Area 3 (DPA and DLA)	<p>Historic Significance:</p> <p>It provides evidence of the inner court.</p> <p>Aesthetic Significance:</p> <p>It reflects the Romanticism plan.</p> <p>Social Significance:</p> <p>It is associated with training elite women in Thai society, and the political change and decentralization in Thailand.</p> <p>Scientific Significance:</p> <p>It represents the influence of the European architecture in the building materials and design in Thailand.</p> <p>The components include:</p> <p>Queen Sukumalmarasi Mansion (L2)</p> <p>Nongkransamosorn Hall (H1)</p>
Group of the First Type Building	<p>Queen Sawangwathana Mansion (L1) and Queen Sukumalmarasi Mansion (L2) provide evidence of:</p> <p>Aesthetic Significance:</p> <p>They demonstrate the distinctive architectural composition. Their building elements, materials and form represent the applied villa style.</p>

Place or building	Components of Significance
	<p>The building location reflects an informal pattern of a Romanticism palace.</p> <p>Historic Significance:</p> <p>They are associated with female members of the royal family as royal residences, and part of the largest and the last inner court in Thailand.</p> <p>Scientific Significance:</p> <p>They represent the influence of the European architecture in building design and materials in Thailand.</p> <p>Social Significance:</p> <p>They are associated with training elite women in Thai society and the preparation of handiworks and meals for royal functions.</p> <p>They are part of the enhancement of the fundamental education and teaching studies in Thailand.</p> <p>Queen Sukumalmarasi Mansion (L2) provides evidence of:</p> <p>Social Significance:</p> <p>It is a part of the Administration College. It has an association with the political change and development of the local administration in Thailand</p> <p>Scientific Significance:</p> <p>It demonstrates a rare quality of the artistic work. A room was decorated with Fresco Secco Mural Painting Technique in the Sixth Reign.</p> <p>Queen Sawangwathana Mansion (L1) provide evidence of:</p> <p>Social Significance:</p> <p>It is associated with the education enhancement of pupils with disabilities.</p>
The Second Type Building	<p>Queen Consort Saisawareepirom Mansion (L3) provides evidence of:</p> <p>Aesthetic Significance:</p> <p>It demonstrates the distinctive architectural composition. Its building elements, materials and form represent the applied villa style.</p> <p>The building location reflects an informal pattern of a Romanticism palace and contributes to the landscape and surroundings as the landmark of SSRU.</p> <p>Historic Significance:</p> <p>It is associated with female members of the Royal Court as the royal residence.</p> <p>It is the key part of the largest and the last inner court of Thailand.</p> <p>The mansion is associated with the introduction of new food recipes to the royal cuisine.</p>

Place or building	Components of Significance
	<p>Social Significance:</p> <p>It enhances the education of the court residents because a school was founded within the mansion.</p> <p>It is associated with training elite women in Thai society and preparation of handiworks and meals for royal functions.</p> <p>It is a part of the enhancement of the education and teaching studies in Thailand.</p> <p>Scientific Significance:</p> <p>It represents the influence of the European architecture in building design and materials in Thailand.</p>
Group of the Third Type Building	<p>Consort Uan Residence (S1), Princess Athorntipayanipa Residence (S2), Princess Jutharatrachakumari Residence (S3), Princess Pisamaipimolsat Residence (S4) and Princess Sasipongprapai Residence (S5) provides evidence of:</p> <p>Aesthetic Significance:</p> <p>Their building composition demonstrates the applied villa style. They represent the group formation in association with the road and canal alignment.</p> <p>The building location reflects a formal pattern of a traditional palace.</p> <p>Historic Significance:</p> <p>They are associated with female members of the royal family as royal residences.</p> <p>They are the part of the largest and the last inner court in Thailand.</p> <p>Social Significance:</p> <p>They are associated with training elite women in Thai society and preparation of handiworks and meals for royal functions.</p> <p>They are the part of the enhancement of the education and teaching studies in Thailand.</p> <p>Scientific Significance:</p> <p>They represent the influence of the European architecture in building design and materials in Thailand.</p> <p>Princess Athorntipayanipa Residence (S2) provides evidence of:</p> <p>Social Significance:</p> <p>It is associated with enhancing Thai classical music for the court residents and continual use as the place of the music rehearsal and studies in SSRU.</p>
The Fourth	Princess Uppantripacha Residence (S6) provides evidence of:

Place or building	Components of Significance
Type Building	<p>Aesthetic Significance:</p> <p>It demonstrates the applied villa style.</p> <p>The building location reflects an informal pattern of a Romanticism palace.</p> <p>Historic Significance:</p> <p>It is associated with female members of the royal family as royal residences.</p> <p>It is a part of the largest and the last inner court in Thailand.</p> <p>Social Significance:</p> <p>It is associated with training elite women in Thai society and preparation of handiworks and meals for royal functions.</p> <p>It is a part of the enhancement of the education and teaching studies in Thailand.</p> <p>Scientific Significance:</p> <p>It represents the influence of the European architecture in building design and materials in Thailand.</p>
Nongkransamo sorn Hall (H1)	<p>It provides evidence of:</p> <p>Historic Significance:</p> <p>The hall is associated with the high royal residents as a venue of royal ceremonies and rituals.</p> <p>Aesthetic Significance:</p> <p>The hall demonstrates an impressive architectural composition because it is associated with the quality of the exterior form and design of the Gothic style.</p> <p>It also demonstrates an outstanding craft of the architecture reflecting the quality of the interior elements of the arcade.</p> <p>The mural painting technique represents Stile Liberty or Art Nouveau.</p> <p>The location of the hall in the middle of the open space contributes to the landscape of A3.</p> <p>Social Significance:</p> <p>It has an association with the political change and the development of the local administration in Thailand. It is a part of the Administration College.</p> <p>Scientific Significance:</p> <p>It represents the influence of the European architecture in building design, materials and techniques in Thailand.</p> <p>It is associated with the rare quality of the artistic work. The hall interior was decorated with Fresco Secco Mural Painting Technique in the Sixth Reign.</p>

Place or building	Components of Significance
Landscape Elements	<p>Earth Hill and Tunnel (T1), Canal (C1 & C2) and Pool (P1) provide evidence of:</p> <p>Aesthetic Significance:</p> <p style="padding-left: 40px;">They demonstrate the oldest elements of the court landscape in the Romantic style.</p> <p>Historic Significance:</p> <p style="padding-left: 40px;">They represent the oldest evidences of the royal garden and inner court.</p> <p>Earth Hill and Tunnel (T1) provide evidences of:</p> <p>Historic Significance:</p> <p style="padding-left: 40px;">They are associated with the use and function in the period of the Royal Inner Court as the kitchenware store (1924-1932) and in the period of education development as a library and an air-raid bunker (1937-1945).</p>

Comparison between the Actual and Contemporary Social Significance

All components of the social value should be assessed at the high level of significance. As shown in Appendix D, the contemporary social significance of the stakeholders discloses that the high level of the following components of the social significance is consistent with the actual assessment.

Queen Sawangwathana Mansion (L1) is associated with the enhancement of the education of pupils with disabilities.

Queen Consort Saisawareepirom Mansion (L3) is associated with the enhancement of the fundamental education for the court residents.

All historic residential buildings are associated with preparation of handiworks, cuisines and performing arts for royal functions.

All historic residential buildings are associated with training elite women in Thai society.

However, two components of the contemporary social significance are different from the actual assessment. The use of historic buildings in the period of the inner court and the education development should be important to the national history and social development but they were assessed at the moderate-to-high level of social significance by the stakeholders. Nongkransamosorn Hall (H1) and Queen Sukumalmarasi Mansion (L2) provide the evidence of the political change and evolution because they represent democracy and the development of local administration in Thailand. All surviving residential buildings are associated with the development of fundamental educations and teaching studies in Thailand. The use and function are abstract qualities of the social value embodied in these historic buildings. The stakeholders might hardly capture the meanings of these intangible values because they might have limited background knowledge. Thus, these factors may distort the social significance assessment of the stakeholders from the actual assessment.

The stakeholders' opinions should be regarded when the conservation, development and change are introduced to Suansunandha. The stakeholders are directly impacted. They may actively support to and mitigate obstacles to conserving the cultural significance if they feel as a part of the management policy. The stakeholders were thus encouraged to assess tourism impacts and potentials because results from the stakeholders' opinions that may be effective to define opportunities and constraints arising from cultural tourism in Suansunandha are also included in Chapter 8.

Chapter 8

Opportunities and Constraints

Results from the Cultural Significance

All cultural significance of Suansunandha is associated with the inner court formation and the beginning of modern national education. The management policy would focus on conservation of the cultural significance arising in the period of the inner court and educational institutes.

This study emphasizes a conservation of physical components of the cultural significance within Suansunandha. An outside component of Suansunandha is out of the scope of the study. Thus a conservation policy would be implemented with historic buildings and surroundings within Suansunandha while an interpretation policy may be connected with the outside component in the context of social and historical association.

Cultural heritages in other periods were not assessed as the cultural significance of Suansunandha and not be included in the proposed management policy. Their values will be increased and may become part of cultural significance of Suansunandha in the future. An assessment of significance and a conservation policy should reconsider buildings and places in the period of Royal Inner Court and Teacher Colleges.

Components of the cultural significance are fragmented into three areas within Suansunandha. They are not connected physically but the management policy should connect them in the context of historical association. The policy should mitigate obstacles of the physical access and enhance intellectual access. Interpretation of individual components should be consistent with the overall interpretation policy.

The waterway and earth hill form the landscape of Suansunandha as open spaces with historic and aesthetic significance. However, current use and condition may be intervened by modern facilities and building constructions. These constructions may affect these components reflecting the court formation. The appropriate use and intervention should be determined in the conservation management policy.

All surviving residential buildings and the hall demonstrate the architectural composition for the establishment of the court and the architectural knowledge for modern residential and large buildings. The architectural elements and the use of these buildings, the hall and their surroundings should be conserved and managed properly. The interpretation and presentation of these buildings should be connected with the overall cultural significance of Suansunandha as the integral part of the management policy.

All surviving residential buildings and the hall also provide evidences of social functions and historical association for the period of the inner court and the educational

institutes. The abstract quality of the historic and social significance might be captured hardly by stakeholders and might restrict the understanding of the stakeholders. The conservation of the significance should ensure that this essential quality will not be diminished in the future. The interpretation should enhance the better understanding of the significance for various target audiences.

Opportunities and Constraints Arising from Significance

Use

Historic buildings used as office and classroom buildings may be inconvenient to organize on-site interpretation activities at the same time. Visitor access into these historic buildings may disturb users while the interpretation may be restricted by the current uses.

The use of the historic buildings as classrooms may not be appropriate to the physical condition because the building carrying capacity may not be able to serve the increasing numbers of present students. Exceeding numbers of students may limit this continual function from the period of education institutes. The introduction of new uses should meet physical carrying capacity and should be compatible with cultural heritage values of the buildings.

The historic buildings may be used for tourism purposes in the future. The historic buildings may be developed to be visitor centers, exhibition venues, art galleries or museums. When the new use of the historic buildings is associated with a tourist attraction and an admission charge, it must follow the 13th Section in the Ancient Monument Act. Furthermore, the new use may be opposed by some relevant parties because they may concern with conflicts and a competition arising from cultural tourism. Limited resources may be drawn to develop the tourism and visitors may disturb primary functions and physical condition of historic buildings. The change of uses or new uses should be derived from a consensus of all representatives of stakeholders.

Users of these historic places are key stakeholders in Suansunandha and may have direct association with routine maintenance and unintentional damages. However, the users may be short of understanding of the overall significance and basic preservation of the places; they may have some historical knowledge about individual and overall historic buildings. They should be educated about cultural values of Suansunandha.

Resources

The conservation management budget is limited and inflexible. A conservation budget is frequently shared with other budgets allocated from the government. Four organizations in Suansunandha may not include a continual maintenance budget in a proposed annual budget to the government because the maintenance budget may be chopped off. The conservation budget is considered as a specific purpose budget. If this budget is not used or is partially used, it is hardly altered for other purposes. For a periodic repair, it may be included in the annual budget because it is associated with high expenditure of the conservation. However, a detailed proposal of the conservation

together with the estimated budget must be presented to the government. The preparation of the conservation budget may depend on the vision of the management and damage of the historic buildings. Cultural tourism may provide an optional source of conservation funds but tourism activities should not disturb the primary function and cultural heritage values of all organizations in Suansunandha. The income arising from tourism should have aims to conserve and enhance the significance of historic buildings.

Various tasks are involved with the conservation management. Multidisciplinary skills are required to accomplish tasks of the conservation in Suansunandha. Specialists should be employed to evaluate building materials, to recover early historic form, to adapt historic buildings for new uses, to add new structures and to develop interpretation techniques. They should have skills in the areas of archaeology, architecture, community engagement, engineering, history, interpretation, materials conservation, research and surveying (Heritage Victoria, 2010:13) to ensure that all intervention activities will not diminish cultural heritage values. However, all conservation tasks must be consulted with the Fine Arts Department (FAD) as the legal specialist.

Suansunandha might not recruit relevant personnel to deal with day-to-day or preliminary tasks of the conservation management. They should have proper knowledge to put measures into actions and to accomplish the tasks. Current responsibilities may be assigned to users of historic buildings or property managers; however, the additional tasks to these personnel become burdens rather than solutions. They may face a lot of routines and have to cope with the unfamiliar tasks as heritage caretakers. Mostly, the routines may take the priority over these specific tasks. The tasks may seldom be achieved according to the conservation plan. The relevant personnel (area managers and building managers) should be appointed to deal directly with the conservation tasks and act as an intermediate party between users and management structures. Training courses should be prepared for these personnel of Suansunandha. The courses should enhance their abilities to investigate damages or physical conditions, to gather information for periodic activities of the conservation and to understand history and significance of Suansunandha.

All areas of Suansunandha provide lodging services. Area1 and Area2 are also associated with hospitality and tourism educations. They may have potentials to deal with visitor and interpretation management. These should be opportunities to enhance skills of relevant stakeholders and to gain economic and socio-cultural benefits.

Interpretation

Current communication and presentation are available in some historic buildings but heritage contents may not be able to connect with cultural significance. Users or audiences are not enhanced to understand concrete and abstract meanings of cultural heritage values. Even though the art and culture center is established within Area1 and Area2, it is not able to demonstrate overall significant heritage values in Suansunandha and its presentations may not enhance the audience understanding. Websites of the culture centers are designed to communicate with audiences with bilingual presentations (Thai and English); however, they display incomplete contents (i.e. <http://www.culture.ssru.ac.th/> and <http://www.ilac.dusit.ac.th/>).

Queen Sawangwathana Mansion (L1) as the culture center in Suan Dusit Rajabhat University (SDRU) may demonstrate and encourage the participation in the

creation of handiworks as an important role of the inner court in royal functions. These techniques should be retained (see figure 80). Demonstrators or trainers should link audiences or participants with actual meanings of the handiworks. The culture center exhibits costumes of female members of the royal family and historical story of King Rama V and Queen Sunandha (see figure 81 & 82); however, this exhibition may not be associated with the cultural significance of Suansunandha.



Figure 80 Exhibition and Demonstration of Handiworks at Queen Sawangwathana Mansion (L1)

Source: Suwannarit Wongcha-um (2011)



Figure 81 Costume Exhibition at Queen Sawangwathana Mansion (L1)

Source: Suwannarit Wongcha-um (2011)

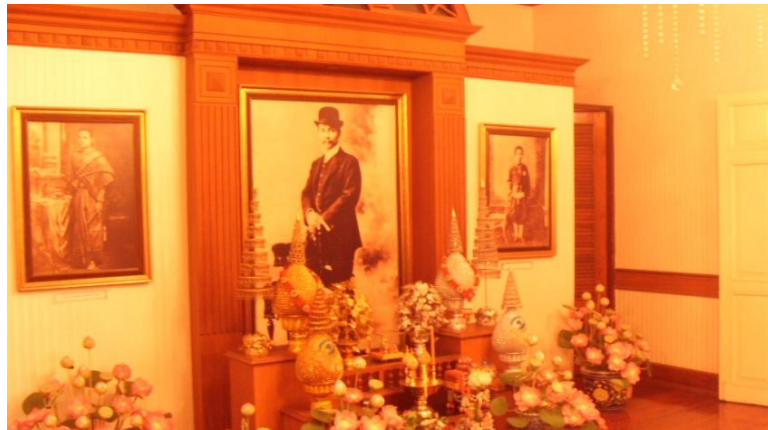


Figure 82 Images of Queen Sunandha, King Rama V and Queen Sawangwathana at Queen Sawangwathana Mansion (L1)
Source: Suwannarit Wongcha-um (2011)

Queen Sukumalmarasi Mansion (L2) is used as the interpretation venue in the Department of Local Administration (DLA). It presents audiences with images and stories of King Rama V and Queen Sunandha (see figure 83); nevertheless, interpretation contents may not be associated with its significance. Interpretation techniques may focus on providing facts and historical stories; thus, audiences may obtain only information.



Figure 83 Images of King Rama V and Queen Sunandha at Queen Sukumalmarasi Mansion (L2)
Source: Suwannarit Wongcha-um (2011)

In Suan Sunandha Rajabhat University (SSRU), the communication and presentation of Queen Consort Saisawareepirom Mansion (L3) are associated with the history of the mansion owners and the roles of the mansion. However, the interpretation may overlook scientific and aesthetic significance of the mansion and presents irrelevant contents (see figure 84). Such contents may lead audiences to misinterpreting the significance of the mansion.



Figure 84 Exhibition and Collections at Queen Consort Saisawareepirom Mansion (L3)

Top: Model and history of Suansunandha

Middle: (from left) Old-fashioned books and ceramic trays in the period of King Rama V

Base: Showcases of collections

Source: Suwannarit Wongcha-um (2009)

Most of the current communications emphasize stories of King Rama V and Queen Sunandha in ways of information rather than the interpretation. They may lack a variety of interpretation techniques to meet different needs of audiences. Furthermore, they fail to connect with heritage contents associated with the historic buildings, residents and events in significant periods.

Themes, concepts and messages that will communicate with target audiences should be based on the following contents.

Primary heritage contents for the interpretation may result from cultural significance in the period of the inner court.

1. The design and atmosphere of a Romanticism court
2. The residential building design for female royal residents

3. Influence of the European architecture in the court design and residential building style

4. Roles of the inner court associated with royal cuisine and handiworks for royal functions

5. The largest and last inner court in Thailand

Secondary heritage contents for the interpretation may result from historic and social significance in the period of the education institutes.

1. Impacts of the political change on the inner court

2. Functions and roles of the education development in Thai society

This should be an opportunity to design the overall interpretation policy as the guidance for interpretive programs of individual historic buildings.

Management

Ground and cultural heritage of Suansunandha are used by four organizations. They are controlled and managed by individual organizations. This separate management should be an opportunity to establish management structures of overall cultural significance in Suansunandha. The management structure as a part of the conservation policy would be associated with the continual maintenance and all decision-making process of cultural heritage management. The structure should be composed of proper representatives from all level of stakeholders and from all organizations in Suansunandha. Scopes of management structures may deal with individual historic buildings to overall cultural significance in Suansunandha. They will act as a “commission with advisory review” (Irwin, 2003:191). A proposed intervention activity should be verified and suggested by this commission before the proposal would be presented to the Fine Arts Department (FAD). The review should ensure the proposed activity protecting and enhancing overall significance in Suansunandha; however, the suggestions of the advisory commission cannot mandate the proposal of intervention activities.

Historic Character

All surviving historic buildings reflect the aspiration of founders, interest of designers and social class of owners transformed into the Romanticism plan of Suansunandha. The building formation is associated with types of historic buildings and the status of owners. The social and historical contexts have relationships to interior forms and room arrangement of the historic buildings. The combination between the European architecture and conditions in Thailand demonstrates outstanding architectural style of the historic buildings. The “historic character” (ICOMOS, 1987) of Suansunandha that is based on cultural expression, social relationships and multi-cultural context (Irwin, 2003:175-179) should be preserved (see figure 85).

Suansunandha demonstrates a historic pattern of the inner court associated with historic building formation and location. The formation of the historic buildings consists of balance and informal (or unbalance) patterns (Somchart Chungsirirak, 2010). The different building forms are based on their location. The formation of small historic buildings is defined by the canal and road in the balance pattern. The formation of large historic buildings is associated with the canal and pool in the unbalance pattern. Current

physical condition of the pool, canal and road should be maintained.

Historic buildings provide evidences of the combination between the influence of the European architecture and climate and cultural conditions in Thailand. All surviving residential buildings may share common style (applied villa style) and have a similar three-part composition (top, middle and base parts of buildings) but their building forms reflect a diversity of historic buildings. The historic buildings are composed of small and large residential buildings, different roof shapes and light and massive appearance of structures that should be respected by other modern structures and surroundings. However, uncontrolled architectural forms of new buildings have adverse impact on the historic buildings. Thus, new building designs should be compatible with historic building forms.

Relationships between all historic buildings and space indicate different classes of residential buildings and the status of owners. A set of small historic buildings is surrounded by limited space reflecting a character of townhouses. Large historic buildings are surrounded with wider space reflecting a character of country houses. The hall as a primary structure is located in the middle of open space and away from residential buildings but at the main entrance of the inner court demonstrating a clubhouse of an urban community. These historic characters of Suansunandha demonstrate the site plan of modern urban villages. The existing space between the historic buildings should be preserved because it is continuously reduced and disturbed by new structures and facilities.

Interior forms and room arrangement are associated with a character of residents, relationships among residents and roles of the residents. The ornaments of the historic buildings provide evidence of link between social context and physical elements. Delicate motifs of fretworks and flower motifs of stucco represent the female residents while the placement of the decoration demonstrates the status of female royal residents. Servant rooms and service stairs can tell historical relationships among residents. Servant workrooms reflect roles of the court residents associated with royal functions. However, these abstract qualities of historical and social contexts may hardly be understood by young generations. These meanings should be interpreted properly to different groups of stakeholders and audiences (i.e. school-age children and cultural visitors) of Suansunandha.

Relationships with Other Place

Suansunandha is associated with the Dusit Royal Palace as a royal garden and as part of the urban expansion in the last stage of the Fifth Reign. It has relationship with the palace as the extended area reflecting the important role of the palace to urban expansion in this reign. A road network surrounding the palace as a contributing factor of the town growth in the north of Bangkok has defined the boundary of Suansunandha. However, the current function and physical environment of Suansunandha is separated from the palace, the historical association still connects them together. Suansunandha demonstrates both the relocation of royal residents from the Dusit Royal Palace and is a part of the town growth. Thus, the understanding of early social and historical connection between Suansunandha and the Dusit Royal Palace should be a part of the management policy.

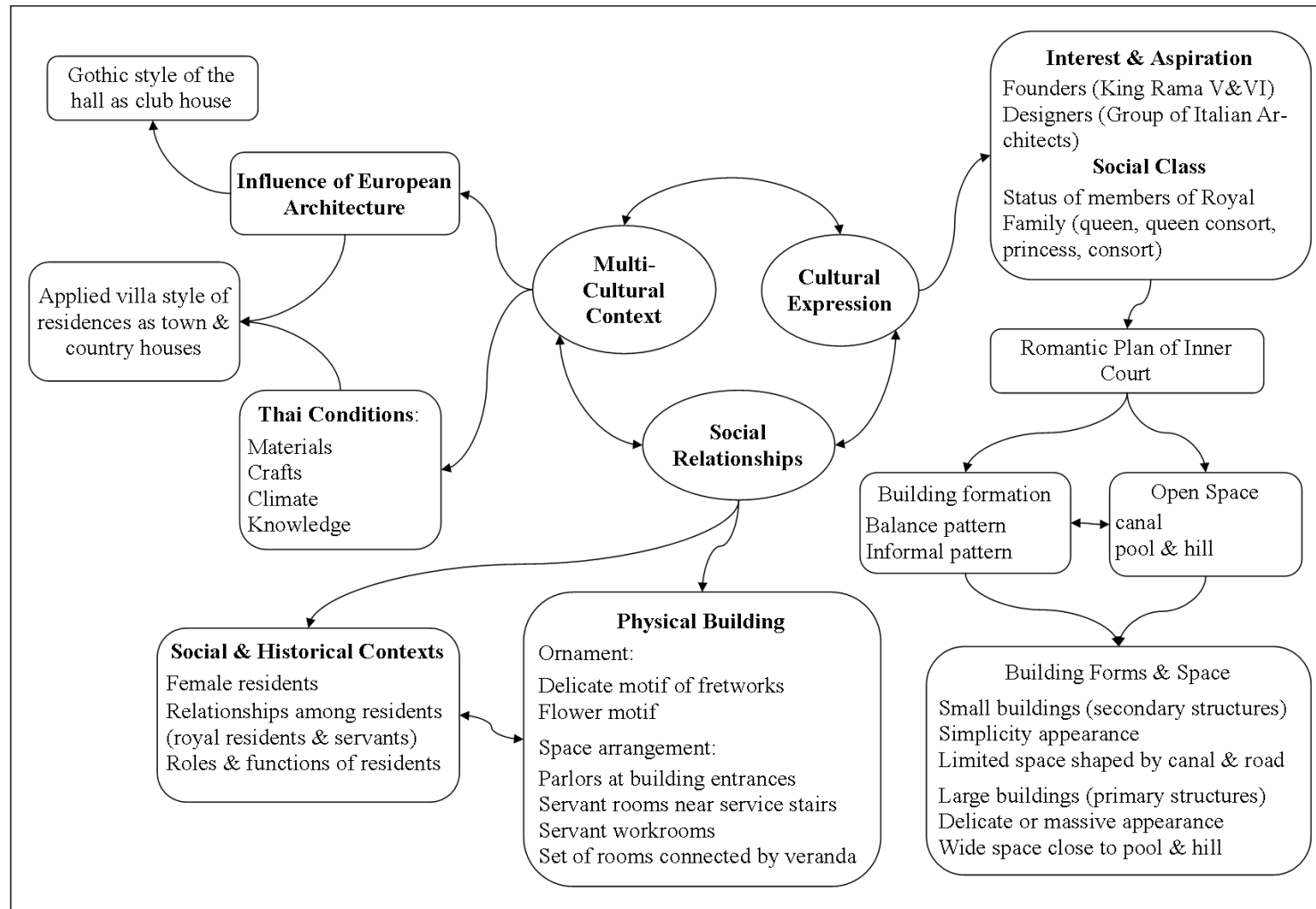


Figure 85 Historic Character of Suansunandha
Source: Suwannarit Wongcha-um (2011)

Condition

Overall historic buildings and places are in good conditions because most of them have been improved recently and periodically. They still encounter inappropriate intervention activities and were disturbed from constructions of facilities, surroundings and modern buildings. The improvement process was implemented without proper records and documentations. Relevant stakeholders should be assigned to do recording and documentation before, during and after conservation.

A large pavilion is projected into the south of the pool. This large scale structure may disturb the traditional form and function of the pool as open space. Further interventions should not interrupt the condition of the pool as one of the oldest components of the inner court. The remaining canal line (C2) should be sustained. Surrounding facilities and buildings should respect the present extent of the canal and new additions should not be projected into the waterway.

The southern open space of both Queen Consort Saisawareepirom Mansion (L3) and the earth hill (T1) should be retained. The open space enhances the vista of the mansion façade, and the front and top of the hill. A recreational area in front of Princess Uppantripacha Residence (S6) as an intermediate zone between the historic building and the road should be preserved because it keeps vehicle traffic away from the building and also enhances the appearance of the building façade.

Other facilities, surroundings and buildings may cause potential adverse impacts to historic buildings and places in Suansunandha such as road extensions and modern building constructions.

Road extensions might be impossible within areas of Suansunandha because the present ground is entirely used. Private vehicles should be restricted. Stakeholders of Suansunandha should be motivated to use public transportations. Surface parking along the main roads and near the historic places within Suansunandha should not be allowed in the future. Parking areas and buildings are restricted to serve only involved people in Suansunandha and may not be adequate to facilitate tourist vehicles. Heavy traffic may deteriorate the historic buildings and places because of pollution and vibration.

Modern structures and facilities are decreasing spaces of the historic buildings and places, and dividing the group of surviving small residences into parts. The existing space between the historic buildings and modern structures should be maintained. Some historic buildings (L2 and S6) contact directly with a road and parking area without the space as the intermediate zone. Spaces of the historic buildings should bring back with the regard to aesthetic significance in the future.

A modern building is located between Princess Pisamaipimolsat Residence (S4) and Princess Sasipongprapai Residence (S5) interrupting the integrity of the group of small historic buildings. This modern building became a dominant structure over the historic buildings because its front terrace is beyond the line of the historic buildings. Moreover, the space between two historic buildings is also eliminated by this building. This inappropriate structure invades the traditional formation of the small building group in SSRU. A set back or cutting off corners should be applied with the excessive terrace. New structures and facility constructions should respect the space, scale and form of historic buildings and places in the future.

Legislative Requirements

To design a proper conservation management policy is necessary to consider related laws, regulations and rules for the appropriate plan in context of local heritage conservation and development (see Appendix B). Due to Suansunandha was registered as a historic site by the Fine Arts Department (FAD); it has been protected by the Act on Ancient Monuments, Antiques, Objects of Art and National Museums in 1961(B.E. 2504) and its amendment in 1992 (B.E. 2535) including rules announced by FAD. The relevant laws were verified before proposed policies are presented in this study. Therefore, the Act's content that is relevant to Suansunandha is emphasized on the Ancient Monuments Chapter. The section 7, 9, 10 and 13 of the Act are associated with intervention activities and collecting entrance fees as an attraction within Suansunandha.

According to 13th Section in the Act, FAD has a legal authority to announce rules, procedures and conditions about admission fees or other fees of visits to ancient monuments owned or lawfully possessed by any individual. The announcement published on the Gazette on September 17, 1992 (B.E. 2535) consists of five obligations (Fine Arts Department, 1992). They are associated with required evidences of a proposed site or place, a preparation of on-site interpretation, the proposal process, exemption and discount from the fees, and the regulation notification to visitors. If a part of the visitor management of Suansunandha is associated with the development of a tourist attraction charging visitors admission fees, a proposed plan should respect the regulations.

The Procedure of Monument Conservation of the Fine Arts Department in 1985 (B.E. 2528) is also associated with conservation management. Key contents of the procedure comprise the definition of technical terms, conservation preparation, conservation practices and other appropriate actions to conserve monuments. Some relevant articles should be considered for the management plan of Suansunandha such as article 1 to 9 and 17 to 20.

Local Regulations

Both historic and modern buildings within Suansunandha as public buildings in Dusit District, Bangkok have to follow local constraints. The future adaptation of these buildings, the change of surroundings and new constructions are directly associated with regulations of Bangkok Metropolitan Administration (BMA). The Building Control in 2001(B.E. 2544) and the Restricted Zones of Construction, Modification, Use or Change of Use in 1992 (B.E. 2535) must be considered to guide the use of the buildings and the physical intervention in the management plan of Suansunandha.

Stakeholders

Stakeholders of Suansunandha may either support or oppose the management policy. The stakeholders have a strong relationship with the historic buildings and places as direct and indirect users. They will be impacted from a change of the cultural heritage values. All levels of the stakeholders in Suansunandha should be encouraged to participate in all process of planning, implementation and review of the conservation and development.

Characters of stakeholders in Suansunandha that are derived from findings of the survey consist of long-term (or permanent) and short-term (or temporary)

stakeholders. The long-term stakeholders are lecturers, staff and officials while the short-term stakeholders are students. The short-term stakeholders have more confidence on tourism potentials of Suansunandha than the long-term stakeholders. The students may have highly positive attitude towards cultural heritage values in Suansunandha rather than the long-term stakeholders.

Relationships among Stakeholders

The stakeholders of Suansunandha are divided into five groups of member stakeholders related with four organizations in three areas of Suansunandha. Each group may understand only cultural heritage values within the related areas and may hardly learn the significance of cultural heritages in other areas because they may lack interrelationships.

The limited relationships between the stakeholders of Suansunandha might be arisen from boundaries and insufficient participations. They do not connect each other regularly but may have a formal relationship during special occasions. The stakeholders of Suansunandha from different areas may participate only in the events on memorial days of Queen Sunandha. The stakeholders from one area may not have some sense of belongings in cultural heritage values of the other areas. A lack of regular relationships may affect sustaining the significance as the integral part of overall cultural heritage values in Suansunandha. The stakeholders from all areas of Suansunandha should be enhanced to have participation in all process of cultural heritage management.

Interpretive programs should be organized beyond boundaries to ensure that stakeholders of Suansunandha are accessible physically and intellectually to significant values. They may learn significance and exchange knowledge of the cultural heritage values with stakeholders from different areas.

Visitors

If cultural tourism is organized in Suansunandha, target visitors should be defined to learn their behaviors as a part of a visitor management policy. Prospective visitors should be cultural visitors as another group of target audiences of Suansunandha. The cultural visitors that may be suitable to cultural significance of Suansunandha would be Midcentric visitors to Allocentric visitors according to Plog (Plog, 1991 cited in Weaver and Lawton, 2002:187). Furthermore, the target visitors of Suansunandha may be related with the purposeful cultural tourist, the sightseeing cultural tourist, the serendipitous cultural tourist, the casual cultural tourist and the incidental cultural tourist (McKercher and du Cros, 2002:144). The characters of the purposeful cultural tourist may be relevant to the inventory of cultural significance and the beginning development of cultural tourism in Suansunandha. They intend to visit a cultural attraction and are willing to have deep experience from the cultural tourism that are similar to the Allocentric visitors exploring new experiences from a strange culture and preferring new but unpopular attractions.

The above predetermined characters of the Allocentric and purposeful cultural visitors should be useful to initiate the interpretation policy. The actual characters of target visitors should be derived from a further research in order to segment target audiences and understand their characteristic behaviors. The matching between the characters of the visitors and the strategies will enhance interpretations and visitor

satisfaction. Target visitor behaviors should also be consistent to opportunities and constraints of the significance in Suansunandha. The right target selection will contribute to better learning from interpretive programs and ensure that the visitors will behave properly to the significant values.

Other Relevant Parties

The Fine Arts Department (FAD) has the legal authority and must be consulted when any intervention activities are implemented with historic buildings, places and other components on ground of Suansunandha. FAD acts as the “commission with binding review to stop construction and demolition” (Irwin, 2003:191) under the Ancient Monument Act in 1961. Any interventions without a permission of FAD may cause the delay and increase cost of the maintenance, improvement, displacement and new addition. FAD has been involved in decision makings of proposed plans of Suansunandha since 1998. The reviews would be opportunities to protect cultural heritage values from improper designs and to control new development.

Crown Property Bureau (CPB) as the owner of Suansunandha should be invited to participate in the management structure of the conservation policy. The bureau may not provide fiscal support but it may provide important evidences and new information to assess and conserve the cultural significance.

Alumni Associations of SSRU and SDRU should be encouraged to be a part of a decision making process and in the management structure as well. They may be active supporters for funds of the conservation policy and provide relevant information of the cultural significance assessment.

Existing Policies

SDRU has planned to develop Queen Sawangwathana Mansion (L1) as a learning center of Thai arts and culture in the middle period of Rattakosin. Themes will be related with culinary, architectural, medical and costume contents. Various interpretive techniques and tools will be used to enhance the center as an interactive museum. However, the contents and messages of the interpretation might not have a direct association with the cultural significance of Suansunandha.

DLA has planned to develop Queen Sukumalmarasi Mansion (L2) as a museum to organize events on the ground floor and permanent exhibition on the upper floor. This presentation may be related with the royal residents of this mansion.

SSRU has improved and developed Consort Uan Residence (S1), Princess Athorntipayanipa Residence (S2) and Princess Jutharatrachakumari Residence (S3) to a gallery, museum and art exhibition. Displays and exhibitions in these buildings may be associated with cultural significance.

These individual interpretation and presentation plans should be adjusted to enhance an appreciation and understanding of the building heritage values as the integral part of the cultural significance and should be compatible with themes of the interpretation policy.

Access

Suansunandha is accessible by public and private vehicles. It is bounded by two main roads leading to the old town district and downtown, thus it connects with numbers

of bus lines and road networks. However, it is surrounded by government agencies and schools. Surrounding roads of Suansunandha encounter heavy traffic. Besides road traffic, express boats should be an alternative public transport to Suansunandha because it is located near the river. Both stakeholders and prospective visitors of Suansunandha should not be encouraged to use private vehicles because parking areas are limited.

Visitors and the public may encounter problems to find their own ways to visit the historic places within Suansunandha. Limitations might result from the current functions, inadequate communication and lack of heritage managers of Suansunandha. All areas are generally perceived as government agencies (public universities and government departments) so they as restricted areas might not allow public access or an access of irrelevant people. Incidental or sightseeing cultural tourists might be unlikely to explore hidden attractions within Suansunandha. Although it is located close to a primary tourist attraction, current communication may lack capabilities to connect with this key attraction and target visitors. The development of on-site and off-site communications should enhance the accessibility of target audiences.

The physical access of people with special needs may be limited to the historic buildings and places in Suansunandha. They should be encouraged to have an access to new media of Suansunandha.

Opportunities and Constraints Arising from Tourism

Impacts of Tourism

Tourism may generate economic, socio-cultural and physical impacts and may have positive and adverse effects to Suansunandha. To forecast these impacts may enhance the conservation of cultural heritage values, and proper measures may alleviate threats of tourism on cultural significance. Thus, this section describes the positive impacts as the opportunities and the negative impacts as the constraints of Suansunandha. The components of the impacts were also evaluated by the stakeholders (see Appendix D for the stakeholders' evaluations) in order that their views are going to be part of the management policy. The findings of stakeholders' opinions were compared with the predefined impacts (see table 9).

The Opportunities Resulting from Tourism

The economic impact may generate additional income and employment. This may be an opportunity to provide economic benefits for relevant parties in Suansunandha. Annual budget and subsidies from public sectors may not be adequate to maintain, preserve and conserve cultural significance of Suansunandha. The cultural tourism can generate own income for conservation funds. The income arising from the tourism may contribute to fiscal plan of the heritage conservation.

The socio-cultural impact may enhance a chance of training tourism students of SDRU and SSRU, public awareness of cultural heritage values, a collaboration of related parties in Suansunandha, interests of heritage values of stakeholders, and the heritage conservation.

The physical impact may be associated with compatible development and improvement of the existing and new facilities with the heritage buildings.

The Constraints Resulting from Tourism

The economic impact may increase the maintenance cost of historic buildings and their surroundings, and the opportunity cost of other budgets. The budget allocations and preparations should be proper for the conservation but do not affect budgets of the primary functions of Suansunandha such as student and academic affairs, and local administration works.

The socio-cultural impact may bring about conflicts and disrupt stakeholders of Suansunandha because they may share the use of facilities and historic buildings with tourists. The number of visitors, and the duration and place of visits should be determined to ensure that cultural tourism do not impact on cultural heritage values and stakeholders of Suansunandha.

The physical impact may cause the deterioration of the historic buildings because of the smoke and vibration from tourist vehicles and overcrowdings. Other physical impacts may lead to visual pollution because of new constructions and littering. The compatible use and proper activities of intervention should be defined to decrease negative visual impacts. The carrying capacity should be included in the visitor management policy in order to deal with excessive number of visitors.

The findings of the stakeholders' evaluations indicated that their opinions were consistent with the predetermined components of the positive and negative impacts because they all agreed with the components of the impacts (Oppermann and Chon, 1997; Swarbrooke, 1999; McKercher and du Cros, 2002; Tosun, 2002; Mason, 2003; Timothy and Boyd, 2003; UNEP, n.d.). Therefore, a proposal of the management policy should prepare measures to mitigate the negative impacts of tourism development and should enhance the positive impacts as the opportunities of Suansunandha.

Table 9 Tourism Impacts

Impacts of Tourism	Opportunities or Constraints	Opinions of Stakeholders
Economic Impacts		
Positive	<u>Opportunities:</u> Tourism might generate more incomes for related parties. Tourism might increase employment opportunity for service providers.	Agree
Negative	<u>Constraints:</u> Tourism might increase maintenance costs of historic buildings and surroundings. Tourism might draw other development budgets generating opportunity cost.	Agree
Socio-cultural Impacts		
Positive	<u>Opportunities:</u> Tourism might create opportunity to develop tourism students.	Agree

Impacts of Tourism	Opportunities or Constraints	Opinions of Stakeholders
	<p>Tourism might enhance tourists and related people understanding and conserving values of historic buildings.</p> <p>Tourism might enhance collaboration among areas and within each area of Suansunandha.</p> <p>Tourism might make local stakeholders of Suansunandha more concerned with values of historic buildings and surroundings.</p> <p>Tourism might encourage related people to preserve, improve and conserve historic buildings and surroundings.</p>	
Negative	<p><u>Constraints:</u></p> <p>Tourism might disrupt teaching, learning and working of lecturers, students, staff and officials.</p> <p>Tourism might obstruct the use of historic buildings and surroundings of lecturers, students, staff and officials.</p> <p>Tourism might overuse facilities of lecturers, students, staff and officials such as library, toilets, benches, parking, and food stores.</p>	Agree
Physical Impacts		
Positive	<p><u>Opportunities:</u></p> <p>Tourism might develop and improve existing facilities in Suansunandha.</p>	Agree
Negative	<p><u>Constraints:</u></p> <p>Tourism might accelerate deterioration of historic buildings and surroundings.</p> <p>Tourism might make Suansunandha untidy and dirty caused by littering.</p> <p>Tourism might cause air pollution from smog and smoke of increasing vehicles.</p> <p>Tourism might construct new building forms against existing historic buildings (visual pollution).</p> <p>Tourism might cause traffic congestion.</p> <p>Tourism might overcrowd areas and cause excessive carrying capacity.</p>	Agree

Potentials of Tourism

Suansunandha may have potentials to develop cultural tourism. Tourism potentials may be opportunities to enhance the conservation, proper use and interpretation of cultural heritage values of Suansunandha. The potentials may contribute to economic and social benefits; however, these tourism potentials may have adverse impacts on the cultural heritage values of Suansunandha.

Numbers of visitors may be attracted to Suansunandha at particular places at the same time because of its own values, special event organization and adjoining location to the primary tourist attraction. These factors may be constraints to conserve cultural significance because they may attract numbers of visitors beyond the carrying capacity of Suansunandha. The management policy should be designed to manage visitor numbers. Appropriate allocation of tourists, visit periods and promotion campaigns should be designed in a visitor management policy. A proper interpretation policy should be designed to improve media and techniques of interpretation and connect them together.

The stakeholders were also encouraged to evaluate the components of tourism potentials (see Appendix D for the stakeholders' evaluations). The findings of the stakeholders' evaluations revealed that they agreed with the components of tourism potentials (see table 10).

Most of stakeholders displayed the opinions in the same direction; however, a number of stakeholders disagreed with some potentials of tourism because they might be concerned about the availability of existing facilities shared with tourists, current budgets for promotional activities and service providers. Insufficient resources and facilities may cause problems rather than benefits to the cultural heritage values.

Table 10 Tourism Potentials

Rank	Components of Tourism Potentials	Opinions of Stakeholders
1	Historic, aesthetic, social and scientific values attracting visitors	Agree
2	Tourists visiting Suansunandha because of adjoining Vimanmek Mansion as a primary tourist attraction	Agree
3	Special event organization to attract tourists such as demonstrations of Thai dance, Thai cooking, fresh produce carving	Agree
4	Practical information and communication about history of royal residents in Suansunandha	Agree
5	Convenient and diverse modes of transportation to Suansunandha	Agree
6	Well worth visit (money, time and effort) of Suansunandha	Agree
7	Proper and enough signs of significant places	Agree
8	Complete information of signs, publications and exhibitions of significant places	Agree
9	Practical information and communication about history of old buildings and surroundings	Agree
10	Readiness of service providers (guides, public relations staff)	Agree
11	Adequate budgets of promotion programs	Agree

Chapter 9

Policy Framework for Conserving the Significance of Suansunandha

Suansunandha has a connection with the royal family of King Rama V and is associated with the continuity of the education development in Thailand. It demonstrates overall cultural significance as an important inner court and as a leading educational institute. To understand all cultural values arising from the inner court and educational institute periods would contribute to conservation of cultural significance. Historic buildings and surroundings are competing with the growth of modern structures and facilities. The modern development is essential to the continuing primary functions of Suansunandha. The historic buildings and surroundings are inevitably under siege from development pressures, modern buildings and environmental needs. Furthermore, the managers of Suansunandha are obligated to the conservation of the historic buildings, places and other components of the national historic site. Therefore, management policies should be created to conserve and interpret cultural significance and to manage visitors in Suansunandha.

The policy framework is formulated with strategies of conservation, visitor and interpretation management to achieve the following objectives.

1. To enhance the conservation of cultural significance
2. To retain balance between the conservation and development in Suansunandha
3. To encourage participation of stakeholders in all decision making process
4. To increase public awareness of cultural heritages in Suansunandha

Cultural values and significance should be guidance for implementation of conservation, visitor and interpretation management policy.

Conservation Management Policy

The conservation management policy is composed of management structure, maintenance and repair, future use, new development, street furniture, parking and traffic, and investigation.

1. Management Structure

All stakeholders of Suansunandha should be responsible for the protection and enhancement of cultural significance. Stakeholders should be encouraged to participate in the process of making decisions about cultural heritage management.

Aims:

To enhance collaboration from all stakeholders of Suansunandha

To ensure all decision making acceptable to all stakeholders

To retain overall cultural significance

Actions:

1. To define members of management structure

The members of management structure should have different responsibilities from day-to-day maintenance to a decision making of large scale conservation. They may be responsible for proposing a conservation budget but they may not have an authority of budget allocation and approval. This structure consists of building managers, area managers, area committee and a commission with advisory review (see figure 86).

The building managers and area managers would be appointed by the management of organizations in Suansunandha. The management may recruit users of the historic buildings or others that have proper qualifications to deal with specific historic buildings as the building managers or to cope with all historic buildings and their surroundings within an area as the area manager. Both the building managers and the area manager would act as delegates of the management in the area committee. The area manager should participate in the advisory commission.

The area committee should be formed by delegates from students or alumni, users of the historic buildings, law offices, property management offices and relevant specialists including the building managers and the area managers. A representative from students or alumni should be applied with the committee of Area 1 and Area 2 as university campuses. A representative from law offices would have knowledge of legislative requirements. A representative from property management offices would know existing budgets and property development policies.

The advisory commission should be composed of the area managers as the representatives of each area, a representative of the Crown Property Bureau (CPB) as the site owner, a representative of law offices and an outside specialist. The outside specialist would be invited from the Archaeology or Architecture Office of the Fine Arts Department (FAD). The specialist could give helpful advices for the proposal improvement. (see figure 87)

2. To outline scope of responsibilities and decision

Each building manager should directly deal with a particular historic building. The manager should be associated with a decision making of the routine maintenance. The building manager should be responsible for regular investigation and information preparation for a management plan.

An area manager should control the implementation of all historic buildings within an area and work together with the building managers for any decision making. For instance, if a problem arises during implementation that may not have adverse impacts on the building significance, both building and area managers should be in charge of co-decision making. The decision making should be based on the cultural heritage values and the statement of cultural significance. The area manager should participate in the preparation of the management plan and present a proposal to an area committee and the commission.

The area committee should give suggestions and feedback for the proposal of both conservation and development plans. For the implementation of the management

plan, if a decision making has impacts on the significance of buildings, a group of buildings or the whole area; the committee should take part of the decision. The participation of the committee should ensure that the planning and implementation would be consistent with the overall significance.

The commission should provide suggestions and reviews for the proposal before it would be presented to FAD. The role of the commission should ensure that the proposal would not have any adverse impacts on the overall cultural significance of Suansunandha and would not make any conflicts with relevant laws and regulations. The specialist from FAD and the specialist from a law office would deal with these issues. Most of the proposals were not approved by FAD because they were not able to meet the legislative obligations.

3. To follow process of proposal

When a proposal is associated a large scale conservation and a development plan and may have impacts on cultural significance, the proposal must be approved by FAD. Before the proposal would be presented to FAD, it should follow the proposal process. Even though this process may take longer time than direct presentation to FAD, it may ensure that the proposal would meet the requirements of FAD. The objection of FAD may waste longer time and more budgets for the proposal modification. (see figure 88)

Resources:

1. Members of the management structure should have basic knowledge of history, cultural significance, preservation and legislative requirements.
2. Specialists should have skills in the areas of archaeology, architecture, community engagement, engineering, history, interpretation, materials conservation, research and surveying.

2. Maintenance and Repair

The pool, canal and underground water may cause damages on floors and walls of the historic buildings. Smoke from vehicles and rainwater may bring about microorganism and water stains on the surfaces of the historic buildings. Broken roof tiles and windows may lead to water infiltration.

Aim:

To prevent damages and to preserve historic buildings

To recover forms and materials of fabrics

Actions:

The historic buildings should have good ventilation in order to decrease humidity within. Windows should be opened during the day. Unworkable window panels should be improved to function normally.

Woodworks (floors and stairs) should be daily cleaned and checked for termites.

The building surroundings should be cleaned and vegetation should be

removed.

Stains on walls and surfaces should be removed with gentle means of cleaning such as water wash and scrubbing with bristle brushes (Wilson, 1984:276).

Gutters and downspouts should be ensured that rainwater could be drained regularly.

Roofs and windows should be checked and repaired before the rainy season. Damaged roof and windows should be replaced with traditional materials and forms.

Housekeepers should follow cleaning schedules that would be designed by building managers and should report any defects to the managers.

The building managers should be responsible for regular inspection for physical conditions of the historic buildings and deal with preliminary problems. Building users should help the building managers to verify any damages and inform them to the managers immediately.

3. Future Use

Aim:

To modify functions of historic buildings for contemporary uses

Actions:

Any new uses should have the least change of historic characters of the buildings.

Any new elements should be sympathetic to old elements of historic buildings.

Interior layout and space arrangement of historic buildings should be maintained.

Adaptation of historic buildings should be connected with cultural significance such as handiwork museums and music galleries. Objects should be displayed on free standing showcases.

Any proposals of the new uses should be consulted with multidisciplinary teams if historic building foundations and structures may be affected by any changes.

The proposed plan of the new use should be approved by the consensus of the management structure and follow the proposal process.

4. New Development

Modern structures and facilities are contrasted with existing forms and elements of the historic buildings. The space of the historic buildings is also disturbed. Any new building design and space should be compatible with the historic buildings.

Aim:

To continue historical context of architectural characters becoming part of the present

4.1 Contemporary Design Guide

New building designs should respect historic characters of building forms and elements rather than style of the buildings. This guide would not advocate an imitation of the historic forms and elements but it would enhance different styles coexisting in the present environment.

Actions:

1. New buildings are close to small historic buildings. The new building design should consider the following compositions:

Small historic buildings should not be obstructed or dominated by new structures.

The pattern of void and solid makes small historic buildings light and simplicity appearance so a façade design of new buildings should be similar to the historic buildings. The proper façade design of the new buildings should also be guided by the pattern of window arrangement.

The proportion demonstrates similar ratio between the height and the width of small historic buildings. New buildings should be compatible with this proportion.

Three-part composition is associated with the pediment and inclined roof of the top part and rectangular windows of the middle part and at the base. A central entrance stairway is an outstanding composition of the building form. A design of new buildings should be sympathetic to this historic composition.

The fenestration of small historic buildings demonstrates a balance pattern of window placement that should be guidance of the façade design of new structures.

2. New buildings are close to large historic buildings. The new building design should consider the following compositions:

Large historic buildings should not be disturbed or enclosed by new structures.

The pattern of void and solid makes large historic buildings massive, elegant and delicate appearance so a façade design of new buildings should be similar to the historic buildings. The massing of these historic buildings should be used in conjunction with the pattern of window arrangement for the proper façade design of new buildings.

The proportion demonstrates a different ratio between the height and the width of the large historic buildings. These large historic buildings indicate wider horizontal planes, so new buildings should be compatible with this proportion.

Three-part composition:

-Large residential buildings are associated with the pediment and inclined roof of the top part and rectangular windows of the middle part and at the base.

-The audience hall demonstrates the pitched and inclined roof on the top, dormer windows and pointed arches of the middle part and rectangular doors at the base.

A design of new buildings should be sympathetic to the compositions of these large historic buildings.

The fenestration of large residential buildings demonstrates a vertical balance of window placement for residential buildings and the large hall indicates both a

horizontal and vertical balance of window arrangement. These arrangements should be guidance of the façade design of new buildings.

3. A new development project should follow the proposal process and the order of the management structure.

4.2 Space Control

Space between historic buildings are disturbed and reduced by new modern structures and facilities.

Actions:

1. A space between new buildings should be compatible with both existing line and space of the historic buildings.

The road and canal form the line of the group of small historic buildings. A space in between the line of the historic buildings and the road should be respected when a new building would share the same line of the historic buildings and be located along the road.

Existing spaces between historic buildings should be retained. When a new building would be designed close to a historic building, the space of the new building should be similar to the spatial character of the historic buildings and would not diminish the existing space of historic buildings.

2. To deal with any part of modern buildings interrupts historic building line and space. It should be removed when time and budgets are allowed in the future. This removal would not have any adverse impact on the building structure and should follow the proposal process. If the removal is impossible, the existing space and line should be retained.

3. Any vanished spaces that are irreversible should be investigated and recorded for further research and interpretation.

Resource:

A proposal of new developments should be under the control of the area committee and reviewed by the advisory commission. The proposal must be verified and allowed by FAD before it would be put into action.

5. Street Furniture (Street Signs, Seats and Bins)

Aim:

To manage street furniture in relation to the cultural heritage values of Suansunandha

Actions:

They should neither imitate original designs nor reproduce traditional items. The design should connect present ideas with historic characters in terms of forms, styles or materials.

All stakeholders of Suansunandha should be encouraged to participate in the design competition. The street furniture should be created by local producers with local materials.

The design and production should be presented to the management structure according to the proposal process.

The placement of the street furniture should enhance utilization but should not obstruct vistas of the historic buildings and places. Street signs should be located at primary views but not disturb the historic buildings. Seats should be placed at recreational areas. Bins should not be barriers on sidewalks but should be within a range of vision.

6. Parking and Traffic

Aims:

To decrease surface parking

To keep heavy traffic away from historic buildings

Actions:

The numbers of vehicles should be consistent with limited parking services. In order to discourage using private vehicles in Suansunandha, current situation and restricted capacity of parking venues should be disseminated to the stakeholders of Suansunandha. They should be encouraged to use public transports to Suansunandha on some working days a week.

All stakeholders of Suansunandha should be invited to participate in campaign designs to reduce private vehicles in Suansunandha. Car pool should be a sample of the campaigns.

Vehicles should not be allowed to park on main roads, roads adjoining the historic buildings and sidewalks.

Lanes that are away from principal views may be used for parking but they should not be connected with the historic buildings and places.

Some historic buildings are adjacent to a road. The sidewalk could not be rebuilt in between the historic buildings and the road. Some road surface that is close the buildings should be reserved as walkways.

The stakeholders of Suansunandha should be enhanced to leave their vehicles on parking areas and buildings. Visitors should be educated that the use of public transportation should be more convenient than private cars because of limited parking spaces.

7. Investigation

Investigation would enhance good maintenance and conservation of the cultural significance. The protection of the cultural significance should have a proper investigation process.

Aim:

To design a process of investigation for protecting the cultural significance

Actions:

1. The description of brief history and cultural significance of Suansunandha should be included in the investigation documents.

2. The selection of existing sources of information would be useful to the physical condition investigation. Existing evidences should be in the forms of plans, maps, drawings, photographs and publications associated with cultural heritage values and could be obtained from local libraries, the national archives and library.

3. The investigation of physical conditions should collect information of building damages, elements, forms, materials, surroundings, maintenance and conservation works.

4. The collection of both existing evidence and investigated information should be recorded in formats of written documents, photographs and drawings. The recorded information would demonstrate sequences of changes and development of the historic buildings and would be benefits for future conservation and research.

5. The investigation and recording should be implemented before, during and after conservation works.

Resources:

Building managers should be responsible for basic investigation and recording of damages, physical condition and routine maintenance. Further investigations for large scale conservation should be cooperation between building managers and multidisciplinary specialists.

Specialists who are employed to deal with investigation and information collection should have knowledge of history, architecture, construction, conservation and the cultural significance of Suansunandha.

Visitor Management Policy

The visitor management policy is comprised of target visitors, sustainable practices, carrying capacity and marketing strategies. (see figure 89)

1. Target Visitors

Visitors would have varying needs and interests influencing their different behaviors. The evaluation and selection of target segments of visitors should consider their different characteristics. Selected target groups would be guidance of carrying capacity measures and sustainable practices. The right group selection could lead to develop appropriate marketing strategies and interpretation.

Aims

To understand visitor behaviors from different target segments

To select proper segments in relation to limited resources and cultural heritages

Actions:

1. To divide visitors into groups with common characters

Groups of visitors should be divided into inside and outside visitors.

Inside visitors are classified into the group of long term involvement and the group of short term involvement based on the length of use.

The members of the long term group are lecturers, staff and officials. The members of the short term group are students. The short term group may have more interests and confidence in the resources and cultural heritage values of Suansunandha than the long term group according to the research findings in Chapter 8.

Outside visitors based on personality and self-image would be cultural tourists to be fit for cultural heritage values of Suansunandha. Allocentric visitors and the purposeful cultural tourists should be included in target groups. Both groups may have similar characteristics that they intend to explore unfamiliar experience and gain knowledge from cultural tourism. Suansunandha that is close to many schools should attract school-age children as one of the target outside visitors. The school-age visitors would be ready to assimilate new cultural experience because they travel in a cultural attraction with an educational purpose.

2. To evaluate target groups of visitors in connection with functions and resources

When primary functions and existing resources of Suansunandha are considered, Suansunandha could not be developed to serve all target visitors. Suansunandha provides educational services and local administration development as main functions. The cultural heritage values may have significance and tourism potentials according to the stakeholder assessment; however, they could not have enough capability to attract mass tourists. The existing resources (service personnel, skills and budgets) may not be sufficient to serve all cultural tourists effectively.

3. To choose proper segments from the groups of visitors

The inside visitors and the group of school-age children should be the primary targets for visitor and interpretation management. Other groups should be considered as the secondary targets and may be part of the primary targets in the future. This target division would be related with the allocation of financial and human resources and the interpretation management.

Another physical advantage is the location of Suansunandha that is close to a primary tourist attraction. This advantage should be developed to attract more cultural visitors in the future.

A service advantage is associated with lodging services that are provided in three areas of Suansunandha. They should be included in the visitor management when an overnight package tour would be initiated in Suansunandha.

A personnel advantage is associated with hotel and tourism students that study at both campuses. They should be employed to be service providers.

The service advantage and intimate location with the primary attraction should be considered when targets would be expanded to other cultural tourist groups.

Characters and behaviors of visitors are dynamic so current targets should be reviewed, and a further research should be conducted periodically to choose proper target groups in the future.

2. Sustainable Practices

Visitors may intentionally or accidentally misbehave to the cultural heritage

values because they may lack understanding of significant heritage values of Suansunandha and may have different past experience for sustainable tourism. They should gain “reeducation” and “reward” (Swarbrooke, 1999:239) in order to behave in sustainable manners to the historic buildings, places and intangible heritage of Suansunandha.

Service providers in Suansunandha should be a part of enhancing appropriate behaviors of the visitors. They have close contact with visitors and may also cause problems to the cultural heritage values. Their knowledge and skills should be adjusted in connection with the cultural significance of Suansunandha and the ways of sustainable visitor management.

Aims:

To modify visitor behaviors being compatible with the cultural heritage values and the sustainable visitor management

To enhance proper skills of service providers in relation to the cultural heritage values and the sustainable visitor management

Actions:

1. Reeducation

Reeducation could enhance proper behaviors of visitors to the cultural heritage values and allocate visitors to different periods and historic places of Suansunandha. Desirable behaviors should be related with respect to the quality of the cultural heritage values, tourism experience and ways of local life.

Visitors should be reeducated before and during their visit how to behave properly and to travel within Suansunandha in sustainable ways to the cultural heritage values.

The visitors should be reeducated that outcomes arising from their desirable behaviors could enhance the sustainability of the cultural heritage values. For instance, they may be helpful to investigate physical conditions and inform service providers because they may face accidental damages to the cultural heritage and out-of-function facilities.

The visitors should be reeducated that all historic buildings and places can be reached even though they are located into three areas. The visitors should be encouraged to visit not only well-developed historic buildings but also other historic buildings as an integral part of overall cultural significance of Suansunandha. The service providers should ensure the visitors that learning the overall cultural significance would enhance their better understanding and appreciation. If time limits a physical access, visitors should have an optional intellectual access through new media.

Working days may attract more numbers of visitors than weekends. The visitors should be reeducated that they could visit the historic buildings and places at different time but they still gain convenience and good cultural experience. A visit during weekends, public holidays and semester breaks might be more appropriate periods for outside visitors. The visitors would not compete with the stakeholders of Suansunandha to use limited resources (parking, food service and recreational areas). This optional visit may increase their satisfaction. The service providers should be

arranged on occasional demands to facilitate the visitors. Thus, visitors should be educated that they are invited to have a visit on holidays but they should make an appointment in advance. This reeducation should be introduced to target visitors through promotion and interpretation programs.

The visitors should be educated continually what they should do and outcomes may arise from their improper behaviors during their visit. The service providers, internal media and rewards should enhance this continual learning.

2. Rewards

Rewards could be contributed to the continuity of appropriate behaviors of visitors during a site visit. The service providers should motivate visitors to behave with proper manners by themselves rather than enforcement. The service providers should be reinforced to create reeducation or reward programs. A negative reinforcement such as “Don’t” messages and signs may not gain required proper behaviors but may stimulate adverse behaviors of the visitors.

The visitors should be attracted with rewards to travel in various historic places in Suansunandha in order to prevent overcrowdings in some historic buildings or places at particular times.

For school-age visitors, a desirable behavior may be involved with heritage learning, thus they should be stimulated with games and rewards to be part of the interpretation and share their ideas with others.

Rewards are not necessary to be monetary incentives. Visitors may be rewarded in forms of recognition, travel incentives, mementos or promotion tools. These reward forms emphasize results of proper behaviors rather than economic returns.

Sample reward programs may be applied to visitors. Brochures or other publications that may be free copies for visitors should be enhanced for reuses. When any visitors return these printed materials to the service providers, they should be rewarded by recognition or other forms. Visitor participation in evaluation or research programs could benefit the visitor management so they should be encouraged to respond to these programs and rewarded by a form of mementos. Visitors may be part of the cultural heritage protection by reporting any defects or damages of physical environment to the service providers. A memento should be awarded to the visitors or such useful reports should be publicized through on- and off-site media.

The service providers should also be rewarded when they could demonstrate supporting or initiation roles of reward or reeducation programs. Moreover, the rewards for the service providers should be based on visitor satisfaction. The sample reward programs of the service providers may include recognition, career promotion, cross training, vacation and flexible working hours.

3. Retraining

Service providers are directly associated with the visitor management, reeducation, education and reward programs. They should know what potential adverse impacts of tourism are and how to prevent them from tourism.

As mentioned in Chapter 8, threats arising from tourism that may cause adverse impacts on cultural heritage values of Suansunandha should be an outline of the negative

impact alleviation. For instance, tourism negative impacts such as the conflict and competition between visitors and stakeholders of Suansunandha, and physical damages could result from overcrowdings. The service providers should be retrained to mitigate an exceeding number of visitors in some place and time with reeducation and carrying capacity measures. They should be retrained on how to enhance partnerships with visitors for heritage protection. This responsibility should be associated with reeducation and reward programs.

The service providers would be connected with the creative reward programs so they should learn visitor behaviors and promotion tools. The service providers should also understand the significance of cultural heritage values of Suansunandha in order to enhance opportunities to conserve them and interpret them to target visitors. The service providers should be trained to perform properly to the cultural heritage values and sustainable cultural tourism as a role model of visitors.

Guidance of the reeducation, reward and retraining should be used in conjunction with carrying capacity, marketing strategy and interpretation.

Resources:

The service providers should be recruited and selected from the stakeholders of Suansunandha. Tourism and hospitality students may be in a priority of the selection.

The skill requirements for the service providers should be associated with knowledge of the history and cultural significance of Suansunandha, interpretation and sustainable management.

3. Carrying Capacity

High numbers of visitors may cause adverse impacts on tourism experience, cultural significance and stakeholders of Suansunandha because of the density of places or areas. Carrying capacity should be established to manage visitor flow; however, it is not a solution but it is the notification of problems arising from overcrowdings.

Aims:

To retain balance between the number of visitors and carrying capacity

To warn relevant parties when the number of visitors exceeding the carrying capacity

Actions:

The appropriate number of visitors could not be defined with exact figures but types of visitors chosen would guide their travel pattern. The pattern would roughly indicate the travel companions because Allocentric or purposeful cultural visitors may travel independently or in small groups while the school-age tourists may travel in large organized groups. The right selection of target visitors would retain the balance of the carrying capacity in its own way.

The school-age visitors may travel in large groups arranged by school teachers. They should be divided into sub-groups and then rotated to visit different historic buildings or places. Even this group of visitors may be a risk of exceeding the carrying capacity but they could be the ease of the control of the service providers. They may

travel with the educational purpose so they intend to learn cultural experiences and participate in all activities actively. However, the service providers should ensure that this group visit would not cause perceptual disturbance to other visitors and stakeholders of Suansunandha.

The group of Allocentric and purposeful cultural visitors would travel with lesser companions, so social and perceptual disturbance may seldom be emerged by these target visitors. They would prefer self-control and seek authentic cultural experience. This visitor group may highly be concerned with a density of places. Reeducation should be used not only to guide this group with proper behaviors but also to notify the visitors about overcrowdings. They may take this information for decision making when the historic buildings in Suansunandha that they plan to visit are meeting an overload of the carrying capacity. The continual education during the visit of this group may rely on self-learning media rather than service providers. The service providers should reeducate them at the beginning and just facilitate them with self-learning atmosphere.

The service providers would better control numbers and rotation of visitors if the visitors have similar travel patterns and behaviors.

When target visitors of Suansunandha may be expanded to various groups of visitors, service providers may encounter different travel patterns. They may hardly control the varied patterns at the same time. Social and perceptual carrying capacities (Swarbrooke, 1999:262) should be defined to deal with the exceeding number of visitors that may reduce the quality of tourism experience and cause cultural damages in Suansunandha. Thus, an indicator of the capacities may be developed as ad hoc measures for an individual place or area at a specific time.

1. Social carrying capacity should be established to ensure that the right number of visitors could be accommodated by individual historic buildings or areas without social interruption and cultural damages of Suansunandha .

2. Perceptual carrying capacity should be established to ensure that the right number of visitors could be accommodated by individual historic buildings or areas before the loss of quality of tourism experience in Suansunandha.

A survey research should be applied to measure both the social and perceptual capacities. The survey of social capacity that should emphasize socio-cultural impact assessment of cultural tourism would explore views of the stakeholders of Suansunandha. The perceptual capacity survey should focus on the quality of tourism experience, thus visitor views should be examined. Respondents from various groups of Suansunandha should be invited to participate in the social capacity survey. All visitors should be encouraged to participate in the evaluation of the tourism experience. The survey may be a qualitative or quantitative research method. The qualitative research would obtain deep opinions and require content analysis skills. The quantitative research could reach opinions of wider sample groups and requires statistic skills for the data analysis.

Questionnaires should be used as the instrument to collect data for both the perceptual and social capacity. The questionnaires should be comprised of close ended questions mostly, and the quantitative research method should be applied because the

main purposes of the surveys are to find out sources of problems or problem indicators rather than problem solutions.

The questionnaires of the perceptual capacity should aim at visitor satisfaction evaluation. This type of questionnaires should emphasize the convenience of respondents so it consists of short questions and predefined answers such as multiple choices and attitude scales. The satisfaction evaluation should be conducted regularly. If the survey findings demonstrate that most of visitors may be dissatisfied by overcrowdings, the numbers of visitors would arrive at the perceptual capacity during the survey period. Thus, such numbers of visitors should be a warning to use measures to retain quality of tourism experiences.

The questionnaires of the social capacity should learn attitudes of stakeholders of Suansunandha in relation to socio-cultural impacts of cultural tourism and may use questions of attitude scales. The questionnaires should be distributed to various groups of stakeholders of Suansunandha. The socio-cultural impact evaluation should be conducted periodically. If the survey findings demonstrate that most of the stakeholders of Suansunandha agree with socio-cultural negative impacts arising from visitors, numbers of visitors would reach the social capacity during the survey period. Thus, such numbers of visitors should be used as guidance to initiate measures to retain quality of the cultural heritage values.

The carrying capacity should be implemented in connection with other sustainable practices, marketing strategy and interpretation to control visitor flow. These alarms should be disseminated to incoming visitors, service providers, building managers and area managers through common and new media. The incoming visitors should be motivated to visit alternative historic places or areas in Suansunandha with rewards, reeducation and de-marketing.

Resources:

Service providers, building managers or area managers should be responsible for the survey.

Skills should be associated with the visitor behavior analysis and research methodology.

4. Marketing Strategy

Aims:

To provide service and facilities in compatible ways with the cultural heritage values

To outline marketing mix in relation to the characteristics of visitors

Actions:

To understand the characteristics of target visitors and the cultural significance of Suansunandha could design product, price, place and promotion appropriately.

1. Product

Existing facilities within Suansunandha such as restrooms, shops, cafeterias and hotels may have potentials to serve target visitors even though they have to share with the

stakeholders. New facilities should not be developed because of the limited space. The use of the existing facilities should be improved for the quality of tourism experiences. Restrooms should always be kept clean with proper functions. The ventilation of the restrooms should be improved. Recreational areas should be tidy without littering. Damaged facility signs and panels should be repaired. The hotel service providers should learn the cultural significance of Suansunandha in order to introduce the historic places to guests.

Atmosphere should be compatible with the period of the inner court in order to enhance historic character as the identity of Suansunandha and to encourage the understanding of the target visitors for the overall theme contents. Historic building style, forms, elements and country environment should be guidance of atmosphere creation for services and products within Suansunandha.

If these existing facilities are close to the historic buildings and may be planned to serve visitors, they should be modified to connect with the atmosphere of the inner court themes. “Romanticism Inner Court” and “Roles of Inner Court” themes should be established to be an outline of the atmosphere, the service and product designs. The surrounding and the interior atmosphere of the historic buildings that would be changed for tourism should create attentions, send messages and rouse moods to the target visitors in relation to the established themes.

As part of the products and services, the service providers should enhance the atmosphere, so their exposure to visitors should be consistent with the established themes. Costumes of the service providers should be of contemporary design with the inner court period.

Products should be developed in connection with the created themes in order to remind visitors of Suansunandha as the inner court. Traditional handiwork such as garlands and perfumes should be adapted to be visitors’ souvenirs. Food and dessert recipes of royal cuisine should be collected and developed to be cookbooks.

Service designs should employ both demonstration to and participation of visitors. Principal target visitors are students and school-age children so coproduction and interaction will contribute to their appreciation and understanding. Cooking class and demonstration should be organized to disseminate the recipes of royal cuisine to the visitors. The visitors should be enhanced to coproduce events or activities with the service providers in order to draw and keep their attention at particular interpretation. If the process of the handiwork creation is to be demonstrated in events, the visitors should be invited to participate in the production. The visitors should also be enhanced to share their ideas and experiences with other visitors and service providers.

2. Pricing

The entrance fees must follow legislative obligations associated with the Act on Ancient Monuments, Antiques, Objects of Art and National Museums in 1961(B.E. 2504) and the announcement of FAD in 1992 (B.E. 2535) about admission fees or other fees of visits to ancient monuments.

When a pricing strategy would be used in Suansunandha, it should aim at visitor satisfaction, the quality of cultural heritage values and conservation funding rather than high economic returns.

Any products and services within Suansunandha should not apply dual pricing for the stakeholders and visitors; however, some extra situations may lead to discriminatory pricing for some target groups, places and periods. The prices that visitors are to pay for should cover the full cost of the products and services.

The differentiation of pricing strategies should be based on target groups of visitors, time and carrying capacity. The strategies consist of:

- Price adjustment (Kotler, Bowen and Makens, 2003) should be implemented to enhance the accessibility of specific groups of visitors, to mitigate crowding at some periods and to manage appropriate visitor flow. Students, people with disabilities and senior adults should be exempted from the entrance fees. Price reduction at weekends and out of seasons could lessen the numbers of visitors in areas during week days and peak seasons. Discounts or free of charge for an entry to some historic buildings or areas could attract visitors from popular places of Suansunandha.

- Price increase should be a tool to deal with exceeding numbers of visitors at particular places. The places with higher price may prevent overcrowdings from incoming visitors. This strategy may not be applied with the entrance fees but should be used with facility charges such as increasing parking fees.

When price modification would be undertaken, visitors should be reeducated through all media.

3. Place

Marketing intermediaries may not be necessary for Suansunandha, but it should directly approach the target visitors through common and new media. The direct channel could control messages and the quality of communication rather than the use of marketing intermediaries. The place strategy would emphasize neither sales volumes nor profit maximization but aim at communication with right targets.

The service providers and other common media should perform functions of connecting visitors with products, services and meanings of the cultural heritage values during their visit in Suansunandha. Visitor centers should be a channel of information and souvenir distribution. Brochures and other publications could enhance self-learning of visitors and also function as internal marketing of services and products.

Each area should create its own website but share common social media as multiple ways to communicate and enhance relationship with the public and visitors. These new media should contain both the cultural heritage values and marketing contents for the visitors. The heritage contents within these new media would be searched and stored by the public before, during and after a visit. The websites and social media would enhance visitors to learn about the cultural heritage values and share their experiences with other visitors all the time. A social networking site (Facebook) and a sharing site (YouTube) should be developed as the linkage of individual area websites. Both social media should focus on information exchange and dissemination of cultural events, marketing activities, the exceeding number of visitors and conservation works among areas of Suansunandha. Furthermore, the sharing site should be applied to present virtual tours and interpretation videos. Both websites and the social media should also function as on-line stores for souvenirs and products.

4. Promotion

Promotion tools should be used to enhance participation of visitors, long term relationships with visitors and a buying decision of visitors.

The promotion tools should combine the service providers and the social media to build long term relationships with target visitors and help them make a decision. The service providers may interact with the visitors on site while the social media (Facebook and YouTube) could enhance interactions between the service providers and visitors, and interactions among visitors all the time. These interactions could help the target visitors to learn and share experience before making a decision. These target visitors may search for more information of Suansunandha and receive comments from other visitors in the social media before they would purchase products or services of Suansunandha. The visitors may share their tourism experience in Suansunandha through the social media with other visitors. The visitor comments and feedback should be reviewed to improve and develop services and products.

Other promotion tools should include games and rewards to encourage participation and a purchasing decision of visitors. These tools should be used in connection with the sustainable practices and interpretation to ensure that visitors could make a buying decision with a right choice at a right time. The games should be designed as supporting tools for learning cultural heritage values. The rewards should be created to deal with the carrying capacity, to be part of interpretation programs and to enhance repurchases and repeated visiting.

5. De-marketing

De-marketing (Swarbrooke, 1999) would discourage visitors to travel in an overcrowded area but divert the visitor demand to other areas in Suansunandha. Any promotional activities should be suspended for overcrowding areas. This strategy should be applied with carrying capacity, other marketing strategies and interpretation to reduce excessive numbers of visitors and retain the quality of visitor experiences and the cultural heritage values.

Interpretation Policy

Interpretation contents should be based on the cultural significance of Suansunandha arising from the period of the inner court and education institutes. However, the inner court period may have adequate potentials to develop various interpretation programs because it is associated with aesthetic, historic, social and scientific values. The cultural significance of the inner court period should be developed in the following themes. The interpretation policy consists of themes and messages, target audiences, purposes, personnel, techniques, media and tools (see figure 90).

1. Themes and Messages

The themes should stimulate the target audiences to learn “Romanticism Inner Court” and “Roles of the Inner Court” of Suansunandha containing these key messages:

1. Suansunandha demonstrates the design and the atmosphere of a Romanticism court.

2. Suansunandha demonstrates the residential building design for female royal residents.

3. Suansunandha reflects the combination between the European architecture and the environment of Thailand.

4. Suansunandha demonstrates skills of royal cuisine and handiwork creations for royal functions.

5. Suansunandha is the largest and last court in Thailand.

2. Target Audiences

The target audiences would be divided into two groups based on target visitors under the visitor management policy. The existing targets consist of students and personnel in Suansunandha. Outside target audiences should include school-age and cultural visitors (Allocentric and purposeful cultural visitors). The primary target audiences should focus on students and school-age visitors.

3. Purposes

The purposes of the interpretation policy should aim at awareness, appreciation and understanding of the target audiences.

4. Relevant personnel

The service providers who are directly involved with audiences have important roles to undertake, improve and evaluate interpretation works. They should include guides, interpreters and other staff. The building managers and area managers should take part in the responsibilities for the interpretation planning process. Other members of management structure should involve the policy reviews and monitors. If outside specialists are to be employed to deal with interpretation planning, they should have skills in historic studies, interpretation and conservation.

5. Techniques

Interpretation strategies should apply one way and multiple ways of communication; thus, the techniques of interpretation should include both demonstration and participation of target audiences. The first technique should focus on learning while the second technique should enhance understanding and appreciation. Both communication techniques would ensure that target audiences could gain satisfaction, knowledge, essential information and relevant news while they could also coproduce interpretation activities and share their experiences and ideas with the service providers and among other audiences.

6. Media

The interpretation should adopt both common and new media to reach multimedia interpretation and to lead to better understanding of the cultural heritage values in Suansunandha.

6.1 The common (or ordinary) media consists of panels, tours, publications, visitor centers and activities.

Panels

Aims:

To stimulate audience interests and self-learning

To link audiences with new media

Actions:

A panel should connect with one or two main ideas of messages. The panel may be suitable to link audiences with a particular meaning. It should inspire them to explore further meanings.

The contents should have texts, images, drawings and illustrations. It should be created with interesting texts and illustrations. The drawings and illustrations would better draw attention of children audiences. The main text should be in short sentences. The panel contents should be arranged by heading, picture, subheading and main text.

For instance, a panel of the pool should be connected with “the Atmosphere of the Romanticism Court”. A drawing that would be used in the panel should be composed of the pool in the foreground and a group of small historic buildings in the background.

The panel design should be simple but connected with some forms of historic characters of Suansunandha. Some motif of decorations or an outstanding building form should be adapted to be part of the panel design. The panel should be produced by local producers to support local business and with local materials for ease of maintenance.

Tours

Different groups of audiences should require varied learning techniques. Suansunandha should provide both guided tours and self guiding tours for the audiences.

Aims:

To encourage audiences to learn the cultural heritage values from various media

To encourage audiences to self-explore the meanings of cultural heritage values

To enhance audiences to share their experience with other audiences

Actions:

1. Guided tour (see samples of tour programs and figure 92)

Audiences could learn the cultural heritage values from a guided tour. The service providers (guides and interpreters) should lead audiences to historic places and interpret created themes to the audiences along the tour. The service providers should function as educators, facilitators and entertainers. They could link the audiences with messages, encourage the audience participation, enhance audience interaction with other audiences and respond to audience questions immediately.

This guided tour should be suitable for audiences in groups such as groups of school-age children or groups of audiences with special needs. The group of audiences should be encouraged to make an advance appointment for the tour.

The service providers should be recruited from the stakeholders of Suansunandha (i.e. tourism and hotel students of SSRU and SDRU) and trained in sustainable visitor management, the cultural heritage values and the significance of Suansunandha.

2. Self guiding tour (see samples of tour programs and figure 93)

A self guiding tour should be appropriate for individual visitors or small groups of audiences. They may prefer self-learning and searching for meanings by themselves to being offered by a guided tour. This learning method should enhance audiences to adopt all media of interpretation and allow them to have flexible time and tour arrangement.

The service providers should get involved with the audiences at the beginning stage of each tour and provide them with all necessary information. A tour route should be suggested to the audiences and all publications (maps and brochures) should be presented to them. If the audiences have mobile devices, they should be recommended how to reach multimedia interpretation during the tour.

Publications

Brochures and maps should be used along with a self-guiding tour. For a guided tour, maps may not be necessary for all audiences.

Aims:

To use as guidance of learning the cultural heritage values

To connect audiences with the new media

Actions:

1. Brochures

A set of brochures should be created to connect with messages of the themes and purposes of interpretation. Suansunandha should have two sets of brochures that should be related with “Romanticism Inner Court” and “Roles of the Inner Court” themes. All historic buildings and places, historic figures and events should be integrated to explain meanings of messages in the brochures.

The brochures should draw attentions of audiences and push them to learn about the cultural heritage values through various media. The brochures should be designed as a part of interpretation to fulfill audience understanding rather than a full explanation of the overall cultural significance. They should be composed with short sentences and emphasize pictures, drawings and illustrations to narrate stories of both themes. They should include the brief history, the contact information and Quick Response Code (QR Code) for all new media of Suansunandha.

The brochures should ensure that the audiences could gain benefits from visiting the historic places of Suansunandha such as unique cultural significance or discovery experience differentiated from primary tourist attractions.

The brochure production tends to be costly if the volume is low. An in-house production should be appropriate for Suansunandha and would be more flexible to modify contents of the brochures. Students and other stakeholders of Suansunandha

should be encouraged to participate in the brochure design according to the defined themes. All brochures should be printed on recycle papers or environment-friendly materials. Audiences should be encouraged to return used brochures to visitor centers by reward programs.

2. Maps

The map should be an important medium for self-learning and used together with self-guiding tours because it could lead audiences to reach historic places and other services in Suansunandha.

Map design should be casual and simple to read the location and directions of historic places and facilities. Drawing map could be attractive and clear to audiences. Details of the maps should be described in both Thai and English. However, universal symbols should be used to help children, visitors with reading difficulties and non-Thai and English speaking audiences understand the map.

The map should be distributed at visitor centers, historic buildings and hotels in Suansunandha. Contact numbers and QR Code should be included on the map to connect audiences with other media of interpretation.

Visitor Centers

Visitor centers should be places where audiences gather before a site visit. Suansunandha should have three visitor centers because of separated boundaries. All visitor centers should have interpretation and visitor management collaboration.

Aim:

To educate and facilitate visitors

To promote products and services

Actions:

Suansunandha should adapt Queen Consort Saisawareepirom Mansion (L3) in SSRU, Queen Sawangwathana Mansion (L1) in SDRU and Queen Sukumalmarasi Mansion (L2) in DLA to be visitor centers for each area. These buildings would not be necessary to be used as the visitor centers as the whole. Some rooms should be adapted to be workplaces of the service providers. Existing meeting rooms that should be used to receive groups of visitors would be prepared for a video presentation. A cloakroom should be prepared in these visitor centers to keep audiences' belongings.

The visitor centers should provide information, aid visitors and support marketing activities. At the visitor centers, the service providers should educate audiences about the brief history of Suansunandha, proper behaviors, contact information and on-line media access (how to install QR Code reader and how to use mobile devices to reach multimedia interpretation). During the site visit, audiences who may need assistance should be able to contact the visitor centers all time via various channels of the communication such as direct phone lines, area websites and social media. The visitor centers should be a distribution channel of souvenirs and promote food, beverage and lodging services of Suansunandha to the audiences.

All visitor centers should be connected to one another through area websites and the social media of Suansunandha. They should regularly exchange

information on visitor numbers, historic building improvements and special events. The information would be communicated with audiences.

Activities

All activities would be used to enhance the atmosphere of learning and enjoyment including events and games.

Aim:

To stimulate audiences to participate in the interpretation

To enhance audience understanding to interpret the themes

Actions:

1. Events

Special events should be organized in connection with memorial days of important royal residents of Suansunandha. They may be associated with “Roles of the Inner Court” theme such as “Food Festival of the Royal Cuisine”. This festival could lead audiences to the atmosphere of cooking, meal preparation and food decoration in manners of the royal inner court. The historic buildings should be used as the festival venues.

The festival should focus on cooking demonstration and encourage audiences to participate in all cooking process. In order to enhance audience’s understanding, the royal cuisine exhibition should be organized along with the festival. This exhibition should link the audiences with the historic places and royal residents who might have important roles to the royal cuisine in Suansunandha such as Queen Consort Saisawarepirom, the queen’s mansion (L3) and the tunnel as the queen’s kitchenware store.

A cooking class for royal cuisine and handiwork creation course should be optional events related to the theme.

2. Games

Games should engage audiences in interpretation. They could help the audiences learn abstract and difficult meanings of the cultural heritage values and should be connected with the themes (Roles of the Inner Court). The audiences would be encouraged to explore answers and conclude their own meanings through the games.

For groups of school-age audiences, a game should be used along with a guided tour in Suansunandha. The game should be easy to play; but still have some challenges, and could connect with the theme of the tour such as word games and puzzle games. A game design should be suitable for both individual plays and group plays. The group plays would better enhance the interaction among audiences. A sample game is associated with “Completing Sentences” as displayed in figure 92.

6.2 The new media are comprised of websites and social media (social networking site and sharing sites).

All new media may have benefits to interpretation, but they may discourage audiences to have sense of place.

Area Websites

Specific purpose websites should be created to connect public and audiences with the cultural heritage values within Suansunandha. Existing websites (<http://www.ssru.ac.th>, <http://www.dusit.ac.th> and <http://www.thailocaladmin.go.th>) of all areas are serving primary functions of Suansunandha. New websites should be created to communicate with the public and the audiences for cultural heritage purposes. However, the cultural heritage websites should be connected with the existing websites of all areas.

Aim:

To enhance audiences searching and storing various cultural heritage contents from all area websites

Actions:

The cultural heritage websites should function as a self-learning source and a marketing channel.

The websites should cover conservation, interpretation and visitor contents, but all areas are not necessary to have the same design of those websites. The website contents should be explained in both Thai and English.

These websites should be under control of each area. The area managers or the service providers should be assigned to be the website administrators in order to keep contents up to date.

The area websites should be linked to each other and connected with other social media of Suansunandha. All contact information should be included in the websites. The website addresses should be transformed into QR Code that should be posted on all panels and publications of Suansunandha in order that audiences could reach further information during a site visit.

Social Media

Three boundaries are located in Suansunandha. The historic buildings are not prepared for visitors only but they are also used as multifunction buildings. These obstacles may discourage audiences to reach all cultural heritage values. The social media should be helpful tools to mitigate the barriers. In order to connect the social media during a visit, audiences should have mobile phones or mobile devices with digital camera connecting wireless internet within Suansunandha.

Aims:

To integrate all sites and support common media

To reconnect the unconnected cultural heritages

Actions:

1. Social Networking Site (SNS)

SNS should function as a bridge between all new media and support common media. It could enhance audiences to coproduce interpretation and to interact with other audiences and the service providers.

Facebook

Facebook should be created to connect individual area websites and be a gateway to sharing sites such as YouTube and Google Maps. Facebook should be designed to maintain relationships with current audiences and create word-of-mouth communication with prospective audiences.

It should encourage audiences to share their experiences with other audiences and service providers in multimedia formats. They could also exchange ideas with other audiences during and after their visit. Facebook should help the service providers to learn feedback and needs of current and prospective audiences to improve the interpretation and other services.

The service providers should use Facebook to launch new interpretation programs in order to inspect audience responses and to attract audiences to join the programs. They could also link audiences with promotion tools and reward programs from Facebook.

The audiences should be encouraged to be part of interpretation. They may seek new evidence of the cultural significance and post it on Facebook. This evidence may lead to adjustments to cultural significance and development of new interpretation themes and messages.

During the visit, audiences could be connected with Facebook from Quick Response Code (QR Code). This code would be printed on both panels and publications of Suansunandha and read by mobile phones with the internet. Thus, the audiences could share and gain ideas on SNS at any historic places of Suansunandha.

Facebook may create multiple benefits, but it may cause adverse impacts on Suansunandha. It should be used with care because the interaction among audiences is hardly controlled.

2. Sharing Sites

The first one is YouTube as a video sharing site that should be used to present multimedia interpretation. The last one is Google Maps as one of “creativity works sharing sites” that should be applied to create the digital map of Suansunandha connecting audiences with historic places and facilities (Mangold and Faulds, 2009).

YouTube

Suansunandha should set up YouTube channel to disseminate the cultural heritage values to the public and the target audiences. This channel should help audiences understand both tangible and intangible cultural heritages of Suansunandha.

It should be used as a medium of interpretation videos and virtual tours of overall cultural significance in Suansunandha. Contents of the videos should be connected with the Roles of the Inner Court theme. Virtual tours should be applied with the Romanticism Inner Court theme.

Meanings are embodied in messages of Roles of the Inner Court associated with abstract qualities of the cultural significance of Suansunandha. The videos should facilitate audiences to grab the meanings and should be developed in forms

of short films. The video contents should reflect the relocation of female royal residents from the Dusit Royal Palace, ways of life of female residents and the atmosphere of royal function preparation.

The second theme is connected with the physical characters of the Romanticism Court of Suansunandha. The virtual tours could be created from Google SketchUp and plotted on Google Earth and Google Maps. The tours should demonstrate the surrounding atmosphere of individual historic buildings and places and the whole areas of Suansunandha. Audiences could explore areas from walk-through views and experience historic buildings in 3D models.

All videos and virtual tours should have subtitles in Thai and English. They should be uploaded on YouTube channel of Suansunandha. This channel could be linked with Facebook and the area websites. Audiences could connect with the videos and tours from QR Code that should be put on all publications and panels within Suansunandha. It could be scanned by audiences' mobile devices.

In order to enhance interpretation coproduction, audiences and the public should be invited to create 3D models of the historic buildings and modern buildings and make videos of virtual tours. All model and video coproduction could be uploaded on YouTube channel and linked with other new media of Suansunandha.

Google Maps

It should be used to demonstrate directions and locations of facilities and historic places within Suansunandha.

When audiences snap a shot of QR Code on a panel, they would be linked to Google Maps. The Maps would let audiences know their present location, next historic places and surrounding facilities. The audiences could learn meanings of historic building form and size associated with the building locations through this map. Recent and past building images could be included into this digital map in order to make audiences understand changes in the varied periods of Suansunandha.

This digital map should be linked with all area websites, YouTube and Facebook of Suansunandha.

7. Tools

7.1 Linkage of Multimedia Interpretation of Suansunandha

Quick Response Code (QR Code), internet and mobile devices (mobile phones and tablet computers) are tools to connect audiences with multiple digital formats of interpretation (see figure 91).

To create multimedia interpretation

All files of multimedia interpretation should be uploaded on the area websites, SNS and sharing sites in order to receive Universal Resource Locator (URL).

To obtain the code

URL of area websites, SNS and sharing sites and texts would be converted into QR Code or 2D code. This encoding process could be run on websites of QR Code Generators (i.e. <http://www.mobile-barcode.com/> or <http://qrcode.kaywa.com/>) without expenditures.

To apply the code with publications and panels

All generated codes could be printed on all panels, brochures, maps and other publications of Suansunandha in order that audiences could reach Facebook, YouTube channel, area websites, Google Maps and messages during their site visit.

To scan the code

Audiences could receive temporary username and password at visitor centers to access the mobile internet. All three areas regularly provide hot spots of wireless internet for all stakeholders of Suansunandha. When the audiences move from one area to another area, they have to request for new username and password.

Service providers should recommend audiences to download free application of QR Code readers from the websites of generators. For smart phones, this application could be installed in on-line application stores as a free service.

Mobile phones and other mobile devices with digital cameras could scan the 2D codes and directly link audiences with multimedia interpretation of Suansunandha.

To reach multimedia interpretation

During the site visit, audiences would like to find next historic places and nearby facilities or to seek insight of meanings. They could take a snapshot of QR Code on panels or publications to get directions from Google Maps and to learn video interpretation on YouTube channel of Suansunandha. The audiences would like to inquire the service providers. They could get contact information from QR Code in order to send messages to or make a phone call with the service providers.

7.2 Creating 3D Models and Making Virtual Tours

Google Maps (or Google Earth) and Google SketchUp should be implemented to create 3D models of the historic buildings and the videos of virtual tours in Suansunandha.

Suansunandha map could be imported from Google Maps or Google Earth. Google SketchUp could be applied to create 3D models of the historic buildings on the map. These 3D models should be saved and shared on Google Maps and Google Earth in order to be used in other media.

The 3D models that would be shared on the Maps could be presented in forms of video presentation. Videos could be produced as walk-through tours to explore surroundings and different views of 3D historic buildings and exported as video files.

The video files should be uploaded on YouTube channel and linked with all new media of Suansunandha. Audiences could learn architectural characters of all historic buildings and the atmosphere in Suansunandha from these virtual tours.

8. Samples of Tour Programs

Sample 1: A guided tour for school-age audiences (see figure 92)

Area2: Suan Dusit Rajabhat University (SDRU)

Historic places: Queen Sawangwathana Mansion (L1) and Princess Uppantripacha Residence (S6)

Purpose: Awareness

Theme: Roles of the Inner Court

Learning: A guided tour

Media: Guides, visitor center (the culture center), brochure, game, panels

Implementation:

If there are 30 audiences, they should be divided into subgroups (10-15 visitors per group). Each group should be guided by one service provider or guide.

1. Rotation of the tour

Group 1 should visit Queen Sawangwathana Mansion (L1) and Princess Uppantripacha Residence (S6).

Group 2 should visit Princess Uppantripacha Residence (S6) and Queen Sawangwathana Mansion (L1).

2. Before the tour

The service providers (guides or interpreters) should provide brief information to audiences about overall cultural heritage values, a theme of the tour, cautions and desirable behaviors during the tour. Video presentation may be helpful to educate numbers of target audiences at the culture center (L1). Questions and a game connecting with the theme should be introduced to the target audiences in order to remind them about the purpose of the tour. The game could be played by individual audiences or in groups. Group players could enhance team working and spirits rather than individual players. The guide should explain about rewards and how the audiences could get the rewards. The rewards should be linked with the game; however, the aim of the rewards should focus on the audience participation rather than competition.

3. During the tour

Guides should be the first source of education and entertainment and then encourage them to find more meanings from other media. At this stage, the game should be started. The printed media, panels and the game could enhance the audience imagination to define their own meanings of the heritage theme. Even though the meaning would be varied from others, it should be an alternative meaning. Thus, the audiences should be enhanced to discuss their findings and share their ideas with other audiences. Before the tour would be moved on, the guide should raise some questions in order to attract audiences to conclude what they learn from the current interpretation. The questions may be or may not be part of the game, but they should connect with the theme. The audiences should be reminded about the proper behaviors.

4. After the tour

This audience group is school-age children so evaluation forms may not be suitable for them. However; their views are necessary to improve the contents and the techniques of interpretation. Thus, the evaluation should apply qualitative techniques. Guides should play important roles of this evaluation because they should observe the audience behaviors and responses during the tour. The guides should discuss with the audiences to verify their understandings and seek their favorites. The guides should

interpret these data into findings of the evaluation. Off-site media of interpretation should be recommended to the audiences in order to keep continual learning of the cultural heritage values in Suansunandha.

Sample 2: A self-guiding tour for students and cultural visitors (see figure 93)

Area 1 and 3: Suan Sunandha Rajabhat University (SSRU) and the Department of Local Administration (DLA) (optional Area 2)

Historic places: Queen Consort Saisawareepirom Mansion (L3), the pool (P1) and the canal (C2), Consort Uan Residence (S1), Princess Athorntipayanipa Residence (S2), Princess Jutharatrachakumari Residence (S3), Princess Pisamaipimolsat Residence (S4), Princess Sasipongprapai Residence (S5), the earth hill (T1), Queen Sukumalmarasi Mansion (L2) and Nongkransamosorn Hall (H1)

Purposes: Understanding and appreciation

Themes: Roles of the Inner Court and the Romanticism Inner Court

Learning: Self-guiding tour or walk

Media: Brochures, map, visitor centers (L3 & L2), interpreters at fixed points and panels

Social Media: YouTube, area websites, Google Maps and Facebook

Implementation:

Target audiences may come in small groups or may be individual visitors. They could adjust their own tour arrangement and design their tour duration. They should be encouraged to visit all places to achieve the theme purposes.

1. Tour route

The tour should be started at L3 to receive necessary information and printed media for the tour in area 1. The audiences should walk north along the canal to the pool and visit the group of small historic buildings. They should walk south along the road to the earth hill and move on to area 3. In area 3, they should start at L2 to gain advices and printed media and finish the tour at the hall.

2. Before the tour

They should be educated and advised at the visitor center (L3). Brochures and a site map should be given to the audiences. If the audiences use mobile devices with digital camera, they should be suggested to connect with the multimedia interpretation from QR Code. They could receive temporary username and password for the internet access. The tour route and the brief cultural significance associated with the themes should be introduced to the audiences in order to give them a scope of the self-learning tour. The audiences should be informed about contact numbers, cautions and appropriate behaviors to the cultural heritage values in Suansunandha. Visitor satisfaction evaluation (printed version) should be distributed to audiences. For digital version, the audiences should be recommended to reach a digital evaluation form on websites or Facebook of Suansunandha.

3. During the tour

Service providers should be prepared at some historic buildings such as L3 and L2. They are not only visitor centers but also surviving large mansions so audiences could receive information and learn meanings of cultural heritages from the service providers (guides or interpreters) at the same time.

For other historic places, the audiences would find their own ways to reach interpretation and conclude their own meanings. At this stage, all publications, panels and digital media would help the audiences to accomplish the purpose of the tour. Self accomplishment and sense of discovery should be a reward for audiences of the self-guiding tour. Other rewards and games may be used along with the challenge of self-learning in order to keep their continual interests.

4. After the tour

Opinions of the audiences would be useful to improve the tour, interpretation media and visitor services. They should be encouraged to participate in visitor satisfaction evaluation. The audiences should gain a memento when their complete evaluation could be shown to service providers. The service providers should use social media to keep relationships with the audiences and to connect them with the cultural heritage values of Suansunandha continuously.

Recommendations

For the visitor management and interpretation policy, a further research should be conducted to redefine target visitors and learn visitor behaviors in order to design proper marketing plans and interpretation programs because visitor characters are dynamic. When present target visitors become older, their needs and aspirations might be changed.

For the conservation policy, when the policy is implemented, the research should be conducted to review all strategies and compared with the policy objectives. The research results would help relevant parties to keep the policy up-to-date to present situations.

Cultural heritage values should be researched periodically because cultural heritages in other periods may be significant values in the future and should be part of the cultural significance of Suansunandha. Moreover, the current cultural values might become loss of completeness and lack interpretive potentials. They might not be included in the statements of the cultural significance and not be part of the interpretation policy.

This strategic model might be adapted to other sites that are similar to Suansunandha encounter unconnected cultural heritages. Cultural heritage values should be analyzed to define their own cultural significance for the conservation and interpretation policy, and target visitors should be researched to outline target audiences of the interpretation policy.

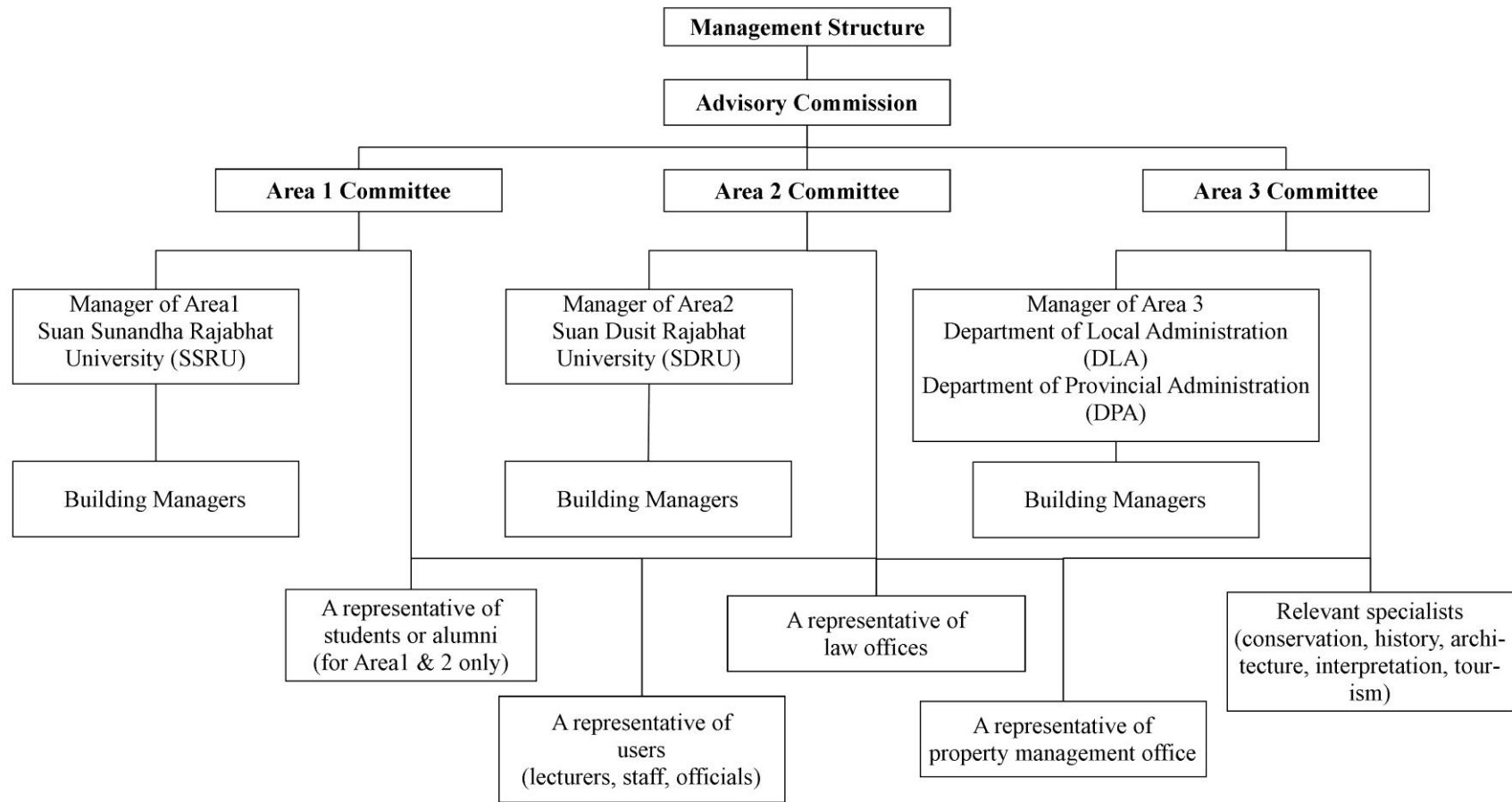


Figure 86 Management Structure of Suansunandha

The management structure participated by relevant stakeholders and divided into two levels: 1) Area and 2) Site

1) Area Committee dealing with cultural heritage values within each area and 2) Advisory Commission dealing with overall cultural significance

Source: Suwannarit Wongcha-um (2011)

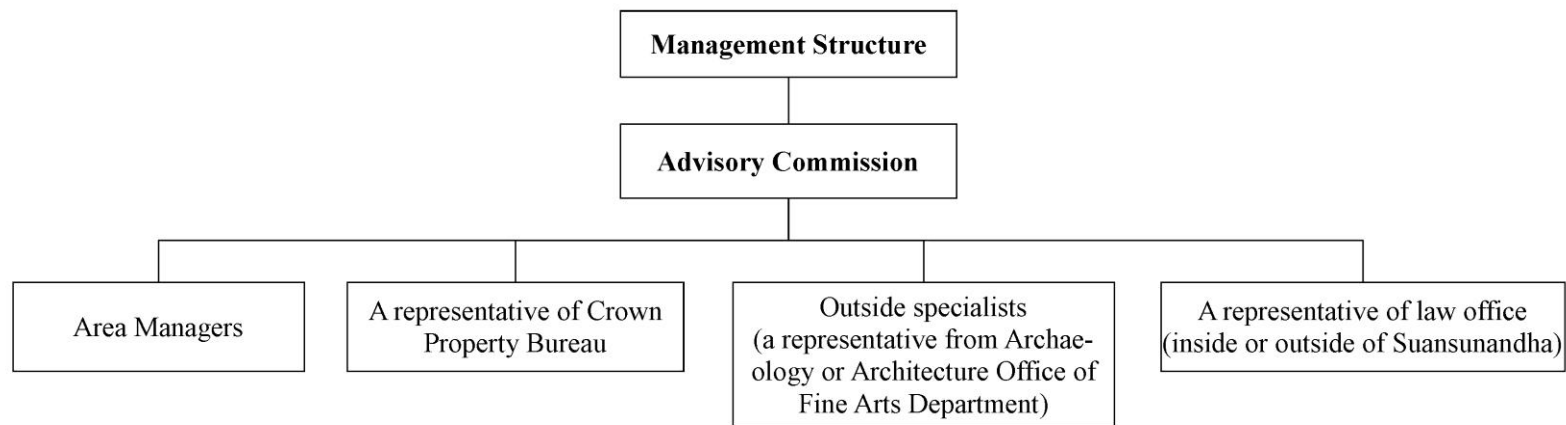


Figure 87 Members of Advisory Commission

Advisory Commission providing advisory reviews to ensure the proposed activity protecting and enhancing overall significance in Suansunandha

Source: Suwannarit Wongcha-um (2011)

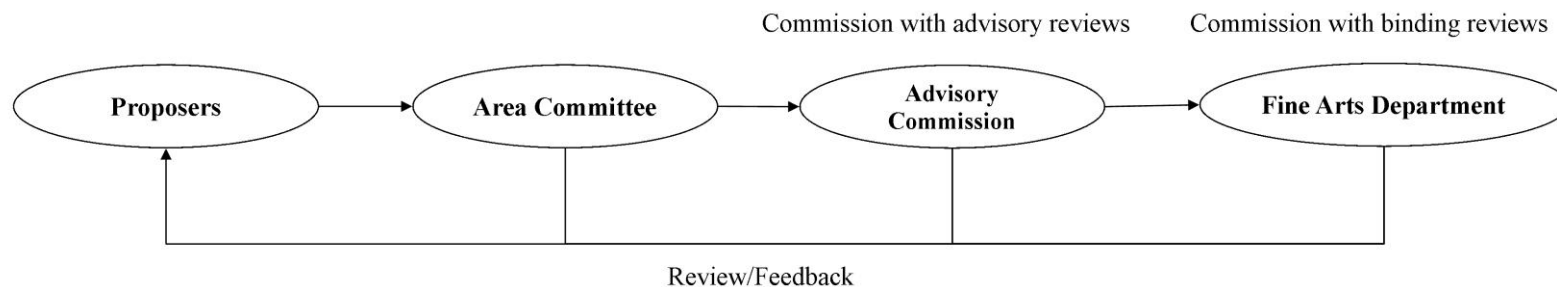


Figure 88 Proposal Process

- 1) A proposal of intervention activities prepared by area managers or building managers and presented to Area Committee
- 2) The proposal reviewed by Area Committee and presented to Advisory Commission but returned to proposers if cultural significance devalued
- 3) Advisory commission reviewing the proposal and providing suggestions before presented to the Fine Arts Department (FAD)
- 4) FAD acting as Commission with binding reviews to stop construction and demolition or to allow the intervention activities

Source: Suwannarit Wongcha-um (2011)

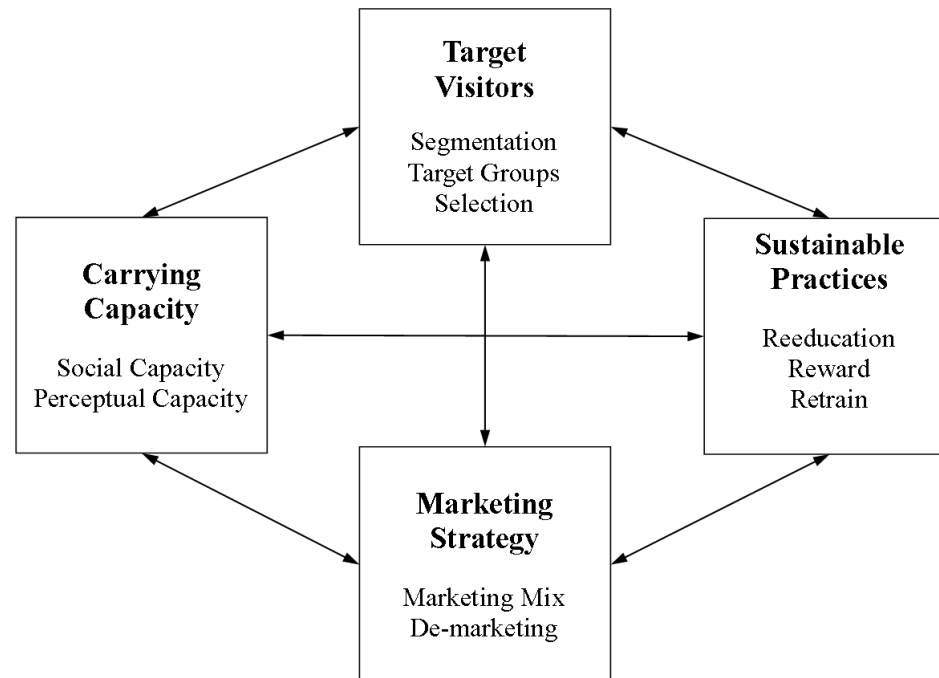


Figure 89 Sustainable Visitor Management of Suansunandha

- 1) To divide visitors into groups with common characters and select target segments according to resources and interpretation policy
- 2) To implement carrying capacity along with sustainable practices retaining quality of tourism experience and cultural heritage values
- 3) To design marketing strategy satisfying needs of target segments and being compatible with cultural significance

Source: Suwannarit Wongcha-um (2011)

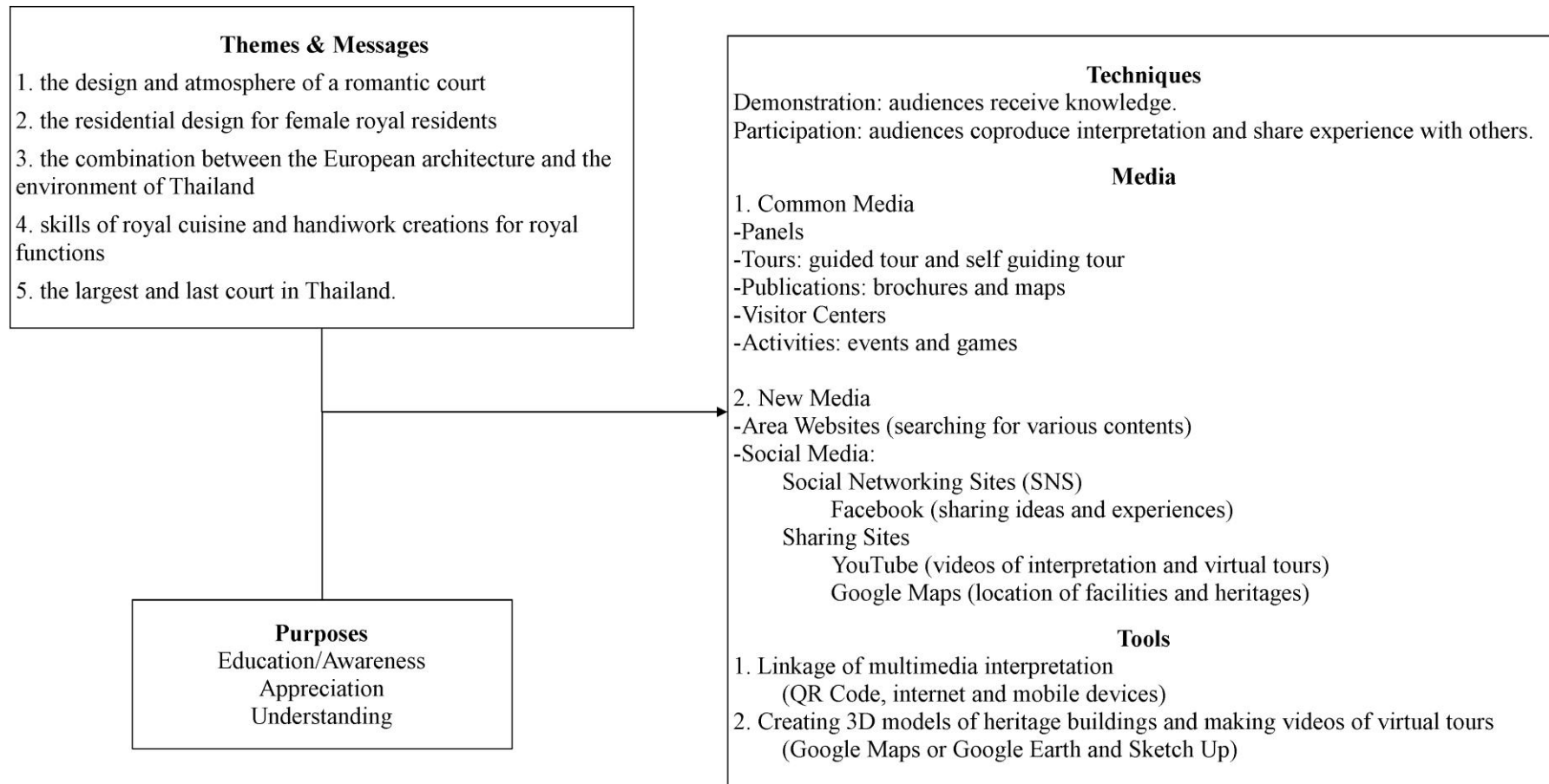


Figure 90 Interpretation Management of Suansunandha

- 1) To determine interpretive themes arising from analysis of cultural significance in the period of Royal Inner Court
- 2) To define purposes of interpretation according to characteristics of target audiences
- 3) To design interpretation techniques, media and tools enhancing awareness, appreciation and understating of the audiences

Source: Suwannarit Wongcha-um (2011)

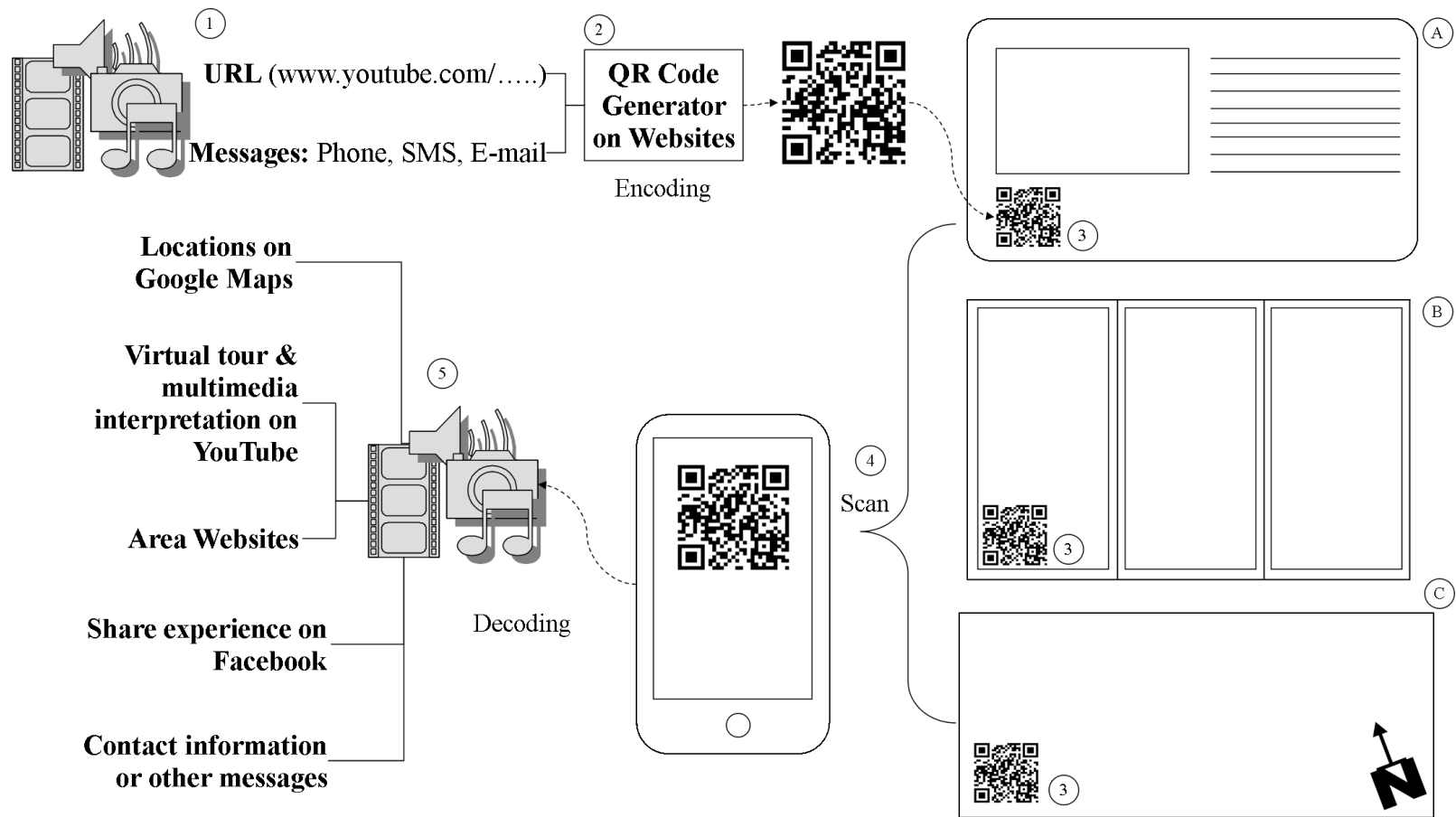


Figure 91 Use of Quick Response Code (QR Code) to Reach Multiple Formats of Interpretation

1) To create multimedia interpretation in forms of URL or messages 2) To transform URL or messages into QR Code or 2D code 3) To apply QR Code with various media ((A) panels, (B) brochures, (C) other printed media) 4) To scan 2D code with Mobile phones or other devices with camera and connecting internet 5) To enjoy multimedia interpretation of Suansunandha

Source: Suwannarit Wongcha-um (2011)

Game:

“The inner court used to be the residence of queen, and consorts of King Rama V.”

“Female residents were able to create handiworks such as garlands,and produce carving.”

“The inner court is like a boarding school to train girls with.....” “Can men reside in the inner court?”

(Audiences may find answers from all media and interpreters or guides should give them hints of the searching.)

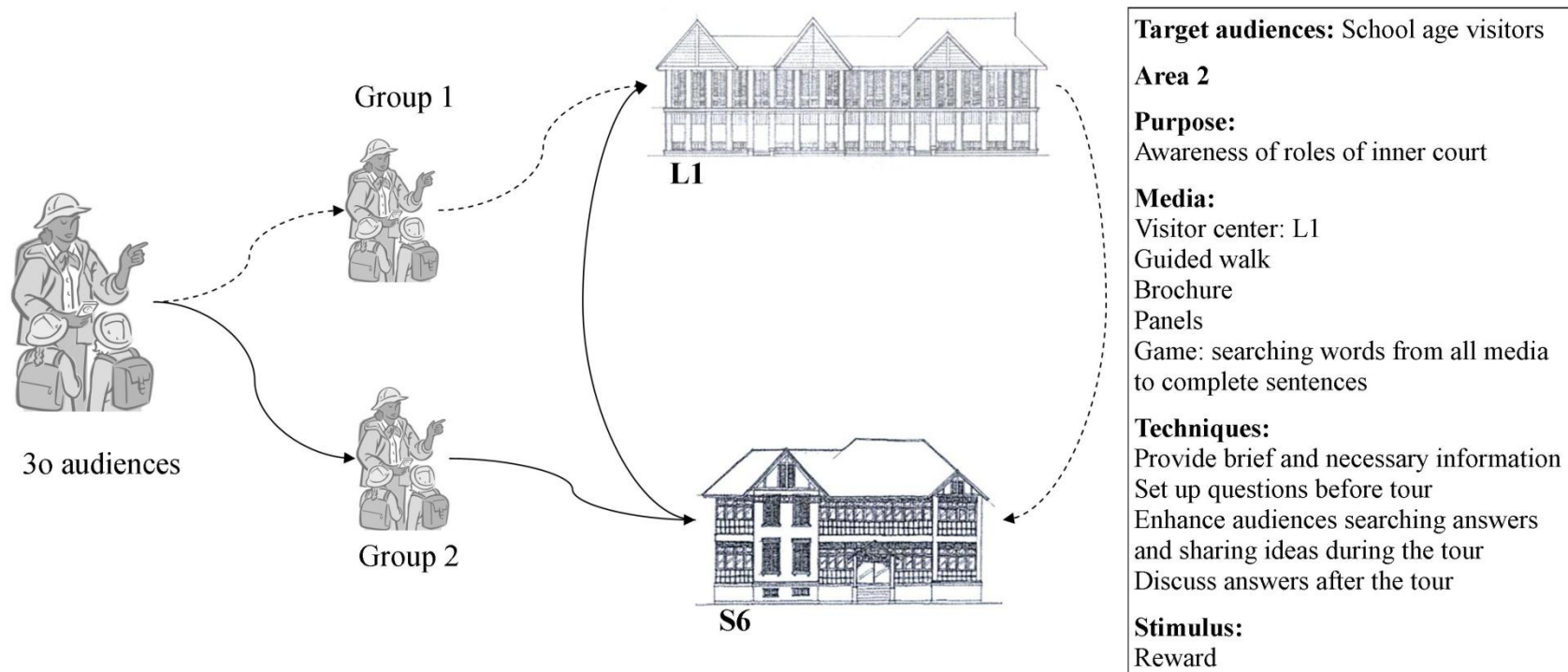
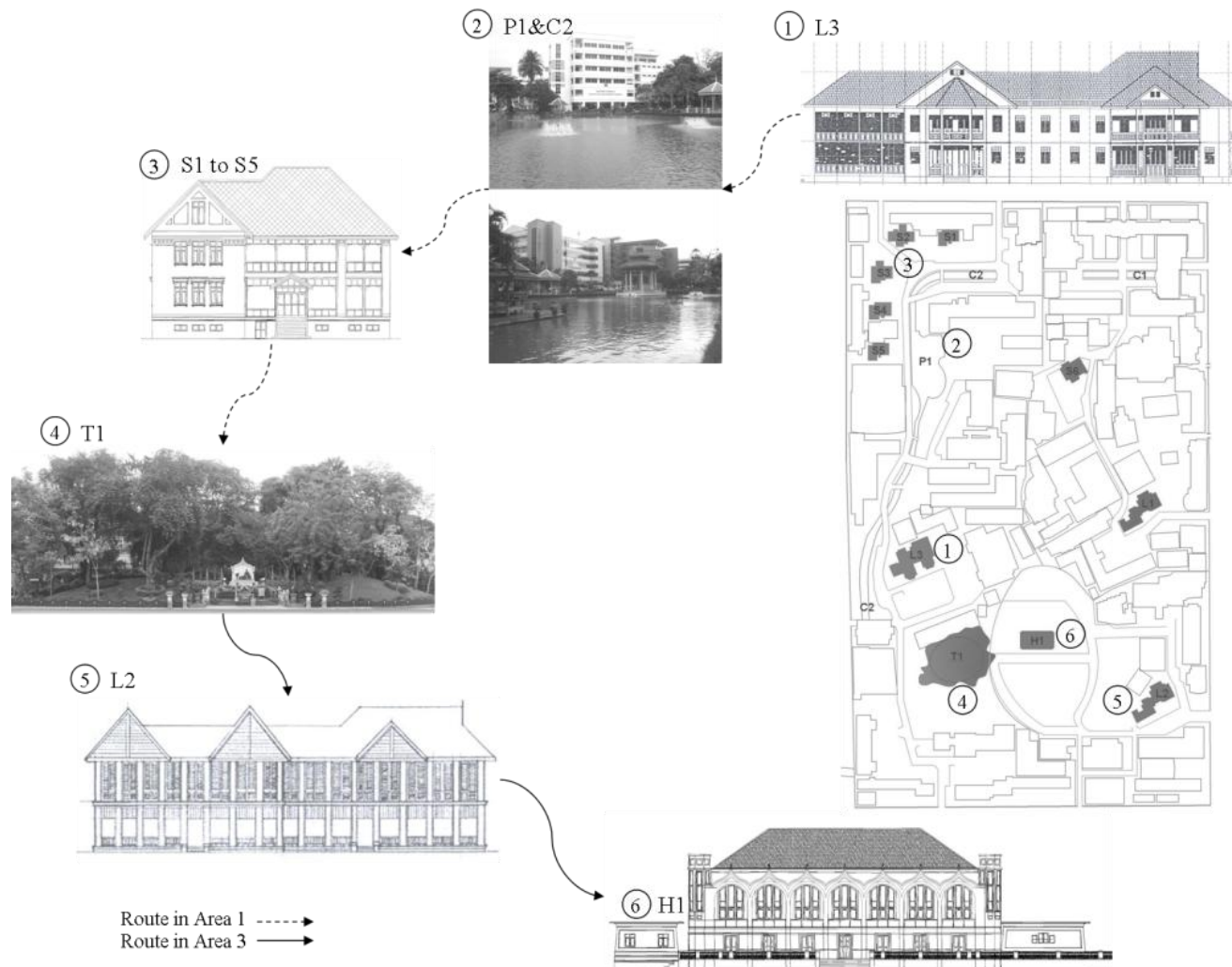


Figure 92 A Sample Guided Tour in Suansunandha for School Age Audiences
Source: Suwannarit Wongcha-um (2011)



Target audiences: Students and cultural visitors

Areas: 1 & 3 (optional area 2)

Purpose:
Appreciation of the romantic court & understanding of roles of inner court

Media:
Visitor centers: L3 & L2
Interpreters at fixed points
Self guiding walk
Brochures & map
Panels
YouTube
Area websites
Google Maps
Facebook

Techniques:
Provide necessary information
Search & receive meanings through multimedia interpretation
Share experience through multiple social media during & after the tour

Stimuli:
Reward
Self-learning
Sense of discovery

Figure 93 A Sample Self-Guiding Tour in Suansunandha for Students and Cultural Visitors
Source: Suwannarit Wongcha-um (2011)

Chapter 10

Conclusion

This chapter demonstrates all studies and findings leading to a strategic approach to manage the cultural heritage values of Suansunandha according to five objectives of the dissertation. Each process of the studies was carried out to achieve all objectives by learning history and evidence of Suansunandha, examining current conditions of Suansunandha and historic buildings, analyzing cultural significance, preparing cultural significance statements, assessing opportunities and constraints of the management policy, and defining the policy framework.

The discussion of the conclusion follows the dissertation's five objectives step by step. The first objective aims to investigate tangible and intangible cultural heritage values of Suansunandha. The second objective aims to assess significant elements of cultural heritage values of Suansunandha. The third objective aims to evaluate potential economic, socio-cultural and physical environment impacts of cultural tourism and cultural heritage management. The fourth objective aims to outline a management policy for cultural heritage values and tourism of Suansunandha. Finally, the last objective aims to define a strategic model to manage cultural heritage values within the context of sustainable tourism development in Suansunandha.

Investigation of Cultural Heritages of Suansunandha

Brief history, evidences and conditions of Suansunandha are discussed according to the first objective.

This dissertation divides study periods into six stages of changes of Suansunandha. The first stage is the period of the Introduction of Royal Garden and Royal Residences (1908-1923) demonstrating four villa styles of royal residences in the country atmosphere of Suansunandha. The second stage is the period of the Growth of Royal Inner Court (1924-1932) reflecting the importance of Suansunandha as the large and last inner court of Thailand. The third stage is the period of the Rejuvenation to Education Institutes (1937-1957) associated with the education development in Thailand. The fourth stage is the period of the Development of Teacher Colleges (1958-1994) reflecting the leading role of developing teaching students. The fifth stage is the period of the Stagnation of Teacher Colleges (1995-2003) associated with the change from teacher colleges to the higher education. The sixth stage is the period of the Maturity of Universities and Government Agencies (2004-2010) indicating the use of the whole areas in Suansunandha.

All six stages have demonstrated different roles and functions of Suansunandha to Thai society; however, the first three stages are obviously associated with cultural heritage values of Suansunandha. The history and evidence of Suansunandha that are analyzed to study cultural heritage values emphasizes the first three periods.

In the beginning, King Rama V built a private garden in the extended western boundary of Suan Dusit Palace (in 1908). The garden that was named “Suansunandha” was similar to gardens of palaces in Europe. The king also planned to construct royal residences in the garden. The royal residences were not constructed in the Fifth Reign because the king passed away in 1910. King Rama VI had continued this project (1911-1919) and commanded to construct an audience hall in Suansunandha (1922-1923). The members of the royal family of King Rama V had gradually resided in Suansunandha since 1924.

From the first to the second period, Suansunandha was created to be the forest garden and the inner court comprising 32 royal residences in the villa style, the audience hall in the Gothic style and country landscape. The royal residences were divided into four villa types in two different sizes. The first type was designed as a large mansion for a queen and a princess. The second type was designed as a large mansion for a queen consort and a princess. The third type was designed as a small residence for a princess or a consort. The fourth type was designed as a small residence for a princess or a royal mother. The Gothic style hall was the venue of organizing royal ceremonies of royal residents in Suansunandha. These royal residences were located by pools, earth hills or the canal. The evidence indicated that Suansunandha was built for the healthy living of all residents rather than the formal pattern of the court formation. Suansunandha housed over 900 female residents circa 1924-1932. These residents were trained with traditional skills such as handiwork creations, meal preparations, food decorations and Thai music performance. They were also taught with primary and secondary education. The female residents of Suansunandha demonstrated these skills for royal functions.

Therefore, Suansunandha plan was differentiated from the classical court plan (balance plan) because it was designed in the Romanticism style. Suansunandha was an important inner court because it was recognized as the largest and last inner court of Thailand.

Suansunandha has been registered as a national ancient site by the Fine Arts Department since 1988. Nine former residential buildings, the earth hill and Nongkransamosorn Hall that exist in Suansunandha have been inscribed as national monuments. Suansunandha has been divided into three areas. The first area that is used by Suan Sunandha Rajabhat University includes six historic buildings (one large mansion and five small residences), the earth hill and the canal. The second area that is used by Suan Dusit Rajabhat University contains two historic buildings (one large mansion and a small residence) and the canal. The third area that is used by Department of Local Administration and Department of Provincial Administration includes a large historic building and the hall. The historic buildings are adapted to be offices, classrooms and culture centers.

Analysis of Cultural Significance

In order to achieve the second objective, this dissertation analyzes cultural significance and prepares cultural significance statements.

The cultural heritage analysis demonstrates that Suansunandha consists of historic, aesthetic, social and scientific value associated with all surviving royal residences, historic places (the earth hill, canal and pool), the audience hall, royal residents and roles of the inner court.

The historic value is associated all surviving residential buildings, the audience hall and the historic places. They are part of the largest and last inner court in Thailand. The residential buildings used to be the residence of female members of the royal family of King Rama V. The audience hall used to organize royal ceremonies for high royal residents of Suansunandha. The historic places provide evidence of the royal garden and the inner court formation. The earth hill used to be the kitchenware store of the inner court, and the temporary library and air raid bunker in the period of Education Institutes.

The aesthetic value is associated with all surviving residential buildings, the audience hall and historic places. All of them are part of the Romanticism plan. The residential buildings reflect the applied villa style. The audience hall demonstrates the Gothic style. The mural painting technique applied with the audience hall and the large residential building within the third area provides evidence of Art Nouveau.

The social value is associated with all surviving residential buildings and the audience hall. Suansunandha demonstrates the principal responsibility of the inner court training Thai elite women, and preparing meals, handicrafts and performing arts for royal functions. Therefore, all surviving residential buildings are associated with the inner court's responsibility. In the period of Education Institutes, a large mansion used to be part of the model kindergarten in Thailand, other royal residences were adapted to be facilities of Suan Sunandha and Suan Dusit Teacher Colleges, and a large mansion and the audience hall used to be part of Public Administration College.

The scientific value is associated with all residential buildings and the audience hall. Suansunandha provides evidence of the influence of European architecture in Thailand. The large mansion and the audience hall are associated with rare quality of the artistic work because they were decorated with Fresco Secco Mural Painting Techniques in the Sixth Reign.

These results are used together with findings arising from tourism impacts, and opportunities and constraints assessment leading to define the management policy of Suansunandha.

Impacts of Cultural Heritage Management and Cultural Tourism

The impacts are analyzed to identify opportunities and constraints of the management policy. The analysis is divided into two parts. The first part is connected with the opportunities and constraints arising from the cultural significance of Suansunandha. The second part is associated with stakeholders' evaluations that demonstrate the stakeholders' attitudes towards tourism impacts and potentials of Suansunandha.

Firstly, obligations arising from the cultural significance outlines what should be done and what should not be done to managing the cultural heritage values of Suansunandha in the future.

New uses of historic buildings should be compatible with their cultural values, must follow relevant laws and should be acceptable to stakeholders of Suansunandha. Moreover, users of the historic buildings should be educated about the cultural value of Suansunandha.

Conservation budgets should be prepared separately from other budgets and supported by the management of all three areas. The cultural tourism should be developed to conserve cultural significance and contribute to the conservation funds.

Specialists with multidisciplinary skills should be employed to deal with various conservation tasks such as skills in areas of archaeology, architecture, engineering, history and surveying. The conservation tasks must be consulted with the Fine Arts Department as the legal specialist before they would be implemented.

Relevant personnel should be set up to be responsible for the management policy of Suansunandha such as building managers and area managers.

Individual historic buildings and places should not be interpreted independently but their interpretation should be part of the overall cultural significance of Suansunandha. Themes, concepts and messages of the interpretation should be established and connected with the cultural significance in the period of Royal Inner Court and Education Institutes.

Even historic buildings and places are separated into three areas but they should not be managed individually. Thus, the management structure should be established to ensure that the planning and implementation of the management policy should be compatible with the overall cultural significance of Suansunandha.

The historic character of Suansunandha should be conserved and interpreted properly because it demonstrates the cultural expression, social relationships and multi-cultural context of Suansunandha. The cultural expression is associated with the Romanticism plan of Suansunandha inspired by the status of royal residents, the interest of designers and the aspiration of the founders. The social relationships demonstrate the status of female residents, relationships among residents and the roles of the residents connected with ornaments and room arrangement of the historic buildings (all surviving former residential buildings). The multi-cultural context is associated with the applied villa style of royal residences in Suansunandha reflecting the combination between European architecture and conditions in Thailand.

Current conditions of historic buildings and places should not be disturbed by new constructions and heavy traffic. If the historic buildings and places are associated with an improvement and an intervention, the whole process should be recorded and documented.

Lastly, findings arising from tourism impacts and potentials were the guidance of the interpretation and visitor management policy. Tourism may generate both positive and negative impacts on cultural heritage values of Suansunandha. Stakeholders were encouraged to participate in the analysis of tourism impacts and potentials of Suansunandha. The positive impacts were identified as the opportunities and the negative impacts were verified as the constraints of the policy.

All opportunities and constraints are consistent with the stakeholders' opinions. The stakeholders agreed with both potential positive and negative impacts

that may result from tourism development in Suansunandha. The opportunities arising from tourism consist of earning incomes from tourism, increasing employment opportunities, developing skills of tourism students, enhancing the understanding of both visitors and stakeholders to cultural heritage values, encouraging collaboration among stakeholders and improving facilities in Suansunandha. The constraints arising from tourism are associated with increasing maintenance and opportunity costs, conflicts between visitors and stakeholders of Suansunandha, and deteriorated historic buildings and surroundings.

The major tourism potentials of Suansunandha that may attract cultural visitors are associated with its own values and special events in relation to cultural heritage values such as demonstration of Thai cooking and its location adjacent to a primary tourist attraction (Vimanmek Mansion). Even though these potentials may create opportunities for cultural tourism, they may attract high numbers of visitors leading to adverse impacts on cultural significance of Suansunandha.

Measures such as the carrying capacity and other sustainable practices are prepared to deal with these potential adverse impacts. The opportunities are enhanced in the management policy.

Management Policy for Cultural Heritage Values and Tourism in Suansunandha

According to the opportunity and constraint assessment, Suansunandha should retain the quality of cultural heritage values, mitigate adverse impacts on cultural heritage values and enhance the understanding about cultural heritage values. Thus, the policy framework is designed to enhance the conservation of cultural significance, retain a balance between cultural heritage conservation and tourism development in Suansunandha, encourage the participation of stakeholders and increase awareness of cultural heritage values in Suansunandha. The policy framework includes strategies of the conservation, interpretation and visitor management.

This conservation policy is designed to encourage stakeholders to participate in all process of decision-makings and draw all parties in Suansunandha to be a part of the management structure to ensure that implementations would be acceptable to everyone in Suansunandha. The policy consists of the management structure, maintenance and repair, future use, new development, street furniture, parking and traffic, and investigation in order to guide future plannings and implementations and to enhance the continuity of the cultural heritage values of Suansunandha.

The visitor management policy is designed to satisfy the needs of target visitors, to retain cultural heritage value and to maintain the quality of life of the stakeholders in Suansunandha. Therefore, the policy is associated with the process of targeting visitors, sustainable practices, carrying capacity and marketing strategies. The strategies of this policy are closely connected with the interpretation policy because some strategies are also used in both policies such as choosing target visitors as target audiences of interpretation programs and using marketing strategies in the interpretation media.

The interpretation policy comprises themes and messages, target audiences, purposes (awareness, appreciation and understanding of the target audiences),

relevant personnel, media (both common and new media), and tools. The themes derive from the cultural heritage values in the period of Royal Inner Court. This policy should be used in conjunction with the cultural significance and along with conservation and visitor management policy.

Strategic Model of Cultural Heritage Management within the Context of Sustainable Tourism

The strategic model of Suansunandha comprises the conservation, interpretation and visitor management policy. The management policy is based on cultural significance associated with both concrete and abstract values during the period of Royal Inner Court and Education Institutes. The cultural heritage values and significance are analyzed to determine opportunities and constraints of the conservation policy, to establish potential themes of the interpretation policy and to be the guidance of defining the visitor management policy. (see figure 94)

Some constraints are associated with unconnected cultural heritages, separated management and limited relationships among stakeholders of Suansunandha. These constraints may threaten cultural values of Suansunandha. The conservation policy emphasizes the participation of the stakeholders of Suansunandha in all decision making process because the successful policy depends on the involvement of stakeholders according to Wates (2000) and Washington Charter (ICOMOS, 1987). Therefore, the conservation policy is started by encouraging the stakeholders of Suansunandha to be a part of the management structure. The stakeholders from different groups and from all areas are invited to participate in all levels of the management structure to ensure that overall cultural heritage values would be conserved and developed properly.

The management structure is not only responsible for the conservation policy but also for the interpretation and visitor management policy. Some members of the management structure are directly related with implementation of the management policy such as building and area managers. They are associated with routine maintenance, physical investigation, visitor accommodation, surveys of the carrying capacity and interpretation planning. Upper level of the management structure is responsible for the policy reviews and monitors.

The interpretation policy is designed to use possible tools at affordable costs to interpret the established themes and to reconnect unconnected cultural heritages. Even though the current technologies interpreting the themes of Suansunandha are not state-of-the-art, they would be reachable and practical in real situations connecting with present lifestyle of the target audiences. The audiences are encouraged to use their own mobile devices to learn the meanings of themes and coproduce interpretation during a site visit. These technologies and tools could apply Quick Response Code (QR Code) to link audiences with multimedia interpretation, and use sharing sites and a program (Google Maps, Google Earth and Sketch Up) to create virtual tours on new media. Moreover, the interpretation tools contribute to the “equity” of the cultural heritage learning in Suansunandha (Swarbrooke, 1999). The audiences with special needs can gain an access to the historic buildings and places in Suansunandha through social media and the interpretation tools.

This model indicates the close relationship between visitor management and the interpretation policy. The process of targeting visitors in the visitor management policy is associated with target segmentation, target evaluation and target selection leading to target audiences of the interpretation policy as well. Moreover, some marketing strategies such as product, promotion and place interrelate with both common and new media such as events and social media. The media function as part of the marketing strategies and the interpretation policy. The media such as visitor centers, social media and websites enhance the understanding of target audiences about cultural heritages and are also the distribution channels of tourism services and products.

This model uses the carrying capacity, sustainable practices and de-marketing along with the interpretation policy as tools to enhance sustainable tourism development of Suansunandha. Strategies of both policies are interdependent to deal with negative impacts of tourism such as overcrowding and visitor misbehaviors. The carrying capacity's warning system of exceeding numbers of visitors and sustainable practices (reeducation and reward) are used together with marketing strategies through both common and new media of the interpretation policy to retain the quality of tourism experience and cultural heritage values.

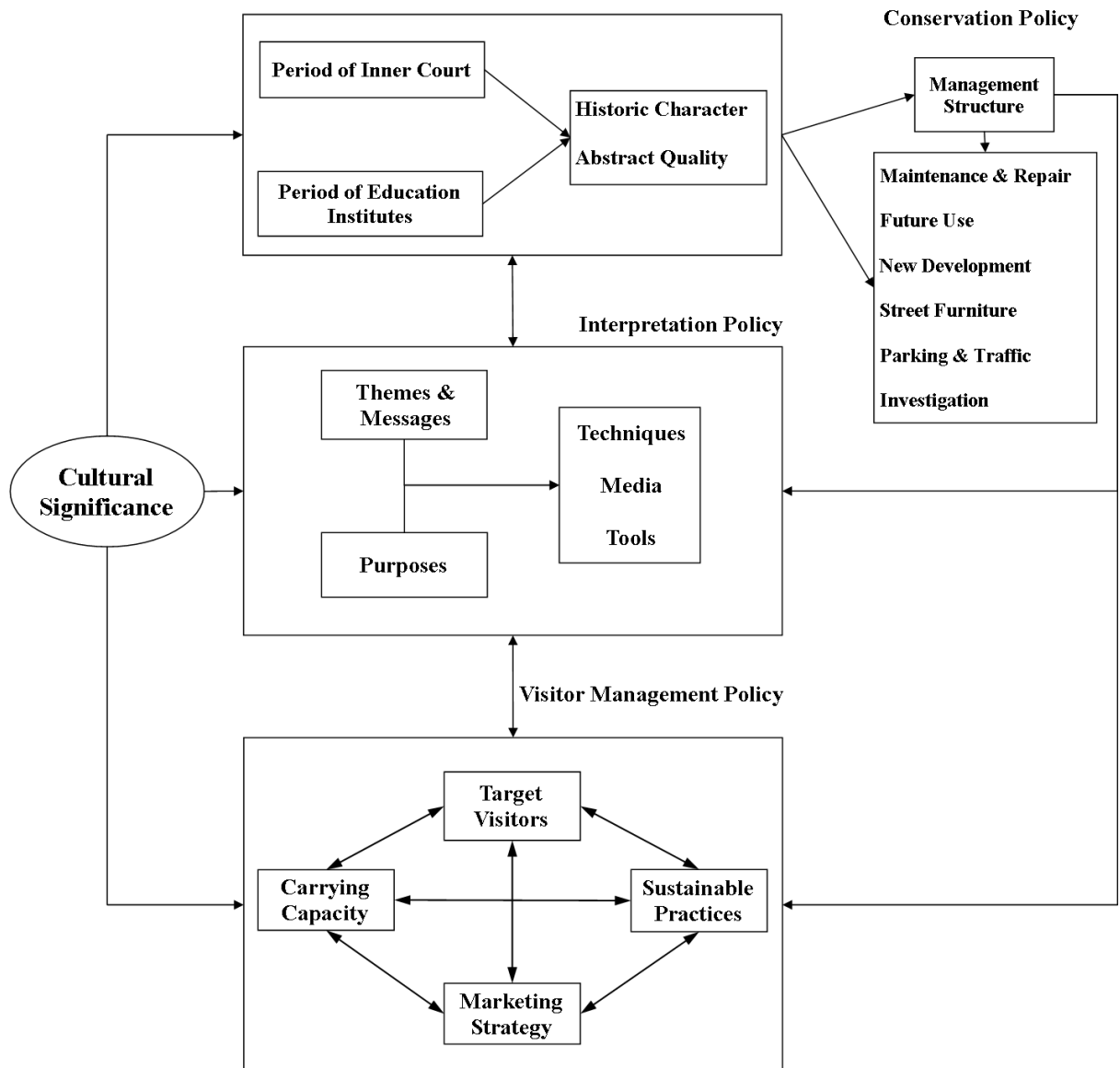


Figure 94 Model of Policy Framework of Suansunandha
Source: Suwannarit Wongcha-um (2011)

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Interviews:

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- Jamjan Thongserm (2010) an alumni and a lecturer of Suan Sunandha Rajabhat University, 19 November 2010.
- Kiatsuda Salabood (2010) a staff of the Department of Local Administration, 7 October 2010.
- Maliwan Pengpol (2010) an official of the Department of Local Administration, 1 September 2010.
- Maneerat Chantanapalin (2011) an alumni and a professor of Suan Dusit Rajabhat University, 8 April 2011.
- Pisit Puntien (2011) an assistant professor of Suan Sunandha Rajabhat University, 3 April 2011.
- Samart Paksuthi (2010) a staff of the Department of Local Administration, 1 September 2010.
- Sakarin Sueboon (2010) a lecturer of Suan Sunandha Rajabhat University, 27 October 2010.
- Sansanee Jasuwan (2011) an assistant professor of Suan Sunandha Rajabhat University, 11 April 2011.
- Sunee Sornnarong (2010) a guest lecturer of Suan Sunandha Rajabhat University, 4 November 2010.
- Teerapoj Jindadech (2011) a staff of Suan Dusit Rajabhat University, 8 April 2011.
- Thongchai Kantapolumporn (2010) a staff of the Department of Provincial Administration, 13 November 2010.
- Wacharin Panyaprasert (2010) an official of the Department of Local Administration, 1 November 2010.
- Yord Klingasorn (2011) an official of the Department of Local Administration, 3 February 2011.
- Yuwadee Kahabadee (2010) an alumni and a lecturer of Suan Sunandha Rajabhat University, 22 November 2010.

Appendix A
Building Plans

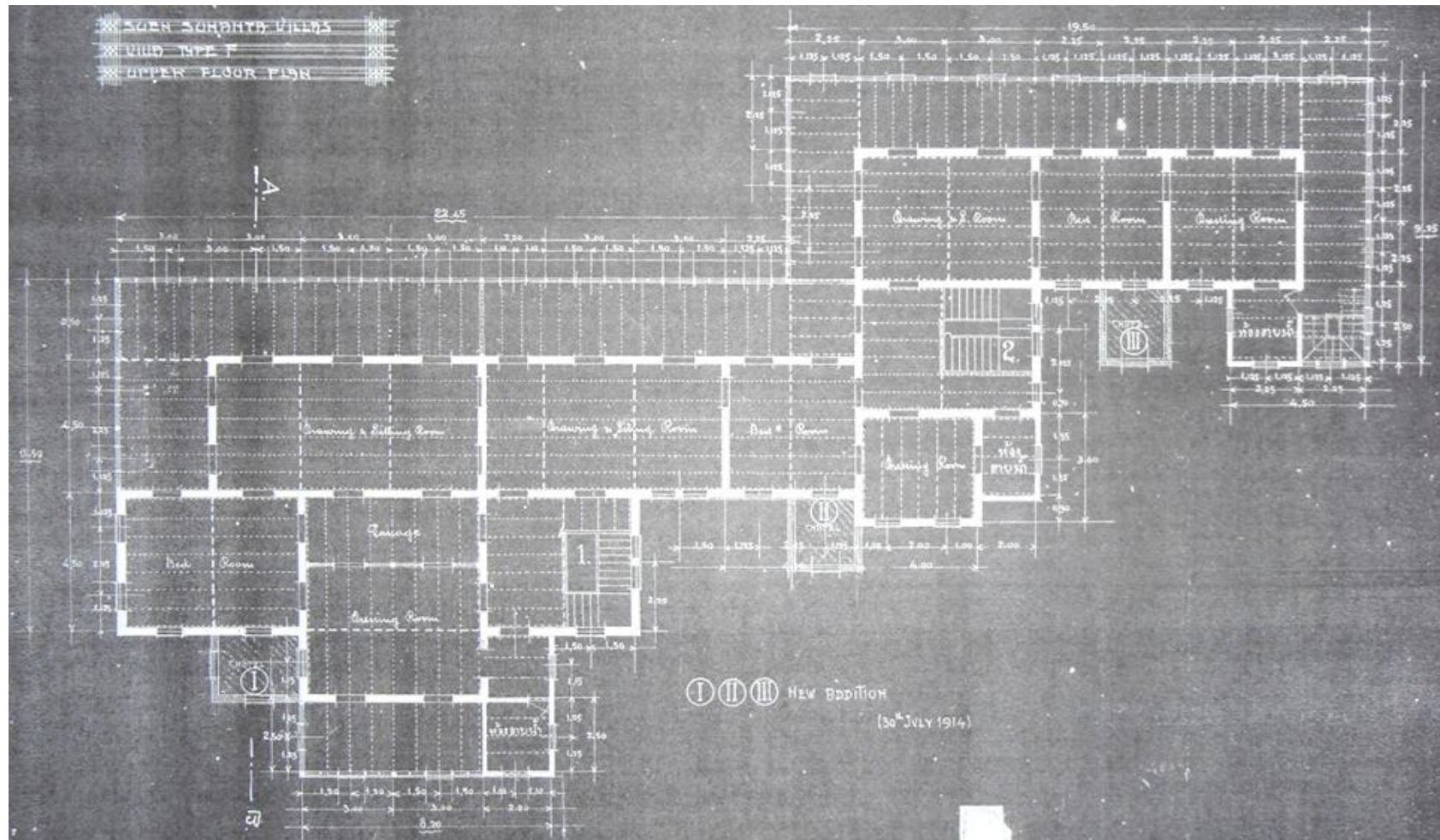


Figure 95 Upper Floor Plan of F-type villa in Suansunandha by Mr. A. Rigassi
Source: National Archives of Thailand (1914)

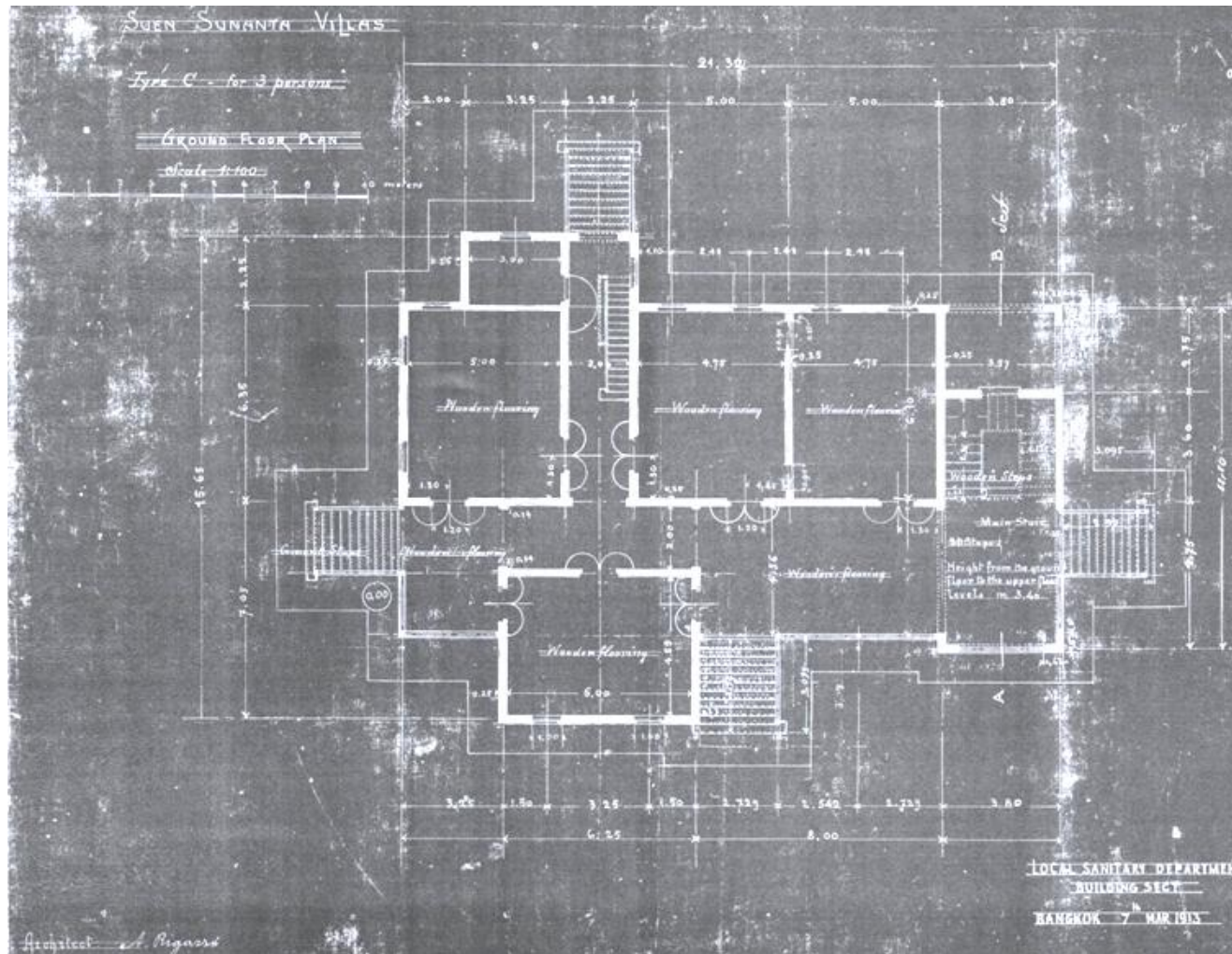


Figure 96 Ground Floor Plan of C-type villa in Suansunandha by Mr. A. Rigassi
Source: National Archives of Thailand (1913)

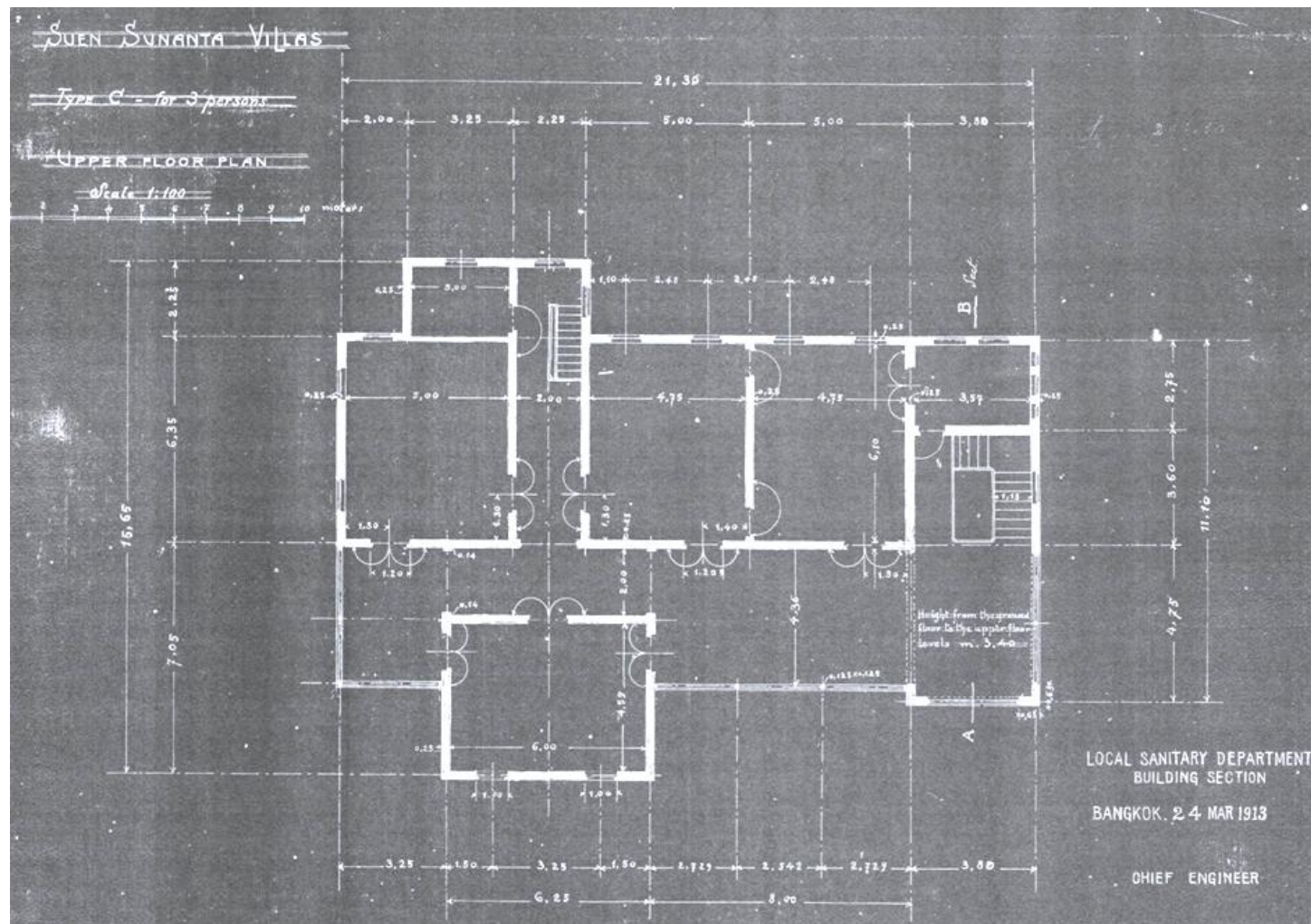


Figure 97 Upper Floor Plan of C-type villa in Suansunandha by Mr. A. Rigassi
Source: National Archives of Thailand (1913)

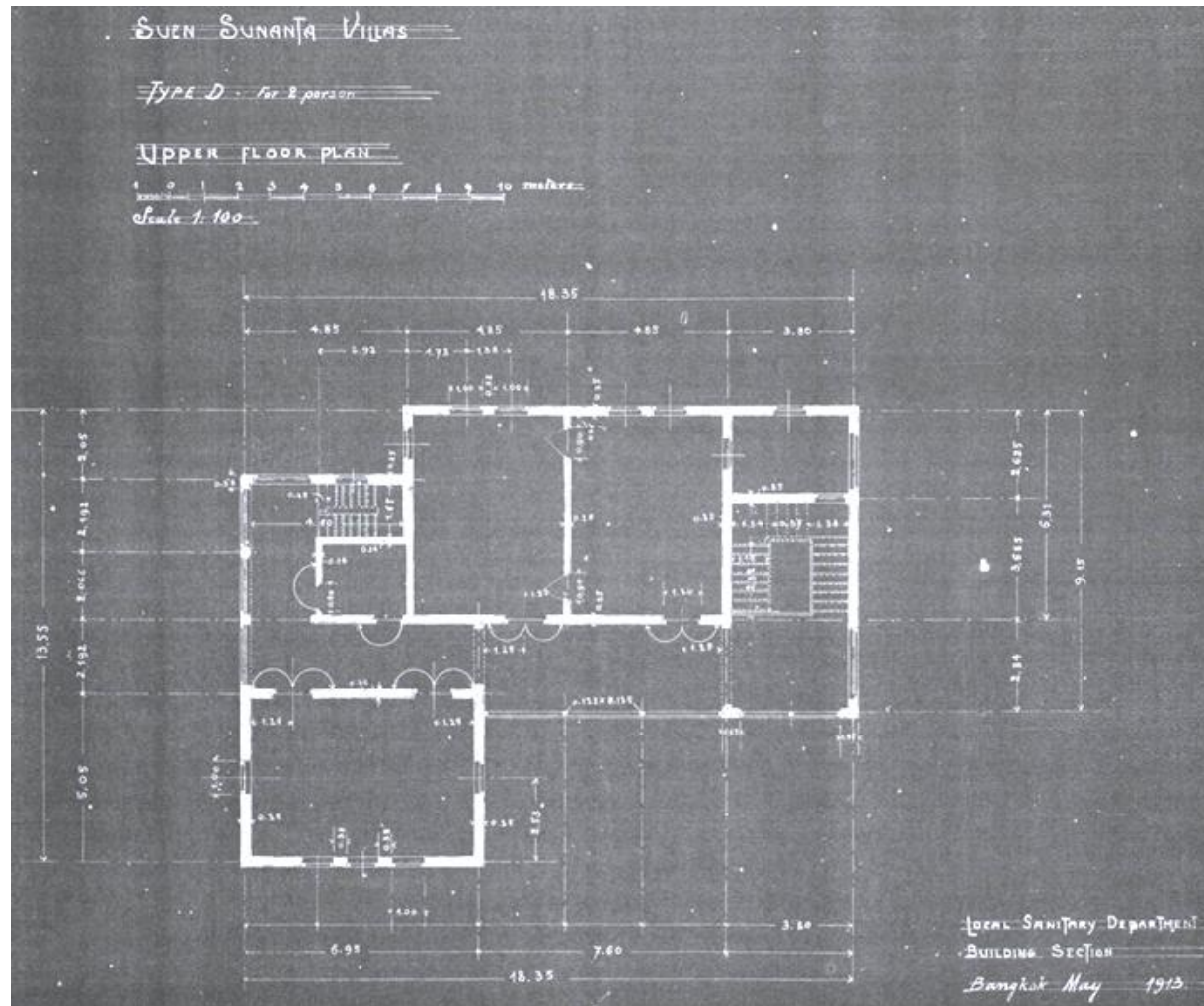


Figure 99 Upper Floor Plan of D-type villa in Suansunandha by Mr. A. Rigassi
Source: National Archives of Thailand (1913)

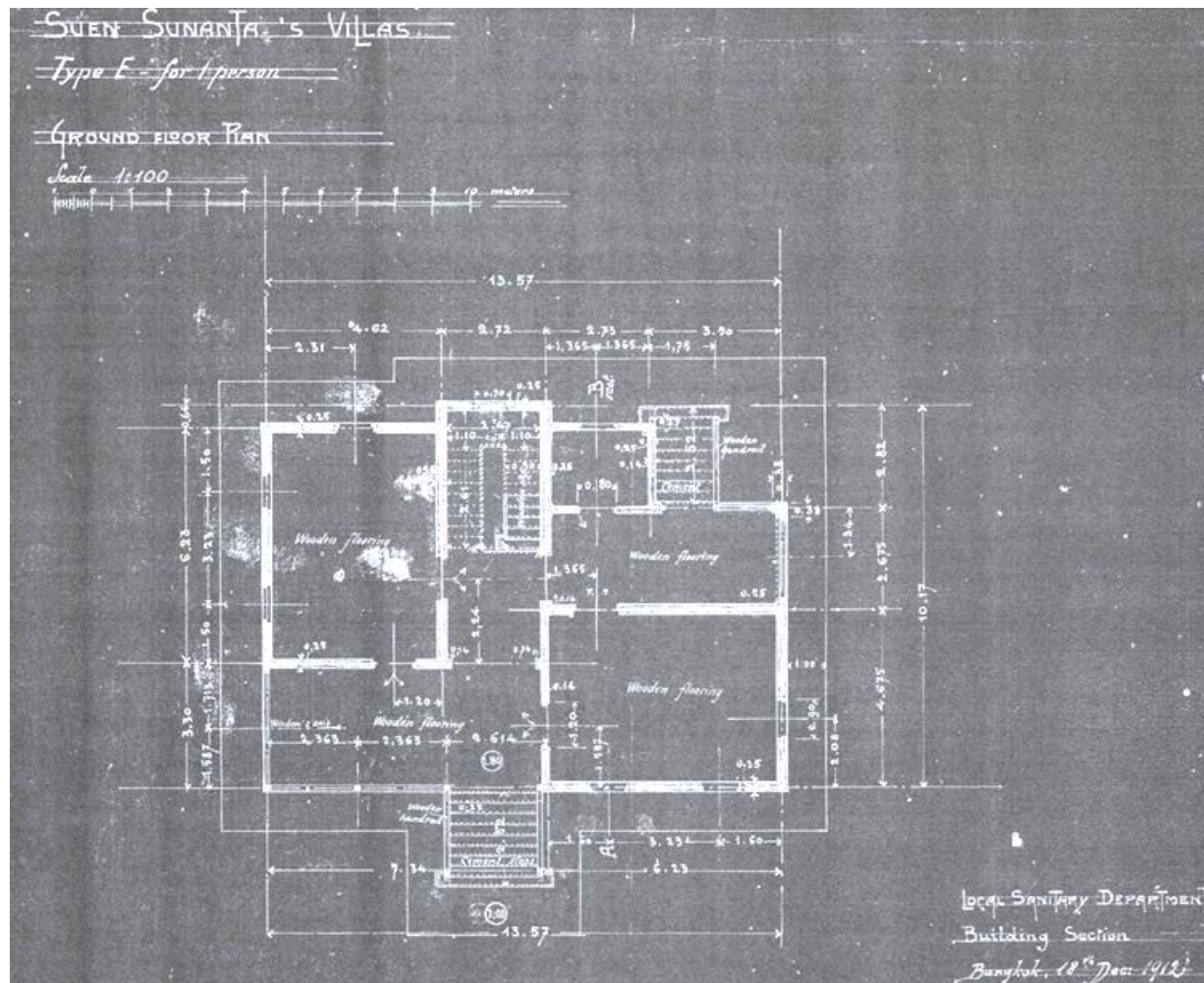


Figure 100 Ground Floor Plan of E-type villa in Suansunandha by Mr. A. Rigassi
Source: National Archives of Thailand (1912)

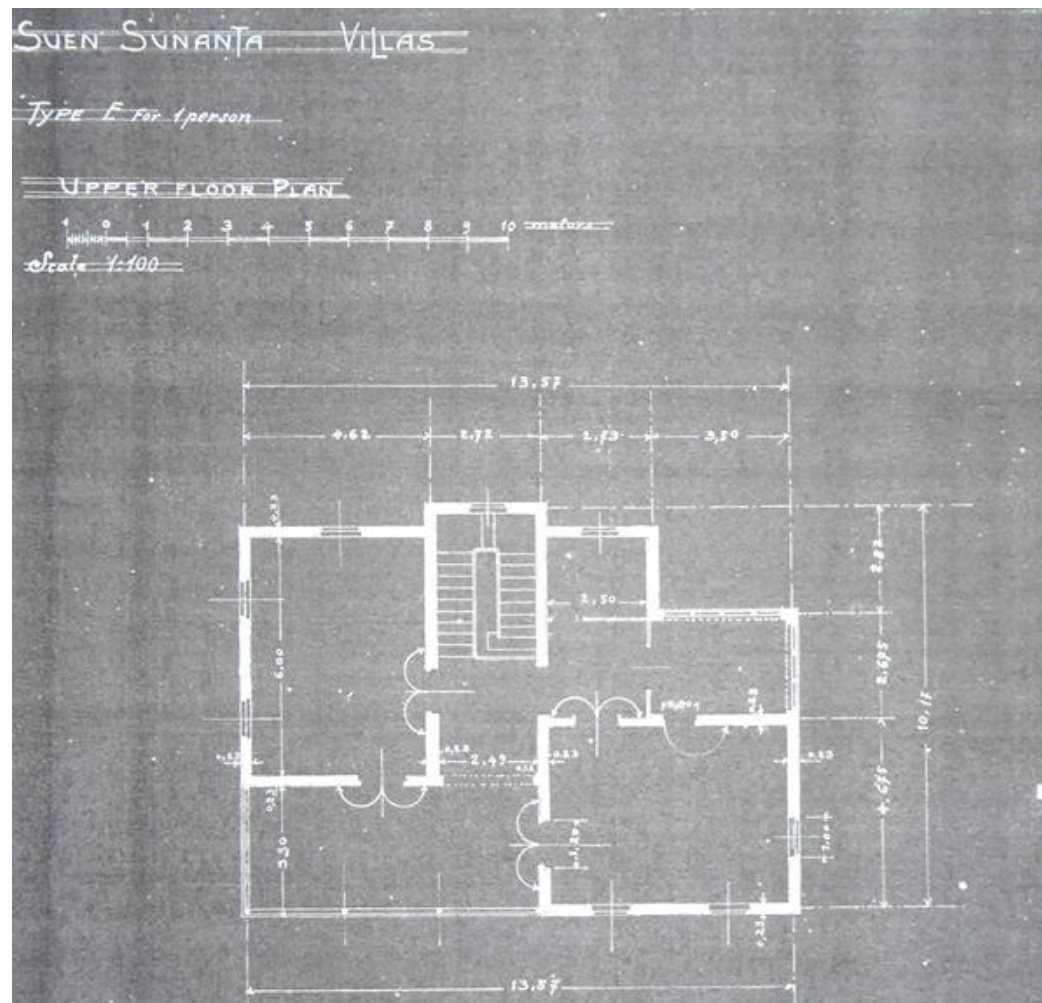


Figure 101 Upper Floor Plan of E-type villa in Suansunandha by Mr. A. Rigassi
Source: National Archives of Thailand (1913)

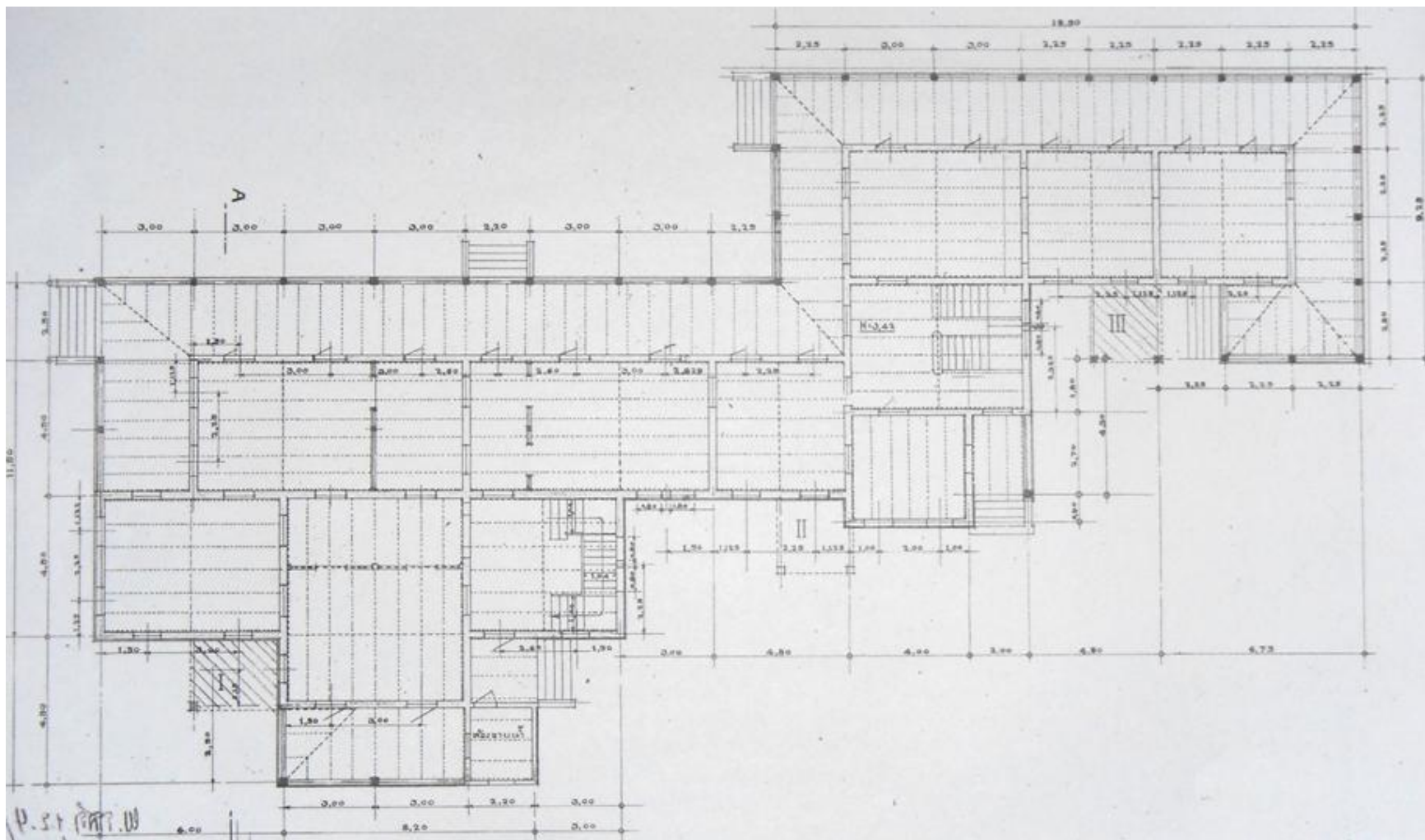


Figure 102 Ground Floor of Unnamed Plan by Fine Arts Department
Source: National Archives of Thailand (1937)

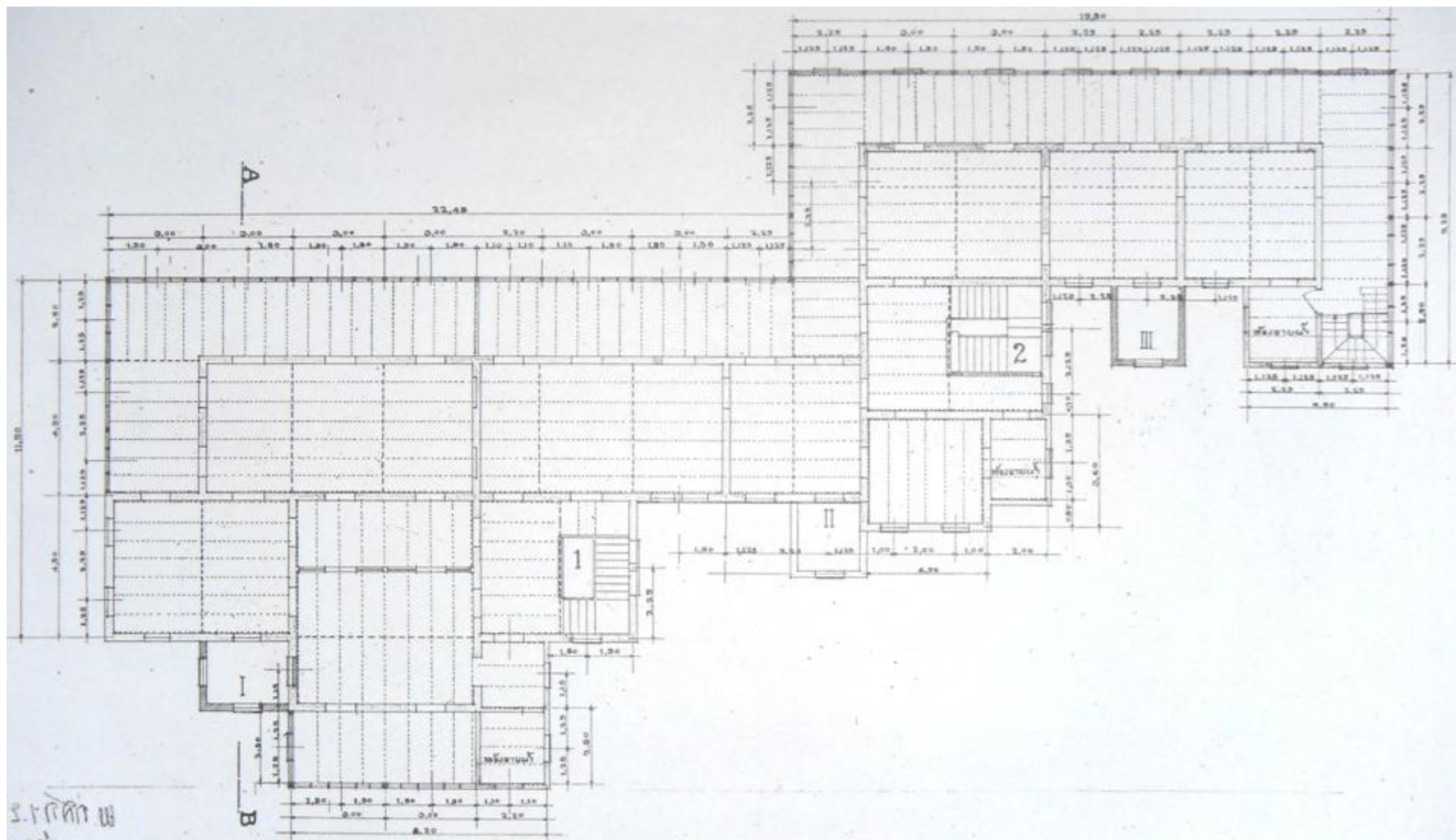


Figure 103 Upper Floor of Unnamed Plan by Fine Arts Department
Source: National Archives of Thailand (1937)

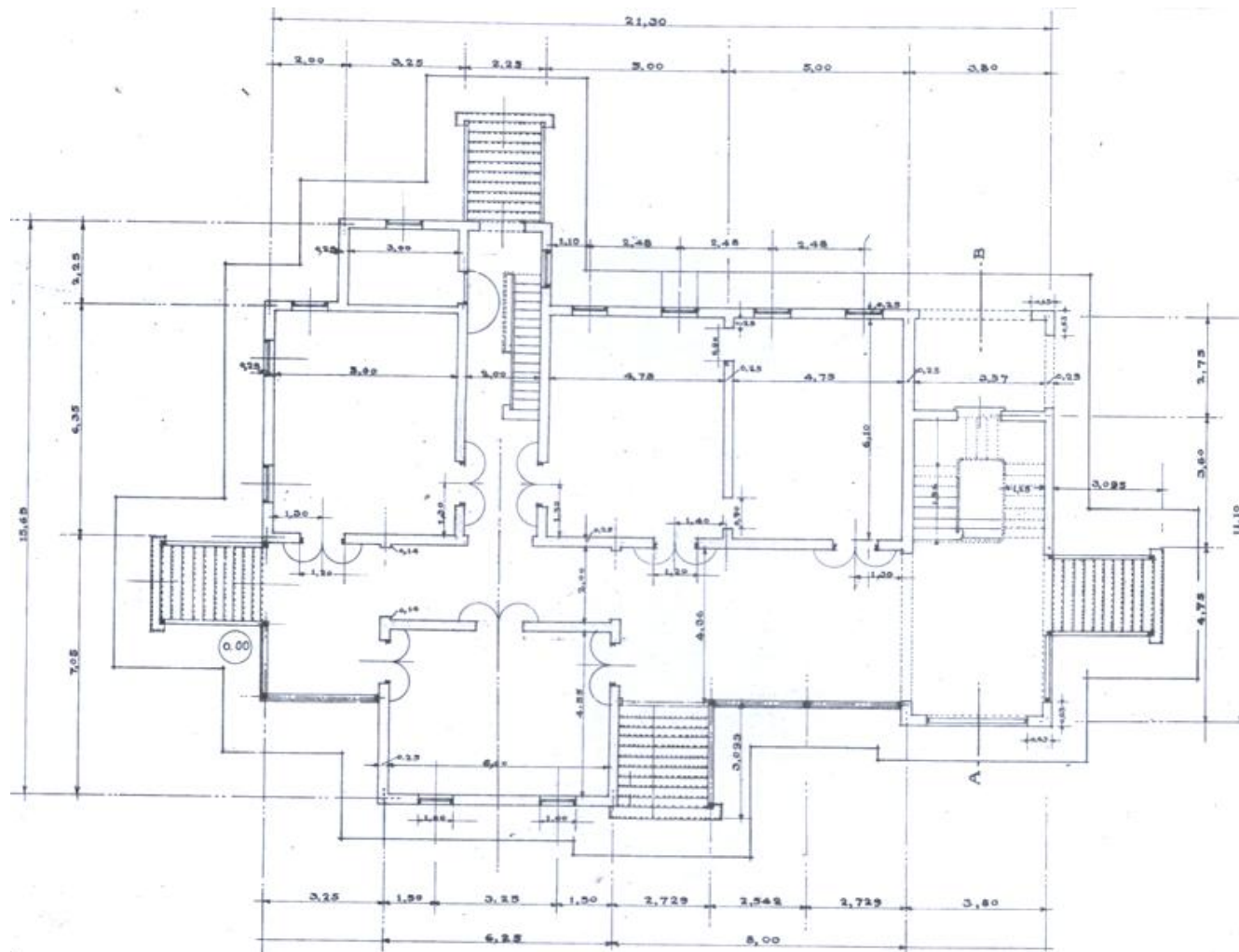


Figure 104 Ground Floor of B Plan by Fine Arts Department
Source: National Archives of Thailand (n.d.)

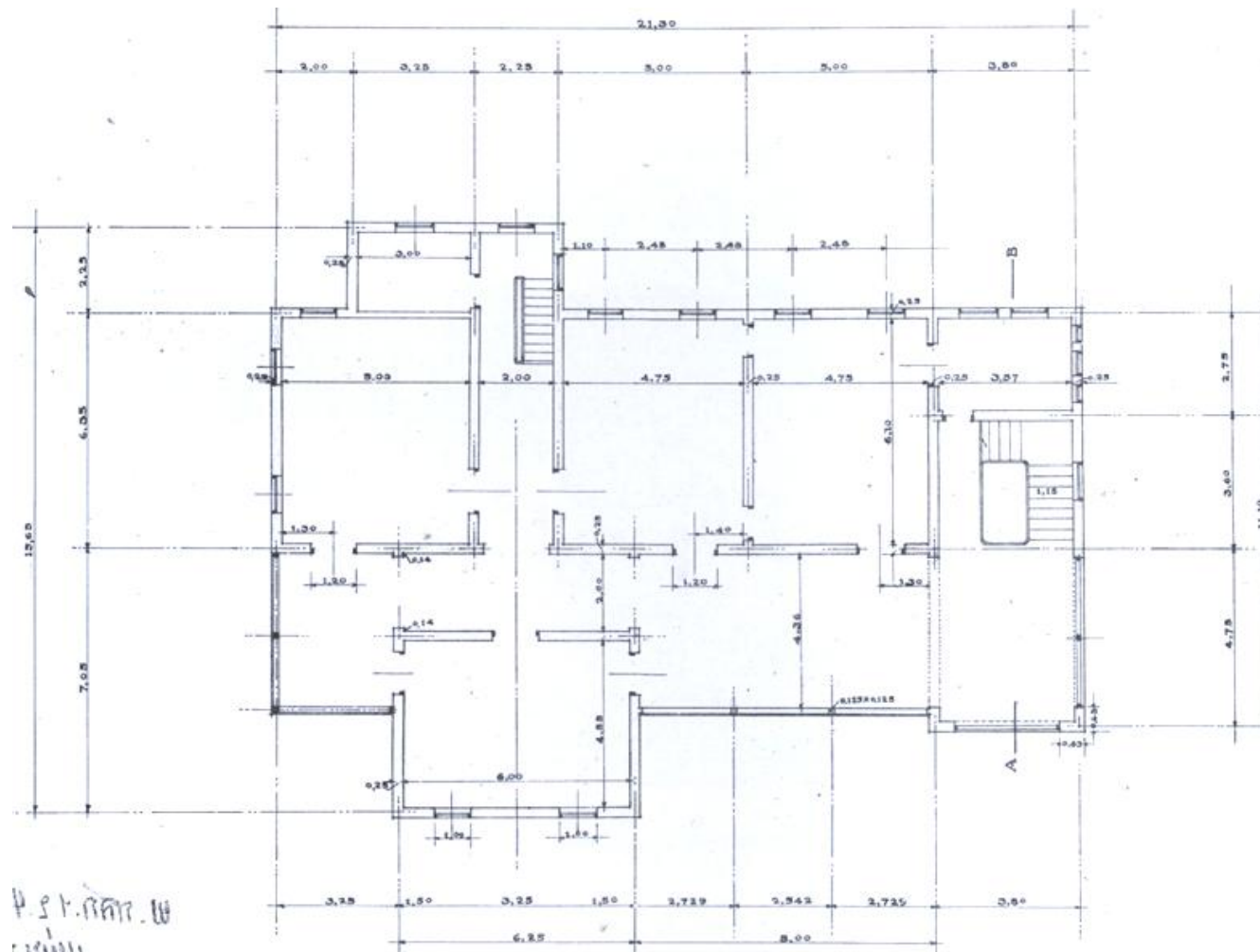


Figure 105 Upper Floor of B Plan by Fine Arts Department
Source: National Archives of Thailand (n.d.)

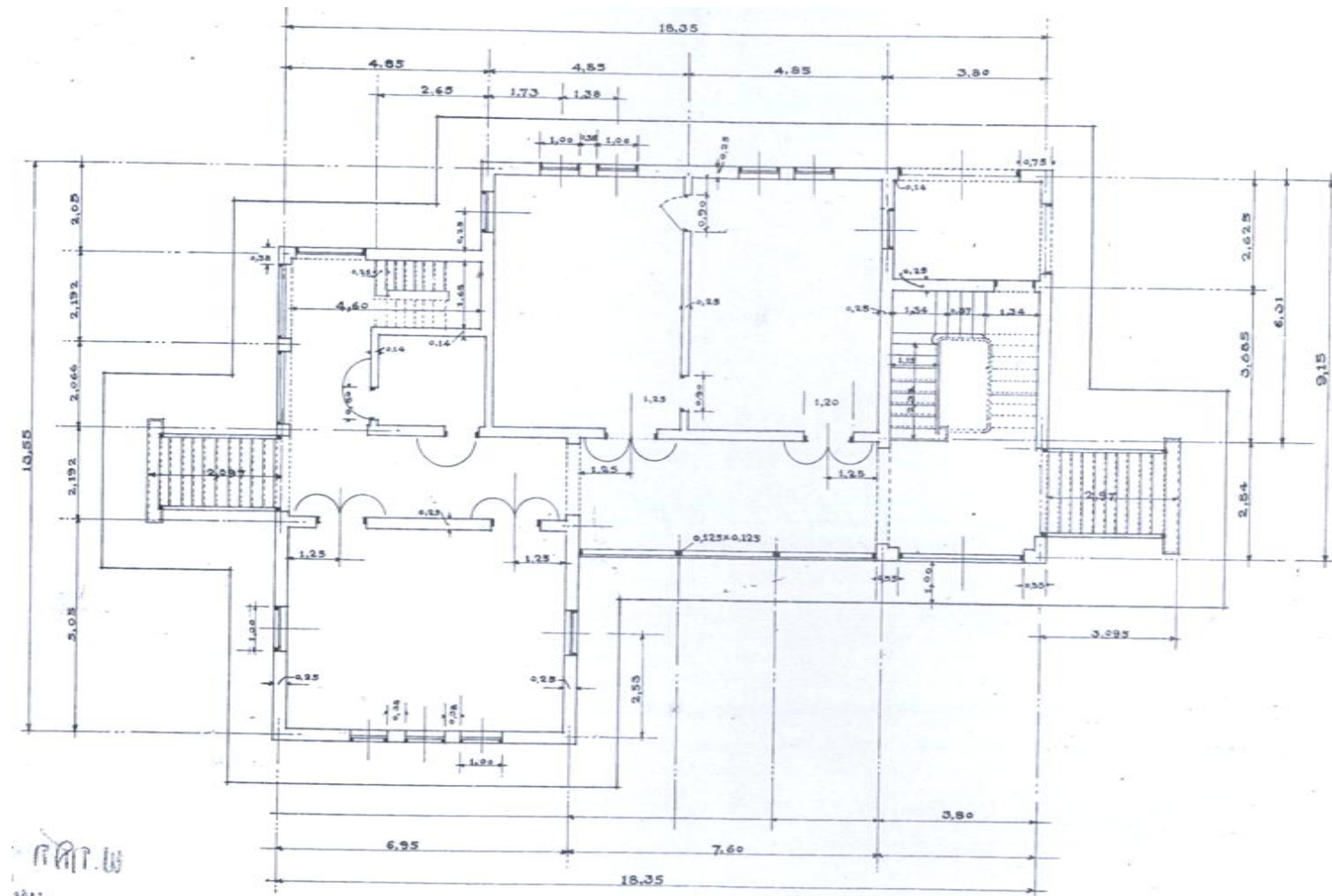


Figure 106 Ground Floor of C Plan by Fine Arts Department
Source: National Archives of Thailand (n.d.)

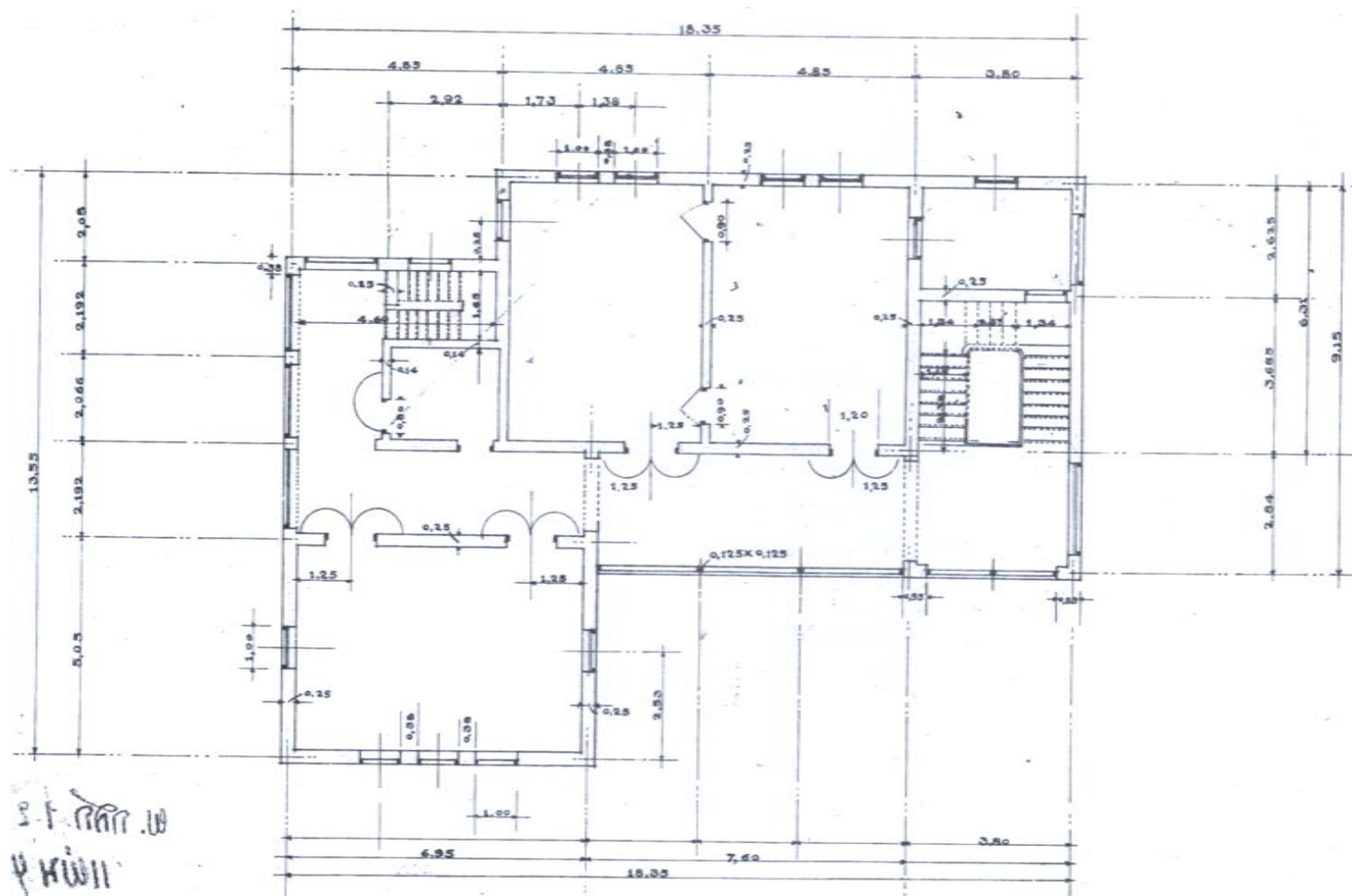


Figure 107 Upper Floor of C Plan by Fine Arts Department
Source: National Archives of Thailand (n.d.)

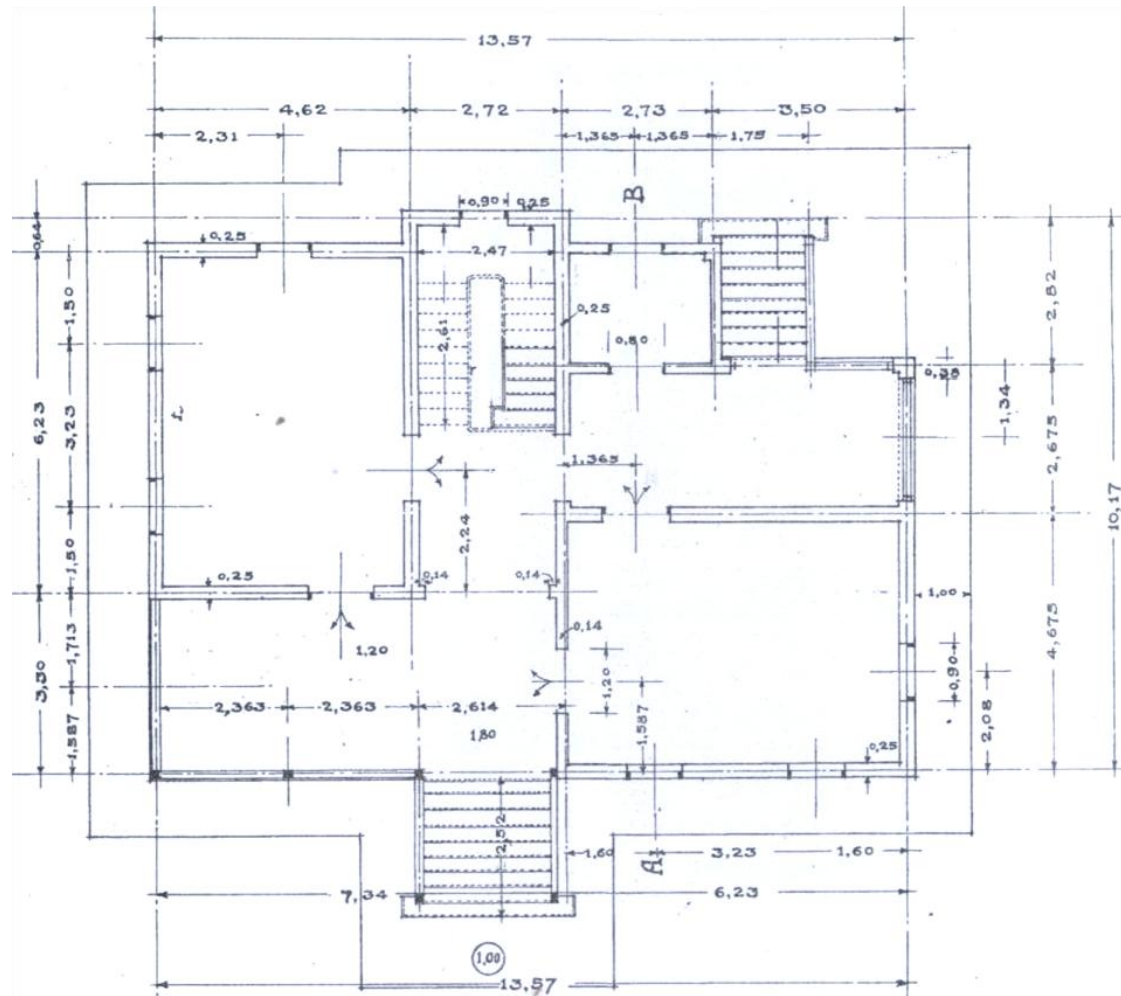


Figure 108 Ground Floor of D Plan by Fine Arts Department
Source: National Archives of Thailand (n.d.)

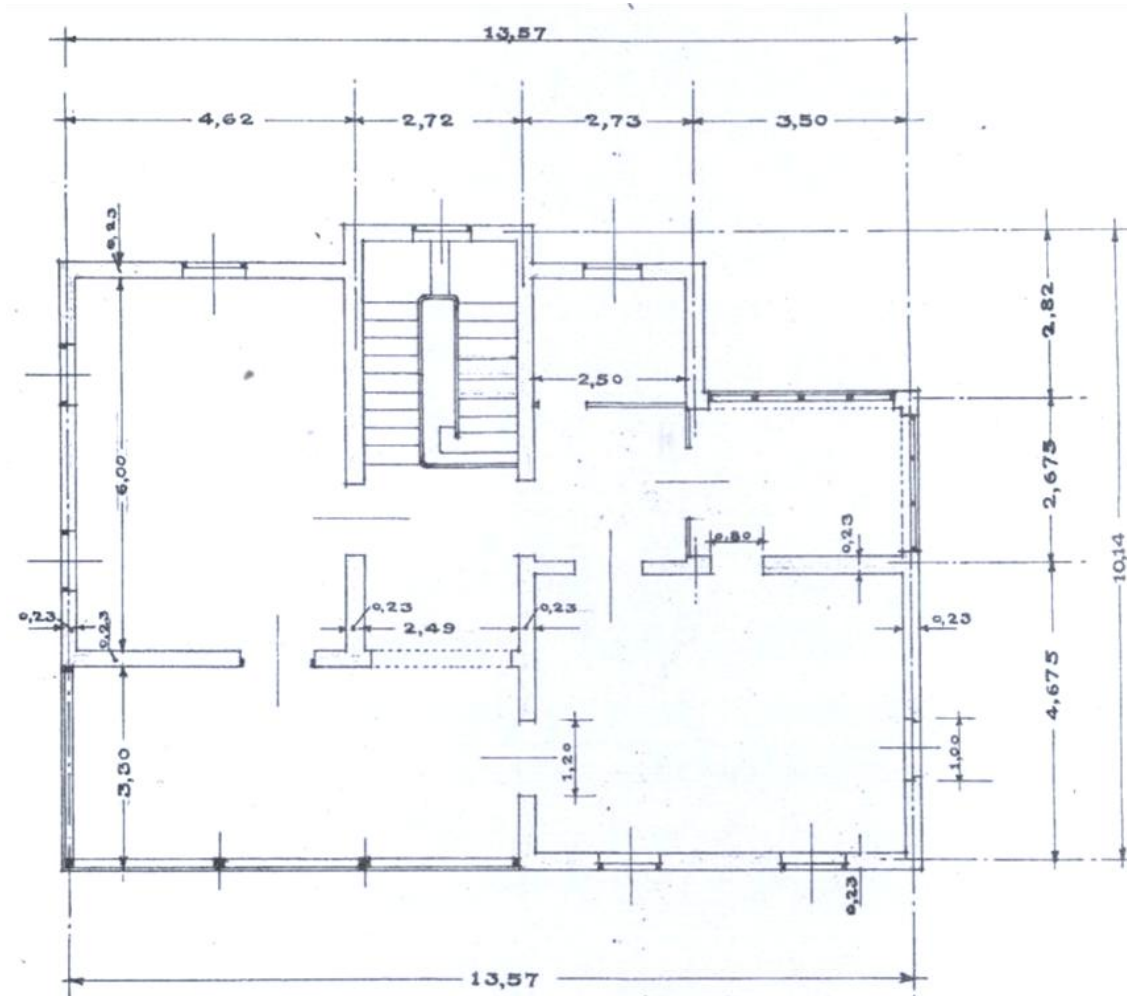


Figure 109 Upper Floor of D Plan by Fine Arts Department
Source: National Archives of Thailand (n.d.)

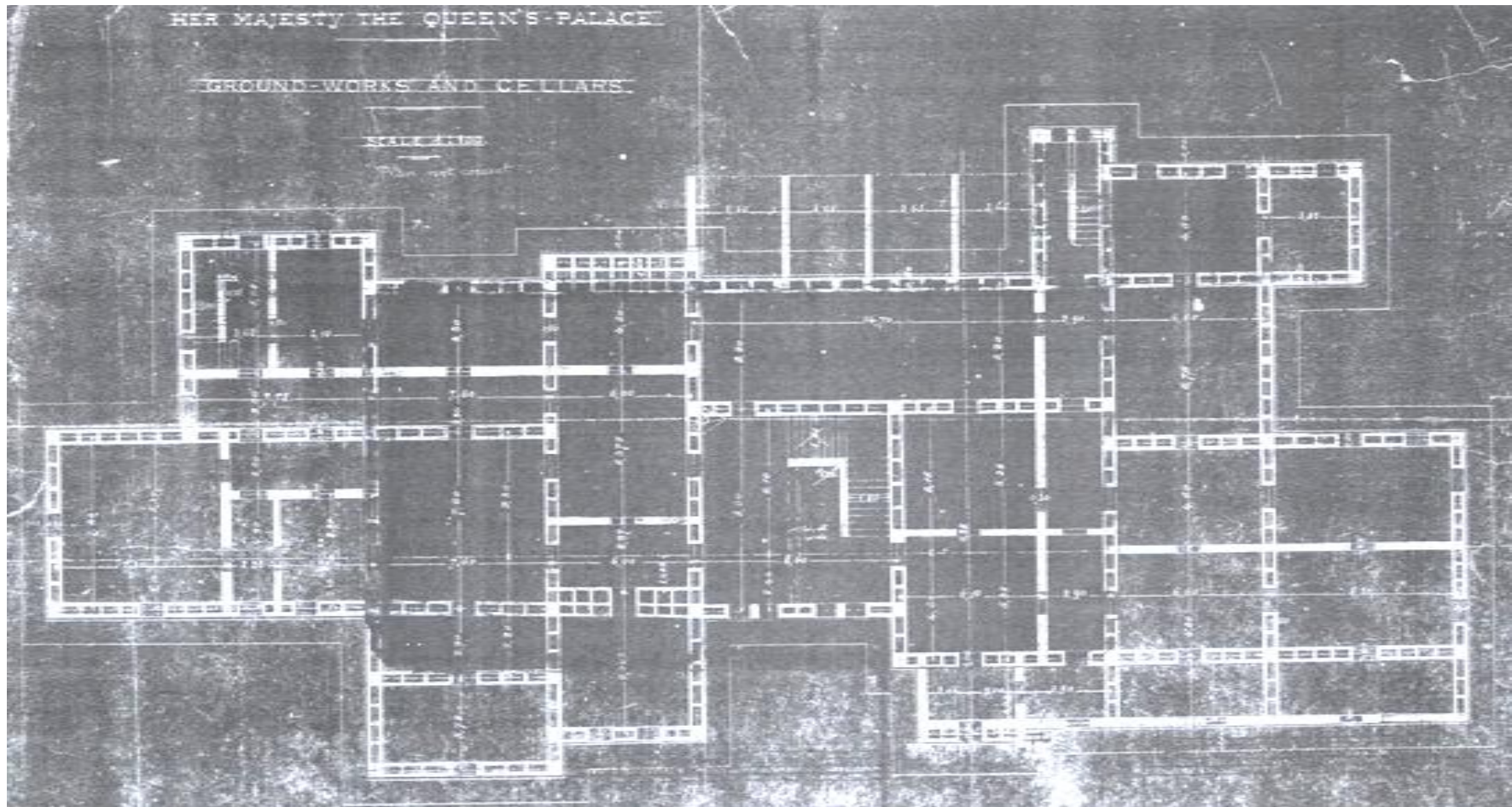


Figure 110 Ground Floor Plan of Queen Palace
 Only the palace's foundation was constructed and the building was changed to be an audience hall.
 Source: National Archives of Thailand (n.d.)

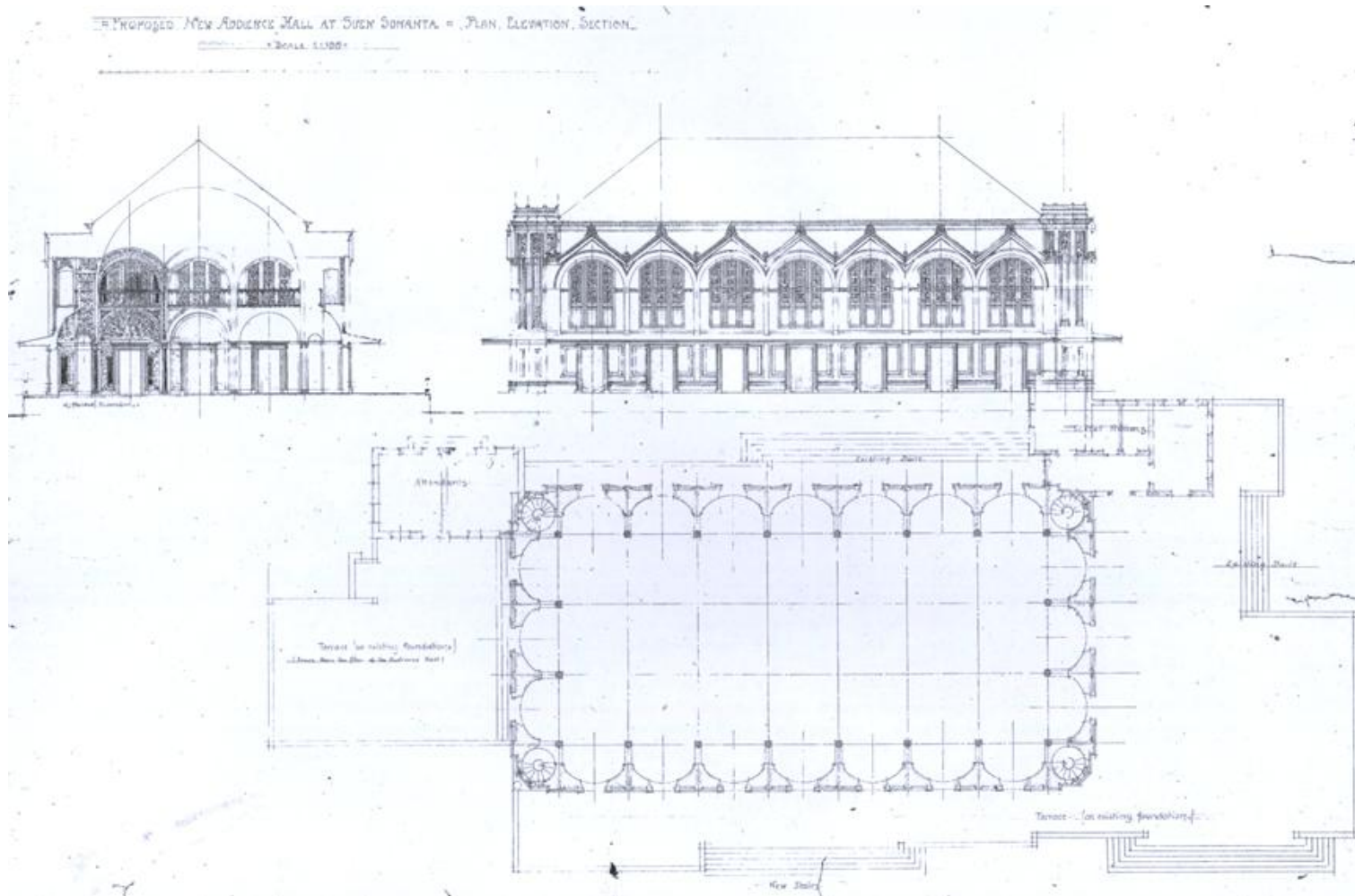


Figure 111 Plan, Elevation and Section of Audience Hall
 The audience hall was built on the existing foundation of the queen palace.
 Source: National Archives of Thailand (n.d.)

Appendix B

Relevant Laws, Regulations and Procedures

Relevant Laws, Regulations and Procedures

Besides a successful cultural heritage conservation may require international charters as guidelines to design a conservation management plan, it is necessary to consider mandatory laws and regulations for the appropriate plan in context of local heritage conservation. Due to Suansunandha was registered as a historic site by the Fine Arts Department (FAD); it has been protected by the Act on Ancient Monuments, Antiques, Objects of Art and National Museums in 1961(B.E. 2504) and its amendment in 1992 including regulations announced by FAD. The relevant laws and regulations were verified before proposed policies are presented in this study. Therefore, the Act's content that is relevant to Suansunandha is emphasized on the Ancient Monuments Chapter. For any further change on heritages in compound of Suansunandha; section 7, 9, 10 and 13 of the Act are directly engaged.

Section 7 bis.

No person shall construct any building according to the law on the control of building construction within the compound of ancient monument registered by the Director-General except permit has been obtained from the Director-General.

In the case where the building being constructed without permit, the Director-General shall have the power to stop the construction and to demolish the building or a part of the building within sixty days from the date of the receipt of the order.

Any person who refuses to stop the construction or to demolish the building or a part of building according to order of the Director-General shall be liable to the offense of refusing the order of official. The Director-General shall demolish the building or a part of that building and the owner, the occupier or the constructor shall have no right to claim damages or proceed with the case whatsoever against the persons executing that demolition.

If the owner does not remove the demolished materials from the ancient monuments compound within fifteen days from the date of the completion of the demolition, the Director-General shall sell such materials by auction. Proceeds of sale after deduction of demolition and sales expenses shall return to the owner of such materials.

Section 9.

In case the registered ancient monument owned and lawfully possessed by any person is deteriorating, dilapidating or being damaged by any means whatsoever, the owner or possessor thereof shall inform the Director-General of the deterioration, dilapidation or damage within thirty days from the date of his or her being aware of its occurrence.

Section 9 bis.

The ancient monument under section 9 which display to the public for collecting admission fee or any other fees as regular business or yield any benefits whatsoever from such ancient monument, the owner or possessor thereof shall bear

the expense of repair, in total or in part, as prescribed by the Director-General.

In determining the expense of repair under paragraph one, the Director General shall appoint a committee of not less than three persons and the owner or possessor shall also be a member.

Section 10.

No person shall repair, modify, alter, demolish, add to, destroy, remove any ancient monument or its parts or excavate for anything or construct any building within the compound of ancient monument, except by order of the Director-General, or permit has been obtained from the Director-General. If the permit contains any conditions, they shall be complied with.

Section 13.

When it is deemed appropriate for preserving the condition, safety, cleanliness and tidiness of the registered ancient monument, the Minister shall have the power to issue a Ministerial Regulation on conducts of visitors during their visit; and may fix admission fee or any other fees.

The organizing of visits to ancient monument owned or lawfully possessed by any individual who charge admission fee or any other fees shall be notified in writing prior to the Director-General and shall be complied with the rules, procedure and conditions notified by the Director-General in the Government Gazette.

Section 13 bis.

When it is deemed appropriate for promoting education and publicizing culture and arts, the Director-General shall have the power to give a written permit to an individual to carry out any activity that gain benefit from the compound of registered ancient monument not owned or lawfully possessed by any individual. The person receiving the permit shall bear all expenses incurred in that activity and shall pay ownership fees, remittances, and other fees to the Department of Fine Arts. The payment received shall benefit the Archaeological Fund in accordance with rules notified by the Director-General in the Government Gazette.

According to 13th Section in the Act, the Fine Arts Department has a legal authority to announce rules, procedures and conditions about admission fees or other fees of visits to ancient monument owned or lawfully possessed by any individual. This announcement was published on the Government Gazette on September 17, 1992(B.E. 2535) and contained five obligations (Fine Arts Department, 1992).

1. The Director-General of the Fine Arts Department must be notified with a written form and documentary evidences by owner or possessor of ancient monuments charged for admission. The evidences are composed of images and a plan of the monument, ownership or lawfully possessing evidence, historical information of the monument and rates of entrance fees including other fees.

2. Signage interpretation describing history of the ancient monument must be

exhibited to public and visitor's statistics are annually reported to the Director-General.

3. In Bangkok, the mentioned notification and report are presented to Office of Archaeology while ancient monuments in other provinces, both documents are given to a Regional Office of the Fine Arts Department or a provincial historical park. If any ancient monuments are located in provinces without such office or park, documents are presented to an educational service area office.

4. Exemption or discount from admission fees must be provided to specific visitors such as uniformed students and pupils including monks and novices.

5. Visitors have to be notified to follow rules, procedures and conditions defined by the Ministry.

These regulations have to be considered and embraced as a part of cultural tourism policies, when whole or some part of monuments in the compound of Suansunandha may be developed to be a tourist attraction with admission charge.

The Procedure of Monument Conservation of the Fine Arts Department in 1985 (B.E.2528)

This procedure aims to conserve monuments accurately in terms of art, history and archaeology and is also associated with economic, social and cultural environments of the monuments. Key contents of the procedure comprise the definition of technical terms, conservation preparation, conservation practices and other appropriate actions to conserve monuments. Some relevant articles should be considered for the management policy of Suansunandha such as:

Article 1, 2 and 3 describe the meanings of technical terms used in this procedure.

Article 4 emphasizes a pre-conservation study regarding monument's condition survey, value assessment and previous preservation study.

Article 5 emphasizes the conservation of monuments including their landscape and surroundings.

Article 6 indicates that monuments conserved by previous changes must be examined rigorously.

Article 7, 8 and 9 recommend ways of monument consolidation. Highly valued monuments should be consolidated or preserved; moreover, any new works for additional consolidation should respect and not diminish the value of monuments.

Article 17 is associated with preservation measures of ancient monuments.

Article 18 allows preliminary and appropriate consolidation to prevent further deterioration of monuments.

Article 19 lets a conservation practice to collaborate with other relevant specialists or institutes.

Article 20 requires all conservation and excavation works must be recorded in form of reports and retained in the National Archive.

All articles in this procedure are applied to design policies of this study in association with other international charters.

Appendix C
Questionnaires

Questionnaire

Suansunandha is divided into areas of 1) Suan Dusit Rajabhat University (SDRU), Suan Sunandha Rajabhat University (SSRU) and the Department of Local Administration (DLA).

This research aims to study cultural values of Suansunandha, tourism impacts and tourism potentials, so your responses will benefit cultural heritage management of SDRU, SSRU and DLA.


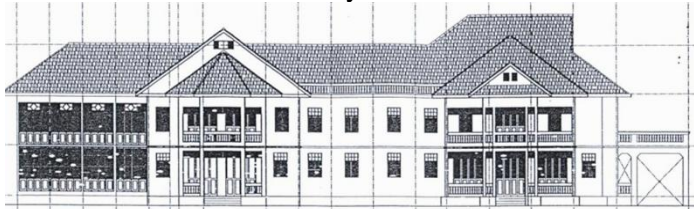
This questionnaire is composed of four parts: 1) Personal Status 2) Perception to Cultural Values 3) Impacts of Tourism and 4) Tourism Potentials.


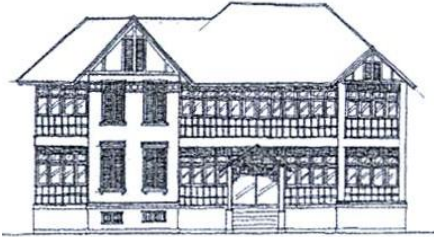
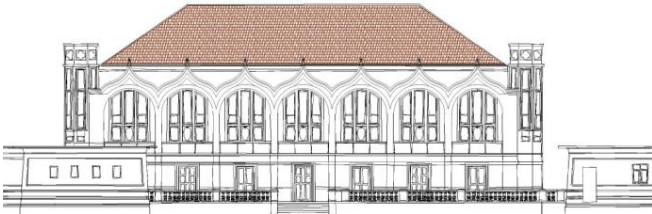


Part 1: Personal Status in Suansunandha

1. You are ☐ 1. Student of Suan Dusit Rajabhat University (SDRU)
☐ 2. Student of Suan Sunandha Rajabhat University (SSRU)
☐ 3. Staff / Lecturers of Suan Dusit Rajabhat University
☐ 4. Staff / Lecturers of Suan Sunandha Rajabhat University
☐ 5. Staff / Officials of the Department of Local Administration (DLA)


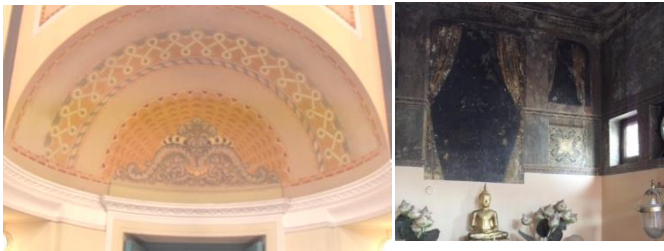


Part 2: Perception to Cultural Values

1. Please consider the following contents and images of buildings and places of Suansunandha and evaluate significant values by ☒ (6 is high significance, 1 is low significance)

Perception to Cultural Values of Suansunandha	Level of Significance					
	High 6	5	4	3	2	Low 1
Aesthetic Values 1. First Style of Old Buildings is a type of Large Mansions, as the Romantic style. 						
2. Second Style of Old Buildings is a type of Large Mansions, as the Romantic style. 						

Perception to Cultural Values of Suansunandha	Level of Significance					
	High 6	5	4	3	2	Low 1
<p>3. Third Style of Old Buildings is a type of Small Residences, as the Romantic style.</p> 						
<p>4. Fourth Style of Old Buildings is a type of Small Residences, as the Romantic style.</p> 						
<p>5. The Audience Hall consists of the high and light shape; and pointed arches as the Gothic style.</p> 						
<p>6. Earth Hill and Tunnel with high rise trees, as the element of Romanticism palace of Suansunandha.</p> 						
<p>7. Pool and Canal, as the element of Romanticism palace of Suansunandha, from Dusit Royal Palace through SSRU and SDRU to the Chaopraya River.</p> 						

Perception to Cultural Values of Suansunandha	Level of Significance					
	High 6	5	4	3	2	Low 1
Historic Values						
1. Old buildings used to be residence of consorts of King Rama V (1924-1932).						
2. Old buildings used to be residence of daughters of King Rama V (1924-1932).						
3. Old buildings used to be residence of queens of King Rama V (1924-1932).						
4. The Audience Hall organized royal ceremonies such as funeral, birthday anniversary of royalties during the Sixth and Seventh Reigns (1924-1932).						
5. Earth tunnel used to be kitchenware store of queen consort (1924-1932).						
6. Earth tunnel used to be library and bookstore of Suansunandha College in the Eight Reign (1937-1943) & used to be air raid bunker during World War II (1944-1945).						
7. A memorial tree was planted on the top of the earth hill over a hundred years ago and represents the symbol of SSRU.						
8. Old buildings had housed over 900 residents (1924-1932) so Suansunandha became a large and principal inner court.						
9. Suansunandha was the last glorious inner court of Thailand before the revolution in 1932.						
10. Suansunandha was place of initiating a well-known royal recipe such as chili paste; and recreational activities such as badminton, tennis, golf, puppet shows and movies (1924-1932).						
Social Values						
1. Suansunandha provided primary and secondary educations for girls from royal family, noble families and royal servants' kin (1924-1932).						
2. Suansunandha trained the girls for the social graces to be noblewomen (1924-1932).						
3. Suansunandha trained the girls for handiworks, cuisines, Thai performing art and classical music to serve monarchs (1924-1932).						
4. An old building was used as the first kindergarten of the country for both normal and disabled pupils in 1940 and became the model preschool of Thailand.						
5. Old buildings that were developed to Girl Schools and Teacher Colleges used as dormitory and classrooms; and were places of home economics and teaching studies of Thailand (1937-1974).						
6. An old building and the hall that was developed to Administration College of Ministry of interior used as dormitory and classrooms trained local officials of Thailand (1940-1994).						

Perception to Cultural Values of Suansunandha	Level of Significance					
	High 6	5	4	3	2	Low 1
Scientific Values 1. Old buildings and the Audience Hall represents scientific development influenced by the European architecture and reflects advanced structure and construction techniques such as vault ceiling in the Sixth Reign. 						
2. Mural painting technique that was painted by Italian painters is a representative of characteristic art in the Sixth Reign but is rarely applied with present artworks. 						
3. Old buildings and the hall represented the popularity of building materials in the Sixth Reign such as cement, reinforced concrete and rhombus shaped roof tiles. 						
4. Old buildings and the hall are the part of the architectural development that represented the present design of urban villages and residential buildings. 						

Part 3: Impacts of Tourism in Suansunandha (SDRU, SSRU and DLA)

Impacts of Tourism in Suansunandha	Strongly agree 5	Agree 4	Neither agree nor disagree 3	Disagree 2	Strongly disagree 1
1. Tourism might disrupt teaching, learning and working of lecturers, students, staff and officials.					
2. Tourism might obstruct the use of old buildings and surroundings of lecturers, students, staff and officials.					
3. Tourism might overuse facilities of lecturers, students, staff and officials such as library, toilets, benches, parking, and food stores.					
4. Tourism might help develop and improve existing facilities in Suansunandha.					
5. Tourism might accelerate deterioration of old buildings and surroundings.					
6. Tourism might make Suansunandha untidy and dirty caused by littering.					
7. Tourism might create opportunity to develop tourism students.					
8. Tourism might cause air pollution from smog and smoke of increasing vehicles.					
9. Tourism might enhance tourists understanding and conserving values of old buildings.					
10. Tourism might increase maintenance costs of old buildings and surroundings.					
11. Tourism might draw other development budgets generating opportunity cost.					
12. Tourism might increase promotion costs.					
13. Tourism might enhance collaboration among areas and within each area of Suansunandha.					
14. Tourism might construct new building forms against existing old buildings (visual pollution).					
15. Tourism might make related people more concerned with values of old buildings and surroundings.					
16. Tourism might encourage related people to preserve, improve and conserve old buildings and surroundings.					
17. Tourism might generate more incomes for related parties.					
18. Tourism might increase employment opportunity for service providers.					
19. Tourism might cause traffic congestion.					
20. Tourism might overcrowd areas and cause excessive carrying capacity.					

Part 4: Tourism Potentials of Suansunandha (SDRU, SSRU and DLA)

Tourism Potentials of Suansunandha	Strongly agree 5	Agree 4	Neither agree nor disagree 3	Disagree 2	Strongly disagree 1
1. Enough facilities such as toilets, parking, food stores, lodging services					
2. Practical information and communication about history of old buildings and surroundings					
3. Practical information and communication about history of royal residents in Suansunandha					
4. Tourists visiting Suansunandha because of adjoining Vimanmek Mansion, a primary tourist attraction					
5. Convenient and diverse modes of transportation to Suansunandha					
6. Historic, aesthetic, social and scientific values attracting visitors					
7. Well worth visit (money, time and effort) of Suansunandha					
8. Adequate budgets of promotions					
9. Readiness of service providers (guides, public relations staff)					
10. Proper and enough signs of significant places					
11. Complete information of signs, publications and exhibitions of significant places					
12. Special event organization to attract tourists such as demonstrations of Thai dance, Thai cooking, fresh produce carving					

Other suggestions

Thank you for complete answers

แบบสอบถาม

วังสวนสุนันทาปัจจุบันแบ่งเป็น **พื้นที่** ของ 1)มหาวิทยาลัยราชภัฏสวนดุสิต 2)มหาวิทยาลัยราชภัฏสวนสุนันทา และ 3) กรมส่งเสริมการปกครองท้องถิ่น

งานวิจัยนี้ทำเพื่อศึกษาระดับคุณค่าของวังสวนสุนันทา ศึกษาผลกระทบที่อาจเกิดจากการท่องเที่ยว รวมทั้งศักยภาพการท่องเที่ยว ของทั้งสามพื้นที่ ดังนั้นการให้ข้อมูลที่ครบถ้วนของท่านจะเป็นประโยชน์อย่างยิ่งในการจัดการมรดกทางวัฒนธรรมของ มหาวิทยาลัยราชภัฏสวนดุสิต มหาวิทยาลัยราชภัฏสวนสุนันทา และ กรมส่งเสริมการปกครองท้องถิ่น

แบบสอบถามมี 4 ส่วน ประกอบด้วย ส่วนที่ 1 สถานะของบุคลากรในพื้นที่ ส่วนที่ 2 การรับรู้คุณค่า ส่วนที่ 3 ผลกระทบของการท่องเที่ยว และส่วนที่ 4 ศักยภาพในการจัดการท่องเที่ยว

ส่วนที่ 1: สถานะของบุคลากรในพื้นที่


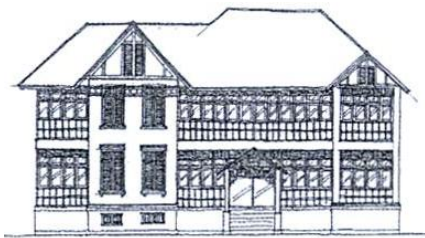



1. ท่านเป็น ☐ 1. นักศึกษามหาวิทยาลัยราชภัฏสวนดุสิต
☐ 2. นักศึกษามหาวิทยาลัยราชภัฏสวนสุนันทา
☐ 3. เจ้าหน้าที่ / อาจารย์ มหาวิทยาลัยราชภัฏสวนดุสิต
☐ 4. เจ้าหน้าที่ / อาจารย์ มหาวิทยาลัยราชภัฏสวนสุนันทา
☐ 5. เจ้าหน้าที่ / ข้าราชการ กรมส่งเสริมการปกครองท้องถิ่น

ส่วนที่ 2: การรับรู้คุณค่า

1. โปรดพิจารณาเนื้อหา และภาพ ของ บริเวณ สถานที่ เหตุการณ์ที่เคยเกิดขึ้น ในวังสวนสุนันทา

โดยทำ ☒ ที่ตรงกับความรู้สึกของท่าน (6 คือ มีคุณค่ามาก, 1 คือ มีค่าน้อย)

การรับรู้คุณค่าวังสวนสุนันทา	ระดับความสำคัญ					
	มาก 6	5	4	3	2	น้อย 1
การรับรู้คุณค่าด้านสุนทรียศาสตร์(ความงดงามของอาคารสถานที่) 1. อาคารโบราณ แบบที่ 1 เป็นอาคารขนาดใหญ่ สไตล์โรแมนติค 						
2. อาคารโบราณแบบที่ 2 เป็นอาคารขนาดใหญ่ สไตล์โรแมนติค 						

การรับรู้คุณค่าวังสวนสุนันทา	ระดับความสำคัญ					
	มาก 6	5	4	3	2	น้อย 1
3. อาคารโบราณแบบที่ 3 เป็นอาคารขนาดเล็ก สไตล์โรแมนติค 						
4. อาคารโบราณแบบที่ 4 เป็นอาคารขนาดเล็ก สไตล์โรแมนติค 						
5. พระที่นั่งนงคราญสโมสรเป็นอาคารหอประชุม รูปทรงสูง มีส่วนโค้งปลายแหลมในสไตล์โกธิค 						
6. เนินเขา และอุโมงค์ ที่สร้างจากดินของสระน้ำและลำคลองปกคลุมด้วยต้นไม้ใหญ่ เป็นองค์ประกอบของวังแบบโรแมนติคของสวนสุนันทา 						
7. สระน้ำ และลำคลองเชื่อมจากพระราชวังดุสิตและออกสู่แม่น้ำเจ้าพระยา เป็นองค์ประกอบหนึ่งของวังแบบโรแมนติคของสวนสุนันทา 						

การรับรู้คุณค่าวังสวนสุนันทา	มีคุณค่า					
	มาก 6	5	4	3	2	น้อย 1
การรับรู้คุณค่าด้านประวัติศาสตร์						
1. อาคารในวังสวนสุนันทาเป็นที่ประทับสำหรับ เจ้าจอมของรัชกาลที่ 5 (พ.ศ. 2462-2475)						
2. อาคารในวังสวนสุนันทา เป็นที่ประทับสำหรับ พระราชธิดา ของรัชกาลที่ 5						
3. อาคารในวังสวนสุนันทาเป็นที่ประทับสำหรับ พระภรรยาเจ้า ของ รัชกาลที่ 5						
4. พระที่นั่งงคราญ จัตุรงคประดิษฐ์ เช่น งานพระบรมศพ งานฉลองพระชนมายุ ช่วงรัชกาลที่ 6-7 (พ.ศ. 2462-2475)						
5. เนินเขาด้านล่างเป็นอุโมงค์ ใช้เป็นที่เก็บเครื่องครัวของพระราชวงศ์สมัยเป็นวัง ช่วง รัชกาลที่ 6-7 (พ.ศ. 2462-2475)						
6. เนินเขาด้านล่างเป็นอุโมงค์ ใช้เป็นห้องสมุดสมัยเป็นโรงเรียนช่วงรัชกาลที่ 8 (พ.ศ. 2480-2486) และใช้เป็นหลุมหลบภัยช่วงสงครามโลก ครั้งที่ 2 (พ.ศ. 2487-2488)						
7. ต้นแก้วเจ้าจอมถูกปลูกไว้บนเนินเขามีอายุกว่า 100 ปี เป็นเสมือนสัญลักษณ์ของสวนสุนันทา						
8. อาคารโบราณในวังสวนสุนันทาเคยรองรับผู้อาศัย มากกว่า 900 คน ช่วง พ.ศ. 2462-2475 จนกลายเป็นเขตพระราชฐานชั้นในขนาดใหญ่						
9. วังสวนสุนันทาแสดงให้เห็นถึงเขตพระราชฐานฝ่ายในแห่งสุดท้ายที่รุ่งเรืองก่อนการเปลี่ยนแปลงการปกครอง ช่วง พ.ศ. 2475						
10. วังสวนสุนันทาเป็นที่ริเริ่ม อาหารดำรับชาววัง เช่น น้ำพริกปลาร้า และกิจกรรมนันทนาการ ต่างๆ เช่น แบดมินตัน เทนนิส กอล์ฟ การฉายภาพยนตร์ ช่วง พ.ศ. 2462-2475						
การรับรู้คุณค่าด้านสังคม						
1. วังสวนสุนันทาจัดการศึกษาพื้นฐานและมัธยมให้กับสตรีจากพระราชวงศ์ ตระกูลขุนนาง และครอบครัวข้าราชการ พ.ศ. 2462-2475						
2. วังสวนสุนันทา เป็นแหล่งอบรมกริยามารยาทให้กับสตรีจาก พระราชวงศ์ ตระกูลขุนนาง และครอบครัวข้าราชการ พ.ศ. 2462-2475						
3. วังสวนสุนันทา เคยเป็นแหล่งฝึกสอนสตรี เพื่อผลิตงานประดิษฐ์ดอกไม้ งานฝีมือ หัตถกรรม ดนตรี และอาหารให้กับราชสำนัก พ.ศ. 2462-2475						
4. อาคารโบราณของสวนสุนันทาเคยใช้เป็นโรงเรียนอนุบาลแห่งแรกของประเทศไทยที่รับทั้งนักเรียนปกติและนักเรียนที่มีความบกพร่องจนกลายเป็นโรงเรียนอนุบาลต้นแบบของประเทศ						
5. อาคารโบราณต่างๆของสวนสุนันทาเป็นส่วนหนึ่งของโรงเรียนสตรี และวิทยาลัยครู ที่จัดการเรียนการสอนด้านการบ้านการเรือน และด้านศึกษาศาสตร์เป็นหลักของประเทศไทย พ.ศ. 2480-2517						
6. อาคารโบราณ และอาคารหอประชุมใช้เป็นหอพัก และสถานศึกษาดำเนินการปกครองท้องถิ่น ของกระทรวงมหาดไทยจัดตั้งเป็นวิทยาลัยการปกครองช่วง พ.ศ. 2483-2537						

การรับรู้คุณค่าวิงสวนสุนันทา	มีคุณค่า					
	มาก 6	5	4	3	2	น้อย 1
การรับรู้คุณค่าทางวิทยาการ 1. พระที่นั่งนงคราญฯ สะท้อนให้เห็นถึงการพัฒนาทางวิทยาการ ได้รับอิทธิพลจากสถาปัตยกรรมของยุโรป และแสดงให้เห็นถึงความก้าวหน้าด้านเทคนิคการก่อสร้างและโครงสร้าง เช่น หลังคาแบบประทุน ในช่วงสมัยรัชกาลที่ 6 						
2. พระที่นั่งนงคราญฯ ใช้เทคนิคการเขียนภาพจิตรกรรมฝาผนังที่เป็นตัวแทนของงานศิลปะในยุคของรัชกาลที่ 6 ซึ่งไม่ค่อยปรากฏให้เห็นในปัจจุบัน  						
3. อาคารโบราณ และพระที่นั่งฯ แสดงให้เห็นถึงวัสดุการก่อสร้างที่ได้รับความนิยมในสมัยรัชกาลที่ 6 เช่น ปูนซีเมนต์ คอนกรีตเสริมเหล็ก และ หลังคากระเบื้องว่าว 						
4. อาคารโบราณ และพระที่นั่งฯ เป็นส่วนหนึ่งของการพัฒนาทางสถาปัตยกรรมที่สะท้อนให้เห็นถึงการออกแบบอาคารที่พัก และหมู่บ้านจัดสรรในปัจจุบัน  						

ส่วนที่ 3: ผลกระทบจากการท่องเที่ยวในพื้นที่วังสวนสุนันทา(สวนดุสิต, สวนสุนันทา, กรมส่งเสริมการปกครองท้องถิ่น)

ผลกระทบจากการจัดการท่องเที่ยวในพื้นที่วังสวนสุนันทา	เห็นด้วย อย่างยิ่ง 5	เห็นด้วย 4	ไม่แน่ใจ 3	ไม่เห็นด้วย 2	ไม่เห็นด้วย อย่างยิ่ง 1
1. การรบกวนประสิทธิภาพในการเรียนหรือการทำงานของ นักศึกษา อาจารย์ และเจ้าหน้าที่ในพื้นที่					
2. อุปสรรคในการใช้อาคารโบราณและบริเวณโดยรอบแก่ นักศึกษา อาจารย์ และเจ้าหน้าที่ ในพื้นที่					
3. การรบกวนการใช้ประโยชน์จากสิ่งอำนวยความสะดวกกับ นักศึกษา อาจารย์ และเจ้าหน้าที่ ในพื้นที่ เช่น หอสมุด ห้องน้ำ ม้านั่ง ที่จอดรถ ร้านค้า ฯลฯ					
4. การพัฒนาและปรับปรุงสิ่งอำนวยความสะดวกในพื้นที่					
5. ความเสื่อมโทรมของอาคารโบราณและบริเวณโดยรอบ					
6. สภาวะความไร้ระเบียบและสกปรกจากการทิ้งขยะไม่เป็นที่					
7. การเพิ่มโอกาสการพัฒนาศักยภาพนักศึกษาสาขาการท่องเที่ยว					
8. ปัญหามลภาวะในอากาศเพิ่มขึ้นจากเขม่าควันยานพาหนะที่เพิ่มขึ้น					
9. การส่งเสริมให้นักท่องเที่ยวเกิดความเข้าใจในคุณค่าและการ อนุรักษ์อาคารโบราณ					
10. เพิ่มค่าใช้จ่ายในการบำรุงรักษาอาคารโบราณและพื้นที่โดยรอบ					
11. การดึงงบประมาณจากส่วนอื่นมาใช้ ทำให้เสียโอกาสในการพัฒนา ด้านอื่นๆ					
12. การเพิ่มขึ้นของค่าใช้จ่ายในการโฆษณา ประชาสัมพันธ์					
13. ความร่วมมือของคนในพื้นที่และจากคนระหว่างพื้นที่(สวนดุสิต, กรมส่งเสริมการปกครองท้องถิ่น,สวนสุนันทา)					
14. สิ่งปลูกสร้างสมัยใหม่ที่อาจขัดกับลักษณะอาคารแบบดั้งเดิม (มลภาวะทางสายตา)					
15. การส่งเสริมให้คนในพื้นที่ใส่ใจในคุณค่าของอาคารโบราณ และ เหตุการณ์ในอดีต					
16. การส่งเสริมให้ผู้เกี่ยวข้องดูแลรักษา ปรับปรุง และอนุรักษ์อาคาร โบราณ และบริเวณโดยรอบ					
17. การเพิ่มรายได้ให้กับหน่วยงานที่เกี่ยวข้อง					
18. การเพิ่มโอกาสการจ้างงานในส่วนบริการนักท่องเที่ยว					
19. ปัญหาการจราจรติดขัดในพื้นที่					
20. ความแออัดของพื้นที่และความหนาแน่นของผู้คนที่เพิ่มขึ้น					

ส่วนที่ 4: ศักยภาพทางด้านการท่องเที่ยวของพื้นที่วังสวนสุนันทา (สวนดุสิต, สวนสุนันทา, กรมส่งเสริมการปกครองท้องถิ่น)

ศักยภาพในการจัดการท่องเที่ยว	เห็นด้วย อย่างยิ่ง 5	เห็นด้วย 4	ไม่แน่ใจ 3	ไม่เห็นด้วย 2	ไม่เห็นด้วย อย่างยิ่ง 1
1. ความพร้อมของสิ่งอำนวยความสะดวก เช่น ห้องน้ำ ที่จอดรถ ร้านอาหาร ที่พัก					
2. ความพร้อมของแหล่งข้อมูลเกี่ยวกับประวัติอาคารโบราณในพื้นที่					
3. ความพร้อมของแหล่งข้อมูลเกี่ยวกับพระราชประวัติ / ประวัติของ บุคคลสำคัญที่เคยประทับ / อาศัยอยู่ในพื้นที่					
4. ทำเลที่ตั้งในละแวกใกล้เคียงกับพระที่นั่งวิมานเมฆมีส่วนช่วยให้ นักท่องเที่ยวแวะมาเยี่ยมชม					
5. ความสะดวกในการเดินทางมายังพื้นที่สามารถเข้าถึงได้หลายวิธี					
6. คุณค่าด้านประวัติศาสตร์ ด้านความงาม ด้านสังคม ด้าน วิทยาการ สามารถดึงดูดนักท่องเที่ยวมาเยี่ยมชมได้					
7. ความคุ้มค่า (เงิน, เวลา, ความพยายาม) ในการเดินทางมา ท่องเที่ยวที่วังสวนสุนันทา					
8. งบประมาณในการโฆษณาประชาสัมพันธ์ที่เพียงพอ					
9. ความพร้อมด้านบุคลากรผู้ให้บริการ(มัคคุเทศก์ ประชาสัมพันธ์ ฯลฯ)					
10. ความเหมาะสมของป้ายบอกทางเพื่ออำนวยความสะดวกในการ เยี่ยมชม					
11. ความสมบูรณ์ของข้อมูลสถานที่ในการจัดทำป้ายอธิบายสถานที่ แผ่นพับ หรือนิทรรศการ					
12. การจัดเตรียมกิจกรรมนันทนาการ / กิจกรรมเชิงศิลปวัฒนธรรม อาทิ การสาธิตรำไทย การทำอาหารไทยโบราณ การแกะสลักผัก ผลไม้ เพื่อดึงดูดความสนใจของนักท่องเที่ยว					

ข้อเสนอแนะอื่นๆ

ขอบคุณที่ท่านสละเวลาตอบแบบสอบถาม

Appendix D

Stakeholders' Evaluations

Stakeholders' Evaluations

The research findings that were evaluated by respondents are summarized in the following tables.

The range of means for cultural significance and value assessment is calculated by:

$$\frac{\text{the highest mean} - \text{the lowest mean}}{\text{levels of significance}}$$

$$\frac{6 - 1}{5} = 1$$

Thus, means of cultural significance and values can be described below:

<u>Means</u>	<u>Levels of Significance</u>
1.00-2.00	Low
2.01-3.00	Moderate to Low
3.01-4.00	Moderate
4.01-5.00	Moderate to High
5.01-6.00	High

The range of means for tourism impact and potential assessment is calculated by:

$$\frac{\text{the highest mean} - \text{the lowest mean}}{\text{levels of opinion}}$$

$$\frac{5 - 1}{5} = 0.8$$

Thus, means of tourism impacts and potentials can be described below:

<u>Means</u>	<u>Levels of Opinion</u>
1.00-1.80	Strongly disagree
1.81-2.60	Disagree
2.61-3.40	Neither agree nor disagree
3.41-4.20	Agree
4.21-5.00	Strongly agree

Table 11 Overall Cultural Significance of Suansunandha

Cultural Significance	\bar{X}	S.D.	Levels of Significance
Scientific Value	5.24	0.70	High
Aesthetic Value	5.05	0.69	High
Historic Value	5.03	0.75	High
Social Value	5.03	0.78	High
Overall	5.07	0.62	High

Suansunandha was evaluated by respondents (long-term and short-term stakeholders of Suansunandha) as the highly significant site ($\bar{x} = 5.07$) that consists of scientific value (\bar{x} 5.24), aesthetic value (\bar{x} 5.05), historic value (\bar{x} 5.03) and social value (\bar{x} 5.03).

Table 12 Perceived Aesthetic Value of Suansunandha

Aesthetic Value	Levels of Significance						\bar{X}	S.D.	Significance
	High 6	5	4	3	2	Low 1			
The first type as a large mansion, and an evidence of the Romantic style	140 (35.4)	149 (37.6)	82 (20.7)	20 (5.1)	2 (0.5)	3 (0.7)	5.00	0.96	Moderate to High
The second type as a large mansion, and an evidence of the Romantic style	154 (38.9)	161 (40.7)	69 (17.4)	9 (2.2)	2 (0.5)	1 (0.3)	5.14	0.84	High
The third type as a small residence type and a part of the Romantic style	112 (28.3)	158 (39.9)	93 (23.4)	28 (7.1)	4 (1.0)	1 (0.3)	4.87	0.95	Moderate to High
The fourth type as a small residence and a part of the Romanticism style	109 (27.5)	172 (43.5)	80 (20.2)	30 (7.5)	4 (1.0)	1 (0.3)	4.88	0.94	Moderate to High
Nongkransamosorn Hall as an evidence of the Gothic style	219 (55.3)	119 (30.1)	46 (11.5)	10 (2.5)	1 (0.3)	1 (0.3)	5.37	0.83	High
Earth Hill & Tunnel as the element of the Romanticism palace	217 (54.8)	116 (29.4)	46 (11.6)	11 (2.8)	3 (0.7)	3 (0.7)	5.32	0.92	High
Canal&Pool as the element of the Romanticism palace	132 (33.3)	126 (31.9)	94 (23.7)	32 (8.1)	8 (2.0)	4 (1.0)	4.83	1.10	Moderate to High
Overall							5.05	0.69	High

From the above table, the findings disclose that Suansunandha consists of three components of the high significance and four components of the moderate-to-high significance of aesthetic value.

The high significance includes Nongkransamosorn Hall (H1) ($\bar{x} = 5.37$), Earth Hill (T1) ($\bar{x} = 5.32$) and the second type building (L3) ($\bar{x} = 5.14$).

The moderate-to-high significance includes the first type building (L1 & L2) ($\bar{x} = 5.00$), the fourth type building (S6) ($\bar{x} = 4.88$), the third type building (S1 to S5) ($\bar{x} = 4.87$) and Canal & Pool (C1, C2 & P1) ($\bar{x} = 4.83$).

Table 13 Perceived Historic Value of Suansunandha

Historic Value	Levels of Significance						\bar{X}	S.D.	Significance
	High 6	5	4	3	2	Low 1			
The residence of consorts of King Rama V	176 (44.4)	151 (38.1)	57 (14.4)	9 (2.3)	1 (0.3)	2 (0.5)	5.23	0.85	High
The residence of the daughter or group of daughters of King Rama V	157 (39.6)	158 (39.9)	69 (17.4)	9 (2.3)	2 (0.5)	1 (0.3)	5.15	0.85	High
The residence of the queen and daughter of King Rama V	166 (41.9)	154 (38.9)	61 (15.4)	14 (3.5)	0 (0.0)	1 (0.3)	5.18	0.85	High
Nongkransamosorn Hall as a venue of organizing royal functions of high royalties	156 (39.4)	137 (34.6)	78 (19.7)	17 (4.3)	6 (1.5)	2 (0.5)	5.05	0.99	High
Earth hill & tunnel in association with royal cuisine of the monarchs as the kitchenware store	136 (34.3)	142 (35.9)	86 (21.7)	26 (6.6)	3 (0.8)	3 (0.8)	4.94	1.00	Moderate to High
Earth hill & tunnel as the evidence of the beginning of education development and the severity of the Second World War	128 (32.3)	152 (38.4)	86 (21.7)	21 (5.3)	5 (1.3)	4 (1.0)	4.92	1.01	Moderate to High
Earth hill, tunnel, canal & pool as the oldest evidence of the royal garden and inner court establishment	150 (37.9)	151 (38.1)	65 (16.4)	22 (5.6)	4 (1.0)	4 (1.0)	5.03	1.01	High
Old residences as the evidence of the largest and pivotal inner court of the monarchs	153 (38.6)	144 (36.4)	74 (18.7)	19 (4.8)	4 (1.0)	2 (0.5)	5.05	0.96	High
Old residences as the part of the last inner court of Thailand	138 (34.8)	155 (39.1)	69 (17.4)	26 (6.6)	5 (1.3)	3 (0.8)	4.97	1.01	Moderate to High
Some residences as the place of creating the royal recipe and initiating modern recreational activities in Suansunandha	115 (29.0)	141 (35.6)	97 (24.5)	36 (9.1)	4 (1.0)	3 (0.8)	4.80	1.03	Moderate to High
Overall							5.03	0.75	High

From the above table, the findings disclose that Suansunandha consists of six components of the high significance and four components of the moderate-to-high significance of historic value.

The components of high significance includes the residence of consorts (S1) (\bar{x} = 5.23), the residence of the queen and daughter (L1 & L3) (\bar{x} = 5.18), the residence of the daughter or group of daughters of King Rama V (S2 to S5 & L1) (\bar{x} = 5.15), all old residences as evidence of the largest and pivotal inner court (\bar{x} =

5.05), Nongkransamosorn Hall (H1) as the venue of organizing royal functions (\bar{x} = 5.05), and Earth Hill & Tunnel (T1), Canal (C1 & C2) and Pool (P1) as the oldest evidence of royal garden and inner court (\bar{x} = 5.03) respectively.

The components of moderate-to-high significance includes all old residences as part of the last inner court of Thailand (\bar{x} = 4.97), Earth Hill & Tunnel (T1) as the kitchenware store associated with royal cuisine of the monarchs (\bar{x} = 4.94), T1 as the evidence of the beginning of education development and the severity of the Second World War (\bar{x} = 4.92), and some residences (L2 & L3) as the place of creating the royal recipe and initiating modern recreational activities in Suansunandha (\bar{x} = 4.80) respectively.

Table 14 Perceived Social Value of Suansunandha

Social Value	Levels of Significance						\bar{X}	S.D.	Significance
	High 6	5	4	3	2	Low 1			
An old residence as the evidence of enhancing the fundamental education to the court residents	154 (38.9)	163 (41.1)	60 (15.2)	13 (3.3)	4 (1.0)	2 (0.5)	5.12	0.91	High
Old residences as the part of training elite women of Thailand	158 (39.9)	146 (36.9)	67 (16.8)	22 (5.6)	1 (0.3)	2 (0.5)	5.09	0.94	High
Old residences as the part of creating handiworks, cuisines, performing arts for the monarchs	160 (40.4)	144 (36.4)	71 (17.9)	16 (4.0)	4 (1.0)	1 (0.3)	5.10	0.93	High
An old residence as the evidence of enhancing the equal chance of both disabled and normal pupils to study together	182 (46.0)	135 (34.1)	57 (14.3)	19 (4.8)	2 (0.5)	1 (0.3)	5.19	0.92	High
Old residences as the contribution to the fundamental education and teaching studies in Thailand	122 (30.8)	157 (39.6)	86 (21.7)	25 (6.4)	4 (1.0)	2 (0.5)	4.91	0.97	Moderate to High
The old residence and the hall as the evidence of the political change and the development of the local administration in Thailand	102 (25.8)	162 (40.8)	93 (23.5)	26 (6.6)	10 (2.5)	3 (0.8)	4.79	1.03	Moderate to High
Overall							5.03	0.78	High

From the above table, the findings disclose that Suansunandha consists of four components of the high significance and two components of the moderate-to-high significance of social value.

The components of high significance includes the residence (L1) enhancing the equal chance of both disabled and normal pupils to study together (\bar{x} = 5.19), the residence (L3) enhancing the fundamental education of the court residents (\bar{x} = 5.12), all residences as part of creating handiworks, cuisines and performing arts for the

monarchs ($\bar{x} = 5.10$), and all residences as part of training elite women of Thailand ($\bar{x} = 5.09$).

The components of moderate-to-high significance includes all old residences as the contribution to the fundamental education and teaching studies of Thailand ($\bar{x} = 4.91$), and a residence (L2) and Nongkransamosorn Hall (H1) as evidence of the political change and development of the local administration in Thailand ($\bar{x} = 4.79$).

Table 15 Perceived Scientific Value of Suansunandha

Scientific Value	Levels of Significance						\bar{X}	S.D.	Significance
	High 6	5	4	3	2	Low 1			
All residences and the hall as the demonstration of the European architecture influence in the Sixth Reign	193 (48.7)	140 (35.4)	52 (13.1)	8 (2.0)	2 (0.5)	1 (0.3)	5.29	0.83	High
The residence and the hall as the evidence of the rare artwork created with Fresco Secco Mural Painting Technique	168 (42.4)	163 (41.2)	53 (13.3)	10 (2.5)	1 (0.3)	1 (0.3)	5.22	0.82	High
All residences and the as the representative of the popularity of building materials in the Sixth Reign	173 (43.6)	165 (41.7)	50 (12.6)	6 (1.5)	1 (0.3)	1 (0.3)	5.26	0.78	High
All residences and the hall as the indication of the new age of the large building and housing estate design in Thailand	167 (42.2)	158 (39.8)	57 (14.4)	10 (2.5)	3 (0.8)	1 (0.3)	5.19	0.86	High
Overall							5.24	0.70	High

From the above table, the findings indicate that Suansunandha consists of four components of scientific value. All components are highly significant including all residences and Nongkransamosorn Hall (H1) demonstrating the influence of European architecture in the Sixth Reign ($\bar{x} = 5.29$), all residences and H1 representing the popularity of building materials in the Sixth Reign ($\bar{x} = 5.26$), the residence (L2) and H1 as evidence of Fresco Secco Mural Painting Technique ($\bar{x} = 5.22$), and all residences and H1 as evidence of the new age of the large building and housing estate design in Thailand ($\bar{x} = 5.19$).

Table 16 Tourism Impacts of Suansunandha

Impacts of Tourism	Levels of Opinion					\bar{X}	S.D.	Opinion
	Strongly agree		Strongly disagree					
	5	4	3	2	1			
Tourism might disrupt teaching, learning and working of lecturers, students,	52 (13.1)	158 (39.9)	132 (33.3)	47 (11.9)	7 (1.8)	3.51	0.92	Agree

Impacts of Tourism	Levels of Opinion					\bar{X}	S.D.	Opinion
	Strongly agree		Strongly disagree					
	5	4	3	2	1			

staff and officials.								
Tourism might obstruct the use of historic buildings and surroundings of lecturers, students, staff and officials.	48 (12.1)	176 (44.5)	126 (31.8)	40 (10.1)	6 (1.5)	3.56	0.88	Agree
Tourism might overuse facilities of lecturers, students, staff and officials such as library, toilets, benches, parking, and food stores.	62 (15.7)	178 (44.9)	100 (25.3)	53 (13.3)	3 (0.8)	3.61	0.93	Agree
Tourism might help develop and improve existing facilities in Suansunandha.	112 (28.3)	192 (48.5)	75 (18.9)	15 (3.8)	2 (0.5)	4.00	0.81	Agree
Tourism might accelerate deterioration of historic buildings and surroundings.	103 (26.0)	163 (41.2)	97 (24.4)	31 (7.8)	2 (0.5)	3.84	0.91	Agree
Tourism might make Suansunandha untidy and dirty caused by littering.	113 (28.5)	168 (42.4)	85 (21.5)	21 (5.3)	9 (2.3)	3.90	0.95	Agree
Tourism might create opportunity to develop tourism students.	104 (26.3)	177 (44.7)	97 (24.5)	15 (3.8)	3 (0.8)	3.92	0.85	Agree
Tourism might cause air pollution from smog and smoke of increasing vehicles.	102 (25.8)	179 (45.2)	90 (22.7)	23 (5.8)	2 (0.5)	3.90	0.86	Agree
Tourism might enhance tourists and related people understanding and conserving values of historic buildings.	144 (36.4)	172 (43.4)	73 (18.4)	6 (1.5)	1 (0.3)	4.14	0.78	Agree
Tourism might increase maintenance costs of historic buildings and surroundings.	103 (26.0)	174 (43.9)	96 (24.3)	21 (5.3)	2 (0.5)	3.90	0.86	Agree
Tourism might draw other development budgets generating opportunity cost.	74 (18.7)	159 (40.2)	132 (33.3)	29 (7.3)	2 (0.5)	3.69	0.87	Agree
Tourism might increase promotion costs.	59 (14.9)	192 (48.5)	115 (29.0)	26 (6.6)	4 (1.0)	3.70	0.83	Agree
Tourism might enhance collaboration among areas and within each area of Suansunandha.	89 (22.5)	189 (47.7)	111 (28.0)	5 (1.3)	2 (0.5)	3.90	0.77	Agree
Tourism might construct new building forms against	102 (25.8)	172 (43.4)	94 (23.7)	21 (5.3)	7 (1.8)	3.86	0.92	Agree

Impacts of Tourism	Levels of Opinion					\bar{X}	S.D.	Opinion
	Strongly agree		Strongly disagree					
	5	4	3	2	1			

existing historic buildings (visual pollution).								
Tourism might make stakeholders of Suansunandha more concerned with values of historic buildings and surroundings.	147 (37.1)	168 (42.4)	72 (18.2)	7 (2.0)	1 (0.3)	4.14	0.79	Agree
Tourism might encourage related people to preserve, improve and conserve historic buildings and surroundings.	157 (39.6)	160 (40.4)	66 (16.7)	13 (3.3)	0 (0.0)	4.16	0.81	Agree
Tourism might generate more incomes for related parties.	94 (23.7)	164 (41.5)	120 (30.3)	16 (4.0)	2 (0.5)	3.84	0.85	Agree
Tourism might increase employment opportunity for service providers.	107 (27.0)	172 (43.4)	101 (25.5)	13 (3.3)	3 (0.8)	3.93	0.84	Agree
Tourism might cause traffic congestion.	141 (35.6)	160 (40.4)	79 (19.9)	14 (3.6)	2 (0.5)	4.07	0.86	Agree
Tourism might overcrowd areas and cause excessive carrying capacity.	140 (35.4)	162 (40.9)	72 (18.1)	19 (4.8)	3 (0.8)	4.05	0.89	Agree
Overall						3.88	0.49	Agree

From the above table, the findings disclose that Suansunandha consists of 12 negative impacts and eight positive impacts of tourism. Most of the respondents agree with all components of tourism impacts.

The positive impacts of tourism include encouraging related people to preserve, improve and conserve historic buildings and surroundings ($\bar{x} = 4.16$), the understanding and conservation of historic buildings ($\bar{x} = 4.14$), stakeholders concerned with values of historic buildings and surroundings ($\bar{x} = 4.14$), the development of existing facilities ($\bar{x} = 4.00$), increasing employment opportunities ($\bar{x} = 3.93$), the development of tourism students ($\bar{x} = 3.92$), the collaboration among areas and within each area of Suansunandha ($\bar{x} = 3.90$), and generating incomes ($\bar{x} = 3.84$).

The negative impacts of tourism include traffic congestion ($\bar{x} = 4.07$), overcrowded areas and exceeding carrying capacity ($\bar{x} = 4.05$), increasing maintenance costs of historic buildings and surroundings ($\bar{x} = 3.90$), air pollution ($\bar{x} = 3.90$), littering ($\bar{x} = 3.90$), visual pollution ($\bar{x} = 3.86$), deterioration of historic buildings and surroundings ($\bar{x} = 3.84$), increasing promotion costs ($\bar{x} = 3.70$), opportunity cost ($\bar{x} = 3.69$), overused facilities ($\bar{x} = 3.61$), obstructed use of historic buildings and surroundings ($\bar{x} = 3.56$), and disrupted stakeholders ($\bar{x} = 3.51$).

Table 17 Tourism Potentials of Suansunandha

Tourism Potentials of Suansunandha	Levels of Opinion					\bar{X}	S.D.	Opinion
	Strongly agree		Strongly disagree					
	5	4	3	2	1			
Enough facilities such as toilets, parking, food stores, lodging services	66 (16.7)	183 (46.2)	88 (22.2)	47 (11.9)	12 (3.0)	3.62	0.99	Agree
Practical information and communication about history of old buildings and surroundings	64 (16.2)	204 (51.5)	96 (24.2)	31 (7.8)	1 (0.3)	3.76	0.82	Agree
Practical information and communication about history of royal residents in Suansunandha	91 (23.0)	194 (49.0)	89 (22.4)	21 (5.3)	1 (0.3)	3.89	0.82	Agree
Tourists visiting Suansunandha because of adjoining Vimanmek Mansion, a primary tourist attraction	100 (25.3)	209 (52.7)	77 (19.4)	9 (2.3)	1 (0.3)	4.01	0.75	Agree
Convenient and diverse modes of transportation to Suansunandha	70 (17.7)	220 (55.5)	81 (20.5)	23 (5.8)	2 (0.5)	3.84	0.79	Agree
Historic, aesthetic, social and scientific values attracting visitors	107 (27.0)	210 (53.1)	71 (17.9)	8 (2.0)	0 (0.0)	4.05	0.72	Agree
Well worth visit (money, time and effort) of Suansunandha	82 (20.7)	182 (46.0)	117 (29.5)	14 (3.5)	1 (0.3)	3.83	0.80	Agree
Adequate budgets of promotions	56 (14.1)	186 (47.0)	136 (34.3)	15 (3.8)	3 (0.8)	3.70	0.78	Agree
Readiness of service providers (guides, public relations staff)	65 (16.4)	189 (47.7)	117 (29.5)	22 (5.6)	3 (0.8)	3.73	0.82	Agree
Proper and enough signs of significant places	71 (17.9)	214 (54.0)	85 (21.5)	18 (4.6)	8 (2.0)	3.81	0.85	Agree
Complete information of signs, publications and exhibitions of significant places	78 (19.7)	193 (48.7)	98 (24.7)	22 (5.6)	5 (1.3)	3.80	0.86	Agree
Special event organization to attract tourists such as demonstrations of Thai dance, Thai cooking, fresh produce carving	102 (25.8)	194 (49.0)	88 (22.2)	10 (2.5)	2 (0.5)	3.97	0.79	Agree
Overall						3.83	0.56	Agree

From the above table, the findings disclose that Suansunandha consists of 12 components of tourism potentials. Most of the respondents agree with all components of tourism potentials of Suansunandha.

The components of tourism potentials of Suansunandha include cultural values attracting visitors ($\bar{x} = 4.05$), location of Suansunandha adjacent to Vimanmek Mansion ($\bar{x} = 4.01$), special event organization attracting tourists ($\bar{x} = 3.97$), information and communication about history of royal residents ($\bar{x} = 3.89$), convenient and diverse modes of transportation ($\bar{x} = 3.84$), well worth visit ($\bar{x} = 3.83$), signs of significant places ($\bar{x} = 3.81$), information of signs, publications and exhibitions of significant places ($\bar{x} = 3.80$), information and communication about history of old buildings and surroundings ($\bar{x} = 3.76$), readiness of service providers ($\bar{x} = 3.73$), adequate budgets of promotions ($\bar{x} = 3.70$), and enough facilities ($\bar{x} = 3.62$).

Table 18 Compared Means for Perceived Cultural Significance of Suansunandha between Short and Long Term Stakeholders

Cultural Significance	Temporary Stakeholders (n=362)		Permanent Stakeholders (n=34)		total		t	p
	\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.		
Aesthetic Value	5.07	0.64	4.90	1.08	5.05	0.69	1.36	0.17
Historic Value	5.04	0.72	4.94	1.03	5.03	0.75	0.69	0.48
Social Value	5.05	0.73	4.81	1.17	5.03	0.78	1.69	0.09
Scientific Value	5.24	0.66	5.16	1.02	5.24	0.70	0.63	0.52
Overall	5.08	0.58	4.94	0.96	5.07	0.62	1.27	0.20

From the above table, the findings indicate that stakeholders' opinions of both groups are not significantly different to overall cultural significance, aesthetic value, historic value, social value and scientific value ($p > 0.05$).

Table 19 Comparison of Means for Impacts of Tourism Management of Suansunandha between Short and Long Term Stakeholders

Tourism Impacts of Suansunandha	Temporary Stakeholders (n=362)		Permanent Stakeholders (n=34)		total		t	p
	\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.		
Overall	3.88	0.49	3.82	0.44	3.88	0.49	0.72	0.47

From the above table, the findings disclose that stakeholders' opinions of both groups are not significantly different to overall tourism impacts of Suansunandha ($p > 0.5$).

Table 20 Comparison of Means for Potentials of Tourism Management of Suansunandha between Short and Long Term Stakeholders

Tourism Potentials of Suansunandha	Temporary Stakeholders (n=362)		Permanent Stakeholders (n=34)		total		t	p
	\bar{X}	S.D.	\bar{X}	S.D.	\bar{X}	S.D.		
Overall	3.85	0.55	3.62	0.55	3.83	0.56	2.35	0.02*

* Statistical Significance at 0.05

From the above table, the findings indicate that stakeholders' opinions of both groups are significantly different to overall tourism potentials of Suansunandha ($p < 0.05$). Short-term (or temporary) stakeholders are more confident to tourism potentials of Suansunandha than long-term (or permanent) stakeholders.

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