

Valuable Modern Architecture Database for Conservation and Lifelong Learning

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ABSTRACT

This research focuses on the survey and study of building architecture built in approximately 1932-1992, in Nakhon Nayok Province, Thailand with the three research objectives; (1) to study modern architecture buildings in Nakhon Nayok that reach the criteria of modern building value for conservation and lifelong learning, (2) to create a roster of modern buildings in Nakhon Nayok by studying the distinctive features of architecture and its historical, social, economic, educational, and other valuable significances; and (3) to create a valuable buildings database according to modern architecture criteria, to be uploaded to the micro-phishing system, and to publish modern architecture conservation database in digital and photographic files as the database of Nakhon Nayok. The main features of the buildings are consistent with the nature of modern architecture that shows the structure importance, and the use of technology of various materials which shows the advance construction technology in those days. The buildings are as simple as a box. They are useful, respond to the public, worth to society and culture, and contain of historical significance. From the survey and study in Nakhon Nayok, it was found that there were 43 buildings reaching the criteria of modern building value for conservation and were saved in the database in accordance with the micro-phishing model. The details of 43 modern buildings are presented in a digital file format and photo database of modern buildings in Nakhon Nayok to propagate the modern architecture conservation database as a lifelong learning resource for the benefit of interested people.

Keywords: Building Architecture, Conservation, Lifelong Learning, Modern architecture

INTRODUCTION

Nakhon Nayok is a province in Thailand, located at latitude 14 degrees north, longitude 101 degrees east. It is 105 kilometers from Bangkok along Rangsit-Nakhon Nayok Road (National Highway No. 305) through Ongkharak to Nakhon Nayok. It has an area of approximately 2,122 square kilometers. As the national strategy (2018-2037) of Thailand; the strategy for eco-friendly development and growth which aims to achieve sustainable development in terms of manifesting a healthy society, economy, and environment; implementing good governance, and integrated partnerships at both national and international levels. The strategy has one of the key development guidelines; developing urban, rural, agricultural, and industrial areas with one key focus on a sustainable growth by sustainably conserving, rehabilitating, and developing natural resources, architectural heritage, art and culture, as well as local identity and lifestyles. Thus, Phranakhon Rajabhat University has a mission on local development which has responsibility of Nakhon Nayok, the university service area. This is in the same way for Srinakharinwirot University due to the outbound campus is located in Nakhon Nayok.

THEORETICAL BACKGROUND OF THE RESEARCH AND CONCEPTUAL FRAMEWORK

Research Background

The research on “Valuable Modern Architecture Database for Conservation and Lifelong Learning” has a concept of

conservation effected from countries around the world focus on preserving modern architecture buildings, the civilizations emerged during the 20th century, such as modern architecture in European countries, USA, Mexico, etc. that mean to develop them as sustainable learning resources.

The non-profit International Organization for Conservation established in 1988, named DOCOMOMO International, (Documentation and Conservation of Buildings, Sites, and Neighborhoods of the Modern Movement) has worked with more than 70 member countries around the world. As such, Thailand became a member country in 2014 under the name “DOCOMOMO Thailand” (www.DOCOMOMO.com, www.DOCOMOMOthailand.org) to publicize knowledge of valuable buildings in the 20th century since it is a period of technology, structural materials and construction that are

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unique to each country in the concept of modern architecture that reflect the advancement of technology, show simplicity in the building's appearance, material and structure, proportions, free from decorative motifs, but meanwhile point toward the value significance. Most of the Thai modern buildings were built during 1932-1985, after some government changes. These buildings respond to public uses, such as educational institutions, theatres, movie theatres, hotels, workplaces, or early high-rise buildings, etc.

Today, the numbers of valuable buildings in Thailand have been greatly reduced and lost day by day. They have been demolished and lost due to economic and social changes that occurred rapidly over the past 20 years. The research on "Valuable Modern Architecture Database for Conservation in Nakhon Nayok" was to create a database and collect building details, preserve building design documents, architectural work sites, and valuable neighborhoods of important communities and societies in the area of Nakhon Nayok, for example, Phra Chulachomklao Royal Military Academy, government buildings in the province, and commercial buildings built during 1932-1992 that still exist at present, in order to preserve these buildings in terms of architectural knowledge and to promote a valuable lifelong learning center for Thai people as a cultural heritage under the Big Database of Nakhon Nayok.

Research Conceptual Framework

Thai architecture, most influenced by western countries was during the reign of King Rama V (1868-1910 A.D.), when Thailand had extensive contacts with foreign countries in Europe. European artisans have played a role in creating architectural works in the country in the palace, temple and dynasty styles, such as Wat Niwet Thammapravat, Bang Pa-In Palace, etc. From that time, in the reign of King Rama VI (1910-1925) there was extensive construction of public buildings, and Thailand hired many foreign technicians who specialized in various fields to serve in the government services. Buildings built at that time, such as Saovabha Institute, Chulalongkorn Hospital, Chulalongkorn University, Samsen Hospital, and Hua Lumpong Railway Station were schools and educational institutions. Therefore, it is a style that combines Thai architecture with the utility of public buildings and construction technology. The New Age Architecture in Thailand was influenced by the new architectural approaches from the western hemisphere through the architects who came to serve in Thailand since the end of the reign of King Rama V., and obtained a performance of building designs in Thailand.

After the government change in 1932, the number of foreign architects decreased. Instead, Thai government granted scholarships to Thai students to study architecture profession in France, and England. Some were supported by private funds. From that time, architecture profession teaching courses were

set up in Thailand at Chulalongkorn University in 1933 with a pioneer, Ajarn Nart Phothiprasart, and the university hired a special European teacher to teach as well, such as Mr. E. Manfredy, Thai architect who received architectural education from abroad and in-country had designed a new international architectural plan to respond the utilization of most public buildings, and private sectors that were increasing, for example school buildings, theatre building for showing movies in those days, office buildings, etc.

Since then, architecture in Thailand has changed in parallel with other countries in the world. A study of modern Thai architecture which conducted during 1932-1989 appears in "Development of the Concept and Style of Architecture in the Past, Present and Future" and a research on "Siamese Architects: Fundamentals, Roles, Works and Concepts in 1932-1994", these researches present Thai architecture importance in the time of creative pioneer starting from the establishment of the first Faculty of Architecture in Thailand at Chulalongkorn University in 1933, with the aim to teach architecture in Thailand.

In 1934, the Association of Siamese Architects was established under the Royal Patronage of His Majesty the King, an architectural professional association, which marked the beginning of modern architecture that has been a solid foundation ever since.

Principles for considering the characteristics of modern architecture in Thailand consists of basic concepts, building styles, and relationships with the environment:

- (1) Basic concepts: The 5 basic concepts are:
 - (1.1) The needs to respond the industrial society which population has increased, so the highlight is no difference in model to reduce gap of the social class.
 - (1.2) Buildings, therefore have limited patterns that is mostly repeated, whether what categories they are. They often have similar patterns which are often cited as an international model.
 - (1.3) Building shapes are often pre-defined, but do not convey the specific meaning of the buildings, especially in terms of symbolic.
 - (1.4) Emphasis on the aesthetics arising from the use of machinery, united by combining art and technology as a straightforward appearance.
 - (1.5) Architects play an important sole role in designing. They are the ones who determine what is good or suitable for the user. The design is therefore often based on the architect's desire. Therefore, it is different from in the past that architects respected the wishes of the building's owner.
- (2) Building styles: The overall styles of the building are:
 - (2.1) simple shape, straight forward, light, clean, consistent,

- (2.2) ghastly decorative patterns and decorations, prohibited item, classified as a crime,
 - (2.3) pure appearance emphasized on abstract shapes, often look naked,
 - (2.4) looks like a box that doesn't say much, does not pay attention to the meaning of the shape, does not adore metaphor or continuity with the past, and
 - (2.5) cold style, lifeless, limitedly, straight pattern from structure and materials, repetitive similar spaces and boring elements.
- (3) The relationships of buildings to the environment: The relationships of buildings to the environment can be described in 2 issues as follows:
- (3.1) Buildings are often isolated or in conflict with their surrounding environments full of historical architecture which aim to be predominantly as a monument, holding an international limited building model.
 - (3.2) Buildings are often separated into units, blocks, mass in accordance to their specific function, located in the midst of green areas to get sunlight and fresh air. Loneliness and lack of liveliness is the result from separating activities from each other.

Modern Architecture style has an image that beauty is an automatic consequence of the efficient operation of machinery, various industrial products, especially vehicles such as railways, cars, steamboats, or even airships, etc. They are samples for modern architects to understand and inspire architectural design, like Le Corbusier. This research is therefore consistent with the building conservation guidelines in the international modern era, while the International DOCOMOMO Organization assists increase stability and publicizes the awareness of the modern Thai architecture value to international. "Valuable Modern Architecture Database for Conservation and Lifelong Learning" means to create a database, to collect building details, to preserve documents, building blueprint, architectural work sites, and community neighborhoods that are valuable to various important communities in Nakhon Nayok, to preserve these buildings in architectural knowledge, and to promote the valuable lifelong learning center for Thai people as a cultural heritage of Nakhon Nayok.

Research Objectives

- (1) to study modern architecture buildings in Nakhon Nayok that reach the criteria of modern building value for conservation and lifelong learning,
- (2) to create a roster of modern buildings in Nakhon Nayok by studying the distinctive features of architecture and its historical, social, economic, educational, and other valuable significances; and
- (3) to create a valuable buildings database according to modern architecture criteria, to be uploaded to the micro-phishing system, and to publish modern architecture conservation database in digital and photographic files as the database of Nakhon Nayok.

METHOD

The research was conducted by using field survey of modern building in Nakhon Nayok prefecture area. These buildings were built during 1935-1992. They mostly responded to the use of the public, represented the advancement in architecture, structural engineering systems and materials technology. The buildings categories are listed as residential, commercial, workplace, factories, public, educational, including neighborhood buildings. All of these buildings meet the criteria of modern architecture value evaluation. It will be disseminated to promote as a useful learning resource for interested people who can access to the world of media without borders.

Research method and process

- (1) Creating a buildings roster, using field surveys on sites of buildings in Nakhon Nayok which were built in the modern era, during the period of 1935-1992, and mostly responded to the use of the public, represented the advancement in architecture, structural engineering systems and materials technology;
- (2) Providing details of building categories in a list of residential, commercial, workplace, factories, public, educational, including neighborhood buildings that reach the criteria of modern architecture value evaluation;
 - (3) Reviewing and defining building criteria of modern architecture value evaluation in Thailand;
 - (4) Recording the buildings that pass the assessment criteria, then field visiting to plan a schedule, and surveying specific building data;
- (5) Asking permission, approaching an agency or person to access the buildings data by taking photographs, recording data, creating coordinates, recording important details or interviewing key people involved in modern architectural building work, and used it for evaluating the value of buildings according to item 4.;
- (6) Creating Micro phishing for the assessment of the building value based on the data obtained from surveys of importance in various fields, such as social, economic, education, and politics, etc.;
- (7) Summarizing of building list by field surveying in the modern building sites in Nakhon Nayok; (8) Creating blueprint data in a universal style to be a medium that everyone can easily access, including maps, building appearances in the form of information database and

digital file of building development concept to be architecture knowledge and conservative building utilization;

- (9) Organizing a seminar to transfer knowledge along with related organizations or arranging an exhibition, or disseminating information in English and Thai in the world of media without borders as a learning center, or presenting research results at the national and international conferences, or publishing in the national or international academic journals.

FINDINGS

From the survey research results of modern architecture building database in Nakhon Nayok by creating a building name list from the field survey of 43 modern buildings in Nakhon Nayok area, it can be concluded that most of the buildings respond to public use and represent advances in architectural, structural engineering systems, and materials technology.

Details of the 43 buildings from the list are divided into 10 categories, sorted by number as shown in Table 1.

The next process is to save the database of 43 modern architectural buildings built in the years, approximately 1932-1992 in Nakhon Nayok, under the following topics: (1) building name, location of building, GPS (Global Positioning System), (2) exterior and interior photograph and important parts of the building, and (3) the importance of buildings built in the modern era, divided into cultural aspect, history, designer, construction year, utility, structure, shape and material, and blueprint. These 3 topics are used for modern architecture buildings study in Nakhon Nayok area. The process follows the criteria of modern building value conservation to be saved on Micro-phishing system, which is the standard of building information record of DOCOMOMO international. The examples of the record are displayed in Table 2 and 3.

From the research survey and study of building sources of 43 buildings in the modern era from each area in Nakhon Nayok, it was found that:

Zone 1: in the community area of Ban Na, the 4 modern buildings can be accessed to the aforementioned buildings by 2 main routes: 1) travel along Highway No. 305, Khlong Rangsit-Nakhon Nayok Road, pass Thanyaburi, a district in Pathum Thani Province, get through Ongkharak, then access to Ban Na; and 2) travel along Highway No. 1, turn right at Hin Kong Intersection, then continue travel along Suwannasorn Road (Highway No. 33) to Ban Na.

Zone 2: To access to 7 modern buildings in the community area of Ongkhalak, the main route is to travel along Highway No. 305, Khlong Rangsit-Nakhon Nayok Road, pass through Thanyaburi, Pathum Thani, then access to Ongkharak.

Zone 3: There are 2 main routes accessing to the 32 modern buildings in the community area of Muang Nakhon Nayok: (1) travel along the Highway No.305, Leap Klong Rangsit-Nakhon Nayok Road, get through Thanyaburi, Pathum Thani, continue travel to Ongkarak, then Ban Na, and access Muang Nakhon Nayok. The distance is about 105 kilometers; and (2) travel along Highway No.1, turn right at Hin Kong Intersection, and continue travel along Suwannasorn Road (Highway No.33) to access Muang Nakhon Nayok. The distance is about 137 kilometers.

DISCUSSION AND CONCLUSION

Discussion

From the survey of 43 modern architecture buildings in Nakhon Nayok, it was found that the most is 21% or 9 buildings is Administrative Management category (ADM), followed by 6% or 7 buildings is Religion (REL), that is equal to Education (EDC), next up 9% or 4 buildings of each category is Public Service (PBS), equal to Transportation Communication (TRC), followed by 7% or 3 buildings of each category is Commercial (COM) and Recreation (REC), while 5% or 2 buildings is Health (HLT), and only 2% or 1 building is Residence (RES).

Table 1. Number and percentage of 43 modern architecture buildings in Nakhon Nayok categorized by utilities

<i>Items</i>	<i>Categories</i>	<i>Number of buildings</i>	<i>Percentage</i>
1	Administration (ADM)	9	21
2	Religion (REL)	7	16
3	Education (EDC)	7	16
4	LAW	4	9
5	Transportation, Communication (TRC)	4	9
6	Public Service (PBS)	4	9
7	Commercial (COM)	3	7
8	Recreation (REC)	3	7
9	Health (HLT)	2	5
10	Residence (RES)	1	2

Table 2: Example 1. Nakhon Nayok Post Office Building

<p>-Photograph of Nakhon Nayok Post Office Building- Summary of important changes after completion</p>	<p>History of building</p>	<p>On 25 February 1977, the Communications Authority of Thailand (CAT) was established under the Communications Authority of Thailand Act 1976. The duty is to operate all activities including postal services from the Post and Telegraph Department. It operates as a state enterprise for Post Office in Nakhon Nayok. In the former time, it was on the land where the anachart Bank is currently located, then around 1982 it was moved to the recent location.</p>	
	<p>The building has been well maintained and periodically renovated by repainting or adjusting the interior design for many parts of the building, such as the hall, but still remain canopy style at the entrance while aluminum cladding is used as a sign of "Nakhon Nayok Post Office".</p>		
<p>Name</p>	<p>Post, Nakhon Nayok"</p>	<p>Building character</p>	<p>The overall building layout is rectangular with simple shape in accordance with the concept of modern architecture. All building structure is reinforced concrete with a column and beam structure system. The building shape is modern with a canopy along the glass. There are 2 entrances to the building, the first is the main entrance in front of the building, leading to the reception hall and a postal transaction section, and the secondary entrance is at the back of the building with the hallway on the right leading up to the second floor. The car accessibility is from the front of the building. Chiller air system is used for the building.</p>
<p>Original Name</p>	<p>Nakhon Nayok Post Office</p>		
<p>GPS Coordinate</p>	<p>14°12'08"N 101°12'57"E</p>		
<p>Current typology</p>	<p>Transportation, Communication: TRC (Post)</p>		
<p>Original typology</p>	<p>Transportation, Communication: TRC (Post)</p>		
<p>State of Protection</p>	<p>Thai Post Office, Co., Ltd.</p>		
<p>Year Of completion of construction</p>	<p>B.E.2525</p>		
<p>Architectural Designer: Assistant Designer: Engineer:</p>	<p>N/A</p>		

Table 3: Example 2: Chunki Silathong Building

<p>-Photograph of Chunki Silathong Building-</p>	<p>History of building In 1947, Mr. Chun Nokkeaw, the governor at that time set up a committee and financial fund for the hospital construction. Later, the Ministry of Interior approved a sum from the local 1954 warfare allowance to support this contribution. Also, the Medical Department approved 100,000 baht to join this fund. Thus, the province used the capital of 152,417.95 baht (8,620 baht from donations and 29,745 baht from Mrs. Chunki Silathong) to purchase land from populates, at the total of 25 Rai 24 square Wa. Nakhon Nayok Hospital was opened for medical examination for the first time on August 23, 1954. Later in the year 1963, Mrs. Chunki Silathong donated another 320,000 baht to build an obstetric building, named "Chunkee Silathong Building".</p> <p>Summary of important changes after opening, but added canopies on the 2nd floor completion As air conditioning system was installed inside the building, so they had to block door and window changes after openings, but added canopies on the 2nd floor completion</p>
<p>Original Name</p> <p>GPS Coordinate</p> <p>Current typology</p> <p>Original typology</p> <p>State of Protection</p> <p>Year of competition of construction</p> <p>Architectural Designer:</p> <p>Assistant Designer:</p> <p>Engineer:</p>	<p>Chunki Silathong Building (Obstetrics Building)</p> <p>14°12'28"N 101°12'46"E</p> <p>HLT (Hospital)</p> <p>HLT (Hospital)</p> <p>Nakhon Nayok Hospital</p> <p>of B.E. 2506</p> <p>N/A</p>

Table 4: Zone 1, Information database of modern architecture work in Ban Na community area

	<i>Building Name</i>	<i>Location</i>	<i>Category</i>
1	Power Station, Nakhon Nayok 1	No. 51, Moo 10, Pa Kha, Ban Na, Nakhon Nayok 26110	PBS
2	Baan Na Post Office	28 Moo 10, Suwannasorn Rd., Ban Na, Nakhon Nayok 26110	TRC
3	Baan Na Police Office	7025 2003 Suwannasorn Rd., Ban Na, Nakhon Nayok 26110	LAW
4	Khao Perm Subdistrict Community Police Office	National Highway No. 3222, Khao Perm, Ban Na, Nakhon Nayok 26110	LAW

The findings mentioned above are consistent in historical theory of Nakhon Nayok as an agricultural city with Administrative Management (ADM), including different categories of government buildings: Law, Transportation Communication (TRC), Public Service (PBS) and Health (HLT). Nakhon Nayok also has religious background, beliefs

including Buddhism, Christianity and Islam that has brought modern architecture with a variety of religions (Religion: REL). It is also the location of Phra Chulachomklao Royal Military Academy at Khao Changok that creates modern architecture building category of Education (EDC) including Recreation (REC) in Phra Chulachomklao Royal Military

Table 5. Information Database for Modern Architecture in Ongkharak Community Area

	<i>Building Name</i>	<i>Location</i>	<i>Category</i>
1	Ongkharak Police Station, Nakhon Nayok	3001 Rural Road, Ongkharak, Nakhon Nayok 26120	LAW
2	Provincial Electricity Authority, Ongkharak	66 Moo 3, Ongkharak, Nakhon Nayok 26120	PBS
3	Nakhon Nayok Provincial Land Office, Ongkharak Branch	Highway No. 305, Khlong Yai, Ongkharak Nakhon Nayok 26120	ADM
4	Railway Station, Ongkharak	Ongkharak, Nakhon Nayok 26120	TRC
5	Phra Nang Maria Church, Cathedral of the Immaculate Conception	Toei Yai, Ongkharak, Nakhon Nayok 26120	REL
6	Da Rul Mumimin Mosque, Nakhon Nayok	1 Chumphon, Khlong 15, Sai Klang, Ongkharak, Nakhon Nayok 26120	REL (Mosque)
7	Hakimuddin Chaloe Phrakiat Central Mosque	Moo 5 Chumphon, Khlong 15, Sai Klang Ongkharak, Nakhon Nayok 26120	REL (Mosque)

Table 6: Zone 3, Modern Architecture Information Database of Community Area, Mueang Nakhon Nayok

	<i>Building Name</i>	<i>Location</i>	<i>Category</i>
1	Nakhon Nayok Post Office	1-248/11 Chaiphon Road, Muang Nakhon Nayok, Nakhon Nayok 26000	TRC
2	Mueang Nakhon Nayok Police Station	B/1-392 Nakhon Nayok Subdistrict, Muang Nakhon Nayok, Nakhon Nayok 26000	ADM
3	Nakhon Nayok Provincial Police Station	B1-392 Ban Yai, Nakhon Nayok Subdistrict, Muang Nakhon Nayok, Nakhon Nayok 26000	ADM
4	Bank for Agriculture and Agricultural Cooperatives Nakhon Nayok	180 Moo.7 Suwannasorn Road, Ban Yai, Muang Nakhon Nayok, Nakhon Nayok 26000	ADM
5	Government Savings Bank, Nakhon Nayok	B1/380, Sri Muang Road, Soi Sri Muang, Ban Yai, Mueang Nakhon Nayok, Nakhon Nayok 26000	ADM
6	Nakhon Nayok Provincial Prison	240 Chaiphon Road, Muang Nakhon Nayok, Nakhon Nayok 26000	LAW
7	Nakhon Nayok Provincial Electricity Authority	138 Moo. 5 Ban Yai, Nakhon Nayok Subdistrict, Muang Nakhon Nayok, Nakhon Nayok 26000	PBS
8	Chao Pho Khun Dan Prakan Chon Shrine, Nakhon Nayok	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	REL
9	Cadets Museum, 100 - Year CRMA	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	REC
10	CRMA (Red Building)	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	EDC
11	Buddhist Temple, CRMA	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	REL
12	Student Club, CRMA	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	REC
13	Auditorium, CRMA, Nakhon Nayok	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	EDC
14	Sala Wong Klom CRMA, Nakhon Nayok	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	REL
15	Education Department CRMA, Nakhon Nayok	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	EDC
16	Education Section, CRMA, Nakhon Nayok	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	Meeting Hall EDC

	<i>Building Name</i>	<i>Location</i>	<i>Category</i>
17	Division of Educational History, CRMA, Nakhon Nayok	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	Central Buildings EDC
18	Herb Garden "Kittikachorn Pharmawet Foundation" (Herbs) Military Pharmacy Factory	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	EDC
19	CRMA Officer's Club	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	REC
20	Hospital Of the CRMA	99 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang Nakhon Nayok, Nakhon Nayok 26000	HLT
21	Tang Teng Hong Pharmacy, Nakhon Nayok	B/4 054-5 Panich Charoen Road, Muang Nakhon Nayok, Nakhon Nayok 26000	COM
22	Hai Jiang Gold Mall, Nakhon Nayok	B/3 004/2 Panich Charoen Road Wang Krachom, Mueang Nakhon Nayok, Nakhon Nayok 26000	COM
23	Wang Krachom Fresh Market, Nakhon Nayok"	22/72 Talad Kao Road, Nakhon Nayok, Mueang Nakhon Nayok, Nakhon Nayok 26000	COM
24	Kokkua Palace Hotel, Nakhon Nayok	420 B/1 Thongchai Road, Soi Sri Mueang, Mueang Nakhon Nayok, Nakhon Nayok 26000	RES
25	Manda Phra Satsana Chak Church, Nakhon Nayok	Ban Yai, Mueang Nakhon Nayok, Nakhon Nayok 26000	REL
26	Chunki Building, Silathong, Nakhon Nayok	100 Suwannasorn Road, (Khao Cha-Ngok) Brahmanee, Mueang, Nakhon Nayok 26000	HLT
27	Disaster Prevention and Mitigation Office	82 Nakhon Nayok -Salika, Khao Phra, Mueang Nakhon Nayok, Nakhon Nayok 26000	PBS
28	Tourism Authority of Thailand (TAT) Nakhon Nayok Office	182/88 Moo1 Suwannasorn Road, Tha Chang, Mueang Nakhon Nayok, Nakhon Nayok 26000	ADM
29	Nakhon Nayok Provincial Natural Resources and Environment Office	B1 306/2 Suwannasorn Road, Ban Yai, Mueang Nakhon Nayok, Nakhon Nayok 26000	ADM
30	Nakhon Nayok Provincial Land Transport	135 Moo 13 near Sam Sao Intersection, Rangsit - Nakhon Nayok Road, Tha Chang, Mueang Nakhon Nayok, Nakhon Nayok 26000	TRC
31	Nakhon Nayok Social Security Office	79/1 Moo10 Suwannasorn Road, Tha Chang, Mueang Nakhon Nayok, Nakhon Nayok 26000	ADM
32	Nakhon Nayok Provincial Agriculture Extension Office	79 Moo 10 Suwannasorn Road, Tha Chang, Mueang Nakhon Nayok, Nakhon Nayok 26000	ADM

Academy. Besides, since Nakhon Nayok is a gateway city and is not too far from Bangkok, the capital city, there is only 1 building of residential category (Residential: RES).

From the field trip, the journey from Bangkok to Nakhon Nayok to survey buildings, and create database of 43 modern architecture buildings can be summarized that the most convenient car travel today is two main routes: 1) traveling along Highway No. 305, from Khlong Rangsit-Nakhon Nayok Road, to Thanyaburi, a district in Pathum Thani, pass through Ongkharak, Ban Na, Mueang Nakhon Nayok, then it will reach Nakhon Nayok Province. The distance is about 105 kilometers; and 2) Traveling along Highway No. 1, turn right at Hin Kong Intersection, continue travel along Suwannasorn Road. (Highway 33), until arrive Nakhon Nayok Province. The distance is about 137 kilometers.

According to research surveys sources of 43 buildings in modern era in Nakhon Nayok, it found that modern

buildings in Nakhon Nayok are located in 3 community area zones:

(1) Ban Na (2) Ongkharak (3) Mueang Nakhon Nayok

CONCLUSION

Modern Architecture Database of 43 buildings in Nakhon Nayok saved in Micro-phishing according to the DOCOMOMO International will be published as a beneficial learning resource for interested people to access to the world of media without borders. This database is in process of uploading to WWW.ARCHPNRU.COM that can be developed this valuable modern architecture database for conservation. It will be useful in linking the big database in education of Nakhon Nayok as a lifelong learning center for local people and tourists according to Knowles's andragogy concept (Silva, 2018). Furthermore, in economy and tourism database which will increase income of Nakhon Nayok in the near future. Therefore, the next phrase of the study will be the database development to be active lifelong



Fig. 1. Summary of the routes to explore the modern architecture buildings database in Nakhon Nayok area zone



Fig. 2. Summary of the zones, areas with modern buildings in Nakhon Nayok

learning activities for local people and tourists regarding conservation as well as economy promotion.

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