

Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity

Vientiane Capital

No:/GVC

Vientiane Capital, Date:.....

Decision (koh tok lon)

on

Vientiane City Plan Management Regulation (kot la biab)

- Pursuant to the Urban Planning Law No: 03/99/NA dated 03rd/04/1999;
- Pursuant to the Local Governance Law of Lao PDR No: 03/NA dated 21st/10/2003;
- Pursuant to the Prime Minister's Decree No: 216/PM dated 10th/12/2002 on endorsement of Vientiane City Development Plan;
- Based on the unanimous consent of discussion meeting regarding the draft Vientiane City Plan Management Regulation among:
 - Ministry of Communication, Transport, Post and Construction,
 - Vientiane Capital and
 - Sector concerned
 - on 19th Sep. 2007;
- Based on the proposal of Communication, Transport, Post and Construction Division in Vientiane Capital No: 2261/CTPC .VC dated 08th Oct. 2007.

Blue parts are <u>supplementary explanations</u>.

Red parts and underlined parts are <u>important parts</u> or <u>parts to be corrected (mistakes in the</u> <u>original Lao text)</u>.

The Governor of Vientiane Capital issues the Decision:

Chapter I General Provisions

Article 1: Objective

This Decision (kho tok lon) on Vientiane City Plan Management Regulation is aimed at:

- Disseminating the Prime minister's Decree No: 216/PM dated 10th Dec. 2002 regarding the endorsement of Vientiane City Development plan;

- being <u>reference (bon ing)</u>
 - for the urban and community development, management, construction management, land use; and
 - for the consideration when issuing the permission of building/structure construction, in scope of Vientiane city plan area,
- ensuring the Vientiane city to be in peace, clean, green, bright, charming and civilized, and to protect the ancient site, the cultural architecture, the natural environment and view.

Article 2: Expectation

- To expand the economic social cultural development plan in Vientiane city systematically, consecutively, to improve the living quality of people get better step by step;
- To create the Vientiane city to have the beautiful view, tidy, clean, safety and calm to meet the word that Vientiane is capital city of Lao PDR;
- To make the people
 - recognize and understand the importance of the Vientiane City Plan Management Regulation and
 - take part in the city development and protection to be livable city;
- To make use the land in the urban area appropriately and adequately in order to support the buildings and urban activities in the future;
- To protect and renovate the cultural heritage, ancient site, architecture in the urban area to have value and sustainably.

Article 3: Scope of the Regulation

- 1. This Regulation is applicable to
 - all the
 - government's,
 - common,
 - private,
 - domestic people's, and
 - foreigner's
 - constructions,
 - in the scope of urban area and communities specified in the City Plan (Vientiane city plan area), which has area of 20,950 hectares and covers 189 villages,
 - in the following types:
 - all (newly) construction activities,
 - renovation,
 - change of building use,
 - digging or backfill,
 - installation and structures, etc. (The last part sounds strange.)
- 2. This Regulation is not applied to the following construction activity (khichakaan-koo-saang):

- The construction activity (khichakaan-pok-saang) directly involved in the specific secret of:

- defense,
- security,
- specific management zone of the sector concerned;

- Construction activity of urban infrastructure development projects according to the city plan, which are already approved;
- - Construction activity in
 - the specific industrial zone, (This regulation is applied to ordinary industrial zone.)
 - new urban development zone, and (New urban development zone is not the same with City-expansion Zone.)
 - developed-villages group, and (It is difficult to identify where developed-villages group is.)
 - other construction activities, which are located outside of the specified city plan.

The design, technical documents and detailed development program, however, should be submitted to the City Plan Agency and related technical agencies in accordance with the regulation and law. (These activities are not needed to meet this regulation, but are needed to other regulations and laws.)

Article 4: Classification into the Common and Specific Land Use

The boundary of each zone is specified in the land use plan and the specific development plan. (There can be the specific development plan in the area of the land use plan.) The boundary of each zone is specified with the Mekong riverbank, roads, small paths, and natural canals. The land use area is classified into major and minor zones as below:

1. Central Urban Area

- Central Urban Area:

- has high density of construction and population more than other zones,
- has the public facilities and utilities, which are the trade center, service, and business operations, excluding the industrial factory operation of any of three levels and large warehouse.
- Central Urban Area:
 - consists of the land for residential buildings, trade, service, office and organizations, and
- It is classified into 4 zones: Historic-Town Conservation Zone; Administration-and-Trade Center Zone; Ancient-Site Conservation Zone and New Central Zone. The legend used on the city plan is as below.

ZPP-Ua - Historic-Town Conservation Zone

ZPP-Ub - Ancient-Site Conservation Zone

UAa - Administration-and-Trade Center Zone

UAb - New Central Zone

2. Surroundings of Central Urban Area

- Surroundings of Central Urban Zone:

- has density of constructions and population lower than Central Urban Zone,
- has green zone,
- has the public facilities and utilities, and
- is also the trade center, service, business operations, excluding the first and second level of industrial factory.
- Surroundings of Central Urban Zone:
 - consists of the land for residential buildings, trade, service, office and organizations, and
- It is classified into 4 zones. The legend used on the city plan is as below:
 - UBa Zone of Surroundings of Central Urban Zone within Aircraft Flying Zone

UBb – Zone of *Surroundings of Central Urban Zone*

UCa - Mekong Riverbank Zone within Aircraft Flying Zone

UCb - Mekong Riverbank Zone

3. Surroundings of Urban Area and Suburb

- Surroundings of Urban Area and Suburb:
 - is the area surrounding Surroundings of Central Urban Area,
 - has density of structures lower than Surroundings of Central Urban Area.
 - There are agriculture, handicraft and the second and third level of industrial factory, and the empty zone.
- Surroundings of Urban Area and Suburb:
 - consists of the land for residential structures, office and organizations, small and

medium industry, including the large warehouse and others.

- It is classified into 4 zones. The legend used on the city plan is as below:
 - UDa Zone of Surroundings of Urban Area within Aircraft Flying Zone
 - UDb Zone of Surroundings of Urban Area relevant to Agricultural Activities
 - UDc Zone of Surroundings of Urban Araa which will expand
 - UF Zone of Villages surrounded by Rice Field

4. City-expansion Area

- City-expansion Area
 - is a zone which will be extended from the suburb,
 - is allocated to ensure the expansion of city and population and social-economic growth, and
 - can be the new city centers or urban surrounding zone in future.
- *City-expansion Area* consists of land for residential structures, education institution, airport, trade, service, handicraft, the first level of industry factory, transport, including:
 - the land for agriculture and forestry for relaxing, and
 - land for tourism and others.
- It consists of 1 zone and use the legend on the plan is as below:

UE - City-expansion Zone

5. Minor Zone and Specific Land Use Zone

Minor Zone and *Specific Land Use Zone* are target zones for reservation in favor of the Government, as the zone has the national importance. There are:

5.1 *Reservation Zone*: NE

This *Reservation Zone* has the target for reservation to be developed as:

- the relax zone, (kheet phak pon)

- park,

- small garden or
- green zone,
- in the city.

5.2 Industrial Zone I

Industrial Zone is specified to develop and construct the second and third level of industrial factory.

5.3 *Transport Zone*: T

Transport zone consists of

- -bus station,
- northern bus station,
- southern bus station,
- Wattay airport, and

- port.

5.4 *Education Zone*: Ef

Education zone consists of Dongdok campus, Sokpalouang campus and others.

5.5 Public Health Zone: Eh

Public Health Zone consists of Mittaphab hospital, Mahosot hospital, 103 hospital and Setthathirat hospital.

5.6 Military Zone and Public Security Zone: Em

Military Zone and Public Security Zone consists of Camp km 6, Pakpasak camp, Chi Nai Mo camp, Fire Arrow Camp in Chommany village and others.

5.7 Agricultural Zone and Zone of Rice Fields surrounded by Build-up Area: NA and A

Agricultural Zone and Zone of Rice Fields surrounded by Build-up Area are specified on the land use plan or specific development plan.

Article 5: Consideration of Amendment

- 1. After using this regulation (kot la biab) for 5-15 years, it can be amended;
- 2. The specific development plan, which is determined during implementation of this regulation, shall include the detailed plan and specific rule consistent with the zoning code.

Charter II Land Use Regulation for Each Zone

Article 6: Land use regulation (la-biab) for each zone

A. Central Urban Area

A.1. ZPP-Ua - Historic-Town Conservation Zone

1. General features

- Location, specification and characteristics
 - It is located along the Mekong River, which cover entire and partial of following villages: Vat Chan Tha, Haiysok, Anou, Meexay, Xiengnyeun, Sisaket, Kaoyord, Phiavat, Seemeaung, Thatkhao, Phapho, Phaxay, Beungkhayong Neau and Beungkhayong Tai (see map 02-1)
 - It is the area which has old temples, old buildings and old offices, such as:
 - traditional Lao style house,
 - Payook style house,
 - Lao house in the colonial era,
 - colonial house,
 - row house,
 - apartment, and
 - mixed style house,
 - which are valuable and architectural heritages.
 - This area has well-developed infrastructure.
 - For this area, specific regulation has to be carried out more strictly than other areas, in order to conserve the historic town including:
 - cultural-historic heritage,
 - urban architectures and
 - cityscape.
 - For this area, besides the specific zoning code, heritage conservative guideline should be applied.

- Boundary

- Boundary of this area is determined based on the boundary of the inner city's wall, which begins from Paak Nam Paa Sak to Setthathilart Road, Samsanthai Road straight to Khualuang Tai intersection, passes national stadium [Currently Chao Anou Vong Stadium], then goes along Khounboulom Road, then connects to Khovieng Road pass Talat sao, go alongside to the west of Nongchan porn, Beungkhayong until reaches Sokpaluang, then connect to Khua khao at the 3rd kilometre of Tha deau Road, go along Tha deau Road to the end of That Khao village, then get in to Fangoom Road and keep going to Paak Nam Paa Sak.

- Area

The area of ZPP-Ua (Historic-Town Conservation Zone) covers 180 hectares.

2. Activities to be permitted and to be prohibited

- Activities to be permitted

- Residential buildings, such as (residential) independent building, (residential) collective building, (residential) consecutive building (row house), hotel, restaurant.
- Public buildings (aakhaan saa-tha-la-na), such as school, hospital, cultural-social buildings, office, religious buildings, sport buildings and commercial buildings, etc.
- Transport station, public parking lot and other service activities, etc.
- Small handicraft activities, which have area of 300 square meters or less, and which do not generate pollution and annoyance to the urban area.

- Activities to be prohibited

- - All levels of industrial factories, and
 - warehouse which has area of more than 300 square meters.

Expansion of those building is not allowed.

- Any activities, which cause pollution and annoyance, and cause trouble in the urban area, such as repair garage, gas warehouse, chemical warehouse, machine shop,

factory that causes pollution, pile of metal scrap, etc. regardless of amount

- A travelling of:

- truck which has more than 2 axles, more than 4 wheels, and has total weight more than 8.5 tons, and
- public bus and tour bus, which has more than 25 seats.
- To build the parking lot for above mentioned vehicle.

3. Special case to be permitted

- To change the land use, but must preserve its existing condition. It is possible to change the land use if permitted. But existing form must be preserved.
- Gas station
- Small warehouse

4. Gateway (thaang khaw ook) and Road (sen thaang)

Every site to be constructed **must have** these following conditions:

- The site must face a public road;
- In case that the site does not directly face the public road, it must have a common path to connect to the public road;
- Acceptable common path must be:
 - at least 4 metres wide, in the case that its length is not more than 50 metres.
 - If the common path exceeds 50 metres long, it must have the width at least 6 metres and also have the U-turn point;
- Gateway must be consistent with detailed land development program, as well as being agreed by the city planning management organization.

5. Technical infrastructure network (taa-naan khong-laan theknik)

Every site to be constructed must connect to technical infrastructure network, such as:

- Electricity, telephone, water supply, wasted water drainage, rain water drainage and trash clean-up system.
- In case that the site is far from those existing network, the private technical infrastructure network, which surely comprises with the issue technical standard, must be built;
- In case where technical infrastructure connection passes through others' site in any condition, such as under the ground, on the ground, or in the air, the literal permission from that site owner must be issued.

6. Feature and size of site

Site to be constructed has these following characteristics:

- To locate in the safety place, without any risks taking condition, such as under the tension wire, near the river bank or land erosion area, flooding area and so on;
- Usage of the land does not go against other businesses, such as agricultural land, cultural land, administrative land or the preservative land for public use.
- Natural canal and water drainage, which is laying either in individual or public land, is considered as the public object, which any obstacles are not allowed. An entering for maintaining the good condition must be allowed.
- Row house facing the road, must has the width of at least 4 meters.
- Site area which can be constructed must not include the preservation area and must be at least 48 square metres for row buildings, and 140 square metres for independent buildings.

It (the site area which can be constructed) does not include the preservation area and must has the area at least 48 $\rm m^2$ for consecutive buildings and 140 $\rm m^2$ for independent buildings

7. Distance between building and boundary of road area

- Every construction should not exceed (boo hai koen) the construction line;
- It should follow the existing construction line or those city planning management organization determined;
- In the case that the construction line is not yet determined, buildings should be constructed out of the road area (khoob kheet thaang), with distance which is stated in the Ministerial Order on city planning No. 1366/MCPTC, dated April 26, 2006;
- In case of an independent buildings, it should setback from the construction line at least 4 metres;

- Part of the building, which hang over the limitation of the construction line, is allowed to exceed up to 1.2 metres, but has to keep at least 3 metres high from to the road surface.

8. Distance between building and site border

- Construction of consecutive building

- It shall (samaat) be constructed consecutively, but of which depth, should not exceed 20 metres;
- The road facing side is allowed to be consecutively built up to 50 metres long and must have space for gateway. In case that buildings is constructed consecutively more than 50 metres long, the detailed plan must be researched, and approval from city planning management organization shall be issued;
- It could be built consecutively to the existing building, in the condition that the new building's connected side does not have any window and literal approval from those existing building's owner is issued;
- In case that not to construct the buildings consecutively, the building should setback 0.5 metre from the existing building, which is measured from the site boundary to the nearest part of the building.
- The backside of the building must setback from the site boundary at least 2 metres, counting from the land boundary to the nearest part of building.

- Construction of independent building

- Distance of side and back of building to its site boundary must be at least 2 metres, counting from the site boundary to the nearest part of building.

9. Construction of many buildings in a site

The construction of two or more buildings in the same site should follow these items:

- The distance between two buildings shall equal with half of the height of the taller building, and should not be less than 3 metres long;
- The distance between two buildings must equal to half of the taller building's height and should not be less than 3m.
- In case that there are many buildings constructed in the same site, which create complex, it should have detailed plan and the approval from city planning management organization.

10. Land Use Ratio: E [Building Coverage Ratio]

- Land use ratio (E) is the ratio of the ground floor area (SE) of the building to the site area (ST). This ratio is allowed up to 75%.

11. Height of buildings

- The height of structures should not exceed (boo hai koen) 12 metre, counting from the level of the ground floor to the ceiling of the top floor.
- The 0 (Zero) floor of the buildings should not be (boo hai) 0.30 metre higher than the permanent road surface. (Ground floor is the same with Zero floor.)

12. Land Use Coefficient: COS [Floor Area Ratio]

- Land use coefficient (COS) should not exceed (boo hai koen) 2.5;
- COS is the ratio of total floor area (SP) to the site area (ST); the total floor area is the combination of every floors area, balcony, roof-deck as well as basement and parking lot. At least half of this amount must be above the ground. The COS is related to the article 10 and 11.

13. External feature of structures

- The construction of new constructions must be harmonious with those existing constructions. Its façade and roof shape must be similar, height of each storey should be in the same level, and the bulging and indented part should be similar to those of existing buildings;
- Constructions of the important roads must be designed with specific buildings' facade for that area.

14. Fence or wall

- The total height of the fence is 2 metres at maximum;
- At the road facing side, the maximum height of brick fence is allowed 0.8 metres. The rest part should be see-through;
- In practice, it depends on the specific land development program of the area whether building or place should have a fence or not.

15. Parking lot and open space

- Parking lot

The parking lot must be placed outside the road area and the construction owner has the right to use it, which should follow these following criteria:

- Apartment shall have 1 parking space per 2 families;
- Hotel: 1 parking space per 3 rooms;
- School, office, bank: 1 parking space per 20 square metre of using area;
- Restaurant, Entertainment place: 1 parking space per 4 square metre of using area;
- Market, commercial building: 1 parking space per 10 square metre of using area.

- Open space

- Open space and the tree planting must follow the detailed land development plan;
- The tree cutting is prohibited except the case where the tree obstructs the construction, and city planning management organization give permission. The tree-cutting-plan has to be attached with the general city plan for buildings construction which is attached with the construction permission application. The tree, which is cut, should be compensated with new planting in the same species, under the plant reservation condition and cityscape.
- Tree planting area should be preserved or built between the road and fence based on the detailed plan;
- The planting area in the open space should not less than 45 percent of the area "without constructed area".

A. 2. ZPP-Ub - Ancient-Site Conservation Zone

1. General features

- Location, specification and characteristics:

- It is the zone consists of the national heritage, such as That Luang stupa, which is the real estate, the ancient material as the historical clue of the nation, and can't be removed.
- It is also the zone for the people to gather from the nationwide on the festival days. And it can be used for the formal activity of the government. It consists of ancient temple, building used for the office, row house, Lao traditional house, and modern houses. The area has the infrastructure network adequately suitable for the use. It is the zone shall be strictly observed to comply with the city regulation more than another zone. It is aimed to preserve the historical heritage and culture. This zone has not only its rule, but also the specific heritage preservation regulation.

- Boundary:

- The ancient site conservation zone covers the Vientiane That Luang stupa, the national assembly, the veteran monument and Youth Park. It is the zone consists of: Phra That Luang, national assembly, hero monument, youth park, residence building, trade, small service and other ...
 - The east and north: form the small path behind the Phra That Luang toward 200 meters parallel to such small path, starting from That Luang road access to the Kaysone Phomvihan road.
 - The west: from Kaysone Phomvihan road, holding the Nongbone road to be the zone until the Nongbone triangle road;
 - South: holding the Namxay road connecting to 23 August road until the starting point on the east.

- Area

- The area of ZPP-Ub (Ancient-Site Conservation Zone) covers totally 50 hectares.

2. Activities to be permitted and to be prohibited

- Activities to be permitted

- Residential buildings, such as (residential) independent building, (residential) collective building, (residential) consecutive building (row house), hotel, restaurant.
- Public buildings, such as school, state's local administration office, religious buildings, etc.
- Public parking lot and other service activities, etc.
- Small handicraft activities, which have the building area not over 300 m^2 and does not causes the pollution and annoyance to the urban area.

- Activities to be prohibited

- - Three levels of industrial factories,
 - warehouse, which has area of 300 m² or more, and
- the existing activity is not allowed to expand more;
- Any activities, which cause pollution and annoyance, and cause trouble in the urban area, such as repair garage, gas warehouse, chemical warehouse, machine shop, factory that causes pollution, pile of metal scrap, etc. regardless of amount
- The truck over 2 axles, 4 wheels and total weight of 8.5 tons or more, passenger bus, or group transport car with over 25 seats. All above are prohibited for traffic.

3. Special case to be permitted

To change the land use, but must preserve its existing condition. It is possible to change the land use if permitted. But existing form must be preserved.
Small warehouse.

4. Gateway (thaang khaw ook) and Road (sen thaang)

- Every site to be constructed must have these following conditions:
 - The site must face a public road;
 - In case that the site does not directly face the public road, it must have a common path to connect to the public road;
 - Acceptable common path must be at least 4 metres wide, in the case that its length is not more than 50 metres. If the common path exceeds 50 metres long, it must have the width of at least 6 metres and also have the U-turn point;

- Gateway must consistent with detailed land development program, as well as being agreed by the city planning management organization.

5. Technical infrastructure network (taa-naan khong-laan theknik)

- All land parcel can be constructed, must be able to connect with the technical service network, such as electricity, telephone, water supply, waste water system, rain drain and can allocate the refuse disposal system $_{\circ}$
- In case of such land is far from such network, must construct the private network to ensure and consistent with the technical measures which stipulated by the sector concerned;
- Connecting the network system through other landholder by underground, surface or aero channel, must be permitted in writing by those holders at first.

Connect the network system which passing through others landholder such us by underground, surface or aero channel, must be getting a permission from those landholders at first

6. Feature and size of site

Site shall be: the site which can be constructed, has the followings characteristics:

- Located at the safety place, no risk to cause the danger;
- Land use not contrary to other activity, such as cultural land, common land or preservation land for public facilities ...
- Natural drain and gutter through the private or public land are considered, as the public, which is prohibited for construction, must allow to access for maintenance;
- Width of land can be constructed; must be at least 4 meters for consecutive buildings;
- Area of land can be constructed, it is the land not cover in the area of preservation zone and at least must be equal to 48 m^2 for consecutive buildings, 140 m^2 for single buildings.

7. Distance between buildings and boundary of road area

- All buildings should not exceed the construction line;
- For construction line should (hai) hold on the existing construction line and the construction line that the city plan agency stipulated;
- In case of no construction line is specified, for setting up the buildings outside of the road scope; in the city plan regulation No: 1366/CTPC dated 26th/04/2006;
- In case of single buildings should (hai) be far from the line as specified at least 4 meters;
- The part excesses the construction line should not over 1.20 meters, but the height not over 3 meters when compared to the road surface.

8. Distance between building and site boundary

• Construction of consecutive building

- Can construct consecutively according to the depth and maximum depth not over 20 meters;
- The front closes to the road can be constructed consecutively not over 50 meters and must leave the space for access road. In case of the buildings is connected over 50 meters must be considered, allocated the detailed plan and the consent must be given from the city plan management agency;
- Can construct close to the nearby land, if the new buildings has no window on the adjacent side and the consent must be given buy the nearby landowner in writing at first;
- In case of can't close to another, should (hai) leave a space from the nearby land at least 0.5 meters, from the surplus part at the longest point of building;
- The backside of buildings must be from the land scope at least 2 meters, from the land scope to the surplus part at longest point of buildings.

• Construction of independent building

- Distance from the side and backside of buildings with own land area must be at least

2 meters, from land scope to the surplus part at the highest length point of buildings.

9. Construction of many buildings in a site

- Constructing two buildings or more on the same land, should (hai) comply with:
 - Distance of two buildings must be equal to the half of height of those buildings but not less than 3 meters;

- In case of constructing many buildings on the same land must allocate the detail plan and the consent must be given from the city plan management agency.

10. Land Use Ratio (E)

- Land use ratio (E) is the ratio of the ground floor area (SE) of the buildings to the site area (ST) where new buildings will be constructed. The Land use ratio (E) is allowed up to 50%.

11. Height of building

- Height of structures should not exceed 7 meters, from the ground floor of the buildings to the ceiling of highest floor;
- The ground floor 0 compared to the permanent surface road not over 0.30 meters.

12. Land Use Coefficient (COS)

- $-\cos \le 0.7$
- COS is the area ratio of all buildings floors (SP) to the site area (ST). Herein the total buildings area is the equal of all areas each floor included the veranda, terrace which has the roof and basement and parking lot, which the half volume must be on the ground surface for specifying the land use COS is related to the article 10 and 11.

13. External feature of structures

- In this zone, new constructions along the road, must define the front feature to be unique identify of Laos.

14. Fence or wall

- The total maximum height of fence is 2 meters;
- Front of road, height of highest part allowed is 0.80 meters, the remaining must be visible inside;
- The practice; the buildings or location should have (khuan mee) fence or no fence or wall depends on the detailed development program.

15. Parking lot and open space

Parking lot

The parking lot must be outside the road scope and the constructor shall be obtained the land use right, at least must have the following parking lot:

- Apartment: one lot for two families;
- Hotel: one lot for 3 rooms;
- School, office, bank: one lot shall have 20m² for area use;
- Restaurant, entertainment pub: one parking lot shall have 4 m²;
- The market, shop: one parking lot shall have area of 10 m².

• Open space

- Regarding to the empty place and planting must comply with the detail development program;
- Cutting the tree is prohibited, unless the tree obstructed the constructions, but the permission must be given by the city plan management agency. The cutting plan must be shown in the general plan of building which attached the application for construction. must plant the tree for replacement at the same time; under the condition of biology preservation and view of urban area;
- Should (hai) protect or allocate planting the tree between road and fence based on the detailed development program;
- Shall procure the planting area on the totally empty land, should (hai) protect or allocate at least 45% of remaining area from construction.

A.3. UAa - Administration-and-Trade Center Zone

1. General features

Administration and Trade Center Zone is the zone for gathering organization offices, trade center and service, and high density of residence, which consists of technical and infrastructure networks.

- Location, specification and characteristics

Administration-and-Trade Center Zone has the density of construction more than the new central zone and has two locations:

- Point 1: spreading from two side of Lane Xang road, from Ta Lad Sao mall traffic light in the north till the Ministry of Defense, which covers the villages: Thongkhankhamneua and Thongkhankhantay, Sisavathkang, Sailom, Hadsadytay, Sisavathneau, Nongchan, Dongpalane and Ban fai; covered one part of villages: Sisavathneua, Sisavathtay, Sidandouan, Sibounheuang, Phonxay, Nongbone, Nongsangthor, Phonkheng, Dongpalanethong, Phonsinouan and Phonsaat.
- **Point 2**: Located at the triangle area between three cut road as: Samsenthai road, Setthathirat road and Khonboulom road; area coveres the one part of village: Sihom, Haisok and Sithanneua.

- Boundary

Point 1: UAa Administration-and-Trade Centrer Zone

- **North**: starting from Thongkhankham market traffic light in the west along to the ASEAN road until the Sibounheuang traffic light, go straight on to the small path of Sibounheuang village connect to the Kayson Phonvihan road, along the Kayson road until the irrigation ditch of Phonsaat village, along the irrigation ditch of the village area detour through Nonsangthor village on the west parallel to the area of Phonkheng village and connect to the market side of Phonkheng village on the west of Kayson road.
- **East**: form the Phonkheng market along Kayson road down to triangle road of veteran monument along the Nongbone road until three crossroad of Nongbone village, through triangle road of Naxay village, until crossroad of Phonxay village, along the Phonxay road-Dongpaina road bypass Dongpalane road, Phonsinouan village until triangle road at 23 August road, and along the Phonsavannuea village toward to Khouvieng raod.
- South: from Comcenter College along Khouvieng road until Khoualoaung traffic light.
- West: from Khoualuang traffic light along Chao Anouvong road until reaching Thongkhankham crossroad;

Point 2: UAa Administration-and-Trade Center Zone

- North: from triangle road of Chao Fa Ngoum park along Samsenthai road until Sihom traffic light (Mine Department);
- South and west: from Chao Fa Ngoum Park, from the Setthathirat road down to Inpeng temple traffic light.
- **East**: from Inpeng temple traffic light to Sihom traffic light (Mines Department) holds on the Khounboulom avenue as the boundary.

- Area

The area of UAa (*Administration-and-Trade Center Zone*) covers totally 399.51 hectares.

2. Activities to be permitted and to be prohibited

- Activities to be permitted

- Residential buildings, such as (residential) independent building, (residential) collective building, (residential) consecutive building (row house).
- Public buildings, such as school, hotel, hospital, culture hall, Government administration office, religious building, sport building, public hall, commercial building, etc.
- Public parking lot, services activities, public parks, etc.
- Small handicraft activity that has the construction area not over 300 m² and does not

cause the pollution and annoyance to the urban area.

- Activities to be prohibited

- Three levels of industrial factories,
 - warehouse and stock, which has area over 100 m^2 and over, and
- the existing activity is not allowed to expand more;
- Any activities, which cause pollution and annoyance, and cause trouble in the urban area, such as repair garage, gas warehouse, chemical warehouse, machine shop, factory that causes pollution, pile of metal scrap, etc. regardless of amount

3. Special case to be permitted

- Gas station

- Small warehouse

- 4. Gateway (thaang khaw ook) and Road (sen thaang)
 - Every site to be constructed must have these following conditions:
 - The site must face a public road;
 - In case that the site does not directly face the public road, it must have a common path to attach the public road;
 - Acceptable common path must be at least 4 metres wide, in the case that its length is not more than 50 metres. If the common path exceeds 50 metres long, it must have the width of at least 6 metres and also have the U-turn point;
 - Gateway must consistent with detailed land development program, as well as being agreed by the city planning management organization.

5. Technical infrastructure network (taa-naan khong-laan theknik)

- All land parcel can be constructed, must connect to the technical service network, such as:
 - Electricity, telephone, water supply, waste water system, rain drain system;
 - In case of such land is far from such network, must construct the private network to ensure and consistent with the technical measures which stipulated by the sector concerned;
 - Connecting the network system through other landholder by underground, surface or aero channel, must be getting a permission in writing by those holders at first.

6. Feature and size of site

Such construction land shall be: the site which can be constructed, has the followings characteristics:

- Located at the safety place, no risk to cause the danger;
- Land use not contrary to other activity, such as cultural land, common land or preservation land for public facilities;
- Natural drain and gutter through the private or public land are considered, as the public, which is prohibited for construction, must allow access for maintenance;
- Width of land can be constructed; must be at least 4 meters for consecutive buildings;
- Area of site, which does not include preservation area, must be at least 48 m^2 for consecutive buildings, 140 m^2 for independent buildings.

7. Distance between building and boundary of road area

- All buildings should not exceed the construction line;
- For construction line must hold on the existing construction line and the construction line that the city plan agency stipulated;
- In case of no construction line is specified, for setting up the buildings outside of the road scope; in the city plan regulation No: 1366/CTPC dated 26th/04/2006;
- In case of independent buildings should be (hai) far from the line as specified at least 4 meters;
- The part excesses the construction line should not over 1.20 meters, but the height not over 3 meters when compared to the road surface.

8. Distance between building and site border

• Construction of consecutive building

- It can be constructed consecutively according to the depth and maximum depth not over 20 meters;
- The front closes to the road can be constructed consecutively not over 50 meters and must leave the space for access road. In case of the buildings is connected over 50 meters must be considered, allocated the detailed plan and the consent must be given by the city plan management agency;

- It can be constructed close to the nearby land, if the new buildings has no window on the adjacent side and the consent must be given by the nearby landowner in writing at first;
- In case of can't close to another, should (hai) leave a space from the nearby land at least 0.5 meters, from the surplus part at the longest point of building;
- The backside of buildings must be setback from the land scope at least 2 meters, from the land scope to the surplus part at longest point of buildings.

• Construction of independent building

- Distance from the side and back of building with own land area must be at least 2 meters, from land scope to the surplus part at the longest point of building.

9. Construction of many buildings in a site

Constructing more than two buildings in the same land, should (hai) comply with:

- Distance of two buildings must be equal to the half of height of the taller building but not less than 3 meters;
- In case of constructing many buildings in the same land must allocate the detail plan and the consent from the city plan management agency.

10. Land Use Ratio (E)

- Land use ratio (E) is the ratio of the ground floor area (SE) of the buildings to the site area (ST) where new construction will be constructed. Land use ratio (E) is allowed up to 75%.

11. Height of building

- Height of structures should not exceed 26 meters, from the ground floor of the buildings floor to the ceiling of highest floor;
- The ground floor 0 compared to the permanent surface road not over 0.30 meters.

12. Land Use Coefficient (COS)

- $\mathrm{COS} \leq 2.5$

- COS is the area ratio of all buildings floors (SP) to the site area (ST). Herein the total buildings area is the equal of all areas each floor included the veranda, terrace which has the roof and basement and parking lot, which the half volume must be on the ground surface for specifying the land use COS is related to the article 10 and 11.

13. External feature of structures

- In this zone, new structures along the road shall define the front feature to be unique identify of Laos.

14. Fence or wall

- The total maximum height of fence is 2 meters;
- Front of road, height of highest part allowed is 0.80 meters, the remaining must be visible inside;
- The practice; the buildings or location should have fence or no fence or wall depends on the detailed development program.

15. Parking lot and open space

• Parking Lot

The parking lot must be placed outside the road scope and the constructor has obtained the land use right, at least must have the amount of the following parking lot:

- Apartment: one lot for two families;
- School, office: one lot has 20m² for area use;
- Hotel: one lot for 3 rooms;
- Restaurant, entertainment pub: one parking lot has 4 m²;
- The market, shop: one parking lot has the area of 10 m^2 .

• Open space

- Regarding to the open space and planting must comply with the detail development program;
- Cutting the tree is prohibited, unless the tree obstructed the construction, but the permission must be given from the city plan management agency. The cutting plan must be shown on the general plan of buildings which attached the application for construction. must plant the tree for replacement sustainably;
- Shall procure the planting area on the totally open land, should (hai) protect or allocate at least 50% of remaining area from construction.

- Shall protect or allocate planting the tree between road and fence based on the detailed development program;

A.4. UAb - New Central Zone

1. General features

UAb area is a new central zone which has been expanded. The density has increased, the technical infrastructure has been upgraded with all the features.

- Location, Specification and Characteristics

UAb area is a zone which has a growing economy, commerce, the landscape is high that it can prevent from the flood. It is a suitable place for the central zone of Vientiane Capital. This zone has gathered the villages containing : Chommani, Chommani Central, Sivilay, and Phonsavang.

- Boundary

- Northern Part: Starting from the northern part of Ban. Chommany pass through Suphanuvong Road, going by the road till Ban. Thatkhao.
- **Eastern Part:** Starting from the zone of Ban. Thatkhao through Ban. Sivilay until the following village.
- Southern Part: In the between of Ban. Sivilay and Ban. Chommany Neua(North) going straight through by the road of Souphanuvong. Going by the road until the sub-road of Mittaphap(Friendship) Hospital of the southern part. Into the sub-road until the side of Beuknongtha.
- Western Part: Following by the Nongtha Lake to Nothern Chommany village until the starting point of Nothern Sivilay village.

- Area

The total size of UAb area is 183 hectares.

2. Activities to be permitted and to be prohibited

- Activities to be permitted

- Residential buildings, such as (residential) independent building, (residential) collective building, (residential) consecutive building (row house).
- Public buildings, such as school, hotel, hospital, culture hall, Government administration office, religious building, sport building, public hall, commercial building, etc.
- Public parking lot, services activities, public parks, etc.
- Small handicraft activity that has the construction area not over 300 m^2 and does not cause the pollution and annoyance to the urban area.

- Activities to be prohibited

- Three levels of industrial factories,
- warehouse and stock, which has area over 300 m² and over, and

the existing activity is not allowed to expand more;

- Any activities, which cause pollution and annoyance, and cause trouble in the urban area, such as repair garage, gas warehouse, chemical warehouse, machine shop, factory that causes pollution, pile of metal scrap, etc. regardless of amount

3. Special case to be permitted

- Gas station

- Small warehouse

4. Gateway (thaang khaw ook) and Road (sen thaang)

Every site to be constructed must have these following conditions:

- The site must face a public road;
- In case that the site does not directly face the public road, it must have a common path to attach the public road;
- Acceptable common path must be at least 4 metres wide, in the case that its length is not more than 50 metres. If the common path exceeds 50 metres long, it must has the width of at least 6 metres and also has the U-turn point;
- Gateway must be consistent with detailed land development program, as well as being agreed by the city planning management organization.

5. Technical infrastructure network (taa-naan khong-laan theknik)

- All establishment land must directly connected to the service infrastructure: Electricity infrastructure, telecommunication, water supply, waste water system, rain drain system.
- In the case of the land which is in a far distance from the technical infrastructure

must have a private technical infrastructure that will be guaranteed, and it must be identical to the quality of technical issuance.

- The connectivity of the technical infrastructure which is passing through the others landowner by underground, land surface or from the air, must have a permission from the owners of that properties first.

6. Feature and size of site

- The land that is allowed for the establishment has the followings characteristic:
 - Establishing in the safe location, no risk of such harm.
 - Using without any destruction to other projects, such as Cultural land, occupied land or reserved land for public advantages.
 - Natural water lines and waste water system which has passed by the privately owned land or the public land is prohibited to build and block. It must be allowed entrance-exit way for the maintenance.
 - The width of the land must be at least 4 metres for the consecutive buildings.
 - The site area, which does not include in the preservation area, must be at least $48m^2$ for consecutive buildings, and $140m^2$ for independent buildings.

7. Distance between building and boundary of road area

- In any cases of all constructions should not exceed the construction line
- For the construction line, should carry on according to the existing construction line and the construction line is regulated by city planning control agency.
- In case when the construction line has not yet considered, the buildings should be (hai) constructed out of the road area which has regulated by the Master Plan Order No.1366/Communication, Transport, Post and Construction Division, issue on 26 April 2006.
- In case of independent buildings, it should (hai) setback from the construction line at least 4 metres.
- The part excesses the construction line should not over 1.20 meters, but the height not over 3 meters when compared to the road surface.

8. Distance between building and site border

- Construction of consecutive buildings

- Able to build consecutively as the depth, and the depth should not exceed 25 metres.
- The front side connected with the road can be constructed by connecting to each other in the length of not more than 50 metres, and must leave a space for the gateway. In case if the buildings is connected to each other longer than 50 metres, there must be a research, detailed planning, and the agreement from the Ministry of City Planning Defense.
- Able to build near the neighbor/adjacent land in the terms and conditions as the new buildings that will be constructed should not (boo hai) have windows and there must be an agreement from the owners of the neighboring land in a letter form first.
- In case of not being able to build near to each other, should (hai) setback from the adjacent site at least 0.5 metres starting from the land to the excessed part that is associated with the building.
- The backside of the buildings setback from the land area at least 2 metres. Starting from the land area to the excessed part that is associated with the buildings.

- Construction of independent building

- The distance between the side and the backside of the building must be equal to at least 2 meters, starting from the land to the excessed part that is associated with the buildings.

9. Construction of many buildings in a site

The establishment of buildings more than 2 buildings in the same site should (hai) comply with:

- The distance of two buildings must be equal to half of the taller building's height, but not be less than 3 meters;
- In case of constructing multiple buildings in the same site must allocate the detailed plan and the consent from the Ministry of city planning defense.

10. Land Use Ratio (E)

- Land use ratio (E) is the ratio of the ground floor area (SE) of the building to the site area (ST) where new building will be constructed. Land use ratio (E) is allowed up to 50%.

11. Height of building

- Height of structures should not exceed 10 meters, from the ground of the building to the ceiling of the highest floor;
- The ground floor 0 compared to the permanent surface road should not exceed 0.30 meters.

12. Land Use Coefficient (COS)

- Land use efficiency COS = 1
- COS is the area ratio of all buildings floors (SP) to the site area (ST). Herein the total buildings area is the equal of all areas each floor containing the veranda, terrace which has the roof and basement and parking lot, which half of the volume shall be on the ground surface for specification for the land use. COS is related to the article 10 and 11.

13. External feature of structures.

- In this area, new structures along the road, must define the front appearance to be the identity of Laos itself.

14. Fence or wall

- The total maximum height of fence is 2 meters;
- The front of road, the height of the highest part allowed is 0.80 meters, the remaining must be visible inside;
- The practice; the buildings or location should have fence or no fence or wall depending on the detailed development program.

15. Parking lot and open space

• Parking lot

The parking lot must be outside the road area and the constructor has obtained the land use rights and the parking lot must be at least have the followings:

- Apartment: one lot for two families;
- School, office: one parking lot per $20m^2$ of the use area;
- Hotel: one parking lot for 3 rooms;
- Restaurant: one parking lot per 4 m² of the use area;
- The market, shop: one parking lot per 10 $m^2\, of$ the use area.

• Open space

- Regarding to the open space and plantation of tree must comply with the detail development program;
- Cutting the tree is prohibited, unless the tree obstructed the construction, but the permission must be given from the Ministry of City Planning Defense. The cutting plan must be shown on the general plan of buildings, which attached in the application for the construction permit. The tree that has been cut must be replaced for a new one for sustainability;
- The land of plantation should be protected or planting the trees in between road and infrastructure based on the detailed development program;
- Total open land for plantation for use, should be protected or allocated at least 50% of the remaining area from construction.

B.1. UBa - Zone of Surroundings of Central Urban Area within Aircraft Flying Zone UBb - Zone of Surroundings of Central Urban Area

1. General features

- Location, specification and characteristics

- UBa (Zone of Surroundings of Central Urban Area within Aircraft Flying Zone) and UBb (Zone of Surroundings of Central Urban Area) located the urban inner zone, situated far from totally 6 difference points, the details shown on the land use plan and zoning code.
- **UBa** (Zone of *Surroundings of Central Urban Area within Aircraft Flying Zone)* shall comply with the principle and measures, the height of constructions on the runway of flying more
- **UBb** (Zone of *Surroundings of Central Urban Area*) has density but the service is not good as should be, refer to some place, shown the low area, such as Dongpalanethong, Dongnasok, Nongsangthor, Phonphanao along the Kayson Phomvihan road until Km 6 and Nongtha, those area will increase the medium density and all new construction shall upgrade the floor to be high by backfilling. Because of some place is still the agricultural land; all construction shall comply with the detailed development program.

- Boundary

Those two zone cover total and partial part of following villages:

Sikhathongneua, Sikhaythongtay, Meuangvathong, Wattayyai thong, Wattaynoy thong, Oubmoung, Khountathong, Nongdoaungthong, Nongdouangtay, Nongdouanthong, Nongsanokham, Khouanlouangneua, Thongtoum, Hongkhaneua, Hongkhatay, Savang, Thongsangnang, Naxay, Phonsinouan, Saphangmo, Saphanthongneua, Phonkheng, Thatlouangtay, Sibounheuang, Hongkaikeo, Sidamdoaun, Sisangvone, Hongkea, Phonphanao, Chommanitay, Chommanineua, Chommanikang, Phontongchommany, Bonangoua, Nongthatay, Sivilay, Phonsavang and Khamhoung.

- Area

UBa (Zone of *Surroundings of Central Urban Area within Aircraft Flying Zone*) and UBb (Zone of *Surroundings of Central Urban Area*) have total area 1,263 hectares.

2. Activities to be permitted and to be prohibited

- Activities to be permitted

- Residential buildings, such as (residential) independent building, (residential) collective building, (residential) consecutive building (row house).
- Public buildings, such as school, hotel, hospital, culture hall, Government administration office, religious building, sport building, public hall, commercial building, etc.
- Public parking lot, services activities, public parks, etc.
- - Level 3 industrial factory, or
 - small handicraft activity, which has the construction area not over 500 m²,

which does not cause the pollution and annoyance to the urban area.

- Activities to be prohibited

- - Level 1 & 2 industrial factory, and
- warehouse, which has area of 500 m² or more, and
- the existing these activities is not allowed to expand more
- Any activities, which cause pollution and annoyance, and cause trouble in the urban area, such as repair garage, gas warehouse, chemical warehouse, machine shop, factory that causes pollution, pile of metal scrap, etc. regardless of amount

3. Special case to be permitted

- Hotel, gas station, small or medium warehouse, Level 3 industrial factory.

4. Gateway (thaang khaw ook) and Road (sen thaang)

Every site to be constructed must have these following conditions:

- The site must face a public road;
- In case that the site does not directly face the public road, it must have a common path to attach the public road;

- Acceptable common path must be at least 4 metres wide, in the case that its length is not more than 50 metres. If the common path exceeds 50 metres long, it must have the width of at least 6 metres and also have the U-turn point;
- Gateway must be consistent with detailed land development program, as well as being agreed by the city planning management organization.

5. Technical infrastructure network (taa-naan khong-laan theknik)

- All land parcel can be constructed, must connect to the technical service network, such as electricity, telephone, water supply, waste water system, rain drain system;
- In case of such land is far from such network, must construct the private network to ensure and consistent with the technical measures which stipulated by the sector concerned;
- Connecting the network system which passing through other landholder by underground, surface or aero channel, must be permitted in writing by those holders at first.

6. Feature and size of site

The site to be constructed has the followings characteristics:

- Located at the safety place, no risk to cause the danger;
- Land use not contrary to other activity, such as cultural land, common land or preservation land for public facilities ...
- Natural drain and gutter through the private or public land are considered, as the public, which is prohibited for construction, must allow access for maintenance;
- Width of land can be constructed; must be at least 4 meters for consecutive buildings;
- Area of land can be constructed; it is the land not cover the area of preservation zone and at least must be equal to 90 m².

7. Distance of building and boundary of road area

- All buildings should not exceed the construction line;
- For construction line should (Hai) hold on the existing construction line and the construction line that the city plan agency stipulated;
- In case of no construction line is specified, for setting up the building outside of the road scope; in the city plan regulation No: 1366/CTPC dated 26th/04/2006;
- In case of an independent buildings should be far from the line as specified at least 4 meters;
- The part excesses the construction line is allowed not over 1.20 meters, but the height not over 3 meters when compared to the road surface.

8. Distance between building and site border

• Construction of consecutive building

- shall be constructed consecutively according to the depth and maximum depth should not exceed 25 meters;
- The front closes to the road can be constructed consecutively should not exceed 50 meters and must leave the space for access road. In case of the buildings is connected over 50 meters must be considered, allocated the detailed plan and the consent given from the city plan management agency;
- shall be constructed close to the adjacent land, if the new buildings has no window on the adjacent side and the consent given by the nearby landowner in writing at first
- In case of can't close to another, must leave a space from the nearby land at least 0.5 meters, from the surplus part at the longest point of buildings;
- The backside of buildings must from the site boundary at least 2 meters, from the land boundary to the surplus part at longest point of buildings.

• Construction of independent buildings

- Distance from the side and backside of building with own land area must be at least 2 meters, from the site boundary to the surplus part at the longest point of buildings.

9. Construction of many buildings in a site

Constructing more than two buildings in the same site, should (hai) comply with:

- Distance of two buildings must be equal to the half of height of the taller building but not less than 3 meters;
- In case of constructing many buildings in the same site (which has a complicated plan) must allocate the detail plan and the consent from the city plan management agency.

10. Land Use Ratio (E)

- Land use ratio (E) is the ratio of the total ground floor area (SE) of the buildings to the site area (ST) where new buildings will be constructed. Land use ratio (E) is allowed up to 60%.

11. Height of building

- Height of structures should not exceed 20 meters, from the ground floor of the buildings to the ceiling of highest floor.
- The ground floor 0 compared to the permanent surface road should not exceed 0.30 meters.
- Uba which included in the aircraft flying zone (Wattay Airport) should (hai) comply with specific requirements from relevant sectors

12. Land Use Coefficient (COS)

- $\cos \le 1.5$
- COS is the area ratio of all buildings floors (SP) to the site area (ST). Herein the total buildings area is the equal of all areas each floor included the veranda, terrace which has the roof and basement and parking lot, which the half volume must be on the ground surface for specifying the land use COS is related to the article 10 and 11.

13. External feature of structures

- In this zone, new structure along the road must define the front feature to be unique identify of Laos.

14. Fence or wall

- The total maximum height of fence is 2 meters;
- Front of road, height of highest part allowed is 0.80 meters, the remaining must be visible inside;
- The practice; the buildings or location should (khuan) have fence or no fence or wall depends on the detailed development program.

15. Parking lot and open space

• Parking lot

The parking lot must be outside the road scope and the constructor has obtained the land use right, at least must have the following parking lot:

- Apartment: one lot for two families;
- School, office: one lot per 20m² for area use;
- Hotel: one lot for 3 rooms;
- Restaurant, entertainment pub: one parking lot per 4 m²;
- The market, shop: one parking lot per10 m².

• Open space

- Regarding to the open space and planting must comply with the detail development program;
- Cutting the tree is prohibited, unless the tree obstructed the construction, but the permission must be given from the city plan management agency. The cutting plan must be shown on the general plan of buildings which attached the application for construction. must plant the tree for replacement sustainably;
- Should (hai) protect or allocate planting the tree between road and fence based on the detailed development program.

- Should (hai) procure the planting area on the totally empty land, should (hai) protect or allocate at least 50% of remaining area from construction.

B.2. UCa - Mekong Riverbank Zone within Aircraft Flying Zone

UCb - *Mekong Riverbank Zone*

1. General features

- Location, specification and characteristics

- UCa (*Mekong Riverbank Zone within Aircraft Flying Zone*) and UCb (*Mekong Riverbank Zone*) situated along the Mekong River; there are dyke and road network. But it shall be strictly protected from improper construction expansion, such as building construction which obstructs the view of Mekong river, disordered construction, in order to avoid all constructions from opposing the bank protection system, three layer of city wall and dyke in the future.
- UCa (*Mekong Riverbank Zone within Aircraft Flying Zone*) shall comply with the principle and measure of the height of runway of flying more,
- This area; most of residential areas is the wooden house, it is the dwelling and some of service; this zone has beautiful natural view, should protect the environment and Lao traditional architecture in some area.

- Boundary: That zone is classified into two parts:

- North: from Pakpasak to Setthathirat avenue and Luang Prabang avenue until triangle road Sikhay at the Mekong river side, and along the Kaoliao road until reaching Nonkhilek village.
- **South**: from Thakhao village along riverbank to Thakhao traffic light and along to Thaduean road along riverbank until triangle road of Chinaimo and then along to Bo O road until Kangyang village.
- UCa (*Mekong Riverbank Zone within Aircraft Flying Zone*) and UCb (*Mekong Riverbank Zone*) covers villages: Xaysathan, Khoknin, Chomcheng, Khountathong, Nongpanay, Wattaynoytha, Akart, Meuangvatha, Sikhaytha, Yapha and Sibounheuangtha; covers one part of Kengyang, Somhong, Phanman villages.

- Area

- The area of UCa (*Mekong Riverbank Zone within Aircraft Flying Zone*) and UCb (*Mekong Riverbank Zone*) covers totally 380 hectares.

2. Activities to be permitted and to be prohibited

- Activities to be permitted

- Residential buildings, such as (residential) independent building, (residential) collective building, (residential) consecutive building (row house).
- Public buildings, such as school, hotel, hospital, culture hall, Government administration office, religious building, sport building, public hall, etc.
- Commercial buildings and service, with area not more than of 100 m^2
- Public parking lot and service activities, public park, etc.
- Small handicraft activity, which has the construction area not more than 200 m², and does not cause the pollution and annoyance to the urban area.

- Activities to be prohibited

- All levels of industrial factories, warehouse, and
- not allowed to expand the existing activity more;
- Any activities, which cause pollution and annoyance, and cause trouble in the urban area, such as repair garage, gas warehouse, chemical warehouse, machine shop, factory that causes pollution, pile of metal scrap, etc. regardless of amount

3. Special case to be permitted

- Government administration office
- Hotel and gas station
- Small and medium warehouse, Level 2 & 3 industrial factories
- Vegetable garden.

4. Gateway (thaang khaw ook) and Road (sen thaang)

Every site to be constructed must have these following conditions:

- The site must face a public road;
- In case that the site does not directly face the public road, it must have a common path to attach the public road;
- Acceptable common path must be at least 4 metres width, in the case that its length is not more than 50 metres. If the common path exceeds 50 metres long, it must have

the width of at least 6 metres and also have the U-turn point;

- Gateway must be consistent with detailed land development program, as well as being agreed by the city planning management organization.

5. Technical infrastructure network (taa-naan khong-laan theknik)

- All land parcel can be constructed, must connect to the technical service network, such as: - Electricity, telephone, water supply, waste water system, rain drain system;
 - In case of such land is far from such network, must construct the private network to ensure and consistent with the technical measures which stipulated by the sector concerned;
 - Connecting the network system through others landholder by underground, surface or aero channel, must be permitted in writing by those holders at first. (must be getting a permission in writing by those landholder at first)

6. Feature and size of site

- Such construction land shall be: (the site to be constructed, has the followings characteristics:
 - Located at the safety place, no risk to cause the danger;
 - Land use not contrary to other activity, such as cultural land, common land or preservation land for public facilities ...
 - Natural drain and gutter through the private or public land are considered, as the public, which is prohibited for construction, must allow access for maintenance;
 - Width of land can be constructed; must be at least 4 meters for consecutive buildings;
 - The site area, which does not include in the preservation area, must be at least 48 m^2 for row buildings, and 140 m^2 for independent buildings.

7. Distance between building and boundary of road area

- All constructions should not exceed the construction line;
- = All constructions along the Mekong riverbank must setback from the banks at least 20m
- In case of no construction line is specified, for setting up the building outside of the road scope; in the city plan regulation No: 1366/CTPC dated 26th/04/2006;
- All constructions along the dyke must far from the dyke inside at least 6 meters.
- For construction line should (hai) hold on the existing construction line and the construction line that the city plan agency stipulated;
- In case of independent buildings should (hai) setback from the line as specified at least 4 meters;
- The part excesses the construction line should not over 1.20 meters, but the height not over 3 meters when compared to the road surface.

8. Distance between buildings and site border

• Construction of consecutive building

- shall be constructed consecutively according to the depth and maximum depth not over 20 meters;
- The front closes to the road can be constructed consecutively not over 50 meters and must leave the space for access the road. In case of the buildings is connected over 50 meters must be considered, allocated the detailed plan and the consent given from the city plan management agency;
- Shall be constructed close to the adjacent site, if the new buildings has no window and must have the consent from the adjacent landowner in writing at first;
- In case of can't close to another, must setback from the adjacent site at least 0.5 meters, from the surplus part at the longest point of building;
- The backside of buildings must setback from the site area at least 2 meters, from the site area to the surplus part at longest point of buildings.

• Construction of independent building

- Distance from the side and backside of buildings must be at least 2 meters, from site area to the surplus part at the longest point of buildings.

9. Construction of many buildings in a site

- Constructing more than two buildings in the same site, should (hai) comply with:
 - Distance of two buildings must be equal to the half of height of the taller building but not less than 3 meters;
 - In case of constructing many buildings in the same land, must allocate the detail plan

and the consent from the city plan management agency.

10. Land Use Ratio (E)

- Land use ratio (E) is the ratio of the ground floor area (SE) of the buildings to the site area (ST) where new buildings will be constructed. Land use ratio (E) is allowed up to 50%.

11. Height of building

- Height of structures should not exceed 10 meters, from the ground floor of the buildings to the ceiling of highest floor;
- The ground floor 0 compared to the permanent surface road not over 0.30 meters.

12. Land Use Coefficient (COS)

- $-\cos = 1$
- COS is the area of all buildings floors (SP) to the site area (ST). Herein the total buildings area is the equal of all areas each floor included the veranda, terrace which has the roof and basement and parking lot, which the half volume must be on the ground surface, for specifying the land use COS is related to the article 10 and 11.

13. External feature of structures

- In this zone, new structures along the road must define the front feature to be unique identify of Laos.

14. Fence or wall

- The total maximum height of fence is 2 meters;
- Front of road, height of highest part allowed is 0.80 meters, the remaining must be visible inside;
- The practice; the buildings or location should have (khuan me) fence or no fence or wall depends on the detailed development program.

15. Parking Lot and open space

• Parking lot

The parking lot must be outside the road boundary and the constructor has obtained the land use right, at least must have the following parking lot:

- Apartment: one lot for two families;
- School, office: one lot per 20m² for area use;
- Hotel: one lot for 3 rooms;
- Restaurant, entertainment pub: one parking lot per 4 m²;
- The market, shop: one parking lot per 10 m^2 of the area.

• Open space

- Regarding to the open space and planting must comply with the detail development program;
- Cutting the tree is prohibited, unless the tree obstructed the construction, but the permission must be given by the city plan management agency. The cutting plan must be shown in the general plan of buildings which attached the application for construction. must plant the tree for replacement sustainably;
- Should (hai) protect or allocate planting the tree between road and fence based on the detailed development program.
- Should (hai) procure the planting area on the totally empty land, should (hai) protect or allocate at least 50% of remaining area from construction.

C. 1. UDa - Zone of Surroundings of Urban Area within Aircraft Flying Zone UDb - Zone of Surroundings of Urban Area relevant to Agricultural activities UDc - Zone of Surroundings of Urban Area and Suburb

1. General features

- Location, Specification and Characteristics

Three of these areas are the outskirt of the central city, which has low density of structures and has less population than the urban area. (Two lines below are not understandable.) The location of the zone has a connected design. Longing from the city's borders there are 3 different points those are.

- Boundary

- Western Part: UDa area, Urban surrounding zone within aircraft flying zone shall follow the principle and the standard of constructions at the air flight and departure zone.
- Northern Part: UDb area, Urban surrounding zone relevant to agricultural activities. One part is located at the south and the other part is located at the west. It is an area that is connected mostly to agricultural activities. It could be strengthening more at the average level.
- Southern Part: UDc area, the city border area that has expandable space and is attached to industrial zone, allow to operate large services; It is a main Dongoy zone which has the ability to turn into a new city and could grow in the future. That is why supports are needed for services, such as hospital, school, market, useful public programs, and public productions. Encouraging commerce, services for businesses however should provide the master plan in details.

Three of these areas are consisting of different villages, such as Dongsavang, Hatxaykhao, Chomphet tai(South), Chomphet neua(North), Sangvei, Donpamai, Sokpaluang, Phonpapao, Phonthan tai(South), Phontan neua(North), Nongtha neua(North), Hongseng, Dongpalep, Hongkha neua(North).

Taking a part of the villages: Gengyang, Gengpayang, Somhong, Ban garng, Banphao, Bo ou, Thana, Dondu, Somvang tai(South), Somvang neua(North), Nong lai, Haysok, Suan mon, Phonxay, Watsop,, Phanmun, Thapalanxay, Thong garng, Wat nak, Thong phaktong, Saphangmo, Hong gae, Thatluang garng(central), Thatluang neua, Viengchalern, Phonkeng, Phonphanao, Sivilay, Sainam nyeum, Phakao, Xangkhu, Saphang merk, Dongdok, Kham houng, Tanmisai, Huay hong, Nongtha tai(South), Dong deng, Phontong chommany, Thongsang nang, Savang, Hongbua thong, Hongkhha tai(South), Phonsavath, Nonky lek, Nonkeau, Dankham, Gao leo, Sisom suem, Siboun heuang thong, Viengsavanth, Nahae, Phosy, Nonsavang, Thongpong, Nalao, Nongteng tai(South), Nong neau.

- Area

The total size of these three areas are 4,597 hectares. The policies for these areas are similar.

2. Activities to be permitted and to be prohibited

- Activities to be permitted

- Residential buildings, such as (residential) independent building, (residential) collective building, (residential) consecutive building (row house).
- -Public buildings, such as school, hotel, hospital, culture hall, Government administration office, religious building, sport building, public hall, commercial building, etc.
- Public parking lot, service activities, public parks, etc.
- - Lebel 3 industrial factory, and
 - Small handicraft, which has the area not more than 500 m², and

which, does not cause the pollution and annoyance to the urban area.

- Activities to be prohibited

- Level 1 & 2 industrial factories, and
- Warehouse with the area of 400m² or more, and
- Expanding these established activities that has already been existed is prohibited.

- Any activities, which cause pollution and annoyance, and cause trouble in the urban area, such as repair garage, gas warehouse, chemical warehouse, machine shop, factory that causes pollution, pile of metal scrap, etc. regardless of amount

3. Special case to be permitted

- Government administration office
- Hotels, gas station.
- Small or medium warehouse. Level 2 & 3 industrial factories.
- Vegetable garden.

4. Gateway (thaang khaw ook) and Road (sen thaang)

- Every site to be constructed must have these following conditions:
 - The site must face a public road;
 - In case that the site does not directly face the public road, it must have a common path to attach the public road;
 - Acceptable common path must be at least 4 metres wide, in the case that its length is not more than 50 metres. If the common path exceeds 50 metres long, it must have the width of at least 6 metres and also have the U-turn point;
 - Gateway must be consistent with detailed land development program, as well as being agreed by the city planning management organization.

5. Technical infrastructure network (taa-naan khong-laan theknik)

- All establishable land must be mainly connected to the service infrastructure: Electricity infrastructure, telecommunication, water supply, waste water system, rain drain system.
- In the case of the land which has a far distance from the technical infrastructure must make a private technical infrastructure that will guarantee and it must be identical to the quality of technical issuance.
- The connectivity of the technical infrastructure pass by the land of the different organizations will be from underground, land surface or from the air must be allowed by the owners of that properties first.

6. Feature and size of site

The land that is allowed for the establishment has as follow :

- Establishing in a safe location, no risk of such harm.
- Using without interrupting with other projects, such as cultural land, occupied land or reserved land for public advantages.
- Natural water lines and waste water system which has passed through the privately owned land or the public land is prohibited to build and block. It must be allowed to have a gateway for the maintenance.
- The width of the land must be at least 4 meters for the consecutive buildings.
- The site area, which does not include in the preservation area, must be at least $48m^2$ for a unit of row buildings, and $140m^2$ for an independent buildings.

7. Distance between building and boundary of road area

- In any cases all establishment must include road lines.

(All the construction should not exceed the construction line)

- only use the road lines that is already provided and the lines that are regulated by the Ministry of City Planning Defense.

(For the construction line should (hai) carry the existing construction line and the construction line which regulated by the organization of city plan)

- In case of when the construction line hasn't been drawn, the buildings should (hai) be in the outer road border which has regulated by the Master Plan Order No.1366/Communication, Transport, Post and Construction Division, issue on 26 April 2006.
- In case of independent buildings, it should (hai) setback from the construction line at least 4 metres.
- The distances of the line gaps must not be more than 1.20 metres, but it has to have a hight of at least 3 metres on the surface of the road.
- (an excess part which exceeded the construction line should not exceed 1.20m, but must be at least 3m higher as compare to the road surface)

8. Distance between building and site border

- Construction of the consecutive buildings

- shall be built consecutively as the depth, and the depth should not exceed 20 meters.
- The front side that is connected with the road can be established by connecting to each other in the length of no more than 50 meters, and must leave a space for the gateway. In case if the buildings is connected to each other longer than 50 meters, there must be a research, detailed planning, and the agreement from the Ministry of City Planning Defense.
- Shall be built close to the adjacent site in terms and conditions; the new buildings-tobe-built has no windows and there must be an agreement from the owners of the adjacent site in a letter at first.
- In case, if not being able to build close to each other, should (hai) setback from the adjacent site at least 0.5 meters counting from the site border to an excess part which is the longest part of building.
- The backside of the buildings must setback from the site area/site border for at least 2 meters. Counting from the site border to an excess part which is the longest part of building.

- Construction of the independent building

- The distance between the side and the backside of the building at least equal to 2 meters, counting from the site border to an excess part which is the longest part of building.

9. Construction of many buildings in a site

The establishment of buildings that are more than 2 buildings in the same site are as follow:

- The distance of two buildings must be equal to the half the height of the taller building but not less than 3 meters;
- In case of constructing multiple buildings in the same site must allocate the detailed plan and the consent from the Ministry of city planning defense.

10. Land Use Ratio (E)

- Land use ratio (E) is the ratio of the ground floor area (SE) of the buildings to the site area of (SE) where new buildings will be constructed. Land use ratio (E) is allowed up to:
 - UDa 40%
 - UDb 50%
 - UDc 50%

11. Height of building

- Height of structures should not exceed 7 meters for area UDa

15 meters for area UDb

15 meters for area UDc

, from the ground floor of the building to the ceiling of the highest floor of the building. - The ground floor 0 compared to the permanent surface road should not exceed 0.30 meters.

12. Land Use Coefficient (COS)

- Land use efficient COS = 0.7 for area UDa
 - COS = 1 for area UDb
 - COS = 1 for area UDc

- COS is the ratio area of all floors of the buildings (SP) to the total site area, Herein the total buildings area is a summation of the total area of each floor including balcony, rooftop, basement and parking lot which has a specific COS related to the article 10 and 11

13. External feature of the structures.

- In this area, new structures along the road must define the front appearance to be the identity of Laos itself.

14. Fence or wall

- The total maximum height of fence is 2 meters;
- The front of road, the height of the highest part allowed is 0.80 meters, the remaining must be visible inside;
- The practice; the buildings or location should have fence or no fence or wall depending on the detailed development program.

15. Parking lot and open space

• Parking lot

The parking lot must be outside the road scope (road boundary) and the contractor must obtain the land use rights (and the constructor has the right to use) and the parking lot must at least have the following:

- Apartment: one lot for two families;
- School, office: one parking space per 20m² for the use area;
- Hotel: one parking space for 3 rooms;
- Restaurant: one parking per 4 m²;
- The market, shop: one parking per 10 m².

• Open space

- Regarding to the empty areas and plantation of tree must comply with the detail development program;
- Cutting the tree is prohibited, unless the tree obstructed the construction, but the permission must be given from the Ministry of City Planning Defense. The cutting plan must be shown in the general building plan which attach with the the application for construction. The tree that has been cut must be replaced for a new one for sustainability;
- The land of plantation should (hai) be protected or planting the trees in between road and infrastructure based on the detailed development program;
- Total empty land for plantation for use, should (hai) be protected or allocated at least 50% of the remaining area from construction.

C.2. UF - Zone of Villages surrounded by Rice Field

1. General features

- Location, specification and characteristics

It is an area which consist of isolated villages that are surrounded by farms, such as Pakthang, Nongpeeng, Donnok koum, Ban meuang noi siangda,... These areas should be taken care of as it is, mainly its low density. Social services are low, and the services of technical infrastructure are still small.

- Boundary

UF area, is a village zone that is totally surrounded by farms and is a part of villages: Thongpong, Nahae, Viengsavanh, Sisom suen, Dankham, Nonkeo, Nonkylek, Pakthang, Dongnasok neua(North), Dongnasok tai(South), Nonsavang, Nong duan tai(South), Nong duang neua(North), Nongping, Bo na ngua, Donnok koum, Nonsavang, Donkhasaiy, Nonko, Khamsavath, Nonvaiy, Ban muang noi siangda, Dongkham sang, and Nahai.

- Area

The total size of the zone of villages surrounded by rice fields is 1.646 hectares.

2. Activities to be permitted and to be prohibited.

- Activities to be permitted

- Residential buildings, such as (residential) independent building, (residential) collective building, (residential) consecutive building (row house).
- -Public buildings, such as school, hotel, hospital, culture hall, Government administration office, religious building, sport building, public hall, commercial building, etc.
- Public parking lot, service activities, public parks, etc.
- - Factory of Level 3 and
- Small handicraft, which has the area not more than 500 m²,
- which does not cause the pollution and annoyance to the urban area.

- Activities to be prohibited

- Level 1 & 2 industrial factory, and
- Warehouse with the area of not more than $400m^2$,
- Expanding these established activities that has already been existed is prohibited.
- Any activities, which cause pollution and annoyance, and cause trouble in the urban area, such as repair garage, gas warehouse, chemical warehouse, machine shop, factory that causes pollution, pile of metal scrap, etc. regardless of amount

3. Special case to be permitted

- Government administration office
- Hotels, gas station.
- Small and medium warehouse. Level 2 & 3 industrial factories.
- Garden.

4. Gateway (thaang khaw ook) and Road (sen thaang)

Every site to be constructed must have these following conditions:

- The site must face a public road;
- In case that the site does not directly face the public road, it must have a common path to attach the public road;
- Acceptable common path must be at least 4 metres wide, in the case that its length is not more than 50 metres. If the common path exceeds 50 metres long, it must have the width of at least 6 metres and also have the U-turn point;
- Gateway must be consistent with detailed land development program, as well as being agreed by the city planning management organization.

5. Technical infrastructure network (taa-naan khong-laan theknik)

- All establishable land must be mainly connected to the service infrastructure: Electricity infrastructure, telecommunication, water supply, waste water system, rain drain system.
- In case if the land is in a far distance from the technical infrastructure, must make a private technical infrastructure that will guarantee and it must be identical to the quality of technical issuance.
- The connectivity of the technical infrastructure pass by the land of the different

organizations will be from underground, land surface or from the air must be allowed by the owners of that properties first.

6. Feature and size of site

The site that is allowed for the establishment has as follows:

- Establishing in a safe location, no risk of such harm.
- Using without interrupting with other projects, such as cultural land, occupied land or reserved land for public advantages.
- Natural water lines and waste water system which has passed by the privately owned land or the public land is prohibited to build and block. It must be allowed for entrance-exit for the maintenance.
- The width of the land must be at least 4 metres for the consecutive buildings.
- The site area, which does not include in the preservation area, must be at least 48m², for consecutive buildings, and 140m² for independent buildings.

7. Distance between building and boundary of road area

- All the construction should not exceed the construction line.
- only use the road lines that has been already provided and the lines that are regulated by the Ministry of City Planning Defense.
- For the construction line should (hai) carry the existing one/construction line and the construction line is regulated by the organization of city planning
- In case of the construction lines hasn't been drawn, the buildings must be in the outer road border which has regulated by the Master Plan Order No.1366/Communication, Transport, Post and Construction Division, issue on 26 April 2006.
- In case of an independent buildings, it must setback from the construction line at least 4 meters.
- An excesses part which is exceed the construction line should not exceed 1.20m, but it has to have a height of at least 3 meters as compare to the road surface.

8. Distance between building and site border

- Construction of consecutive building

- shall be built consecutively as the depth, and the depth should not exceed 20 metres.
- The front side connected to the road can be established by connecting to each other in the length of no more than 50 metres, and must leave a space for the gateway. In case if the buildings is connected to each other longer than 50 metres, there must be a research, detailed planning, and the agreement from the Ministry of City Planning Defense.
- Shall be built close to the adjacent site in terms and conditions; the new building-tobe-built has no windows and there must be an agreement from the owners of the adjacent site in a letter at first.
- In case of not being able to build close to each other, should (hai) setback from the adjacent site at least 0.5 metres, counting from the site border/area to an excess part which is the longest part of the building.
- The backside of the buildings must be always setback from the site border/area at least 2 meters. Counting from the site border/area to an excess part which is the longest part of the building.
- Construction of independent building
- The distance between the side and the backside of building must be equal 2 meters counting from the site border/area to an excess part which is the longest part of the building.

9. Construction of many buildings in a site

The establishment of buildings that are more than 2 buildings in the same site are as follow:

- The distance of two buildings must be equal to the half the height of the taller buildings but not less than 3 meters;
- In case of constructing multiple buildings in the same site must allocate the detailed plan and the consent from the Ministry of city planning defense.

10. Land Use Ratio (E)

- Land use ratio (E) is the ratio of the ground floor area (SE) of the buildings to the site area (ST) where new buildings will be constructed. Land use ratio (E) is allowed up to

40%:

11. Height of building

- Height of structures should not exceed 7 meters, from the ground floor of the buildings to the ceiling of the highest floor.

- The ground floor 0 compared to the permanent surface road should not exceed 0.30 meters.

12. Land Use Coefficient (COS)

- Land use efficiency COS = 1
- COS is the ratio are of all building floors (SP) to the site area (ST). Herein the total building area is the equal of all areas each floor containing the veranda, terrace which has the roof and basement and parking lot, which half of the volume must be on the ground surface for specification for the land use. COS is related to the article 10 and 11.

13. External feature of structures.

- In this area, new structures along the road must define the front appearance to be the identity of Laos itself.

14. Fence or wall

- The total maximum height of fence is 2 meters;
- The front of road, the height of the highest part allowed is 0.80 meters, the remaining must be visible inside;
- The practice; the building or location should have fence or no fence or wall depending on the detailed development program.

15. Parking lot and open space

• Parking lot

The parking lot must be outside the road scope and the constructor has the right to use and the parking lot must at least have the following:

- Apartment: one lot for two families;
- School, office: one parking per 20m² for the use area;
- Hotel: one parking space for 3 rooms;
- Restaurant: one parking lot per 4 m²;
- The market, shop: one parking lot per 10 m^2 .

• Open space

- Regarding to the open space and plantation of tree must comply with the detail development program;
- Cutting the tree is prohibited, unless the tree obstructed the construction, but the permission must be given from the Ministry of City Planning Defense. The cutting plan must be shown on the general plan of construction which attach to the application for construction. The tree that has been cut must be replaced for a new one for sustainability;
- The land of plantation should be protected or planting the trees in between road and infrastructure based on the detailed development program;
- Total empty land for plantation for use, should be protected or allocated at least 50% of the remaining area from construction.

D. City-Expantion Area

D.1. UE - City-Expansion Zone

1. General features

- Location, specification and characteristics

UE Area, is an expandable area located north-east from the central part of the urban area. This area is attached to the suburbs. It is designed as the area that is prepared for the city expansion, population growth and economic-sociality, and will:

- be a new center of the city or

- be an outskirt of the city

in the future. The area is mainly for residential expansion, with old building, necessary to build road system that will benefit the villagers. The density is as average.

- Boundary

UE Area, is a village expansion zone which covers these villages: Nonsa nga, Nonsavanh and has covered a part of Nonsavang village, Vangxay, Sok kham, Seng savang, Nong neou, Ahmon, Hua khua, Khamsavath, and Samkae.

- Area

The total size of *City-Expansion Zone*: 856 hectares.

2. Activities to be permitted and to be prohibited.

- Activities to be permitted

- Residential buildings, such as (residential) independent building, (residential) collective building, (residential) consecutive building (row house).
- -Public buildings, such as school, hotel, hospital, culture hall, Government administration office, religious building, sport building, public hall, commercial building, etc.
- Public parking lot, service activities, public parks, etc.
- - Level 3 industrial factory and
 - Small handicraft, which has the area not more than 500 m²,

which does not cause the pollution and annoyance to the urban area.

- Activities to be prohibited

- Level 1 & 2 industrial factory, and
- Warehouse with area of more than 400m^{2,}
- Extension of these existing activities is prohibited.
- All activities that will cause pollution and annoyance to the cities, such as repair garage, gas warehouse, chemical substances, leather, foundry, the factories that will cause any pollution, pile of steel scrap, etc...
- - Level 3 industrial factory, and
- Small handicraft, which has the area not more than 500 m²,

which does not cause the pollution and annoyance to the urban area.

- Activities to be prohibited

- Level 1 & 2 industrial factory, and
- Warehouse with the area of not more than 400m²,
- Expanding these established activities that has already been existed is prohibited.
- Any activities, which cause pollution and annoyance, and cause trouble in the urban area, such as gas warehouse, chemical warehouse, pile of metal scrap, etc. regardless of amount. Slightly different with other regulations.

3. Special case to be permitted

- Government administration office
- Hotels, gas station.
- Small or medium warehouse. Level 2 & 3 industrial factories.
- Vegetable garden.

4. Gateway (thaang khaw ook) and Road (sen thaang)

Every site to be constructed must have these following conditions:

- The site must face a public road;
- In case that the site does not directly face the public road, it must have a common path to attach the public road;

- Acceptable common path must be at least 4 metres wide, in the case that its length is not more than 50 metres. If the common path exceeds 50 metres long, it must have the width of at least 6 metres and also have the U-turn point;
- Gateway must be consistent with detailed land development program, as well as being agreed by the city planning management organization.
- 5. Technical infrastructure network (taa-naan khong-laan theknik)
 - All establishable land must be mainly connected to the service infrastructure: Electricity infrastructure, telecommunication, water supply, waste water system, rain drain system.
 - In the case of the land which is in far distance from the technical infrastructure, must make a private technical infrastructure that will guarantee and it must be identical to the quality of technical issuance.
 - The connectivity of the technical infrastructure pass by the land of the different organizations will be from underground, land surface or from the air must be allowed by the owners of that properties first.

6. Feature and size of site

The land that is allowed for the establishment has as follows:

- Establishing in a safe location, no risk of such harm.
- Using without interrupting with other projects, such as cultural land, occupied land or reserved land for public advantages.
- Natural water lines and waste water system which has passed through the privately owned land or the public land is prohibited to build and block. It must be allowed for gateway to maintenance.
- The width of the land must be at least 4 metres for the consecutive buildings.
- The site area, which does not include in the preservation area, must be at least $48m^2$ for a unit of row buildings, and $140m^2$ for an independent buildings.

7. Distance between building and boundary of road area

- All the constructions should not exceed the construction line.
- only use the road lines that is already has been provided and the lines that are regulated by the Ministry of City Planning Defense.
- For the construction line should (hai) carry the existing one/construction line and the construction line is regulated by the organization of city planning.
- In case of the construction lines hasn't been drawn, the buildings must be in the outer road border which has regulated by the Master Plan Order No.1366/Communication, Transport, Post and Construction Division, issue on 26 April 2006.
- In case of an independent buildings, it must be setback from the construction line at least 4 meters.
- An extended part that exceeded a construction line must not be more than 1.20 meters, but it has to have a height of at least 3 meters as compare to the road surface.

8. Distance between building and site border

• Construction of consecutive building

- Shall be built connectedly as the depth, and the depth should not exceed 20 metres.
- The front side connected to the road can be established by connecting to each other in the length of no more than 50 metres, and must leave a space for the gateway. In case if the buildings is connected to each other longer than 50 metres, there must be a research, detailed planning, and the agreement from the Ministry of City Planning Defense.
- Shall be built near the adjacent site in terms and conditions; the new building-to-bebuilt has no windows and there must be an agreement from the owner of adjacent siye in a letter at first.
- In case of not being able to build close to each other, should setback from the adjacent site at least 0.5 meters, counting from the site area/border to an excess part which os the longest part of building
- The back side of the building must be always setback from the site area/border at least 2 meters, counting from the site area/border to an excess part which os the longest part of building

Construction of independent building

- The distance between the sides and the backside of the building must be equal to 2

meters counting from the site area/border to an excess part which os the longest part of building

9. Construction of many buildings in a site

The establishment of buildings consisting more than 2 buildings in the same site are as follow:

- The distance of two buildings must equal to the half the height of the taller building but not less than 3 meters;
- In case of constructing multiple buildings in the same site must allocate the detailed plan and the consent shall be given from the Ministry of city planning defense.

10. Land Use Ratio (E)

- Land use ratio (E) is the ratio of the ground floor area (SE) of the buildings to the site area (ST) where new buildings will be constructed. Land use ratio (E) is allowed up to 50%.

11. Height of building

- Height of structures should not exceed 23 meters, from the ground floor of the buildings to the ceiling of the highest floor.
- The ground floor 0 compared to the permanent surface road shall not be over 0.30 meters.

12. Land Use Coefficient (COS)

- Land use efficiency COS = 1
- COS is the area ratio of all building floors (SP) to the site area (ST). Herein the total building area is the equal of all areas each floor containing the veranda, terrace which has the roof and basement and parking lot, which half of the volume must be on the ground surface for specification for the land use. COS is related to the article 10 and 11.

13. External feature of structures

- In this area, new structures along the road must define the front appearance to be the identity of Laos itself.

14. Fence or wall

- The total maximum height of fence is 2 meters;
- The front of road, the height of the highest part allowed is 0.80 meters, the remaining must be visible inside;
- The practice; the building or location should have fence or no fence or wall depending on the detailed development program.

15. Parking lot and open space

• Parking lot

The parking lot must be outside the road scope and the constructor has obtain the rights to use and the parking lot must at least have the following:

- Apartment: one lot for two families;
- School, office: one parking per 20m² for the use area;
- Hotel: one parking space for 3 rooms;
- Restaurant: one parking lot per 4 m²;
- The market, shop: one parking lot per 10 m².

• Open space

- Regarding to the open space and plantation of tree must comply with the detail development program;
- Cutting the tree is prohibited, unless the tree obstructed the construction, but the permission must be given from the Ministry of City Planning Defense. The cutting plan must be shown on the general plan of building which attach to the application for construction. The tree that has been cut must be replaced for a new one for sustainability;
- The land of plantation should be protected or planting the trees in between road and infrastructure based on the detailed development program;
- Total empty land for plantation for use, should be protected or allocated at least 50% of the remaining area from construction.

E. Minor Zone and Specific Land Use Zone

E.1. NE - Reservation Zone

1. General features

- Location, specification and characteristics

It has the most beautiful view in the urban area, the zone as specified in special case for government project, such as:

- Kayson Phomvihan monumemt park project,
- Don Xieng Xou,
- Had Don Chan,
- That Luang pond,
- Nongtha,
- Nongping,
- Nongsanghouabo,
- Nong O,
- Nongdoaung,
- Nongchan,
- Nongbone,
- Nongbouamay,
- Ningloubngeual,
- Nongveng and
- natural water ponds which preserved in the urban area.

These areas shall be protected from construction, shall be used as the land for preservation, forestry improvement, water resource, drainage, reservoir and natural environment.

- Boundary

The scope of zone is specified in the land use plan and zoning code and specific development zone.

- Area

The area of NE (*Reservation Zone*) covers totally 1,470 hectares.

2. Activities to be permitted and to be prohibited

- Activities to be permitted

After being agreed by all levels of city plan management agencies, the activities to be allowed are followings:

- Buildings involved in the preservation, forest management or environment protection;
- Buildings for natural tourism

- Activities to be prohibited

- All construction activities (except buildings above)

3. Special case to be permitted

After being agreed by all levels of city plan management agencies, the following special activities can be permitted:

- The project, which was studied from the viewpoint of the technical matter and was agreed by the higher level.

4. Gateway (thaang khaw ook) and Road (sen thaang) until

15. Parking lot and open space

- Not applicable

E.2. I Zone - Industrial Zone

1. General features

- Location, specification and characteristics

The location of this area has taken the industrial zone in the past which is located on the side line of Thadeua Road in between both sides of roads starting from Somsanouk village, Nong vang, Nonghai village, Sala kham, Somvang tai(South). The objective of this area is to achieve level 3 industries accordingly to rules. Consisting technical master plan that has the lowest rate of land use per hectare.

- Boundary

The scope of zone has been limited to the area planning management for land use, main developing area, and plan for limiting location of national level industries.

- Area

The area of I public preservation zone covers totally 220 hectares.

2. Activities to be permitted and to be prohibited

- Activities to be permitted

- Warehouse.

- Level 2 industries, and Level 3 which has not been categorized in any kind but must be in terms and conditions afterward with related section that does "environmental and social effect" research. (We can not understand.)

Level 2 and Level 3 are not categorized into any type of activity (either to be permitted or to be prohibited) but if so, it has to get a permission from related sectors after doing a research on the impacts to social and environment.

- Activities to be prohibited

- Level 1 industries, and the expansion of the existing running activities.
- Warehouse of scrap steels, scrap parts from destruction, remaining pieces, such as old tires, old vehicles, cotton/silk, and rubbish.

3. Special case to be permitted

- Residential buildings for:
 - security guards, and
 - the owner of the business in the area
- Gas station

4. Gateway (thaang khaw ook) and Road (sen thaang)

- Construction site must directly facing to a public road as infrastructure system.

5. Technical infrastructure network (taa-naan khong-laan theknik)

- **Hydrant water**: Establishing level 2 and level 3 industrial factory must consider the capacity of water hydrant sufficiently. In that the estimation of water needs for future use, however must follow along with the related sectors.
- Water Depletion System: All establishments and installment will continue using water depletion infrastructure associated with related work issuant standard.
- Waste Water Depletion System: All establishments are disallowed to deplete waste water to the public water depletion infrastructure directly except counteracting waste water to clean water must meet the standard of the associated work issuant first, only then release the water to the joint water system.

6. Feature and size of site

- Must have a detailed plan of site allocation and approved from City Planning Defense Organization.
- For the level 2 of industrial factories, medium size of warehouse, the site that is available for construction must have a width of 15 meters and has the site area at least 500m².
- For the level 3 of industrial factories, small size of warehouse, site that is available for construction must have a width of 8 metres and has the site area at least 200m².

7. Distance between building and boundary of road area

- Every construction has to be follow the construction line which provided in the detailed plan. If there is no line in any of locations, it has to define at least 15 metres away from the central road. The buildings for offices, residence for watchers, social service buildings, electricity management boxes, gas payment places have to be in term for no more than 20% the area of construction at behind the construction line.

- In case the construction line has not been determined, the buildings should (hai) be establish outskirt border of road by applying article 8.

8. Distance between building and site border

• Construction of consecutive building

- For level 2 industrial factories, medium size of the warehouse, the buildings must be away from every part of the land at least 6 metres.
- For level 3 industrial factories, small size of the warehouse, the buildings must be away from every part of the land at least 4 metres.

9. Construction of many building in a site

- Moreover, contrary suggestion to detailed planning allocation, 2 inconsecutive buildings in the same site has to setback from each other which equal to the half of the taller building but not less than 6m. In terms of the construction must provide security system in order to prevent the spreading of fire proof walls and common path that could be used in case of emergency.
- In between front side of buildings. A buildings containing infrastructure in order to receive sun light into the office. The distance between 2 buildings must be equal to the half of taller building but not less than 10 meters.

10. Land Use Ratio (E)

Moreover, contrary suggestion to detailed planning allocation, the area of construction attaching to the surface of land should not exceed 30% of the total land. Sometimes it could be 50% in the following conditions:

- A section that exceeds 30% shall be 2 floors which means 6 metres at the maximum point. (not able to understand)
- All the area of this building is for office programs, services and commerce.

11. Height of building

- Height of structures should not exceed 15 meters, from the ground floor of the buildings to the ceiling of the highest floor.
- The floor zero (phuun saan suun) compared to the permanent surface road should not be over 0.30 meters.

12. Land Use Coefficient (COS)

- Land use efficient COS = 2
- COS is the area ratio of all building floors (SP) to the site area (ST). Herein the total building area is the equal of all areas each floor containing the veranda, terrace which has the roof and basement and parking lot, which half of the volume must be on the ground surface for specification for the land use. COS is related to the article 10 and 11.

13. External feature of structures

- Must have detailed master plan.

14. Fence or wall

- Must have detailed master plan.
- The real process of the buildings, or the location should have fences or not, or that wall is dependent on plan of the land scape provided.

15. Parking place and open space

- Parking lot

- Industrial buildings must provide parking lots for transportation vehicles and servicing on that land itself.
- 1 parking lot per 25m²

- Open space

- The green grass area and tree plantation must equal to 10% of total area. The tree plantation area must be separated away from the industry at least 12 meters. Must plant the trees in double lines and the thickness of the trees should be 10m² per tree. Encourage the design to be suitable to reduce the pollution caused by that industry.

E.3. T zone - Transport Zone

1. General features

- Location, specification and characteristics

- It is a zone for transportation programs these includes;
 - Ta- Air Transportation Zone
 - Tf- Train/Rail Transportation Zone
 - Tp- Sea Transportation Zone
 - Tr- Land Transportation Zone

- Boundary

The scope of zone has been limited to the area planning management for land use, and main developing area.

- Area

T Zone (Transport Zone) with a total of 390.47 hectares. Excluding train transportation.

2. Activities to be permitted and to be prohibited until

15. Parking lot and open space

- Not applicable.

E.4. E zone - Services Zone

1. General features

- Location, specification and characteristics

- It is a zone for service programs these includes;
 - Ef- Education Zone
 - Eh- Public Health Zone
 - Em- Military Zone and Public Security Zone

- Boundary

The scope of zone has been limited to the area planning management for land use, and main developing area.

- Area

E Zone, the services area combining all the areas are:

- Ef-Education Zone163 hectaresEh-Public Health Zone37 hectares
- Em- *Military Zone and Public Security Zone* 245 hectares

- For information, see regulation associated with sectors.

2. Activities to be permitted and to be prohibited until

15. Parking lot and open space

- Not applicable.

E.5. NA - Agricultural Zone

1. General features

- Location, specification and characteristics

- It is the land use zone for agriculture and livestock.
- NA is the large agricultural zone in Vientiane Capital, and is a zone excluding all types of construction. In the irrigation zone, which consist of irrigation ditch and rice fields, expansion of backfilling and constructions are not allowed, in the rice fields, such as Thongpong, Nongping, Nongnieng, Viengcahleun, Phonpapao, Donnokkhoum and Bo O village.

- Boundary

The scope of zone has been limited to the area planning management for land use, and main developing area.

- Area

The area of NA (*Agricultural Zone*) covers totally 8,855 hectares.

2. Activities to be permitted and to be prohibited

- Activities to be permitted

- Temporary constructions for farmers. Ordinary farmer's house is not allowed.

- Activities to be prohibited

- Permanent residential construction;
- Trade buildings;
- Backfilling and digging for all types of construction, which has environment and water impact;
- Industrial buildings and warehouse for all kinds of industry.

3. Special case to be permitted

- Manufacturer buildings with cultivation agriculture and livestock production
- Buildings for religion, social-culture, sports and relax
- Condition above must be passed the relevant technical study research stage and permitted from the city plan management agency.

4. Gateway (thaang khaw ook) and Road (sen thaang) until

- 15. Parking lot and open space
 - Not applicable.

E.6. A - Zone of Rice Fields surrounded by Built-up Area

1. General features

- Location, specification and characteristics

A zone, which is called "Zone of Rice Fields surrounded by Built-up Area", is the area separated from the_NA zone (*Agricultural Zone*). In some places, there is a construction, however expansion and a new construction is prohibited, such as rice fields from Nongsano kham to Dongnasok, form Phonpanao to Chommany until 6 km post. These shall be reserved to be a green area of rice fields.

- Boundary

The scope of zone has been limited to the area planning management for land use, and main developing area.

- Area

The area of A (Zone of Rice Fields surrounded by Built-up Area) covers a total of 79,75 hectares.

2. Activities to be permitted and to be prohibited

- Activities to be permitted

- Temporary residences for farmers.
- In case the establishment spread from UB area to the area should (hai) follow the policies and rules of UB area.

- Activities to be prohibited

- Permanent residence buildings;
- Trade buildings;
- Backfilling and digging for all types of construction, which has environment and water impact;
- Industrial buildings and warehouse for all kinds of industry.

3. Special case to be permitted

- Manufacturer buildings with cultivation agriculture and livestock production.
- Buildings for religion, social-culture, sports and relaxation.
- Farm area that is closely surrounded that is still being reserved in the main city will be provided as a green area, park, or the land for public benefits.
- Condition above must be passed the relevant technical study research stage and permitted from the city plan management agency.

4. Gateway (thaang khaw ook) and Road (sen thaang) until

15. Parking lot and open space

- Not applicable.

Chapter III Policy to Good Worker and Measures to Violator

Article 7: Policy to Good Worker

Any person or organization, who/which has good works in carrying out the Vientiane city plan or good works in carrying out this regulation, will receive the esteem or promotion as appropriately.

Article 8: Measures to violator

Any person or organization, who/which violates this regulation, will be:

- warned,
- re-educated,
- penalized by some measures,
- based on severity of the case.
- 1. Re-educating measure
 - Any person, legal person or organization violates this regulation, such as:
 - laying the construction material, or disposing the waste outside the defined place,
 - constructing or extending some part which covers on the public place, or
 - other light violation,

shall be:

- warned and re-educated, and
- ordered to stop construction or dismantle the construction, which is inconsistent with this regulation.

based on each case.

2. Measure for compensation

Any person or organization, who/which violates this regulation and cause the damage to the assets of the Government, public or any person, shall compensate the damage according to the law.

3. Measure for penalty

Any person or organization, who/which still continues violation after being re-educated with the above measure, will be fined with 10% of the value of construction or renovation, which has been done without permission. In case where such construction or renovation is not consistent with this regulation, violator shall dismantle the incorrect construction in each case.

4. Criminal measures

Any person including people and government staff, who violates this regulation as criminal offenses, which:

- are,

- using fake documents,
- forging the documents,
- abusing a position for a personal benefit, and
- neglecting the duty, and
- cause the damage to:
 - life or health of person or
 - the Government or common asset, and
- are incompliance with the safety measures, and cause the death or health problem,
- shall be punished according to the criminal law.
- 5. Additional punishment measure

Besides the punishment mentioned above, the violator who caused the serious damage to the asset of the Government, common or private, will receive additional punishment, such as:

- suspension of business,
- withdraw of permission,
- dismantle of the construction or renovation

based on each case.

Chapter IV Final Provision

Article 9: Implementation

- 1. To assign the Department of Communication, Transport, Post and Construction of Vientiane Capital, in cooperation with:
 - the Department of Housing and Urban Plan of Ministry of Communication, Transport, Post and Construction, and
 - sectors concerned,
 - $\mbox{-}$ to make the implementation program of detail city plan, in particular to each zone or project, and
 - to issue the regulation and notice for the implementation of this decision.
- 2. To assign the Department of Communication, Transport, Post and Construction of Vientiane Capital in cooperation with:
 - Districts,
 - Municipalities, and
 - sectors concerned
 - to disseminate this regulation thoroughly,
 - to follow up the implement strictly, and
 - to report every period.

Article 10: Effectiveness

This Regulation is valid from the date of signature. Other provisions, regulations or notices which contrary to this regulation shall be canceled.

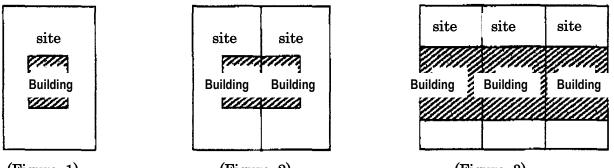
Governor of Vientiane Capital

No.	Legend	Description of zone	Land use ratio (E)%	Height of buildings (H) m	Land use coefficient (COS)
a		Urban Central Zone		(11) 111	
1	ZPP-Ua	Historic-Town Conservation Zone	75%	12	2.5
2	ZPP-Ub	Ancient-Site Conservation Zone	50%	7	0.7
3	UAa	Administration-and-Trade Central Zone	75%	26	2.5
4	UAb	New Central Zone	75%	26	2.5
		Surroundings of Urban Central Zone		-	
1	UBa	Surroundings of Urban Central Zone within Aircraft Flying Zone	60%	Referring to relevant regulation	1.5
2	UBb	Surroundings of Urban Central Zone	60%	20	1.5
3	UCa	Mekong Riverbank Zone within Aircraft Flying Zone	50%	10	1
4	UCb	Mekong Riverbank Zone	50%	10	1
		Surroundings of Urban Zone and Suburb			
1	UDa	Surroundings of Urban Zone within Aircraft Flying Zone	40%	7	1.5
2	UDb	Surroundings of Urban Zone relevant to Agricultural Activities	50%	15	1.5
3	UDc	Surroundings of Urban Zone which will expand	50%	15	1
4	UF	Villages surrounded by Rice Field	40%	10	1
		City-Expansion Zone			
1	UE	City-Expansion Zone	50%	23	1
		Minor Zone and Specific Land Use Zone			
1	NE	Preservation-for-Public-Use Zone	30%	14	With
2	Ι	Industrial Zone			reference
3	Т	Transport Zone			to the detail
4	Ef	Education zone			plan
5	Eh	Public Health Zone			allocation
6	Em	Military Zone and Public Security Zone			
7	NA	Agricultural Zone			
8	А	Rice Field surrounded by Built-up Area			

Practical Guideline

I. Before construction, it is needed to carry out as followings

- 1. To confirm the site where construction will be done, and to identify the site on the map, which is color with the alphabet, such as ZPP-Ua, old city preservation zone,
- 2. After identifying on which zone the construction site locates, to see the city plan regulation of that zone in chapter II, article 6, which specifies the zoning code of 15 items for each zone. Such regulation specifies the overall direction (thit thaang luam) responding to each building type:
 - Plain Buildings (aa-khaan suan tua) are classified into many types. The inconsecutive buildings (aa-khaan bo to-nuan) (Villa (wila)) (Figure 1) Twin buildings (aa-khaan feed) (Two buildings connected by their sides) (Figure 2) The consecutive buildings (aa-khaan to-nuan) (Row house (hong thew)) (Figure 3)



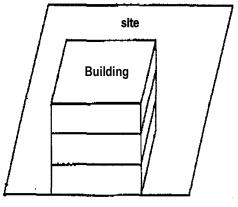
(Figure 1)

(Figure 2)

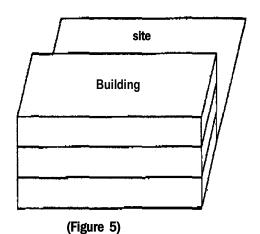
(Figure 3)

• The Collective Buildings (aa-khaan luam muu) is classified into two types. The consecutive inconsecutive collective buildings (independent buildings (aa-khaan diaw)) (Figure 4)

The **inconsecutive** consecutive collective buildings (buildings, of which sides are close to other buildings) (Figure 5)







II. Method to carry out the zoning code

The zoning code consists of 15 items of the regulation corresponding to each land use zone, as the following detail:

1. Characteristics of Zone

- Location, Specification and Characteristic
- Zone Boundary
- Area

2. Activities (khit-cha-kaan) to be permitted and to be prohibited

• Activities to be permitted

In urban area, it is necessary to select the structures and activities, which do not cause the negative impact, or possibly bring the problem to the urban area directly or indirectly.

• Activities to be prohibited

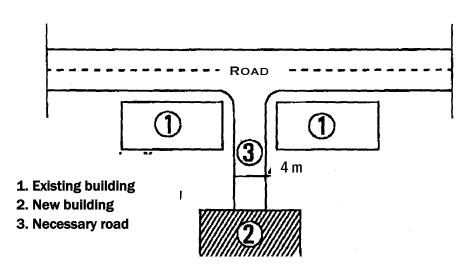
In the urban area, it is necessary not to allow the structures and activities, which cause the problem or possibly cause the bad impact to the urban area directly or indirectly.

3. Special case to be permitted

It is the special case, which can be permitted, but it depends on the case.

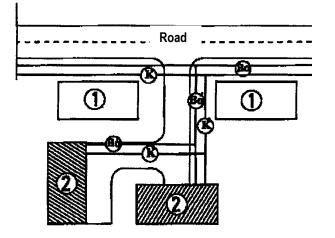
4. Road (sen thaang) and Gateway (thaang khaw ook)

The site for construction must be ensured having the gateway linking to the public road, in order to enable the vehicle, such as garbage truck and fire engine, to access the site, through specifying the width of a common path (thaang hoom) based on the zoning code of each zone.



5. Technical infrastructure

- This regulation indicates that: every construction site shall be connected to the technical network for service, such as the water supply, sewage drain, electricity network, telephone, garbage disposal.
- In case where the construction site is far from the public technical network, the buildings on such site must be ensured to use the private technical system in accordance with the related technical standards.



Existing buildings
 New buildings
 K general drainpipe
 K' specific drainpipe
 Bo general distribution
 pipe
 Bo' specific distribution
 pipe

General >> Public Specific >> Private

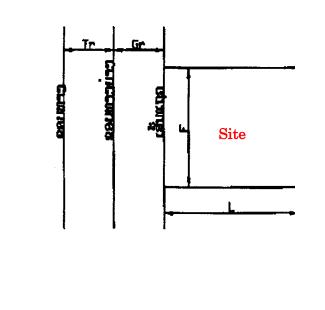
6. Feature of site

The land condition is specified in order to make the construction site efficient. This item doesn't stipulate the shape of land, but stipulate:

- the minimum width of front side of construction site, which is facing to the road,

- the minimum area of construction site,

so as to have the condition for asking the permission. Specification of the height and the site area depends on the land use regulation of each zone,



Tr: Pedestrian way

Gr: preservation area

F: width of site in meter

 $- F \ge 4$ meters for consecutive building

- F \geq 10 meters for independent building

L: length (depth) of site in meter - L \geq 18 meters for consecutive building - L \geq 14 meters for independent building

Construction line (seen theew puk saang) Edge of pedestrian way (khob thaang nyaan) Road edge (khob thaang)

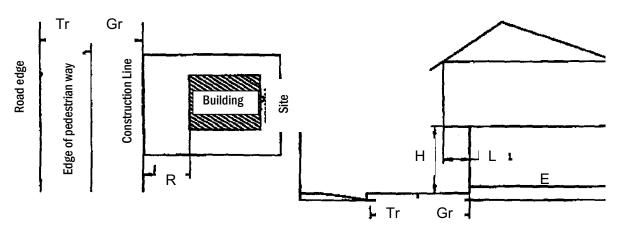
7. Building construction from the boundary of road area

The objective of this item 7 is to require the front of structures along the road:

- to be in the construction line, and

- not to decline and not to intrude.

The construction line is the preservation area for road as specified in route network and depends on the type and size of road in the urban area.



8 Tr: Pedestrian way Gr: Green areaR: Distance from the construction line to the buildings Tr: Pedestrian way

Gr: Reservation area

- E: Ground floor level compared with the pedestrian way
- H: Height from road surface to the intrusive part

Distance between building and site border

L: length of intrusive part

The boundary of site is determined by its borderlines, excluding the front side (Road facing side). Such determination is aimed:

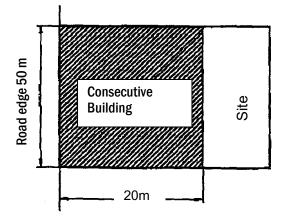
- To ensure the locations of structures not so close to each other in order to avoid disturbing and being annoyed by nearby people and preserving the good environment, such as lighting, air, soil, water, and cleaning;

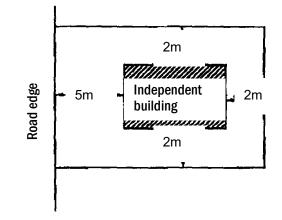
- To ensure the cohabitation, and to respect the rights of each other.

Determination of the distance from the fence (boundary of site) to the structures is based on the land use regulation of each zone, type of buildings and height of buildings.

<Left figure> "Road edge" should be "construction line".

<Right figure> "Road edge" should be "Boundary of road area".



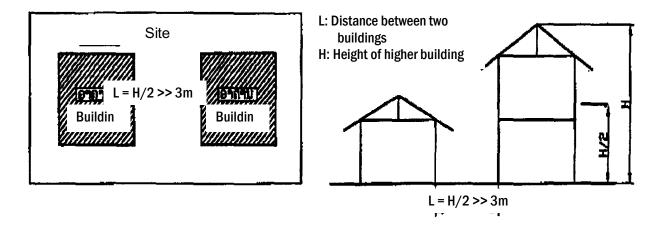


9. Construction of many buildings in a site

This regulation is aimed to control many structures on a site, in order to secure the distance in compliance with the standard as specified in each zone, and to control the density of habitation. Conditions to define the distance are based on:

- Size of a site;
- Type of building use, building group;
- Height of structures;
- Zoning Code for each zone.

(Definition of building height is different from the provision before.)



10. Land Use Ratio: E [Building Coverage Ratio]

- Land use ratio (E) is the ratio of the ground floor of the building (SE) to the site area (ST):

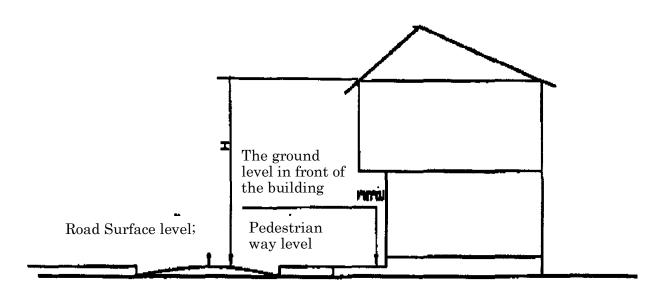
 $E = \frac{SE}{ST}$ is Land Use Ratio.

- E: Land Use Ratio, which must not be over 75%.

- Determining this rate is aimed to control the density of structures. It means to enable the open space of site to be used for other activities, such as place for planting, gateway, drainage and others, based on the size of a site and building use.
- The quotient depends on Zoning Code, kind and type of buildings, height of buildings, and land use coefficients (Floor Area Ratio) as determined specifically for each zone.

11. Building Height (H)

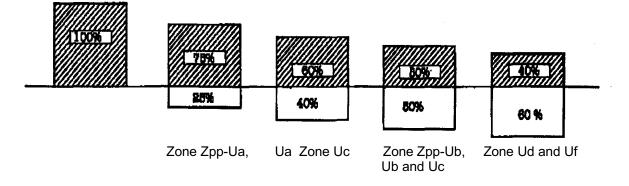
- The maximum height of structures is measured from the ceiling of the top floor of buildings to the ground floor. In comparing with the road surface, which the buildings faces, the part below the road surface level is excluded (from the building height). This regulation does not apply to:
 - the religious buildings,
 - public use buildings, such as stadium, hall, public water tank, technical watch-tower, antenna tower, structures related to any certain technique.
- The height depends on the Zoning Code and the special characteristic of each zone. Beside that, it also relies on the width of road where the buildings turns to;
- A determining or limiting the height is aimed to manage the balance of the structures in the urban area, to protect the specification of buildings which has particular architecture, antique, or to preserve a view of urban area to be beautiful.
- Specifying the height of buildings also depends on other technical conditions, such as security system, technical infrastructure system (Electricity, water, garbage disposal); (It means that the maximum building height depends on not only the zone but also the conditions of infrastructure surrounding the land?)



H: Height of building

12. Land Use Coefficient (COS)

- COS is the number used in the calculation for requirement and comparing value related to the size, area, portion of building. Land Use Coefficient is the ratio of total floor area of the building to the site area, herein the total floor area of the building includes;
 the area of veranda, terrace which have the roof,
 - the area of veranda, terra
 - basement,
 - garage, etc.



13. The exterior feature of structures

- This item indicates:
 - the exterior shape of structures, and
 - architectural detail, such as material, color, and the ad signs installation.
- Specifying the external shape of the structures is in accordance with the Zoning Codes of each zone, especially the zone for heritage or architecture preservation, the external shape of structures must be consistent with the specific regulation of such zone.

14. Fence or wall

- The fence and wall to be constructed should (hai) be consistent with the existing environment.
- In practice, it depends on the specific land development program whether the buildings should have fence or not.

15. Parking Lot

- This item specifies the necessary parking lot depends on the number of residence and number of employment of the buildings, such as:

- collective buildings,
- plain buildings (aa-khaan suan tua),
- commercial buildings,
- public use buildings,

in specifying the parking lot in accordance with the Zoning Code for each zone and type of building use.

- Open space and planting space consists of:

- public park,

- pond,

- green area of roadside,
- green area of riverbank,
- agricultural area

in the urban area, forestry area and others.

- This item specifies to enforcing the protection of environment in the urban area, rare crop, the ecology system to absorb the pollution, waste and water and air pollution caused by the urban area. Specifying the open space depending on the density of each zone.