

# INTRODUCTION TO URBAN MORPHOLOGY KNUST DEPT OF ARCHITECTURE GROUP 5 URBAN GROWTH URBAN FORM 01 02 Factors that affect Urban growth Elements that affect Urban form URBAN TRANSITIONS AND TRANSFORMATION

# URBAN MORPHOLOGY

- The study of the **formation of human settlement**.
- Process of **formation** and **transformation**.
- Seeks to understand spatial structure by analyzing physical setting.
- **Urban morphology** is divided into two groups:

# A few examples of common patterns of urban form that have been identified and documented in multiple settings by urban morphologists (drawn by Brenda Scheer). \*\*Discourse from the control of the contr

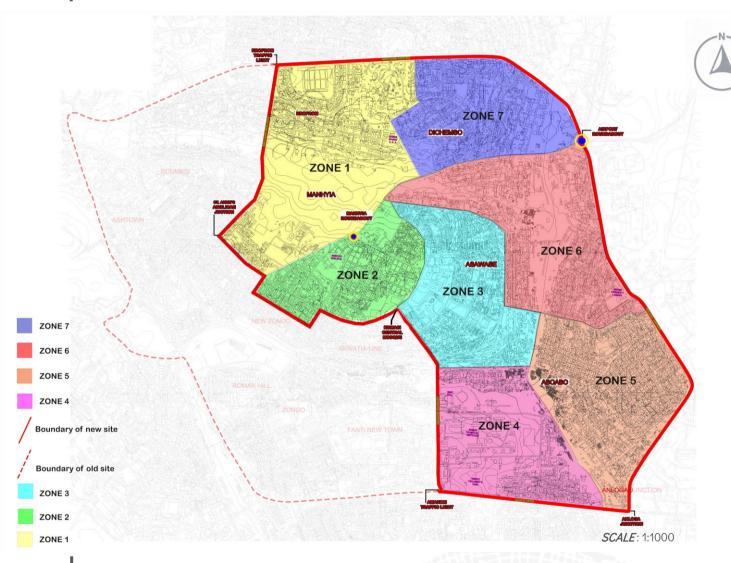


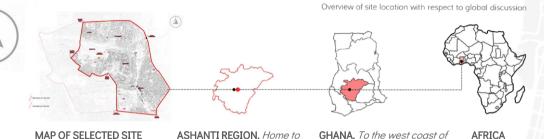
Area of study



# SITE LOCATION 9







• The study area which comprises of:

culture

deep-rooted Ghanaian

- Asokore Mampong Municipality Latitude 6° 43'2.67"N and Longitude 1° 33'43.28"W
- Oforikrom Municipality Latitude 6.35°N and Longitude 1.30°W
- Kumasi Metropolitan District Latitude 6.35° N and Longitude 1.30°W
- Occupies a total land area of 4.986 sq.km

Source: Google Earth







URBAN TRANSITIONS AND TRANSFORMATION



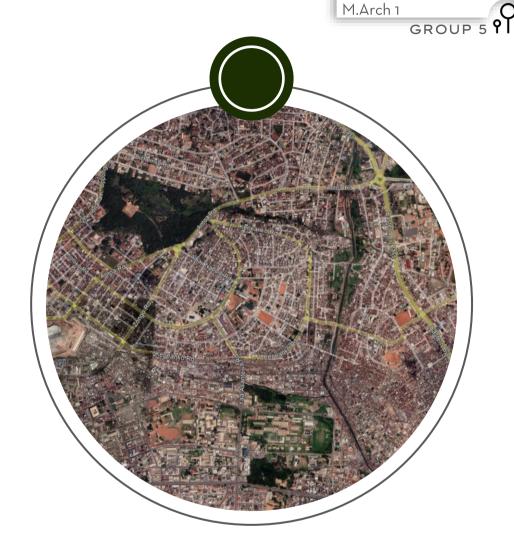
URBAN TRANSITIONS AND TRANSFORMATION

The physical expansion of a city or urban area over time, as its population and economic activity increases.

Urban growth is influenced by;

- The development of new buildings
- Infrastructure
- Transportation networks
- The expansion of existing neighborhoods and commercial areas.





Current map with roads

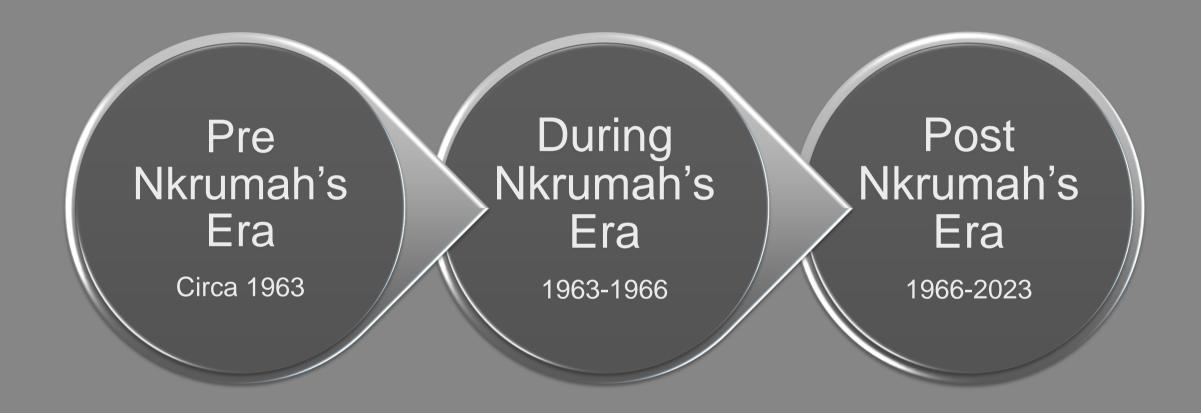


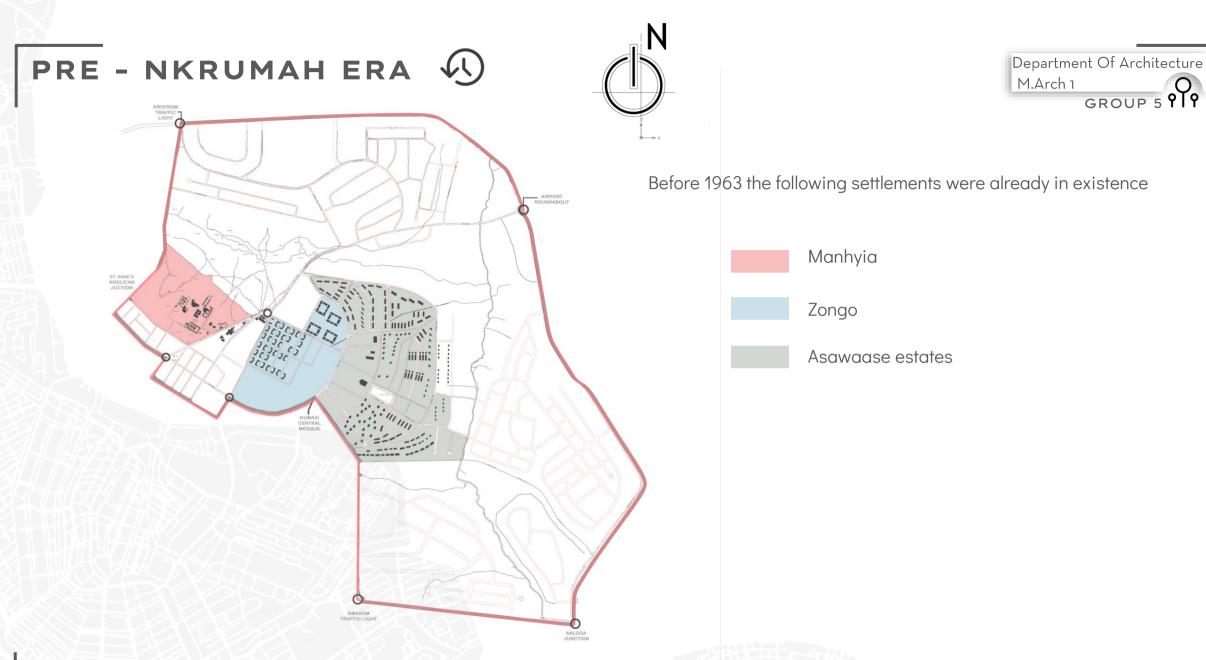
URBAN TRANSITIONS AND TRANSFORMATION (URBAN MORPHOLOGY)



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# PRE - NKRUMAH ERA

sawaase used to be a small settlement around the Asaawa tree which was established from the palace of the queen for protection.

The inflow of the British in 1874 transformed the place into their own settlement.

In 1874-1901, there were series of wars between the British and Ashantis. Troops from India, Kenya, Nigeria, and Jamaica were brought in by the British to help fight the Ashantis.

Yaa Asantewaa war of 1900 ended the dispute which called for the return of the troops back to their respective countries, but the Hausa from Nigeria decided to stay behind in





# PRE - NKRUMAH ERA

The invasion of the British during the colonial days led to the relocation of the Ashanti king from Kwaman to present day Manhyia after Kwaman being the capital town of ancient day Asanteman was burnt down.

The move to Manhyia was motivated by several factors, including the Asantehene's desire for a more centralized location for his administrative and ceremonial activities.



GROUP 5 PT

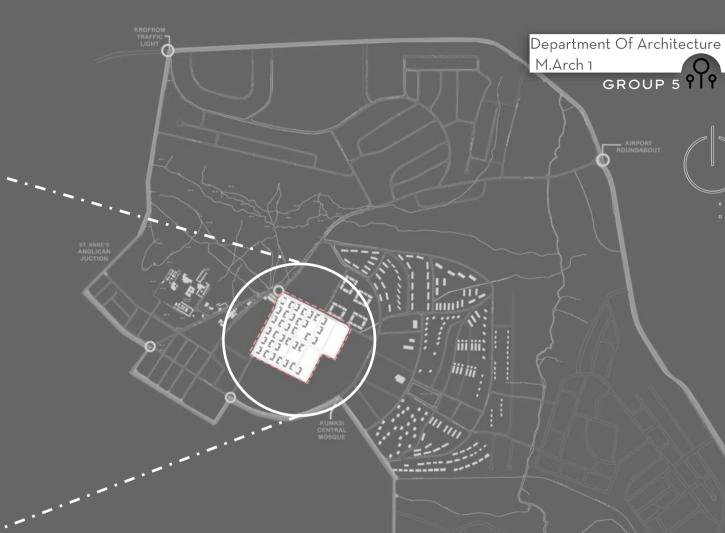


# PRE - NKRUMAH ERA

As part of security interventions, the king strategically sited the **Zongos** close to the **Manhyia for protection** against foreign invaders in future.

This was due to the physical stature of the Zongos.

They were known to be physically strong, tall and masculine in physique.













# DURING NKRUMAH'S ERA

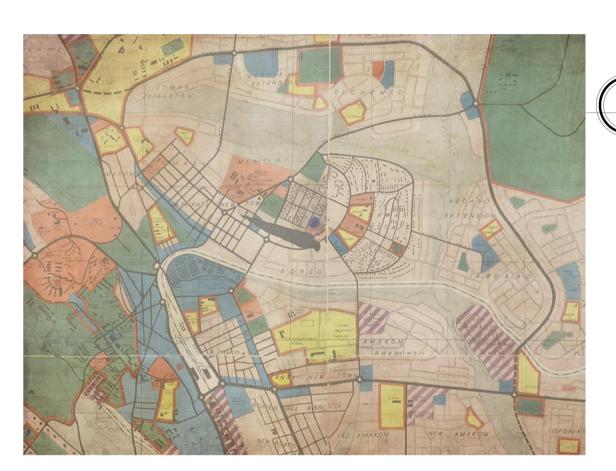




In 1963/64, Kwame Nkrumah had a development plan for Ashanti region as part of the 25-year development plan for the city.

In addition to this plan, "the Kumasi Outline Planning Scheme implemented from 1963 to 1988, all sought in broad terms to provide the framework for social, economic, physical, infrastructure and environmental growth of the city" (Kumasi Metropolitan Assembly, 2006).

The new development plan was prolific in strategically locating the current day airport, educational, military and other government development projects in Ashanti region.









# POST - NKRUMAH ERA

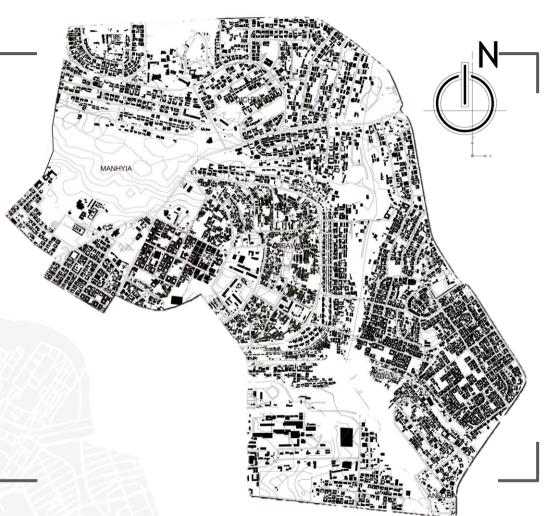
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The Kumasi airport was designed and constructed in the 1940s.

The airport had a significant impact on the development and growth of Manhyia and the surrounding areas in facilitating transport services and commerce.

The airport provides a critical link between Kumasi and other parts of Ghana, as well as other countries in the region and beyond.



Overall, the Kumasi Airport has played an important role in shaping the growth and development of Manhyia and the Ashanti region

It provides vital transportation links, supporting economic growth, and promotes cultural and social exchange.

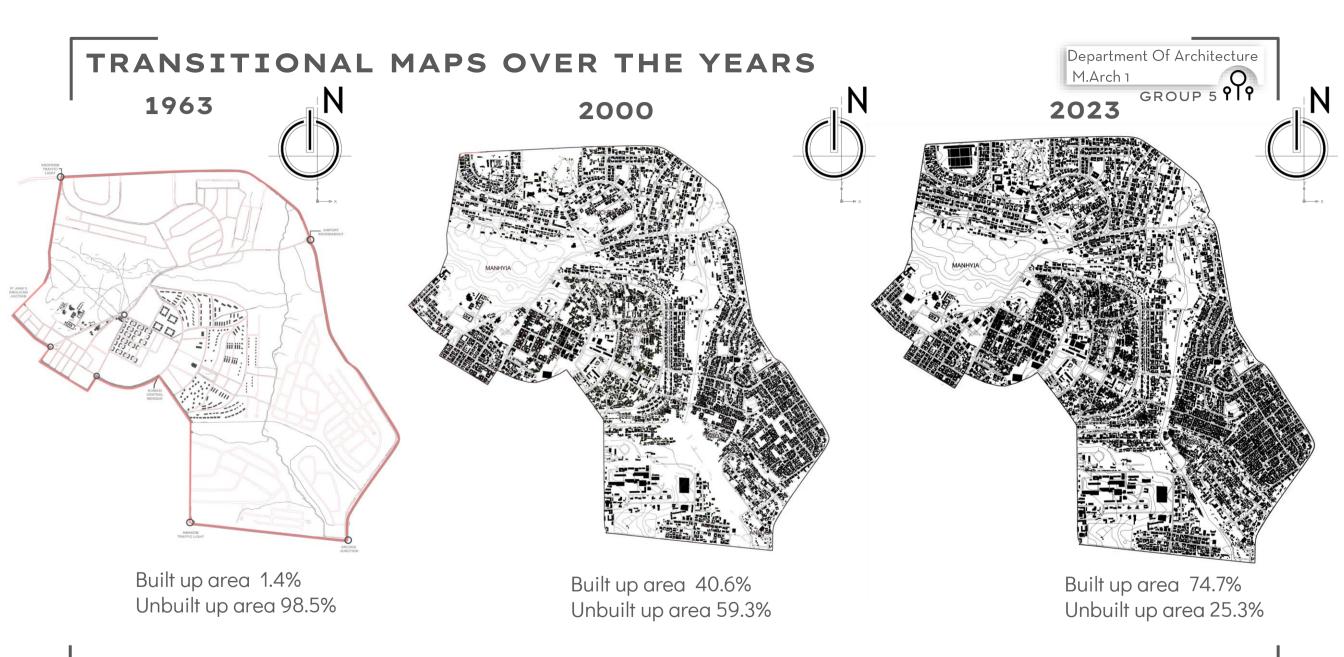
Rapid population growth and rise in economic activities affected the projected land uses for the city.

The population of the city, which was 218,172, in 1960, increased to 346,336 in 1970 and as of the end of the development plan, the population was 487,504 in 1984.

This rapid increase in population and physical expansion of Kumasi made planning and management difficult.









The physical expansion of a city or urban area over time, as its population and economic activity increases.

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- The expansion of existing neighborhoods and commercial areas.





• Current map with roads





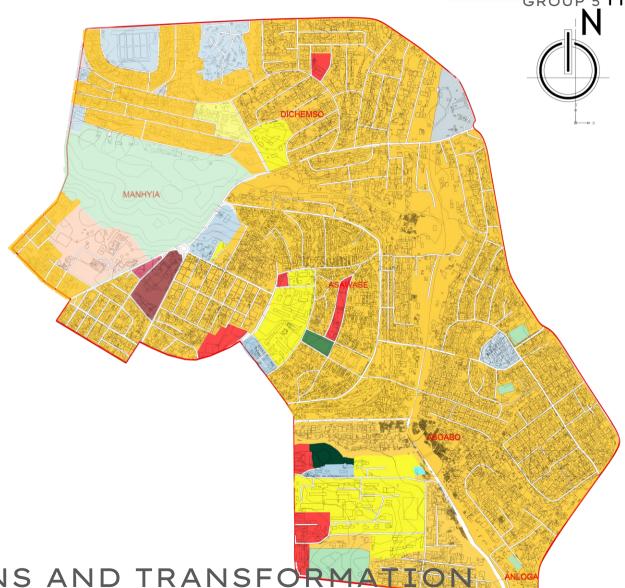




### Department Of Architecture M.Arch 1 GROUP 5 PIP

## Legend

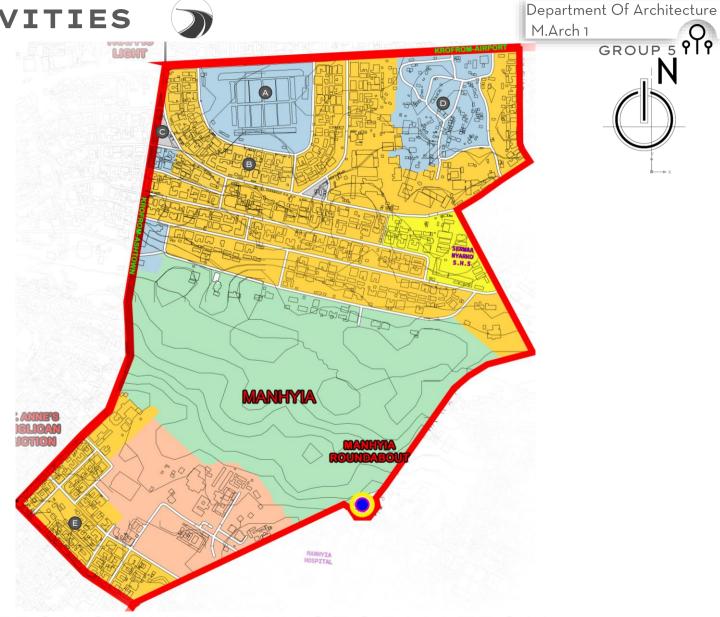
- Residential Zone
- Commercial Zone
- Religious Zone Forest Reserves Zone
- Transport Zone
- Education Zone
- Civic Zone Cultural Zone
- Health Zone





# Zone 1 Legend

- Commercial Zone
- Residential Zone
- Cultural Zone
- Forest Reserves Zone
- Transport Zone
- Education Zone





URBAN TRANSITIONS AND TRANSFORMATION (URBAN MORPHOLOGY)



GROUP 5 PIP

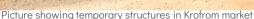


### Zone 1A

### **Kofrom Market**

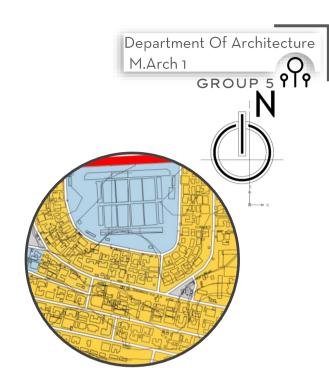
- This area started off as market for the people of Krofrom. The structures were not very defined. Until the government decided to clear the land and build a proper market for the people.
- 14 years down the line and the structure has still not been completed. The locals resorted to rebuilding their temporary structures around the edges of the site to serve as a temporary marketplace.
- The edges of the market site is however intended by the government to be a lorry park.

















### Zone 1B

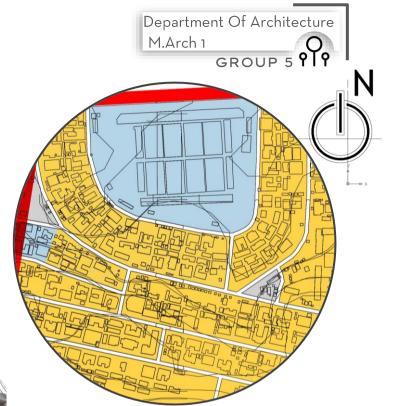
- This area was demarcated to be a residential zone.
- Most of the buildings in the zone are residential zones, however over the years existing buildings along the streets have been converted into mixed-used developments with commercial activities on the ground floors and residential activities on the remaining floors.
- Both temporal and permanent structures have been put up along the streets to house commercial activities. These structures are concentrated around the Krofrom market and the Santos park and reduce they move further away from the street.









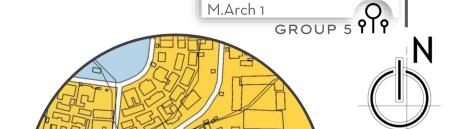




### Zone 1C

### **Town Council Bus Station**

- The region started out as community washroom with the pit latrine system.
- In 2007, a new public washroom with modern facilities was constructed. The unused land was turned into a refuse site.
- As an intervention to put an end to the illegal dumping, a parking area for intercity buses was created after the land was cleared.
- The allocation of the land to the bus owners has created a commerce open space and reduced the number of temporal structures which were used to house buses.



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Bus station (Author's Field Survey)





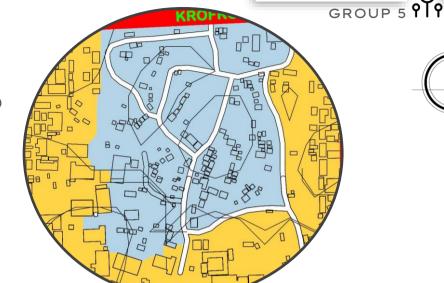




### Zone 1D

### Dichemso Fitaam Mu

- Dichemso fitaam mu is a commercial area, found on plots of land belonging to the Ghana Post and Ghana's Aviation Sector
- In the early 80s, after permission from owners of the land, a small group of mechanics started a car repair shop.
- It opened doors for other mechanics from the immediate area as well as further areas.
- The result is a mini town-like area of mechanics and related professions. However only temporal structures are found on the site because that was the condition given by the owners of the land
- As the mini town was developing, roads had to be constructed.
   Some include local roads Krofrom Airport road and
- About 2 years ago Ghana's Aviation Sector put up a wall indicating further development is under way. This is due to the airport being converted into an international one.





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Aerial view of Dichemso Fitaam mu (Author's Field Survey)

Ghana Post Signage (Author's Field Survey)



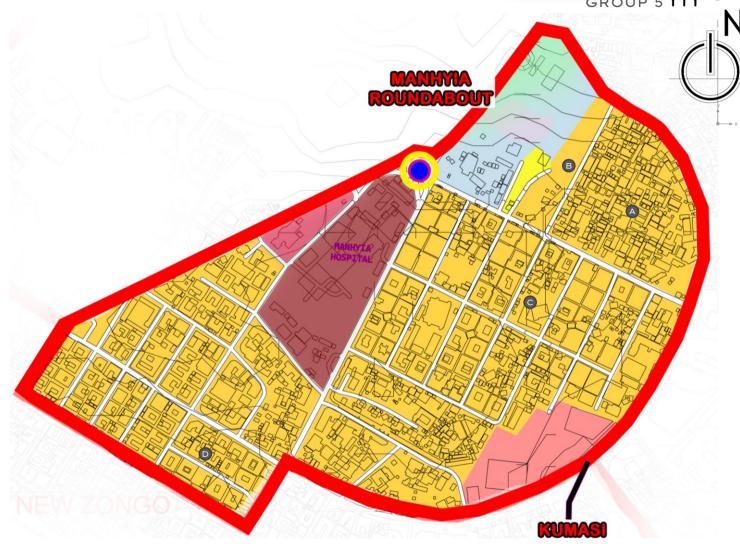




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# Zone 2 Legend

- Commercial Zone
- Residential Zone
- Civic Zone
- Health Zone
- Religious Zone
- Education Zone







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GROUP 5 P

### Zone 2A, B & C

- During Otumfuo Nana Prempeh I's reign, he introduced the Zongo estate in 2C as a security measure
- In the 1970s, the government-built estates for KMA and runway workers in zone 2C and 2B, which was a forest area.
- This was because the initial place of settlement was being destroyed for a government project.
- As the population increased the land was too much to house the growing population
- A cemetery in the 2B was relocated so that land could be used to house the growing population



Aerial View of Zongo (Author's Field Survey)

Streetscape of street in Zongo (Author's Field Survey)

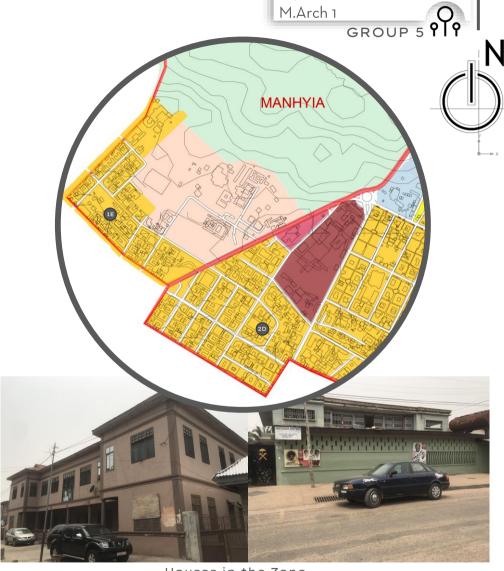






### Zone 1E & 2D

- These regions are purely residential. Most of them are family houses of royals. Some dignitaries and colonial masters lived there as well.
- The activities in this region have not changed significantly. This is because royals and the chiefs of the Ashanti Region are directly vested in the lands.
- This means nobody can access any portion of this zone without the consent of the said chiefs
- The activity of the area won't change if the chief doesn't directly do it



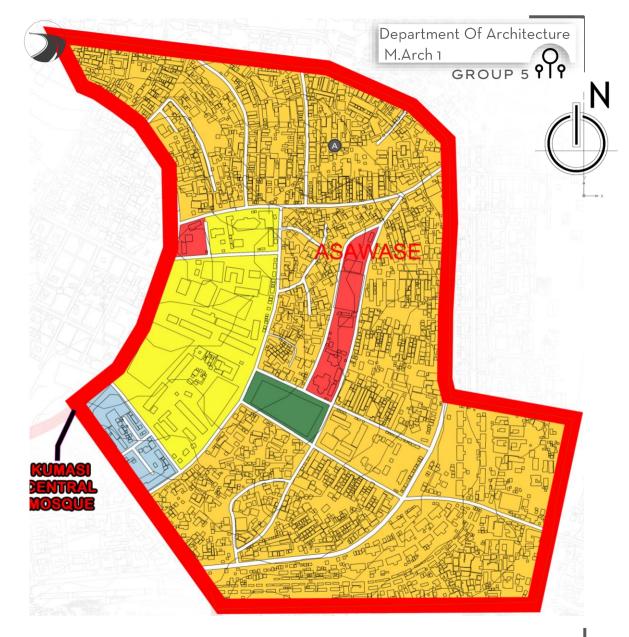
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# Zone 3 Legend

- Commercial Zone
- Residential Zone
- Civic Zone
- Open Spaces
- Religious Zone
- Education Zone







### Zone 3A

### **G-Line**

• In 1945, under the Pension Ordinance, there was a scheme purposely for African Senior Civil Servants who would pay for houses in which they lived in and become owners when full payment was made.

• It was based on the garden city architectural design proposed by Maxwell Fry and Jane Drew.

• In 1979, as the houses changed hands to the next generation, unsanctioned additions such as kitchens and extra bedrooms were made.

• Due to the growth in population of that area, migration of some family members and poverty people started to put up more houses.

 These were in the yards between the already existing houses leaving about a 1 metre alley.



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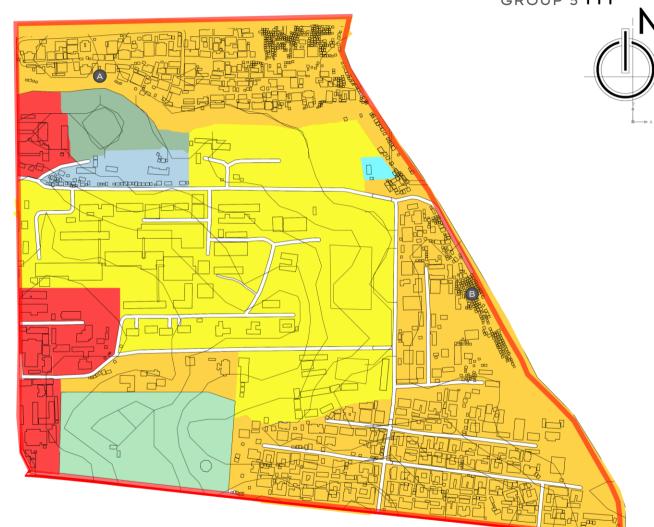






# Zone 4 Legend

- Commercial Zone
- Residential Zone
- Forest Reserves Zone
- Religious Zone
- Education Zone











GROUP 5 PTP

### Zone 4A

### **Railway Market**

- The railway market started out as a transport zone being the railway right-of-way.
- After the railway was abandoned, people began to encroach on 50m the railway right-of-way by building houses leaving about 10m.
- Some areas were then used as a dumpsite
- When the Asafo market became overcrowded, some vendors cleared out the area began to use the rest of the railway right-of-way for their businesses







# DISTRIBUTION OF ACTIVITIES Department Of Architecture GROUP 5 PIP M.Arch 1 Zone 5 Legend Residential Zone Open Space





Department Of Architecture M.Arch 1

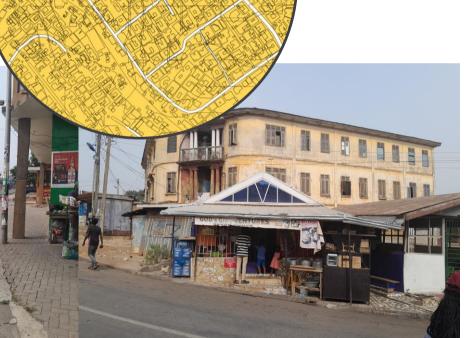
GROUP 5 PY

### Zone 5A

### Aboabo No. 1 & 2

- The settlement started developing in the early 70s
- It was developed to as a newsite for Alabar and Bambala migrants
- It has however become densely populated due expansion of the then existing houses as a result of rapid population growth









### **Zone 4B & 5B**

### **Anwiamu**

- The area had two uses in the beginning: as farmland for cocoyam and sugarcane and allowance for the high voltage towers
- The farmers began to erect their houses in the area so that they'll be able to live closer to their farms

• Later, most of the farmers abandoned their houses as it was a flood prone area, and their houses began to sink.

- However, migrants from the Dagomba and Konkomba wars started to settle there in temporal structures and creating slums.
- With some living on the highland and those living on the lowland constructing their houses on stilts



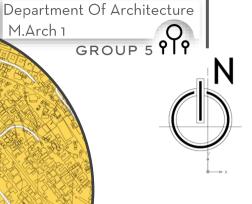
Sunk-in house (Author's Field Survey)



M.Arch 1

Houses on stilts (Author's Field Survey)





## DISTRIBUTION OF ACTIVITIES

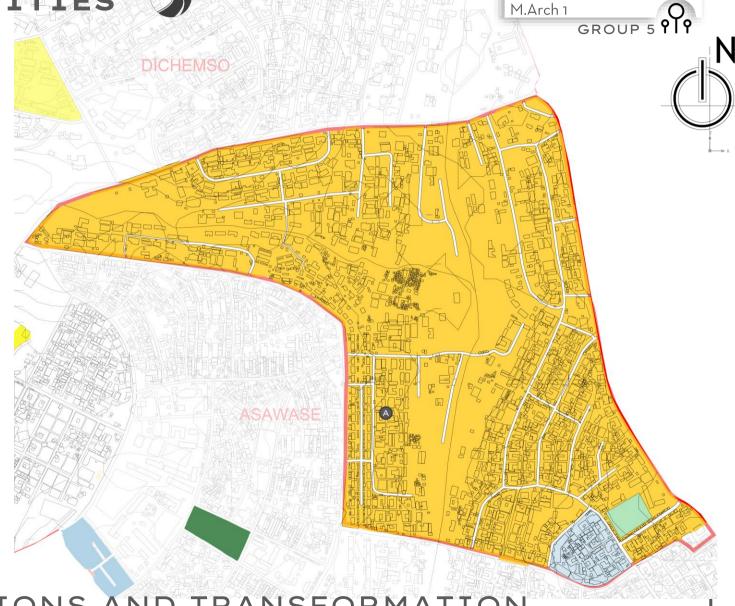
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M.Arch 1

Zone 6 Legend

Commercial Zone

Residential Zone

Open Space





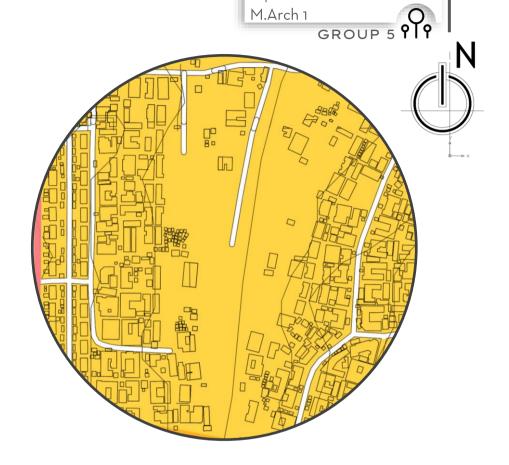
#### DISTRIBUTION OF ACTIVITIES



#### Zone 6A

#### **Aboabo Extension**

- Aboabo extension is an area which was designated for residential activities as an extension to Aboabo for the migrants from Alabar and Bambala.
- The settlement started developing in the 1970s with the people being of mixed ethnicity but has Islam being the predominant religion.
- This has caused many homeowners to make vertical additions to their buildings to accommodate their families and rent them out.



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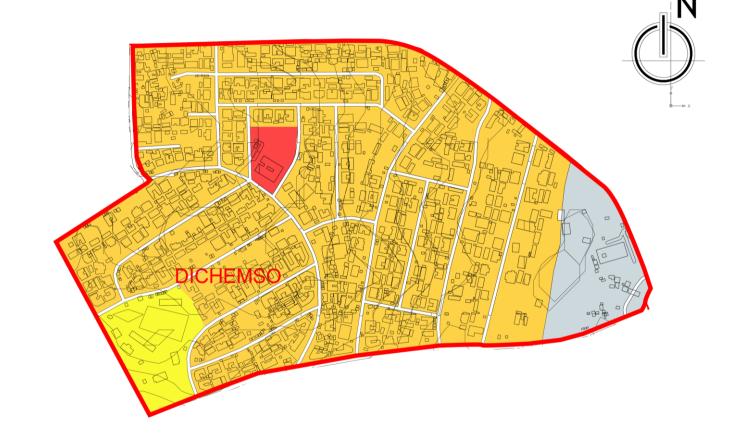
## DISTRIBUTION OF ACTIVITIES





#### Zone 7 Legend

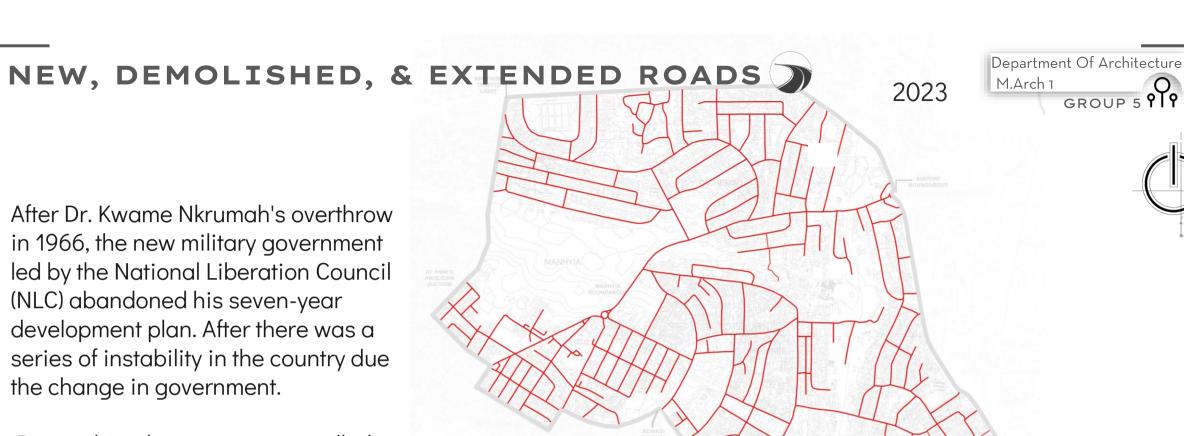
- Commercial Zone
- Residential Zone
- Education Zone
- Religious Zone









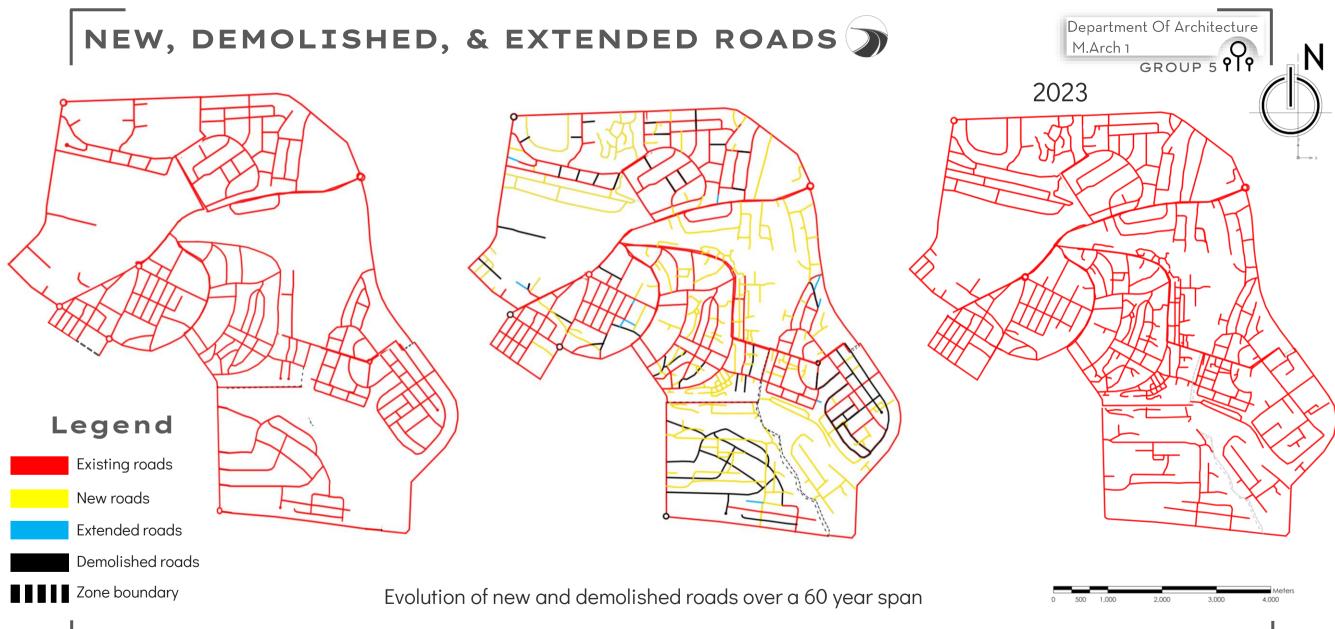


 Due to this, there was uncontrolled growth. This led to the creation of new roads, the extension of existing roads and the demolishing of some roads.

Map of road network in 2023, Google earth, 2023









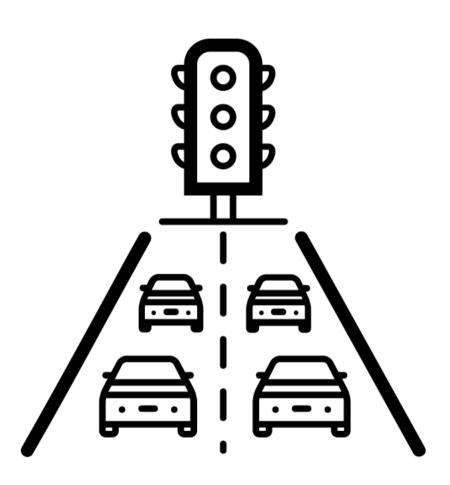


# FACTORS THAT LED TO THE DEVELOPMENT OF NEW ROADS





- As the city grew and developed over the years, the volume of traffic in the area increased, leading to congestion and delays on existing roads.
- This not only made it difficult for residents to move around the area, but also impacted the efficiency of commercial and logistics operations in the area.
- The development of new roads was primarily driven by the need to improve transportation infrastructure and alleviate traffic congestion in the area.
- Some of the new roads and extensions came about organically as an effect of uncontrolled growth



Source: Urban survey interview, 2023





# EFFECTS OF THE DEVELOPMENT OF NEW ROADS AND EXTENDED ROADS





- However, the government of Ghana, in collaboration with other stakeholders, invested in the development of new roads and transportation infrastructure in and around the city.
- These projects have included the construction of new roads, widening of existing roads, and the installation of new traffic management systems and other transportation infrastructure.
- These efforts have not only helped to alleviate traffic congestion in the area, but also improved connectivity and accessibility for residents and businesses in the area.
- They have also helped to support economic growth and development in Manhyia and the surrounding areas by improving the efficiency and effectiveness of transportation and logistics operations.

Source: Urban survey interview, 2023



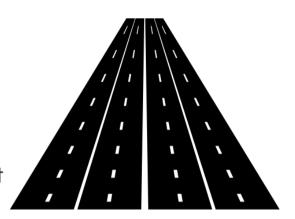




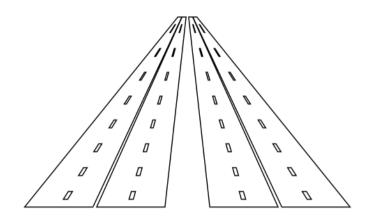
#### TARRED & UNTARRED ROADS



 Tarred roads, also known as paved roads or asphalt roads, are roads that have a surface layer of asphalt or concrete.



Untarred roads, also known as gravel roads or dirt roads, are roads that have a surface layer of loose gravel, dirt, or other natural materials.



- The condition and distribution of tarred and untarred roads can provide valuable insights into the history and development of a city.
- The presence of untarred roads in parts of a city can indicate a lack of investment in infrastructure
- The prevalence of tarred roads in parts of a city may reflect more recent development and modernization
- This helps to locate the areas that need development

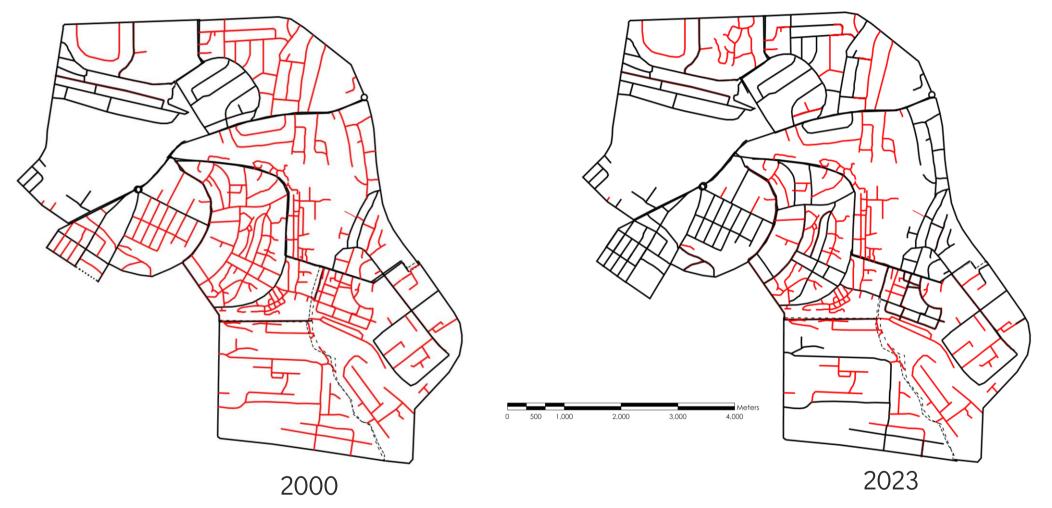
Ahadnejad M. and N. Shahbazi (2016).





## TARRED & UNTARRED ROADS





Evolution of tarred roads over a 60 year span









# STREET LAYOUT

• This is the arrangement of streets with in a city or town. The pattern of streets in a city can have a significant influence on the overall shape and structure of the city. The layout of streets can affect everything from the ease of transportation and circulation to the distribution of land use and the character of neighborhoods.

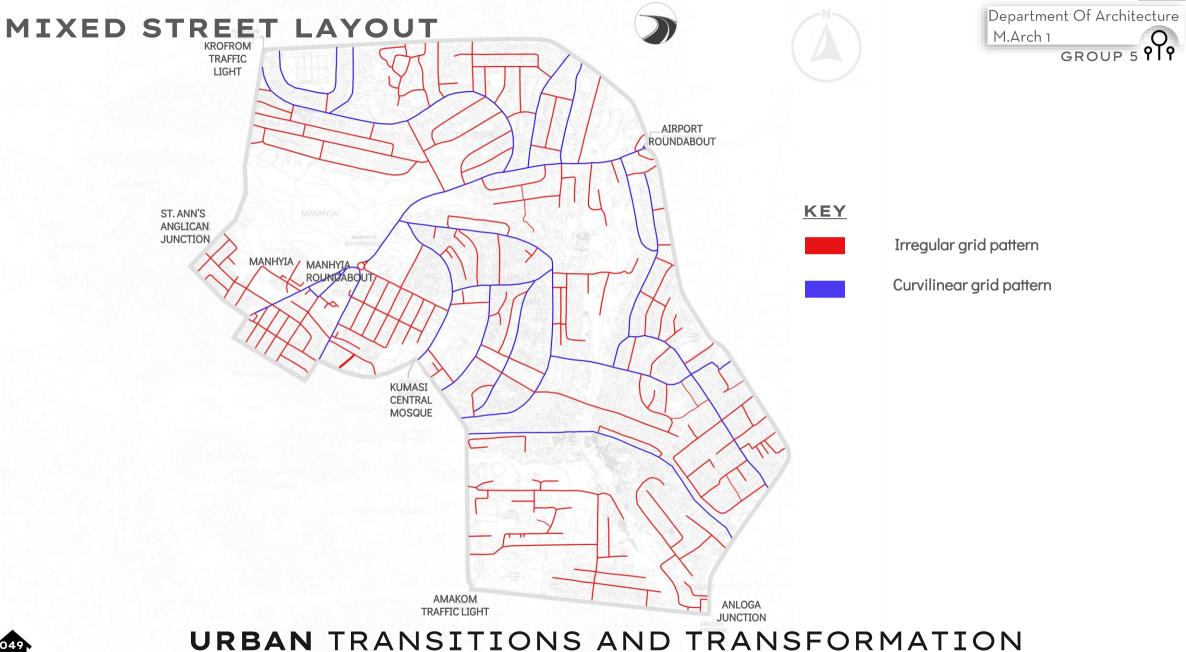
#### Types of street layout found in study area

- Mixed street pattern: A combination of different street patterns with in a city, often reflecting a mix of historical development and modern planning principles.
- Hierarchical pattern: Patterns characterized by streets of varying widths and importance often reflecting the importance of different areas or functions within the city.

Lynch, K. (1960).







(URBAN MORPHOLOGY)



#### IRREGULAR GRID PATTERN MAP





 The irregular grid pattern is the clearly predominant street layout, where streets run perpendicular to each other in an irregular pattern.

This creates regular city blocks that are easy to navigate and promotes efficient transportation





# CURVILINEAR PATTERN KROFROM TRAFFIC





- The curvilinear features winding, meandering streets that follow the natural topography of the land.
- This creates a more organic and scenic cityscape,





# STREET HIERACHY

- It is the conceptual arrangement of streets based upon function.
- A hierarchical approach to street design classifies streets according to function, from high-traffic arterial roads to streets whose function is residential access

#### Street Hierachy Classification

- A Trunk street is a main street declared a highway by the State or Federal Government and typically used for travel by the public between important destinations, such as cities, large towns, and states.
- Arterial Street is a street that predominantly carries through traffic from one region to another, forming principal avenues of travel for traffic movements.
- A collector street is a street providing for local residential access and collection of traffic from access places and/or access streets.
- A local street is a street whose main function is to provide access to and from adjacent land uses.

Lynch, K. (1960).





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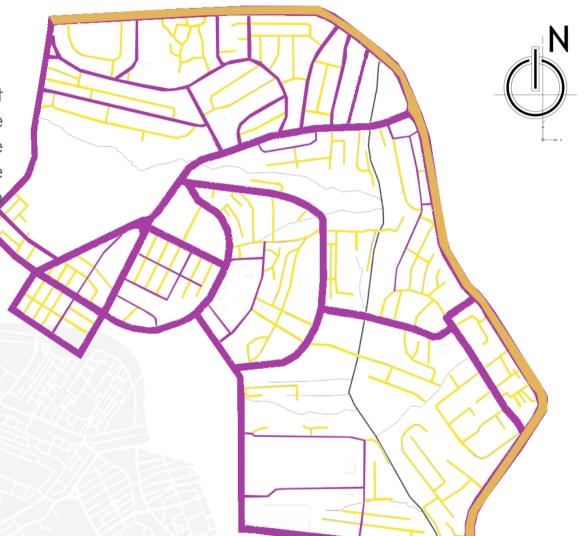




#### **EXISTING ROAD HIERARCHY MAP**



Due to the different functions of the streets, the sizes vary and they all come together in shaping the overall form of the urban environment













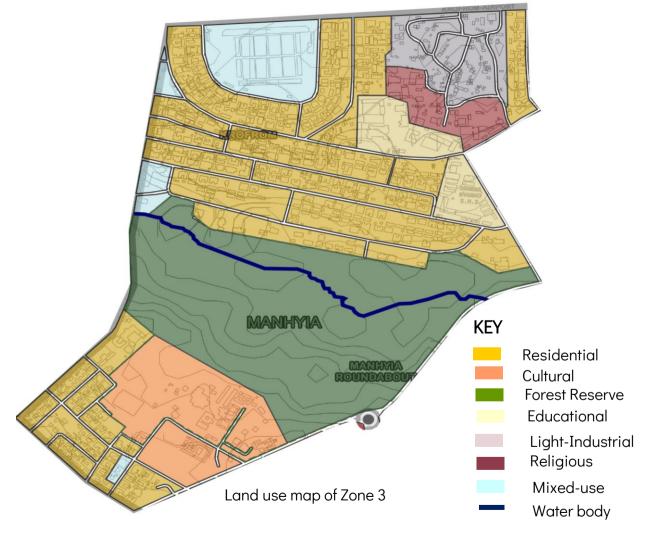






#### **ZONE 1**

- This land use map shows the predominance of residential areas in zone 1
- The predominant settlement pattern is nucleated, dispersed, and linear types of settlements.
- Residential buildings are nucleated with the Krofrom market as its center.
- Portions of Krofrom has a linear settlement with predominately residential buildings on both sides of the Dichemso roads
- Portions of Manhyia have the linear type of settlement also on both sides of the road

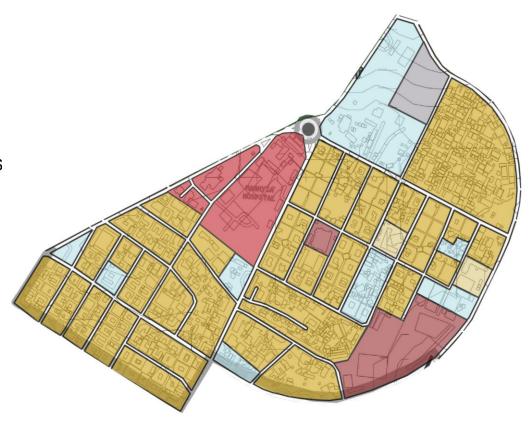








- This land use map shows the predominance of residential areas in zone 2
- The area is characterized by dispersed and linear types of settlements.
- The area is mainly organized on opposite sides of the Yaa Asantewa, Boakye Tuffour, Alhaji Nabure, and the Zongo Roads in a linear settlement type fashion forming grids.
- Portions of Zongo has dispersed settlement type.
- Buildings are sandcrete or composite and aluminum and wooden temporal commercial structures.
- Buildings in zone 1 ranges from 1 floor to 5 floors.
- Building types found in Zones 1 are detached, courtyard, and apartments and flats









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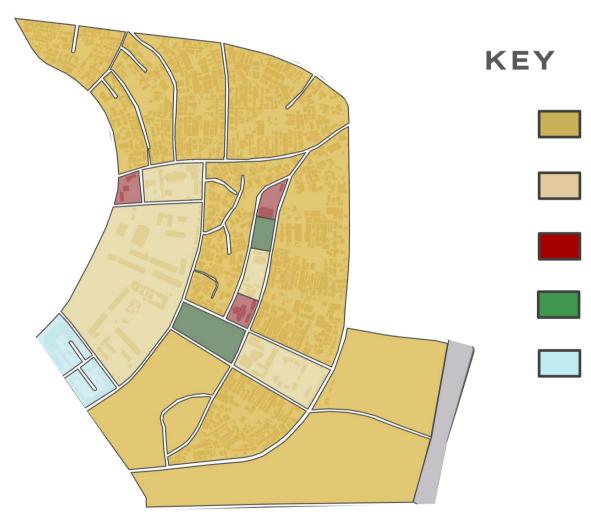
GROUP 5 PT

This Land Use map shows the predominance of residential areas in Zone 3

The predominant settlement pattern within this zone is nucleated with about half of the structures being single- storey.

The most used building materials for the roof and walls of these structures are aluminium and sandcrete blocks respectively.

Linear housing is found to be moderately dominant leaving compound housing and courtyards the least employed residential type within this setting.



Land Use map of Zone 3





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M.Arch 1

The land use map of 1963 for zone 4 showing the demarcation for:

- Residential
- Industrial
- Commercial
- > A zone for nature reserve.

It was observed that, the middle belt of this zone is used for educational purposes and the stretch along the main road is being used for mainly commercial purposes.









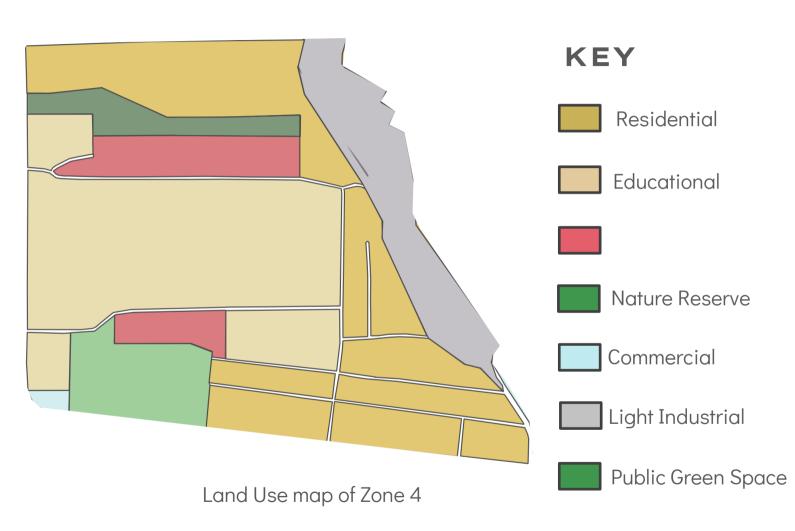


The residential areas are at the south-eastern and northern part of Zone 4. The middle belt consist of educational institutions.

The predominant settlement pattern within this zone is nucleated with about two-thirds of the structures being single- storey.

The most used building materials for the roof and walls of these structures are aluminium and composite materials respectively.

Linear housing and U-shaped buildings were found to be moderately dominant.









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- Zone 5 which is part Aboabo community is one of the two largest communities in the Asokore Mampong Municipal Assembly (AMMA), located in the Greater Kumasi Metropolitan Area.
- Zone 5 is located in the densely populated zones of the municipality (Asokore-Mampong

• The settlement is characterized by vast household numbers, congestion, and unauthorized construction extensions (Amoako & Brandful Cobbinah, 2011; Asibey et al., 2019).

• The landscape of the communities is largely comprised of informal settlements.











- Zone 6 is the north of the Aboabo community
- It is referred to as the Aboabo extension
- Aboabo is located in the densely populated zones of the municipality (Asokore-Mampong Municipal Assembly (AMMA), 2014).
- In 1963 zone 6 had no settlements with the railway quaters being the only settlement in existence
- The settlement is characterized by vast household numbers, congestion, and unauthorized construction extensions







## **BUILDING USE-ZONE 1**

• The buildings use map shows most of the buildings found in zone 1 are residential.



A residential multistorey building in zone 1

A residential Single storey building







GROUP 5

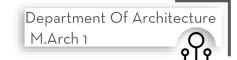






#### **BUILDING USE-ZONE 2**





GROUP 5

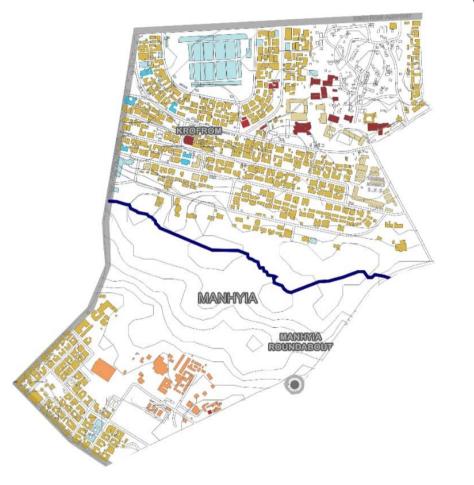
- The buildings are mostly residential and moderately dominated by mixed used buildings.
- The usage of some buildings changed eg: an old family house was rebuilt and converted into an NHIS office, portions of an abandoned cinema has been converted into a warehouse
- There have been construction of new buildings and building extensions as well.

Portions of an abandoned cinema turned into a warehouse





An old family house rebuilt into the NHIS office

















## **BUILDING USE-ZONE 3**

The buildings are mostly used for residential purposes followed by commercial and

Some changes have occurred in the usage of certain buildings due to urbanization. Eg. Some kitchens have been converted to bedrooms for renting.







GROUP 5

















#### **BUILDING USE-ZONE-4**

















The buildings use map shows dominance of both residential and educational facilities.



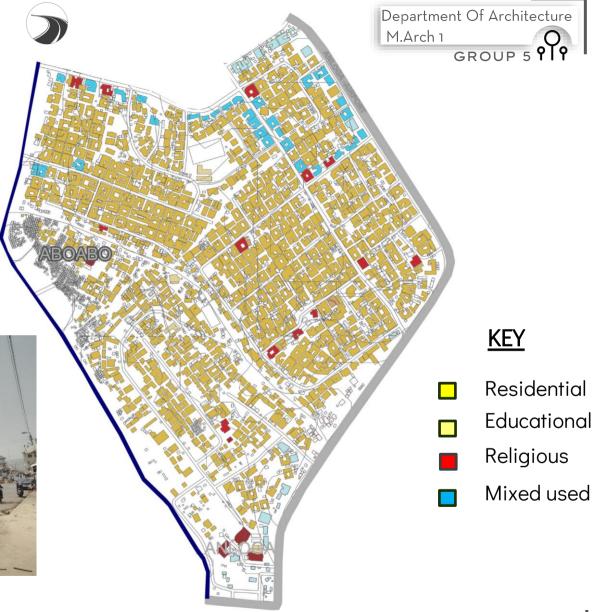


#### **BUILDING USE ZONE 5**

- Residential buildings are dominant in zone 5.
- Most of these residential building have made extension which are used for commercial activities.
- Others buildings are mixed used facilities and have both residential and commercial activities happening in the same building.





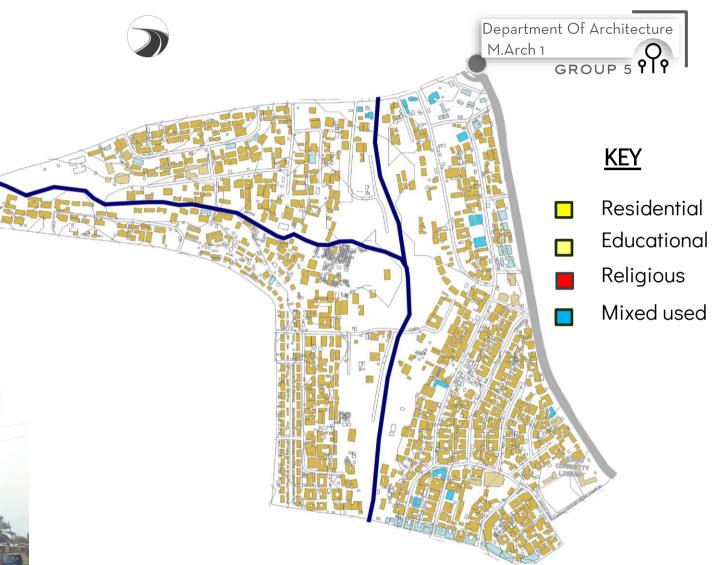




#### **BUILDING USE ZONE 6**

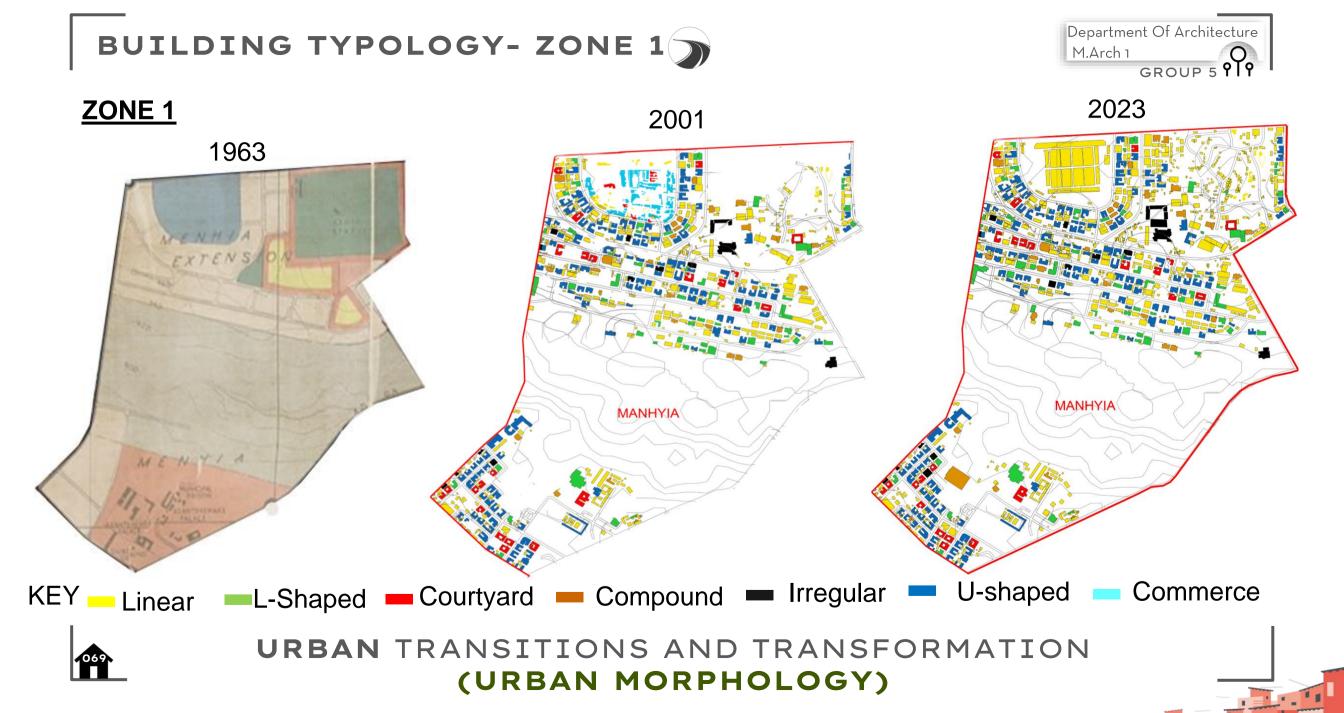
- Residential buildings are dominant in zone 6.
- Most of the spaces between residential building have been occupied with temporal structures such as kiosk which are used for commercial activities.
- Others buildings are mixed used facilities and have both residential and commercial activities happening in the same building.









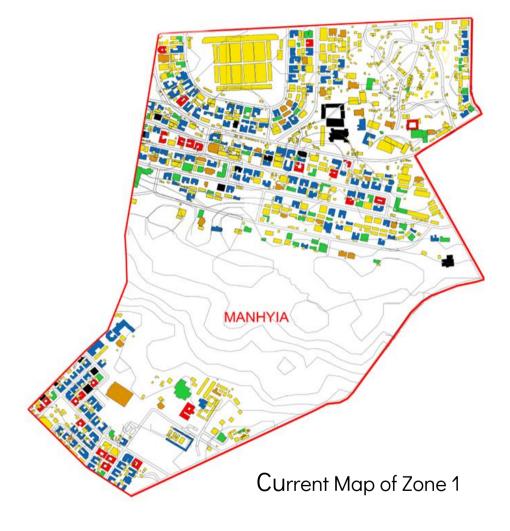


## BUILDING TYPOLOGY- ZONE 1



#### **ZONE 1**

- In 1963, there were only settlements in Menhyia ,dominantly courtyard houses.
- In 2001, There was an increase in buildings in Menhyia still with courtyard buildings dominating. There was settlement at the Menhyia extension (Krofrom).
- In 2023,a few more buildings were located in Menhyia. Population in Krofrom grew denser with temporal commercial structures along roadside and by buildings serving as 'hotspots' for commercial activities.

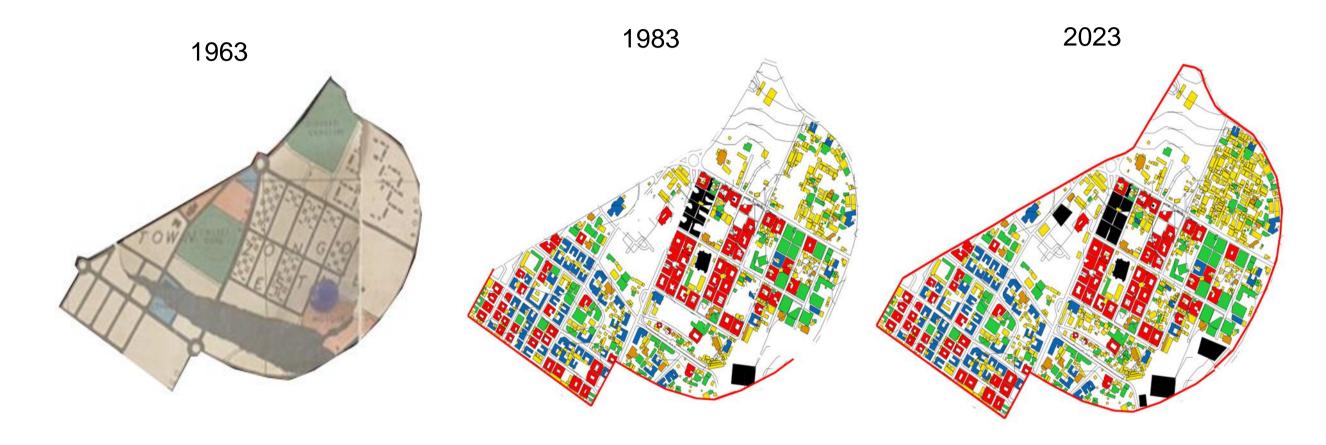






#### **BUILDING TYPOLOGY- ZONE 2**





KEY Linear L-Shaped Courtyard Compound Irregular U-shaped Commerce





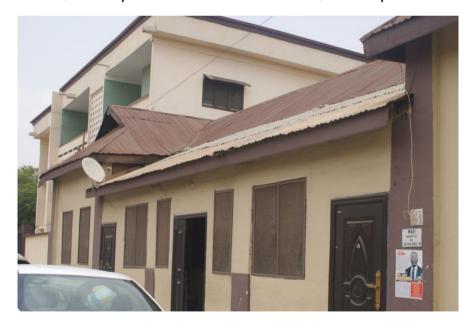
## BUILDING TYPES-ZONE 2

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GROUP 5

- In 1963, there was linear shaped houses in the northern and central parts of Zone 2.
- In 1983 there was settlement in the southern part of Zone 2 and an increase in settlement in the northern and central part of Zone 2.Dominated by courtyard buildings and an increase of temporary structures.
- In 2023 there was an increase in temporal structures and a number of irregular shaped buildings
- Settlers still practice the extended family hence making the courtyard housing dominant over the years with extensions for shops and accommodation.

The family house was given to members of the royal family by Otumfour. The initial plan comprised of 9 bedrooms, 2 kitchen, 2 bathrooms, 2 washrooms and a living area.

Currently the plan has not changed, but the building has gone through some few renovations Building types found in Zones 1 are detached, courtyard and town houses, and apartments and flats.



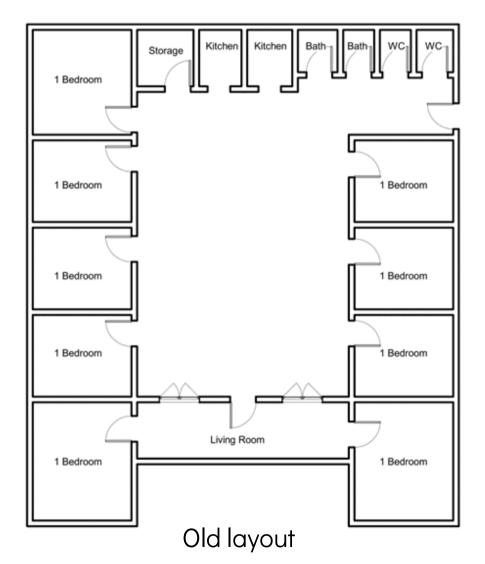
Entrance to family house

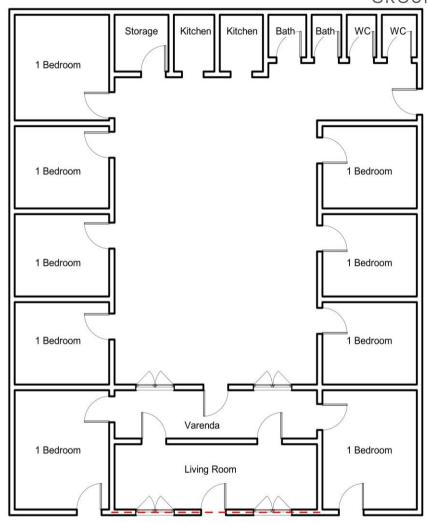




# BUILDING TYPES-ZONE 2

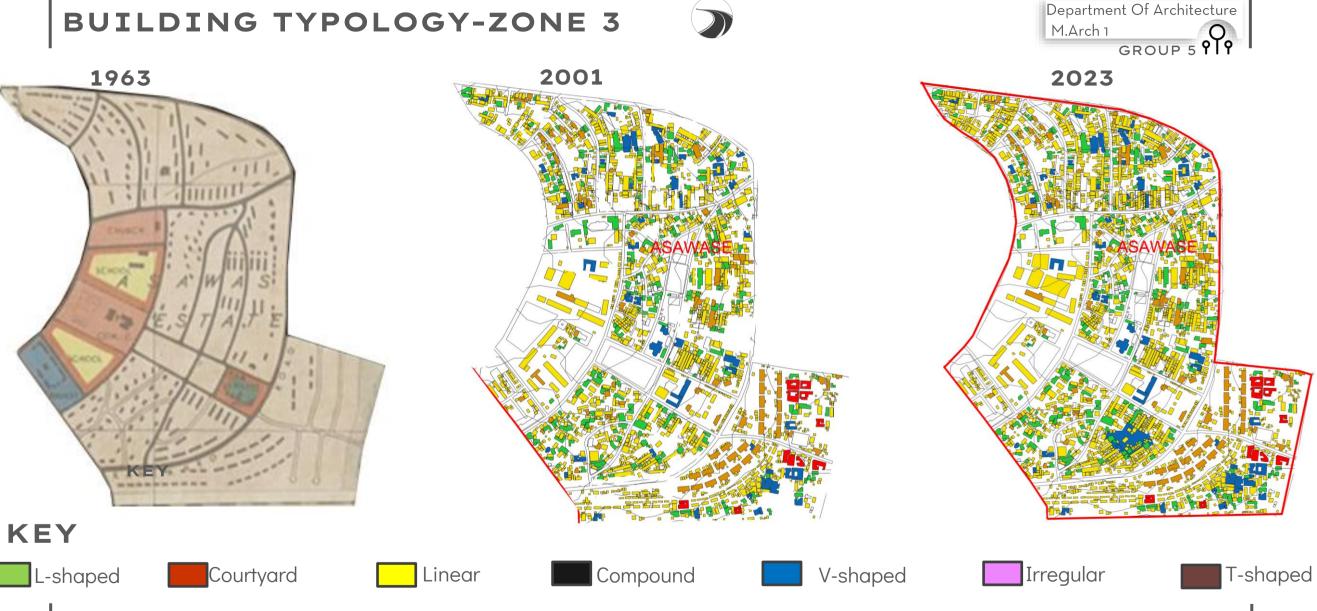






New layout









### **BUILDING TYPOLOGY-ZONE 3**



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Zone 3 was Asawase Estate in 1963. Linear buildings were dominant. Schools, churches, commercial and civic facilities were available in this zone.

In 1983, linear buildings still continued with few extensions and there was enough spacing between these structures.

As a result of urbanization, temporary structures have been erected either along the roads for commercial purposes or within the core for residential purposes.

Some homeowners have extended their buildings thereby forming a T-shaped or L-shaped building type and others have put up new buildings forming the compound or courtyard residence.







# **BUILDING TYPOLOGY-ZONE 4**



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In 1983, linear buildings were dominant within this zone.

In 2023, it has been observed that linear building are dominant in the northern part of zone 4 and U-shaped buildings are dominant in the southern part.

This is because a part of the railway quarters is located at the northern part of this zone and the U-shaped buildings are mostly family houses or are used for renting.





### **BUILDING TYPOLOGY - ZONE 1**





GROUP 5

#### **Building Scale**

- Zone 1 is characterized by single storey and multi storey buildings with 2 floors buildings as the most dominant.
- The increase in count of buildings and height over time is as a result of the increase in demand for accommodation due to population growth and search for income.

#### Architectural style

- Old buildings have elements of classical architecture(symmetry, columns, rectangular windows...)
- New buildings are slightly influenced by this style with the use of modern materials.





Extension of a single floor storey building to accommodate more people





Style influence from old buildings

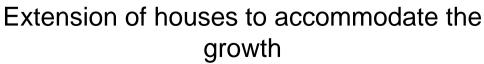


# BUILDING TYPOLOGY AND SCALE -ZONE 2



- Zone 2 is mostly dominated by single storey buildings, the least dominated buildings are 4 and more floors buildings.
- Settlements in Zone 2 tends to grow more denser than in height. Settlers tend to live in close proximity to family, friends, market, religious and educational buildings.
- They make extensions to accommodate the growth in population. There are also new construction and change in use of some old buildings and also old buildings that have been neglected.







## BUILDING TYPOLOGY AND SCALE -ZONE 3



#### **Building Scale**

The structures in Zone 3 are a mixture of both single storey and multi storey. Most multi storey structures are for mix use purposes.

#### **Architectural Style**

- . The local style of architecture varies from place to place across Ghana due to factors like climate, culture and construction
- Most structures are constructed with wood, stones, sandcrete and concrete.









## BUILDING TYPOLOGY AND SCALE -ZONE 4





#### **Building Scale**

The structures in Zone 4 are mostly multi-storey. Most multi-storey structures are for mix use purposes. The ground floor is mostly commercial and the other floors are for residential purposes.

#### **Architectural Style**

- . The local style of architecture varies from place to place across Ghana due to factors like climate, culture and construction
- Most structures are constructed with wood, stones, sandcrete and concrete.







# VARIOUS BUILDING TYPES-ZONE 3







For this type of residential structure, there is a general washroom and kitchen. These facilities are being used by used by everyone within this household.



This type of residential structure, two different houses use have their washrooms within the structure but they do not use the same washroom. The porch is used as a kitchen.









#### F-LINE(railway quarters)

The F-line was constructed for middle income earners.

The Old layout it was constructed in 1963.

It is a semi detached building with two bedrooms, a living room, kitchen and washroom.

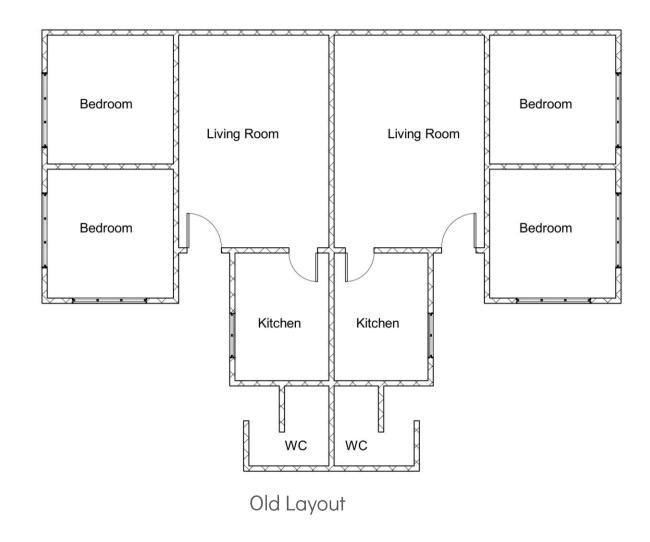
The new layout consist extensions of the old type
It is also a semi detached building with 5 bedrooms,

2 kitchens, a living room and washroom

The red walls in the next slide shows the extensions

The extensions include the boys quarters, a

bedroom and kitchen.



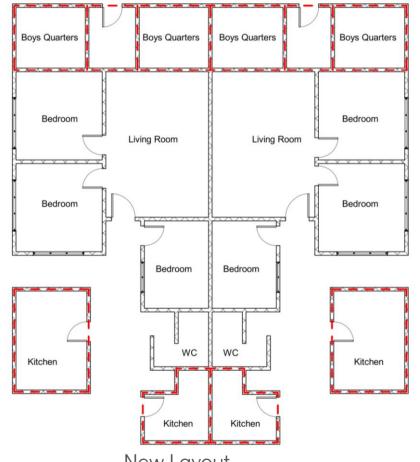








#### F-LINE(railway quarters)





New Layout









G-LINE(railway quarters)



3d of Old type

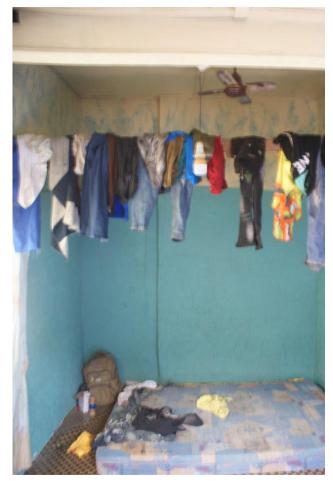








F-LINE(railway quarters)





3d of New type









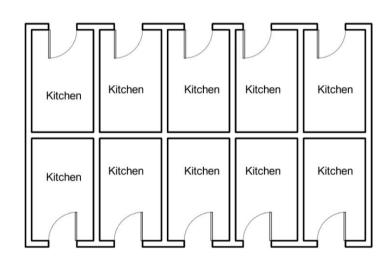


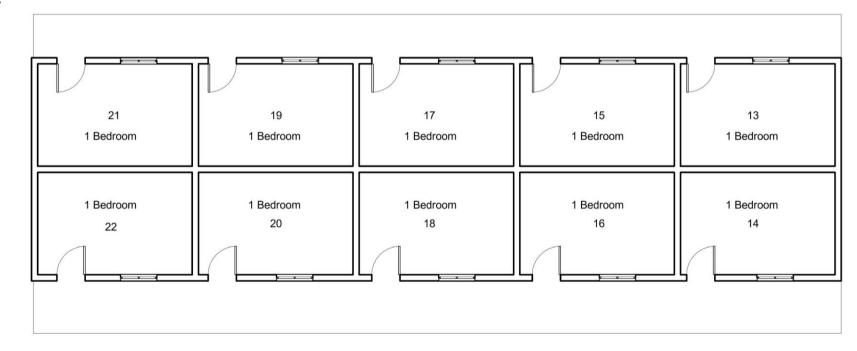
#### G-LINE(railway quarters)

The G-line was constructed for low income earners.

The Old layout it was constructed in 1963.

The old layout consist of 10 bedrooms with 10 kitchens for each of the bedrooms and a verandah.





Old Layout







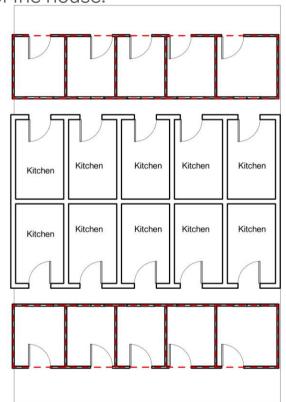


#### G-LINE(railway quarters)

The New layout consist of extensions on both ends

It consist of about 20 bedrooms with 20 individual

of the house.







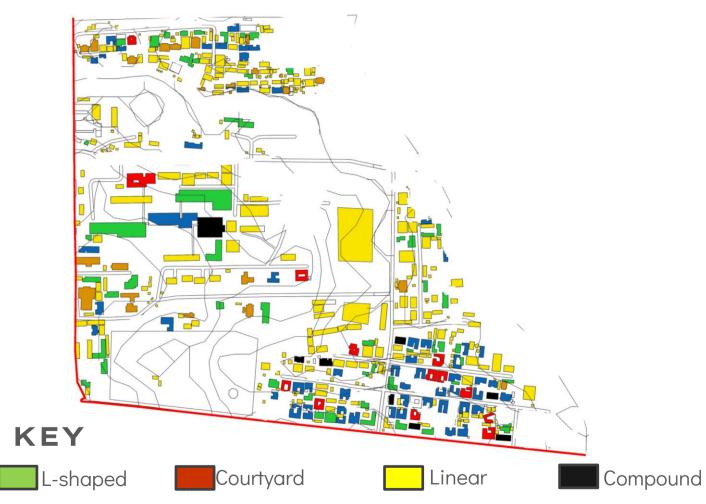


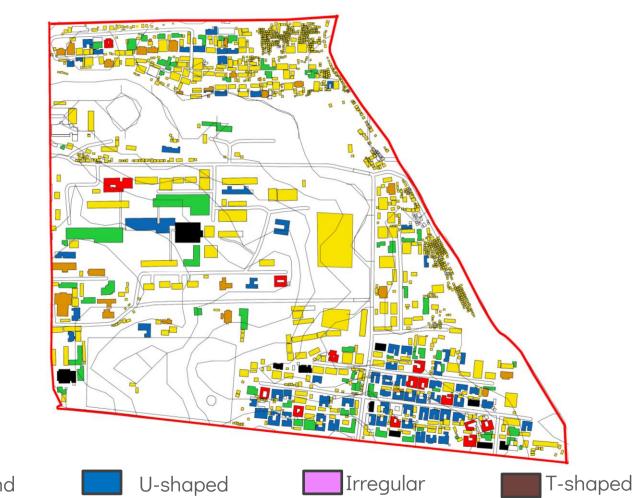
### **BUILDING TYPOLOGY-ZONE 4**





2001 2023







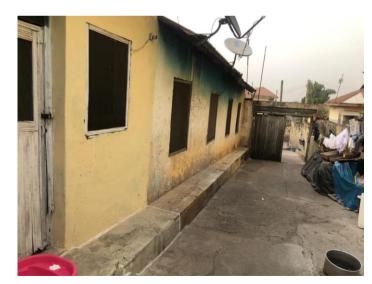


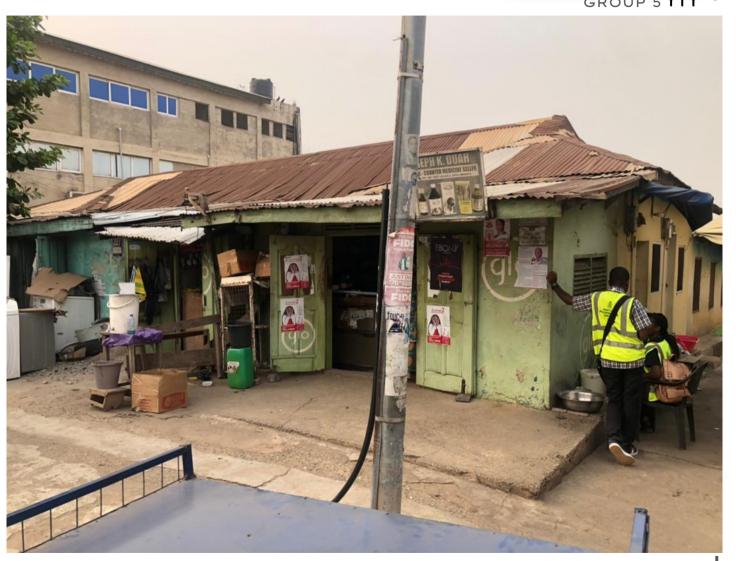


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This is one of the oldest structure in Zone 4
It consist of extensions at the front and back.
The extensions are being used for both
commercial and residential purposes.
Some years back, glo helped to paint this

structure to serve as advertisement.





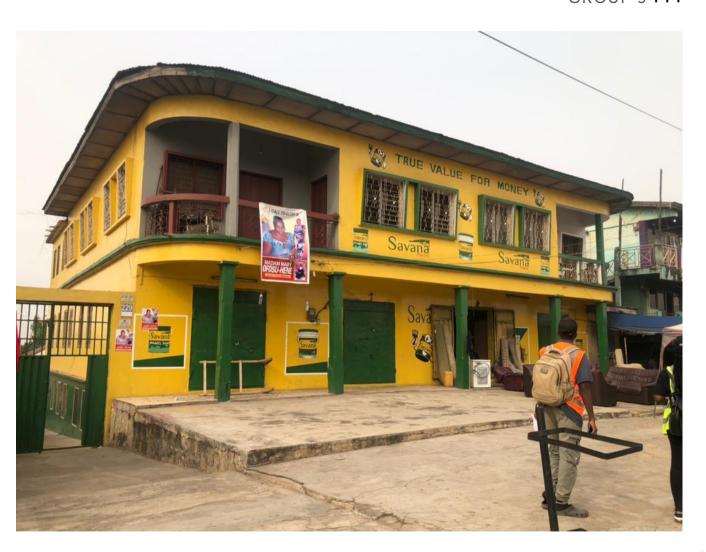






This type of structure is very dominant in zone 4. It has a basement and two other floors. The windows are different for floor. A part of the ground floor is being used for commercial activities













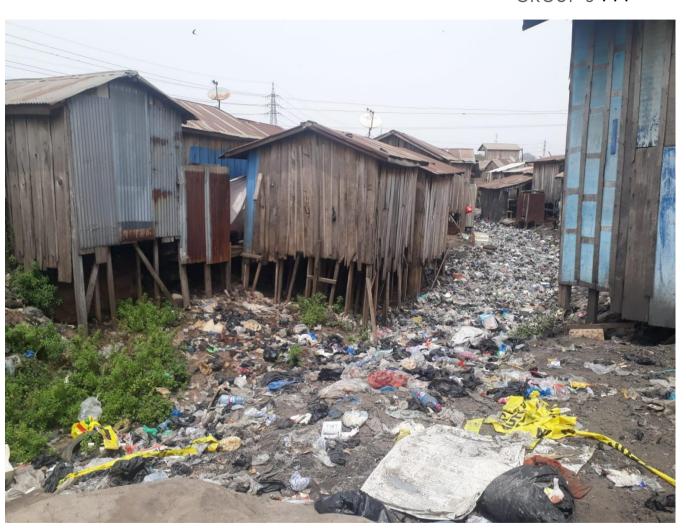
This type of structure is very dominant at the northern part of zone 4. It is purely wooden and has been raised on wooden studs.

This structures were built by farmers temporarily because of their plantation. Now, it has become a permanent residence for some people and others

pay rent for the place.

















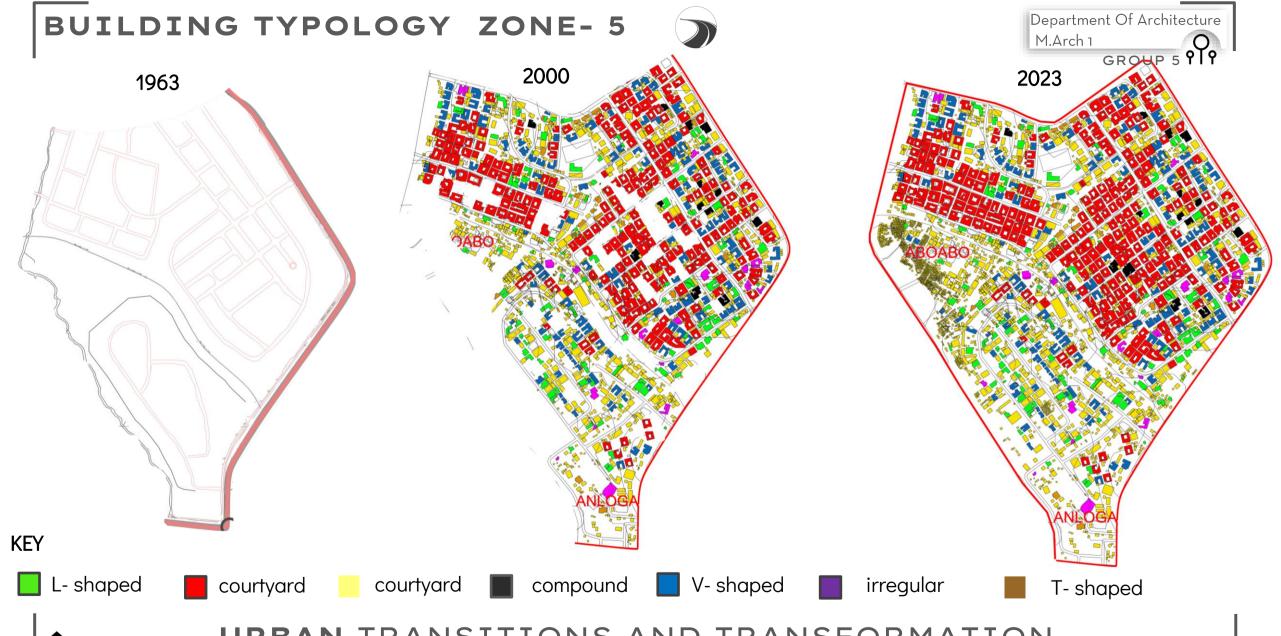




A renovated building in zone 4







093

## **BUILDING TYPOLOGY AND SCALE ZONE-5**

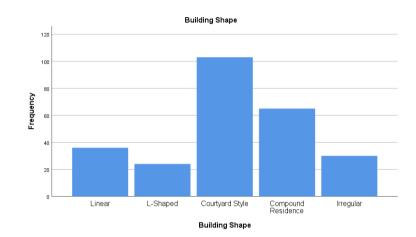




- Zone 5 consist of a lot square and u- shaped courtyard houses and these houses are occupied by extended family units.
- Most of these courtyard houses have the same architectural style and this is because building owners knew themselves and therefore replicated the building plan of their friends

The courtyard system was also adopted since it facilitate communal living.

 Most permanent structures in aboabo are single storey with a few new structures being two storeys and 3 storeys

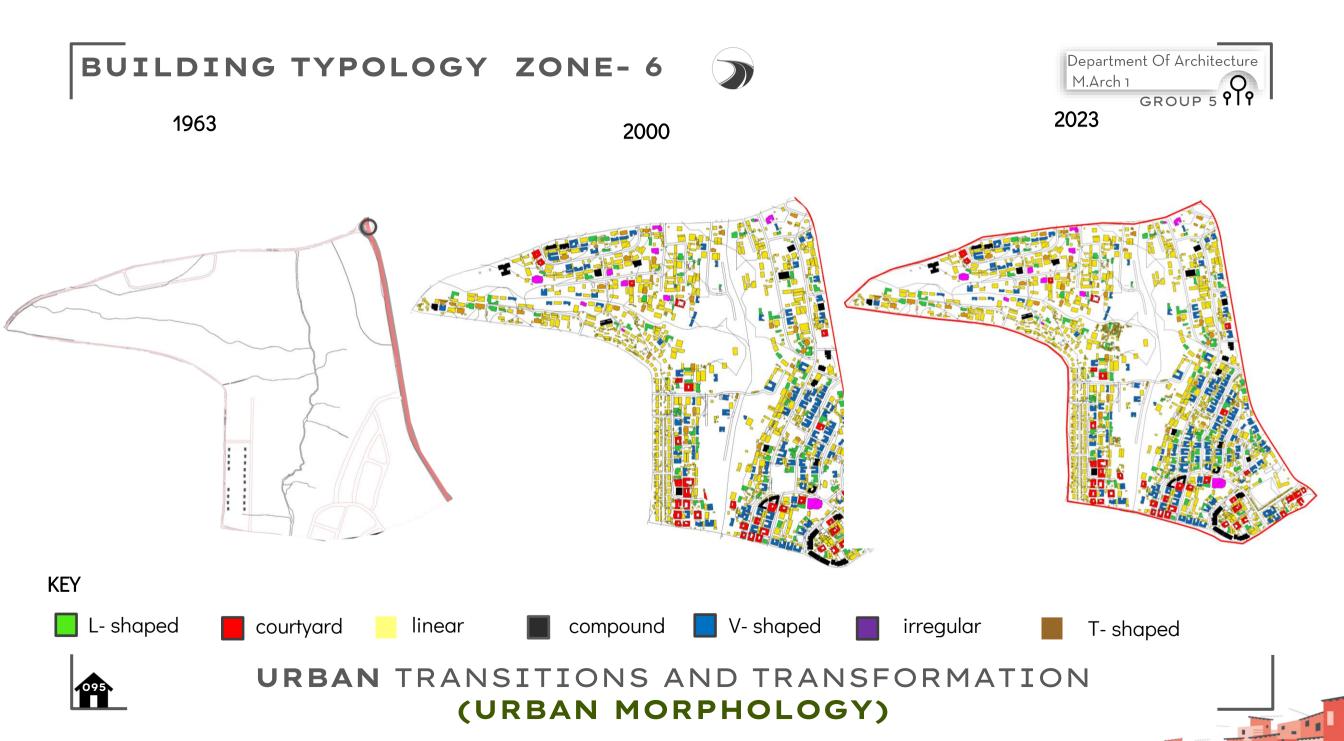












### **BUILDING TYPOLOGY and SCALE ZONE-6**





#### **BUILDING TYPOLOGY**

- The local style of architecture varies from place to place across
   Ghana due to factors like climate, culture and construction and zone
   6 employs this style,
- Zone 6 consist mostly of multi storey tenement houses
- Most of these look old and are in bad shape.



#### **BUILDING SCALE**

Most tenement houses are two to to four stories with a few being single storey.

Most of these tenement house went high in order to gain more tenants since population is high in the zone







## **BUILDING TYPOLOGY and SCALE ZONE-6**

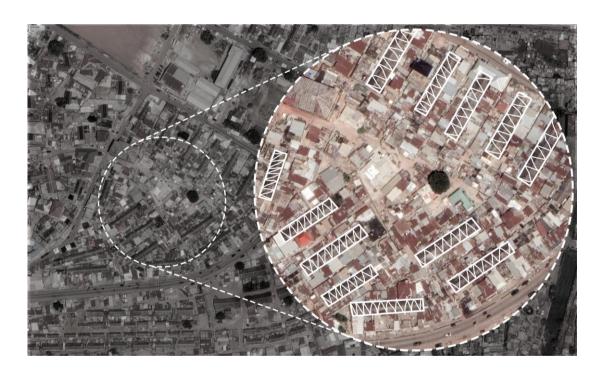




#### **BUILDING TYPOLOGY**

- The western art of zone 6 contained estates which served as quarters for railway workers in the past.
- They were single bedrooms with a porch and shared a communal washroom between two linear flats.
- Due to urbanization extension have been made the original estate





Map showing extensions on old railway quarters





# BUILDING MATERIAL -ZONE 1



- Buildings are mostly sandcrete and an average number of composite buildings Window Type;
- The most dominant window type used in Zone 1 are louvers (mostly buildings of about five decades).
- Moderately dominant type of windows used are sliding glass windows (recent buildings)
- Least dominant type of windows used are jalousie (about a century old buildings) Roofing Type;
- Majority of roofing sheets used in zone 1 are aluminum but recent buildings use the precoated and Aluzinc types.
- An average number of buildings also use concrete slab roof, usually multi-storey buildings(old and new buildings)
- A few buildings use shingle and parapet roof (recent buildings).

#### Wall Finish;

- Majority of buildings use acrylic and oil paints as wall finish
- An average number of buildings use paint with stone cladding/tiles (over 5 decade old and recent buildings)
- A number use alucobond and sand swirl finish





# BUILDING MATERIAL - ZONE 1







Period: less than a decade

Window type: sliding glass windows

Roofing type: flat concrete slab

Wall finish: Allucobond

Period: About 5 decades ago

Window type :louvres and jalousie

Roofing type: precoated aluminum

Wall finish: sand swirl finish

Buildings from different time with similar façade treatments with different materials



# BUILDING MATERIAL-ZONE 2



- Buildings made of sandcrete are the most dominant and composite buildings are moderately dominant.
   Window Type;
- The most dominant window type used in Zone 2 are louvers (mostly buildings and renovations made ).
- Moderately dominant type of windows used are sliding glass windows (recent buildings)
- Least dominant type of windows used are jalousie (about a century old buildings) Roofing Type;
- Majority of roofing sheets used in zone are aluminum.
- An average number of buildings also use concrete and parapet roof. Wall Finish;
- Majority of buildings use acrylic and oil paints as wall finish (old and recent).
- An average number of buildings use paint with tiles (recent buildings)





# ROOFING MATERIALS-ZONE 3







The most dominant roofing material is aluminium.

Few structures use asbestos and concrete as their roofing materials.

For the concrete roof it was noticed that aluminium was being used to cover it because of leakages.







# **ROOFING MATERIALS-ZONE 4**







The most dominant roofing material is aluminium. Few structures used concrete as their roofing material.

Some concrete roofs are being reroofed with aluminium because of leakages.







### **BUILDING MATERIAL ZONE 5**





- Building materials found in Zone 5 vary from sandcrete to mud to aluminum to timber.
- Most permanent structures in aboabo are single storey with a few new structures being two storeys and 3 storeys.
- Old Buildings in Aboabo were built with laterite while new buildings and extensions are built with sandcrete.
- Aluminum structures are used as stores, most timber structures are kiosks and a few are residential.
- It can be concluded that the availability of laterite informed the wide use of laterite for building old structures.



Old building built with laterite



Old building with Extension built with sand crete



New building built with sandcrete blocks



### BUILDING MORPHOLOGY ZONE 6





#### **BUILDING MATERIAL**

- Most houses in zone 6 have their walls and roof built in sandcrete blocks and aluminum sheets respectfully.
- Others had flat roof made of concrete.
- Aluminum structures are used as stores, most timber structures are kiosks and a few are residential.





Old building built with laterite

Old building with Extension built with sand crete

New building built with sandcrete blocks





# BUILDING MORPHOLOGY ZONE 6



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#### **BUILDING MATERIAL**

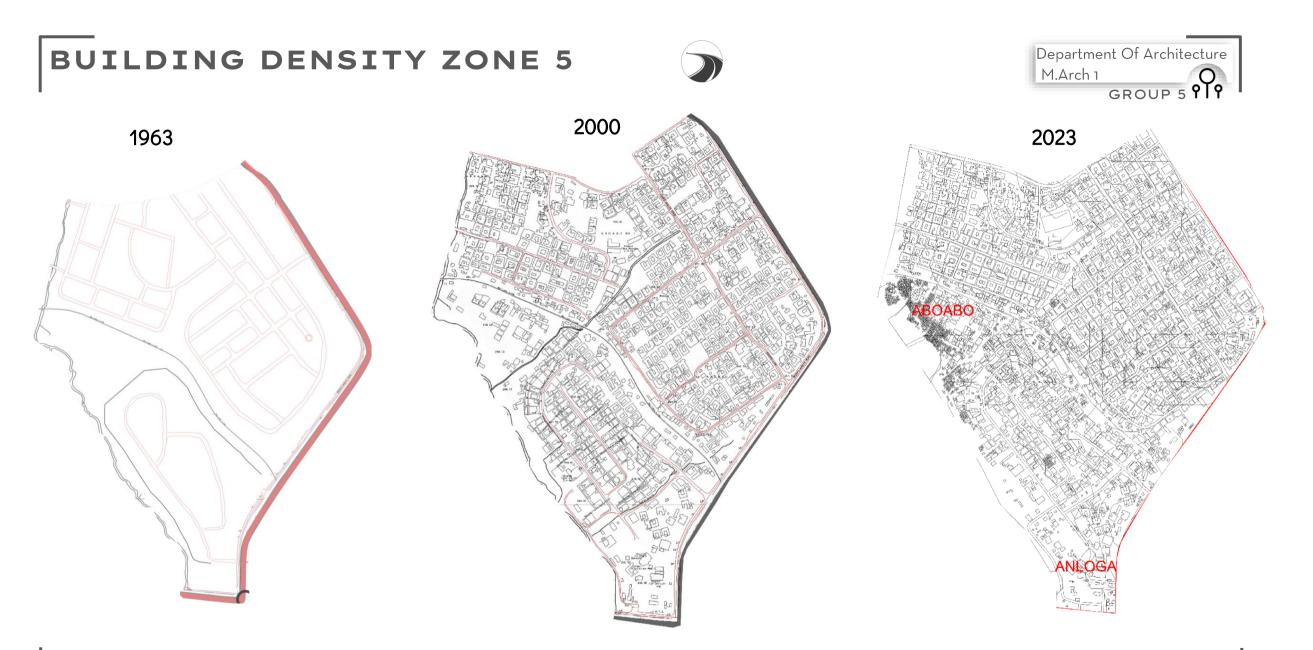




- The railway quarters used asbestos and concrete as their roofing materials.
- The walls of the quarters were sandcrete blocks
- aluminum sheets have been used to patch damaged arts of the asbestos roofs
- Aluminium sheets have been used as window shades too











#### **BUILDING DENSITY ZONE 5**



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- Zone 5 contains thousands of informal settlement dweller.
- The houses are closely connected to each other with little or no spaces between them.
- Most of the houses have additional structures attached to them which were not included in the original plan due to the increase in population density.
- The factors behind the growth of informal settlements include low level of income, rural-urban migration low level of education and social contacts.



Unauthorized building extesions





## **BUILDING DENSITY ZONE 6**





1963 2000







## **BUILDING DENSITY ZONE 6**





- The building density of Zone 6 has increased significantly 1963 to 2023, and this is due to the increase in population density.
- The settlement pattern of zone 6 is influenced by the settle pattern of zone 5.
- Zone 6 has a nucleated settlement pattern
- Most of the spaces between residential building have been occupied with temporal structures such as kiosk which are used for commercial activities.





Unauthorized building extesions







URBAN TRANSITIONS AND TRANSFORMATION

## LANDMARKS WITHIN THE ENCLAVE



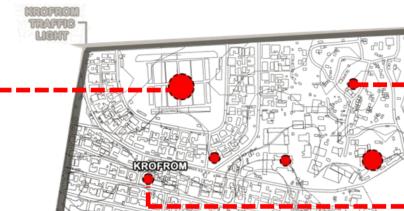




## LANDMARKS A ZONE 1



Krofrom market



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GROUP 5 PIP



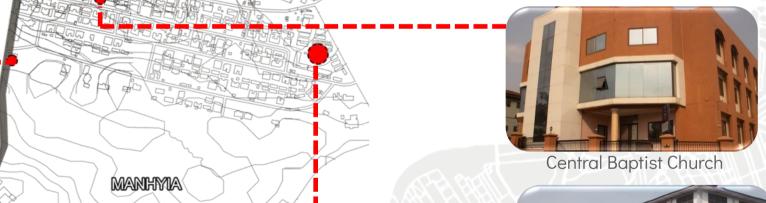
Magazine Fitting Area



Zen Filling Station



Manhyia Police station





Serwaa Nyarko SHS



URBAN TRANSITIONS AND TRANSFORMATION (URBAN MORPHOLOGY)

MANHMA

## LANDMARKS A ZONE 1



Department Of Architecture
M.Arch 1

GROUP 5 PIP



Dunwell methodist church



New tafo SDA Church



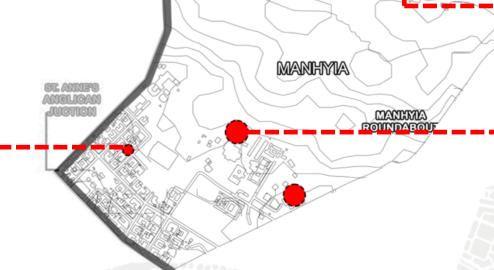
Manhyia Palac**∉** 



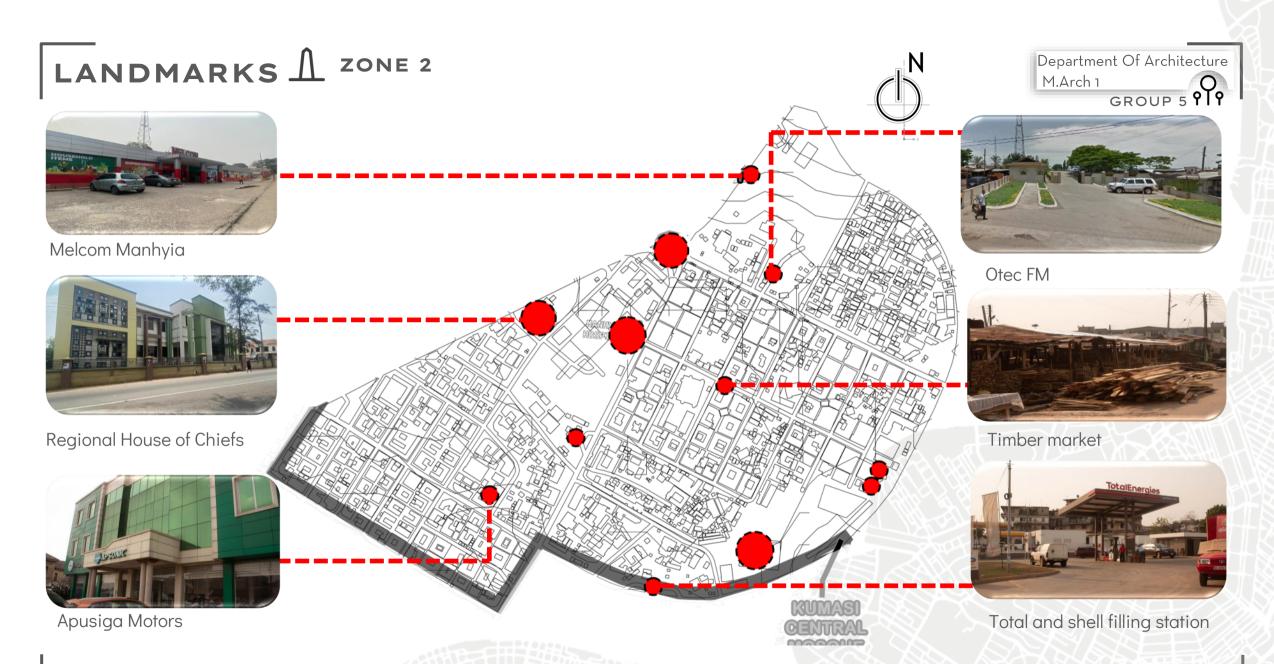
Amoah Agyemang Hospital



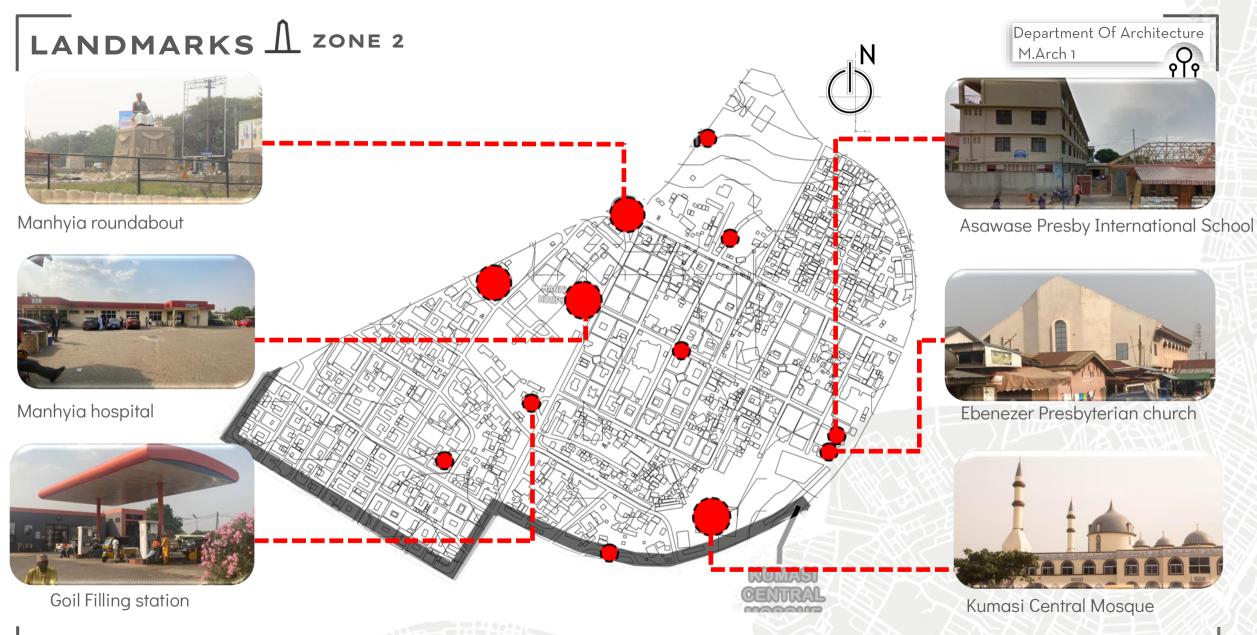
Act 2000,SDA



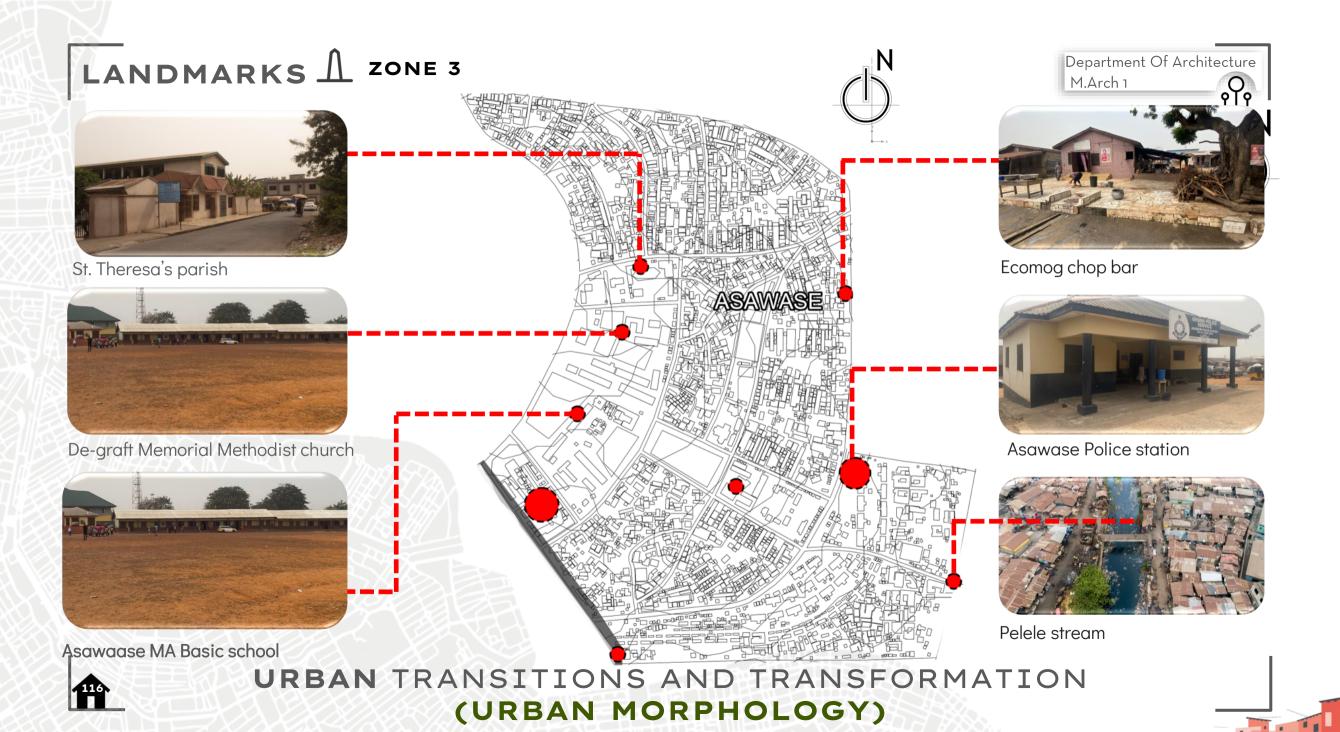














Nuru Ameen Islamic shs

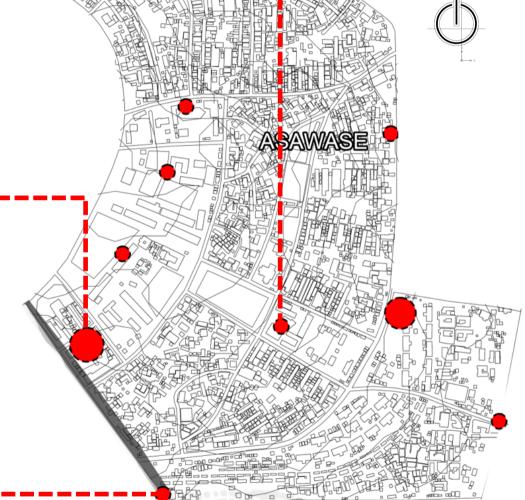




Asawase Market



Asawase Total Energies





## LANDMARKS A ZONE 4



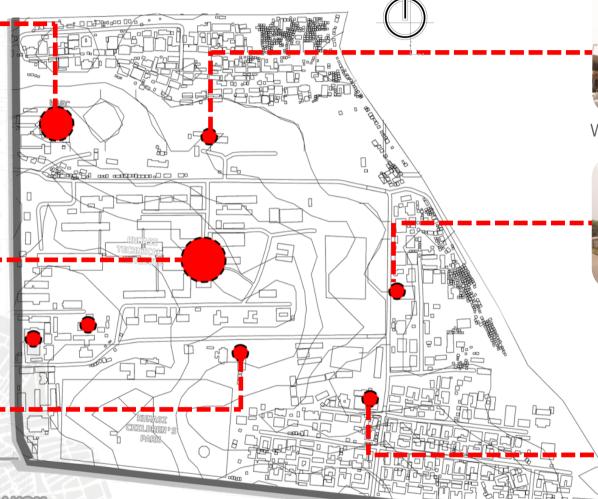
University of Ghana College



Kumasi Technical Institute



NDC Regional Party Office



Department Of Architecture
M.Arch 1



**WAEC Hall** 



New Oxford International



nwiam Hospital Limited



## LANDMARKS A

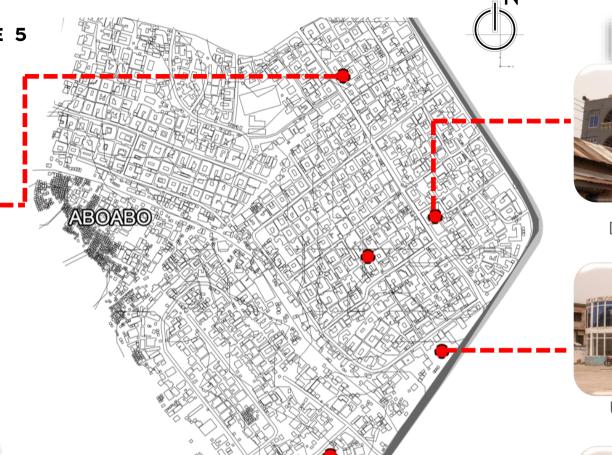
ZONE 5



Masjid AL-Furgan



Christian Divine Church Anwiam



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Durul Hadith Mosque

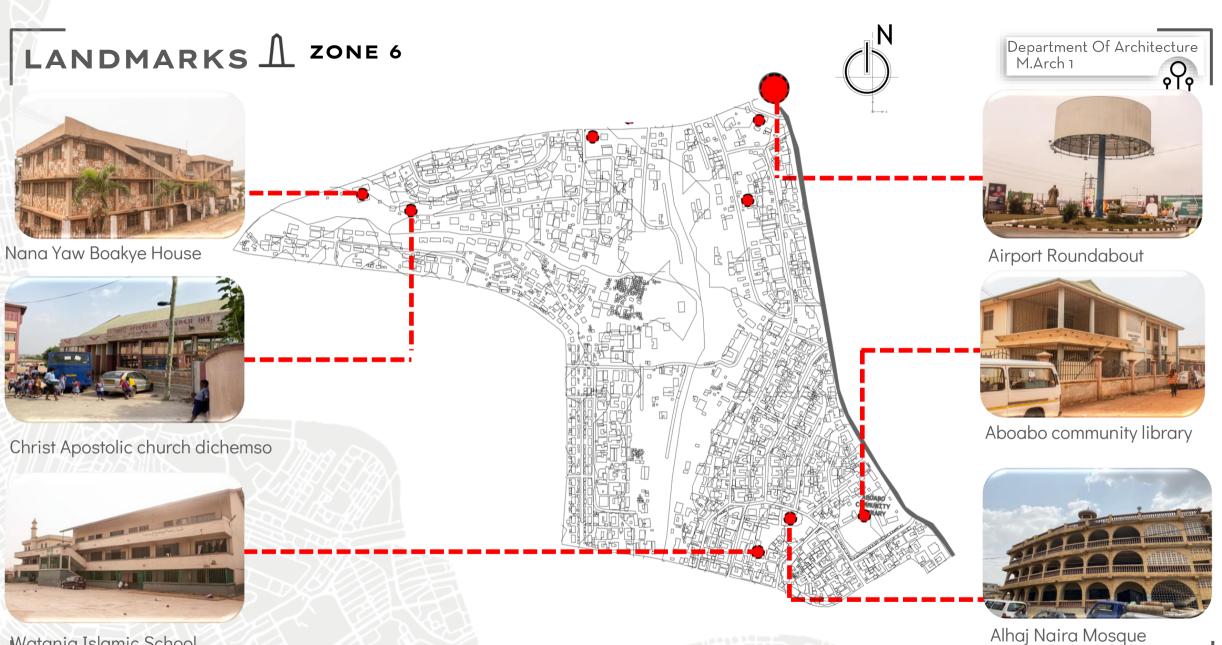


Unity oil



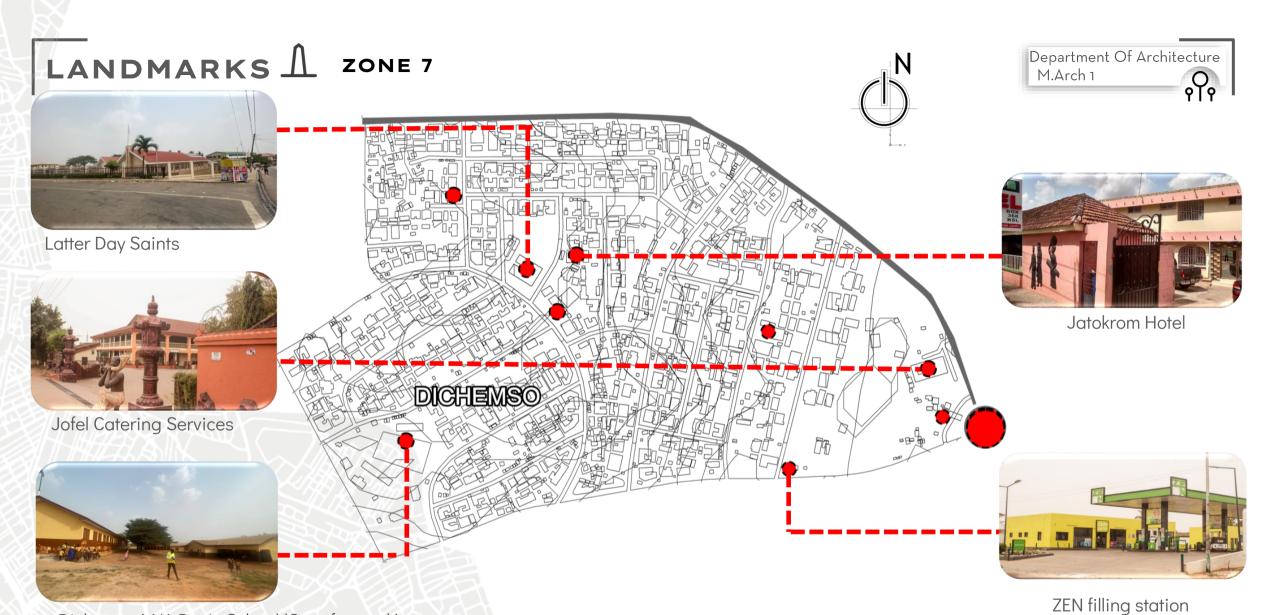
Anloga junction TotalEnergies





Watania Islamic School

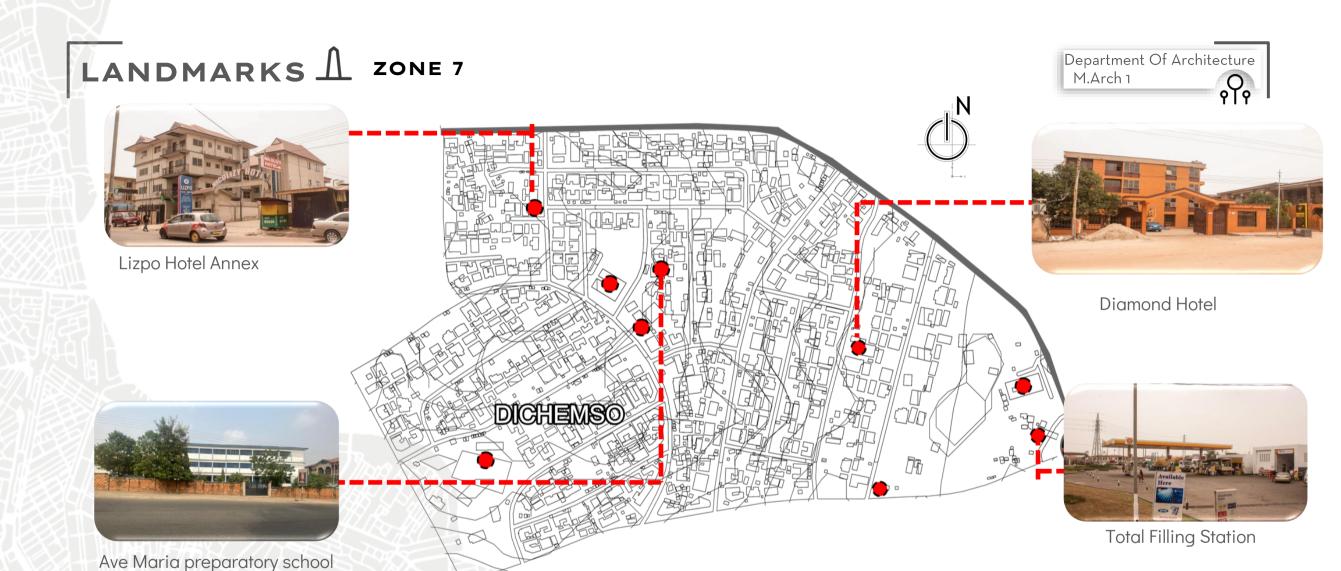
















## LANDMARKS<u></u>

- Manhyia Police station
- Manhyia hospital
- Manhyia Palace
- Manhyia roundabout
- Regional House of Chiefs
- Serwaa Nyarko SHS
- Dunwell Methodist Church
- Krofrom market
- Central Mosque
- Asawase Market
- Asawase Police station
- Airport roundabout
- ❖ WAEC office
- Kumasi Technical Institute
- Joefel

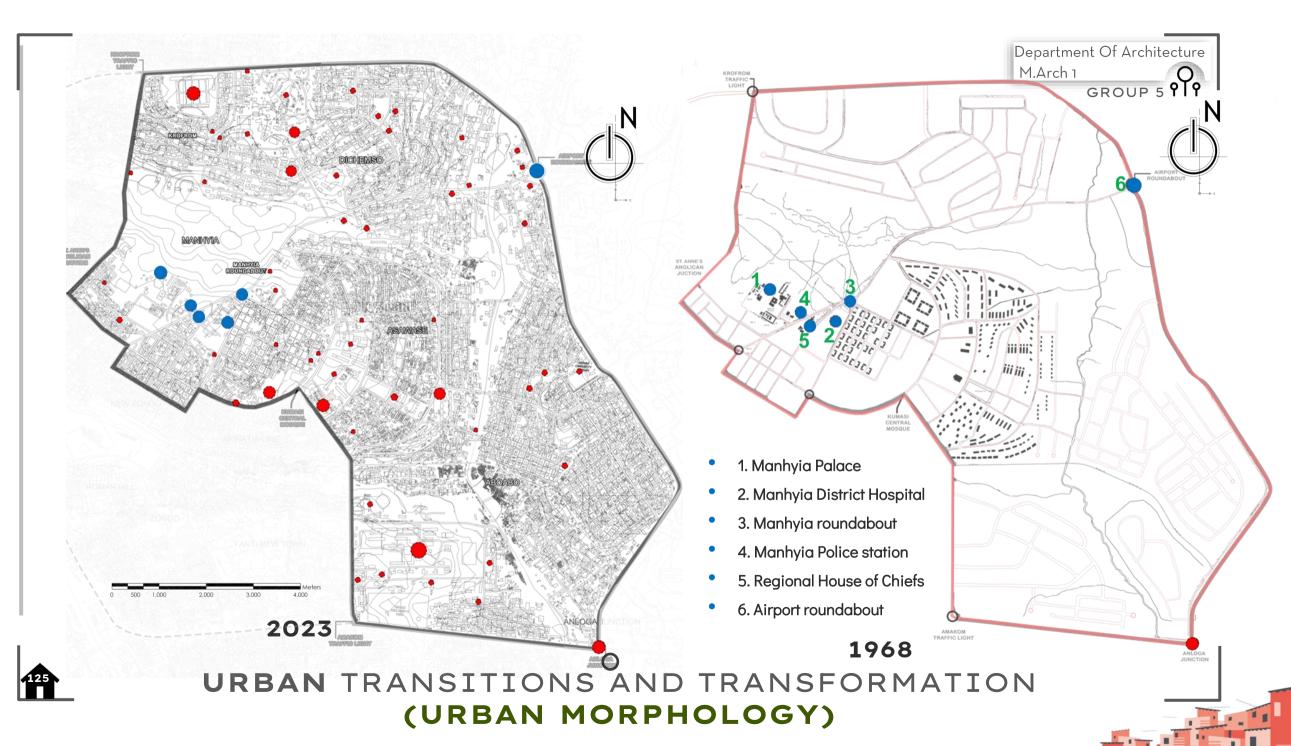
- Zen Filling Station
- Baptist Church
- Amoah Agyemang Hospital
- ❖ Odotobri Rural Bank
- Apusiga Motors
- Goil Filling station
- Timber Market
- Presby Church
- Unity oil
- Christian Divine church
- Prudential Bank
- ❖ Watania Islamic School
- Grace Baptist school
- Islamiya Basic

- De-graft Memorial Methodist church
- Nuru Ameen Islamic shs
- Pelele
- Ecomog chopbar
- Ebenezer Presbyterian church
- St. Theresa's parish
- Total and shell filling station
- Otec FM
- Asawaase MA Basic school
- Magazine fitting yard
- Melcom (Menhyia)
- ❖ Act 2000,SDA
- New tafo SDA Church
- Otumfuo Park

- Ghana Education Service
- ❖ Asawase Total Energies
- University of Ghana College
- New Oxford International
- Anwiam Hospital Limited
- NDC Regional Party Office
- Diamond Hotel
- Latter Day Saints
- Dyches M/A Basic School
- ❖ Hotel Cote D'Ivoire
- Durul Hadith Mosque
- Masjid AL-Furqan
- Aboabo Community Library









#### **DESCRIPTION**

#### **HISTORY**

Manhyia was formally a forest. After the attack of the British government at Kwaaman, the king and his exectives escaped to the forest and established the place, now called Manhyia

#### OWNERSHIP

Chiefs and Local Natives

#### YEAR BUILT

Ashanti Kingdom was established in the 18<sup>th</sup> Century Structures were built 1925

## DISTANCE FROM REFERENCE POINT

700m from the Kumasi central mosque

#### **DESCRIPTION**

#### **FUNCTION**

- Functions as a home for the chef (Otumfuo)
- Houses a family
- Used for Ceremonies (Royal Family)

#### TIME OF OPERATION

- Everyday
- Everytime

#### **MATERIALS**

- Concrete
- Timber
- Sandnerete Blocks
- ❖ Wood
- Aluminium

## CATALYTIC EFFECT

- Annhyia is an important cultural and historical center in Ghana attracting visitors from around the world who are interested in learning about the rich history ad traditions of the Ashanti people.
- The Manhyia Palace Museum, located in the heart of the neighbourhood ,is a popular attraction that showcases the history and culture of the Asantehene in the region.
- ❖ Manhyia is the home to many other important cultural sites and institutions, including the Kumasi Cultural Center and the National Cultural Center



## MANHYIA PALACE

## URBAN PLANNING



- The Manhyia Museum is planned around the Manhyia Palace which is a historic district or a historical Landmark to help maintain the area's unique character.
- The purpose of the museum is to collect ,preserve and interpret and display objects of artistic and cultural significance for the study and education of the public.
- The location of the museum around the Manhyia helps to preserve and highlight and shape the overall layout and character of the area

## TRANSPORTATION

- Manhyia also impacts building infrastructure and road networks.
- Manhyia Palace is in close proximity to Kumasi Airport.
- ❖ It is located 4.23km away from the Kumasi Airport. Manhyia Palace attracts more visitors and commuters to the area and has influenced the location of a major transportation hub such as the Kumasi Airport that are designed to accommodate the influx of people and traffic.







## DESCRIPTION

#### HISTORY

Since 2000, the Manhyia Government has been elevated from community clinic to district hospital

#### CUSTODIAN

Government of Ghana

#### YEAR BUILT

1950

DISTANCE FROM REFERENCE POINT

310m from the manhyia palace

### **DESCRIPTION**

#### DOMAIN OF OPERATION

Child Abuse

13

- Gender Based Violence
- Emergency Humanitarian
- People with disabilities
- Street children
- Care Elderly

#### TIME OF OPERATION

- Day
- Night

#### **MATERIALS**

- Concrete
- Sandcrete blocks
- Glass
- ❖ Work

## CATALYTIC EFFECT

- Supports the local economy
- Provides comprehensive care
- Helps to treat people with minor and serious disease
- Help to promote health, give information on prevention of illnesses
- ❖ Accessible to all
- Creates jobs for personnel like nurses, medical doctors, etc.

URBAN TRANSITIONS AND TRANSFORMATION

(URBAN MORPHOLOGY)



## MANHYIA HOSPITAL

## HISTORY



- Manhyia district hospital is a primary hospital owned by the government. It is located in Manhyia, around Asantehene's Palace.
- The Manhyia District Hospital was established in 1962 as a community clinic.

It gained an urban health status in 1966 and in 1976 became a polyclinic, before being elevated to the status of a district hospital in 2000 to serve the growing population of Manhyia.

## ECONOMIC DEVELOPMENT

- The expansion of the hospital has influenced and served as an encouragement for people to locate their pharmacies in close proximity to the hospital.
- Also, residents have taken advantage of the influx of people into the hospital to set up their businesses around the hospital.







### **DESCRIPTION**

#### HISTORY

Manhyia roundabout was constructed due to the intense traffic occurring at Manhyia. A proposal was made to construct a roundabout

#### CUSTODIAN

Government of Ghana

#### YEAR BUILT

**\*** 2008

## DISTANCE FROM REFERENCE POINT

370m from the manhyia palace.

### **DESCRIPTION**

#### **FUNCTION**

To allow traffic flow easily and to give traffic maximum fluidity

#### TIME OF OPERATION

- Day
- Night

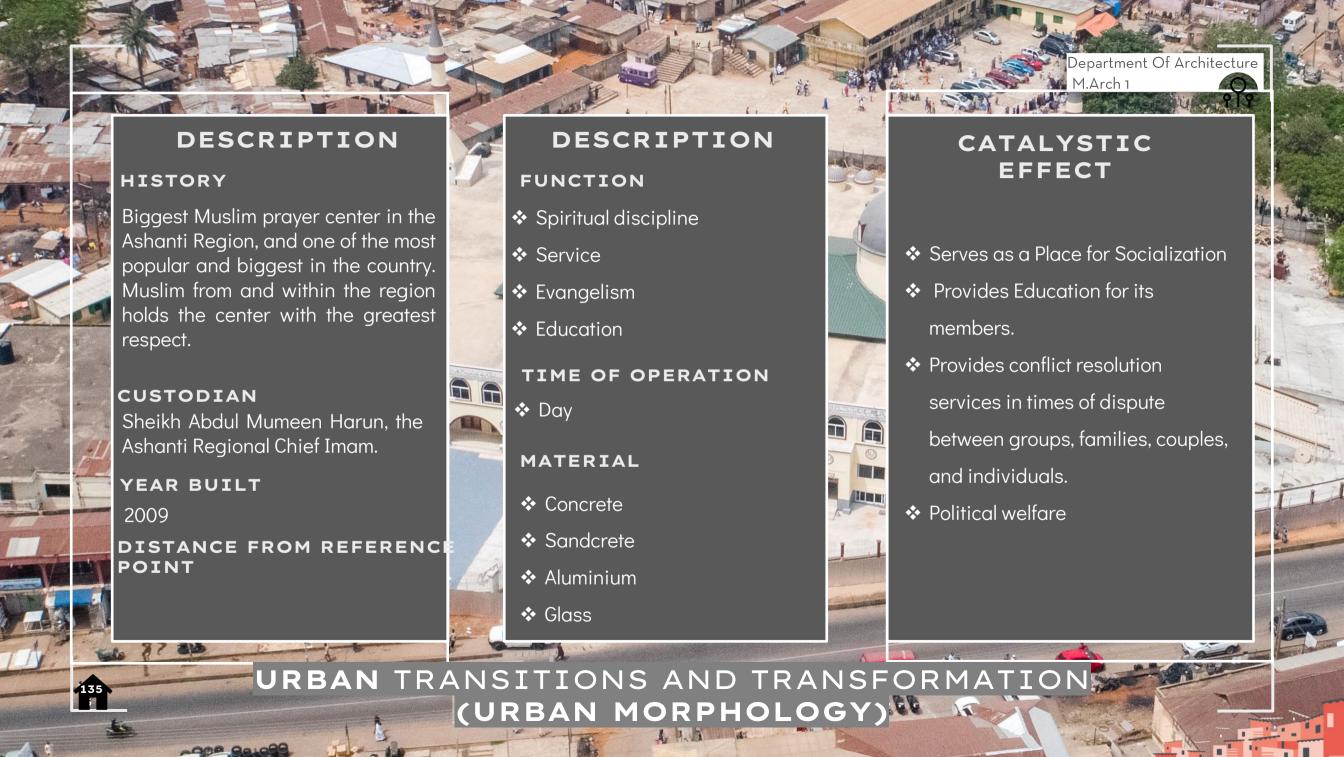
#### MATERIAL

- Laterite
- Grass

## CATALYSTIC EFFECT

- Fewer pedestrian/cycle crashes
- Safer alternative to traffic signals
- Reduces fuel consumption
- Environmentally friendly
- Reduces vehicle crash rate and the neighborhood is made safer for all
- Reduced travel speed





## KUMASI CENTRAL MOSQUE

## ORIENTATION AND CONNECTIVITY



- The central mosque serves as a central point for navigation in the community due to its distinctive nature.
- The mosque is in the highly dense Zongo community which makes the dweller in its environs feel more connected to their religion and gives them a high sense of ownership and belonging.

## ECONOMIC DEVELOPMENT

- The presence of the central mosque has brought about economic development in its environs.
- Several shops have been created around the mosque which serves the users of the spaces and its environs most especially, these shops sell Islamic attires, Qurans, Islamic rosary, and the like.







## **CHECKLIST**



## **Building Form**

i.e., Linear, L-shape, U-shape, T-shape, Irregular shape

01

## Material

i.e., concrete, brick, glass, steel, laterite, wood and others

I.e., Continuous structures, Framed structures and Tensile structures

02

04

03

I.e., Post-Modernism, Modernism, International Indo-Islamic,

Architectural style

Structural system

URBAN TRANSITIONS AND TRANSFORMATION



LANDMARK	ORIENTATION	STRUCTURAL SYSTEM	MATERIALS	BUILDING FORM	ARCHITRCTURAL STYLE
Manhyia Police Station	North-South	Continuous	concrete, glass, wood	Linear	Modernism
Act 2000 SDA	North-SOUTH	Continuous	concrete, glass, wood	linear	Modernism
Apusiga Motors	North-East	Framed structures	concrete, glass, blocks others(alucubon)	linear	International
Baptist church	North-South	Framed structures	concrete, glass, blocks, wood	linear	Modernism
Ebenezer Presbyterian Church	North-South	Framed structures	concrete, steel, glass, bricks, and others	Linear	Post-Modernism
Melcom manhyia	Northeast - Southwest	Framed structures	concrete, steel, glass, bricks and others	Linear	Post-Modernism
Odotobri Rural Bank	Northeast - Southwest	Framed structures	concrete, wood, bricks, steel	linear	International
Asawase Police station	East-West	Continuous structures	concrete, wood, bricks, steel	T-shape	Modernism
Ecomog	North-South	Framed structures	concrete, wood, steel	L-shape	Modernism
Manhyia Central Mosque	North-south	Continuous structures	concrete, wood, bricks, steel and others	Linear	Indo-Islamic
Regional House of Chiefs	Northeast - Southwest	Continuous structures	concrete, steel, glass, bricks, and others	T-shape	Post-Modernism
WAEC Hall	East-West	Framed structures	concrete, glass, bricks, steel and others	linear	Post-Modernism







LANDMARK	ORIENTATION	STRUCTURAL SYSTEM	MATERIALS	BUILDING FORM	ARCHITRCTURAL STYLE
Anwian Hospital Limited	North-South	Continuous structures	concrete, wood, bricks, steel, glass	linear	Modernism
University of Ghana College	East-West	Framed structures	concrete, wood, bricks, steel, glass	linear	Post-Modernism
NDC Regional Party Office	North-south	Continuous structures	concrete, wood, bricks, steel	T-shape	Post-Modernism
Regional Education Office	North-South	Continuous structures	concrete, steel, wood, bricks, and others	L-shape	Post-Modernism
Masjid AL-Furqan	Northeast - Southwest	Continuous structures	concrete, bricks, steel and others	L-shape	Indo-Islamic
Christian Divine Church Anwiam	Northeast - Southwest	Continuous structures	concrete, wood, bricks, steel, glass	linear	Modernism
Durul Hadith Mosque	North-South	Framed structures	concrete, wood, bricks, steel, glass	linear	Post-Modernism
Nana Yaw Boakye House	Northwest - Southeast	Continuous structures	concrete, wood, bricks, steel and others	T-shape	Modernism
Aboabo community library	East-West	Continuous structures	concrete, steel, wood, bricks, and others	linear	Modernism
Latter Day Saints	Northwest - Southeast	Continuous structures	concrete, bricks, steel and others	U-shape	Modernism







### **DEFINITION**

- Public open spaces (POS) (parks) have been identified as an important venue for physical activity (Bedimo-Rung et al., 2005; Krenichyn, 2005), particularly for children (Veitch et al., 2006).
- How long people remain at these locations and the kind of activities they choose to do there can be used to assess the quality of public open spaces in metropolitan settings.







## **PUBLIC OPEN SPACES**

- 1. Manhyia Palace Car park
- 2. DKC park
- 3. Dichemso M/A blk B park
- 4. Krofrom Market
- 5. Krofrom Bolga station
- 6. Manhyia Palace Park
- 7. Melcom Car Park
- 8. Kumasi Central Mosque Park
- 9. Asawasi B Line park
- 10. Asawasi C-Line park
- 11. Red Park- Asawasi
- 12. 31st DWN Daycare Center



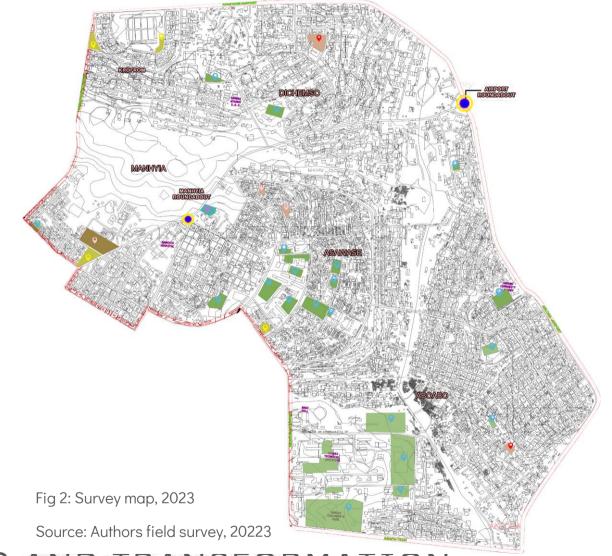




Department Of Architecture
M.Arch 1

GROUP 5

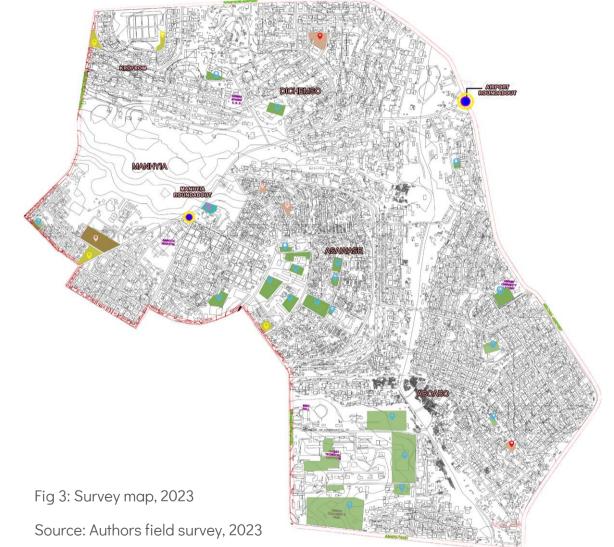
- 13. Dogo Moro Park
- 14. Nuru SHS park-Asawasi
- 15. Asawasi Market
- 16. Methodist Primary Park Asawasi
- 17. Kumasi Children Park
- 18. Friends of Disable
- 19. New Oxford Inter. School Park
- 20. UG City Campus Park, Kumasi
- 21. Kumasi Technical Institute park
- 22. New Aboabo M/A Park
- 23. Nantwie Park
- 24. Alhaji Bawa Park







- 25. New Aboabo M/A Primary Park
- 26. God Church of Peace
- 27. Dichemso M/A block A Park
- 28. Later Days Church of Jesus Christ Park
- 29. Kenianko M/A Primary School Park
- 30. Asawasi M/A Primary/JHS Park
- 31. Methodist KG Park Asawasi







#### **HISTORY**

- The open spaces have all gone through significant change over time. In the year 1956 the State Housing Company (Gold coast housing company) was established.
- There were tasked to increase the availability of dwelling houses in Ghana under the 1955 ordinance.
- The provision of open spaces were considered in the planning and development of the settlement areas.
- After 8 years a post colonial development plan was developed with larger lots and open spaces.
- Some open spaces such as the Kumasi Children's park and Krofrom market was established to facilitate social cohesion and exchange.
- Provision was also made for spaces such as the Krofrom market in the plan.





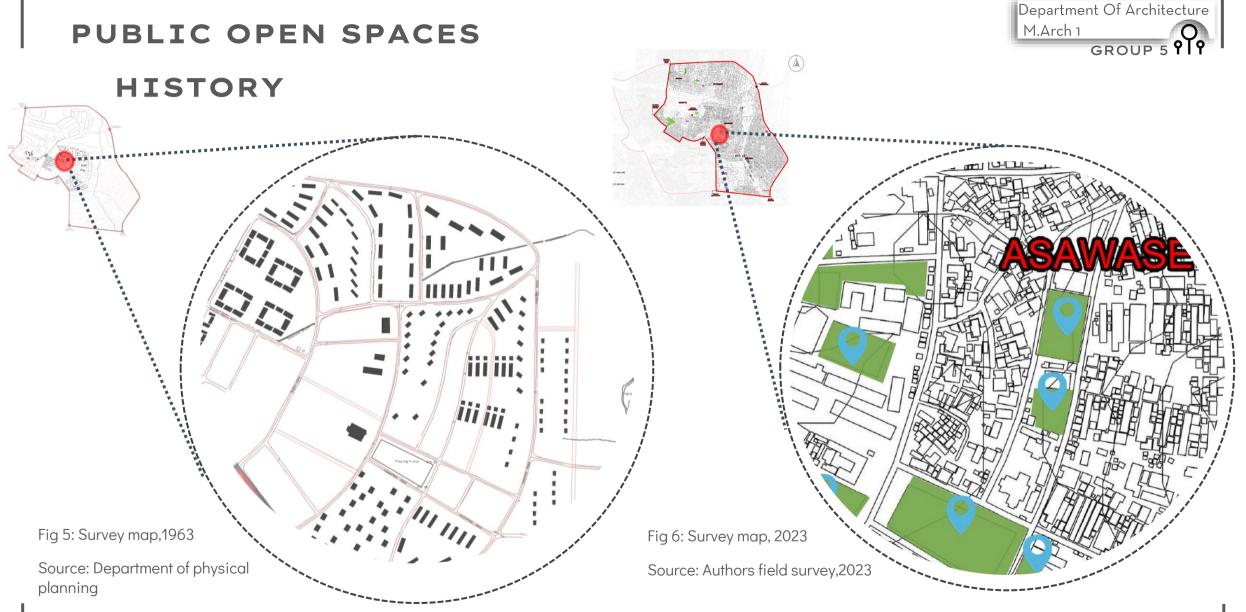


#### **HISTORY**

- The lands in the Ashanti kingdom are owned by the Asantehene however these lands were leased to the State Housing Company.
- However, in the year 2008 the lease had expired and some of the lands around the existing houses were sold to individuals which caused some of these open spaces to be reduced and other were converted to settlement areas as seen in Figure 1 and 2.
- Open spaces such as B line park (formally a public place of convenience) and C line park (abandoned Mangoase school) were converted back to open spaces due to concerns raised by the people.
- Places such as the VIP parking lot behind the town council building was once an open space that was used as a refuse disposal point however due to concerns by the near by residents its purpose was changed. This change has attracted more residents to the neighborhood.













		ZONE 1		GROO
NAME	CUSTODIAN	MATERIALS	OBSERVATION	USAGE
Krofrom Market	Government	Wood, Stone, Concrete	<ol> <li>Defined walkways and boundary.</li> <li>Presence of functional Streetlight.</li> </ol>	Commercial
Cocoa Ano park	Community	Sand, stone	<ol> <li>Pathway is undefined</li> <li>Bare ground</li> </ol>	Commercial
Krofrom station	Privately owned	Wood, concrete	Access uncontrolled	Commercial
Dichemso M/A JHS and primary	Government	Concrete, gravels	Defined boundary	Commercial
		ZONE 2		
Asawase central mosque	Government	Pavement blocks & Concrete	Defined walkways around the park	Religious and Academic activities
Veteran Administration Ghana	Government	Pavement blocks & Concrete	Defined boundary	Commercial

Table 1: Public spaces according to zones











				GROC
NAME	CUSTODIAN	MATERIALS	OBSERVATION	USAGE
Veteran Administration Ghana	Government	Pavement blocks & Concrete	Defined boundary	Commercial
		ZONE 3		
Dogo Moro park	Community	Sand, gravels	Undefined boundary	Commercial, Recreational
Red park	Community	Sand, gravels	No vegetation cover	Recreational
Asawase B line park	Community	Sand, gravels	Defined boundary	Commercial
Asawase C line park	Community	Sand, gravels	Bare brown land	Recreational, social
Asawase No 4 Kg and Primary	Government	Concrete and sand	Defined boundary	Recreational, social
		ZONE 4		
Kumasi Children's park	Government	Wood, Sand and gravels	Presence of soft and hard landscape	Recreational

Table 2: Public spaces according to zones

Source: Authors field survey







NAME	CUSTODIAN	MATERIALS	OBSERVATION	USAGE
University of Ghana Kumasi Park	Community	Sand, gravels	Bare brown land	Recreational, social
		ZONE 5		
New Aboabo JHS park	New Aboabo JHS	Sand, gravels	Uncontrolled access	Recreational, social
Nantwie park	Community	Sand, gravels	Railway lines are located along the edge of the park	Recreational, social
Alhaji Bawa park	Alhaji Bawa family	Sand, gravels	<ol> <li>The space is used for drying corn flour.</li> <li>There are sitting spaces.</li> <li>Presence of washrooms</li> </ol>	Recreational, social
		ZONE 6		
NAME	CUSTODIAN	MATERIALS	OBSERVATION	USAGE
New Aboabo M/A Primary park	New Aboabo Primary	Sand and gravels	Presence of hard and soft landscape	Recreational, social

Table 3: Public spaces according to zones

Source: Authors field survey









ZONE 7				
NAME	CUSTODIAN	MATERIALS	OBSERVATION	USAGE
Otumfuo park	Community	Astroturf	<ol> <li>Presence of functional streetlights</li> <li>Absence of washrooms</li> <li>Defined boundary</li> </ol>	Recreational, social
Dichemso Latter Days Saints church park	Church	Grass & Concrete	<ol> <li>Presence of functional streetlights</li> <li>Absence of washrooms</li> <li>Located within the church premises</li> </ol>	Religious, Recreational, Social

Table 4: Public spaces according to zones

Source: Authors field survey





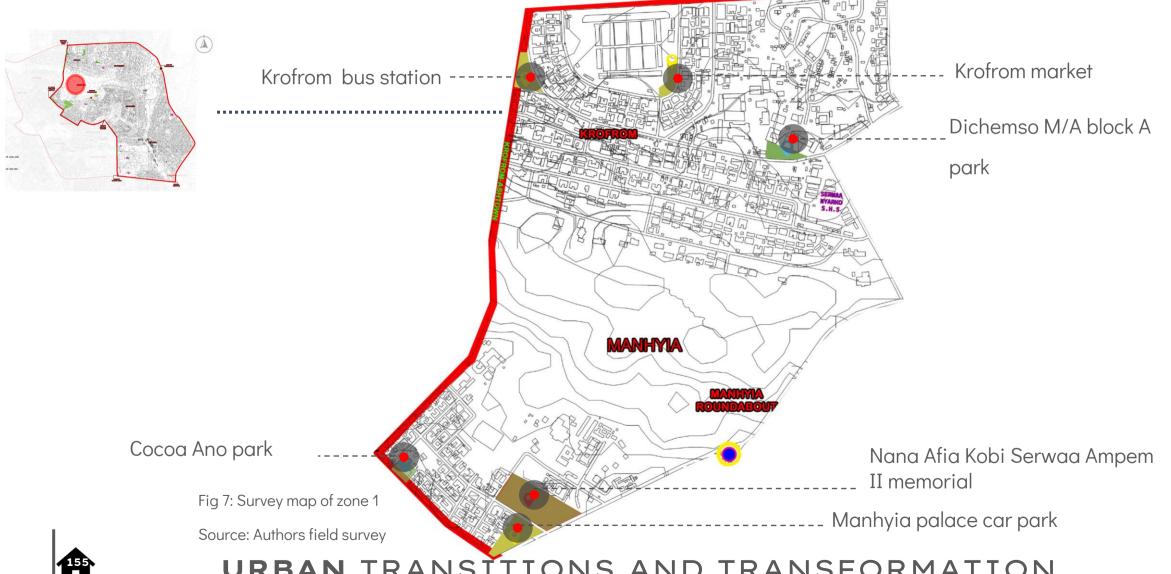






URBAN TRANSITIONS AND TRANSFORMATION











### **DESCRIPTION**

- The market has existed for over 60 years
- Their present settlement has been allocated as a proposed lorry park.
- The market is located close to the P.V Obeng bypass.
- The market is formed by timber structures that is clustered on the eastern of the open space.
- The business transaction that take place at the market has been affected by the homeless people and the criminals who seek for refuge in the abandoned market structure.
- The market is surrounded by a green open space for the proposed market.



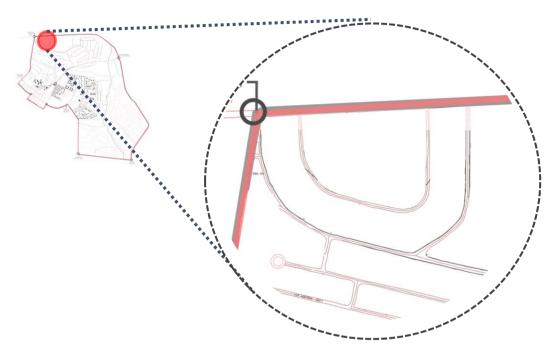
Fig 8: Krofrom market stalls

Source: Authors field survey



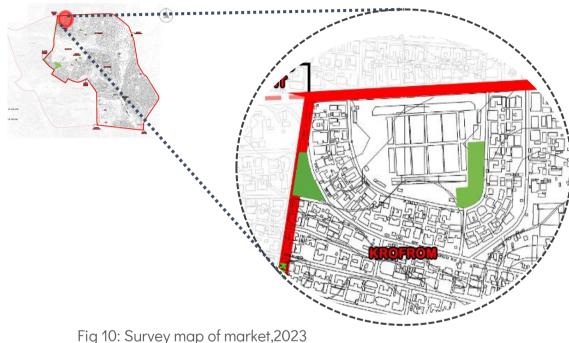








Source: Department of physical planning



Source: Authors field survey

In the year 1963 development plan provision was made for the Krofrom market. In the 2023 map, it is observed that there has been an evolution in the neighborhood especially around the market which shows the impact of the open space.







### **DESCRIPTION**

- The park was called cocoa ano because of a cocoa tree that was located at the edge of the park before it's current use.
- The space is surrounded by abandoned cars parked along the street.
- The space is bounded by the pinanko road and the Kotoko road which give direct access to the space.
- The space is mostly used by the residents of the community.
- The space is currently being used mainly for football and funerals to generate money for the community.
- The land is a bare brown land with little shrubs located at the end of the park.



Fig 11: Cocoa ano park

Source: Authors field survey

## KROFROM STATION

Location: Krofrom Latitude: 6°42'13.37"N Longitude: 1°37'7.45"W

Area: 1,355.28 sqm



### **DESCRIPTION**

- The bus station moved to its present settlement in the year 2008.
- Before its current usage it was used as an open space hosting funerals and other events.
- The bus station attracted a lot of businesses to the neighborhood especially within the space.
- Since the bus station migrated to its present settlement it as attracted a lot of business to the space housed in container structures.
- There is no greenery within and around the space to absorbed the carbon monoxide produced by the vehicles.



Fig 12: Krofrom bus station

Source: Authors field survey





# DICHEMSO M/A JHS AND PRIMARY BLOCK A

Location: Krofrom Latitude: 6°42'13.37"N Longitude: 1°37'7.45"W

Area: 1,355.28sqm

### **DESCRIPTION**

- The school was established in 1954 with only one structure located on the central part of the school premises.
- Provision was made for the park during the construction of the school.
- The space is bounded by the eastern by-pass and the maham bla street, the maham bla street gives direct access to the space
- Plans have been put in place to renovate the park but however management reluctant to do so due to the negative impacts that is being faced by their sister school.
- There are trees with large canopies and wild bushes are located at the northern and western part of the space.



Fig 13 : Dichemso M/A JHS & Primary block A park

Source: Authors field survey





URBAN TRANSITIONS AND TRANSFORMATION









# ASAWASE CENTRAL MOSQUE

Location: Asawase

Latitude: 6°42'01.72"N Longitude: 1°36'36.28"W

Area: 5,159.07sqm



### **DESCRIPTION**

- The space is also bounded by the eastern by-pass and the maham bla street, the maham bla street gives direct access to the space.
- The park serves both religious purposes and educational purposes.
- It is also used when there is a big event like the regional salah for prayers .
- The green infrastructure of the central part of the site has been cleared because of the construction of the mosque.
- However, the trees present on the open space are used as shelter for students.



Fig 15: Kumasi central mosque open space & Car park

Source: Authors field survey





## ON THE RUN PARK

Location: Asawase

Latitude: 6°42'O5.14"N Longitude: 1°36'43.94"W

Area: 9,085.26sqm



### **DESCRIPTION**

- The usage of the land has changed overtime.
- The physical characteristics of the place has morphed three times.
- The space was rich in greenery before it became a refuse collection point.
- The space is located in a large lot bounded by the Antoa,
   Alhaji Nabure and the Keneanko road behind the Total energy's petrol station.6



Fig 16: On the run park

Source: Authors field survey







### **DESCRIPTION**

- The refuse behind the site emits fumes with cause air pollution.
- The park is mostly used for playing football by the children in the neighborhood.
- The park however does not generate funds for the community.
- The park is bounded by a fence to serves as a form of security for the businesses present on site.
- The green infrastructure of the park has been cleared making the land bare.



Fig 17: On the run park

Source: Authors field survey





# VETERAN ADMINISTRATION GHANA

Location: Asawase Latitude: 6°42'18.05"N Longitude: 1°36'34.25"W

Area: 818.48sqm



### **DESCRIPTION**

- The space is a parking space for the Veterans,
- It is also used for hosting funerals and other programs at a token to the administration.
- The space is protected by security personnel who are employed by the administration.
- The space was given to them during Rawlings government.
- The space is located along the Zongo road adjacent the Goil filling station.
- Business owners who use the facility pay a fee of 5 cedis to the administration.



Fig 18: Veterans administration car park

Source: Authors field survey







MANHYIA

ZONE THREE

URBAN TRANSITIONS AND TRANSFORMATION









### DOGO MORO PARK

Location: Asawase

Latitude: 6°41′59.88″N Longitude: 1°36′18.09″W

Area: 7,133.87sqm





### **DESCRIPTION**

- The name of the park was inspired by a Kotoko player.
- It has been in use as a community park for almost a century.
- The space is located within a lot which houses the Al-Haq construction company and Nurul Ameen school. It located close an unnamed road linked to the Samuel Obiri Asare road.
- It is mostly patronized due to its accessibility.
- The events hosted in the space generates funds for the community
- There is an absence of greenery within the space



Fig 20: Dogo Moro park







## RED PARK

Location: Asawase

Latitude: 6°42'06.94"N Longitude: 1°36'15.90"W

Area: 2,536.10sqm



### **DESCRIPTION**

- Red park is form by two unnamed parallel roads. The space is located between the Asawase Pentecost Church and Royal City Chapel.
- The place has always operated as a community park and has been around for over a century.
- The park was established as a community park for the estate buildings.
- The park has contributed to a decrease in crime rate.



Fig 21: Red park

Source: Authors field survey





# ASAWASE NO-\_4 PRIMARY AND KG

Location: Asawase Latitude: 6°41'59.88"N Longitude: 1°36'18.09"W

Area: 7,133.87sqm



### **DESCRIPTION**

- Currently serving as a school, portions of the land was previously used as a cemetery.
- Activities in the vicinity poses aa a disturbance during lesson hours.
- The presence of the school serve as an avenue for some businesses.
- The space is mostly intruded.
- The space is rented out for programs during weekends.



Fig 22: Asawase No 4 Primary and KG Park

Source: Authors field survey





# ASAWASE B UNE PARK

Location: Asawase

Latitude: 6°41′59.88″N Longitude: 1°36′18.09″W

Area: 7,133.87sqm



#### DESCRIPTION

- It was initially managed by the State Housing Company but in the year 2008 it became the property of the Ashanti kingdom after the lease had expired.
- since the year 2008 the park has transformed in terms of size and purpose.
- A structure was built at the center of the open space to serve as a public place of convenience. The structure was demolished, and the space was used as a mini farm by the surrounding residents before it was later used as a park.



Fig 23: Asawase B line Park









#### DESCRIPTION

- The space is bounded by residential buildings that is connected to an unnamed road linked to the Keneanko road.
- The roads that create the destination between the two parks were given names by the local people, known as B-line.
- Recreational activities are mostly organized in the park, however during the weekends the space is used for hosting rallies, weddings and naming ceremonies.
- The park is unable to accommodate the number of people who
  use the space during an event which causes traffic due to
  blockage of the Keneanko road.



Fig 24: Asawase B line Park

Source: Authors field survey





# ASAWASE C LINE

Location: Asawase

Latitude: 6°42'15.79"N Longitude: 1°36'24.30"W

Area: 1,553.28sqm



#### DESCRIPTION

- Its shape is influenced by the surrounding buildings.
- It was initially managed by the State Housing Company but in the year 2008 it became the property of the Ashanti kingdom after the lease had expired.
- The park is protected and managed by the residents of the community.
- Reduction in the size of the space is caused by encroachment by the residents that surround the space.
- Just like B-line park the space is located within a lot with a highly populated residential buildings.



Fig 25: Asawase Cline Park

Source: Authors field survey







#### DESCRIPTION

- The space is not highly patronized by the people of the community increase in the rate of crime in the neighborhood.
- The park is mainly used for recreational activities which does not generate funds for the community.
- The green infrastructure of the park has been cleared making the land bare.
- The land is therefore exposed to the heat of the sun.



Fig 26: Asawase Cline Park

Source: Authors field survey



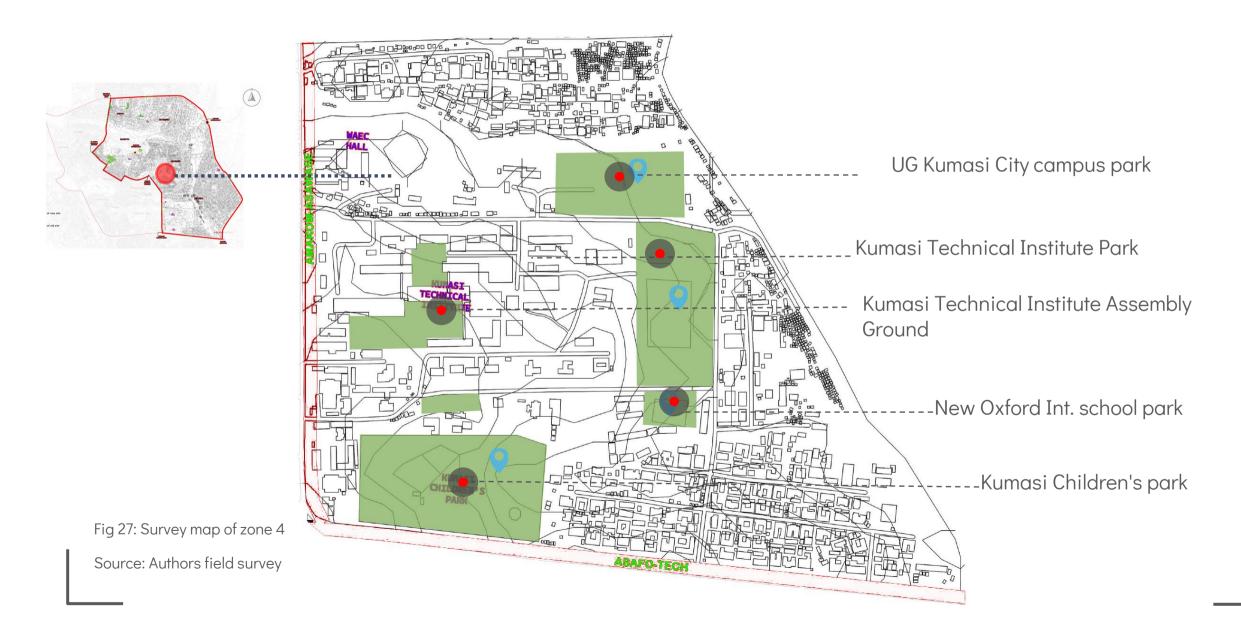








URBAN TRANSITIONS AND TRANSFORMATION





### **DESCRIPTION**

- The space is bounded by the main Kumasi-Ejisu road which serves as the eastern boundary of the site giving users of this road direct access to the space.
- The Yaa Asantewaa road serves as boundary to the site
- Children have abandoned the space due to the dilapidated state of play equipment's that were present on the site which took place after the year 2008.
- Due to the invasion of criminals in the evening the business within the neighborhood are unable function during this during causing some of the business owner to migrate from the area.
- However, trees with large canopies and wild bushes are located at the northern and western part of the site.



Fig 28: Kumasi children's park

Source: Authors field survey

# UNIVERSITY OF GHANA KUMASI PARK

Location: Asawase Latitude: 6°42'15.79"N Longitude: 1°36'24.30"W

Area: 1,553.28sqm

#### DESCRIPTION

- The park is located in the University of Ghana Kumasi campus.
   The site has a triangular configuration which is formed by three unnamed roads.
- The space is used for funerals, weddings and football these activities however does not generate money.
- Its shape was influenced by the buildings around it.
- It was a sugarcane plantation. It then became a refuse dump for the community before it became an open space when it was purchased by the university.
- Overtime the green infrastructure of the site has been cleared during the construction process of the school and since then the green infrastructure has not returned



• Fig 29: University of Ghana Campus park

• Source: Authors field survey





URBAN TRANSITIONS AND TRANSFORMATION







## NEW ABOABO JHS PARK

Location: Asawase

Latitude: 6°42'15.79"N Longitude: 1°36'24.30"W

Area: 1,553.28sqm



#### DESCRIPTION

- The space is located in front of the New Aboabo JHS.
- The space has no boundaries because of the entrance of the settlements on the northern and southern part of the space.
- There is only one vehicular access to the space which is in a deplorable state.
- The space is owned by the school however the it is also used by the youth of the community for organizing recreational activities.
- The space is currently being renovated by Ghana Gas company to an astroturf pitch.
- After the completion of the project its status will be changed to a community park.



Fig 31: New Aboabo JHS Park

Source: Authors field survey

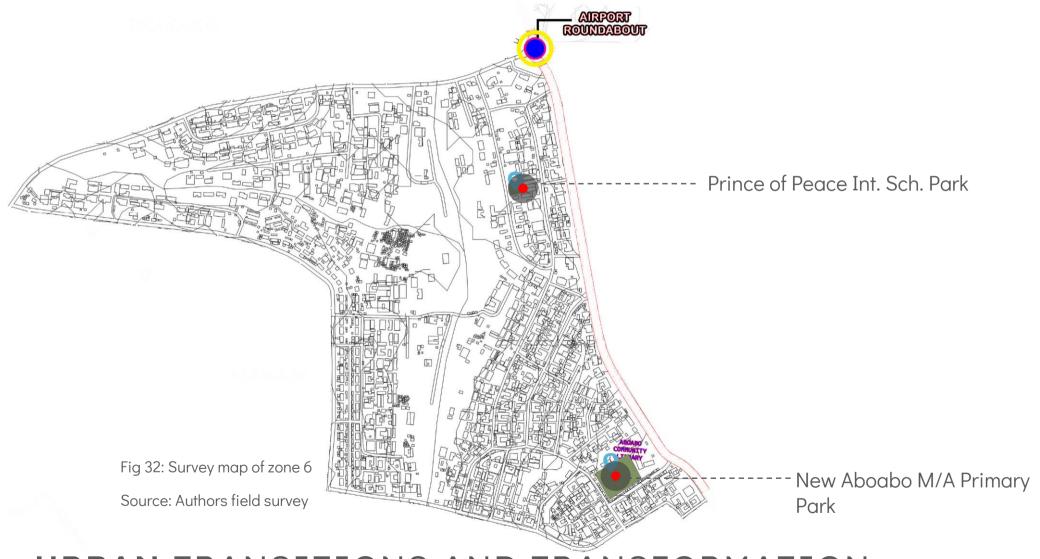






URBAN TRANSITIONS AND TRANSFORMATION







# NEW ABOABO M/A PRIMARY SCHOOL PARK

Location: ABOABO

Latitude: 6°42'15.79"N Longitude: 1°36'24.30"W

Area: 1,553.28sqm



### **DESCRIPTION**

- The park was established during the construction of the school.
- the space is also bounded by the FF Antoh street and the Dr. J.G. Lan, the Dr. J.G. lane gives direct access to the space.
- The space was once covered with greens; the whole area was a forest before it became an open space.
- The space is not used for hosting events however recreational activities such as football are organized on the park by both the students and the youth of the community.
- It is mostly used during the day and not in the night because it is used as a hiding place for criminals.

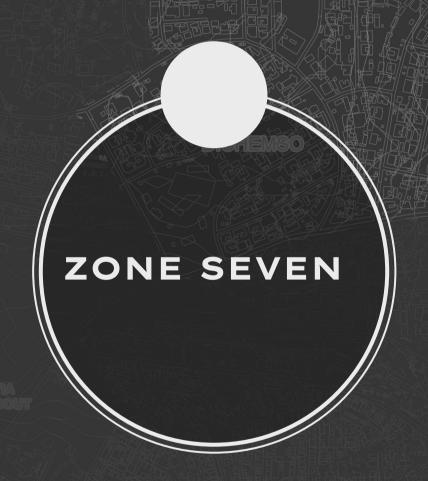


Fig 33 : New Aboabo M/A Primary school park



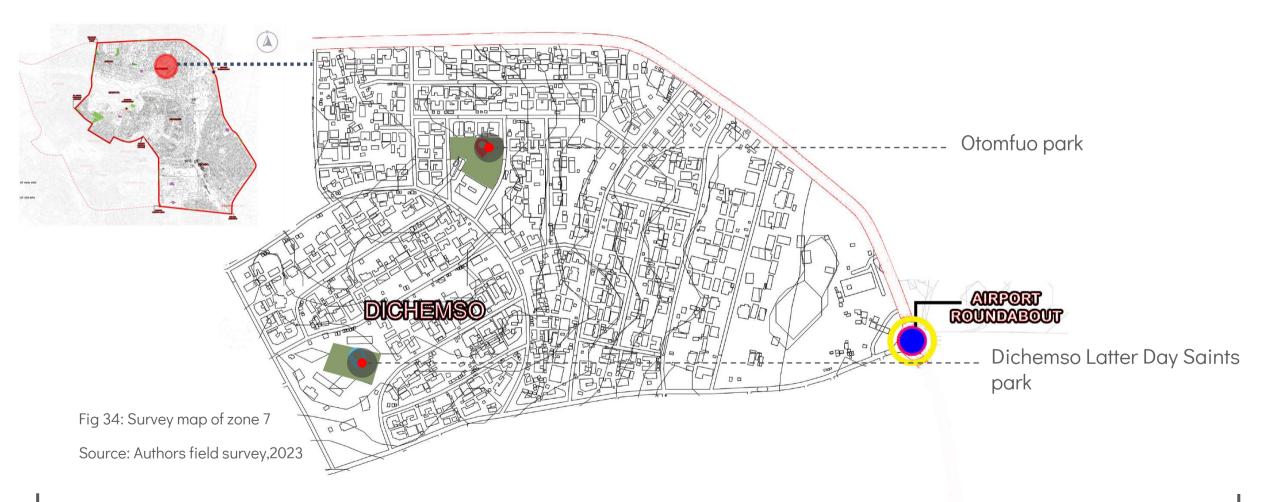






URBAN TRANSITIONS AND TRANSFORMATION







# OTUMFUO PARK

Location: DICHEMSO Latitude: 6°42'15.79"N Longitude: 1°36'24.30"W

Area: 5,794.06sqm



### **DESCRIPTION**

- The school was built in 1962.
- The land was commissioned on the Sunday 18<sup>th</sup> December 2022 by Hon. Dr. Matthew Opoku and funded by the Get fund.
- The park was a dusty park before it was renovated to an astroturf field.
- The park is maintained by a seven-member committee.
- The space is located within a lot with a sparse population of residential buildings.
- A rate of 200 cedis is paid per hour for the utilization of this facility.
- The activities that take place on the space are mostly controlled.



Fig 35: Otumfuo park





# DICHEMSO LATTER DAY SAINTS CHURCH

Location: DICHEMSO Latitude: 6°42'15.79"N Longitude: 1°36'24.30"W

Area: 5,794.06sqm



#### **DESCRIPTION**

- The space was formerly used as a hospital (Abrefi Hospital) and was later sold to its current owner.
- It is currently owned by the Latter-Day Saints Church.
- The space is completely covered by greenery.
- It is currently used for weddings, funeral, a basketball and football park with permission from the pastor.
- The space is located within the premises of the Dichemso Latter
  Days Saints church. It is accessed by an unnamed road which is
  linked to the Antoa road.
- The pedestrian access is well defined.



Fig 36 : Dichemso Latter days Saints church park

Source: Authors field survey





### THANK YOU.