



The Planning Model

Volume 3

STRUCTURE PLAN GUIDELINES

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1 Definition

A Structure Plan is a long term (ten to fifteen years) statutory framework used to guide the development or redevelopment of land. It is used to define; future development and land use patterns; the layout of trunk (primary distribution networks) infrastructure and main transportation routes, including terminals; conservation and protected areas; and other key features for managing the direction of development.

The land use proposals included in the Structure Plan are based on meeting the strategic objectives and sector policies included in the Spatial Development Framework (SDF) for the District or Sub-Regional Area. These objectives and policies form part of the District Medium Term Development Plan, which is approved by the Assembly.

A Structure Plan should generally be prepared for the following urban and urbanising areas:

1. Towns with rapid urban growth,
2. Urban settlements that are subject to redevelopment and regeneration due to changing dynamics of economic growth and employment(e.g., the old dockland towns, or towns where the main industrial base has collapsed or changed
3. New towns or urban settlements
4. Parts of towns, or ‘sectors’, where development is to be phased over time
5. Areas likely to be affected by major industrial, communications or other development schemes (e.g. areas near planned new national or international airport sites, inland ports etc.)
6. Areas proposed for major tourism projects and development including near important heritage sites.

The Structure Plan has specific functions to:

1. Identify inner city areas suitable for redevelopment *Reason: to ensure that land in moribund land uses is utilised more effectively in the changing economic reality*
2. Identify inner city areas suitable for regeneration. *Reason: to ensure that areas with substantial populations of disadvantaged persons but whom play a vital role in the service sector required for the efficient functioning of the inner city are provided improved living conditions.*
3. Identify areas where the land is presently underutilized and yet is suitable for housing and other uses, *Reason: to ensure that land is made available to meet demand*
4. Identify sensitive areas where special controls are needed to ensure water quality and quantity, and protection of sites with natural and/or cultural heritage value *Reason: to make most efficient use of an area’s resources/facilities/services and safeguard for future generations*

5. Co-ordinate the staging of development over time, particularly where large areas are to be developed. *Reason: to minimise the impacts on existing development and safeguard long term development proposals for the area.*
6. Ensure patterns and intensities of development are co-ordinated and compatible between existing and proposed areas of development and redevelopment. *Reason: to ensure that new development makes most efficient use of an area's resources/facilities/services to avoid potential conflicts*
7. Provide a co-ordinated approach to infrastructure provision and other services across land parcels in different ownerships, *Reason: to facilitate new development that makes most efficient use of an area's resources/facilities/services*
8. Provide higher levels of certainty to developers, the council, the public and affected parties regarding the character of permitted development in an area earmarked for growth or redevelopment. *Reason: to promote development in accordance with the Plan in the public interest.*

A Structure Plan should identify:

1. Main land uses, present and proposed (this will include rezoned areas), as well as identifying land for which no specific zoning has been proposed (often known as 'white' land) and areas of outstanding significance and subject to special treatment and controls.
2. All trunk infrastructure, including roads, water, drainage and sewerage and electricity. It should provide sufficient detail of the capacity of the main systems to know whether they are adequate to support the levels of development proposed, or are a constraint to the density of development
3. Main public transport termini
4. How development will be phased over the period covered by the plan
5. Investment proposals for stimulating the realisation of the plan (eg, investment in roads and other infrastructure, or the cleaning of old industrial sites, and housing area development, etc.)
6. A Preliminary Budget for the investment required and a three year development budget covering the first three years to guide public sector investment.

2 CONTENT OF THE STRUCTURE PLAN

The Structure Plan will comprise of a report and a Zoning Plan, which is sometimes referred to as the Structure Plan. The report will cover the justification for the plan, the analysis, details of the phasing of the proposed development, the financing plan and the monitoring proposals.

2.1 The Zoning Plan

The Plan should contain the boundaries of land designated for specific uses and purposes, with an accuracy of ± 10 metres, such as:

1. Industrial areas (heavy including areas with special considerations regarding their location such as shipbuilding, or requiring good road, rail or port access, industries with special environmental requirements such oil refining, gas works or metal processing works, and industry that have little environmental impact and may be located in residential and commercial land use areas)
2. Commercial areas (including offices, shopping malls, mixed office and shopping areas and markets)
3. Warehousing
4. Residential areas of various categories (eg. High, medium and low density and mixed residential commercial areas)
5. Major areas for institutional use (eg. Universities, school complexes, hospitals, religious complexes)
6. Military and Police complexes including barracks
7. Public cemeteries
8. Prisons and Correctional Institutes
9. Major recreational areas (stadia, sports fields, parks, camping grounds etc.)
10. Agricultural areas
11. Forest areas and timber plantations
12. Main drainage system including rivers, streams and canals and land reserved for flood protection, such as spill areas
13. Watershed protection areas
14. Historic and cultural sites
15. Main road network including highways (primary roads) and main connector roads (secondary) but not local distributors, and road reservations.
16. Location of bus, trotro terminals and lorry parks
17. Ports (sea, river, inland and air ports) and related land uses
18. Rail lines and land reserved for railway network and use
19. Main power distribution lines and sub-stations, including buffer zones
20. Main water distribution system (primary network)
21. Water treatment works
22. Main sewerage network
23. Sewage treatment plants
24. Land fill (solid waste disposal) sites
25. Areas of mining activities
26. Natural disaster high risk zones unsuitable for development
27. Boundaries of areas identified for urban regeneration
28. Boundaries of areas identified for urban redevelopment
29. Areas without specified zoning ('White Land')

Additional categories of land may be identified on the plans, depending on its critical nature.

The plan will also identify the locations (centre point) of the following:

1. Public drinking water wells or other sources
2. Public toilets and sanitation facilities (sanitary areas)
3. Radio masts for telephone and radio transmission.

The requirements and conditions as to the use of the land within the classifications are defined in the Zoning Regulations. However, some additional Planning Conditions/Restrictions may be made and specified in the Structure Plan Report Volume 1 (see below)

2.2 The Report

The report of the plan should be in two volumes

Volume 1

1. Executive Summary
2. Introduction
3. Background: Overview of development over past 20 years, identifying population changes and functions of town and highlighting any significant development or factor that has had a significant impact on growth. Identify the function and proposed function of the town as proposed in the National, Regional and District development plans, in particular the Medium Term Development Plan (MTDP) and the SDF of the DA. Identify factors that will impact on growth in the town, or determine/constrain the direction of growth. These should be drawn from the assumptions and strategies outlined in the SDF. In cases where the Structure Plan is being revised, a comparison of the actual development with the planned development should be made, and an analysis provided of the changes. *Note this chapter should include a plan a map showing the location of the town in the District and or Region and the relevant SDF*
4. Data analysis and projections
 - a. Population Projections for sectors, neighbourhoods or zones
 - b. Housing demand projections
 - c. Commercial space projections, including major markets
 - d. Tourism and hotel space capacity and projections
 - e. Industrial space projections
 - f. Educational facilities projections
 - g. Health facilities projections
 - h. Open space projections (including large scale public recreation areas)
 - i. Capacity of roads, transport terminals and Lorry Parks and projected requirements during planning period
 - j. Water needs projections, present capacity and gaps
 - k. Sewage disposal requirements
 - l. Solid Waste projections, capacity of land fill sites and gaps
 - m. Electricity distribution and service, capacity and gaps
 - n. Identification of flood risk in different areas and capacity of drainage system
5. Land requirement projections based on projections in 4 above, plus projections for additional land for other special requirements
6. Land Supply Analysis, based on layers of information about existing land use, suitability of land and availability of land. Data presented as a number of maps culminating in a composite map of areas identified as suitable for different uses (apart from the existing land use and composite map, the other maps may be placed in Volume 2)

7. SWOT or POCC¹ analysis of options based on stated assumptions presented in schematic form (*simplified schematic plans included*)
8. Preferred land use option presented as a plan, with text justifying the decision in choosing this option.
9. Infrastructure requirements: roads and other transport, drainage, water, electricity, sewerage, solid waste and ancillary land use requirements for preferred option (*Plans presented showing proposed extensions of network and location of increased capacity*)
10. Planning Conditions/Restrictions to be applied to the development of specified areas, where relevant (*These form part of the Zoning Regulations and are effectively bye-laws attached to the Plan*)
11. Phasing of implementation of proposals (*Include phasing plan*)
12. Costs of proposed development
13. Financial Plan and Strategy to implement the Structure Plans,
14. Detailed DA budget for MTDP period

Volume 2: Appendices/Attachments

1. Report on Stakeholder consultations,
 - Report on preliminary consultation
 - Report on public forum where options discussed
 - Report on public forum during presentation of Draft plan/report
2. Report on Surveys undertaken as part of plan
3. Methodology used in projecting land use requirements
4. Land supply related maps and tables (see Volume 1. 6)
5. System of analysis used for projecting infrastructure extension and increased capacity including roads, water, drainage and power (see Volume 1.9)

3 THE PREPARATION OF STRUCTURE PLANS

3.1 Initiation of Structure Plans

The preparation of Structure Plans should be initiated by the Metropolitan, Municipal and District Assemblies (MMDA) and will be based on the priorities for the development of an area, as identified in the current District SDF. In situations where an urbanising area crosses administrative boundaries, (i.e. between two districts, a district and a municipality, or a district and a metropolitan area), the decision to prepare the Structure Plan will be made by the Assemblies of both authorities.

The Assembly should seek the advice of its Planning Department or may be advised by the Planning Department or the Statutory Planning Committee that a new Structure Plan should be prepared or the existing approved plan revised. This may include the need to consider re-zoning of specified parts of the planned area, or to extend the planning into areas outside the present areas of the approved plan.

¹ SWOT = Strengths, Weaknesses, Opportunities and Threats. POCC=Potentials, Opportunities, Constraints and Challenges

3.2 Persons /Bodies Authorized to Prepare Structure Plans

The District Assembly shall order the Physical Planning Department to prepare Structure Plans. The Structure Plans may be prepared internally by a Planning Team. This team would be made up of staff from the; Planning Department; Works Department; Development Planning Coordinating Unit; and individual short-term consultants engaged by the Assembly, or the Assembly may outsource the preparation of the plan which would then be subject to evaluation, critical appraisal by the Technical Sub Committee of the MMDA who will recommend it for approval by the Statutory Planning Committee.

The Planning Department may also ‘outsource’ this task and would be responsible for preparing detailed specifications for the consultants chosen to undertake the task. These Specifications would form part of the Request for Proposals (RFP) which would be advertised according to standard operating procedures in line with Government of Ghana (GoG) procurement practices. The Physical Planning Department should either ask organisations or institutions to ‘pre-qualify’ to undertake this work (in particular this would consider the capacity of the organisation or institution, the quality and professional qualifications of its employees and associates, the experience they have in the type of work or similar type of assignments, financial capacity to forward fund such work before payment, etc.), or this information would be requested with the submission of their bids. The evaluation system would be explained as part of the RFP. The choice of the contractor will be made by a team of at least five persons, including members of the Physical Planning Department, the Economic Development Planning Officer, the Head of the Works Department and the DCD or his/her deputy. A report on the evaluation will be prepared and submitted to the Assembly for approval.

Where consultants are engaged to prepare the plans, the Technical Sub Committee as represented by the Head of the Physical Planning Department will act as the ‘client’ on behalf of the Assembly in the day-to-day administration of the contract, and recommend acceptance of each stage of the work to the Assembly for approval.

The Terms of Reference (TOR) should clearly identify:

- town boundaries where the Structure Plan is to be prepared;
- the SDF and its policies, including the functions of the town, its hierarchy and respective hinterlands, and any major infrastructure or other development proposed;
- the nature of stakeholder consultation to be carried out;
- information on approved plans and programmes for infrastructure, utilities and other major development projects that are located in the planning area or will impact on the planning area;
- areas to be protected because of their cultural, religious and historical importance; and
- the form of the final recommendations, including the types and numbers of reports and maps to be presented by the consultant.

The District Planning Department should also provide quality assurance if the plan preparation is outsourced. This will involve the Planning Department liaising with the technical departments of the MMDA, Ministries, Departments and Agencies(MDAs), utilities and services providers, regulatory agencies and Regional Planning Departments at various stages of the evaluation as it is being prepared.

3.3 Maps for Preparing and Presenting Zoning Plans

All Zoning Plans shall be prepared using one or more of the following:

1. Current Survey Department's approved standard maps and line maps converted to a georeferenced system using WGS 84
2. Ortho-rectified aerial photography, geo-referenced using WGS 84, or
3. Ortho-rectified satellite images, georeferenced using WGS 84.

All base maps should be approved by the Survey and Mapping Division of the Lands Commission. However, the Zoning Plan is not subject to such approval. All hard copies of maps and overlays will be produced on A0 sized paper at an appropriate scale (usually between 1:10,000 or 1:50,000) depending on the size of the town.

Electronic copies of Zoning Plans should be prepared, using the Government preferred GIS software, Map Maker.

3.4 Format of the Zoning Plan

- a. Size of the Plan
For hard copies of the Zoning Plan, the paper size should not be bigger than A0 paper. The paper size should be uniform.
- b. Key Plan
The plan should indicate the location of the planning area in the wider context on a scale of 1:250,000 or some appropriate scale, at the top of the Legend Box.
- c. Legend Box
The legend box contains a legend showing the colours and shading/hatching or other indicators used to identify all the land uses both existing and proposed in the plan. It should also indicate the road types, utility lines, administrative and proposed special planning project areas' boundaries as well as the scale, the North Point and a one hectare box drawn to same scale as the plan. The box will also include the approval seal with date of approval and signature of authorized person, with place and date. There should also be a name tag box, which should indicate the District, Region, Department, name of the plan, number of the plan, authors/professions, drafting team, District Head. Where the plan is prepared by consultants, their name should also be indicated in the name box.
- d. Town Planning Colours and Shading
Town planning colours and shading to be applied in the planning scheme should conform to those indicated in the Zoning Regulations.
- e. Presentation
The plan should be prepared at an appropriate scale see 3.3 above). The presentation of the plan should indicate the area subject to the plan (Planning Area) and show its associated administrative boundaries. The administrative names of the adjoining areas should be written on the maps. In most cases, the plan will cover one administrative area but where a town is fast growing, or where two towns are merging, the

Planning Area may not coincide with administrative boundaries, in which case the extent of the Planning Area should be indicated on the maps.

3.5 Required Stakeholder Consultation

The preparation of Structure Plans requires the involvement of all stakeholders. The minimum requirements include:

1. Consultation with Stakeholders (see below) in the presentation of the data analysis and the development of alternative options
2. Exhibition of data analysis, assumptions and development alternatives, in Data Room of MMDA, with a period of 60 days for comment
3. Presentation and review of Draft Structure Plan (which has taken into account comments from Public after exhibition) by Stakeholders (see below)
4. Exhibition of draft Structure Plan, showing Zoning Plan and Phasing Plan, in Data Room of MMDA, with period of 60 days for comment
5. Publication of at least half page broadsheet size in locally available newspaper of information about the Plan and where more details can be found.
6. Presentation of revised plan (taking into account comments from Public), review and approval by Statutory Planning Committee
7. Presentation and approval by MMDA
8. Placing of approved plan in Data Room
9. Publication of Plan in Gazette.

The following category of stakeholders should be involved in the planning process particularly in already developed areas.

1. The District Assembly including the chairpersons of all sub committees of the Assembly and Assembly men representing the area being planned
2. Representatives of the Urban or Sub-Metro Councils
3. Members of the Statutory Planning Committee
4. Heads of Technical Departments of the Assembly, including those on Statutory Planning Committee and including Agriculture, Forestry Commission, Department of Employment, Education, Health, Sports etc.
5. Lands Commission including Survey and Mapping Division and Lands Title Registry
6. Police Department, Ministry of Defence, Prisons and Regional Coordinator (where relevant)
7. Representatives of specific interest groups, such as Ghana Real Estate Developers Association (GREDA), Chambers of Commerce, Market Traders, artisan groups, social and environmental pressure groups, etc.
8. Chiefs/Elders/Traditional Rulers
9. The OASL
10. Customary Lands Secretariat (CLS) (if it exists for part or all of town area)

11. Land Owners and Developers
12. Representatives of Utility Providers
13. District Budget Office

The requirements listed above constitute the minimum requirements for consultation during the preparation and approval of the Structure Plan. Other means of involving the public may be used, along with a broader list of those who are to be consulted

3.6 Review of the Structure Plan

The requirement to revise a Structure Plan will depend on a number of factors. First, the Structure Plan is a plan for 15 years from the date of its approval. The Plan will make a number of assumptions about activities and function of the area, the availability of land for development, population growth, changes in occupancy rates and family size and so on. These assumptions are then compared with what actually is happening over the period covered by the plan (see 4.1 below). The greater the actual changes are from the assumptions underpinning the Structure Plans, the more urgent a review will be required and a new Structure Plan developed. As the SDF is reviewed every four years in line with the MTDPs, so there is the opportunity to identify the need to revise or prepare a new Structure Plan for the area.

4 IMPLEMENTATION OF THE STRUCTURE PLAN

Plan implementation should be linked to plan preparation. The involvement of stakeholders, (whether implementing departments of Central Government or District Assemblies, or the private sector), serves the purpose of ensuring that the plan reflects the stakeholders needs but also that the stakeholders are aware of their obligation to invest in the realisation of the plan. The key stakeholders need to develop their own implementation strategies, financing concepts and process controlling systems. This is a step-by-step as well as a participatory process. The Assembly in particular should ensure that its investment program as expressed in the annual budget complies with the Structure Plan's program of phased development

It is desirable that those organizations, institutions and beneficiary groups, that are outside the control of the MMDA, and were involved in the planning process, should also implement both the land use plan and other related development schemes so as to facilitate the realisation of the whole plan.

Planning is a sequential prescription of measures to be taken into account by all parties which are involved. The same applies to the implementation process: prescribed negotiation and co-ordination steps are to be carried out in a certain sequence. Implementation requires mechanisms to link plans to public and private budgeting. As the public sector is less frequently directly involved in development of the parcels of land, public investment is used to stimulate private sector investment. This may also require additional stimulus through fiscal measures taken by the District Assembly

A Financial Plan will be prepared for implementation as part of the Structure Plan, which will consider the capital costs and the operations and management costs and will identify potential sources of funding including amongst others: the District Assembly Common Fund, the District Development Fund, International Funds, Internally Generated Funds, Public Private

Partnerships, loans and other sources, including the investments by the public utility companies. Strategies will need to be developed to ensure the required funding is available when needed.

4.1 Plan Implementation and Monitoring Procedure

The following procedures and measures should be put in place to implement the plan:

1. Based on the Structure Plan, the Physical Planning Department or private developers or other state institutions will prepare detailed local plans, which will comply with the Structure Plan. The detailed plans will be prepared by the Physical Planning Department according to the phasing proposed for the Structure Plan.
2. The Physical Planning Department should record on maps, all development proposals for land, on, above and below ground. Thus when local plans are prepared and approved, these should be recorded, using the Permit Database software where available. Likewise, once construction starts, the information should be updated. This will also apply to when a building is demolished or there is a change of use.
3. The Physical Planning Department should make regular reports on the progress of the implementation of the Structure Plan to the Statutory Planning Committee, (SPC).
4. The SPC should evaluate the progress of the plan's implementation against the Spatial Development Framework and the MTDP and pass on recommendations for action by the full Assembly.
5. All technical Departments and Chairmen of Sub metros and Urban Councils should have copies of the approved Structure Plan. This would enable them to assist the Statutory Planning Committee to monitor the developments taking place in their area. They should also make sure that Local Plans and other developments in their area or under their control conform to the Structure Plan.
6. Each department of the Assembly, should include an action plan, as part of their annual plan to support the realisation of the Structure Plan. This should contain implementation strategies, financing measures, and other actions aimed at the coordination of development and growth of the local area.

4.2 Evaluation of the Plan

The evaluation of the Structure Plan will be based on how the plan manages to achieve the objectives of the broader National and Regional Development Plans, the MTDP and the District Spatial Development Framework and how successful is its realisation. As part of this exercise the Assembly will also consider the level of involvement of the stakeholders and the success or not of the financial strategy developed to facilitate the Plans realisation. Based on the findings of the evaluation, a decision will be made whether to revise or review or re-make the Structure Plan